



## Report to the Board of Supervisors

Prepared by the Maricopa County Planning and Development Department

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<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	August 7, 2013
<b>Agenda Item:</b>	2
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Staff
<b>Request:</b>	Consider a Recommendation for a Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as amended
<b>Support/Opposition:</b>	One general comment letter, two (2) letters of support, and 23 opposition emails.
<b>Recommendation:</b>	<b>Approval</b>

### Discussion:

A text amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the following:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Plumbing Code
- 2012 International Mechanical Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code
- 2011 National Electric Code

This text amendment proposes to replace the currently-adopted 2009 suite of building codes, with local amendments, with the updated 2012 suite of international building codes, with local amendments. In addition, three new construction codes are being considered for adoption. These codes include (1) the 2012 International Existing Building Code, (2) the 2012 International Energy Conservation Code, and (3) the 2012 International Green Construction Code (voluntary basis only). The purpose of the text amendment is to ensure updated construction safety codes with the Maricopa Association of Governments / Arizona Building Officials (MAG/AZBO) amendments that are consistent with other jurisdictions in the county and state. The April 9, 2013, April 30, 2013 and May 21, 2013 BCAB meeting minutes and the leg-edit Local Additions and Addenda showing all proposed changes are attached. Also attached are the

specific pages amended as a result of the May 21, 2013 BCAB meeting and the June 6, 2013 Planning & Zoning Commission meeting to:

- Cover page: to update to June 2013 draft.
- Table of Contents to update code references and page numbers.
- Chapter 2- page 7 to add Licensing Time Frame Fees recently approved by the Board of Supervisors.
- Chapter 3 – page 7 to add the Arizona Masonry Guild amendment.
- Chapter 3- page 8 to add Home Builders Association amendments.
- Chapter 3 – pages 19 and 20 to add Home Builders Association amendments.

The legislative-edit revised document is attached in its entirety. Most of the changes are code updates and not substantial changes from current codes. The County has not previously adopted the Green Construction Code, which will be voluntary, the Existing Building code, which will benefit adaptive reuse for existing buildings, and the Energy Conservation Code.

More specifically, the changes to the Local Additions and Addenda and the ICC/NEC Codes, shown in leg-edit form on the attached proposed language exhibit, are summarized as follows:

**Cover Page:**

1. Updated to March 2013., now June 2013.  
Reason for change: Update to current year.

**Table of Contents:**

1. Updated to reference the 2012 codes and add the IGCC, IECC and IEBC.  
Reason for change: Update to correct year reference and add the new codes.

**Chapter 1:**

1. No Changes.

**Chapter 2:**

1. Removed the \$75 fee for Expedited in-house plan review. Now added the Licensing Time Frame Fees.  
Reason for change: This is not a service we offer. Licensing fees approved by BOS.
2. Section 209. Noise Level Reduction. Updated Zoning Ordinance reference from Section 1007 to 1010.  
Reason for change: To reflect a change made to the Zoning Ordinance section.
3. Section 210.2 Definitions, Swimming Pool. Added "This does not include decorative fountains that contain water under 12" deep".  
Reason for change: Without this language, pool barriers are required around fountains, which is not necessary or practical.
4. Section 211.1.5 of Residential Woodburning Regulations. Text changed in its entirety to match current Arizona Revised Statutes (ARS) for the four types of allowable fireplaces/wood stoves.  
Reason for change: To be consistent with ARS.

### Chapter 3:

1. Section 301. Adopts and amends 2012 IBC and Appendix G Flood Resistance Construction.  
Reason for change: We don't usually adopt appendices, but this one is necessary to maintain our standing in the National Flood Insurance Program (NFIP).  
Of note, Section 202 through Section 3109 are the MAG/AZBO amendments that did not change other than some slight editorial corrections. We are still exempting single family residences from fire sprinkler requirements. We are also adding an amendment to the wind load requirements for solid freestanding walls not over 7 feet as requested by the Arizona Masonry Guild.
2. Section 302. Adopts and amends 2012 IRC. No changes other than some code section corrections. We are still exempting single family residences from fire sprinkler requirements. Also added the Home Builders Association amendments.  
Reason for change: To update code section references and to incorporate the Home Builders Association amendments.
3. Section 303. Adopts and amends 2012 IMC with new MAG/AZBO amendments for Domestic Systems and Standards.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
4. Section 304. Adopts and amends 2012 IPC with new MAG/AZBO amendment for Water Closet clearances. Kept same MAG/AZBO amendments for Discharge Piping and Vent Through Roof.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
5. Section 305. Adopts and amends 2011 NEC with the City of Phoenix Amendments, which haven't changed except for section number corrections to fit the new code.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
6. Section 306. Adopts and amends 2003 IFC.  
No changes: This code still only applies to County-owned buildings.
7. Section 307. Adopts and amends 2012 IFGC with same MAG/AZBO amendment for Burial Depth.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
8. Section 308. Adopts and amends 2012 IGCC with City of Phoenix proposed amendments. Specifies that code is optional.  
Reason for change: To allow optional use of code for builders who want to be energy conscious.
9. Section 309. Adopts and amends 2012 IECC with City of Phoenix and SRP and Home Builders Association proposed amendments for scoping and the RESNET testing and HERS ratings and pool motor requirements recommended by MAG/AZBO.  
Reason for change: To be consistent with MAG/AZBO jurisdictions and to incorporate the Home Builders Association and SRP amendments.
10. Section 310. Adopts 2012 IEBC with no amendments.

Reason for change: To allow greater flexibility in the redevelopment of existing buildings.

This item is being processed through the County's Enhanced Regulatory Outreach Program (EROP). A stakeholder meeting was held on February 22, 2013. This item was presented to the Maricopa County Building Code Advisory Board (BCAB) on April 9<sup>th</sup> for discussion and was presented and approved on April 30, 2013 for initiation and recommendation. In order to provide ample opportunity for additional public testimony another BCAB hearing was held on May 21, 2013 where the BCAB affirmed its prior recommendation for approval.

In accordance with state statutes, this text amendment was also heard by the Maricopa County Planning & Zoning Commission who unanimously recommended approval at their June 6, 2013 meeting. TA2013001 is scheduled for BOS public hearing on August 7, 2013. The regulations will take immediate effect upon approval, but with a three month grace period where compliance with either the 2009 or 2012 ICC Codes will be allowed.

### **Recommendation:**

Staff recommends that the Board of Supervisors approve a Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as Amended.

Prepared by Tom Ewers, Plan Review Manager

Attachments: Updated LAA pages per BCAB and P&Z recommendation (7 pages)  
Material submitted by SRP in favor (20 pages)  
David & Sharon Mann letter in support (1 page)  
Arizona Masonry Guild COP amendment (1 page)  
Rudson Ray email in opposition (2 pages)  
Gordon Ray email in opposition (1 page)  
Proposed language (53 pages)  
TA2013001 P&Z minutes 6/6/13 (DRAFT, excerpt, 3 pages)  
TA2013001 P&Z staff report 6/6/13 (total 168 pages) – will be provided under separate cover upon request  
TA2013001 P&Z staff report addendum #1 6/6/13 (total 31 pages) – will be provided under separate cover upon request  
TA2013001 P&Z staff report addendum #2 6/6/13 (total 67 pages) – will be provided under separate cover upon request

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

~~March 2013~~ ~~May 2013~~ June 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Renew permit for final	\$ 100
Special Event Fee (tents)	\$ 100 per event

### **Additional Fees:**

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system	\$500
(Less than six (6) feet high)	
Roof mounted residential solar system	\$300

### **Licensing Time Frame Fees:**

<u>\$350 – Pre-application meeting fee for non residential projects</u>
<u>\$150 – Pre-application meeting fee for residential projects subject to a violation</u>
<u>\$50 – Pre-application meeting fee for residential projects not subject to a violation</u>
<u>\$50 – Fee for a change to an application for a license in progress</u>
<u>\$50 – Fee for an application to be added to an application for a license in progress</u>
<u>\$50 – Fee to re-initiate application for a license administratively denied due to time (within 180 days)</u>
<u>\$150 – Fee to appeal administrative denial of a license (within 30 days)</u>

### **Copy Charges:**

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### **Grading Fees:**

### **Plan Review Fees:**

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
25. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 25)		

**Amend Section 1609.1.1 to add:**

Exception 7. For design wind loads on solid freestanding walls not over 7 feet, a net force coefficient  $c_f = 1.2$  may be used.

**Section 3109 Swimming Pool Enclosures** is deleted.

### SECTION 302. 2012 INTERNATIONAL RESIDENTIAL CODE

The 2012 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following amendments.

**Amendments to the 2012 International Residential Code:**

Revise Table R 301.5 as follows:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

**Section R313 Automatic fire sprinkler systems** is deleted.

N1101.15.1 Alternative approach for compliance. A Home Energy Rating System ("HERS") Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

N1101.17 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

~~N1103.2.2.1 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2-percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

**R102.1.2 RESNET Testing & Inspection Protocol.** The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections R402.4.1.1, R402.4.1.2 and R403.2.2 and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. R402.4.1.2 – Testing – Air Leakage Rate
  - c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

Add Section R401.2.1

R401.2.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R401.4 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R403.2 Ducts. Ducts and air handlers shall be in accordance with Sections R403.2.1 through R403.2.3.

R403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exceptions: Ducts or portions thereof located completely inside the building thermal envelope.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
  - 2.1 Minimum SEER rating of space heating/cooling system is increased to 15.
  - 2.2 Maximum U-factor is decreased to 0.35 and maximum SHGC is decreased to .022 for all fenestration products.
  - 2.3 Wall cavity insulation minimum R-value is increased to R-19.
  - 2.4 Residential buildings that meet the requirements of Sections R102.1.1 or R405.
  - 2.5 Residential buildings with attic radiant barriers in accordance with ASTM C 1313, installed in accordance with ASTM C1743.

~~R403.2.2.1 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

~~**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System ("HERS") Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.~~

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.

# The 2012 IECC

Will Put Thousands in Wallets of New Homeowners

A Summary of Analyses Developed by ICF International/Building Code Assistance Project

Where	Net Savings	Added Cost	Break Even
Arizona	\$2,642 - \$9,233	\$798 - \$2870	7 months
Denver	\$5,886 - \$6,354	\$1,412	16 - 17 months
Illinois	\$5,460 - \$19,832	\$958 - \$1,775	5 - 13 months
Idaho	\$4,139 - \$5,038	\$1,350 - \$1,892	22-25 months
Kansas City	\$15,033 - \$16,338	\$1,460 - \$2,293	7 - 11 months
Minnesota	\$19,197 - \$23,479	\$2,682 - \$3,959	8 - 14 months
New Jersey	\$9,260 - \$11,864	\$1,489 - \$3,333	9 - 24 months
Pennsylvania	\$5,460 - \$19,832	\$1,233 - \$2,841	5 - 23 months
Philadelphia	\$2,603 - \$3,995	\$1,222 - \$1,847	22 - 45 months
Texas			
Dallas	\$4,294 - \$4,607	\$2,358 - \$2,440	33 - 37 months
Houston	\$5,000	\$1,623	22 month
San Antonio	\$5,961	\$939	11 months
Utah	\$7,052 - \$15,543	\$1,926 - \$3,081	10 - 21 mos.
Salt Lake City	\$6,926 - \$7,800	\$1,296	17 - 22 months
Virginia	\$2,502 - \$7,644	\$1,542 - \$2,303	15 months

**Homeowner Life Cycle Cost Savings – after fully recouping incremental cost – for Homes Built to 2009 & 2012 IECC (over 2006 IECC)**

April 2013 Analysis by US Department of Energy

State	2009 IECC	2012 IECC
Alabama	\$ 2,117	\$ 6,182
Alaska	\$ 5,861	\$ 20,745
Arizona	\$ 3,245	\$ 6,550
Arkansas	\$ 1,948	\$ 6,679
California	\$ 1,192	\$ 2,136
Colorado	\$ 1,528	\$ 5,435
Connecticut	\$ 3,793	\$ 13,709
Delaware	\$ 4,316	\$ 14,778
District of Columbia	\$ 2,024	\$ 6,852
Florida	\$ 2,320	\$ 4,147
Georgia	\$ 2,210	\$ 6,415
Hawaii	\$ 5,150	\$ 14,238
Idaho	\$ 1,444	\$ 5,515
Illinois	\$ 1,784	\$ 6,506
Indiana	\$ 1,781	\$ 6,764
Iowa	\$ 2,823	\$ 10,416
Kansas	\$ 2,556	\$ 8,828
Kentucky	\$ 2,279	\$ 7,646
Louisiana	\$ 1,663	\$ 4,107
Maine	\$ 5,109	\$ 18,944
Maryland	\$ 3,473	\$ 11,688
Massachusetts	\$ 3,914	\$ 14,777
Michigan	\$ 3,363	\$ 12,346
Minnesota	\$ 3,196	\$ 11,817
Mississippi	\$ 2,022	\$ 5,400
Missouri	\$ 2,229	\$ 7,826

State	2009 IECC	2012 IECC
Montana	\$ 1,668	\$ 5,920
Nebraska	\$ 1,908	\$ 7,141
Nevada	\$ 2,543	\$ 7,352
New Hampshire	\$ 3,925	\$ 14,573
New Jersey	\$ 3,445	\$ 11,877
New Mexico	\$ 1,835	\$ 5,897
New York	\$ 3,870	\$ 13,677
North Carolina	\$ 1,844	\$ 5,911
North Dakota	\$ 2,353	\$ 8,719
Ohio	\$ 1,959	\$ 7,120
Oklahoma	\$ 2,526	\$ 8,621
Oregon	\$ 1,422	\$ 4,917
Pennsylvania	\$ 3,189	\$ 11,845
Rhode Island	\$ 4,043	\$ 15,074
South Carolina	\$ 2,215	\$ 6,650
South Dakota	\$ 2,583	\$ 9,514
Tennessee	\$ 1,809	\$ 6,102
Texas	\$ 2,433	\$ 5,942
Utah	\$ 1,385	\$ 4,879
Vermont	\$ 5,133	\$ 18,861
Virginia	\$ 2,186	\$ 7,487
Washington	\$ 1,498	\$ 5,299
West Virginia	\$ 1,996	\$ 7,301
Wisconsin	\$ 3,056	\$ 11,272
Wyoming	\$ 1,809	\$ 6,441

## SRP's Building Energy Codes Initiative

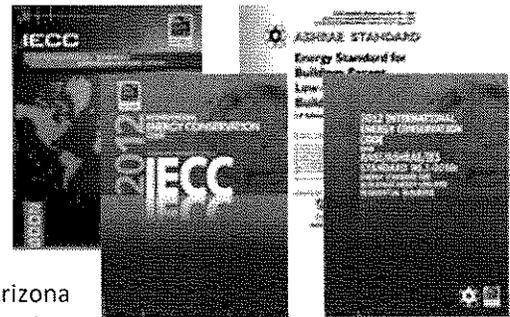
*In Support of Clean & Efficient Energy*

### SRP's Commitment to Energy Efficiency

SRP's dedication to energy efficiency continues to result in great success. Twenty-five energy efficiency and demand response programs provide a wide array of money and energy-saving opportunities for our commercial and residential customers. In Fiscal Year 2011, a record number of SRP customers participated in our rebate and incentive programs, collectively saving more than 380 million kilowatt-hours of energy use. The growing levels of participation and efficient management of these and other programs have positioned SRP's energy efficiency portfolio as one of the most efficient in the country, spending fewer dollars per kilowatt-hour saved than other utilities. This level of success and commitment saves our customers money, spurs job creation within our communities, minimizes the need to build expensive generation plants, and saves our State's natural resources.

### Model Energy Codes

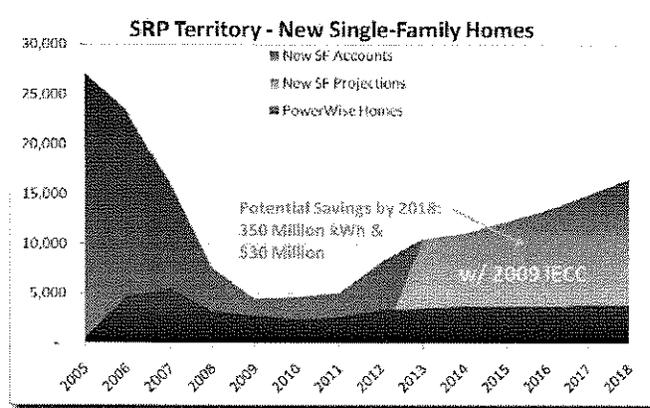
While SRP has experienced enormous success with our energy efficiency programs, there is a great deal of energy savings potential associated with the implementation of newer model energy codes. The adoption of model energy codes is an important step any municipality can take to ensure new or remodeled buildings will be built to conserve energy and save money. As a "home rule" state, Arizona empowers local municipalities with the authority to select and adopt the appropriate building codes to beneficially influence building construction within their jurisdiction. SRP believes that this authority presents a unique opportunity for cities and towns to help their residents save millions of dollars through the adoption of the most recent model energy codes – the 2012 International Energy Conservation Code (IECC). While implementing model energy codes and ensuring their compliance is not without difficulty, the long-term energy and money savings will help stabilize pocketbooks and energy demand growth within the municipality.



Until fairly recently, model energy codes were considered an optional piece of the construction permitting process. They are now seen by the Department of Energy and the International Code Council as a mechanism for saving energy and resources. The 2009 IECC marked the beginning of their strategic shift to produce greater savings through performance-based measures. Studies have shown that the 2009 IECC helps residential and commercial buildings achieve 15% greater efficiency than those built under the 2006 IECC. Additional enhancements went into the development of the 2012 IECC (published in July 2011) that are expected to produce commercial and residential buildings that are roughly 30% more efficient than those built under the 2006 IECC. Future editions of the IECC are expected to provide homeowners with even greater levels of energy efficiency.

Importantly, these energy codes result in real, long-term savings for new home and building owners. While the additional expense of building to the 2009 IECC may result in a one-time cost of approximately \$560 per home, the homeowner is expected to save more than \$200 per year on their energy bills – for the life of the home. Not only will residents have more money to spend within the local economy, but they will simply be more comfortable through Arizona's summer.

In SRP's service territory, homebuilders have recognized the marketing potential associated with enhanced energy efficiency, utility bill savings, and comfort. More than half of all homes built in our territory since 2007 have participated in the SRP PowerWise Homes program. This program requires homes to perform better than the 2009 IECC as a minimum, and in some cases, requirements are more demanding than the 2012 IECC. If all of the new homes projected to be built in SRP's service territory between 2012 and 2018 were built to just the 2009 IECC, those homeowners would collectively save approximately 350 million kilowatt-hours of electricity, and nearly \$30 million in electricity bill costs.



### SRP's Support Efforts

SRP realizes the adoption and implementation of new building or energy codes is not without difficulty for cities and towns. The current recession has impacted all aspects of the economy, including the building industry and municipalities. Building department budgets have been cut dramatically, reducing staff, training opportunities, and other resources required to adopt and implement newer building and energy codes. However, SRP also believes there is no better time to adopt enhanced energy codes than right now. Municipalities have a little more time in this relatively slow construction market to make necessary adjustments to their code enforcement practices. Builders also have the time, and are already in the process of modifying their building practices to produce increasingly more efficient homes. Home and Building Owners can benefit from the monthly energy bill savings when they most need it. Finally, this action helps defer the expenses related to new generation resources and facilities, allowing SRP to maintain affordable rates when our customers most need them.

To that end, SRP hopes to strengthen its relationships with the municipalities in our service territory. Through the sharing of information, resources and technical expertise, SRP is able to provide some of the tools necessary to address the challenges municipal building departments face related to the adoption, implementation, and enforcement of newer model energy codes. The initiative is intended to be flexible, as each municipality may have different needs. At this time, SRP anticipates offering the following services to municipalities within our territory.

- *Ongoing training seminars.* SRP will offer free training opportunities for building code officials and building industry representatives served by SRP. Earlier this year, SRP co-sponsored a program called The Energy Code Workshop, which was successful in raising awareness within the industry. Moving forward, SRP intends to partner with AZBO and other organizations to sponsor training sessions related to the IECC and ANSI 90.1 standard. On demand training sessions for various municipal departments will be available upon request.
- *Code books and other support materials.* SRP is willing to provide code books and materials free of charge to jurisdictions within its service territory. We hope this will allow municipalities to use the savings in other areas of their constrained budgets.
- *SRP as a technical resource.* SRP has extensive technical expertise in the areas of energy efficiency, building science, and market trends. We intend to provide municipalities with the support, insight, and statistics necessary to evaluate the effects of the new energy codes as they are developed. Utilizing SRP's market data, we can produce energy and utility bill savings estimates; provide market trends and projections; and supply targeted reports and statistics specific to the needs of each municipality.
- *SRP support.* SRP will be active with municipal building code advisory committees, and present at city council meetings where energy codes are discussed. SRP is also a voting member of the ICC, and as such can vote for or against certain provisions our municipalities deem beneficial or harmful to their constituents. SRP also intends to be active within the building community to raise awareness of the benefits, and to help reduce external pressures faced by municipal building departments.

Contact Sharon Bonesteel, RA,CBO - SRP Sr. Policy Analyst – Codes & Standards Initiative • 602-236-4498 Sharon.Bonesteel@srpnet.com

# Arizona

## Energy and Cost Savings for New Single- and Multifamily Homes:

**2009 and 2012 IECC  
as Compared to the  
2006 IECC**



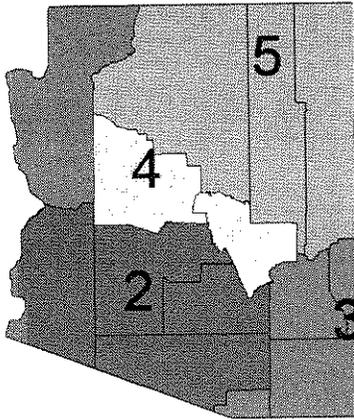


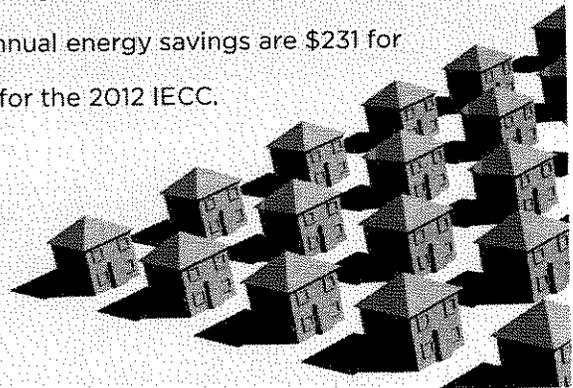
Figure 1. Arizona Climate Zones

## Arizona Energy and Cost Savings for New Single- and Multifamily Homes: **2009** and **2012 IECC** as Compared to the **2006 IECC**

The 2009 and 2012 International Energy Conservation Codes (IECC) yield positive benefits for Arizona homeowners.

Moving to either the 2009 or 2012 IECC from the 2006 IECC is cost-effective over a 30-year life cycle. On average, Arizona homeowners will save \$3,245 over 30 years under the 2009 IECC, with savings still higher at \$6,550 with the 2012 IECC.

Each year, the reduction to energy bills will significantly exceed increased mortgage costs. After accounting for up-front costs and additional costs financed in the mortgage, homeowners should see net positive cash flows (i.e., cumulative savings exceeding cumulative cash outlays) in 1 year for the 2009 and 2 years with the 2012 IECC. Average annual energy savings are \$231 for the 2009 IECC and \$486 for the 2012 IECC.



## Highlights

### Cost-effectiveness against a 2006 IECC baseline:

- ê Life-cycle cost savings, averaged across climate zones and building types, are \$3,245 for the 2009 IECC and \$6,550 for the 2012 IECC
- ê Simple payback periods are 5.6 years for the 2009 and 6.4 years for the 2012 IECC

### Consumer savings compared to a 2006 IECC baseline:

- ê Households save an average of \$231 per year in energy costs with the 2009 IECC
- ê Household savings rise significantly to an average of \$486 per year with the 2012 IECC
- ê Net annual consumer savings, including energy savings, mortgage cost increases, and other associated costs in the first year of ownership, average \$154 for the 2009 IECC and \$303 for the 2012 IECC
- ê Energy costs, on average, are 13.5% lower for the 2009 IECC and 28.3% lower for the 2012 IECC

## Cost-Effectiveness

The U.S. Department of Energy (DOE) evaluates the energy codes based on three measures of cost-effectiveness:

- ê **Life-Cycle Cost:** Full accounting over a 30-year period of the cost savings, considering energy savings, the initial investment financed through increased mortgage costs, tax impacts, and residual values of energy efficiency measures
- ê **Cash Flow:** Net annual cost outlay (i.e., difference between annual energy cost savings and increased annual costs for mortgage payments, etc.)
- ê **Simple Payback:** Number of years required for energy cost savings to exceed the incremental first costs of a new code

Life-cycle cost is the primary measure by which DOE assesses the cost-effectiveness of the IECC. These savings assume that initial costs are mortgaged, that homeowners take advantage of the mortgage interest deductions, and that long-lived efficiency measures retain a residual value after the 30-year analysis period. As shown in Table 1, life-cycle cost savings averaged across climate zones are \$3,245 for the 2009 IECC and \$6,550 for the 2012 IECC.

Table 1. Average Life-Cycle Cost Savings from Compliance with 2009 and 2012 IECC, Relative to the 2006 IECC

	Life-Cycle Cost Savings (\$)	Net Positive Cash Flow (Years)	Simple Payback (Years)
2009 IECC	\$3,245	1	5.6
2012 IECC	\$6,550	2	6.4

## Consumer Savings

Annual consumer cash flows impact the affordability of energy-efficient homes. Based on this analysis, Arizona homeowners, on average, should see annual energy cost savings of \$231 per year and achieve a net cumulative savings that accounts for an increased down payment in addition to energy costs, mortgage costs, and tax-

related costs and benefits in 1 year when comparing the 2009 IECC to the 2006 IECC. When moving to the 2012 IECC from the 2006 IECC, the average annual savings increase substantially to \$486 per year, and it is 2 years before cumulative savings exceed cumulative costs. Table 2 summarizes these results.

Table 2. Impacts to Consumers' Cash Flow from Compliance with 2009 and 2012 IECC Compared to the 2006 IECC

	Consumers' Cash Flow (Average)	2009 IECC	2012 IECC
A	Down payment and other up-front costs	\$140	\$332
B	Annual energy savings (year one)	\$231	\$486
C	Annual mortgage increase	\$10	\$180
D	Net annual cost of mortgage interest deductions, mortgage insurance, and property taxes (year one)	\$1	\$1
E = [B-(C+D)]	Net annual cash flow savings (year one)	\$154	\$303
F = [A/E]	Years to positive savings, including up-front cost impacts	1	2

The U.S. Department of Energy (DOE) provides estimates of energy and cost savings from code adoption:

• **National:** Energy cost savings (only)

• **Climate Zone:** Energy cost savings, life-cycle cost savings, and consumer cash flows

• **State:** Energy cost savings, life-cycle cost savings, consumer cash flows, and simple paybacks

For more information on how these estimates were developed, visit the DOE Building Energy Codes website: [www.energycodes.gov/development/residential](http://www.energycodes.gov/development/residential)

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**Building Energy Codes**

For information on Building Energy Codes, visit [www.energycodes.gov](http://www.energycodes.gov)

BUILDING TECHNOLOGIES PROGRAM

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# Technical Appendix A

## Methodology

An overview of the methodology used to calculate these impacts is provided below. Further information as to how these estimates were developed is available at the U.S. Department of Energy's (DOE) Building Energy Codes website.<sup>1</sup>

### Cost-Effectiveness

Pacific Northwest National Laboratory (PNNL) calculated three cost-effectiveness metrics in comparing the 2009 and 2012 International Energy Conservation Codes (IECC) to the 2006 IECC. These are:

- Life-Cycle Cost (LCC): Full accounting over a 30-year period of the cost savings, considering energy savings, the initial investment financed through increased mortgage costs, tax impacts, and residual values of energy efficiency measures
- Cash Flow: Net annual cost outlay (i.e., difference between annual energy cost savings and increased annual costs for mortgage payments, etc.)
- Simple Payback: Number of years required for energy cost savings to exceed the incremental first costs of a new code

LCC is a robust cost-benefit metric that sums the costs and benefits of a code change over a specified time period. LCC is a well-known approach to assessing cost-effectiveness. DOE uses LCC for determining the cost-effectiveness of code change proposals, and for the code as a whole, because it is the most straightforward approach to achieving the desired balance of short- and long-term perspectives.

The financial and economic parameters used for these calculations are as follows:

- New home mortgage parameters:
  - 5.0% mortgage interest rate (fixed rate)
  - Loan fees equal to 0.7% of the mortgage amount
  - 30-year loan term
  - 10% down payment
- Other rates and economic parameters:
  - 5% nominal discount rate (equal to mortgage rate)
  - 1.6% inflation rate
  - 25% marginal federal income tax and 4.24% marginal state income tax
  - 0.9% property tax
  - Insulation has 60-year life with linear depreciation resulting in a 50% residual value at the end of the 30-year period
  - Windows, duct sealing, and envelope sealing have a 30-year life and hence no residual value at the end of the analysis period
  - Light bulbs have a 6-year life and are replaced four times during the 30-year analysis period

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<sup>1</sup> [www.energycodes.gov/development/residential](http://www.energycodes.gov/development/residential)

## Energy and Economic Analysis

This analysis determined the energy savings and economic impacts of the 2009 and 2012 IECC compared to the 2006 IECC. Energy usage was modeled using DOE's EnergyPlus™ software for two building types:

1. Single-Family: A two-story home with a 30-ft by 40-ft rectangular shape, 2,400 ft<sup>2</sup> of floor area excluding the basement, and windows that cover 15% of the wall area, equally distributed on all sides of the house
2. Multifamily: A three-story building with 18 units (6 units per floor), each unit having conditioned floor area of 1,200 ft<sup>2</sup> and window area equal to approximately 10% of the conditioned floor area, equally distributed on all sides of the building

Each of these building types, single-family and apartment/condo in a multifamily building, have four unique foundation types:

1. Slab on grade
2. Heated basement
3. Unheated basement
4. Crawlspace

Each building type also has four unique heating system types:

1. Natural gas
2. Heat pump
3. Electric resistance
4. Oil

This results in 32 unique scenarios (2 x 4 x 4) for each of the four climate zones.

PNNL incorporated the prescriptive requirements of the 2006, 2009, and 2012 IECC when modeling the impacts of changes to the code. Whenever possible, PNNL uses DOE's EnergyPlus model software to simulate changes to code requirements. However, in some cases, alternative methods are employed to estimate the effects of a given change. As an example, in order to give full consideration of the impacts of the 2012 IECC requirement for insulating hot water pipes (or shortening the pipe lengths), a separate estimate was developed for hot water pipe insulation requirements in the 2012 IECC, which results in a 10% savings in water heating energy use (Klein 2012).

Energy and economic impacts were determined separately for each unique scenario, including the single-family and multifamily buildings, the four unique foundation types, and the four unique heating system types. However, the cost-effectiveness results are reported as a single average for each climate zone and as an overall state average. To determine this average, first the results were combined across foundation types and heating system types for single-family and multifamily prototypes as shown in Table A.1 and Table A.2 (single-family and multifamily have the same shares for foundation types). For example, the primary heating system type in new residential units in Arizona is a natural gas furnace. Therefore, the combined average energy usage calculations were proportionally weighted to account for the predominance of natural gas heating. Then single-family and multifamily results were combined for each climate zone in the state and the climate zone results were combined to determine a state average weighted by housing starts from 2010 U.S. Census data as shown in Table A.3.

Table A.1. Heating Equipment Shares

Heating System	Percent Share	
	Single-Family	Multifamily
Natural gas	77.8	97.2
Heat pump	19.4	2.8
Electric resistance	2.6	0
Oil	0.2	0

Table A.2. Foundation Type Shares

Foundation Type	Slab on Grade	Heated Basement	Unheated Basement	Crawlspace
Percent share	90.7	0.6	3.1	5.6

Table A.3. Construction by Building Type and Climate Zone

Climate Zone	Housing Starts	
	Single-Family	Multifamily
2	9,409	719
3	696	28
4	307	58
5	343	88

### Differences Between the 2006 IECC, the 2009 IECC, and the 2012 IECC

All versions of the IECC have requirements that apply uniformly to all climate zones, and other requirements that vary by climate zone. Highlights of the mandatory requirements across all buildings include:

- Building envelope must be caulked and sealed. The 2012 IECC adds a requirement that the building must be tested and a level of leakage that is no more than a maximum limit must be achieved.
- Ducts and air handlers must be sealed. Testing against specified maximum leakage rates is required in the 2009 and 2012 IECC if any ducts pass outside the conditioned space (e.g., in attics, unheated basements). The 2012 IECC leakage requirements are more energy efficient.
- Supply and return ducts in attics, and all ducts in crawlspaces, unheated basements, garages, or otherwise outside the building envelope must be insulated.
- For the 2009 and 2012 IECC, a minimum percentage of the lighting bulbs or fixtures in the dwelling must be high-efficacy lighting.
- A certificate listing insulation levels and other energy efficiency measures must be posted on or near the electric service panel.

A comparison of significant IECC requirements that do not vary by climate zone is contained in Table A.4. Of these, the most significant changes in the 2009 and 2012 IECC compared to the 2006 IECC are the requirements for pressure testing of the building envelope and ducts/air handlers, and for insulating service hot water pipes (2012 IECC only). The requirement for high-efficacy lamps, while significant, is somewhat abated by a

superseding federal regulation banning the manufacture or import of less efficient lamps at common watt levels that takes effect in 2012 to 2014.

**Table A.4. Comparison of Major Requirements That Do Not Vary by Climate Zone**

Requirement	2006 IECC	2009 IECC	2012 IECC
Building envelope sealing	Caulked and sealed, verified by visual inspection	Caulked and sealed, verified by visual inspection against a more detailed checklist	Caulked and sealed, verified by visual inspection and a pressure test against a leakage requirement
Ducts and air handlers	Sealed, verified by visual inspection	Sealed, verified by visual inspection, and pressure tested, or all ducts must be inside building envelope	Sealed, verified by visual inspection, and pressure tested against a leakage requirement, or all ducts must be inside building envelope
Supply ducts in attics	R-8	R-8	R-8
Return ducts in attics and all ducts in crawlspaces, unheated basements, garages, or otherwise outside the building envelope	R-8	R-6	R-6
Insulation on hot water pipes for service water heating systems	None	None	R-3 except where pipe run length is below a diameter-dependent threshold
Insulation on hot water pipes for hydronic (boiler) space heating systems	R-3	R-3	R-3
High-efficacy lamps (percent of lighting in the home)	None	50% of lamps	75% of lamps or 75% of fixtures
Certificate of insulation levels and other energy efficiency measures	Yes	Yes	Yes

Requirements such as insulation levels and fenestration (window, door, and skylights) U-factors can vary by the eight zones in the United States. Table A.5 shows these requirements. Arizona has four climate zones (Zones 2, 3, 4, and 5) as defined in the IECC.

Table A.5. Comparison of Major Requirements That Vary by Climate Zone

Climate Zone	IECC	Components										
		Ceiling (R-value)	Skylight (U-factor)	Fenestration (Windows and Doors)		Wood Frame Wall (R-value)	Mass Wall* (R-value)	Floor (R-value)	Basement Wall** (R-value)	Tested Max Air Leakage Rate (air changes per hour)	Slab*** (R-value and depth)	Crawl Space** (R-value)
				U-factor	SHGC							
1	2006				0.4							
	2009	30	0.75	NR	0.3	13	3/4	13	NR	NR	NR	NR
	2012				0.25					5		
2	2006	30	0.75	0.75	0.4					NR		
	2009	30	0.75	0.65	0.3	13	4/6	13	NR	NR	NR	NR
	2012	38	0.65	0.4	0.25					5		
3	2006	30	0.65	0.65	0.4	13	5/8		0	NR		
	2009	30	0.65	0.5	0.3	13	5/8	19	5/13****	NR	NR	5/13
	2012	38	0.55	0.35	0.25	20	8/13		5/13****	3		
4	2006	38	0.6	0.4	NR	13	5/13		10/13	NR		10/13
	2009	38	0.6	0.35		13	5/10	19	10/13	NR	10, 2 ft	10/13
	2012	49	0.55	0.35	0.4	20	8/13		10/13	3		10/13
5	2006	38	0.6	0.35		19	13/19		10/13	NR		10/13
	2009	38	0.6	0.35	NR	20	13/17	30	10/13	NR	10, 2 ft	10/13
	2012	49	0.55	0.32		20	15/19		15/19	3		15/19
6	2006		0.6	0.35		19	10/13		10/13	NR		10/13
	2009	49	0.6	0.35	NR	20	15/19	30	15/19	NR	10, 4 ft	10/13
	2012		0.55	0.32		20+5	15/19		15/19	3		15/19
7 and 8	2006		0.6	0.35		21		30	10/13	NR		10/13
	2009	49	0.6	0.35	NR	21	19/21	38	15/19	NR	10, 4 ft	10/13
	2012		0.55	0.32		20+5		38	15/19	3		15/19

\* The second number applies when more than half the insulation is on the interior side of the high mass material in the wall.  
 \*\* The first number is for continuous insulation (e.g., a board or blanket directly on the foundation wall) and the second number is for cavity insulation (i.e., if there is a furred-out wall built against the foundation wall). Only one of these two has to be met.  
 \*\*\* The first number is R-value. The second value refers to the vertical depth of the insulation around the perimeter.  
 \*\*\*\* Basement wall insulation is not required in the warm-humid region of Zone 3 in the southeastern United States.  
 NR = not required  
 SHGC = solar heat gain coefficient

While exemptions or allowances in the code in are not included in this analysis, the code does allow for some of these depending on the compliance path. Examples include the following:

- One door and 15 ft<sup>2</sup> of window area are exempt
- Skylight U-factors are allowed to be higher than window U-factors
- Five hundred square feet or 20% of ceiling area of a cathedral ceiling, whichever is less, is allowed to have R-30 insulation in climate zones where more than R-30 is required for other ceilings

## Incremental First Costs

Table A.6 shows the costs of implementing the prescriptive measures of the new codes. Costs are provided for both the reference home and apartment/condo, and for the cost of moving from the 2006 to the 2009 IECC, as well as from the 2006 IECC to the 2012 IECC. The costs derive from estimates assembled by Faithful + Gould (2012) and a number of other sources.<sup>2</sup> The original cost data were based on a national average. The costs are adjusted downwards by 7.2% (multiplied by 0.928) to reflect local construction costs based on location factors provided by Faithful + Gould (2011).

Table A.6. Total Construction Cost Increase for the 2009 and 2012 IECC Compared to the 2006 IECC

	2,400 ft <sup>2</sup> House		1,200 ft <sup>2</sup> Apartment/Condo	
	Slab, Unheated Basement, or Crawlspace	Heated Basement	Slab, Unheated Basement, or Crawlspace	Heated Basement
<b>2009 IECC</b>				
Zone 2	\$1,405	\$1,405	\$613	\$613
Zone 3	\$1,405	\$1,869	\$613	\$680
Zone 4	\$584	\$584	\$341	\$341
Zone 5	\$871	\$871	\$447	\$447
<b>2012 IECC</b>				
Zone 2	\$3,256	\$3,256	\$1,521	\$1,521
Zone 3	\$3,751	\$4,215	\$1,698	\$1,766
Zone 4	\$2,472	\$2,472	\$1,275	\$1,275
Zone 5	\$2,325	\$2,561	\$1,224	\$1,258

## Results

### Life-Cycle Cost

Table A.7 shows the LCC savings (discounted present value) of the new codes over the 30-year analysis period. These savings assume that initial costs are mortgaged, that homeowners take advantage of the mortgage interest tax deductions, and that efficiency measures retain a residual value at the end of the 30 years. As shown in Table A.7, life-cycle cost savings, averaged across climate zones, are \$3,245 for the 2009 IECC and \$6,550 for the 2012 IECC.

<sup>2</sup> The Faithful +Gould cost data and other cost data for energy efficiency measures are available on the "BC3" website at <http://bc3.pnnl.gov/>.

**Table A.7. Life-Cycle Cost Savings Compared to the 2006 IECC**

	Zone 2	Zone 3	Zone 4	Zone 5	State Average
2009 IECC	\$3,386	\$2,946	\$2,017	\$1,538	\$3,245
2012 IECC	\$6,339	\$9,353	\$7,223	\$5,727	\$6,550

### Cash Flow

Because most houses are financed, consumers will be very interested in the financial impacts of buying a home that complies with the 2009 or 2012 IECC requirements compared to the 2006 IECC. Mortgages spread the payment for the cost of a house over a long period of time (the simple payback fails to account for the impacts of mortgages). In this analysis, a 30-year fixed-rate mortgage was assumed. It was also assumed that homebuyers will deduct the interest portion of the payments from their income taxes.

Table A.8 and Table A.9 show the impacts to consumers' cash flow resulting from the improvements in the 2009 and 2012 IECC, respectively. Up-front costs include the down payment and loan fees. The annual values shown in the table are for the first year.

The savings from income tax deductions for the mortgage interest will slowly decrease over time while energy savings are expected to increase over time because of escalating energy prices. These tables also include increases in annual property taxes because of the higher assessed house values. The net annual cash flow includes energy costs, mortgage payments, mortgage tax deductions, and property taxes but not the up-front costs. The time to positive cash flow includes all costs and benefits, including the down payment and other up-front costs.

As shown in Table A.8, on average, there is a net positive cash flow to the consumer of \$154 per year beginning in year one for the 2009 IECC. Positive cumulative savings, including payment of up-front costs, are achieved in 1 year. The positive cash flow is more significant with the 2012 IECC. Here state average net annual cash flow savings are \$303, with only 2 years to positive cumulative savings after covering up-front costs (see Table A.9).

**Table A.8. Impacts to Consumers' Cash Flow from Compliance with 2009 IECC Compared to the 2006 IECC**

	Cost/ Benefit	Zone 2	Zone 3	Zone 4	Zone 5	State Average
A	Down payment and other up-front costs	\$144	\$147	\$58	\$84	\$140
B	Annual energy savings (year one)	\$240	\$220	\$131	\$117	\$231
C	Annual mortgage increase	\$78	\$80	\$32	\$46	\$76
D	Net annual cost of mortgage interest deductions, mortgage insurance, and property taxes (year one)	\$0	\$1	\$1	\$1	\$1
E	Net annual cash flow savings (year one)	\$162	\$139	\$98	\$70	\$154
[B-(C+D)]						
F	Years to positive savings, including up-front cost impacts	1	2	1	2	1
[A/E]						

Note: Item D includes mortgage interest deductions, mortgage insurance, and property taxes for the first year. Deductions can partially or completely offset insurance and tax costs. As such, the "net" result appears relatively small or is sometimes even negative.

Table A.9. Impacts to Consumers' Cash Flow from Compliance with 2012 IECC Compared to the 2006 IECC

Cost/ Benefit		Zone 2	Zone 3	Zone 4	Zone 5	State Average
A	Down payment and other up-front costs	\$335	\$393	\$244	\$225	\$332
B	Annual energy savings (year one)	\$478	\$650	\$473	\$391	\$486
C	Annual mortgage increase	\$182	\$213	\$132	\$122	\$180
D	Net annual cost of mortgage interest deductions, mortgage insurance, and property taxes (year one)	\$3	\$3	\$2	\$2	\$3
E						
=						
[B-	Net annual cash flow savings (year one)	\$293	\$434	\$339	\$267	\$303
(C+D)]						
F						
=						
[A/E]	Years to positive savings, including up-front cost impacts	2	1	1	1	2

### Simple Payback

Table A.10 shows the simple payback period, which consists of the construction cost increase divided by first-year energy cost savings. This calculation yields the number of years required for the energy cost savings to pay back the initial investment. Simple payback does not consider financing of the initial costs through a mortgage or favored tax treatment of mortgages.

As Table A.10 shows, the simple payback period from moving to the 2009 IECC from the 2006 IECC averages 5.6 years across climate zones. The simple payback for the 2012 IECC is slightly longer, averaging 6.4 years.

Table A.10. Simple Payback Period, Relative to the 2006 IECC (Years)

Code	Zone 2	Zone 3	Zone 4	Zone 5	State Average
2009 IECC	5.6	6.3	4.2	6.7	5.6
2012 IECC	6.6	5.7	4.8	5.4	6.4

### Energy Cost Savings

All fuel prices were obtained from the DOE Energy Information Administration and are recent residential prices specific to Arizona (DOE 2012a, 2012b, 2012c). For this analysis, natural gas fuel prices were set to \$1.306/therm. Electricity prices were set to \$0.099/kWh for space heating and \$0.117/kWh for air conditioning. Oil prices were set to \$23.7/MBtu. Energy prices are assumed to escalate at the rates published in DOE's *Annual Energy Outlook* (DOE 2012d).

Table A.11 shows the estimated annual energy costs, including heating, cooling, water heating, and lighting per home that result from meeting the requirements in the 2006, 2009, and 2012 IECC. Table A.12 shows the total

energy cost savings as both a net dollar savings and as a percentage of the total energy use.<sup>3</sup> Results are averaged across home type (single- and multifamily), foundation type, and heating system types.

Table A.11. Annual Energy Costs for Different Versions of IECC

	2006 IECC					2009 IECC					2012 IECC				
	Heating	Cooling	Water Heating	Lighting	Total	Heating	Cooling	Water Heating	Lighting	Total	Heating	Cooling	Water Heating	Lighting	Total
Zone 2	\$216	\$1,120	\$194	\$209	\$1,739	\$196	\$935	\$194	\$174	\$1,499	\$126	\$813	\$175	\$147	\$1,261
Zone 3	\$622	\$637	\$251	\$213	\$1,723	\$543	\$530	\$251	\$179	\$1,503	\$268	\$428	\$226	\$151	\$1,073
Zone 4	\$636	\$324	\$276	\$197	\$1,433	\$548	\$313	\$276	\$165	\$1,302	\$298	\$274	\$248	\$140	\$960
Zone 5	\$574	\$329	\$273	\$190	\$1,366	\$504	\$313	\$273	\$159	\$1,249	\$298	\$294	\$246	\$137	\$975
<b>State Average</b>	<b>\$267</b>	<b>\$1,036</b>	<b>\$203</b>	<b>\$209</b>	<b>\$1,715</b>	<b>\$240</b>	<b>\$868</b>	<b>\$203</b>	<b>\$173</b>	<b>\$1,484</b>	<b>\$146</b>	<b>\$753</b>	<b>\$183</b>	<b>\$147</b>	<b>\$1,229</b>

As can be seen from Table A.12, energy cost savings per year for the 2009 IECC compared to the 2006 IECC range from \$117 in Zone 5 to \$240 in Zone 2. Annual energy cost savings rise significantly with the 2012 IECC, ranging from \$391 per year for Zone 5, up to \$650 per year in Zone 3. On a percentage basis, energy cost savings range from about 27% to 38% with the 2012 IECC depending on climate zone.

Table A.12. Total Energy Cost Savings Compared to the 2006 IECC

	2009 IECC		2012 IECC	
	Savings (\$/ yr)	Percent Savings	Savings (\$/ yr)	Percent Savings
Zone 2	\$240	13.8	\$478	27.5
Zone 3	\$220	12.8	\$650	37.7
Zone 4	\$131	9.1	\$473	33
Zone 5	\$117	8.6	\$391	28.6
<b>State Average</b>	<b>\$231</b>	<b>13.5</b>	<b>\$486</b>	<b>28.3</b>

## References

Faithful + Gould. 2012. *Residential Energy Efficiency Measures—Prototype Estimate and Cost Data*. Portland, Oregon. <http://bc3.pnnl.gov/wiki/index.php/Downloads>

Faithful + Gould. 2011. *Residential Energy Efficiency Measures—Locations Factors*. Portland, Oregon. <http://bc3.pnnl.gov/wiki/index.php/Downloads>

<sup>3</sup> The percent savings is the annual energy cost savings for heating, cooling, water heating, and lighting divided by the total baseline annual energy cost for heating, cooling, water heating, and lighting.

Klein, G. 2012. *Cost Estimation for Materials and Installation of Hot Water Piping Insulation*. Affiliated International Management, LLC, Newport Beach, California.

U.S. Department of Energy (DOE). 2012a. *Electric Power Monthly*. DOE/EIA-0226. Washington, D.C.  
[http://www.eia.doe.gov/cneaf/electricity/epm/table5\\_6\\_a.html](http://www.eia.doe.gov/cneaf/electricity/epm/table5_6_a.html)

U.S. Department of Energy (DOE). 2012b. *Natural Gas Monthly*. DOE/EIA-0130. Washington, D.C.  
[http://www.eia.gov/oil\\_gas/natural\\_gas/data\\_publications/natural\\_gas\\_monthly/ngm.html](http://www.eia.gov/oil_gas/natural_gas/data_publications/natural_gas_monthly/ngm.html)

U.S. Department of Energy (DOE). 2012c. *Petroleum Marketing Monthly*. DOE/EIA-0380. Washington, D.C.  
<http://www.eia.gov/petroleum/marketing/monthly/>

U.S. Department of Energy (DOE). 2012d. *Annual Energy Outlook*. DOE/EIA-0383. Washington, D.C.

## International Code Council Building Codes Fact Sheet – 6-10-2013

- The International Code Council is an American public safety, membership based association with major offices in Alabama, Illinois, California and Washington. The codes are developed by building safety and fire officials, architects, engineers, builders and others with an interest in public safety.
- The Code Council lessens the burden on local governments by developing consensus-based model building safety codes and standards.
- The codes are minimum standards; they provide the basic safeguards for people at home, at school and in the workplace.
- The Code Development Hearings use a Governmental Consensus process to develop the codes, an open, inclusive process that allows input from all individuals and groups. The final vote is made by your City's Governmental Members.
- Arizona currently has 607 Governmental and Corporate Members of ICC
- Arizona currently has 432 Governmental Members eligible to vote in the final action hearings in the code development process.
- Anyone can attend the Code Development Hearings, present a proposed code change, and discuss the code changes presented by others. There is no charge for attending. Information on the code development schedule can be found on at [www.iccsafe.org](http://www.iccsafe.org).
- The Arizona Building Officials have a code development committee, and the Maricopa Area Governments has a Building Code Committee; each reviews the proposed codes and considers amendments for inclusion during adoption at the local level.
- The International Codes are developed in the United States and are "used as a means to export American knowledge and technology to other countries – to do business with them."
- "The Code Council is not a part of the United Nations nor did the Code Council or its codes originate from the International Council for Local Environmental Initiatives."
- Federal Agencies use the I-Codes and require them to be followed in the maintenance and construction of new and renovated structures.

The following clarifies why HUD has selected ICC – Highlights added *(comments added in red)*:

**For Immediate Release:**

April 25, 2013  
[www.iccsafe.org](http://www.iccsafe.org)

**Contact:** Steve Dagers

888-ICC-SAFE (888-422-7233) ext. 4212  
[sdagers@iccsafe.org](mailto:sdagers@iccsafe.org)

### **HUD Proposes to Replace FHA Building Inspectors with ICC-Certified Inspectors and Code Officials**

A U.S. Department of Housing and Urban Development proposal to eliminate Federal Housing Administration inspectors recognizes the quality of the work performed by ICC Members and all jurisdictional code officials. The rule change also demonstrates the value of earning International Code Council certification as an inspector and the quality of the Code Council's rigorous certification process.

HUD regulations govern the inspection and warranty requirements of FHA-insured mortgages. In the executive summary of the proposed change, HUD says: "The quality of housing and building technology has improved significantly. In addition, local jurisdictions have

adopted more uniform building codes, while more vigorously enforcing their building codes.”

ICC filed comments to the HUD Rulemaking Proposal and agreed with the finding that use of the *International Residential Code for One- and Two-Family Dwellings* (IRC) in 49 states and the District of Columbia was strong justification for eliminating the separate and duplicative system of a HUD-maintained roster of FHA inspectors. In the proposal, HUD recognized the increasing quality of inspections by building code officials nationwide. *(Note that the use of the IRC allowed for elimination of duplication – or alternately, it supported the reduction of government inefficiency.)*

The National Association of Home Builders in written comments said it “strongly supports” the HUD proposal. NAHB cited increased code uniformity, the rigorous examinations required to become an ICC Residential Combination Inspector and familiarity of inspectors with the IRC among the reasons for its support.

HUD proposes to eliminate its national inspector roster that dates back to an era when cities and states developed their own building codes with little uniformity or consistency. *(So if a city writes their own code, would HUD accept it?)* If the proposal is approved, HUD would rely on local residential building inspections and the certificate of occupancy issued by local jurisdictions to determine if a home is complete and the construction is of acceptable quality. In areas where local inspections are not conducted, HUD proposes to use ICC-certified Residential Combination Inspectors to perform inspections for the FHA.

“To be certified by the ICC, Residential Combination Inspectors must pass a rigorous set of examinations, which includes testing their knowledge of the IRC,” HUD said. “As a result, there is no longer a need for HUD to maintain and administer its own standardization process for inspectors.”

The HUD proposal seeks to remove requirements it no longer believes to be necessary to reduce some of the administrative burden on homeowners and HUD. The change also is expected to produce dollar savings for homeowners who obtain FHA-insured mortgages.

ICC suggested HUD also accept inspections performed by ICC-certified Combination Inspectors as they are certified in all four areas required to be a Residential Combination Inspector. ICC urges code officials to check the status of their certifications to be fully qualified to perform inspections for FHA-insured homes when the proposal is approved.

The International Code Council is a member-focused association. It is dedicated to developing model codes and standards used in the design, build and compliance process to construct safe, sustainable, affordable and resilient structures. Most U.S. communities and many global markets choose the International Codes.

*David and Sharon Mann  
9614 W. Lindgren Ave.  
Sun City AZ 85373*

June 6, 2013

Maricopa Planning and Zoning Commission

RE: TA2013001 - Adoption of latest edition of construction and safety codes

Members of the Commission:

We wish to express our support of the adoption of the new codes, in particular the adoption of the 2012 IgCC and IECC. These codes will put energy efficiency and water conservation into the mix of items that are built into the homes and businesses. The money not spent on utility bills, building new power plants, replacing infrastructure will go back into the pockets of the residents and will be spent on local businesses and services.

When did it become "American" to be wasteful? Freedom does not mean the right to waste our natural resources and cause the rest of us to bear the cost. Putting energy efficiency and water saving methods into buildings when they are built is the least expensive time to do so. People that buy or rent homes will stay in their homes longer if their utility bills are lower. Less turnover and fewer foreclosures is good for Maricopa County.

We urge your support of the adoption of the latest codes as the best way to save Maricopa Co Residents money and protect the environment.

Sincerely,

A handwritten signature in black ink, appearing to read 'DMann' followed by a flourish.

David and Sharon Mann



# City of Phoenix

PLANNING & DEVELOPMENT DEPARTMENT

## BUILDING CONSTRUCTION CODE CHANGE PROPOSAL Proposed Amendments to the 2012 International Building Code Section 1609.1.1

**Submitted by:** Masonry Guild

**1609.1.1 Determination of wind loads.** Wind loads on every building or structure shall be determined in accordance with Chapters 26 to 30 of ASCE 7 or provisions of the alternate all-heights method in Section 1609.6. The type of opening protection required, the ultimate design, wind speed, Vult, and the exposure category for a site is permitted to be determined in accordance with Section 1609 or ASCE 7. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered.

**Exceptions:**

1. Subject to the limitations of Section 1609.1.1.1, the provisions of ICC 600 shall be permitted for applicable Group R-2 and R-3 buildings.
2. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of AF&PA WFCM.
3. Subject to the limitations of Section 1609.1.1.1, residential structures using the provisions of AISI S230.
4. Designs using NAAMM FP 1001.
5. Designs using TIA-222 for antenna-supporting structures and antennas, provided the horizontal extent of Topographic Category 2 escarpments in Section 2.6.6.2 of TIA-222 shall be 16 times the height of the escarpment.
6. Wind tunnel tests in accordance with Chapter 31 of ASCE 7.
7. For design wind loads on solid freestanding walls not over 7 feet, a net force coefficient, Cf = 1.2 may be used.

**Reasons:**

Amendment carried forward from previous code specifically for fences not over 7 feet.

**Cost Impact:** None

**ACTION TAKEN:**

<b>2012 Code Committee *</b>	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied <input type="checkbox"/> No action taken	
<b>Development Advisory Board Technical Subcommittee *</b>	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied <input type="checkbox"/> No action taken	
<b>Development Advisory Board *</b>	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied <input type="checkbox"/> No action taken	
<b>Council Subcommittee *</b>	Date:
<input type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied <input type="checkbox"/> No action taken	
<b>City Council Action</b>	Date: 5/15/13
<input checked="" type="checkbox"/> Approved as submitted <input type="checkbox"/> Modified and approved <input type="checkbox"/> Denied <input type="checkbox"/> No action taken	

\*Initiated at City Council Meeting

## Tom Ewers - PLANDEVX

---

**From:** Darren Gerard - PLANDEVX  
**Sent:** Tuesday, June 04, 2013 2:56 PM  
**To:** Debra Stark - PLANDEVX  
**Cc:** Lynn Favour - PLANDEVX; Tom Ewers - PLANDEVX  
**Subject:** Fw: ISO Ratings & Code Consistency

---

**From:** Denny Barney - DIST1X  
**Sent:** Tuesday, June 04, 2013 10:21 AM  
**To:** Darren Gerard - PLANDEVX; Lynn Favour - PLANDEVX  
**Subject:** FW: ISO Ratings & Code Consistency

FYI – for the file

*Candice Copple  
Deputy Chief of Staff  
Supervisor Denny Barney  
Maricopa County  
(602) 506-1781 office*

---

**From:** Rusdon Ray [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 30, 2013 12:25 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** FW: ISO Ratings & Code Consistency

Dear Maricopa County Board of Supervisors,

Below is some research and some information gathered by my dad that's worth considering when reviewing Management recommendations on the 2012 ICC Codes.

A member of Gilbert town management and a member of the County Building Code Advisory Board have both stated that they need to pass the 2012 codes so they can get a good ISO rating. They then said that the good ISO rating would lower the insurance premiums of the county and the town and also lower the rates homeowners in the county or town pay.

However, this assertion seems to be completely unfounded!

Here is what I have found out about the ISO (*Insurance Services Office*) ratings:

- 1- Lots of insurance companies do not use ISO ratings any more to determine their insurance rates. I was told that they are familiar with ISO but do their own inspections and research.
- 2- I called ISO directly and talked to 3 different departments. (Customer Service; Public Protection Code; and Building Code Effectiveness Grading Schedule.)
- 3- The first department (CS) had never heard of the ICC (International Code Council) codes.
- 4- The second department (PPC) head John (manager) had heard of the ICC codes but said that they have “no bearing” on a town’s rating.
- 5- The last department said the BCEGS uses the ICC codes for the town owned buildings only. She (Mary-office manager) made it very clear that residential homes are not affected at all by ISO ratings or ICC codes.

- 6- ISO only looks at the natural catastrophic disasters (tornadoes, floods, earthquakes) and losses that happen to town owned buildings. They also look at how catastrophic resistant the town's buildings are.  
<http://www.isogov.com/>

For additional proof, please note this document. <http://www.usfa.fema.gov/pdf/efop/efo39907.pdf>. State Farm stopped using ISO. So did Western Mutual Ins. Group. A home's proximity to the fire station is important. Adherence to Life and Safety codes is important. Sprinklers in commercial buildings seems important. They are not mentioned in residential homes.

Members of Gilbert town management and members of the County Building Code Advisory Board also stated that they need to pass the 2012 codes so they can be up with all the other cities to make it easier and more consistent for the builders."

- 1- This statement is not founded on any research by talking to any builders.
- 2- There is not hardly any consistency between cities that are on the same codes.
- 3- Every plan reviewer in every city interprets the same code differently.
- 4- Every inspector in the field interprets and enforces the same code differently.
- 5- This has only become worse since the new all encompassing ICC codes have come into existence since 2000.

It appears that everything would be better and more consistent if each town would adopt their own life/safety codes. All the valley city codes would probably be practically the same since we almost all have the same issues. We will still have safe homes without all of the unnecessary and costly code items that do nothing for safety.

Gordon

Rusdon Ray  
GER Drafting Services  
2243 E. Claxton  
Gilbert, AZ 85297  
[\(480\)988-2472](tel:(480)988-2472) Office  
[\(480\)988-5359](tel:(480)988-5359) Fax  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

**The Defenders of Liberty**  
**God - Religion - Freedom - Peace - Family**

**From:** Lynn Favour - PLANDEVX  
**Sent:** Friday, June 28, 2013 9:24 AM  
**To:** Darren Gerard - PLANDEVX; Tom Ewers - PLANDEVX; Marsha Spencer - PLANDEV  
**Subject:** Fw: codes

**From:** Katie Prendergast - DIST2X  
**Sent:** Thursday, June 27, 2013 10:17 AM  
**To:** Lynn Favour - PLANDEVX  
**Subject:** FW: codes

Hi Lynn,

Another email in opposition to the building codes.

Thanks!

Katie

**From:** Gordon Ray [<mailto:gordonray49@gmail.com>]  
**Sent:** Wednesday, June 26, 2013 11:23 AM  
**To:** Katie Prendergast - DIST2X  
**Subject:** codes

Katie,  
Can this comment from a citizen get to county supervisors and whoever else?

Why are the citizens having to bear the burden of proof as to why they want to retain freedom and why freedom is better than more laws? The burden of proof should be on staff and ultimately on council members who vote something into law. They should be able to explain why a given code/law is important enough to take away freedom of choice---no matter how "little" that amount of freedom may be or seem. There should be a question of "Is this important enough and imperative enough to remove freedom and restrict choice bearing the weight of law?" Rather than an automatic action of "Let's pass these laws unless someone can come up with enough reasons not to."

**Gordon Ray**  
**House Plans in a Week**  
2243 E. Claxton Ave.  
Gilbert, AZ 85297  
480-988-2472  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

~~March 2013~~ ~~May 2013~~ June 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 1 – Purpose & Title

### **SECTION 101. PURPOSE**

The purpose of this document is to provide all local addenda, amendments, and additions to the adopted national building codes in one location.

### **SECTION 102. TITLE**

This document shall be referred to and known as "Local Additions & Addenda".

### **SECTION 103. SEPARABILITY**

If any section, subsection, sentence clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not effect the validity of the remaining portions thereof.

### **SECTION 104. AMENDMENT**

This document may be amended from time to time. It may be amended by simple motion of the Board of Supervisors, provided all state required legal advertising for amending a Building Code has been satisfied. Staff may correct typographical errors and/or reformat this document without being considered an amendment.

### **SECTION 105. REVOCATION**

This document shall abolish, replace, and/or supercede any previous amendments, changes or additions to the national codes previously approved by Maricopa County.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### **SECTION 201. PURPOSE**

The purpose of this Chapter is to provide all local changes to the adopted national building codes that relate to the administration of those codes in on location.

### **SECTION 202. VIOLATION & PENALTY (Reserved)**

### **SECTION 203. BUILDING CODE ADVISORY BOARD (Reserved)**

### **SECTION 204. ORGANIZATION & ENFORCEMENT**

Code Enforcement Agency

The Code Enforcement Agency created under the building code shall be defined in Maricopa County as the Planning and Development Department. This Planning and Development Department is charged by the Board of Supervisors to implement the building code and other pertinent laws, ordinances and/or regulations through the County's One Stop Shop Program.

Building Official

The Building Official shall be the Director of the Planning and Development Department (or his/her duly authorized representatives), who is charged with the administration and enforcement of the building code and Building Safety Ordinance.

General

Wherever the building code refers to the intent, purpose, implementation, inspection, enforcement, regulation, issuance of documents, compliance or other similar activity related to "this code", the phrase for purposed of implementing the "One Stop Shop Program" shall mean "this code or other pertinent laws, ordinances, and/or regulations implemented through the Code Enforcement Agency."

### **SECTION 205. PERMITS**

**Building Permits:** A building permit shall not be required for a detached non-habitable accessory building that is single story and no greater than 200 square feet in floor area, provided such building does not include plumbing, electrical, or mechanical services or equipment. A building permit shall not be required to replace an existing water heater provided the work is done in accordance with manufacturer's specifications.

**Permit Expiration:** A permit may be renewed within one year of expiration provided that no change in ownership or engineer/architect of record has occurred. Renewal after expiration for

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

more than one year shall not be permitted. Any such permit shall be deemed to be revoked and a new permit must be issued.

The design and construction of structures located within the unincorporated areas of Maricopa County shall comport to the codes in effect at the time of permit application, provided the specific permit remains valid, regardless of whether or not the County adopts subsequent codes. When approved by the Building Official, utility-scale solar generating facilities in which permit applications have been submitted, the design and construction may continue to utilize the codes in effect at the time of initial permit application, regardless of the number of permits required to complete the project, provided that 1) all construction is covered by an issued permit, 2) any permits issued for construction remain valid, and 3) continuous construction takes place until the facility is commissioned for commercial service and the facility receives final inspection. Once the above conditions have been met, subsequent construction activity shall comply with the codes in effect at the time of the subsequent permit applications. Further, should a permit lapse, the work contemplated by the permit shall be subject to a new permit application and shall comport to the codes in effect at the time the new permit application is submitted. For purposes of this section, the term "Utility-Scale" shall be as defined by the Maricopa County Zoning Ordinance.

**Temporary Event Permit Exemption:** Structures erected pursuant to an approved Temporary Use Permit shall not require a building permit if standing for a period not to exceed 96 contiguous hours. The responsible party shall provide documentation, as specified in the Temporary Use Permit that said structures were erected and maintained subject to all applicable building safety codes and manufacturer's specifications. The documentation shall be provided to the Department within two working days following the end of the special event to be filed with the Temporary Use Permit. Failure to provide the required documents will render the Temporary Use Permit null and void and constitute a zoning violation in accordance with Chapter 15 of the Maricopa County Zoning Ordinance.

### SECTION 206. INSPECTIONS

**Pre-Permit Inspection:** A pre-permit inspection may be necessary and shall be the responsibility of the permit holder to post the property in a manner approved by the Building Official.

**Permit Holder Responsibilities:** It shall be the responsibility of the permit holder to:

1. Call for an inspection.
2. Stake property corners.
3. Designate property lines prior to the inspection of any primary use.
4. Post the inspection card.
5. Provide a copy of the approved plans on the site.
6. Provide access to the site.
7. Have someone at the site during the inspection.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Failure to complete the above shall result in no inspection at the time and an assessment of a re-inspection fee. A survey of the lot may be required by the Building Official to verify that the building/structure is located in accordance with the approved plans.

**Partial Inspections:** Partial inspections may be requested and conducted when necessary due to common construction practices. If a partial inspection is approved, documentation shall be maintained during construction that identifies what segments of work have obtained what types of partial inspection approval.

**Re-inspections:** Re-inspection fees shall apply when:

1. Property lines have not been designated as required.
2. The inspection card is not posted or available on the work site.
3. Approved plans are not readily available to the inspector on the site.
4. There is no access on the date for which the inspection is requested.
5. Work is not ready for inspection.
6. Work has been covered.
7. Late cancellation.
8. There is a deviation from plans significant enough to require approval of revised plans.

To obtain a re-inspection, the applicant shall follow the same procedures required for an inspection after paying a re-inspection fee.

### SECTION 207. CERTIFICATE OF OCCUPANCY

The purpose of a Certificate of Occupancy is to insure that all department requirements have been met. A Certificate of Occupancy is required for all permits except those issued over the counter.

**Temporary Certificate:** A Temporary Certificate of Occupancy may be issued with the concurrence of all impacted departments and when appropriate fees are paid. Bonding, if required, shall be provided in accordance with the direction of the Building Official prior to issuance of a Temporary Certificate.

**Permanent Utility Authorization:** Permanent utility approval shall not be authorized until after a permanent Certificate of Occupancy has been issued. Said authorization to the utility company shall include a copy of the Certificate of Occupancy or letter of approval.

### SECTION 208. FEES

**Determination of Value:** Values shall be determined through the use of the most current published Building Valuation data in the publication "Building Standards" as modified for Arizona. The Building Official may develop similar increases for unpublished valuations.



# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

expedite processing, provided that the owner and/or architect/engineer have remained the same and that the building plans have not been changed.

No subsequent step in the permit process shall be undertaken without all fees due being paid.

**Fees:** The Building Official may develop a requirement for an initial flat rate filing fee for permits that require plan review. Should this type of fee be developed, said fee shall be considered as a part of and credited against any required plan review fees. The building plan review fees specified in the code are separate fees from the permit fees specified, these fees are also separate from the fees specified for investigations. Building plan review fees are assessed in addition to these other fees. All fees may be rounded up to the next full dollar amount at the discretion of the Building Official.

The following fees are hereby established for use.

TABLE 1-A – BUILDING CODE/PERMIT FEES

Total Valuation	Fee
\$1 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the first \$500 plus \$3.05 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the first \$25,000 plus \$10.10 for each additional \$1000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,233.75 for the first \$500,000 plus \$4.75 for each additional \$1000, or fraction thereof, and including \$1,000,000
\$1,000,001 and up	\$5,608.75 for the first \$1,000,000 plus \$3.65 for each additional \$1000, or fraction thereof

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### Other Inspections and Fees:

1. Inspections outside of normal business hours	\$ 150 per residential inspection \$ 250 per commercial inspection
2. Reinspection fees	\$ 150 per residential inspection \$ 250 per commercial inspection
3. Inspections for which no fee is indicated	\$ 150 per inspection
<del>4. Expedited in-house plan review</del>	<del>\$ 75 per hour</del>
<del>54. Expedited plan review by consultant</del>	Actual costs
<del>65. Standard plan review (5 options)</del>	2 times normal plan review fee
<del>76. Change to approved plan (includes standards)</del>	\$ 250
<del>87. Code Modification</del>	\$ 100 per request
<del>98. Alternate material, design or methods</del>	\$ 100 per request
<del>109. Tests required</del>	\$ 100 per test & test fees paid by applicant
<del>110. Appeal to the Building Code Advisory Board</del>	\$ 500
<del>1211. Amendment to the Code</del>	\$1500
<del>1312. Requested/needed staff directive</del>	\$ 250
<del>1413. Requested staff research report</del>	\$ 100 residential property \$ 250 commercial property

### Flat Rate Fees:

Air conditioner	\$ 50
Elec. Serv Residential 1 – 200 amps	\$ 50
Elec. Serv Res or Comm 201 – 400 amps	\$ 75
Elec. Serv over 400 amps	\$ 120
Temporary meter	\$ 50
Evaporative cooler	\$ 50
Gas Line (connect or clearance)	\$ 50
Mobile home "Pre-HUD Upgrade"	\$ 50
Plumbing sewer line SFR	\$ 50
Irrigation System	\$ 50
Sprinkler	\$ 50
Mechanical	\$ 50
Plumbing (Install or replace Equip/fixture/devices)	\$ 50
Demolition Permit	\$ 50
Manufactured/Mobile Home Setup/Installation	\$ 300
Commercial Manufactured Building (factory built building)	Based on installation value & Table 1-A
Occupancy Change	\$ 75
Hot tub or Spa (in or above ground)	\$ 75
Swimming pool above ground	\$ 75
Compliance Inspection	\$ 100
Move on House (compliance inspection)	\$ 100

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Renew permit for final	\$ 100
Special Event Fee (tents)	\$ 100 per event

### **Additional Fees:**

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system (Less than six (6) feet high)	\$500
Roof mounted residential solar system	\$300

### **Licensing Time Frame Fees:**

<u>\$350 – Pre-application meeting fee for non residential projects</u>	
<u>\$150 – Pre-application meeting fee for residential projects subject to a violation</u>	
<u>\$50 – Pre-application meeting fee for residential projects not subject to a violation</u>	
<u>\$50 – Fee for a change to an application for a license in progress</u>	
<u>\$50 – Fee for an application to be added to an application for a license in progress</u>	
<u>\$50 – Fee to re-initiate application for a license administratively denied due to time (within 180 days)</u>	
<u>\$150 – Fee to appeal administrative denial of a license (within 30 days)</u>	

### **Copy Charges:**

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### **Grading Fees:**

### **Plan Review Fees:**

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Volume of material (Cut and Fill)	Fee
<50 cubic yards	No fee
50 – 100 cubic yards	\$ 23.50
101 – 1,000 cubic yards	\$ 37.00
1,001 – 10,000 cubic yards	\$ 49.25
10,001 – 200,000 cubic yards	\$ 49.25 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof
200,001 or more cubic yards	\$269.75 plus \$ 7.25 for each additional 10,000 cubic yards or fraction thereof
Additional plan review required by changes, additions, or revisions to approved plans	\$ 50.00

### Permit Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	\$ 23.50
50 – 100 cubic yards	\$ 37.00
101 – 1,000 cubic yards	\$ 37.00 plus \$ 17.50 for each additional 100 cubic yards or fraction thereof
1,001 – 10,000 cubic yards	\$194.50 plus \$ 14.50 for each additional 1,000 cubic yards or fraction thereof
10,001 – 100,000 cubic yards	\$325.00 plus \$ 66.00 for each additional 10,000 cubic yards or fraction thereof
100,001 or more cubic yards	\$919.00 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof

**Payment of Fees:** No application shall be scheduled for hearing by any board or commission acting pursuant to the "Maricopa County Local Additions and Addenda", or administratively approved unless and until all fees and fines owed to the Department as a result of any activity or inactivity attributable to the property that is the subject of the application are brought

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current and paid in full or any amounts owed pursuant to an agreement of compliance are current, as the case may be. This requirement shall not be waived by the board/commission.<sup>\*1\*2</sup>

### SECTION 209. ADDITIONAL REGULATIONS

**NOISE LEVEL REDUCTION:** Any building within the vicinity of a military airport or ancillary military facility as defined by State Statute shall have a noise level reduction incorporated in **the design and construction of any residential building or portions of buildings where the public is received, office areas and where normal noise level is low for first occupancy, including libraries, schools and churches, pursuant to building permits issued after December 31, 2001** in order to achieve a maximum interior noise level of forty-five decibels in areas within noise contours described in Section ~~1007~~ 1010 of the Maricopa County Zoning Ordinance. All residential buildings in territory in the vicinity of a military airport but outside the noise contours as described in this section shall be constructed with a minimum of R18 exterior wall assembly, a minimum of R30 roof and ceiling assembly, dual-glazed windows and solid wood, foam-filled fiberglass or metal doors to the exterior or, if the specified building standards are not met, the County may approve as an alternative, a certification by an architect or engineer registered pursuant to A.R.S. Title 32, Chapter 1 to achieve a maximum interior noise level of forty-five decibels at the time of final construction.

### SECTION 210. BARRIERS FOR SWIMMING POOLS, SPAS & HOT TUBS

#### SECTION 210.1 - GENERAL

##### 210.1.1

**Scope.** The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

##### 210.1.2

**Standards of Quality.** In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements for pool and spa safety covers as listed below. The standard listed below is a recognized standard. (See Section 3504.)

1. ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

#### SECTION 210.2 – DEFINITIONS

For the purpose of this section, certain terms, words and phrases are defined as follows:

**ABOVEGROUND/ON-GROUND POOL.** See definition of "swimming pool."

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**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

**GRADE** is the underlying surface, such as earth or a walking surface.

**HOT TUB.** See definition of “spa, nonself-contained” and “spa, self-contained.”

**IN-GROUND POOL.** See definition of “swimming pool.”

**SEPARATION FENCE** is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

**SPA, NONSELF-CONTAINED** is a hydro massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A nonself-contained spa is intended for recreational bathing and contains water over 24 inches (610mm) deep.

**SPA, SELF-CONTAINED** is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 18 inches deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over 18 inches deep and/or wider than 8 feet at any point. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools. This does not include decorative fountains that contain water less than 12 inches deep.

**SWIMMING POOL, INDOOR** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR** is any swimming pool that is not an indoor pool.

### SECTION 210.3 – REQUIREMENTS

**210.3.1 Outdoor Swimming Pool.** An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on

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the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 54 inches apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

2. Openings in the barrier shall not allow passage of a 1 ¾-inch-diameter (44.5 mm) sphere.

### **EXCEPTIONS:**

1. When vertical spacing between such openings is 54 inches or more, the opening size may be increased such the passage of a 4-inch-diameter (102 mm) sphere is not allowed.
5. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 54 inches or more.
3. Chain link fences used as the barrier shall not be less than 11 gage.
4. Access gates shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
6. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section 210.3.1 shall be provided.

### **EXCEPTIONS:** When approved by the Building Official, one the following may be used:

1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.
2. An alarm installed on all doors with direct access to the pool. The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet

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(3048 mm). The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means such a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.

3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
4. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.

**210.3.2 Indoor Swimming Pool.** For an indoor swimming pool, protection shall comply with the requirements of Section 210.3.1 Item 5

**210.3.3 Spas and Hot Tubs.** For a nonself-contained and self-contained spa or hot tub protection shall comply with the requirements of Section 210.3.1

**EXCEPTION:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 210.3.1

**210.3.4** Where a window faces a swimming pool enclosure, said window shall be equipped with a screwed in place wire mesh screen, a keyed lock that prevents opening the window more than 4" or a latching device located not less than 54" above the floor. Emergency escape or rescue windows in bedrooms which face swimming pool enclosures shall be equipped with a latching device located no less than 54" above the floor.

**210.3.5** Protective enclosures shall be located at a minimum horizontal distance of 54" from any equipment, permanent structures, planters, or similar objects that could be used to climb the enclosure. This provision shall not apply to the area between the pool and the protective enclosure if the protective enclosure is a solid wall with no openings.

## **SECTION 211. RESIDENTIAL WOODBURING REGULATIONS**

### **211.1 FIREPLACE RESTRICTIONS**

#### **211.1.1 Purpose**

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The purpose of this subsection is to regulate fireplaces, wood stoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

### 211.1.2 Applicability

The Residential Woodburning Restriction Ordinance applies to any residential wood burning device in sections of Area A that are within Maricopa County or within incorporated cities and towns in such sections.

**AREA A** – As defined in Arizona Revised Statutes (ARS) §49-541(1), the area in Maricopa County delineated as follows:

- Township 8 North, Range 2 East and Range 3 East
- Township 7 North, Range 2 West through Range 5 East
- Township 6 North, Range 5 West through Range 6 East
- Township 5 North, Range 5 West through Range 7 East
- Township 4 North, Range 5 West through Range 8 East
- Township 3 North, Range 5 West through Range 8 East
- Township 2 North, Range 5 West through Range 8 East
- Township 1 North, Range 5 West through Range 7 East
- Township 1 South Range 5 West through Range 7 East
- Township 2 South, Range 5 West through Range 7 East
- Township 3 South Range 5 West through Range 1 East
- Township 4 South Range 5 West Through Range 1 East

### 211.1.3 Effective Date

The effective date of the regulations and prohibitions set forth this subsection shall be December 31, 1998.

### 211.1.4 Definitions

For purposes of this subsection, the following words and terms shall be defined as follows:

**FIREPLACE** means a built in place masonry hearth and fire chamber of a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

**SOLID FUEL** includes but is not limited to wood, coal, or other nongaseous or nonliquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as “inappropriate fuel” to burn in residential wood-burning devices.

**WOOD STOVE** means a solid-fuel burning heating appliance, including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

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### 211.1.5 Installation Restrictions

- (a) On or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following:
1. ~~A fireplace which has a permanently installed gas or electric log insert.~~
  2. ~~A fireplace, wood stove or other solid-fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  3. ~~A fireplace, wood stove or other solid-fuel burning appliance which has been tested and listed by a nationally recognized testing agency to meet performance standards, equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  4. ~~A fireplace, wood stove or other solid-fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  5. ~~A fireplace which has a permanently installed wood stove insert which complies with subparagraphs 2, 3, or 4 above.~~
- (b) ~~The following installations are not regulated by this Article and are not prohibited by this Article:~~
1. ~~Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.~~
  2. ~~Cook stoves, barbecue grills, and similar appliances designed primarily for cooking.~~
  3. ~~Fire pits, barbecue grills, and other outdoor fireplaces.~~

### ~~211.1.6 Fireplace or Wood Stove Alterations Prohibited~~

- (a) ~~On or after December 31, 1998 no person, firm or corporation shall alter or remove a gas or electric log insert or a wood stove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.~~
- (b) ~~On or after December 31, 1998 no person, firm or corporation shall alter a fireplace, wood stove or other solid-fuel burning appliance in any manner that would void its certification or operational compliance with the provisions of this subsection.~~
1. Provides the sole or primary source of heat or fuel for cooking for a residence.

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2. Meets performance standards for new residential wood heaters manufactured on or after July 1, 1990, or sold at retail on or after July 1, 1992, as prescribed by 40 Code of Federal Regulations Part 60, Subpart AAA.
3. Burns gaseous fuels, including gas logs.
4. Meets rules adopted by the Board of Supervisors as prescribed in ARS § 49-479 for burning wood in approved appliances.

### **211.1.76 Permits Required**

In addition to the provisions and restrictions of this subsection, construction, installation or alteration of all fireplaces, wood stoves and gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the County Building Code and shall be subject to the permits and inspections required by the County Building Code.

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### ~~SECTION 301 – 2009 INTERNATIONAL BUILDING CODE~~

The 2009 International Building Code has been adopted as the building code for Maricopa County along with the following M.A.G. amendments:

#### **Amendments to the 2009 International Building Code:**

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

**308.2 Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

- Residential board and care facilities
- Assisted living centers
- Halfway houses
- Group homes
- Congregate care facilities
- Social rehabilitation facilities
- Alcohol and drug abuse centers
- Convalescent facilities

A facility such as the above with 10 or fewer persons shall be classified as a Group R-4 Condition 1 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 424 of this code.

**308.3 Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, custodial, personal or directed care on a 24-hour basis of more than five persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to the following:

- Child care facilities
- Hospitals
- Nursing homes (both intermediate-care facilities and skilled nursing facilities)
- Mental hospitals

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### ~~Detoxification facilities~~

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

This occupancy shall also include buildings and structures used for assisted living homes providing supervisory, personal, or directed care on a 24-hour basis of more than 10 persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. A facility such as the above with ten or fewer persons shall be classified as R-4 Condition 2.

**310.1 R-4 Residential occupancies** shall include buildings arranged for occupancy as residential care/assisted living homes including not more than 10 occupants, excluding staff.

**310.1.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as a Group I-1.

**310.1.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

R-4 occupancies shall meet the requirements for construction as defined in Group R-3 except as otherwise provided for in this code, and Section 424 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 424 of this code.

### **310.1 Definitions**

**Personal Care Service.** Assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and the administration of medications and treatments.

**Directed Care Service.** Care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions.

**Supervisory Care Service.** General supervision, including daily awareness of resident functioning and continuing needs.

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~~Residential Care/Assisted Living Home. A building or part thereof housing a maximum of 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides supervisory, personal, or directed services. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living homes, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.~~

### **424 Residential Care/Assisted Living Homes**

~~424.1 Applicability. The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed cares services. Except as specifically required by this division, R-4 occupancies shall meet all applicable provisions of Group R-3.~~

~~424.2 General. Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building, and shall not exceed 2000 square feet above the first story except as provided in Section 506.~~

~~424.3 Special Provisions. R-4 occupancies having more than 2000 square feet of floor area above the first floor shall be of not less than one-hour fire-resistive construction throughout.~~

~~424.3.1 Mixed Uses. R-4 occupancies shall be separated from other uses as provided in Table 508.4.~~

### **424.4 Access and Means of Egress Facilities.**

~~424.4.1 Accessibility. R-4 occupancies shall be provided with at least one accessible route per the Arizonans with Disabilities Act. Sleeping rooms and associated toilets shall be accessible.~~

~~Exception: Existing buildings shall comply with Section 3409. Bathing and toilet facilities need not be made accessible, but shall be provided with grab bars in accordance with ICC/ANSI A 117.1.~~

### **424.4.2 Exits**

~~424.4.2.1 Number of Exits. Every story, basement, or portion thereof shall have not less than two exits.~~

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~~Exception: Basements and stories above the first floor containing no sleeping rooms may have one means of egress as provided in Chapter 10.~~

**424.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1014, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**424.4.2.3 Emergency Exit Illumination.** In the event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the ICC Electric Code.

**424.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception 1 to Section 1029.1 does not apply to R-4 occupancies.

**424.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with Sections 1008.1.4.4, and items 1, 2, 4, 5 and 6, or 1008.1.9.8.

### **424.4 Smoke Detectors and Sprinkler Systems**

**424.5.1 Smoke Alarms.** All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms installed in accordance with Section 907.2.1.1.

**424.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with Section 903.3. Sprinkler systems installed under this Section shall be installed throughout, including attached garages, and in Condition 2 facilities shall include attics and concealed spaces of or containing combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In R-4 Condition 2 occupancies, such systems shall contain water-flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

Add new exception to **716.5.4**

Exceptions:

4. Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.3.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals.

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~~Section 903.2.8, Group R:~~ An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2, Door Swing.** Egress doors shall be side-hinged swinging.

Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2006 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Chapter 13 Energy Efficiency is deleted in its entirety.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

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~~1503.4.6 Overflow Drainage Required.~~ Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
27. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 27)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### ~~SECTION 302. 2009 INTERNATIONAL RESIDENTIAL CODE~~

The 2009 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following M.A.G. amendments.

~~Amendments to the 2009 International Residential Code:~~

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Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

**Section R313 Automatic fire sprinkler systems** is deleted

Chapter 11 Energy Efficiency is deleted in its entirety.

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building (no other changes)

G2406.2 Add new Item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.10 (404.9) Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.10.1 Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping

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~~terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.~~

3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2009 INTERNATIONAL MECHANICAL CODE**

The 2009 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County with one amendment to delete Section 301.2.

### **SECTION 304. 2009 INTERNATIONAL PLUMBING CODE**

The 2009 International Plumbing Code has been adopted as the plumbing code for Maricopa County with two amendments.

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.

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4. ~~Serve a single relief device and shall not connect to piping serving any other relief device or equipment.~~
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**904.1 Roof extension** All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305: 2008 NATIONAL ELECTRICAL CODE**

The 2008 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following M.A.G. amendments.

Revise the following sections to read:

#### **210-8. Ground-Fault Circuit-Interrupter Protection for Personnel**

FPN: See 215.9 for ground-fault circuit-interrupter protection for personnel on feeders.

**(A) All Occupancies.** All 125-volt, single-phase, 15 and 20-ampere receptacles installed in the locations specified in (1) through (9) shall have ground-fault circuit-interrupter protection for personnel.

1. Bathrooms
2. Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas and areas of similar use.
3. Outdoors

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~~Exception No. 1 to (3): Receptacles that are not readily accessible and are supplied by a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with 426.28.~~

Exception No. 2 to (3): In industrial establishments only, where the conditions of maintenance and supervision ensure that only qualified personnel are involved, an assured equipment grounding conductor program as specified in 590.6(B)(2) shall be permitted for only those receptacle outlets used to supply equipment that would create a greater hazard if power is interrupted or having a design that is not compatible with GFCI protection.

4. Crawl Spaces – at or below grade level

5. Unfinished basements – for purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exception to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

FPN: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.

Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).

6. Kitchens –

- (a) Dwelling units – where the receptacles are installed to serve countertop surfaces
- (b) Other than dwelling units – all locations

7. Sinks – where the receptacle are installed within 1.8m (6 ft) of the outside edge of the sink.

Exception No. 1 to (7): In industrial laboratories, receptacles used to supply equipment where removal of power would introduce a greater hazard shall be permitted to be installed without GFCI protection.

Exception No. 2 to (7): For receptacles located in patient care areas of health care facilities other than those covered under 210.8(A)(1), GFCI protection shall not be required.

8. Boathouses

9. Indoors:

- (a) Damp locations

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~~(b) Wet locations~~

**(B) Boat Hoists.** GFCI protection shall be provided for outlets not exceeding 240 volts that supply boat hoists installed in dwelling unit locations.

**250.118 Types of Equipment Grounding Conductors.** The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

FPN: For effective ground-fault current path, see 250.2 Definition.

1. A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.
2. Rigid metal conduit.
3. Intermediate metal conduit.
4. Electrical metallic tubing with an additional equipment grounding conductor.
5. Listed flexible metal conduit with an additional equipment grounding conductor, and meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The combined length of flexible metal conduit and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft) for feeders and 15 m (50ft) for branch circuits.
  - c. The additional equipment grounding conductor is terminated at each termination or junction point.
6. Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1 1/4), the circuit conductors contained in the conduit are protected of overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metallic tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the grounding path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft).
  - e. Where used to connect equipment where flexibility is necessary after installation, an equipment grounding conductor shall be installed.
7. Listed liquidtight flexible metal conduit with an additional equipment grounding conductor and meeting all of the following conditions:

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- ~~a. The conduit is terminated in listed fittings.~~
- ~~b. The combined length of liquidtight flexible metal conduit and flexible metal conduit in the same ground return path does not exceed 15 m (50ft) for branch circuits and 1.8 m (6ft) for feeders.~~
- ~~c. The additional equipment grounding conductor is terminated at each termination or junction point.~~
- ~~8. Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
  - ~~a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.~~
  - ~~b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft).~~~~
- ~~9. Armor of Type AC cable with an additional equipment grounding conductor and as provided in 320.108.~~
- ~~10. The copper sheath of mineral-insulated, metal-sheathed cable.~~
- ~~11. Type MC cable where listed and identified for grounding in accordance with the following:
  - ~~a. The combined metallic sheath and grounding conductor of interlocked metal tape-type MC cable.~~
  - ~~b. The metallic sheath or the combined metallic sheath and grounding conductors of the smooth or corrugated tube-type MC cable.~~~~
- ~~12. Cable trays as permitted in 392.3 and 392.7.~~
- ~~13. Cablebus framework as permitted in 370.3.~~
- ~~14. Other listed electrically continuous metal raceways and listed auxiliary gutters.~~
- ~~15. Surface metal raceways listed for grounding.~~

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

1. One-and two-family dwellings.
2. Multifamily dwellings permitted to be of Types III, IV, and V construction
3. Other dwelling unit accessory buildings and structures in accordance with 334.10 (1) and (2).

FPN No. 1: Types of building construction and occupancy classifications are defined in NFPA 220-2006, *Standard on Types of Building Construction*, or the applicable building code, or both.

FPN No. 2: See Annex E for determination of building types [NFPA 220, Table 3-1].

4. Cable trays in structures permitted to be Types III, IV, or V where the cables are identified for the use.

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~~FPN: See 310.10 for temperature limitation of conductors.~~

- (A) Type NM.** Type NM cable shall be permitted as follows:
1. For both exposed and concealed work in normally dry locations.
  2. To be installed or fished in air voids in masonry block or tile walls.
- (B) Type NMC.** Type NMC cable shall be permitted as follows:
1. For both exposed and concealed work in dry, moist, damp, or corrosive locations.
  2. In outside and inside walls of masonry block or tile.
  3. In a shallow chase in masonry, concrete, or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe, or similar finish.
- (C) Type NMS.** Type NMS cable shall be permitted as follows:
1. For both exposed and concealed work in normally dry locations.
  2. To be installed or fished in air voids in masonry block or tile walls.

### 334.12 Uses Not Permitted.

**(A) Types NM, NMC, and NMS.** Types NM, NMC, and NMS cables shall not be permitted as follows:

1. In any dwelling or structure not specifically permitted in 334.10 (1), (2), and (3).
2. As service-entrance cable.
3. In hoistways or on elevators or escalators.
4. Embedded in poured cement, concrete, or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

1. Where exposed to corrosive fumes or vapors.
2. Where embedded in masonry, concrete, adobe, fill or plaster.
3. In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
4. In wet or damp locations.

### ~~SECTION 306. 2003 INTERNATIONAL FIRE CODE~~

~~The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:~~

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#### ~~AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE~~

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

#### ~~SECTION 307. 2009 INTERNATIONAL FUEL GAS CODE~~

The 2009 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.9.1, and one revision as follows:

**404.9 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

**THE  
REMAINING  
PAGES ARE THE  
NEW TEXT FOR  
CHAPTER 3.**

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### SECTION 301. 2012 INTERNATIONAL BUILDING CODE

The 2012 International Building Code has been adopted as the building code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Building Code:

Adopt Appendix G Flood-Resistant Construction

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

#### SECTION 202 DEFINITIONS.

**PERSONAL CARE SERVICE** is assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and administration of medications or treatments.

**SUPERVISORY CARE SERVICE** is general supervision, including daily awareness of resident functioning and continuing needs.

**DIRECTED CARE SERVICE** is care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need or making basic care decisions.

**ASSISTED LIVING FACILITY** is a residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services or directed care services on a continuing basis.

**ASSISTED LIVING CENTER** is an assisted living facility that provides resident rooms to eleven or more residents.

**ASSISTED LIVING HOME** is an assisted living facility that provides resident rooms to ten or fewer residents.

#### INSTITUTIONAL GROUP I

**308.3 Institutional Group I-1.** This occupancy shall include buildings, structures or portions thereof for more than 10 persons who reside on a 24 hour basis in a supervised

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environment, receive custodial care and are capable of self-preservation, except as provided for assisted living centers. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living centers

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

**308.3.2 Six to Ten Persons Receiving Care.** A facility such as above, housing not fewer than six and not more than 10 persons receiving such care, shall be classified as Group R-4, except as provided for assisted living homes.

**308.4 Institutional Group I-2.** This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities

Detoxification facilities

Hospitals

Assisted living centers

Psychiatric hospitals

**SECTION 310.2 DEFINITIONS.** The following terms are defined in Chapter 2:

ASSISTED LIVING FACILITY

ASSISTED LIVING CENTER

ASSISTED LIVING HOME

BOARDING HOUSE

CONGREGATE LIVING FACILITIES

DIRECTED CARE SERVICES

DORMITORY

GROUP HOME

PERSONAL CARE SERVICE

SUPERVISORY CARE SERVICES

TRANSIENT

**310.5.1 Care facilities with a dwelling.** Licensed care facilities for 10 or fewer persons receiving care that are within a single-family dwelling are permitted provided that the requirements of Section 425 of this code are met.

**310.6 Residential Group R-4.** This occupancy shall include buildings, structures or portions thereof for more than five but not more than 10 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self-preservation, except as provided for assisted living homes. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living homes

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code and Section 425.

**310.6.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as Group I-2.

**310.6.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-1.

### **SECTION 425. ASSISTED LIVING HOMES**

**425.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment, which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all the applicable provisions of Group R-3.

**425.2 General.** Building or portions of buildings classified as R-4 may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building and shall not exceed two thousand square feet above the first story, except as provided in Section 506.

**425.3 Special Provisions.** R-4 occupancies having more than 2000 square feet above the first story shall be of not less than one-hour fire-resistive construction throughout.

**425.3.1 Mixed Uses.** R-4 occupancies shall be separated from other occupancies as provided in Table 508.4.

#### **425.4 Access and Means of Egress Facilities.**

**425.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route as provided in Section 1104.1.

#### **425.4.2 Exits.**

**425.4.2.1 Number of Exits.** Every story, basement or portion thereof shall have not less than two exits.

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Exception: Basements and stories above the first floor containing no sleeping rooms used by residents may have only one means of egress as provided in Chapter 10.

**425.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1016, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**425.4.2.3 Emergency Exit Illumination.** In event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the International Electric Code.

**425.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception #1 to 1029 does not apply to R-4 occupancies.

**425.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with 1008.1.9.7, Items 1,2,4,5 and 6.

### **425.5 Smoke Alarms and Sprinkler Systems.**

**425.5.1 Smoke Alarms.** R-4 occupancies shall be provided with smoke alarms installed in accordance with 907.2.11.2, and such alarms shall be installed in all habitable rooms.

**425.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with 903.3.1.3. Sprinkler systems installed under this section shall be installed throughout, including attached garages, and in Condition 2 facilities, shall include concealed spaces of, or containing, combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In Condition 2 occupancies, such systems shall contain water flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

**1008.1.2 Door Swing.** Delete the text of Exception #4 and replace with the following:

4. Doors within or serving a single dwelling unit in Groups R-2 and R-3, as applicable in 101.2 and R-4.

**Section 903.2.8 Group R:** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2 Door Swing.** Egress doors shall be side-hinged swinging.

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Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2012 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (10 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

**1503.4.6 Overflow Drainage Required.** Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

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**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
25. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 25)		

**Amend Section 1609.1.1 to add:**

Exception 7. For design wind loads on solid freestanding walls not over 7 feet, a net force coefficient  $c_f = 1.2$  may be used.

**Section 3109 Swimming Pool Enclosures** is deleted.

### **SECTION 302. 2012 INTERNATIONAL RESIDENTIAL CODE**

The 2012 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following amendments.

**Amendments to the 2012 International Residential Code:**

Revise Table R 301.5 as follows:

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Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

**Section R313 Automatic fire sprinkler systems** is deleted.

N1101.15.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

N1101.17 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

~~N1103.2.2.1 Sealed air handler. Air handlers shall have a manufacturer’s designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

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6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.12 Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.12.1 Individual Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more that 12 inches (305mm) above grade.
3. Not be smaller that the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more that 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2012 INTERNATIONAL MECHANICAL CODE**

The 2012 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County along with the following amendments.

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### **Amendments to the 2012 International Mechanical Code:**

Revise the following sections to read:

**505.1 Domestic Systems.** Where domestic range hoods and domestic appliances equipped with downdraft exhaust are located within dwelling units, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with an approved transition fitting.

**1004.1 Standards.** Oil-fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed and labeled in accordance with UL 834. Boilers shall be designed and constructed in accordance with the ASME *Boiler and Pressure Vessel Code* and Arizona Boiler Rules, Title 20 Chapter 5.

### **SECTION 304. 2012 INTERNATIONAL PLUMBING CODE**

The 2012 International Plumbing Code has been adopted as the plumbing code for Maricopa County along with the following amendments.

### **Amendments to the 2012 International Plumbing Code:**

Add to Section 405.3.1:

Exception: Side clearances for accessible or ambulatory water closets shall comply with ICC/ANSI A117.1.

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.

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6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

Add to Section 904.1:

All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2011 NATIONAL ELECTRICAL CODE**

The 2011 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following amendments.

Revise the following sections to read:

#### **ARTICLE 210 – Branch Circuits**

##### **Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel**

**(B) Other Than Dwelling Units.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(B)(1) through (8) shall have ground-fault circuit-interrupter protection for personnel.

**(6)** Indoor damp and wet locations.

#### **ARTICLE 250 – Grounding and Bonding**

##### **250.118 Types of Equipment Grounding Conductors.**

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) A copper, aluminum or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered or bare; and in the form of a wire or a busbar of any shape.
- (2) Rigid metal conduit.
- (3) Intermediate metal conduit.
- (4) Electric metallic tubing with an additional equipment grounding conductor.
- (5) Listed flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - d. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (6) Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1-1/4), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metal tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the ground-fault current path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (7) Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
  - a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
- (8) Armor of Type AC cable as provided in 320.108.
- (9) The copper sheath of mineral-insulated, metal-sheathed cable.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

- (10) Type MC cable that provides an effective ground-fault current path in accordance with one or more of the following:
  - a. It contains an insulated or uninsulated equipment grounding conductor in compliance with 250.118(1).
  - b. The combined metallic sheath and uninsulated equipment grounding/bonding conductor of interlocked metal tape-type MC cable that is listed and identified as an equipment grounding conductor.
  - c. The metallic sheath or the combined metallic sheath and equipment grounding conductors of the smooth or corrugated tube-type MC cable that is listed and identified as an equipment grounding conductor.
- (11) Cable trays as permitted in 392.10 and 392.60.
- (12) Cablebus framework as permitted in 370.3
- (13) Other listed electrically continuous metal raceways and listed auxiliary gutters.
- (14) Surface metal raceways listed for grounding.

### ARTICLE 334 – Nonmetallic-Sheathed Cable; Types NM, NMC and NMS

#### II. Installation

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- (1) One- and two- family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multifamily dwellings permitted to be of Types III, IV and V construction except as prohibited in 334.12.
- (3) Other dwelling unit accessory buildings and structures in accordance with 334.10(1) and 334.10 (2) and other provisions of this Code.
- (4) Cable trays in structures permitted to be Types III, IV or V in accordance with 334.10(1) and (2) where the cables are identified for the use.
- (5) Types I and II construction in accordance with 334.10(1) and (2) where installed within raceways permitted to be installed in Types I and II construction.

**(A) Type NM.** Type NM cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

(2) To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

(1) For both exposed and concealed work in dry, moist, damp or corrosive locations.

(2) In outside and inside walls of masonry block or tile.

(3) In a shallow chase in masonry, concrete or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe or similar finish.

**(C) Type NMS.** Type NMS cable shall be permitted as follows:

(1) For both exposed and concealed work in normally dry locations.

(2) To be installed or fished in air voids in masonry block or tile walls.

### **334.12 Uses Not Permitted.**

**(A) Types NM, NMC and NMS.** Type NM, Type NMC and Type NMS cables shall not be permitted as follows:

(1) In any dwelling or structure not specifically permitted in 334.10(1), (2) and (3).

(2) As service-entrance cable.

(3) In hoistways or on elevators or escalators

(4) Embedded in poured cement, concrete or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

(1) Where exposed to corrosive fumes or vapors.

(2) Where embedded in masonry, concrete, adobe, fill or plaster.

**Chapter 3 – Adoption of National Codes**

(3) In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.

(4) In wet or damp locations.

**SECTION 306. 2003 INTERNATIONAL FIRE CODE**

The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:

**AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE:**

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

### **SECTION 307. 2012 INTERNATIONAL FUEL GAS CODE**

The 2012 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.11.1, and one revision as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

Delete Section 404.12.1

### **SECTION 308. 2012 INTERNATIONAL GREEN CONSTRUCTION CODE**

The 2012 International Green Construction Code has been adopted as the Green Construction Code for Maricopa County along with the following amendments:

#### **Amendments to the 2012 International Green Construction Code:**

Revise the following sections to read:

#### **SECTION 101 GENERAL**

##### **[A] 101.1 Title.**

These regulations shall be known as the Maricopa County Green Construction Code hereinafter referred to as "this code."

##### **101.2 General.**

The use of this code is optional, unless specifically required through ordinance by Maricopa County. This code is an overlay document to be used in conjunction with the other codes and

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

standards adopted by the jurisdiction. This code is not intended to be used as a standalone construction regulation document and permits are not to be issued under this code. This code is not intended to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.

**TABLE 302.1  
REQUIREMENTS DETERMINED BY THE JURISDICTION**

Section	Section Title of Description and Directives	Jurisdictional Requirements	
<b>CHAPTER 1. SCOPE</b>			
101.3 Exception 1.1	Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.2	Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.3	Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
<b>CHAPTER 4. SITE DEVELOPMENT AND LAND USE</b>			
402.2.1	Flood hazard area preservation, general		No
402.2.2	Flood hazard area preservation, specific		No
402.3	Surface water protection		No
402.5	Conservation area	Yes	
402.7	Agricultural land	Yes	
402.8	Greenfield sites	Yes	
407.4.1	High-occupancy vehicle parking	Yes	
407.4.2	Low-emissions, hybrid and electric vehicle parking	Yes	
409.1	Light pollution control	Yes	
<b>CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
503.1	Minimum percentage of waste material diverted from landfills.	50%	
<b>CHAPTER 6. ENERGY CONSERVATION, EFFICIENCY AND CO<sub>2</sub>e EMISSIONS REDUCTION</b>			
302.1, 302.1.1, 602.1	zEPI of Jurisdictional Choice . The jurisdiction shall indicate a zEPI of 46 or less in each occupancy for which it intends to require enhanced energy performance.	Occupancy: _____ zEPI:	

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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604.1	Automated demand response infrastructure		No
<b>CHAPTER 7. WATER RESOURCES CONSERVATION, QUALITY AND EFFICIENCY</b>			
702.7	Municipal reclaimed water		No
<b>CHAPTER 8. INDOOR ENVIRONMENT QUALITY AND COMFORT</b>			
804.2	Post-Construction Pre-Occupancy Baseline IAQ Testing		No
807.1	Sound transmission and sound levels	Yes	
<b>CHAPTER 10. EXISTING BUILDINGS</b>			
1007.2	Evaluation of existing buildings	Yes	
1007.3	Post Certificate of Occupancy zEPI, energy demand and CO2e emissions reporting		No

### SECTION 309. 2012 INTERNATIONAL ENERGY CONSERVATION CODE

The 2012 International Energy Conservation Code has been adopted as the Energy Conservation Code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Energy Conservation Code:

Revise the following sections to read:

**C101.2 Scope.** This code applies to commercial buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Commercial Building by Section C202, shall have the option of complying under the Residential Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

**R101.2 Scope.** This code applies to residential buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Residential Building by Section R202, shall have the option of complying under the Commercial Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Commercial Provisions shall be followed.

Add Section R102.1.2

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

**R102.1.2 RESNET Testing & Inspection Protocol.** The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections R402.4.1.1, R402.4.1.2 and R403.2.2 and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. R402.4.1.2 – Testing – Air Leakage Rate
  - c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

Add Section R401.2.1

R401.2.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R401.4 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R403.2 Ducts. Ducts and air handlers shall be in accordance with Sections R403.2.1 through R403.2.3.

R403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exceptions: Ducts or portions thereof located completely inside the building thermal envelope.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
  - 2.1 Minimum SEER rating of space heating/cooling system is increased to 15.
  - 2.2 Maximum U-factor is decreased to 0.35 and maximum SHGC is decreased to .022 for all fenestration products.
  - 2.3 Wall cavity insulation minimum R-value is increased to R-19.
  - 2.4 Residential buildings that meet the requirements of Sections R102.1.1 or R405.
  - 2.5 Residential buildings with attic radiant barriers in accordance with ASTM C 1313, installed in accordance with ASTM C1743.

~~R403.2.2.1 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

~~**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System ("HERS") Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.~~

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.

**Text Amendment: TA2013001**

**All Districts**

Applicant: Commission-Initiated  
Request: Text Amendment to the Maricopa County Local Additions & Addenda to adopt and amend updated construction safety codes

Darren Gerard, Deputy Planning Director, referred the Commissioners to the two handouts they received at the meeting and the second addendum to the staff report, which included the verbatim language being recommended by staff after the May 21<sup>st</sup> Building Code Advisory Board (BCAB) meeting. He introduced Tom Ewers, Chief Building Official and Plan Review Manager for Maricopa County Planning and Development Department.

Mr. Ewers presented the above item. He explained that every three years staff seeks to update the International Codes by adopting the Local Additions and Addenda. The changes between the 2009 and 2012 International Codes were minor in nature and most were editorial in that they took all of the definitions out of the different sections and moved them into Chapter 2 of each of the codes. He explained the code books have black lines in the margins that show changes from one edition to the other, and the 2012 edition had very few black lines, except in Chapter 16 which deals with some structural and wind load requirements and Chapter 17 which deals with special inspections requirements. He stated staff was seeking to adopt the 2012 International Suite of Codes and the 2011 National Electrical Code. He stated staff was also seeking to adopt the same amendments that were proposed by the Arizona Building Officials and the Maricopa Association of Governments Building Code Committee, which were included in the leg-edit draft that was presented to the BCAB at three different hearings and was being presented to the Planning & Zoning Commission. Staff did receive proposed amendments from the Homebuilders Association and SRP that were included in staff's original and revised drafts that were in the Commissioners' packets. The Arizona Masonry Counsel suggested an additional change that affects the wind loading on masonry fences, which was passed out to the Commissioners at the meeting, and would be include in the redraft going to the Board of Supervisors. Staff has received a couple of letters of support and some emails in opposition, which were included in the Commissioners' packets. A letter of opposition was passed out to the Commissioners at the meeting and a letter from David and Sharon Mann supporting the adoption of the new codes, in particular, the adoption of the green code and the energy code was received at the meeting and Mr. Ewers read it into the record. Mr. Ewers indicated the Local Additions and Addenda with the MAG/AZBO amendments and some amendments from the Homebuilders Association, SRP and the Arizona Masonry Counsel were being presented to the Commission and staff asked the Commission recommend approval of TA2013001 to be forwarded to the Board of Supervisors.

Chairman Deutsch asked if there were questions for staff.

**Extracts of the Maricopa County Planning and Zoning Commission Meeting of June 6, 2013**

**Case Number: - TA2013001 – 2012 International Codes**

Commissioner Pugmire asked if cost estimates had been done on the Codes' effect on a typical house. Mr. Ewers responded that staff had not done cost estimates. He stated that with the Energy Codes there was the philosophy that whatever it costs, it saves. Commissioner Pugmire asked if that was a philosophy or was it true. Mr. Ewers believed it was true, stating whatever improvements you make to a building that can save you energy will eventually pay for itself and then there is the difference in how many years it takes to pay for itself. Commissioner Pugmire confirmed that they did not know of any cost increases created by the code. Mr. Ewers stated the changes being recommended from the 2009 Code were not sufficient to make any substantial cost difference in the construction of a building.

Chairman Deutsch asked if there were any other questions for staff and asked Spencer Kamps if he wanted to speak.

Spencer Kamps, representing the Homebuilders Association of Central Arizona, spoke in favor of the item. Mr. Kamps stated they had worked well with staff in addressing some of their concerns related to the Codes. He stated they supported, for the record, the adoption of the Building Codes. He explained there were advantages to that for the industry as it related to uniformity and certainty in updating your Codes so they were supportive of that. He stated they had concerns over the Energy Code and submitted amendments related to the HERS path to compliance. Addressing the cost issue, Mr. Kamps stated the HERS path allows them to obtain the same energy savings to the home buyer as the Code with about half the cost, which was why they proposed the amendment and were grateful that it was being included in the Code. He encouraged the Commissioners to pass it.

Chairman Deutsch asked if there were any questions.

Sharon Bonesteel, representing SRP, spoke in favor of the item. Addressing Commissioner Pugmire's comment on the cost savings, Ms. Bonesteel stated she provided to staff the Department of Energy's review of the cost of the Energy Code as it related to the 2006 Energy Code and the 2009 and they were looking at a net positive cash flow within one year for the 2009 and two years for 2012. She stated life-cycle cost savings were \$6,550 in terms of money that residents would not be putting into utility bills and would be able to spend back into the community. She stated the Energy Code was a code of many selections and paths, giving a lot of different options in the way people could comply with the Code. Ms. Bonesteel stated one of the key elements about the IRC and the IECC was they allowed a small builder who builds one or two homes a year to have a prescriptive path, an easy path to take to comply with the code and they allowed the large scale homebuilders to utilize some of those other method that were very efficient when you are building 300 homes. She stated she had been involved in the development of the building codes for probably 16 years, attended the code hearings, and been

**Extracts of the Maricopa County Planning and Zoning Commission Meeting of June 6, 2013**

**Case Number: - TA2013001 – 2012 International Codes**

a part of helping to write them and making sure that they were reasonable. Ms. Bonesteel urged the Commissioners' support.

Chairman Deutsch asked if there were any questions.

Commissioner Aster asked for clarification of the \$6,550. Ms. Bonesteel explained the Arizona Energy and Cost Savings for New Single and Multi-Family Homes did cost savings comparisons of the 2012 Energy Code to the 2009 and 2006 Codes. She stated they looked at life-cycle cost savings and net positive cash flow in a single pay back and the dollars and cents that people would be saving. She stated the 2012 Energy Code was expected to save a homeowner about \$154 a year on up to maybe \$500 a year, depending on the house, and the \$6,550 had to do with life-cycle cost savings.

Chairman Deutsch asked if there were any other questions.

**COMMISSION ACTION:** Commissioner Aster moved to recommend approval and adoption of TA2013001; Vice-Chairman Smith seconded the motion which passed with a unanimous vote of 7-0.

DRAFT

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:38 PM  
To: 'information@sierraclub.org'  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Cliff Wilkerson regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:22 PM  
To: Lynn Favour - PLANDEVX  
Cc: Katie Prendergast - DIST2X  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Cliff Wilkinson  
Sent: Thursday, August 01, 2013 4:05 AM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Aug 1, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mr. Cliff Wilkinson  
942 W Emerald Cir  
Mesa, AZ 85210-3457

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:40 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Martin Smith regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:23 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Martin Smith  
Sent: Wednesday, July 31, 2013 12:13 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 31, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mr. Martin Smith  
8968 W Citrus Way  
Glendale, AZ 85305-5415  
(623) 707-5471

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:42 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Gerald Ziegler regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:28 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Gerald Ziegler  
Sent: Wednesday, July 31, 2013 3:01 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 31, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mr. Gerald Ziegler  
900 W Grove Pkwy  
Tempe, AZ 85283-4520  
(231) 288-3786

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:43 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Michael Weinand regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:29 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Michael Weinand  
Sent: Thursday, July 25, 2013 11:09 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 26, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mr. Michael Weinand  
215 W Portland St Unit 157c  
Phoenix, AZ 85003-5421  
(520) 780-1834

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:45 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Carolyn Maxon regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:29 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Carolyn Maxon  
Sent: Thursday, July 25, 2013 1:10 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 25, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mrs. Carolyn Maxon  
5958 E Aster Dr  
Scottsdale, AZ 85254-4335  
(480) 483-8267

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:46 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Jason Michael Walker regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:29 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Jason Michael Walker  
Sent: Tuesday, July 23, 2013 9:34 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 23, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mr. Jason Michael Walker  
6920 S 74th Ln  
Laveen, AZ 85339-5093  
(602) 690-9929

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:47 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Janice Butkiewicz regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:29 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Janice Butkiewicz  
Sent: Friday, July 19, 2013 5:34 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 19, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Mrs. Janice Butkiewicz  
29073 N 122nd Dr  
Peoria, AZ 85383-2419

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:49 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Dr. Cady Berkel regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:29 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Cady Berkel  
Sent: Monday, July 15, 2013 1:07 PM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 15, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

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On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Dr. Cady Berkel  
148 W Vera Ln  
Tempe, AZ 85284-3915

From: Lynn Favour - PLANDEVX  
Sent: Monday, August 05, 2013 6:50 PM  
To: information@sierraclub.org  
Cc: Darren Gerard - PLANDEVX; Marsha Spencer - PLANDEV  
Subject: RE: Please support energy-saving building codes

Dear Sierra Club,

Thank you for sending this email on behalf of Elizabeth Freer regarding TA2013001 (Building Codes).

The Board of Supervisors will hear this item this Wednesday, 8/7, at their meeting that begins at 9:00 a.m. in the Supervisor's Auditorium located at 205 W. Jefferson Street should you wish to attend.

Thank you for your comments.

Sincerely,

Lynn Favour, AICP, Deputy Director  
Maricopa County Planning and Development Department

-----Original Message-----

From: Stephen Chucri - DIST2X  
Sent: Monday, August 05, 2013 3:29 PM  
To: Lynn Favour - PLANDEVX  
Subject: FW: Please support energy-saving building codes

-----Original Message-----

From: Sierra Club [mailto:information@sierraclub.org] On Behalf Of Elizabeth Freer  
Sent: Saturday, July 13, 2013 10:19 AM  
To: Stephen Chucri - DIST2X  
Subject: Please support energy-saving building codes

Jul 13, 2013

Mr. Steve Chucri  
10th Floor  
301 West Jefferson Street  
Phoenix, AZ 85003-2143

Dear Mr. Chucri,

I ask that you please approve adoption of the 2012 International Energy Conservation Code.

Adoption of these codes will help save energy and save consumers money, too.

Energy efficient homes are more affordable, reduce default and foreclosure risk, drive down the short-term and long-term cost of energy, improve air quality, reduce stress on our electrical grid, defer the need to construct costly new energy infrastructure, and decrease greenhouse gas emissions. Energy efficient homes are generally more comfortable, as well, with fewer hot spots in different areas.

Energy efficient homes are 32 percent less likely to go into default.

On average, Arizona homeowners with a home built under the 2012 energy code will save \$6,550 over thirty years, and each year, the reduction to energy bills will significantly exceed increased mortgage costs.

Please act now to help us reduce energy use and to save customers money!

Thank you for considering my comments.

Sincerely,

Ms. Elizabeth Freer  
7436 E Chaparral Rd Unit B108  
Scottsdale, AZ 85250-7130



## Report to the Planning and Zoning Commission

Prepared by the Maricopa County Planning and Development Department

---

<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	June 6, 2013
<b>Agenda Item:</b>	6
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Commission-initiated
<b>Request:</b>	Text Amendment Maricopa County Local Additions & Addenda to adopt and amend updated construction safety codes
<b>Support/Opposition:</b>	One (1) email of support
<b>Recommendation:</b>	<b>Approval</b>

### Discussion:

1. TA2013001 is a text amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the following:
  - 2012 International Building Code
  - 2012 International Residential Code
  - 2012 International Plumbing Code
  - 2012 International Mechanical Code
  - 2012 International Fuel Gas Code
  - 2012 International Green Construction Code
  - 2012 International Energy Conservation Code
  - 2012 International Existing Building Code
  - 2011 National Electric Code

The proposed text amendment language is a repeal and replace of the existing document language for the Maricopa County Local Additions & Addenda. These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to our customers. Note the green construction code will be voluntary.

2. This item is being processed through the County's Enhanced Regulatory Outreach Program (EROP). A stakeholder meeting was held on February 22, 2013. The Commission initiated TA2013001 at the April 25, 2013 ZIPPOR meeting. The matter was discussed at the April 9, 2013 Building Code Advisory Board (BCAB) meeting, and the BCAB voted to initiate the amendments at their April 30, 2013 meeting. The matter will be revisited by the BCAB at the May 21, 2013 (the 5/21/13 BCAB packet is attached but as of the writing of this report the results of that meeting are not known). If the

Commission acts positively today, the matter will go to the July 17, 2013 Board of Supervisors public hearing, and if adopted will take immediate effect.

3. One email of support was received via EROP:

**From:** Darren Gerard - PLANDEVX  
**Sent:** Tuesday, April 16, 2013 5:20 PM  
**To:** 'Ann Hutchinson'; Alan & Candy Muller  
**Cc:** Debra Stark - PLANDEVX; Michael Norris - PLANDEVX; Lynn Favour - PLANDEVX  
**Subject:** RE: TA2013001-002--003 New River-Desert Hills Community Association Response

Ann & Alan: your comments are appreciated and will be printed for hand out at the 4/24 P&Z meeting. The agenda and staff reports with attachments are available online. Please note regarding TA2013001 that the green construction codes will be voluntary. Also regarding TA2013003, please note that administrative drainage waivers will have site posting giving neighbors opportunity to provide comment, and that the administrative determination may be appealed to the Drainage Review Board. Please let me know if this alleviates your concerns. Darren

**From:** Ann Hutchinson [<mailto:behomes@q.com>]  
**Sent:** Thursday, April 11, 2013 12:31 PM  
**To:** Darren Gerard - PLANDEVX  
**Cc:** Alan & Candy Muller  
**Subject:** TA2013001-002--003 New River-Desert Hills Community Association Response [MEMO ATTACHED AT END OF REPORT]  
Darren,

The attached has the New River - Desert Hills response and consultant's analysis for TA2013001, TA2013002, and TA2013003

Thank you for your consideration,

Ann Hutchinson  
Planning and Development Liaison  
New River - Desert Hills Community Association  
515 E. Carefree Highway, #300  
Phoenix, AZ 85085-8839  
Email: [behomes@q.com](mailto:behomes@q.com)  
[www.nrdhca.org](http://www.nrdhca.org)  
623-742-6514

There is no known opposition to TA2013001 as of the writing of this report. The New River / Desert Hills Community Association (NRDHCA) registered support via EROP and sent a memo, attached. Salt River Project (SRP) provided early written support at the stakeholder meeting, attached. There have been no suggestions to alter the language proposed at the ZIPPOR meeting.

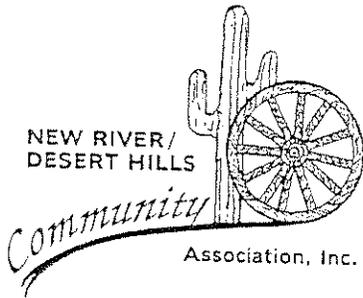
4. The proposed verbatim language is attached.

**Recommendation:**

5. Staff recommends the Commission recommend **approval** of **TA2013001** as shown in the attachment and as recommended by the BCAB.

Prepared by: Darren V. Gerard, AICP, Deputy Director

Attachments: NRDHCA memo of support (2 pages)  
SRP letter of support (1 page)  
DRAFT April 25, 2013 ZIPPOR minutes (not available as of the writing of this report)  
April 25, 2013 ZIPPOR packet (41 Pages)  
DRAFT May 21, 2013 BCAB minutes (not available as of the writing of this report)  
May 21, 2013 BCAB packet (116 pages)



New River/Desert Hills Community Association, Inc.  
515 E. Carefree Hwy. #300  
Phoenix, AZ 85085-8839  
Phone 602-432-2800  
Fax: 623-465-1177  
Website: [www.NRDHCA.ORG](http://www.NRDHCA.ORG)  
President's email: [Alan@NRDHCA.com](mailto:Alan@NRDHCA.com)

April 11, 2013

Darren Gerard  
Maricopa County Planning and Development  
501 North 44th Street, Suite 200  
Phoenix, AZ 85008

Dear Darren,

The President of the New River/Desert Hills Community Association (NR/DHCA) has authorized me to submit following comments and recommendations:

- **TA2013001 – 2012 International Codes.** For the most part, this seems appropriate. **Concern:** There is concern about the implementation of the International Green Construction Code since may be greatly increase the cost of a new residencies. We suggest that the county phase this into the requirements to mitigate undue hardships.
- **TA2013002 - Hillside Retaining Walls.** This seems appropriate. **No concern:** It appears to merely clarifies the existing ordinance.
- **TA2013003 - Drainage Waivers.** For the most part, this seems appropriate. **Concern:** There is concern that there does not seem to be any checks and balances. Therefore it is not obvious that the administrative hearings will adequate and that there will not be an opportunity for public input. .

Please consider the attached letter from our consultant.

Regards,

*Ann Hutchinson*

Ann Hutchinson  
Planning and Development Liaison  
New River - Desert Hills Community Association  
515 E. Carefree Highway, #300  
Phoenix, AZ 85085-8839  
Email: [behomes@g.com](mailto:behomes@g.com)  
[www.nrdhca.org](http://www.nrdhca.org)  
623-742-6514

**Attachment:** Consultant's analysis

PAUL H. McALLISTER  
201 W. Circle Mountain Road  
New River, AZ 85087  
Date: 31 March 2013

To: NR-DHCA, INC.

I have reviewed the proposed TAs (Text Amendments) TA2013001, TA2013002 and TA2013003. TA2013001 proposes adopting 2012 International, Building, Residential, Plumbing, Mechanical, Fuel/Gas, Green Construction, Energy Conservation, Existing Building Codes. If Green Construction and Energy Conservation Codes are required, I can only hope Maricopa County does not require sealed plans/documents as part of the approval process.

**TA2013001** incorporates The International Green Construction Code. This will elevate the cost of a new residence but only slightly. The new products on the market are tried and proven to be better or as good as the older required products. Presently the newer (Green) materials are much cheaper than their accepted older materials.

When it comes to energy conservation, my experience in California was that energy efficacy compliance on the plans had to be documented and sealed for approval. This seal provided by a registered Architectural Engineer or a Engineer was required for approval.

Energy Conservation is often an expensive process and will increase the cost of a new residences considerably. Insulation R designation (walls, attic, floors), windows shading, window size, air intrusion sealing (windows and doors mostly) all will become part of this change. Energy conservation in this area is a good thing but what cost is acceptable? The county should only require certain modifications to the structure and slowly, not enter all at once thereby avoiding anything that might be considered as a hardship.

I do not possess a copy of the International Existing Building Code and thereby know very little about it. I know virtually nothing about what requirements are in this code but it does not sound good (i.e. sounds expensive for little value).

**TA2013002** this proposed addition to Chapter 11 will make no new requirements only spells-out those requirements that exist and clear up any confusion that currently exist.

**TA2013003** Will allow drainage requirements to be approved administratively and not require (in some cases) approval only by the Drainage Review Board (a public meeting). The only objection to this method is that the county may use this method to approve everything. This TA provides no checks and balances but is open-ended.

Sincerely,

Paul H. McAllister



March 19, 2013

Debra W. Stark, AICP  
Maricopa County Planning and Development Director  
501 N. 44<sup>th</sup> Street, Suite 200  
Phoenix, AZ 85008

*file in  
Adoption of  
2012 I Codes*

RE: Adoption of the 2012 I Codes

Ms. Debra Stark:

Thank you for taking the time to meet with me yesterday. I enjoyed our conversation about Maricopa County, and I hope I was able to provide some helpful information on why the adoption of the 2012 IECC is so important to our collective future. I will keep you posted as new information becomes available. Senate Bills 1365 and 1321 have been a concern to us all; SRP supports the right of Maricopa Co to define their own future, and determine what is best for their residents.

SRP supports your efforts to adopt the 2012 Codes, as well as your efforts to encourage design and building techniques that reduce energy consumption thereby saving Maricopa Counties businesses and residents money. It makes good business sense for the County to encourage building practices that protect their infrastructure. SRP's mission of providing reliable and reasonably priced electricity relies upon efforts such as this to assure our ability to meet future and current power demands.

Building Energy Codes are the most cost effective method of obtaining energy efficiency. SRP supports the adoption of the 2012 International Energy Conservation Code as a means to obtain reduced demand on your infrastructure and our generation facilities. The construction costs associated with building additional generation facilities will be born by all of us; all of us can contribute to postponing that work, allowing American ingenuity time to develop the next great energy generating resource.

Currently SRP obtains power from many types of generation facilities: hydro, nuclear, natural gas, wind, geothermal, solar, landfill gas, biomass, and fuel cell technology. In 2012 we met 9% of power demand with sustainable resources. During the past few years, SRP has introduced more than 25 energy efficiency programs. Through these rebate programs we have supported a movement in the market that has resulted in better built, more energy efficient homes and businesses. We support and encourage your adoption of the 2012 IECC as a means to continue this trend, saving your residents and business money in the most cost effective way.

If we can be of any support, including providing training and code books, please let us know.

Sincerely,

Sharon Bonesteel, RA, CBO, CP  
Senior Policy Analyst – Codes & Standards Initiative  
Office 602-236-4498, Cell 602-814-7357



MOHAWK





## Report to the Planning and Zoning Commission

Prepared by the Maricopa County Planning and Development Department

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<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	April 25, 2013
<b>Agenda Item:</b>	7
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Staff
<b>Request:</b>	Initiate a Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as amended
<b>Support/Opposition:</b>	No known opposition. One letter of support.
<b>Recommendation:</b>	<b>Initiate</b>

### Discussion:

This is to ensure updated construction safety codes. This item was presented to the Maricopa County Building Code Advisory Board on April 9 for discussion and will be presented again on April 30, 2013 for recommendation. The April 9, 2013 BCAB report and proposed language are attached.

A text amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the following:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Plumbing Code
- 2012 International Mechanical Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code
- 2011 National Electric Code

The proposed text amendment language is a repeal and replace of the existing document language for the Maricopa County Local Additions & Addenda. The rewritten document is attached in its entirety. These are code updates and not substantial changes from current codes, except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to our customers. Note the green construction code will be voluntary.

This item is being processed through the County's Enhanced Regulatory Outreach Program (EROP). A stakeholder meeting was held on February 22, 2013. If these items are initiated at today's ZIPPOR, and positively acted on at the April 30, 2013 BCAB, the anticipated Commission hearing for recommendation to the BOS is June 6, 2013 and the tentative BOS hearing for adoption is July 17, 2013. The regulations will take immediate effect upon approval.

The stakeholder meeting was well attended and this matter was discussed. (No minutes of the meeting were prepared.) The stakeholders indicated compliance with the green construction codes should be optional, and that an alternative to energy code compliance must be offered. Staff is proposing an alternative approach to compliance by documenting a Home Energy Rating System (HERS) Index of 70 or less. There is no known opposition to the proposed language. A letter of support was received from SRP, attached.

**Recommendation:**

Staff recommends the Commission **initiate TA2013001**.

Prepared by Darren V. Gerard, AICP, Deputy Director

Attachments: SRP letter (1 page)  
4/9/13 BCAB report (3 pages)  
Proposed language (35 pages)

No large size enclosures.



March 19, 2013

Debra W. Stark, AICP  
Maricopa County Planning and Development Director  
501 N. 44<sup>th</sup> Street, Suite 200  
Phoenix, AZ 85008

file in  
Adoption of  
2012 I Codes

RE: Adoption of the 2012 I Codes

Ms. Debra Stark:

Thank you for taking the time to meet with me yesterday. I enjoyed our conversation about Maricopa County, and I hope I was able to provide some helpful information on why the adoption of the 2012 IECC is so important to our collective future. I will keep you posted as new information becomes available. Senate Bills 1365 and 1321 have been a concern to us all; SRP supports the right of Maricopa Co to define their own future, and determine what is best for their residents.

SRP supports your efforts to adopt the 2012 Codes, as well as your efforts to encourage design and building techniques that reduce energy consumption thereby saving Maricopa Counties businesses and residents money. It makes good business sense for the County to encourage building practices that protect their infrastructure. SRP's mission of providing reliable and reasonably priced electricity relies upon efforts such as this to assure our ability to meet future and current power demands.

Building Energy Codes are the most cost effective method of obtaining energy efficiency. SRP supports the adoption of the 2012 International Energy Conservation Code as a means to obtain reduced demand on your infrastructure and our generation facilities. The construction costs associated with building additional generation facilities will be born by all of us; all of us can contribute to postponing that work, allowing American ingenuity time to develop the next great energy generating resource.

Currently SRP obtains power from many types of generation facilities: hydro, nuclear, natural gas, wind, geothermal, solar, landfill gas, biomass, and fuel cell technology. In 2012 we met 9% of power demand with sustainable resources. During the past few years, SRP has introduced more than 25 energy efficiency programs. Through these rebate programs we have supported a movement in the market that has resulted in better built, more energy efficient homes and businesses. We support and encourage your adoption of the 2012 IECC as a means to continue this trend, saving your residents and business money in the most cost effective way.

If we can be of any support, including providing training and code books, please let us know.

Sincerely,

Sharon Bonesteel, RA, CBO, CP  
Senior Policy Analyst – Codes & Standards Initiative  
Office 602-236-4498, Cell 602-814-7357



MOHAWK





# Maricopa County

Planning & Development Department

Tom Ewers  
Plan Review Manager  
501 N. 44<sup>th</sup> St., Suite 200  
Phoenix, Arizona 85008  
Phone: (602) 506-7145  
[www.maricopa.gov/planning](http://www.maricopa.gov/planning)

TO: BUILDING CODE ADVISORY BOARD  
FROM: TOM EWERS, PLAN REVIEW DIVISION MANAGER  
DATE: March 15, 2013  
RE: April 9, 2013 BCAB MEETING

### Approval of Minutes:

At your April 9, 2013 meeting please approve the attached minutes of your January 8, 2013 meeting.

### New Business:

**1. 2012 ICC Code Adoption – 2013 Maricopa County Local Additions and Addenda**

Attached please find the 2013 Maricopa County Local Additions and Addenda which we use to adopt and amend the following International Codes:

2012 International Building Code  
2012 International Residential Code  
2012 International Mechanical Code  
2012 International Plumbing Code  
2011 National Electrical Code  
2003 International Fire Code  
2012 International Fuel Gas Code  
2012 International Green Construction Code  
2012 International Energy Conservation Code  
2012 International Existing Building Code

We had hoped to have new codebooks available for the BCAB members but we can't order them until we have a clear idea of exactly which codes will be adopted. Then we can do a bulk order for the BCAB and our plan review and inspections staff.

In general the 2012 ICC Codes, and 2011 NEC Code, did not contain many actual changes, other than housekeeping changes to move all definitions to chapter two and not include related code language in every section, but just refer to the related code sections. This resulted in far fewer pages in each code book. The only big actual changes to the IBC and IRC are clarifications to wind load design, earthquake design and wall bracing.

We are adding the Green Construction Code, Energy Conservation Code and Existing Building Code.

Similarly, the Local Additions and Addenda are not changing much other than to update the referenced code sections. We are still recommending adoption of the MAG/AZBO Amendments for the IBC, IRC, IMC, IPC and IFGC and the City of Phoenix Amendments for the NEC, IGCC, IECC and IEBC.

I will describe more specifically the changes to the Local Additions and Addends and the ICC/NEC Codes:

**Cover Page:**

1. Updated to March 2013.

**Table of Contents:**

1. Updated to reference the 2012 codes and add the IGCC, IECC and IEBC.

**Chapter 1:**

1. No Changes.

**Chapter 2:**

1. Removed the \$75 fee for Expedited in-house plan review, since this is not a service we offer.
2. Section 209. Noise Level Reduction. Updated Zoning Ordinance reference from Section 1007 to 1010 to reflect a change made to the Zoning Ordinance.
3. Section 210.2 Definitions, Swimming Pool. Added "This does not include decorative fountains that contain water under 12" deep". Without this language, we were requiring pool barriers around fountains.
4. Section 211.1.5 of Residential Woodburning Regulations completely changed to match current Arizona Revised Statutes (ARS) for the four types of allowable fireplaces/wood stoves.

**Chapter 3:**

1. Section 301. Adopts and amends 2012 IBC and Appendix G Flood Resistance Construction. We don't usually adopt appendices, but this one is necessary to maintain our standing in the NFIP.
  - a. Section 202 through Section 3109 are the MAG/AZBO amendments that did not change other than some slight editorial corrections. We are still exempting single family residences from fire sprinkler requirements.

2. Section 302. Adopts and amends 2012 IRC. No changes other than some code section corrections. We are still exempting single family residences from fire sprinkler requirements.
3. Section 303. Adopts and amends 2012 IMC with new MAG/AZBO amendments for Domestic Systems and Standards.
4. Section 304. Adopts and amends 2012 IPC with new MAG/AZBO amendment for Water Closet clearances. Kept same MAG/AZBO amendments for Discharge Piping and Vent Through Roof.
5. Section 305. Adopts and amends 2011 NEC with the City of Phoenix Amendments, which haven't changed except for section number corrections to fit the new code.
6. Section 306. Adopts and amends 2003 IFC. No changes, still only applies to County owned buildings.
7. Section 307. Adopts and amends 2012 IFGC with same MAG/AZBO amendment for Burial Depth.
8. Section 308. Adopts and amends 2012 IGCC with City of Phoenix proposed amendments. Specifies that code is optional.
9. Section 309. Adopts and amends 2012 IECC with City of Phoenix and SRP proposed amendments for scoping and the RESNET testing and HERS ratings and pool motor requirements recommended by MAG/AZBO.
10. Section 310. Adopts 2012 IEBC with no amendments.

It is staff's recommendation that the BCAB recommend that the Maricopa County Planning and Zoning Commission and Board of Supervisors adopt the 2013 Maricopa County Local Additions and Addenda which adopts and amends the 2012 ICC codes and the 2011 NEC code.

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

March 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 1 – Purpose & Title

### **SECTION 101. PURPOSE**

The purpose of this document is to provide all local addenda, amendments, and additions to the adopted national building codes in one location.

### **SECTION 102. TITLE**

This document shall be referred to and known as "Local Additions & Addenda".

### **SECTION 103. SEPARABILITY**

If any section, subsection, sentence clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not effect the validity of the remaining portions thereof.

### **SECTION 104. AMENDMENT**

This document may be amended from time to time. It may be amended by simple motion of the Board of Supervisors, provided all state required legal advertising for amending a Building Code has been satisfied. Staff may correct typographical errors and/or reformat this document without being considered an amendment.

### **SECTION 105. REVOCATION**

This document shall abolish, replace, and/or supercede any previous amendments, changes or additions to the national codes previously approved by Maricopa County.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### SECTION 201. PURPOSE

The purpose of this Chapter is to provide all local changes to the adopted national building codes that relate to the administration of those codes in on location.

### SECTION 202. VIOLATION & PENALTY (Reserved)

### SECTION 203. BUILDING CODE ADVISORY BOARD (Reserved)

### SECTION 204. ORGANIZATION & ENFORCEMENT

Code Enforcement Agency

The Code Enforcement Agency created under the building code shall be defined in Maricopa County as the Planning and Development Department. This Planning and Development Department is charged by the Board of Supervisors to implement the building code and other pertinent laws, ordinances and/or regulations through the County's One Stop Shop Program.

Building Official

The Building Official shall be the Director of the Planning and Development Department (or his/her duly authorized representatives), who is charged with the administration and enforcement of the building code and Building Safety Ordinance.

General

Wherever the building code refers to the intent, purpose, implementation, inspection, enforcement, regulation, issuance of documents, compliance or other similar activity related to "this code", the phrase for purposed of implementing the "One Stop Shop Program" shall mean "this code or other pertinent laws, ordinances, and/or regulations implemented through the Code Enforcement Agency."

### SECTION 205. PERMITS

**Building Permits:** A building permit shall not be required for a detached non-habitable accessory building that is single story and no greater than 200 square feet in floor area, provided such building does not include plumbing, electrical, or mechanical services or equipment. A building permit shall not be required to replace an existing water heater provided the work is done in accordance with manufacturer's specifications.

**Permit Expiration:** A permit may be renewed within one year of expiration provided that no change in ownership or engineer/architect of record has occurred. Renewal after expiration for

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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more than one year shall not be permitted. Any such permit shall be deemed to be revoked and a new permit must be issued.

The design and construction of structures located within the unincorporated areas of Maricopa County shall comport to the codes in effect at the time of permit application, provided the specific permit remains valid, regardless of whether or not the County adopts subsequent codes. When approved by the Building Official, utility-scale solar generating facilities in which permit applications have been submitted, the design and construction may continue to utilize the codes in effect at the time of initial permit application, regardless of the number of permits required to complete the project, provided that 1) all construction is covered by an issued permit, 2) any permits issued for construction remain valid, and 3) continuous construction takes place until the facility is commissioned for commercial service and the facility receives final inspection. Once the above conditions have been met, subsequent construction activity shall comply with the codes in effect at the time of the subsequent permit applications. Further, should a permit lapse, the work contemplated by the permit shall be subject to a new permit application and shall comport to the codes in effect at the time the new permit application is submitted. For purposes of this section, the term "Utility-Scale" shall be as defined by the Maricopa County Zoning Ordinance.

**Temporary Event Permit Exemption:** Structures erected pursuant to an approved Temporary Use Permit shall not require a building permit if standing for a period not to exceed 96 contiguous hours. The responsible party shall provide documentation, as specified in the Temporary Use Permit that said structures were erected and maintained subject to all applicable building safety codes and manufacturer's specifications. The documentation shall be provided to the Department within two working days following the end of the special event to be filed with the Temporary Use Permit. Failure to provide the required documents will render the Temporary Use Permit null and void and constitute a zoning violation in accordance with Chapter 15 of the Maricopa County Zoning Ordinance.

### SECTION 206. INSPECTIONS

**Pre-Permit Inspection:** A pre-permit inspection may be necessary and shall be the responsibility of the permit holder to post the property in a manner approved by the Building Official.

**Permit Holder Responsibilities:** It shall be the responsibility of the permit holder to:

1. Call for an inspection.
2. Stake property corners.
3. Designate property lines prior to the inspection of any primary use.
4. Post the inspection card.
5. Provide a copy of the approved plans on the site.
6. Provide access to the site.
7. Have someone at the site during the inspection.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Failure to complete the above shall result in no inspection at the time and an assessment of a re-inspection fee. A survey of the lot may be required by the Building Official to verify that the building/structure is located in accordance with the approved plans.

**Partial Inspections:** Partial inspections may be requested and conducted when necessary due to common construction practices. If a partial inspection is approved, documentation shall be maintained during construction that identifies what segments of work have obtained what types of partial inspection approval.

**Re-inspections:** Re-inspection fees shall apply when:

1. Property lines have not been designated as required.
2. The inspection card is not posted or available on the work site.
3. Approved plans are not readily available to the inspector on the site.
4. There is no access on the date for which the inspection is requested.
5. Work is not ready for inspection.
6. Work has been covered.
7. Late cancellation.
8. There is a deviation from plans significant enough to require approval of revised plans.

To obtain a re-inspection, the applicant shall follow the same procedures required for an inspection after paying a re-inspection fee.

### SECTION 207. CERTIFICATE OF OCCUPANCY

The purpose of a Certificate of Occupancy is to insure that all department requirements have been met. A Certificate of Occupancy is required for all permits except those issued over the counter.

**Temporary Certificate:** A Temporary Certificate of Occupancy may be issued with the concurrence of all impacted departments and when appropriate fees are paid. Bonding, if required, shall be provided in accordance with the direction of the Building Official prior to issuance of a Temporary Certificate.

**Permanent Utility Authorization:** Permanent utility approval shall not be authorized until after a permanent Certificate of Occupancy has been issued. Said authorization to the utility company shall include a copy of the Certificate of Occupancy or letter of approval.

### SECTION 208. FEES

**Determination of Value:** Values shall be determined through the use of the most current published Building Valuation data in the publication "Building Standards" as modified for Arizona. The Building Official may develop similar increases for unpublished valuations.



# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

expedite processing, provided that the owner and/or architect/engineer have remained the same and that the building plans have not been changed.

No subsequent step in the permit process shall be undertaken without all fees due being paid.

**Fees:** The Building Official may develop a requirement for an initial flat rate filing fee for permits that require plan review. Should this type of fee be developed, said fee shall be considered as a part of and credited against any required plan review fees. The building plan review fees specified in the code are separate fees from the permit fees specified, these fees are also separate from the fees specified for investigations. Building plan review fees are assessed in addition to these other fees. All fees may be rounded up to the next full dollar amount at the discretion of the Building Official.

The following fees are hereby established for use.

TABLE 1-A – BUILDING CODE/PERMIT FEES

<b>Total Valuation</b>	<b>Fee</b>
\$1 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the first \$500 plus \$3.05 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the first \$25,000 plus \$10.10 for each additional \$1000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,233.75 for the first \$500,000 plus \$4.75 for each additional \$1000, or fraction thereof, and including \$1,000,000
\$1,000,001 and up	\$5,608.75 for the first \$1,000,000 plus \$3.65 for each additional \$1000, or fraction thereof

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### Other Inspections and Fees:

1. Inspections outside of normal business hours	\$ 150 per residential inspection \$ 250 per commercial inspection
2. Reinspection fees	\$ 150 per residential inspection \$ 250 per commercial inspection
3. Inspections for which no fee is indicated	\$ 150 per inspection
4. Expedited plan review by consultant	Actual costs
5. Standard plan review (5 options)	2 times normal plan review fee
6. Change to approved plan (includes standards)	\$ 250
7. Code Modification	\$ 100 per request
8. Alternate material, design or methods	\$ 100 per request
9. Tests required	\$ 100 per test & test fees paid by applicant
10. Appeal to the Building Code Advisory Board	\$ 500
11. Amendment to the Code	\$1500
12. Requested/needed staff directive	\$ 250
13. Requested staff research report	\$ 100 residential property \$ 250 commercial property

### Flat Rate Fees:

Air conditioner	\$ 50
Elec. Serv Residential 1 – 200 amps	\$ 50
Elec. Serv Res or Comm 201 – 400 amps	\$ 75
Elec. Serv over 400 amps	\$ 120
Temporary meter	\$ 50
Evaporative cooler	\$ 50
Gas Line (connect or clearance)	\$ 50
Mobile home "Pre-HUD Upgrade"	\$ 50
Plumbing sewer line SFR	\$ 50
Irrigation System	\$ 50
Sprinkler	\$ 50
Mechanical	\$ 50
Plumbing (Install or replace Equip/fixture/devices)	\$ 50
Demolition Permit	\$ 50
Manufactured/Mobile Home Setup/Installation	\$ 300
Commercial Manufactured Building (factory built building)	Based on installation value & Table 1-A
Occupancy Change	\$ 75
Hot tub or Spa (in or above ground)	\$ 75
Swimming pool above ground	\$ 75
Compliance Inspection	\$ 100
Move on House (compliance inspection)	\$ 100
Renew permit for final	\$ 100

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Special Event Fee (tents) \$ 100 per event

### Additional Fees:

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system	\$500
(Less than six (6) feet high)	
Roof mounted residential solar system	\$300

### Copy Charges:

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### Grading Fees:

#### Plan Review Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	No fee
50 – 100 cubic yards	\$ 23.50
101 – 1,000 cubic yards	\$ 37.00
1,001 – 10,000 cubic yards	\$ 49.25
10,001 – 200,000 cubic yards	\$ 49.25 plus \$ 24.50 for each additional

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	10,000 cubic yards or fraction thereof
200,001 or more cubic yards	\$269.75 plus \$ 7.25 for each additional 10,000 cubic yards or fraction thereof
Additional plan review required by changes, additions, or revisions to approved plans	\$ 50.00

### Permit Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	\$ 23.50
50 – 100 cubic yards	\$ 37.00
101 – 1,000 cubic yards	\$ 37.00 plus \$ 17.50 for each additional 100 cubic yards or fraction thereof
1,001 – 10,000 cubic yards	\$194.50 plus \$ 14.50 for each additional 1,000 cubic yards or fraction thereof
10,001 – 100,000 cubic yards	\$325.00 plus \$ 66.00 for each additional 10,000 cubic yards or fraction thereof
100,001 or more cubic yards	\$919.00 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof

**Payment of Fees:** No application shall be scheduled for hearing by any board or commission acting pursuant to the "Maricopa County Local Additions and Addenda", or administratively approved unless and until all fees and fines owed to the Department as a result of any activity or inactivity attributable to the property that is the subject of the application are brought current and paid in full or any amounts owed pursuant to an agreement of compliance are current, as the case may be. This requirement shall not be waived by the board/commission. <sup>\*1\*2</sup>

### SECTION 209. ADDITIONAL REGULATIONS

**NOISE LEVEL REDUCTION:** Any building within the vicinity of a military airport or ancillary military facility as defined by State Statute shall have a noise level reduction incorporated in the design and construction of any residential building or portions of buildings where the public is received, office areas and where normal noise level is low for first occupancy, including libraries, schools and churches, pursuant to building permits issued after December 31, 2001 in order to achieve a maximum interior noise level of forty-five decibels in areas

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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within noise contours described in Section 1010. of the Maricopa County Zoning Ordinance. All residential buildings in territory in the vicinity of a military airport but outside the noise contours as described in this section shall be constructed with a minimum of R18 exterior wall assembly, a minimum of R30 roof and ceiling assembly, dual-glazed windows and solid wood, foam-filled fiberglass or metal doors to the exterior or, if the specified building standards are not met, the County may approve as an alternative, a certification by an architect or engineer registered pursuant to A.R.S. Title 32, Chapter 1 to achieve a maximum interior noise level of forty-five decibels at the time of final construction.

### **SECTION 210. BARRIERS FOR SWIMMING POOLS, SPAS & HOT TUBS**

#### **SECTION 210.1 - GENERAL**

##### **210.1.1**

**Scope.** The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

##### **210.1.2**

**Standards of Quality.** In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements for pool and spa safety covers as listed below. The standard listed below is a recognized standard. (See Section 3504.)

1. ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

#### **SECTION 210.2 – DEFINITIONS**

For the purpose of this section, certain terms, words and phrases are defined as follows:

**ABOVEGROUND/ON-GROUND POOL.** See definition of "swimming pool."

**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

**GRADE** is the underlying surface, such as earth or a walking surface.

**HOT TUB.** See definition of "spa, nonself-contained" and "spa, self-contained."

**IN-GROUND POOL.** See definition of "swimming pool."

**SEPARATION FENCE** is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

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**SPA, NONSELF-CONTAINED** is a hydro massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A nonself-contained spa is intended for recreational bathing and contains water over 24 inches (610mm) deep.

**SPA, SELF-CONTAINED** is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 18 inches deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over 18 inches deep and/or wider than 8 feet at any point. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools. This does not include decorative fountains that contain water less than 12 inches deep.

**SWIMMING POOL, INDOOR** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR** is any swimming pool that is not an indoor pool.

### SECTION 210.3 – REQUIREMENTS

**210.3.1 Outdoor Swimming Pool.** An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 54 inches apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.
2. Openings in the barrier shall not allow passage of a 1 ¾-inch-diameter (44.5 mm) sphere.

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### EXCEPTIONS:

1. When vertical spacing between such openings is 54 inches or more, the opening size may be increased such the passage of a 4-inch-diameter (102 mm) sphere is not allowed.
2. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 54 inches or more.
3. Chain link fences used as the barrier shall not be less than 11 gage.
4. Access gates shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section 210.3.1 shall be provided.

### EXCEPTIONS: When approved by the Building Official, one the following may be used:

1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.
2. An alarm installed on all doors with direct access to the pool. The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet (3048 mm). The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means such a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.
3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
4. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.

**210.3.2 Indoor Swimming Pool.** For an indoor swimming pool, protection shall comply with the requirements of Section 210.3.1 Item 5

**210.3.3 Spas and Hot Tubs.** For a nonself-contained and self-contained spa or hot tub protection shall comply with the requirements of Section 210.3.1

**EXCEPTION:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 210.3.1

**210.3.4** Where a window faces a swimming pool enclosure, said window shall be equipped with a screwed in place wire mesh screen, a keyed lock that prevents opening the window more than 4" or a latching device located not less than 54" above the floor. Emergency escape or rescue windows in bedrooms which face swimming pool enclosures shall be equipped with a latching device located no less than 54" above the floor.

**210.3.5** Protective enclosures shall be located at a minimum horizontal distance of 54" from any equipment, permanent structures, planters, or similar objects that could be used to climb the enclosure. This provision shall not apply to the area between the pool and the protective enclosure if the protective enclosure is a solid wall with no openings.

### SECTION 211. RESIDENTIAL WOODBURNING REGULATIONS

#### 211.1 FIREPLACE RESTRICTIONS

##### 211.1.1 Purpose

The purpose of this subsection is to regulate fireplaces, wood stoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

##### 211.1.2 Applicability

The Residential Woodburning Restriction Ordinance applies to any residential wood burning device in sections of Area A that are within Maricopa County or within incorporated cities and towns in such sections.

**AREA A** – As defined in Arizona Revised Statutes (ARS) §49-541(1), the area in Maricopa County delineated as follows:

Township 8 North, Range 2 East and Range 3 East

Township 7 North, Range 2 West through Range 5 East

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Township 6 North, Range 5 West through Range 6 East  
Township 5 North, Range 5 West through Range 7 East  
Township 4 North, Range 5 West through Range 8 East  
Township 3 North, Range 5 West through Range 8 East  
Township 2 North, Range 5 West through Range 8 East  
Township 1 North, Range 5 West through Range 7 East  
Township 1 South Range 5 West through Range 7 East  
Township 2 South, Range 5 West through Range 7 East  
Township 3 South Range 5 West through Range 1 East  
Township 4 South Range 5 West Through Range 1 East

### 211.1.3 Effective Date

The effective date of the regulations and prohibitions set forth this subsection shall be December 31, 1998.

### 211.1.4 Definitions

For purposes of this subsection, the following words and terms shall be defined as follows:

**FIREPLACE** means a built in place masonry hearth and fire chamber of a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

**SOLID FUEL** includes but is not limited to wood, coal, or other nongaseous or nonliquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood-burning devices.

**WOOD STOVE** means a solid-fuel burning heating appliance, including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

### 211.1.5 Installation Restrictions

- (a) On or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following:
1. Provides the sole or primary source of heat or fuel for cooking for a residence.
  2. Meets performance standards for new residential wood heaters manufactured on or after July 1, 1990, or sold at retail on or after July 1,

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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1992, as prescribed by 40 Code of Federal Regulations Part 60, Subpart AAA.

3. Burns gaseous fuels, including gas logs.
4. Meets rules adopted by the Board of Supervisors as prescribed in ARS § 49-479 for burning wood in approved appliances.

### **211.1.6 Permits Required**

In addition to the provisions and restrictions of this subsection, construction, installation or alteration of all fireplaces, wood stoves and gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the County Building Code and shall be subject to the permits and inspections required by the County Building Code.

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### SECTION 301. 2012 INTERNATIONAL BUILDING CODE

The 2012 International Building Code has been adopted as the building code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Building Code:

Adopt Appendix G Flood-Resistant Construction

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

#### SECTION 202 DEFINITIONS.

**PERSONAL CARE SERVICE** is assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and administration of medications or treatments.

**SUPERVISORY CARE SERVICE** is general supervision, including daily awareness of resident functioning and continuing needs.

**DIRECTED CARE SERVICE** is care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need or making basic care decisions.

**ASSISTED LIVING FACILITY** is a residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services or directed care services on a continuing basis.

**ASSISTED LIVING CENTER** is an assisted living facility that provides resident rooms to eleven or more residents.

**ASSISTED LIVING HOME** is an assisted living facility that provides resident rooms to ten or fewer residents.

#### INSTITUTIONAL GROUP I

**308.3 Institutional Group I-1.** This occupancy shall include buildings, structures or portions thereof for more than 10 persons who reside on a 24 hour basis in a supervised

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environment, receive custodial care and are capable of self-preservation, except as provided for assisted living centers. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living centers

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

**308.3.2 Six to Ten Persons Receiving Care.** A facility such as above, housing not fewer than six and not more than 10 persons receiving such care, shall be classified as Group R-4, except as provided for assisted living homes.

**308.4 Institutional Group I-2.** This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities

Detoxification facilities

Hospitals

Assisted living centers

Psychiatric hospitals

**SECTION 310.2 DEFINITIONS.** The following terms are defined in Chapter 2:

ASSISTED LIVING FACILITY

ASSISTED LIVING CENTER

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ASSISTED LIVING HOME

BOARDING HOUSE

CONGREGATE LIVING FACILITIES

DIRECTED CARE SERVICES

DORMITORY

GROUP HOME

PERSONAL CARE SERVICE

SUPERVISORY CARE SERVICES

TRANSIENT

**310.5.1 Care facilities with a dwelling.** Licensed care facilities for 10 or fewer persons receiving care that are within a single-family dwelling are permitted provided that the requirements of Section 425 of this code are met.

**310.6 Residential Group R-4.** This occupancy shall include buildings, structures or portions thereof for more than five but not more than 10 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self-preservation, except as provided for assisted living homes. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living homes

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

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Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code and Section 425.

**310.6.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as Group I-2.

**310.6.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

### SECTION 425. ASSISTED LIVING HOMES

**425.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment, which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all the applicable provisions of Group R-3.

**425.2 General.** Building or portions of buildings classified as R-4 may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building and shall not exceed two thousand square feet above the first story, except as provided in Section 506.

**425.3 Special Provisions.** R-4 occupancies having more than 2000 square feet above the first story shall be of not less than one-hour fire-resistive construction throughout.

**425.3.1 Mixed Uses.** R-4 occupancies shall be separated from other occupancies as provided in Table 508.4.

#### **425.4 Access and Means of Egress Facilities.**

**425.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route as provided in Section 1104.1.

#### **425.4.2 Exits.**

**425.4.2.1 Number of Exits.** Every story, basement or portion thereof shall have not less than two exits.

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Exception: Basements and stories above the first floor containing no sleeping rooms used by residents may have only one means of egress as provided in Chapter 10.

**425.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1016, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**425.4.2.3 Emergency Exit Illumination.** In event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the International Electric Code.

**425.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception #1 to 1029 does not apply to R-4 occupancies.

**425.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with 1008.1.9.7, Items 1,2,4,5 and 6.

### **425.5 Smoke Alarms and Sprinkler Systems.**

**425.5.1 Smoke Alarms.** R-4 occupancies shall be provided with smoke alarms installed in accordance with 907.2.11.2, and such alarms shall be installed in all habitable rooms.

**425.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with 903.3.1.3. Sprinkler systems installed under this section shall be installed throughout, including attached garages, and in Condition 2 facilities, shall include concealed spaces of, or containing, combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In Condition 2 occupancies, such systems shall contain water flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

**1008.1.2 Door Swing.** Delete the text of Exception #4 and replace with the following:

4. Doors within or serving a single dwelling unit in Groups R-2 and R-3, as applicable in 101.2 and R-4.

**Section 903.2.8 Group R:** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2 Door Swing.** Egress doors shall be side-hinged swinging.

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Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2012 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (10 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

**1503.4.6 Overflow Drainage Required.** Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

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**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
25. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 25)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### SECTION 302. 2012 INTERNATIONAL RESIDENTIAL CODE

The 2012 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following amendments.

#### Amendments to the 2012 International Residential Code:

Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

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**Section R313 Automatic fire sprinkler systems** is deleted.

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.12 Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.12.1 Individual Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.

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11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2012 INTERNATIONAL MECHANICAL CODE**

The 2012 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Mechanical Code:**

Revise the following sections to read:

**505.1 Domestic Systems.** Where domestic range hoods and domestic appliances equipped with downdraft exhaust are located within dwelling units, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with an approved transition fitting.

**1004.1 Standards.** Oil-fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed and labeled in accordance with UL 834. Boilers shall be designed and constructed in accordance with the ASME *Boiler and Pressure Vessel Code* and Arizona Boiler Rules, Title 20 Chapter 5.

### **SECTION 304. 2012 INTERNATIONAL PLUMBING CODE**

The 2012 International Plumbing Code has been adopted as the plumbing code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Plumbing Code:**

Add to Section 405.3.1:

Exception: Side clearances for accessible or ambulatory water closets shall comply with ICC/ANSI A117.1.

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504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

Add to Section 904.1:

All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2011 NATIONAL ELECTRICAL CODE**

The 2011 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following amendments.

Revise the following sections to read:

#### **ARTICLE 210 – Branch Circuits**

##### **Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel**

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**(B) Other Than Dwelling Units.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(B)(1) through (8) shall have ground-fault circuit-interrupter protection for personnel.

**(6)** Indoor damp and wet locations.

### **ARTICLE 250 – Grounding and Bonding**

#### **250.118 Types of Equipment Grounding Conductors.**

The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) A copper, aluminum or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered or bare; and in the form of a wire or a busbar of any shape.
- (2) Rigid metal conduit.
- (3) Intermediate metal conduit.
- (4) Electric metallic tubing with an additional equipment grounding conductor.
- (5) Listed flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - d. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (6) Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1-1/4), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metal tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the ground-fault current path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).

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- e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (7) Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
  - a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
- (8) Armor of Type AC cable as provided in 320.108.
- (9) The copper sheath of mineral-insulated, metal-sheathed cable.
- (10) Type MC cable that provides an effective ground-fault current path in accordance with one or more of the following:
  - a. It contains an insulated or uninsulated equipment grounding conductor in compliance with 250.118(1).
  - b. The combined metallic sheath and uninsulated equipment grounding/bonding conductor of interlocked metal tape-type MC cable that is listed and identified as an equipment grounding conductor.
  - c. The metallic sheath or the combined metallic sheath and equipment grounding conductors of the smooth or corrugated tube-type MC cable that is listed and identified as an equipment grounding conductor.
- (11) Cable trays as permitted in 392.10 and 392.60.
- (12) Cablebus framework as permitted in 370.3
- (13) Other listed electrically continuous metal raceways and listed auxiliary gutters.
- (14) Surface metal raceways listed for grounding.

### **ARTICLE 334 – Nonmetallic-Sheathed Cable; Types NM, NMC and NMS**

#### **II. Installation**

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- (1) One- and two- family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multifamily dwellings permitted to be of Types III, IV and V construction except as prohibited in 334.12.
- (3) Other dwelling unit accessory buildings and structures in accordance with 334.10(1) and 334.10 (2) and other provisions of this Code.

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(4) Cable trays in structures permitted to be Types III, IV or V in accordance with 334.10(1) and (2) where the cables are identified for the use.

(5) Types I and II construction in accordance with 334.10(1) and (2) where installed within raceways permitted to be installed in Types I and II construction.

**(A) Type NM.** Type NM cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

- (1) For both exposed and concealed work in dry, moist, damp or corrosive locations.
- (2) In outside and inside walls of masonry block or tile.
- (3) In a shallow chase in masonry, concrete or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe or similar finish.

**(C) Type NMS.** Type NMS cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

### 334.12 Uses Not Permitted.

**(A) Types NM, NMC and NMS.** Type NM, Type NMC and Type NMS cables shall not be permitted as follows:

- (1) In any dwelling or structure not specifically permitted in 334.10(1), (2) and (3).
- (2) As service-entrance cable.
- (3) In hoistways or on elevators or escalators
- (4) Embedded in poured cement, concrete or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

- (1) Where exposed to corrosive fumes or vapors.
- (2) Where embedded in masonry, concrete, adobe, fill or plaster.
- (3) In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
- (4) In wet or damp locations.

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### **SECTION 306. 2003 INTERNATIONAL FIRE CODE**

The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:

#### AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE:

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

### **SECTION 307. 2012 INTERNATIONAL FUEL GAS CODE**

The 2012 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.11.1, and one revision as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

Delete Section 404.12.1

### **SECTION 308. 2012 INTERNATIONAL GREEN CONSTRUCTION CODE**

The 2012 International Green Construction Code has been adopted as the Green Construction Code for Maricopa County along with the following amendments:

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### Amendments to the 2012 International Green Construction Code:

Revise the following sections to read:

#### SECTION 101 GENERAL

##### [A] 101.1 Title.

These regulations shall be known as the Maricopa County Green Construction Code hereinafter referred to as "this code."

##### 101.2 General.

The use of this code is optional, unless specifically required through ordinance by Maricopa County. This code is an overlay document to be used in conjunction with the other codes and standards adopted by the jurisdiction. This code is not intended to be used as a standalone construction regulation document and permits are not to be issued under this code. This code is not intended to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.

TABLE 302.1  
REQUIREMENTS DETERMINED BY THE JURISDICTION

Section	Section Title of Description and Directives	Jurisdictional Requirements	
<b>CHAPTER 1. SCOPE</b>			
101.3 Exception 1.1	Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.2	Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.3	Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
<b>CHAPTER 4. SITE DEVELOPMENT AND LAND USE</b>			
402.2.1	Flood hazard area preservation, general		No
402.2.2	Flood hazard area preservation, specific		No
402.3	Surface water protection		No
402.5	Conservation area	Yes	

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402.7	Agricultural land	Yes	
402.8	Greenfield sites	Yes	
407.4.1	High-occupancy vehicle parking	Yes	
407.4.2	Low-emissions, hybrid and electric vehicle parking	Yes	
409.1	Light pollution control	Yes	
<b>CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
503.1	Minimum percentage of waste material diverted from landfills.	50%	
<b>CHAPTER 6. ENERGY CONSERVATION, EFFICIENCY AND CO<sub>2</sub>e EMISSIONS REDUCTION</b>			
302.1, 302.1.1, 602.1	zEPI of Jurisdictional Choice . The jurisdiction shall indicate a zEPI of 46 or less in each occupancy for which it intends to require enhanced energy performance.	Occupancy: _____ zEPI:	
604.1	Automated demand response infrastructure		No
<b>CHAPTER 7. WATER RESOURCES CONSERVATION, QUALITY AND EFFICIENCY</b>			
702.7	Municipal reclaimed water		No
<b>CHAPTER 8. INDOOR ENVIRONMENT QUALITY AND COMFORT</b>			
804.2	Post-Construction Pre-Occupancy Baseline IAQ Testing		No
807.1	Sound transmission and sound levels	Yes	
<b>CHAPTER 10. EXISTING BUILDINGS</b>			
1007.2	Evaluation of existing buildings	Yes	
1007.3	Post Certificate of Occupancy zEPI, energy demand and CO <sub>2</sub> e emissions reporting		No

### SECTION 309. 2012 INTERNATIONAL ENERGY CONSERVATION CODE

The 2012 International Energy Conservation Code has been adopted as the Energy Conservation Code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Energy Conservation Code:

Revise the following sections to read:

**C101.2 Scope.** This code applies to commercial buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Commercial Building by Section C202, shall have the option of complying under the Residential Provisions of the code,

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## Chapter 3 – Adoption of National Codes

regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

**R101.2 Scope.** This code applies to residential buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Residential Building by Section R202, shall have the option of complying under the Commercial Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Commercial Provisions shall be followed.

Add Section R102.1.2

**R102.1.2 RESNET Testing & Inspection Protocol.** The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections R402.4.1.1, R402.4.1.2 and R403.2.2 and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. R402.4.1.2 – Testing – Air Leakage Rate
  - c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

Add Section R401.2.1

**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System (“HERS”) Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor’s maximum

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.



## Report to the Building Code Advisory Board

Prepared by the Maricopa County Planning and Development Department

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<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	May 21, 2013
<b>Agenda Item:</b>	1
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Staff
<b>Request:</b>	Motion to Re-consider a Recommendation for a Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as amended
<b>Support/Opposition:</b>	No written opposition. One letter of support. One general comment letter.
<b>Recommendation:</b>	<b>Recommend Approval</b>

### Discussion:

This matter was presented to the BCAB at the April 9, 2013 Regular Meeting and the April 30, 2013 Special Meeting.

Maricopa County has been made aware of possible opposition to adoption of these codes. In order to allow additional input we are requesting that the BCAB reconsider TA2013001 to allow anyone interested in participating or offering additional testimony the chance to do so.

At your May 21, 2013 Special Meeting staff recommends that a BCAB Member, who voted affirmatively for the adoption of the new codes at the April 30, 2013 Special Meeting, make a motion to reconsider TA2013001 for the purpose of accepting additional public input. If this motion receives a second from an additional BCAB member who voted affirmatively at your last meeting, and then a majority vote to approve, then the public hearing will be reopened.

The staff report and attachments remain the same as those presented at your April 30, 2013 Special Meeting, with the addition of the minutes of that meeting.

After listening to the testimony of any interested parties, and asking any questions you might have, staff recommends that you adopt a motion reaffirming your prior action and that the BCAB recommend that the Maricopa County Planning and Zoning Commission and Board of Supervisors approve TA2013001 and adopt the 2013 Maricopa County Local Additions and Addenda which adopt and amend the 2012 ICC Codes and the 2011 NEC Code.

Prepared by Tom Ewers, Plan Review Manager

Attachments: April 30, 2013 BCAB Minutes (4 pages)  
April 30, 2013 Staff Report (4 pages)  
SRP letter (1 page)  
New River/Desert Hills email (2 pages) and letter (2 pages)  
April 9, 2013 BCAB minutes (4 pages)  
Proposed language (50 pages)



**MARICOPA COUNTY**  
**Planning & Development Department**  
**AGENDA**

SPECIAL MEETING OF THE MARICOPA COUNTY BUILDING CODE ADVISORY BOARD, TUESDAY, MAY 21, 2013, AT 2:00 P.M. IN THE DEPARTMENT OF PLANNING AND DEVELOPMENT GOLD CONFERENCE ROOM, 501 NORTH 44<sup>TH</sup> STREET, 1<sup>ST</sup> FLOOR, PHOENIX. All items on this agenda are for Board action unless otherwise noted.

Maricopa County has an aggressive strategy to provide accessibility for all citizens to these programs, activities and services, as required by the American with Disabilities Act (ADA). Accommodations for Individuals with Disabilities alternative format materials, sign language interpretation, and assistive listening devices are available upon 72 hours' advance notice through the Office of the Clerk of the Board, 301 West Jefferson Avenue, Tenth Floor, Phoenix, Arizona 85003, 602-506-3766, Fax 602-506-6402, TTY 506-2000 and on the internet at <http://www.maricopa.gov/agendas/default.asp>. To the extent possible, additional reasonable accommodations will be made available within the time constraints of the request.

**CALL TO ORDER BY THE CHAIRMAN**

**ROLL CALL**

**APPROVAL OF THE MINUTES OF THE SPECIAL MEETING OF**  
April 30, 2013

**REPORT OF COMMITTEES**

None

**UNFINISHED BUSINESS**

None

**NEW BUSINESS**

None

**OTHER BUSINESS**

New Hearing: 2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda

**NEXT REGULAR MEETING**

July 9, 2013

**ADJOURNMENT**



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## Enhanced Regulatory Outreach Program MARICOPA COUNTY BUILDING CODE ADVISORY BOARD SPECIAL MEETING

**Date/Time: Tuesday, May 21, 2013 at 2:00 p.m.**

**Location: Gold/Platinum Conference Rooms, 501 N. 44<sup>th</sup> St. 1<sup>st</sup> Floor**

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The Maricopa County Planning & Development Department will host a Maricopa County Building Advisory Board (BCAB) Meeting to conduct a public hearing to discuss a proposed ordinance amendment to consider recommendation of the following to the Board of Supervisors:

**TA2013001 – 2012 International Codes:** A text amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the following:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Plumbing Code
- 2012 International Mechanical Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code
- 2011 National Electric Code

These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to our customers. Note the green construction code will be voluntary.

The public may submit comments to the project manager, Darren Gerard, at:  
<http://www.maricopa.gov/regulations/comments.aspx>.

BUILDING CODE ADVISORY BOARD  
MEETING MINUTES

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**DATE:** April 30, 2013  
**TIME:** 2:00 p.m.

**LOCATION:** 501 North 44<sup>th</sup> Street, 1<sup>st</sup> Floor  
Phoenix, AZ 85008

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**MEMBERS PRESENT:**

Mr. Tracy Finley, Chairman  
Mr. John Kight  
Mr. Robert Ghan  
Mr. Arthur Luera

**STAFF PRESENT:**

Tom Ewers, Plan Review Manager/Chief Building Official  
Lynn Favour, Deputy Director  
Ralph Shepard, Plan Review Supervisor  
Kathy Semder, Administrative Assistant

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**ROLL CALL**

Chairman Finley called the meeting to order at 2:03 p.m.

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**APPROVAL OF MINUTES**

Chairman Finley asked if everyone looked at the minutes from the previous April 9, 2013 meeting and were there any comments. Member Ghan made a motion to approve the minutes. Member Kight seconded the motion. Motion passed unanimously.

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**REPORT OF COMMITTEES**

None

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**UNFINISHED BUSINESS**

None

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## **NEW BUSINESS**

### **2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda**

Mr. Ewers explained that the meeting packet is similar to the one from the previous meeting however this one is more robust with leg-edits of the amendments to be more in line with the processes of our other County departments and regulations. Also, they use a process of adopting several motions, one to initiate a text amendment and another to recommend and approve that text amendment. Mr. Ewers will be asking this Board to do those same two types of motions at the end of this meeting.

Although there is no new information from what was presented at the previous meeting, Mr. Ewers did follow up on some questions that were raised on April 9, 2013. Returning to Vice Chairman Territo's question regarding ADA Standards, Mr. Ewers confirmed that the references in the Local Additions and Addenda that point directly back to the 2010 Standards that have been adopted as the Federal Standards for Accessibility. Public attendee Mr. Jackson Moll had questioned the energy code to which Mr. Ewers has determined that we do in fact allow the give-and-take of the MAG and AZBO Energy Code by adopting their Energy Code Amendments, which allows for mix-and-match ways to meet the energy standards.

Aside from those questions there is no other public input or opposition. Mr. Ewers explained that part of the suggested motion would allow us to initiate the text amendment and by a separate motion, recommend approving as an expedited EROP processing for the Planning & Zoning Commission and the Board of Supervisors to approve the Local Additions and Addenda and 2012 I-Codes and the 2011 NEC Code.

Chairman Finley pointed out that there are several letters from the public in the meeting packet and most seemed to be concerned with the Green Code, which he confirmed is a voluntary code that the public may not have understood. Mr. Ewers confirmed that all those questions raised by the letters have been addressed. Mr. Luera asked if the questions were answered verbally or in writing and Mr. Ewers replied that emails and letters were sent in response and they are included in the meeting packet. Mr. Luera requested further clarification for Mr. Paul McAllister's letter to which Mr. Ewers confirmed Deputy Director Darren Gerard sent an email explaining the code was voluntary.

Before adopting a motion there are some procedural items that need to be read into the record by Mr. Ewers. The second motion, after initiating, which recommends in favor of an expedited program, is allowable because we meet the requirements of the Enhanced Regulatory Outreach Program (EROP) as follows:

- The amendment was the subject of at least one (actually two) stakeholder-type public meetings
- Advance notice was provided on the County website
- A draft of the regulatory change was available on the EROP website at least two weeks prior to the Board Hearing
- The BCAB has received no opposition to the request

Ms. Favour clarified that the EROP is a new procedure as discussed with the BCAB Members and the Assistant County Manager in January. The BCAB Members are really the EROP Board for these types of amendments because it is their expertise that is needed to work with the public. This text amendment is also going through the Planning Commission (it was initiated on April 25, 2013), so we have two processes running parallel; the one mandated by the State and the County process. Today you have two choices; you can initiate and have yet another meeting or initiate and ask to expedite where it would just go straight to the Planning Commission in June and the Board in July.

Mr. Luera asked where the initiation process starts and Mr. Ewers explained that the start of the process is via memo to the County Manager then a Stakeholders' meeting with participation and then the technical initiation of the text amendment follows a vote by the BCAB members. Ms. Favour advised that the focus of the EROP process is to be more transparent and push more information to the public before things really get moving through the regulatory process. If people have an interest or comments they have the option to participate through various mediums before the formal initiation of the text amendment. Mr. Luera then asked if, by following this process of initiating and expediting, it prohibits the public from commenting to the BCAB and/or the County. Ms. Favour confirmed we are in compliance with all the required criteria as Mr. Ewers read aloud earlier to everyone. There are still two public hearings remaining, one at the Planning Commission in June and the other at the Board of Supervisors a month later. At both of these hearings the public can comment before the Board makes a final decision.

Member Kight made a motion to initiate TA2013001, Member Ghan seconded and the motion passed unanimously. Member Kight made a motion that TA2013001 be approved for expedited EROP processing and that the Maricopa County Planning and Zoning Commission and Board of Supervisors adopt the 2013 Maricopa County Local Additions and Addenda which adopt and amend the 2012 ICC Codes and the 2011 NEC Code. Member Luera seconded the motion and it passed unanimously.

### **OTHER BUSINESS**

None

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## **SET DATE OF NEXT MEETING**

Chairman Finley confirmed the next regular meeting is scheduled for July 9, 2013, at 2:00 p.m., and that no special meeting is required at this time.

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## **ADJOURNMENT**

Member Ghan made a motion to adjourn the meeting. Member Kight seconded the motion. The motion passed unanimously and the meeting was adjourned at 2:17 p.m.

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Minutes prepared by Kathy Semder, Administrative Assistant  
May 2, 2013

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Minutes Reviewed by Thomas F. Ewers, Chief Building Official



## Amended Report to the Building Code Advisory Board

Prepared by the Maricopa County Planning and Development Department

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<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	April 30, 2013
<b>Agenda Item:</b>	1
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Staff
<b>Request:</b>	Initiate and Consider a Recommendation for a Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as amended
<b>Support/Opposition:</b>	No known opposition. One letter of support. One general comment letter.
<b>Recommendation:</b>	<b>Recommend Approval</b>

### Discussion:

A text amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the following:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Plumbing Code
- 2012 International Mechanical Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code
- 2011 National Electric Code

This text amendment to the Maricopa County Local Additions and Addenda proposes to replace the currently-adopted 2009 suite of building codes, with local amendments, with the updated 2012 suite of international building codes, with local amendments. In addition, three new construction codes are being considered for adoption. These codes include (1) the 2012 International Existing Building Code, (2) the 2012 International Energy Conservation Code, and (3) the 2012 International Green Construction Code (voluntary basis only). The purpose of the text amendment is to ensure updated construction safety codes with the Maricopa Association of Governments / Arizona Building Officials (MAG/AZBO) amendments that are consistent with other jurisdictions in the county and state. The April 9, 2013 BCAB meeting

minutes and the leg-edit Local Additions and Addenda showing all proposed changes are attached.

As noted, the proposed text amendment language is a repeal and replace of the existing document language for the Maricopa County Local Additions & Addenda. The leg-edit revised document is attached in its entirety. These are code updates and not substantial changes from current codes, except that the County has not previously adopted the Green Construction Code, Energy Conservation Code or the Existing Building Code – all of which are anticipated to be a benefit to our customers. Note that compliance to the Green Construction Code will be voluntary.

More specifically, the changes to the Local Additions and Addenda and the ICC/NEC Codes, shown in leg-edit form on the attached proposed language exhibit, are as follows:

**Cover Page:**

1. Updated to March 2013.  
Reason for change: Update to current year.

**Table of Contents:**

1. Updated to reference the 2012 codes and add the IGCC, IECC and IEBC.  
Reason for change: Update to correct year reference and add the new codes.

**Chapter 1:**

1. No Changes.

**Chapter 2:**

1. Removed the \$75 fee for Expedited in-house plan review.  
Reason for change: This is not a service we offer.
2. Section 209. Noise Level Reduction. Updated Zoning Ordinance reference from Section 1007 to 1010.  
Reason for change: To reflect a change made to the Zoning Ordinance section.
3. Section 210.2 Definitions, Swimming Pool. Added “This does not include decorative fountains that contain water under 12” deep”.  
Reason for change: Without this language, pool barriers are required around fountains, which is not necessary or practical.
4. Section 211.1.5 of Residential Woodburning Regulations. Text changed in its entirety to match current Arizona Revised Statutes (ARS) for the four types of allowable fireplaces/wood stoves.  
Reason for change: To be consistent with ARS.

**Chapter 3:**

1. Section 301. Adopts and amends 2012 IBC and Appendix G Flood Resistance Construction.  
Reason for change: We don’t usually adopt appendices, but this one is necessary to maintain our standing in the National Flood Insurance Program (NFIP).

Of note, Section 202 through Section 3109 are the MAG/AZBO amendments that did not change other than some slight editorial corrections. We are still exempting single family residences from fire sprinkler requirements.

2. Section 302. Adopts and amends 2012 IRC. No changes other than some code section corrections. We are still exempting single family residences from fire sprinkler requirements.  
Reason for change: To update code section references.
3. Section 303. Adopts and amends 2012 IMC with new MAG/AZBO amendments for Domestic Systems and Standards.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
4. Section 304. Adopts and amends 2012 IPC with new MAG/AZBO amendment for Water Closet clearances. Kept same MAG/AZBO amendments for Discharge Piping and Vent Through Roof.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
5. Section 305. Adopts and amends 2011 NEC with the City of Phoenix Amendments, which haven't changed except for section number corrections to fit the new code.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
6. Section 306. Adopts and amends 2003 IFC.  
No changes: This code still only applies to County-owned buildings.
7. Section 307. Adopts and amends 2012 IFGC with same MAG/AZBO amendment for Burial Depth.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
8. Section 308. Adopts and amends 2012 IGCC with City of Phoenix proposed amendments. Specifies that code is optional.  
Reason for change: To allow optional use of code for builders who want to be energy conscious.
9. Section 309. Adopts and amends 2012 IECC with City of Phoenix and SRP proposed amendments for scoping and the RESNET testing and HERS ratings and pool motor requirements recommended by MAG/AZBO.  
Reason for change: To be consistent with MAG/AZBO jurisdictions.
10. Section 310. Adopts 2012 IEBC with no amendments.  
Reason for change: To allow greater flexibility in the redevelopment of existing buildings.

This item is being processed through the County's Enhanced Regulatory Outreach Program (EROP). A stakeholder meeting was held on February 22, 2013. This item was presented to the Maricopa County Building Code Advisory Board (BCAB) on April 9<sup>th</sup> for discussion and will be presented on April 30, 2013 for initiation and possible recommendation. At the April 30<sup>th</sup> meeting, the BCAB may recommend that the text amendment process be expedited. An expedited process recommendation means that the BCAB would both initiate and make a

recommendation regarding the text amendment at the same meeting. To be considered for the expedited process, the following three criteria must be met: (1) the amendment has been the subject of at least one Stakeholder Workshop (posted on the County's web site at least two weeks in advance); (2) a draft of the regulatory change was available on the EROP web site at least two weeks prior to the Board hearing; and (3) the BCAB has received no opposition to the proposed text amendment and is recommending approval of the proposed language. If the BCAB does not make a recommendation for expedited processing, an additional hearing date must be scheduled.

In accordance with state statutes, this text amendment will also be heard by the Maricopa County Planning and Zoning Commission (Commission). If these items are initiated at the April 25, 2013 Commission meeting, and positively acted on at the April 30, 2013 BCAB, the anticipated Commission hearing for recommendation to the Board of Supervisors (BOS) is June 6, 2013 and the tentative BOS hearing for adoption is July 17, 2013. The regulations will take immediate effect upon approval, but with a three month grace period where compliance with either the 2009 or 2012 ICC Codes will be allowed. This schedule is subject to change depending on information and recommendations received by the public and by the actions of the BCAB, Commission and/or BOS.

The initial February 22<sup>nd</sup> Stakeholder Meeting was well attended and this matter was discussed. (No minutes of the meeting were prepared.) The stakeholders indicated compliance with the Green Construction Codes should be optional, and that an alternative to energy code compliance must be offered. Staff is proposing an alternative approach to compliance by documenting a Home Energy Rating System (HERS) Index of 70 or less. There is no known opposition to the proposed language. A letter of support was received from SRP, attached. A general letter from the New River/Desert Hills Community is attached. They did receive an email response that compliance with the Green Construction Code will be optional. At the April 9, 2013 BCAB meeting BCAB members and a representative from the Home Builders Association had questions that were answered by staff as shown on the attached minutes from that meeting.

**Recommendation:**

Staff recommends that the BCAB initiate TA2013001.

Staff further recommends, if the EROP criteria are met, that the BCAB recommend that TA2013001 be approved for expedited EROP processing and that the Maricopa County Planning and Zoning Commission and Board of Supervisors adopt the 2013 Maricopa County Local Additions and Addenda which adopt and amend the 2012 ICC Codes and the 2011 NEC Code.

If the EROP criteria are not met, staff recommends that the BCAB take action to set a Special Meeting to hear TA2013001 on June 11, 2013.

Prepared by Tom Ewers, Plan Review Manager

Attachments: SRP letter (1 page)  
New River/Desert Hills email (2 pages) and letter (2 pages)  
4/9/13 BCAB minutes (4 pages)  
Proposed language (50 pages)



March 19, 2013

Debra W. Stark, AICP  
Maricopa County Planning and Development Director  
501 N. 44<sup>th</sup> Street, Suite 200  
Phoenix, AZ 85008

*file in  
Adoption of  
2012 I Codes*

RE: Adoption of the 2012 I Codes

Ms. Debra Stark:

Thank you for taking the time to meet with me yesterday. I enjoyed our conversation about Maricopa County, and I hope I was able to provide some helpful information on why the adoption of the 2012 IECC is so important to our collective future. I will keep you posted as new information becomes available. Senate Bills 1365 and 1321 have been a concern to us all; SRP supports the right of Maricopa Co to define their own future, and determine what is best for their residents.

SRP supports your efforts to adopt the 2012 Codes, as well as your efforts to encourage design and building techniques that reduce energy consumption thereby saving Maricopa Counties businesses and residents money. It makes good business sense for the County to encourage building practices that protect their infrastructure. SRP's mission of providing reliable and reasonably priced electricity relies upon efforts such as this to assure our ability to meet future and current power demands.

Building Energy Codes are the most cost effective method of obtaining energy efficiency. SRP supports the adoption of the 2012 International Energy Conservation Code as a means to obtain reduced demand on your infrastructure and our generation facilities. The construction costs associated with building additional generation facilities will be born by all of us; all of us can contribute to postponing that work, allowing American ingenuity time to develop the next great energy generating resource.

Currently SRP obtains power from many types of generation facilities: hydro, nuclear, natural gas, wind, geothermal, solar, landfill gas, biomass, and fuel cell technology. In 2012 we met 9% of power demand with sustainable resources. During the past few years, SRP has introduced more than 25 energy efficiency programs. Through these rebate programs we have supported a movement in the market that has resulted in better built, more energy efficient homes and businesses. We support and encourage your adoption of the 2012 IECC as a means to continue this trend, saving your residents and business money in the most cost effective way.

If we can be of any support, including providing training and code books, please let us know.

Sincerely,

Sharon Bonesteel, RA, CBO, CP  
Senior Policy Analyst – Codes & Standards Initiative  
Office 602-236-4498, Cell 602-814-7357



## Lynn Favour - PLANDEVX

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**From:** Darren Gerard - PLANDEVX  
**Sent:** Wednesday, April 17, 2013 12:52 PM  
**To:** 'Ann Hutchinson'; Alan & Candy Muller  
**Cc:** Debra Stark - PLANDEVX; Michael Norris - PLANDEVX; Lynn Favour - PLANDEVX  
**Subject:** RE: TA2013001-002--003 New River-Desert Hills Community Association Response

Ann: I'm sorry about this lack of attention to detail on my part, yes, it was a typo in my email yesterday. The P&Z (ZIPPOR) is here at the county planning office on Thursday 4/25, 9:30 a.m. TA2013001 also goes to the Building Code Advisory Board which is meeting Tuesday 4/30. If you're subscribed to EROP for automated email or text reply then you should be getting a notice when items are posted to the site. Next time your down this way let's make sure that you're subscribed to receive automated notices. Darren

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**From:** Ann Hutchinson [<mailto:behomes@q.com>]  
**Sent:** Wednesday, April 17, 2013 12:23 PM  
**To:** Darren Gerard - PLANDEVX; Alan & Candy Muller  
**Cc:** Debra Stark - PLANDEVX; Michael Norris - PLANDEVX; Lynn Favour - PLANDEVX  
**Subject:** Re: TA2013001-002--003 New River-Desert Hills Community Association Response

Darren,  
Thanks for this acknowledgement. Thanks for explanation too. We also found the link to the April 30 agenda (which includes the April 9 notes) that helped too.

I note that you say "at the 4/24 P&Z meeting. However, this is the first notification that we've received about this meeting. I think you may have a typo. The Enhanced Regulatory Outreach Program shows April 25 On the Step 4: Stakeholder Notification 2 Weeks Prior to Citizen's Board or Commission and Step 5: Public Meeting to Initiate Regulatory Change. The link for that is for a ZIPPOR meeting. Additionally for 001, the EROP shows April 30 with the Code Advisory Board; The link to the April 30 agenda (which includes the April 9 notes) helped us too. Which dates are correct? In any case, we did not receive any notifications. I have the EROP as my home page hoping that I monitor it more on my own – it is just a bit hard to figure out sometimes ... or notice any changes.

Thanks,

Ann Hutchinson  
Planning and Development Liaison  
New River - Desert Hills Community Association  
515 E. Carefree Highway, #300  
Phoenix, AZ 85085-8839  
Email: [behomes@q.com](mailto:behomes@q.com)  
[www.nrdhca.org](http://www.nrdhca.org)  
623-742-6514

**From:** [Darren Gerard - PLANDEVX](mailto:Darren.Gerard@plandevx.com)  
**Sent:** Tuesday, April 16, 2013 5:19 PM

**To:** 'Ann Hutchinson' ; Alan & Candy Muller

**Cc:** Debra Stark - PLANDEVX ; Michael Norris - PLANDEVX ; Lynn Favour - PLANDEVX

**Subject:** RE: TA2013001-002--003 New River-Desert Hills Community Association Response

Ann & Alan: your comments are appreciated and will be printed for hand out at the 4/24 P&Z meeting. The agenda and staff reports with attachments are available online. Please note regarding TA2013001 that the green construction codes will be voluntary. Also regarding TA2013003, please note that administrative drainage waivers will have site posting giving neighbors opportunity to provide comment, and that the administrative determination may be appealed to the Drainage Review Board. Please let me know if this alleviates your concerns. Darren

**Darren V. Gérard, AICP, Deputy Director**

Maricopa County Planning & Development Department

501 N. 44<sup>th</sup> St. # 200 Phoenix, AZ 85008

602-506-7139, 602-506-3711 (fax)

[darrengerard@mail.maricopa.gov](mailto:darrengerard@mail.maricopa.gov)

[www.maricopa.gov/planning](http://www.maricopa.gov/planning)

[www.mygreengovernment.com](http://www.mygreengovernment.com)

[www.CleanAirMakeMore.com](http://www.CleanAirMakeMore.com)

Our office is located three blocks north of the 44<sup>th</sup> St. Light Rail Station, and along Bus Route 44. See [www.valleymetro.org](http://www.valleymetro.org) for trip information.

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**From:** Ann Hutchinson [<mailto:behomes@q.com>]

**Sent:** Thursday, April 11, 2013 12:31 PM

**To:** Darren Gerard - PLANDEVX

**Cc:** Alan & Candy Muller

**Subject:** TA2013001-002--003 New River-Desert Hills Community Association Response

Darren,

The attached has the New River - Desert Hills response and consultant's analysis for TA2013001, TA2013002, and TA2013003

Thank you for your consideration,

Ann Hutchinson

Planning and Development Liaison

New River - Desert Hills Community Association

515 E. Carefree Highway, #300

Phoenix, AZ 85085-8839

Email: [behomes@q.com](mailto:behomes@q.com)

[www.nrdhca.org](http://www.nrdhca.org)

623-742-6514



New River/Desert Hills Community Association, Inc.

515 E. Carefree Hwy. #300

Phoenix, AZ 85085-8839

Phone 602-432-2800

Fax: 623-465-1177

Website: [www.NRDHCA.ORG](http://www.NRDHCA.ORG)

President's email: [Alan@NRDHCA.com](mailto:Alan@NRDHCA.com)

April 11, 2013

Darren Gerard  
Maricopa County Planning and Development  
501 North 44th Street, Suite 200  
Phoenix, AZ 85008

Dear Darren,

The President of the New River/Desert Hills Community Association (NR/DHCA) has authorized me to submit following comments and recommendations:

- **TA2013001 – 2012 International Codes.** For the most part, this seems appropriate. **Concern:** There is concern about the implementation of the International Green Construction Code since may be greatly increase the cost of a new residencies. We suggest that the county phase this into the requirements to mitigate undue hardships.
- **TA2013002 - Hillside Retaining Walls.** This seems appropriate. **No concern:** It appears to merely clarifies the existing ordinance.
- **TA2013003 - Drainage Waivers.** For the most part, this seems appropriate. **Concern:** There is concern that there does not seem to be any checks and balances. Therefore it is not obvious that the administrative hearings will adequate and that there will not be an opportunity for public input. .

Please consider the attached letter from our consultant.

Regards,

A handwritten signature in cursive script that reads "Ann Hutchinson".

Ann Hutchinson  
Planning and Development Liaison  
New River - Desert Hills Community Association  
515 E. Carefree Highway, #300  
Phoenix, AZ 85085-8839  
Email: [behomes@q.com](mailto:behomes@q.com)  
[www.nrdhca.org](http://www.nrdhca.org)  
623-742-6514

**Attachment:** Consultant's analysis

**PAUL H. McALLISTER**  
**201 W. Circle Mountain Road**  
**New River, AZ 85087**  
**Date: 31 March 2013**

**To:** NR-DHCA, INC.

I have reviewed the proposed TAs (Text Amendments) TA2013001, TA2013002 and TA2013003. TA2013001 proposes adopting 2012 International, Building, Residential, Plumbing, Mechanical, Fuel/Gas, Green Construction, Energy Conservation, Existing Building Codes. If Green Construction and Energy Conservation Codes are required, I can only hope Maricopa County does not require sealed plans/documents as part of the approval process.

**TA2013001** incorporates The International Green Construction Code. This will elevate the cost of a new residence but only slightly. The new products on the market are tried and proven to be better or as good as the older required products. Presently the newer (Green) materials are much cheaper than their accepted older materials.

When it comes to energy conservation, my experience in California was that energy efficacy compliance on the plans had to be documented and sealed for approval. This seal provided by a registered Architectural Engineer or a Engineer was required for approval.

Energy Conservation is often an expensive process and will increase the cost of a new residences considerably. Insulation R designation (walls, attic, floors), windows shading, window size, air intrusion sealing (windows and doors mostly) all will become part of this change. Energy conservation in this area is a good thing but what cost is acceptable? The county should only require certain modifications to the structure and slowly, not enter all at once thereby avoiding anything that might be considered as a hardship.

I do not possess a copy of the International Existing Building Code and thereby know very little about it. I know virtually nothing about what requirements are in this code but it does not sound good (i.e. sounds expensive for little value).

**TA2013002** this proposed addition to Chapter 11 will make no new requirements only spells-out those requirements that exist and clear up any confusion that currently exist.

**TA2013003** Will allow drainage requirements to be approved administratively and not require (in some cases) approval only by the Drainage Review Board (a public meeting). The only objection to this method is that the county may use this method to approve everything. This TA provides no checks and balances but is open-ended.

Sincerely,

Paul H. McAllister

**BUILDING CODE ADVISORY BOARD  
MEETING MINUTES**

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**DATE:** April 9, 2013  
**TIME:** 2:00 p.m.

**LOCATION:** 501 North 44<sup>th</sup> Street, 1<sup>st</sup> Floor  
Phoenix, AZ 85008

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**MEMBERS PRESENT:**

Mr. Tracy Finley, Chairman  
Mr. Vincent Territo, Vice Chairman  
Mr. John Kight  
Mr. Robert Ghan

**STAFF PRESENT:**

Tom Ewers, Plan Review Manager/Chief Building Official  
Lynn Favour, Deputy Director  
Ralph Shepard, Plan Review Supervisor  
Debra Stark, Director  
Valerie Beckett, Ombudsman  
Kathy Semder, Administrative Assistant

**PUBLIC PRESENT:**

Gabriel Millican  
Jackson Moll

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**ROLL CALL**

Chairman Finley called the meeting to order at 2:01 p.m.

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**APPROVAL OF MINUTES**

Chairman Finley asked if everyone looked at the minutes from the previous January 8, 2013 meeting and were there any comments. Member Kight made a motion to approve the minutes. Member Ghan seconded the motion. Motion passed unanimously.

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**REPORT OF COMMITTEES**

None

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## **UNFINISHED BUSINESS**

None

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## **NEW BUSINESS**

### **2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda**

Mr. Ewers advised that Maricopa County is in the process of adopting the new I-Codes and updating our Local Additions and Addenda. There is a new hearing process, the Enhanced Regulatory Outreach Program (EROP); and part of that is to give the public more access to our processes and provide more public notice for meetings. Unfortunately this was not done so this meeting is for discussion purposes only and Mr. Ewers will ask Chairman Finley to set a Special Meeting for April 30, 2013, at 2:00 p.m. to take any action, if necessary.

Mr. Ewers explained we are looking at adopting the following International Codes:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Mechanical Code
- 2012 International Plumbing Code
- 2011 National Electric Code
- 2003 International Fire Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code

Mr. Ewers then stated that we will do a bulk order for code books for the BCAB Members as well as our Staff once we have a clear idea of which codes will be adopted. A letter from Sharon Bonesteel of SRP was handed out to the Members showing general support for the adoption of the 2012 IECC.

In general, the updates from 2009 to 2012 are mainly that all Definitions can now be found in Chapter 2 of each of the Codes and they stopped including one Code within another, instead they just make reference to the relevant Code. This has cut down the total number of pages considerably for the new Code books. The only other main changes are clarifications to wind load design, earthquake design and wall bracing, to reflect different language.

The Local Additions and Addenda, which is the vehicle for adopting these National Codes, is updating the referenced code sections and other minor changes which Mr. Ewers then detailed by Section and Chapter. Everything in Chapter 3 is new and Section 301 adopts and amends the 2012 IBC and Appendix G Flood Resistance Construction. Although we don't normally adopt appendices, Mr. Ewers explained this is necessary to maintain our membership in the National Flood Insurance Program (NFIP). The Arizona Building Officials (AZBO) proposes Code changes to the International Code Commission every cycle and when they are approved they no longer have to be a Local Amendment. When those changes are not accepted, we must use the Local Amendments. Mr. Ewers went on to list each of the Chapter 3 Sections which adopt and amend the new International Codes mentioned earlier in the meeting. In Section 309, Mr. Ewers explained the acronyms for the energy testing and ratings systems and that there is currently legislation pending that the State may change the HERS ratings, which we would then have to amend as well.

Chairman Finley then opened the meeting for discussion to the Members. Member Kight asked if Section 309 is optional, similar to Sections 308 and 310 to which Mr. Ewers replied no, it includes energy conservation measures for both residential and commercial structures. Member Kight then asked if we intend to convert the optional Codes to mandatory at some point and Mr. Ewers answered not at this time but we cannot predict what the Board may decide in the future.

Vice Chairman Territo stated that he thought 18 inches was the standard and Mr. Ewers explained that the pool definition states 18 inches depth in water and 8 feet wide. In response to Vice Chairman Territo asking about training for Section 308, Mr. Ewers advised that we will look into third party reports. Vice Chairman Territo made a recommendation to make the ICC's errata, which is a correction for errors, automatically accepted but Chairman Finley said we would bring it back to the BCAB for review first rather than having them automatically adopted. In Chapter 3, page 6, Vice Chairman Territo advised that Section 1101.3 has now been revised to the 2010 ADA Standards to which Mr. Ewers explained that our Local Additions and Addenda require that we comply to the ADA and Arizonans with Disabilities Act and he will further investigate Vice Chairman Territo's concern that the statutes are not up to date. Mr. Ewers also advised that we intentionally did not include a year in the Section 304, page 9 Exception to stay in compliance with state and federal regulations.

Member Ghan asked if the 2003 IFC applied to County owned properties in the City of Phoenix, where would an applicant with a commercial property fall under. Mr. Ewers responded they would reference the International Building Code which covers all the requirements for fire alarms and sprinklers. We don't adopt the Fire Code, other than specifically for County owned properties in the City of Phoenix due to an existing IGA, because we don't maintain any Fire Departments or equipment or water systems. Outside of the cities, you would have to meet the adopted Codes of the Fire jurisdiction that you're in, such as Daisy Mountain.

Chairman Finley asked for any additional discussion from the Board Members and then opened the meeting to the public. Jackson Moll, of the Homebuilders Association, is on the City of Phoenix Advisory Board and wanted to know if some items discussed in Phoenix regarding the Energy Conservation Code were brought up here as well. For example, the trade-off table created by the City of Phoenix for supply duct insulation where the requirements are now R-8 insulation but R-6 could be used if certain criteria were met to maintain the relative energy efficiency. Mr. Ewers advised he looked at what is currently before the City of Phoenix for proposals to adopt these National Codes and Amendments. Chairman Finley agreed that he didn't see the trade-off table included in the proposal and that it was adopted by MAG and AZBO which then rolled over to the City of Phoenix. Mr. Moll then mentioned a reference to the air-handler requirement. Mr. Moll also questioned if it is the same for the IRC and Mr. Ewers explained that for the IRC we use the same Amendments we had in the past and our Local Additions and Addenda. Mr. Moll further clarified a grandfathering situation for certain lots already under preliminary plan review prior to 2007 and having only a 3 foot setback. Mr. Ewers advised this was discussed during the 2009 Adoption phase because of the difference with 3 and 5 foot setbacks. In the County we have larger lots where it's not as much of an issue and we require fire rating within 5 feet of the property line. We previously changed our Zoning Code to allow no separation between principal and accessory structures as well as between accessory structures and also reduced setbacks in side and rear yards, but the IRC doesn't require fire rating on residential structures on the same lot.

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### **SET DATE OF NEXT MEETING**

Mr. Ewers requested to close the discussion at this time and asked for a Special Meeting in three weeks to take any action. Member Ghan made a motion to have the Special Meeting scheduled for April 30, 2013, at 2:00 p.m., Member Kight seconded the motion. The motion passed unanimously.

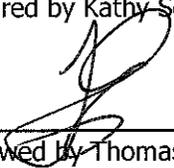
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### **ADJOURNMENT**

Member Kight made a motion to adjourn the meeting. Member Ghan seconded the motion. The motion passed unanimously and the meeting was adjourned at 2:31 p.m.

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Minutes prepared by Kathy Semder, Administrative Assistant  
April 10, 2013

Minutes Reviewed by  Thomas F. Ewers, Chief Building Official

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

March ~~2012~~ 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 1 – Purpose & Title

### **SECTION 101. PURPOSE**

The purpose of this document is to provide all local addenda, amendments, and additions to the adopted national building codes in one location.

### **SECTION 102. TITLE**

This document shall be referred to and known as "Local Additions & Addenda".

### **SECTION 103. SEPARABILITY**

If any section, subsection, sentence clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not effect the validity of the remaining portions thereof.

### **SECTION 104. AMENDMENT**

This document may be amended from time to time. It may be amended by simple motion of the Board of Supervisors, provided all state required legal advertising for amending a Building Code has been satisfied. Staff may correct typographical errors and/or reformat this document without being considered an amendment.

### **SECTION 105. REVOCATION**

This document shall abolish, replace, and/or supercede any previous amendments, changes or additions to the national codes previously approved by Maricopa County.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### **SECTION 201. PURPOSE**

The purpose of this Chapter is to provide all local changes to the adopted national building codes that relate to the administration of those codes in on location.

### **SECTION 202. VIOLATION & PENALTY (Reserved)**

### **SECTION 203. BUILDING CODE ADVISORY BOARD (Reserved)**

### **SECTION 204. ORGANIZATION & ENFORCEMENT**

Code Enforcement Agency

The Code Enforcement Agency created under the building code shall be defined in Maricopa County as the Planning and Development Department. This Planning and Development Department is charged by the Board of Supervisors to implement the building code and other pertinent laws, ordinances and/or regulations through the County's One Stop Shop Program.

Building Official

The Building Official shall be the Director of the Planning and Development Department (or his/her duly authorized representatives), who is charged with the administration and enforcement of the building code and Building Safety Ordinance.

General

Wherever the building code refers to the intent, purpose, implementation, inspection, enforcement, regulation, issuance of documents, compliance or other similar activity related to "this code", the phrase for purposed of implementing the "One Stop Shop Program" shall mean "this code or other pertinent laws, ordinances, and/or regulations implemented through the Code Enforcement Agency."

### **SECTION 205. PERMITS**

**Building Permits:** A building permit shall not be required for a detached non-habitable accessory building that is single story and no greater than 200 square feet in floor area, provided such building does not include plumbing, electrical, or mechanical services or equipment. A building permit shall not be required to replace an existing water heater provided the work is done in accordance with manufacturer's specifications.

**Permit Expiration:** A permit may be renewed within one year of expiration provided that no change in ownership or engineer/architect of record has occurred. Renewal after expiration for

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

more than one year shall not be permitted. Any such permit shall be deemed to be revoked and a new permit must be issued.

The design and construction of structures located within the unincorporated areas of Maricopa County shall comport to the codes in effect at the time of permit application, provided the specific permit remains valid, regardless of whether or not the County adopts subsequent codes. When approved by the Building Official, utility-scale solar generating facilities in which permit applications have been submitted, the design and construction may continue to utilize the codes in effect at the time of initial permit application, regardless of the number of permits required to complete the project, provided that 1) all construction is covered by an issued permit, 2) any permits issued for construction remain valid, and 3) continuous construction takes place until the facility is commissioned for commercial service and the facility receives final inspection. Once the above conditions have been met, subsequent construction activity shall comply with the codes in effect at the time of the subsequent permit applications. Further, should a permit lapse, the work contemplated by the permit shall be subject to a new permit application and shall comport to the codes in effect at the time the new permit application is submitted. For purposes of this section, the term "Utility-Scale" shall be as defined by the Maricopa County Zoning Ordinance.

**Temporary Event Permit Exemption:** Structures erected pursuant to an approved Temporary Use Permit shall not require a building permit if standing for a period not to exceed 96 contiguous hours. The responsible party shall provide documentation, as specified in the Temporary Use Permit that said structures were erected and maintained subject to all applicable building safety codes and manufacturer's specifications. The documentation shall be provided to the Department within two working days following the end of the special event to be filed with the Temporary Use Permit. Failure to provide the required documents will render the Temporary Use Permit null and void and constitute a zoning violation in accordance with Chapter 15 of the Maricopa County Zoning Ordinance.

### **SECTION 206. INSPECTIONS**

**Pre-Permit Inspection:** A pre-permit inspection may be necessary and shall be the responsibility of the permit holder to post the property in a manner approved by the Building Official.

**Permit Holder Responsibilities:** It shall be the responsibility of the permit holder to:

1. Call for an inspection.
2. Stake property corners.
3. Designate property lines prior to the inspection of any primary use.
4. Post the inspection card.
5. Provide a copy of the approved plans on the site.
6. Provide access to the site.
7. Have someone at the site during the inspection.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Failure to complete the above shall result in no inspection at the time and an assessment of a re-inspection fee. A survey of the lot may be required by the Building Official to verify that the building/structure is located in accordance with the approved plans.

**Partial Inspections:** Partial inspections may be requested and conducted when necessary due to common construction practices. If a partial inspection is approved, documentation shall be maintained during construction that identifies what segments of work have obtained what types of partial inspection approval.

**Re-inspections:** Re-inspection fees shall apply when:

1. Property lines have not been designated as required.
2. The inspection card is not posted or available on the work site.
3. Approved plans are not readily available to the inspector on the site.
4. There is no access on the date for which the inspection is requested.
5. Work is not ready for inspection.
6. Work has been covered.
7. Late cancellation.
8. There is a deviation from plans significant enough to require approval of revised plans.

To obtain a re-inspection, the applicant shall follow the same procedures required for an inspection after paying a re-inspection fee.

### **SECTION 207. CERTIFICATE OF OCCUPANCY**

The purpose of a Certificate of Occupancy is to insure that all department requirements have been met. A Certificate of Occupancy is required for all permits except those issued over the counter.

**Temporary Certificate:** A Temporary Certificate of Occupancy may be issued with the concurrence of all impacted departments and when appropriate fees are paid. Bonding, if required, shall be provided in accordance with the direction of the Building Official prior to issuance of a Temporary Certificate.

**Permanent Utility Authorization:** Permanent utility approval shall not be authorized until after a permanent Certificate of Occupancy has been issued. Said authorization to the utility company shall include a copy of the Certificate of Occupancy or letter of approval.

### **SECTION 208. FEES**

**Determination of Value:** Values shall be determined through the use of the most current published Building Valuation data in the publication "Building Standards" as modified for Arizona. The Building Official may develop similar increases for unpublished valuations.



# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

expedite processing, provided that the owner and/or architect/engineer have remained the same and that the building plans have not been changed.

No subsequent step in the permit process shall be undertaken without all fees due being paid.

**Fees:** The Building Official may develop a requirement for an initial flat rate filing fee for permits that require plan review. Should this type of fee be developed, said fee shall be considered as a part of and credited against any required plan review fees. The building plan review fees specified in the code are separate fees from the permit fees specified, these fees are also separate from the fees specified for investigations. Building plan review fees are assessed in addition to these other fees. All fees may be rounded up to the next full dollar amount at the discretion of the Building Official.

The following fees are hereby established for use.

TABLE 1-A – BUILDING CODE/PERMIT FEES

<b>Total Valuation</b>	<b>Fee</b>
\$1 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the first \$500 plus \$3.05 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the first \$25,000 plus \$10.10 for each additional \$1000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,233.75 for the first \$500,000 plus \$4.75 for each additional \$1000, or fraction thereof, and including \$1,000,000
\$1,000,001 and up	\$5,608.75 for the first \$1,000,000 plus \$3.65 for each additional \$1000, or fraction thereof

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### Other Inspections and Fees:

1. Inspections outside of normal business hours	\$ 150 per residential inspection \$ 250 per commercial inspection
2. Reinspection fees	\$ 150 per residential inspection \$ 250 per commercial inspection
3. Inspections for which no fee is indicated	\$ 150 per inspection
<del>4. Expedited in-house plan review</del>	<del>\$ 75 per hour</del>
<del>54. Expedited plan review by consultant</del>	Actual costs
65. Standard plan review (5 options)	2 times normal plan review fee
76. Change to approved plan (includes standards)	\$ 250
87. Code Modification	\$ 100 per request
98. Alternate material, design or methods	\$ 100 per request
<del>109. Tests required</del>	\$ 100 per test & test fees paid by applicant
110. Appeal to the Building Code Advisory Board	\$ 500
1211. Amendment to the Code	\$1500
1312. Requested/needed staff directive	\$ 250
1413. Requested staff research report	\$ 100 residential property \$ 250 commercial property

### Flat Rate Fees:

Air conditioner	\$ 50
Elec. Serv Residential 1 – 200 amps	\$ 50
Elec. Serv Res or Comm 201 – 400 amps	\$ 75
Elec. Serv over 400 amps	\$ 120
Temporary meter	\$ 50
Evaporative cooler	\$ 50
Gas Line (connect or clearance)	\$ 50
Mobile home "Pre-HUD Upgrade"	\$ 50
Plumbing sewer line SFR	\$ 50
Irrigation System	\$ 50
Sprinkler	\$ 50
Mechanical	\$ 50
Plumbing (Install or replace Equip/fixture/devices)	\$ 50
Demolition Permit	\$ 50
Manufactured/Mobile Home Setup/Installation	\$ 300
Commercial Manufactured Building (factory built building)	Based on installation value & Table 1-A
Occupancy Change	\$ 75
Hot tub or Spa (in or above ground)	\$ 75
Swimming pool above ground	\$ 75
Compliance Inspection	\$ 100
Move on House (compliance inspection)	\$ 100

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Renew permit for final	\$ 100
Special Event Fee (tents)	\$ 100 per event

### Additional Fees:

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system	\$500
(Less than six (6) feet high)	
Roof mounted residential solar system	\$300

### Copy Charges:

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### Grading Fees:

#### Plan Review Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	No fee
50 – 100 cubic yards	\$ 23.50
101 – 1,000 cubic yards	\$ 37.00
1,001 – 10,000 cubic yards	\$ 49.25

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

10,001 – 200,000 cubic yards	\$ 49.25 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof
200,001 or more cubic yards	\$269.75 plus \$ 7.25 for each additional 10,000 cubic yards or fraction thereof
Additional plan review required by changes, additions, or revisions to approved plans	\$ 50.00

### Permit Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	\$ 23.50
50 – 100 cubic yards	\$ 37.00
101 – 1,000 cubic yards	\$ 37.00 plus \$ 17.50 for each additional 100 cubic yards or fraction thereof
1,001 – 10,000 cubic yards	\$194.50 plus \$ 14.50 for each additional 1,000 cubic yards or fraction thereof
10,001 – 100,000 cubic yards	\$325.00 plus \$ 66.00 for each additional 10,000 cubic yards or fraction thereof
100,001 or more cubic yards	\$919.00 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof

**Payment of Fees:** No application shall be scheduled for hearing by any board or commission acting pursuant to the "Maricopa County Local Additions and Addenda", or administratively approved unless and until all fees and fines owed to the Department as a result of any activity or inactivity attributable to the property that is the subject of the application are brought current and paid in full or any amounts owed pursuant to an agreement of compliance are current, as the case may be. This requirement shall not be waived by the board/commission.<sup>\*1\*2</sup>

### SECTION 209. ADDITIONAL REGULATIONS

**NOISE LEVEL REDUCTION:** Any building within the vicinity of a military airport or ancillary military facility as defined by State Statute shall have a noise level reduction incorporated in the design and construction of any residential building or portions of buildings where the public is received, office areas and where normal noise level is low for first occupancy, including libraries, schools and churches, pursuant to building permits issued after December

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

31, 2001 in order to achieve a maximum interior noise level of forty-five decibels in areas within noise contours described in Section ~~1007~~ 1010 of the Maricopa County Zoning Ordinance. All residential buildings in territory in the vicinity of a military airport but outside the noise contours as described in this section shall be constructed with a minimum of R18 exterior wall assembly, a minimum of R30 roof and ceiling assembly, dual-glazed windows and solid wood, foam-filled fiberglass or metal doors to the exterior or, if the specified building standards are not met, the County may approve as an alternative, a certification by an architect or engineer registered pursuant to A.R.S. Title 32, Chapter 1 to achieve a maximum interior noise level of forty-five decibels at the time of final construction.

### **SECTION 210. BARRIERS FOR SWIMMING POOLS, SPAS & HOT TUBS**

#### **SECTION 210.1 - GENERAL**

##### **210.1.1**

**Scope.** The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

##### **210.1.2**

**Standards of Quality.** In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements for pool and spa safety covers as listed below. The standard listed below is a recognized standard. (See Section 3504.)

1. ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

#### **SECTION 210.2 – DEFINITIONS**

For the purpose of this section, certain terms, words and phrases are defined as follows:

**ABOVEGROUND/ON-GROUND POOL.** See definition of "swimming pool."

**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

**GRADE** is the underlying surface, such as earth or a walking surface.

**HOT TUB.** See definition of "spa, nonself-contained" and "spa, self-contained."

**IN-GROUND POOL.** See definition of "swimming pool."

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

**SEPARATION FENCE** is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

**SPA, NONSELF-CONTAINED** is a hydro massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A nonself-contained spa is intended for recreational bathing and contains water over 24 inches (610mm) deep.

**SPA, SELF-CONTAINED** is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 18 inches deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over 18 inches deep and/or wider than 8 feet at any point. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools. This does not include decorative fountains that contain water less than 12 inches deep.

**SWIMMING POOL, INDOOR** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR** is any swimming pool that is not an indoor pool.

### SECTION 210.3 – REQUIREMENTS

**210.3.1 Outdoor Swimming Pool.** An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 54 inches apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

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2. Openings in the barrier shall not allow passage of a 1 ¾-inch-diameter (44.5 mm) sphere.

### **EXCEPTIONS:**

1. When vertical spacing between such openings is 54 inches or more, the opening size may be increased such the passage of a 4-inch-diameter (102 mm) sphere is not allowed.
2. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 54 inches or more.
3. Chain link fences used as the barrier shall not be less than 11 gage.
4. Access gates shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section 210.3.1 shall be provided.

### **EXCEPTIONS:** When approved by the Building Official, one the following may be used:

1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.
2. An alarm installed on all doors with direct access to the pool. The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet (3048 mm). The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means such a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.
3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.

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4. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.

**210.3.2 Indoor Swimming Pool.** For an indoor swimming pool, protection shall comply with the requirements of Section 210.3.1 Item 5

**210.3.3 Spas and Hot Tubs.** For a nonself-contained and self-contained spa or hot tub protection shall comply with the requirements of Section 210.3.1

**EXCEPTION:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 210.3.1

**210.3.4** Where a window faces a swimming pool enclosure, said window shall be equipped with a screwed in place wire mesh screen, a keyed lock that prevents opening the window more than 4" or a latching device located not less than 54" above the floor. Emergency escape or rescue windows in bedrooms which face swimming pool enclosures shall be equipped with a latching device located no less than 54" above the floor.

**210.3.5** Protective enclosures shall be located at a minimum horizontal distance of 54" from any equipment, permanent structures, planters, or similar objects that could be used to climb the enclosure. This provision shall not apply to the area between the pool and the protective enclosure if the protective enclosure is a solid wall with no openings.

## **SECTION 211. RESIDENTIAL WOODBURNING REGULATIONS**

### **211.1 FIREPLACE RESTRICTIONS**

#### **211.1.1 Purpose**

The purpose of this subsection is to regulate fireplaces, wood stoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

#### **211.1.2 Applicability**

The Residential Woodburning Restriction Ordinance applies to any residential wood burning device in sections of Area A that are within Maricopa County or within incorporated cities and towns in such sections.

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**AREA A** – As defined in Arizona Revised Statutes (ARS) §49-541(1), the area in Maricopa County delineated as follows:

Township 8 North, Range 2 East and Range 3 East  
Township 7 North, Range 2 West through Range 5 East  
Township 6 North, Range 5 West through Range 6 East  
Township 5 North, Range 5 West through Range 7 East  
Township 4 North, Range 5 West through Range 8 East  
Township 3 North, Range 5 West through Range 8 East  
Township 2 North, Range 5 West through Range 8 East  
Township 1 North, Range 5 West through Range 7 East  
Township 1 South Range 5 West through Range 7 East  
Township 2 South, Range 5 West through Range 7 East  
Township 3 South Range 5 West through Range 1 East  
Township 4 South Range 5 West Through Range 1 East

### **211.1.3 Effective Date**

The effective date of the regulations and prohibitions set forth this subsection shall be December 31, 1998.

### **211.1.4 Definitions**

For purposes of this subsection, the following words and terms shall be defined as follows:

**FIREPLACE** means a built in place masonry hearth and fire chamber of a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

**SOLID FUEL** includes but is not limited to wood, coal, or other nongaseous or nonliquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood-burning devices.

**WOOD STOVE** means a solid-fuel burning heating appliance, including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

### **211.1.5 Installation Restrictions**

- (a) On or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following:

- ~~1. A fireplace which has a permanently installed gas or electric log insert.~~

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2. ~~A fireplace, wood stove or other solid fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  3. ~~A fireplace, wood stove or other solid fuel burning appliance which has been tested and listed by a nationally recognized testing agency to meet performance standards, equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  4. ~~A fireplace, wood stove or other solid fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  5. ~~A fireplace which has a permanently installed wood stove insert which complies with subparagraphs 2, 3, or 4 above.~~
- (b) ~~The following installations are not regulated by this Article and are not prohibited by this Article:~~
1. ~~Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.~~
  2. ~~Cook stoves, barbecue grills, and similar appliances designed primarily for cooking.~~
  3. ~~Fire pits, barbecue grills, and other outdoor fireplaces.~~

### **211.1.6 — Fireplace or Wood Stove Alterations Prohibited**

- (a) ~~On or after December 31, 1998 no person, firm or corporation shall alter or remove a gas or electric log insert or a wood stove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.~~
- (b) ~~On or after December 31, 1998 no person, firm or corporation shall alter a fireplace, wood stove or other solid fuel burning appliance in any manner that would void its certification or operational compliance with the provisions of this subsection.~~
  1. Provides the sole or primary source of heat or fuel for cooking for a residence.
  2. Meets performance standards for new residential wood heaters manufactured on or after July 1, 1990, or sold at retail on or after July 1, 1992, as prescribed by 40 Code of Federal Regulations Part 60, Subpart AAA.
  3. Burns gaseous fuels, including gas logs.
  4. Meets rules adopted by the Board of Supervisors as prescribed in ARS § 49-479 for burning wood in approved appliances.

### **211.1.76 Permits Required**

In addition to the provisions and restrictions of this subsection, construction, installation or alteration of all fireplaces, wood stoves and gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the County Building Code and shall be subject to the permits and inspections required by the County Building Code.

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### ~~SECTION 301. 2009 INTERNATIONAL BUILDING CODE~~

The 2009 International Building Code has been adopted as the building code for Maricopa County along with the following M.A.G. amendments:

#### **Amendments to the 2009 International Building Code:**

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

**308.2 Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

- Residential board and care facilities
- Assisted living centers
- Halfway houses
- Group homes
- Congregate care facilities
- Social rehabilitation facilities
- Alcohol and drug abuse centers
- Convalescent facilities

A facility such as the above with 10 or fewer persons shall be classified as a Group R-4 Condition 1 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 424 of this code.

**308.3 Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, custodial, personal or directed care on a 24-hour basis of more than five persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to the following:

- Child care facilities
- Hospitals
- Nursing homes (both intermediate-care facilities and skilled nursing facilities)
- Mental hospitals

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### ~~Detoxification facilities~~

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

This occupancy shall also include buildings and structures used for assisted living homes providing supervisory, personal, or directed care on a 24-hour basis of more than 10 persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. A facility such as the above with ten or fewer persons shall be classified as R-4 Condition 2.

**310.1 R-4** Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living homes including not more than 10 occupants, excluding staff.

**310.1.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as a Group I-1.

**310.1.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

R-4 occupancies shall meet the requirements for construction as defined in Group R-3 except as otherwise provided for in this code, and Section 424 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 424 of this code.

### **310.1 Definitions**

**Personal Care Service.** Assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and the administration of medications and treatments.

**Directed Care Service.** Care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions.

**Supervisory Care Service.** General supervision, including daily awareness of resident functioning and continuing needs.

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~~**Residential Care/Assisted Living Home.** A building or part thereof housing a maximum of 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides supervisory, personal, or directed services. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living homes, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.~~

### **424 Residential Care/Assisted Living Homes**

~~**424.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed cares services. Except as specifically required by this division, R-4 occupancies shall meet all applicable provisions of Group R-3.~~

~~**424.2 General.** Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building, and shall not exceed 2000 square feet above the first story except as provided in Section 506.~~

~~**424.3 Special Provisions.** R-4 occupancies having more than 2000 square feet of floor area above the first floor shall be of not less than one-hour fire-resistive construction throughout.~~

~~**424.3.1 Mixed Uses.** R-4 occupancies shall be separated from other uses as provided in Table 508.4.~~

### ~~**424.4 Access and Means of Egress Facilities.**~~

~~**424.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route per the Arizonans with Disabilities Act. Sleeping rooms and associated toilets shall be accessible.~~

~~Exception: Existing buildings shall comply with Section 3409. Bathing and toilet facilities need not be made accessible, but shall be provided with grab bars in accordance with ICC/ANSI A 117.1.~~

### ~~**424.4.2 Exits**~~

~~**424.4.2.1 Number of Exits.** Every story, basement, or portion thereof shall have not less than two exits.~~

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~~Exception: Basements and stories above the first floor containing no sleeping rooms may have one means of egress as provided in Chapter 10.~~

**424.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1014, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**424.4.2.3 Emergency Exit Illumination.** In the event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the ICC Electric Code.

**424.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception 1 to Section 1029.1 does not apply to R-4 occupancies.

**424.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with Sections 1008.1.4.4, and items 1, 2, 4, 5 and 6, or 1008.1.9.8.

### **424.4 Smoke Detectors and Sprinkler Systems**

**424.5.1 Smoke Alarms.** All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms installed in accordance with Section 907.2.11.

**424.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with Section 903.3. Sprinkler systems installed under this Section shall be installed throughout, including attached garages, and in Condition 2 facilities shall include attics and concealed spaces of or containing combustibles. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In R-4 Condition 2 occupancies, such systems shall contain water-flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

Add new exception to **716.5.4**

Exceptions:

4. Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.3.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals.

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~~Section 903.2.8, Group R:~~ An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2, Door Swing.** Egress doors shall be side-hinged swinging.

Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2006 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Chapter 13 Energy Efficiency is deleted in its entirety.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

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~~1503.4.6 Overflow Drainage Required.~~ Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
27. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 27)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### **SECTION 302. 2009 INTERNATIONAL RESIDENTIAL CODE**

The 2009 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following M.A.G. amendments.

~~Amendments to the 2009 International Residential Code:~~

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Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

**Section R313 Automatic fire sprinkler systems** is deleted

Chapter 11 Energy Efficiency is deleted in its entirety.

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building (no other changes)

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.10 (404.9) Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.10.1 Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping

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~~terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.~~

3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2009 INTERNATIONAL MECHANICAL CODE**

The 2009 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County with one amendment to delete Section 301.2.

### **SECTION 304. 2009 INTERNATIONAL PLUMBING CODE**

The 2009 International Plumbing Code has been adopted as the plumbing code for Maricopa County with two amendments.

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.

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- ~~4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.~~
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**904.1 Roof extension** All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2008 NATIONAL ELECTRICAL CODE**

The 2008 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following M.A.G. amendments.

Revise the following sections to read:

#### **210-8. Ground-Fault Circuit-Interrupter Protection for Personnel**

FPN: See 215.9 for ground-fault circuit-interrupter protection for personnel on feeders.

**(A) All Occupancies.** All 125-volt, single-phase, 15 and 20-ampere receptacles installed in the locations specified in (1) through (9) shall have ground-fault circuit-interrupter protection for personnel.

1. Bathrooms
2. Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas and areas of similar use.
- ~~3. Outdoors~~

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~~Exception No. 1 to (3): Receptacles that are not readily accessible and are supplied by a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with 426.28.~~

Exception No. 2 to (3): In industrial establishments only, where the conditions of maintenance and supervision ensure that only qualified personnel are involved, an assured equipment grounding conductor program as specified in 590.6(B)(2) shall be permitted for only those receptacle outlets used to supply equipment that would create a greater hazard if power is interrupted or having a design that is not compatible with GFCI protection.

4. Crawl Spaces – at or below grade level

5. Unfinished basements – for purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exception to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

FPN: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.

Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).

6. Kitchens –

- (a) Dwelling units – where the receptacles are installed to serve countertop surfaces
- (b) Other than dwelling units – all locations

7. Sinks – where the receptacle are installed within 1.8m (6 ft) of the outside edge of the sink.

Exception No. 1 to (7): In industrial laboratories, receptacles used to supply equipment where removal of power would introduce a greater hazard shall be permitted to be installed without GFCI protection.

Exception No. 2 to (7): For receptacles located in patient care areas of health care facilities other than those covered under 210.8(A)(1), GFCI protection shall not be required.

8. Boathouses

9. Indoors:

- (a) Damp locations

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~~(b) Wet locations~~

**(B) Boat Hoists.** GFCI protection shall be provided for outlets not exceeding 240 volts that supply boat hoists installed in dwelling unit locations.

**250.118 Types of Equipment Grounding Conductors.** The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

FPN: For effective ground-fault current path, see 250.2 Definition.

1. A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.
2. Rigid metal conduit.
3. Intermediate metal conduit.
4. Electrical metallic tubing with an additional equipment grounding conductor.
5. Listed flexible metal conduit with an additional equipment grounding conductor, and meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The combined length of flexible metal conduit and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft) for feeders and 15 m (50ft) for branch circuits.
  - c. The additional equipment grounding conductor is terminated at each termination or junction point.
6. Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1 1/4), the circuit conductors contained in the conduit are protected of overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metallic tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the grounding path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft).
  - e. Where used to connect equipment where flexibility is necessary after installation, an equipment grounding conductor shall be installed.
7. ~~Listed liquidtight flexible metal conduit with an additional equipment grounding conductor and meeting all of the following conditions:~~

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- ~~a. The conduit is terminated in listed fittings.~~
- b. The combined length of liquidtight flexible metal conduit and flexible metal conduit in the same ground return path does not exceed 15 m (50ft) for branch circuits and 1.8 m (6ft) for feeders.
- c. The additional equipment grounding conductor is terminated at each termination or junction point.
- 8. Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
  - a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft).
- 9. Armor of Type AC cable with an additional equipment grounding conductor and as provided in 320.108.
- 10. The copper sheath of mineral-insulated, metal-sheathed cable.
- 11. Type MC cable where listed and identified for grounding in accordance with the following:
  - a. The combined metallic sheath and grounding conductor of interlocked metal tape-type MC cable.
  - b. The metallic sheath or the combined metallic sheath and grounding conductors of the smooth or corrugated tube-type MC cable.
- 12. Cable trays as permitted in 392.3 and 392.7.
- 13. Cablebus framework as permitted in 370.3.
- 14. Other listed electrically continuous metal raceways and listed auxiliary gutters.
- 15. Surface metal raceways listed for grounding.

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- 1. One-and two-family dwellings.
- 2. Multifamily dwellings permitted to be of Types III, IV, and V construction
- 3. Other dwelling unit accessory buildings and structures in accordance with 334.10 (1) and (2).

FPN No. 1: Types of building construction and occupancy classifications are defined in NFPA 220-2006, *Standard on Types of Building Construction*, or the applicable building code, or both.

FPN No. 2: See Annex E for determination of building types [NFPA 220, Table 3-1].

- 4. Cable trays in structures permitted to be Types III, IV, or V where the cables are identified for the use.

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~~FPN: See 310.10 for temperature limitation of conductors.~~

**(A) Type NM.** Type NM cable shall be permitted as follows:

1. For both exposed and concealed work in normally dry locations.
2. To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

1. For both exposed and concealed work in dry, moist, damp, or corrosive locations.
2. In outside and inside walls of masonry block or tile.
3. In a shallow chase in masonry, concrete, or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe, or similar finish.

**(C) Type NMS.** Type NMS cable shall be permitted as follows:

1. For both exposed and concealed work in normally dry locations.
2. To be installed or fished in air voids in masonry block or tile walls.

### **334.12 Uses Not Permitted.**

**(A) Types NM, NMC, and NMS.** Types NM, NMC, and NMS cables shall not be permitted as follows:

1. In any dwelling or structure not specifically permitted in 334.10 (1), (2), and (3).
2. As service-entrance cable.
3. In hoistways or on elevators or escalators.
4. Embedded in poured cement, concrete, or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

1. Where exposed to corrosive fumes or vapors.
2. Where embedded in masonry, concrete, adobe, fill or plaster.
3. In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
4. In wet or damp locations.

### **SECTION 306. 2003 INTERNATIONAL FIRE CODE**

The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:

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### ~~AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE~~

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

### ~~SECTION 307. 2009 INTERNATIONAL FUEL GAS CODE~~

The 2009 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.9.1, and one revision as follows:

**404.9 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

**THE  
REMAINING  
PAGES ARE THE  
NEW TEXT FOR  
CHAPTER 3.**

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### SECTION 301. 2012 INTERNATIONAL BUILDING CODE

The 2012 International Building Code has been adopted as the building code for Maricopa County along with the following amendments:

#### **Amendments to the 2012 International Building Code:**

Adopt Appendix G Flood-Resistant Construction

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

#### **SECTION 202 DEFINITIONS.**

**PERSONAL CARE SERVICE** is assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and administration of medications or treatments.

**SUPERVISORY CARE SERVICE** is general supervision, including daily awareness of resident functioning and continuing needs.

**DIRECTED CARE SERVICE** is care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need or making basic care decisions.

**ASSISTED LIVING FACILITY** is a residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services or directed care services on a continuing basis.

**ASSISTED LIVING CENTER** is an assisted living facility that provides resident rooms to eleven or more residents.

**ASSISTED LIVING HOME** is an assisted living facility that provides resident rooms to ten or fewer residents.

#### **INSTITUTIONAL GROUP I**

**308.3 Institutional Group I-1.** This occupancy shall include buildings, structures or portions thereof for more than 10 persons who reside on a 24 hour basis in a supervised

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environment, receive custodial care and are capable of self-preservation, except as provided for assisted living centers. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living centers

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

**308.3.2 Six to Ten Persons Receiving Care.** A facility such as above, housing not fewer than six and not more than 10 persons receiving such care, shall be classified as Group R-4, except as provided for assisted living homes.

**308.4 Institutional Group I-2.** This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities

Detoxification facilities

Hospitals

Assisted living centers

Psychiatric hospitals

**SECTION 310.2 DEFINITIONS.** The following terms are defined in Chapter 2:

ASSISTED LIVING FACILITY

ASSISTED LIVING CENTER

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ASSISTED LIVING HOME

BOARDING HOUSE

CONGREGATE LIVING FACILITIES

DIRECTED CARE SERVICES

DORMITORY

GROUP HOME

PERSONAL CARE SERVICE

SUPERVISORY CARE SERVICES

TRANSIENT

**310.5.1 Care facilities with a dwelling.** Licensed care facilities for 10 or fewer persons receiving care that are within a single-family dwelling are permitted provided that the requirements of Section 425 of this code are met.

**310.6 Residential Group R-4.** This occupancy shall include buildings, structures or portions thereof for more than five but not more than 10 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self-preservation, except as provided for assisted living homes. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living homes

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

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Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code and Section 425.

**310.6.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as Group I-2.

**310.6.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

### **SECTION 425. ASSISTED LIVING HOMES**

**425.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment, which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all the applicable provisions of Group R-3.

**425.2 General.** Building or portions of buildings classified as R-4 may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building and shall not exceed two thousand square feet above the first story, except as provided in Section 506.

**425.3 Special Provisions.** R-4 occupancies having more than 2000 square feet above the first story shall be of not less than one-hour fire-resistive construction throughout.

**425.3.1 Mixed Uses.** R-4 occupancies shall be separated from other occupancies as provided in Table 508.4.

#### **425.4 Access and Means of Egress Facilities.**

**425.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route as provided in Section 1104.1.

#### **425.4.2 Exits.**

**425.4.2.1 Number of Exits.** Every story, basement or portion thereof shall have not less than two exits.

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Exception: Basements and stories above the first floor containing no sleeping rooms used by residents may have only one means of egress as provided in Chapter 10.

**425.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1016, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**425.4.2.3 Emergency Exit Illumination.** In event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the International Electric Code.

**425.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception #1 to 1029 does not apply to R-4 occupancies.

**425.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with 1008.1.9.7, Items 1,2,4,5 and 6.

### **425.5 Smoke Alarms and Sprinkler Systems.**

**425.5.1 Smoke Alarms.** R-4 occupancies shall be provided with smoke alarms installed in accordance with 907.2.11.2, and such alarms shall be installed in all habitable rooms.

**425.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with 903.3.1.3. Sprinkler systems installed under this section shall be installed throughout, including attached garages, and in Condition 2 facilities, shall include concealed spaces of, or containing, combustibles materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In Condition 2 occupancies, such systems shall contain water flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

**1008.1.2 Door Swing.** Delete the text of Exception #4 and replace with the following:

4. Doors within or serving a single dwelling unit in Groups R-2 and R-3, as applicable in 101.2 and R-4.

**Section 903.2.8 Group R:** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2 Door Swing.** Egress doors shall be side-hinged swinging.

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### Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

### Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2012 International Building Code, the stricter shall apply.

### Revise as follows:

**1210.2 Walls.** Walls within 2 feet (10 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

**1503.4.6 Overflow Drainage Required.** Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

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**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
25. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 25)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### **SECTION 302. 2012 INTERNATIONAL RESIDENTIAL CODE**

The 2012 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Residential Code:**

Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

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**Section R313 Automatic fire sprinkler systems** is deleted.

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.12 Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.12.1 Individual Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.

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11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2012 INTERNATIONAL MECHANICAL CODE**

The 2012 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Mechanical Code:**

Revise the following sections to read:

**505.1 Domestic Systems.** Where domestic range hoods and domestic appliances equipped with downdraft exhaust are located within dwelling units, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with an approved transition fitting.

**1004.1 Standards.** Oil-fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed and labeled in accordance with UL 834. Boilers shall be designed and constructed in accordance with the ASME *Boiler and Pressure Vessel Code* and Arizona Boiler Rules, Title 20 Chapter 5.

### **SECTION 304. 2012 INTERNATIONAL PLUMBING CODE**

The 2012 International Plumbing Code has been adopted as the plumbing code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Plumbing Code:**

Add to Section 405.3.1:

Exception: Side clearances for accessible or ambulatory water closets shall comply with ICC/ANSI A117.1.

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504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more that 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

Add to Section 904.1:

All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2011 NATIONAL ELECTRICAL CODE**

The 2011 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following amendments.

Revise the following sections to read:

#### **ARTICLE 210 – Branch Circuits**

#### **Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel**

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**(B) Other Than Dwelling Units.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(B)(1) through (8) shall have ground-fault circuit-interrupter protection for personnel.

**(6)** Indoor damp and wet locations.

### ARTICLE 250 – Grounding and Bonding

#### 250.118 Types of Equipment Grounding Conductors.

The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) A copper, aluminum or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered or bare; and in the form of a wire or a busbar of any shape.
- (2) Rigid metal conduit.
- (3) Intermediate metal conduit.
- (4) Electric metallic tubing with an additional equipment grounding conductor.
- (5) Listed flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - d. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (6) Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1-1/4), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metal tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the ground-fault current path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).

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- e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (7) Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
- a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
- (8) Armor of Type AC cable as provided in 320.108.
- (9) The copper sheath of mineral-insulated, metal-sheathed cable.
- (10) Type MC cable that provides an effective ground-fault current path in accordance with one or more of the following:
- a. It contains an insulated or uninsulated equipment grounding conductor in compliance with 250.118(1).
  - b. The combined metallic sheath and uninsulated equipment grounding/bonding conductor of interlocked metal tape-type MC cable that is listed and identified as an equipment grounding conductor.
  - c. The metallic sheath or the combined metallic sheath and equipment grounding conductors of the smooth or corrugated tube-type MC cable that is listed and identified as an equipment grounding conductor.
- (11) Cable trays as permitted in 392.10 and 392.60.
- (12) Cablebus framework as permitted in 370.3
- (13) Other listed electrically continuous metal raceways and listed auxiliary gutters.
- (14) Surface metal raceways listed for grounding.

### **ARTICLE 334 – Nonmetallic-Sheathed Cable; Types NM, NMC and NMS**

#### **II. Installation**

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- (1) One- and two- family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multifamily dwellings permitted to be of Types III, IV and V construction except as prohibited in 334.12.
- (3) Other dwelling unit accessory buildings and structures in accordance with 334.10(1) and 334.10 (2) and other provisions of this Code.

## Chapter 3 – Adoption of National Codes

(4) Cable trays in structures permitted to be Types III, IV or V in accordance with 334.10(1) and (2) where the cables are identified for the use.

(5) Types I and II construction in accordance with 334.10(1) and (2) where installed within raceways permitted to be installed in Types I and II construction.

**(A) Type NM.** Type NM cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

- (1) For both exposed and concealed work in dry, moist, damp or corrosive locations.
- (2) In outside and inside walls of masonry block or tile.
- (3) In a shallow chase in masonry, concrete or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe or similar finish.

**(C) Type NMS.** Type NMS cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

### **334.12 Uses Not Permitted.**

**(A) Types NM, NMC and NMS.** Type NM, Type NMC and Type NMS cables shall not be permitted as follows:

- (1) In any dwelling or structure not specifically permitted in 334.10(1), (2) and (3).
- (2) As service-entrance cable.
- (3) In hoistways or on elevators or escalators
- (4) Embedded in poured cement, concrete or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

- (1) Where exposed to corrosive fumes or vapors.
- (2) Where embedded in masonry, concrete, adobe, fill or plaster.
- (3) In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
- (4) In wet or damp locations.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

### **SECTION 306. 2003 INTERNATIONAL FIRE CODE**

The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:

#### AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE:

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

### **SECTION 307. 2012 INTERNATIONAL FUEL GAS CODE**

The 2012 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.11.1, and one revision as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

Delete Section 404.12.1

### **SECTION 308. 2012 INTERNATIONAL GREEN CONSTRUCTION CODE**

The 2012 International Green Construction Code has been adopted as the Green Construction Code for Maricopa County along with the following amendments:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

### Amendments to the 2012 International Green Construction Code:

Revise the following sections to read:

#### SECTION 101 GENERAL

##### [A] 101.1 Title.

These regulations shall be known as the Maricopa County Green Construction Code hereinafter referred to as "this code."

##### 101.2 General.

The use of this code is optional, unless specifically required through ordinance by Maricopa County. This code is an overlay document to be used in conjunction with the other codes and standards adopted by the jurisdiction. This code is not intended to be used as a standalone construction regulation document and permits are not to be issued under this code. This code is not intended to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.

TABLE 302.1  
REQUIREMENTS DETERMINED BY THE JURISDICTION

Section	Section Title of Description and Directives	Jurisdictional Requirements	
<b>CHAPTER 1. SCOPE</b>			
101.3 Exception 1.1	Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.2	Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.3	Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
<b>CHAPTER 4. SITE DEVELOPMENT AND LAND USE</b>			
402.2.1	Flood hazard area preservation, general		No
402.2.2	Flood hazard area preservation, specific		No
402.3	Surface water protection		No
402.5	Conservation area	Yes	

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

402.7	Agricultural land	Yes	
402.8	Greenfield sites	Yes	
407.4.1	High-occupancy vehicle parking	Yes	
407.4.2	Low-emissions, hybrid and electric vehicle parking	Yes	
409.1	Light pollution control	Yes	
<b>CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
503.1	Minimum percentage of waste material diverted from landfills.	50%	
<b>CHAPTER 6. ENERGY CONSERVATION, EFFICIENCY AND CO<sub>2</sub>e EMISSIONS REDUCTION</b>			
302.1, 302.1.1, 602.1	zEPI of Jurisdictional Choice . The jurisdiction shall indicate a zEPI of 46 or less in each occupancy for which it intends to require enhanced energy performance.	Occupancy: _____ zEPI: _____	
604.1	Automated demand response infrastructure		<b>No</b>
<b>CHAPTER 7. WATER RESOURCES CONSERVATION, QUALITY AND EFFICIENCY</b>			
702.7	Municipal reclaimed water		<b>No</b>
<b>CHAPTER 8. INDOOR ENVIRONMENT QUALITY AND COMFORT</b>			
804.2	Post-Construction Pre-Occupancy Baseline IAQ Testing		<b>No</b>
807.1	Sound transmission and sound levels	Yes	
<b>CHAPTER 10. EXISTING BUILDINGS</b>			
1007.2	Evaluation of existing buildings	Yes	
1007.3	Post Certificate of Occupancy zEPI, energy demand and CO <sub>2</sub> e emissions reporting		<b>No</b>

### **SECTION 309. 2012 INTERNATIONAL ENERGY CONSERVATION CODE**

The 2012 International Energy Conservation Code has been adopted as the Energy Conservation Code for Maricopa County along with the following amendments:

#### **Amendments to the 2012 International Energy Conservation Code:**

Revise the following sections to read:

**C101.2 Scope.** This code applies to commercial buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Commercial Building by Section C202, shall have the option of complying under the Residential Provisions of the code,

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

**R101.2 Scope.** This code applies to residential buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Residential Building by Section R202, shall have the option of complying under the Commercial Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Commercial Provisions shall be followed.

Add Section R102.1.2

**R102.1.2 RESNET Testing & Inspection Protocol.** The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections R402.4.1.1, R402.4.1.2 and R403.2.2 and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. R402.4.1.2 – Testing – Air Leakage Rate
  - c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

Add Section R401.2.1

**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System (“HERS”) Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor’s maximum

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.

**ORIGINAL  
STAFF REPORT  
POSTED TO  
THE EROP  
WEBSITE ON  
APRIL 16, 2013**



**MARICOPA COUNTY**  
**Planning & Development Department**  
**AGENDA**

SPECIAL MEETING OF THE MARICOPA COUNTY BUILDING CODE ADVISORY BOARD, TUESDAY, APRIL 30, 2013, AT 2:00 P.M. IN THE DEPARTMENT OF PLANNING AND DEVELOPMENT GOLD CONFERENCE ROOM, 501 NORTH 44<sup>TH</sup> STREET, 1<sup>ST</sup> FLOOR, PHOENIX. All items on this agenda are for Board action unless otherwise noted.

Maricopa County has an aggressive strategy to provide accessibility for all citizens to these programs, activities and services, as required by the American with Disabilities Act (ADA). Accommodations for Individuals with Disabilities alternative format materials, sign language interpretation, and assistive listening devices are available upon 72 hours' advance notice through the Office of the Clerk of the Board, 301 West Jefferson Avenue, Tenth Floor, Phoenix, Arizona 85003, 602-506-3766, Fax 602-506-6402, TTY 506-2000 and on the internet at <http://www.maricopa.gov/agendas/default.asp>. To the extent possible, additional reasonable accommodations will be made available within the time constraints of the request.

**CALL TO ORDER BY THE CHAIRMAN**

**ROLL CALL**

**APPROVAL OF THE MINUTES OF THE REGULAR MEETING OF**

April 9, 2013

**REPORT OF COMMITTEES**

None

**UNFINISHED BUSINESS**

None

**NEW BUSINESS**

1. 2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda

**OTHER BUSINESS**

**NEXT REGULAR MEETING**

July 9, 2013

**ADJOURNMENT**



# Maricopa County

## Planning & Development Department

Tom Ewers  
Plan Review Manager  
501 N. 44<sup>th</sup> St., Suite 200  
Phoenix, Arizona 85008  
Phone: (602) 506-7145  
www.maricopa.gov/planning

TO: BUILDING CODE ADVISORY BOARD  
FROM: TOM EWERS, PLAN REVIEW DIVISION MANAGER  
DATE: April 11, 2013  
RE: April 30, 2013 BCAB MEETING

### Approval of Minutes:

At your April 30, 2013 meeting please approve the attached minutes of your April 9, 2013 meeting.

### New Business:

#### 1. 2012 ICC Code Adoption – 2013 Maricopa County Local Additions and Addenda

Attached please find the 2013 Maricopa County Local Additions and Addenda which we use to adopt and amend the following International Codes:

2012 International Building Code  
2012 International Residential Code  
2012 International Mechanical Code  
2012 International Plumbing Code  
2011 National Electrical Code  
2003 International Fire Code  
2012 International Fuel Gas Code  
2012 International Green Construction Code  
2012 International Energy Conservation Code  
2012 International Existing Building Code

We had hoped to have new codebooks available for the BCAB members but we can't order them until we have a clear idea of exactly which codes will be adopted. Then we can do a bulk order for the BCAB and our plan review and inspections staff.

In general the 2012 ICC Codes, and 2011 NEC Code, did not contain many actual changes, other than housekeeping changes to move all definitions to chapter two and not include related code language in every section, but just refer to the related code sections. This resulted in far fewer pages in each code book. The only big actual changes to the IBC and IRC are clarifications to wind load design, earthquake design and wall bracing.

We are adding the Green Construction Code, Energy Conservation Code and Existing Building Code.

Similarly, the Local Additions and Addenda are not changing much other than to update the referenced code sections. We are still recommending adoption of the MAG/AZBO Amendments for the IBC, IRC, IMC, IPC and IFGC and the City of Phoenix Amendments for the NEC, IGCC, IECC and IEBC.

I will describe more specifically the changes to the Local Additions and Addends and the ICC/NEC Codes:

**Cover Page:**

1. Updated to March 2013.

**Table of Contents:**

1. Updated to reference the 2012 codes and add the IGCC, IECC and IEBC.

**Chapter 1:**

1. No Changes.

**Chapter 2:**

1. Removed the \$75 fee for Expedited in-house plan review, since this is not a service we offer.
2. Section 209. Noise Level Reduction. Updated Zoning Ordinance reference from Section 1007 to 1010 to reflect a change made to the Zoning Ordinance.
3. Section 210.2 Definitions, Swimming Pool. Added "This does not include decorative fountains that contain water under 12" deep". Without this language, we were requiring pool barriers around fountains.
4. Section 211.1.5 of Residential Woodburning Regulations completely changed to match current Arizona Revised Statutes (ARS) for the four types of allowable fireplaces/wood stoves.

**Chapter 3:**

1. Section 301. Adopts and amends 2012 IBC and Appendix G Flood Resistance Construction. We don't usually adopt appendices, but this one is necessary to maintain our standing in the NFIP.
  - a. Section 202 through Section 3109 are the MAG/AZBO amendments that did not change other than some slight editorial corrections. We are still exempting single family residences from fire sprinkler requirements.

2. Section 302. Adopts and amends 2012 IRC. No changes other than some code section corrections. We are still exempting single family residences from fire sprinkler requirements.
3. Section 303. Adopts and amends 2012 IMC with new MAG/AZBO amendments for Domestic Systems and Standards.
4. Section 304. Adopts and amends 2012 IPC with new MAG/AZBO amendment for Water Closet clearances. Kept same MAG/AZBO amendments for Discharge Piping and Vent Through Roof.
5. Section 305. Adopts and amends 2011 NEC with the City of Phoenix Amendments, which haven't changed except for section number corrections to fit the new code.
6. Section 306. Adopts and amends 2003 IFC. No changes, still only applies to County owned buildings.
7. Section 307. Adopts and amends 2012 IFGC with same MAG/AZBO amendment for Burial Depth.
8. Section 308. Adopts and amends 2012 IGCC with City of Phoenix proposed amendments. Specifies that code is optional.
9. Section 309. Adopts and amends 2012 IECC with City of Phoenix and SRP proposed amendments for scoping and the RESNET testing and HERS ratings and pool motor requirements recommended by MAG/AZBO.
10. Section 310. Adopts 2012 IEBC with no amendments.

It is staff's recommendation that the BCAB recommend that the Maricopa County Planning and Zoning Commission and Board of Supervisors adopt the 2013 Maricopa County Local Additions and Addenda which adopts and amends the 2012 ICC codes and the 2011 NEC code.

BUILDING CODE ADVISORY BOARD  
MEETING MINUTES

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**DATE:** April 9, 2013  
**TIME:** 2:00 p.m.

**LOCATION:** 501 North 44<sup>th</sup> Street, 1<sup>st</sup> Floor  
Phoenix, AZ 85008

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**MEMBERS PRESENT:**

Mr. Tracy Finley, Chairman  
Mr. Vincent Territo, Vice Chairman  
Mr. John Kight  
Mr. Robert Ghan

**STAFF PRESENT:**

Tom Ewers, Plan Review Manager/Chief Building Official  
Lynn Favour, Deputy Director  
Ralph Shepard, Plan Review Supervisor  
Debra Stark, Director  
Valerie Beckett, Ombudsman  
Kathy Semder, Administrative Assistant

**PUBLIC PRESENT:**

Gabriel Millican  
Jackson Moll

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**ROLL CALL**

Chairman Finley called the meeting to order at 2:01 p.m.

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**APPROVAL OF MINUTES**

Chairman Finley asked if everyone looked at the minutes from the previous January 8, 2013 meeting and were there any comments. Member Kight made a motion to approve the minutes. Member Ghan seconded the motion. Motion passed unanimously.

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**REPORT OF COMMITTEES**

None

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## **UNFINISHED BUSINESS**

None

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## **NEW BUSINESS**

### **2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda**

Mr. Ewers advised that Maricopa County is in the process of adopting the new I-Codes and updating our Local Additions and Addenda. There is a new hearing process, the Enhanced Regulatory Outreach Program (EROP); and part of that is to give the public more access to our processes and provide more public notice for meetings. Unfortunately this was not done so this meeting is for discussion purposes only and Mr. Ewers will ask Chairman Finley to set a Special Meeting for April 30, 2013, at 2:00 p.m. to take any action, if necessary.

Mr. Ewers explained we are looking at adopting the following International Codes:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Mechanical Code
- 2012 International Plumbing Code
- 2011 National Electric Code
- 2003 International Fire Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code

Mr. Ewers then stated that we will do a bulk order for code books for the BCAB Members as well as our Staff once we have a clear idea of which codes will be adopted. A letter from Sharon Bonesteel of SRP was handed out to the Members showing general support for the adoption of the 2012 IECC.

In general, the updates from 2009 to 2012 are mainly that all Definitions can now be found in Chapter 2 of each of the Codes and they stopped including one Code within another, instead they just make reference to the relevant Code. This has cut down the total number of pages considerably for the new Code books. The only other main changes are clarifications to wind load design, earthquake design and wall bracing, to reflect different language.

The Local Additions and Addenda, which is the vehicle for adopting these National Codes, is updating the referenced code sections and other minor changes which Mr. Ewers then detailed by Section and Chapter. Everything in Chapter 3 is new and Section 301 adopts and amends the 2012 IBC and Appendix G Flood Resistance Construction. Although we don't normally adopt appendices, Mr. Ewers explained this is necessary to maintain our membership in the National Flood Insurance Program (NFIP). The Arizona Building Officials (AZBO) proposes Code changes to the International Code Commission every cycle and when they are approved they no longer have to be a Local Amendment. When those changes are not accepted, we must use the Local Amendments. Mr. Ewers went on to list each of the Chapter 3 Sections which adopt and amend the new International Codes mentioned earlier in the meeting. In Section 309, Mr. Ewers explained the acronyms for the energy testing and ratings systems and that there is currently legislation pending that the State may change the HERS ratings, which we would then have to amend as well.

Chairman Finley then opened the meeting for discussion to the Members. Member Kight asked if Section 309 is optional, similar to Sections 308 and 310 to which Mr. Ewers replied no, it includes energy conservation measures for both residential and commercial structures. Member Kight then asked if we intend to convert the optional Codes to mandatory at some point and Mr. Ewers answered not at this time but we cannot predict what the Board may decide in the future.

Vice Chairman Territo stated that he thought 18 inches was the standard and Mr. Ewers explained that the pool definition states 18 inches depth in water and 8 feet wide. In response to Vice Chairman Territo asking about training for Section 308, Mr. Ewers advised that we will look into third party reports. Vice Chairman Territo made a recommendation to make the ICC's errata, which is a correction for errors, automatically accepted but Chairman Finley said we would bring it back to the BCAB for review first rather than having them automatically adopted. In Chapter 3, page 6, Vice Chairman Territo advised that Section 1101.3 has now been revised to the 2010 ADA Standards to which Mr. Ewers explained that our Local Additions and Addenda require that we comply to the ADA and Arizona's with Disabilities Act and he will further investigate Vice Chairman Territo's concern that the statutes are not up to date. Mr. Ewers also advised that we intentionally did not include a year in the Section 304, page 9 Exception to stay in compliance with state and federal regulations.

Member Ghan asked if the 2003 IFC applied to County owned properties in the City of Phoenix, where would an applicant with a commercial property fall under. Mr. Ewers responded they would reference the International Building Code which covers all the requirements for fire alarms and sprinklers. We don't adopt the Fire Code, other than specifically for County owned properties in the City of Phoenix due to an existing IGA, because we don't maintain any Fire Departments or equipment or water systems. Outside of the cities, you would have to meet the adopted Codes of the Fire jurisdiction that you're in, such as Daisy Mountain.

Chairman Finley asked for any additional discussion from the Board Members and then opened the meeting to the public. Jackson Moll, of the Homebuilders Association, is on the City of Phoenix Advisory Board and wanted to know if some items discussed in Phoenix regarding the Energy Conservation Code were brought up here as well. For example, the trade-off table created by the City of Phoenix for supply duct insulation where the requirements are now R-8 insulation but R-6 could be used if certain criteria were met to maintain the relative energy efficiency. Mr. Ewers advised he looked at what is currently before the City of Phoenix for proposals to adopt these National Codes and Amendments. Chairman Finley agreed that he didn't see the trade-off table included in the proposal and that it was adopted by MAG and AZBO which then rolled over to the City of Phoenix. Mr. Moll then mentioned a reference to the air-handler requirement. Mr. Moll also questioned if it is the same for the IRC and Mr. Ewers explained that for the IRC we use the same Amendments we had in the past and our Local Additions and Addenda. Mr. Moll further clarified a grandfathering situation for certain lots already under preliminary plan review prior to 2007 and having only a 3 foot setback. Mr. Ewers advised this was discussed during the 2009 Adoption phase because of the difference with 3 and 5 foot setbacks. In the County we have larger lots where it's not as much of an issue and we require fire rating within 5 feet of the property line. We previously changed our Zoning Code to allow no separation between principal and accessory structures as well as between accessory structures and also reduced setbacks in side and rear yards, but the IRC doesn't require fire rating on residential structures on the same lot.

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### **SET DATE OF NEXT MEETING**

Mr. Ewers requested to close the discussion at this time and asked for a Special Meeting in three weeks to take any action. Member Ghan made a motion to have the Special Meeting scheduled for April 30, 2013, at 2:00 p.m., Member Kight seconded the motion. The motion passed unanimously.

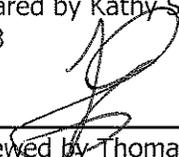
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### **ADJOURNMENT**

Member Kight made a motion to adjourn the meeting. Member Ghan seconded the motion. The motion passed unanimously and the meeting was adjourned at 2:31 p.m.

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Minutes prepared by Kathy Semder, Administrative Assistant  
April 10, 2013

  
Minutes Reviewed by Thomas F. Ewers, Chief Building Official

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

March 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 1 – Purpose & Title

### **SECTION 101. PURPOSE**

The purpose of this document is to provide all local addenda, amendments, and additions to the adopted national building codes in one location.

### **SECTION 102. TITLE**

This document shall be referred to and known as "Local Additions & Addenda".

### **SECTION 103. SEPARABILITY**

If any section, subsection, sentence clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not effect the validity of the remaining portions thereof.

### **SECTION 104. AMENDMENT**

This document may be amended from time to time. It may be amended by simple motion of the Board of Supervisors, provided all state required legal advertising for amending a Building Code has been satisfied. Staff may correct typographical errors and/or reformat this document without being considered an amendment.

### **SECTION 105. REVOCATION**

This document shall abolish, replace, and/or supercede any previous amendments, changes or additions to the national codes previously approved by Maricopa County.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### **SECTION 201. PURPOSE**

The purpose of this Chapter is to provide all local changes to the adopted national building codes that relate to the administration of those codes in on location.

### **SECTION 202. VIOLATION & PENALTY (Reserved)**

### **SECTION 203. BUILDING CODE ADVISORY BOARD (Reserved)**

### **SECTION 204. ORGANIZATION & ENFORCEMENT**

Code Enforcement Agency

The Code Enforcement Agency created under the building code shall be defined in Maricopa County as the Planning and Development Department. This Planning and Development Department is charged by the Board of Supervisors to implement the building code and other pertinent laws, ordinances and/or regulations through the County's One Stop Shop Program.

Building Official

The Building Official shall be the Director of the Planning and Development Department (or his/her duly authorized representatives), who is charged with the administration and enforcement of the building code and Building Safety Ordinance.

General

Wherever the building code refers to the intent, purpose, implementation, inspection, enforcement, regulation, issuance of documents, compliance or other similar activity related to "this code", the phrase for purposed of implementing the "One Stop Shop Program" shall mean "this code or other pertinent laws, ordinances, and/or regulations implemented through the Code Enforcement Agency."

### **SECTION 205. PERMITS**

**Building Permits:** A building permit shall not be required for a detached non-habitable accessory building that is single story and no greater than 200 square feet in floor area, provided such building does not include plumbing, electrical, or mechanical services or equipment. A building permit shall not be required to replace an existing water heater provided the work is done in accordance with manufacturer's specifications.

**Permit Expiration:** A permit may be renewed within one year of expiration provided that no change in ownership or engineer/architect of record has occurred. Renewal after expiration for

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

more than one year shall not be permitted. Any such permit shall be deemed to be revoked and a new permit must be issued.

The design and construction of structures located within the unincorporated areas of Maricopa County shall comport to the codes in effect at the time of permit application, provided the specific permit remains valid, regardless of whether or not the County adopts subsequent codes. When approved by the Building Official, utility-scale solar generating facilities in which permit applications have been submitted, the design and construction may continue to utilize the codes in effect at the time of initial permit application, regardless of the number of permits required to complete the project, provided that 1) all construction is covered by an issued permit, 2) any permits issued for construction remain valid, and 3) continuous construction takes place until the facility is commissioned for commercial service and the facility receives final inspection. Once the above conditions have been met, subsequent construction activity shall comply with the codes in effect at the time of the subsequent permit applications. Further, should a permit lapse, the work contemplated by the permit shall be subject to a new permit application and shall comport to the codes in effect at the time the new permit application is submitted. For purposes of this section, the term "Utility-Scale" shall be as defined by the Maricopa County Zoning Ordinance.

**Temporary Event Permit Exemption:** Structures erected pursuant to an approved Temporary Use Permit shall not require a building permit if standing for a period not to exceed 96 contiguous hours. The responsible party shall provide documentation, as specified in the Temporary Use Permit that said structures were erected and maintained subject to all applicable building safety codes and manufacturer's specifications. The documentation shall be provided to the Department within two working days following the end of the special event to be filed with the Temporary Use Permit. Failure to provide the required documents will render the Temporary Use Permit null and void and constitute a zoning violation in accordance with Chapter 15 of the Maricopa County Zoning Ordinance.

### SECTION 206. INSPECTIONS

**Pre-Permit Inspection:** A pre-permit inspection may be necessary and shall be the responsibility of the permit holder to post the property in a manner approved by the Building Official.

**Permit Holder Responsibilities:** It shall be the responsibility of the permit holder to:

1. Call for an inspection.
2. Stake property corners.
3. Designate property lines prior to the inspection of any primary use.
4. Post the inspection card.
5. Provide a copy of the approved plans on the site.
6. Provide access to the site.
7. Have someone at the site during the inspection.

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Failure to complete the above shall result in no inspection at the time and an assessment of a re-inspection fee. A survey of the lot may be required by the Building Official to verify that the building/structure is located in accordance with the approved plans.

**Partial Inspections:** Partial inspections may be requested and conducted when necessary due to common construction practices. If a partial inspection is approved, documentation shall be maintained during construction that identifies what segments of work have obtained what types of partial inspection approval.

**Re-inspections:** Re-inspection fees shall apply when:

1. Property lines have not been designated as required.
2. The inspection card is not posted or available on the work site.
3. Approved plans are not readily available to the inspector on the site.
4. There is no access on the date for which the inspection is requested.
5. Work is not ready for inspection.
6. Work has been covered.
7. Late cancellation.
8. There is a deviation from plans significant enough to require approval of revised plans.

To obtain a re-inspection, the applicant shall follow the same procedures required for an inspection after paying a re-inspection fee.

### **SECTION 207. CERTIFICATE OF OCCUPANCY**

The purpose of a Certificate of Occupancy is to insure that all department requirements have been met. A Certificate of Occupancy is required for all permits except those issued over the counter.

**Temporary Certificate:** A Temporary Certificate of Occupancy may be issued with the concurrence of all impacted departments and when appropriate fees are paid. Bonding, if required, shall be provided in accordance with the direction of the Building Official prior to issuance of a Temporary Certificate.

**Permanent Utility Authorization:** Permanent utility approval shall not be authorized until after a permanent Certificate of Occupancy has been issued. Said authorization to the utility company shall include a copy of the Certificate of Occupancy or letter of approval.

### **SECTION 208. FEES**

**Determination of Value:** Values shall be determined through the use of the most current published Building Valuation data in the publication "Building Standards" as modified for Arizona. The Building Official may develop similar increases for unpublished valuations.

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### Additional Value Determinations:

#### Walls and fences:

	Per lineal foot
Retaining walls	
0-2'	\$15
2-4'	\$25
4-6'	\$42
6' or more	\$86
Chain link	\$ 6
CMU	
4" 6' or less	\$14
4" more than 6'	\$21
8" block or other	\$22
Wrought iron	\$16
Iron wood	\$18
Wood	\$11
3 strand barbed wire	\$ 3
Rail	\$ 6

In ground pools \$200 per perimeter foot

Wood frame or masonry patio covers shall be valued as open carports.

Metal patio covers and covered pipe-rail horse corrals shall be valued at 50 percent of the value of a wood or masonry patio cover.

Non-habitable accessory buildings, other than covered pipe-rail horse corrals, shall be valued as a private garage.

Water/sewer collection and distribution lines shall be valued as determined by the building official.

Shell buildings shall be valued at 80% of new building value.

Alterations shall be valued at 20% of new building value.

**Processing:** All plan review fees (65 percent of calculated permit fee) required to be paid shall entitle the applicant to three submissions and reviews of documents submitted. If the applicant is unable to obtain approval of his application with these three attempts, the application shall be denied. The applicant may then resubmit and the submittal shall be treated as a new application. Should these circumstances occur or the permit has been expired in accordance with the Building Code, the Building Official may use information located in the denied/expired files to

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expedite processing, provided that the owner and/or architect/engineer have remained the same and that the building plans have not been changed.

No subsequent step in the permit process shall be undertaken without all fees due being paid.

**Fees:** The Building Official may develop a requirement for an initial flat rate filing fee for permits that require plan review. Should this type of fee be developed, said fee shall be considered as a part of and credited against any required plan review fees. The building plan review fees specified in the code are separate fees from the permit fees specified, these fees are also separate from the fees specified for investigations. Building plan review fees are assessed in addition to these other fees. All fees may be rounded up to the next full dollar amount at the discretion of the Building Official.

The following fees are hereby established for use.

TABLE 1-A – BUILDING CODE/PERMIT FEES

<b>Total Valuation</b>	<b>Fee</b>
\$1 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the first \$500 plus \$3.05 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the first \$25,000 plus \$10.10 for each additional \$1000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,233.75 for the first \$500,000 plus \$4.75 for each additional \$1000, or fraction thereof, and including \$1,000,000
\$1,000,001 and up	\$5,608.75 for the first \$1,000,000 plus \$3.65 for each additional \$1000, or fraction thereof

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### Other Inspections and Fees:

1. Inspections outside of normal business hours	\$ 150 per residential inspection \$ 250 per commercial inspection
2. Reinspection fees	\$ 150 per residential inspection \$ 250 per commercial inspection
3. Inspections for which no fee is indicated	\$ 150 per inspection
4. Expedited plan review by consultant	Actual costs
5. Standard plan review (5 options)	2 times normal plan review fee
6. Change to approved plan (includes standards)	\$ 250
7. Code Modification	\$ 100 per request
8. Alternate material, design or methods	\$ 100 per request
9. Tests required	\$ 100 per test & test fees paid by applicant
10. Appeal to the Building Code Advisory Board	\$ 500
11. Amendment to the Code	\$1500
12. Requested/needed staff directive	\$ 250
13. Requested staff research report	\$ 100 residential property \$ 250 commercial property

### Flat Rate Fees:

Air conditioner	\$ 50
Elec. Serv Residential 1 – 200 amps	\$ 50
Elec. Serv Res or Comm 201 – 400 amps	\$ 75
Elec. Serv over 400 amps	\$ 120
Temporary meter	\$ 50
Evaporative cooler	\$ 50
Gas Line (connect or clearance)	\$ 50
Mobile home "Pre-HUD Upgrade"	\$ 50
Plumbing sewer line SFR	\$ 50
Irrigation System	\$ 50
Sprinkler	\$ 50
Mechanical	\$ 50
Plumbing (Install or replace Equip/fixture/devices)	\$ 50
Demolition Permit	\$ 50
Manufactured/Mobile Home Setup/Installation	\$ 300
Commercial Manufactured Building (factory built building)	Based on installation value & Table 1-A
Occupancy Change	\$ 75
Hot tub or Spa (in or above ground)	\$ 75
Swimming pool above ground	\$ 75
Compliance Inspection	\$ 100
Move on House (compliance inspection)	\$ 100
Renew permit for final	\$ 100

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Special Event Fee (tents) \$ 100 per event

### Additional Fees:

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system	\$500
(Less than six (6) feet high)	
Roof mounted residential solar system	\$300

### Copy Charges:

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### Grading Fees:

#### Plan Review Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	No fee
50 – 100 cubic yards	\$ 23.50
101 – 1,000 cubic yards	\$ 37.00
1,001 – 10,000 cubic yards	\$ 49.25
10,001 – 200,000 cubic yards	\$ 49.25 plus \$ 24.50 for each additional

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	10,000 cubic yards or fraction thereof
200,001 or more cubic yards	\$269.75 plus \$ 7.25 for each additional 10,000 cubic yards or fraction thereof
Additional plan review required by changes, additions, or revisions to approved plans	\$ 50.00
<b>Permit Fees:</b>	
Volume of material (Cut and Fill)	Fee
<50 cubic yards	\$ 23.50
50 – 100 cubic yards	\$ 37.00
101 – 1,000 cubic yards	\$ 37.00 plus \$ 17.50 for each additional 100 cubic yards or fraction thereof
1,001 – 10,000 cubic yards	\$194.50 plus \$ 14.50 for each additional 1,000 cubic yards or fraction thereof
10,001 – 100,000 cubic yards	\$325.00 plus \$ 66.00 for each additional 10,000 cubic yards or fraction thereof
100,001 or more cubic yards	\$919.00 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof

**Payment of Fees:** No application shall be scheduled for hearing by any board or commission acting pursuant to the "Maricopa County Local Additions and Addenda", or administratively approved unless and until all fees and fines owed to the Department as a result of any activity or inactivity attributable to the property that is the subject of the application are brought current and paid in full or any amounts owed pursuant to an agreement of compliance are current, as the case may be. This requirement shall not be waived by the board/commission.<sup>\*1\*2</sup>

### **SECTION 209. ADDITIONAL REGULATIONS**

**NOISE LEVEL REDUCTION:** Any building within the vicinity of a military airport or ancillary military facility as defined by State Statute shall have a noise level reduction incorporated in the design and construction of any residential building or portions of buildings where the public is received, office areas and where normal noise level is low for first occupancy, including libraries, schools and churches, pursuant to building permits issued after December 31, 2001 in order to achieve a maximum interior noise level of forty-five decibels in areas

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within noise contours described in Section 1010. of the Maricopa County Zoning Ordinance. All residential buildings in territory in the vicinity of a military airport but outside the noise contours as described in this section shall be constructed with a minimum of R18 exterior wall assembly, a minimum of R30 roof and ceiling assembly, dual-glazed windows and solid wood, foam-filled fiberglass or metal doors to the exterior or, if the specified building standards are not met, the County may approve as an alternative, a certification by an architect or engineer registered pursuant to A.R.S. Title 32, Chapter 1 to achieve a maximum interior noise level of forty-five decibels at the time of final construction.

### **SECTION 210. BARRIERS FOR SWIMMING POOLS, SPAS & HOT TUBS**

#### **SECTION 210.1 - GENERAL**

##### **210.1.1**

**Scope.** The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

##### **210.1.2**

**Standards of Quality.** In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements for pool and spa safety covers as listed below. The standard listed below is a recognized standard. (See Section 3504.)

1. ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

#### **SECTION 210.2 – DEFINITIONS**

For the purpose of this section, certain terms, words and phrases are defined as follows:

**ABOVEGROUND/ON-GROUND POOL.** See definition of "swimming pool."

**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

**GRADE** is the underlying surface, such as earth or a walking surface.

**HOT TUB.** See definition of "spa, nonself-contained" and "spa, self-contained."

**IN-GROUND POOL.** See definition of "swimming pool."

**SEPARATION FENCE** is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

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**SPA, NONSELF-CONTAINED** is a hydro massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A nonself-contained spa is intended for recreational bathing and contains water over 24 inches (610mm) deep.

**SPA, SELF-CONTAINED** is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 18 inches deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over 18 inches deep and/or wider than 8 feet at any point. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools. This does not include decorative fountains that contain water less than 12 inches deep.

**SWIMMING POOL, INDOOR** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR** is any swimming pool that is not an indoor pool.

### SECTION 210.3 – REQUIREMENTS

**210.3.1 Outdoor Swimming Pool.** An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 54 inches apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.
2. Openings in the barrier shall not allow passage of a 1 ¾-inch-diameter (44.5 mm) sphere.

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### **EXCEPTIONS:**

1. When vertical spacing between such openings is 54 inches or more, the opening size may be increased such the passage of a 4-inch-diameter (102 mm) sphere is not allowed.
2. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 54 inches or more.
3. Chain link fences used as the barrier shall not be less than 11 gage.
4. Access gates shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section 210.3.1 shall be provided.

### **EXCEPTIONS:** When approved by the Building Official, one the following may be used:

1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.
2. An alarm installed on all doors with direct access to the pool. The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet (3048 mm). The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means such a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.
3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
4. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a

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barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.

**210.3.2 Indoor Swimming Pool.** For an indoor swimming pool, protection shall comply with the requirements of Section 210.3.1 Item 5

**210.3.3 Spas and Hot Tubs.** For a nonself-contained and self-contained spa or hot tub protection shall comply with the requirements of Section 210.3.1

**EXCEPTION:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 210.3.1

**210.3.4** Where a window faces a swimming pool enclosure, said window shall be equipped with a screwed in place wire mesh screen, a keyed lock that prevents opening the window more than 4" or a latching device located not less than 54" above the floor. Emergency escape or rescue windows in bedrooms which face swimming pool enclosures shall be equipped with a latching device located no less than 54" above the floor.

**210.3.5** Protective enclosures shall be located at a minimum horizontal distance of 54" from any equipment, permanent structures, planters, or similar objects that could be used to climb the enclosure. This provision shall not apply to the area between the pool and the protective enclosure if the protective enclosure is a solid wall with no openings.

### SECTION 211. RESIDENTIAL WOODBURNING REGULATIONS

#### 211.1 FIREPLACE RESTRICTIONS

##### 211.1.1 Purpose

The purpose of this subsection is to regulate fireplaces, wood stoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

##### 211.1.2 Applicability

The Residential Woodburning Restriction Ordinance applies to any residential wood burning device in sections of Area A that are within Maricopa County or within incorporated cities and towns in such sections.

**AREA A** – As defined in Arizona Revised Statutes (ARS) §49-541(1), the area in Maricopa County delineated as follows:

Township 8 North, Range 2 East and Range 3 East  
Township 7 North, Range 2 West through Range 5 East

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Township 6 North, Range 5 West through Range 6 East  
Township 5 North, Range 5 West through Range 7 East  
Township 4 North, Range 5 West through Range 8 East  
Township 3 North, Range 5 West through Range 8 East  
Township 2 North, Range 5 West through Range 8 East  
Township 1 North, Range 5 West through Range 7 East  
Township 1 South Range 5 West through Range 7 East  
Township 2 South, Range 5 West through Range 7 East  
Township 3 South Range 5 West through Range 1 East  
Township 4 South Range 5 West Through Range 1 East

### 211.1.3 Effective Date

The effective date of the regulations and prohibitions set forth this subsection shall be December 31, 1998.

### 211.1.4 Definitions

For purposes of this subsection, the following words and terms shall be defined as follows:

**FIREPLACE** means a built in place masonry hearth and fire chamber of a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

**SOLID FUEL** includes but is not limited to wood, coal, or other nongaseous or nonliquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood-burning devices.

**WOOD STOVE** means a solid-fuel burning heating appliance, including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

### 211.1.5 Installation Restrictions

- (a) On or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following:
1. Provides the sole or primary source of heat or fuel for cooking for a residence.
  2. Meets performance standards for new residential wood heaters manufactured on or after July 1, 1990, or sold at retail on or after July 1,

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1992, as prescribed by 40 Code of Federal Regulations Part 60, Subpart AAA.

3. Burns gaseous fuels, including gas logs.
4. Meets rules adopted by the Board of Supervisors as prescribed in ARS § 49-479 for burning wood in approved appliances.

### **211.1.6 Permits Required**

In addition to the provisions and restrictions of this subsection, construction, installation or alteration of all fireplaces, wood stoves and gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the County Building Code and shall be subject to the permits and inspections required by the County Building Code.

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### **SECTION 301. 2012 INTERNATIONAL BUILDING CODE**

The 2012 International Building Code has been adopted as the building code for Maricopa County along with the following amendments:

#### **Amendments to the 2012 International Building Code:**

Adopt Appendix G Flood-Resistant Construction

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

### **SECTION 202 DEFINITIONS.**

**PERSONAL CARE SERVICE** is assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and administration of medications or treatments.

**SUPERVISORY CARE SERVICE** is general supervision, including daily awareness of resident functioning and continuing needs.

**DIRECTED CARE SERVICE** is care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need or making basic care decisions.

**ASSISTED LIVING FACILITY** is a residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services or directed care services on a continuing basis.

**ASSISTED LIVING CENTER** is an assisted living facility that provides resident rooms to eleven or more residents.

**ASSISTED LIVING HOME** is an assisted living facility that provides resident rooms to ten or fewer residents.

### **INSTITUTIONAL GROUP I**

**308.3 Institutional Group I-1.** This occupancy shall include buildings, structures or portions thereof for more than 10 persons who reside on a 24 hour basis in a supervised

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environment, receive custodial care and are capable of self-preservation, except as provided for assisted living centers. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living centers

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

**308.3.2 Six to Ten Persons Receiving Care.** A facility such as above, housing not fewer than six and not more than 10 persons receiving such care, shall be classified as Group R-4, except as provided for assisted living homes.

**308.4 Institutional Group I-2.** This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities

Detoxification facilities

Hospitals

Assisted living centers

Psychiatric hospitals

**SECTION 310.2 DEFINITIONS.** The following terms are defined in Chapter 2:

ASSISTED LIVING FACILITY

ASSISTED LIVING CENTER

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ASSISTED LIVING HOME

BOARDING HOUSE

CONGREGATE LIVING FACILITIES

DIRECTED CARE SERVICES

DORMITORY

GROUP HOME

PERSONAL CARE SERVICE

SUPERVISORY CARE SERVICES

TRANSIENT

**310.5.1 Care facilities with a dwelling.** Licensed care facilities for 10 or fewer persons receiving care that are within a single-family dwelling are permitted provided that the requirements of Section 425 of this code are met.

**310.6 Residential Group R-4.** This occupancy shall include buildings, structures or portions thereof for more than five but not more than 10 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self-preservation, except as provided for assisted living homes. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living homes

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

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Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code and Section 425.

**310.6.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as Group I-2.

**310.6.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

### **SECTION 425. ASSISTED LIVING HOMES**

**425.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment, which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all the applicable provisions of Group R-3.

**425.2 General.** Building or portions of buildings classified as R-4 may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building and shall not exceed two thousand square feet above the first story, except as provided in Section 506.

**425.3 Special Provisions.** R-4 occupancies having more than 2000 square feet above the first story shall be of not less than one-hour fire-resistive construction throughout.

**425.3.1 Mixed Uses.** R-4 occupancies shall be separated from other occupancies as provided in Table 508.4.

#### **425.4 Access and Means of Egress Facilities.**

**425.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route as provided in Section 1104.1.

#### **425.4.2 Exits.**

**425.4.2.1 Number of Exits.** Every story, basement or portion thereof shall have not less than two exits.

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Exception: Basements and stories above the first floor containing no sleeping rooms used by residents may have only one means of egress as provided in Chapter 10.

**425.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1016, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**425.4.2.3 Emergency Exit Illumination.** In event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the International Electric Code.

**425.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception #1 to 1029 does not apply to R-4 occupancies.

**425.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with 1008.1.9.7, Items 1,2,4,5 and 6.

### **425.5 Smoke Alarms and Sprinkler Systems.**

**425.5.1 Smoke Alarms.** R-4 occupancies shall be provided with smoke alarms installed in accordance with 907.2.11.2, and such alarms shall be installed in all habitable rooms.

**425.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with 903.3.1.3. Sprinkler systems installed under this section shall be installed throughout, including attached garages, and in Condition 2 facilities, shall include concealed spaces of, or containing, combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In Condition 2 occupancies, such systems shall contain water flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

**1008.1.2 Door Swing.** Delete the text of Exception #4 and replace with the following:

4. Doors within or serving a single dwelling unit in Groups R-2 and R-3, as applicable in 101.2 and R-4.

**Section 903.2.8 Group R:** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2 Door Swing.** Egress doors shall be side-hinged swinging.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2012 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (10 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

**1503.4.6 Overflow Drainage Required.** Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

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**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
25. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 25)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### SECTION 302. 2012 INTERNATIONAL RESIDENTIAL CODE

The 2012 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following amendments.

#### Amendments to the 2012 International Residential Code:

Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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**Section R313 Automatic fire sprinkler systems** is deleted.

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.12 Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.12.1 Individual Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2012 INTERNATIONAL MECHANICAL CODE**

The 2012 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Mechanical Code:**

Revise the following sections to read:

**505.1 Domestic Systems.** Where domestic range hoods and domestic appliances equipped with downdraft exhaust are located within dwelling units, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with an approved transition fitting.

**1004.1 Standards.** Oil-fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed and labeled in accordance with UL 834. Boilers shall be designed and constructed in accordance with the ASME *Boiler and Pressure Vessel Code* and Arizona Boiler Rules, Title 20 Chapter 5.

### **SECTION 304. 2012 INTERNATIONAL PLUMBING CODE**

The 2012 International Plumbing Code has been adopted as the plumbing code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Plumbing Code:**

Add to Section 405.3.1:

Exception: Side clearances for accessible or ambulatory water closets shall comply with ICC/ANSI A117.1.

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504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

Add to Section 904.1:

All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2011 NATIONAL ELECTRICAL CODE**

The 2011 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following amendments.

Revise the following sections to read:

#### **ARTICLE 210 – Branch Circuits**

##### **Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel**

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**(B) Other Than Dwelling Units.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(B)(1) through (8) shall have ground-fault circuit-interrupter protection for personnel.

**(6)** Indoor damp and wet locations.

### **ARTICLE 250 – Grounding and Bonding**

#### **250.118 Types of Equipment Grounding Conductors.**

The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) A copper, aluminum or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered or bare; and in the form of a wire or a busbar of any shape.
- (2) Rigid metal conduit.
- (3) Intermediate metal conduit.
- (4) Electric metallic tubing with an additional equipment grounding conductor.
- (5) Listed flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - d. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (6) Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1-1/4), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metal tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the ground-fault current path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).

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- e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (7) Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
- a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
- (8) Armor of Type AC cable as provided in 320.108.
- (9) The copper sheath of mineral-insulated, metal-sheathed cable.
- (10) Type MC cable that provides an effective ground-fault current path in accordance with one or more of the following:
- a. It contains an insulated or uninsulated equipment grounding conductor in compliance with 250.118(1).
  - b. The combined metallic sheath and uninsulated equipment grounding/bonding conductor of interlocked metal tape-type MC cable that is listed and identified as an equipment grounding conductor.
  - c. The metallic sheath or the combined metallic sheath and equipment grounding conductors of the smooth or corrugated tube-type MC cable that is listed and identified as an equipment grounding conductor.
- (11) Cable trays as permitted in 392.10 and 392.60.
- (12) Cablebus framework as permitted in 370.3
- (13) Other listed electrically continuous metal raceways and listed auxiliary gutters.
- (14) Surface metal raceways listed for grounding.

### **ARTICLE 334 – Nonmetallic-Sheathed Cable; Types NM, NMC and NMS**

#### **II. Installation**

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- (1) One- and two- family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multifamily dwellings permitted to be of Types III, IV and V construction except as prohibited in 334.12.
- (3) Other dwelling unit accessory buildings and structures in accordance with 334.10(1) and 334.10 (2) and other provisions of this Code.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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(4) Cable trays in structures permitted to be Types III, IV or V in accordance with 334.10(1) and (2) where the cables are identified for the use.

(5) Types I and II construction in accordance with 334.10(1) and (2) where installed within raceways permitted to be installed in Types I and II construction.

**(A) Type NM.** Type NM cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

- (1) For both exposed and concealed work in dry, moist, damp or corrosive locations.
- (2) In outside and inside walls of masonry block or tile.
- (3) In a shallow chase in masonry, concrete or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe or similar finish.

**(C) Type NMS.** Type NMS cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

### **334.12 Uses Not Permitted.**

**(A) Types NM, NMC and NMS.** Type NM, Type NMC and Type NMS cables shall not be permitted as follows:

- (1) In any dwelling or structure not specifically permitted in 334.10(1), (2) and (3).
- (2) As service-entrance cable.
- (3) In hoistways or on elevators or escalators
- (4) Embedded in poured cement, concrete or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

- (1) Where exposed to corrosive fumes or vapors.
- (2) Where embedded in masonry, concrete, adobe, fill or plaster.
- (3) In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
- (4) In wet or damp locations.

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## Chapter 3 – Adoption of National Codes

### **SECTION 306. 2003 INTERNATIONAL FIRE CODE**

The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:

#### AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE:

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

### **SECTION 307. 2012 INTERNATIONAL FUEL GAS CODE**

The 2012 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.11.1, and one revision as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

Delete Section 404.12.1

### **SECTION 308. 2012 INTERNATIONAL GREEN CONSTRUCTION CODE**

The 2012 International Green Construction Code has been adopted as the Green Construction Code for Maricopa County along with the following amendments:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

### Amendments to the 2012 International Green Construction Code:

Revise the following sections to read:

#### SECTION 101 GENERAL

##### [A] 101.1 Title.

These regulations shall be known as the Maricopa County Green Construction Code hereinafter referred to as “this code.”

##### 101.2 General.

The use of this code is optional, unless specifically required through ordinance by Maricopa County. This code is an overlay document to be used in conjunction with the other codes and standards adopted by the jurisdiction. This code is not intended to be used as a standalone construction regulation document and permits are not to be issued under this code. This code is not intended to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.

**TABLE 302.1  
REQUIREMENTS DETERMINED BY THE JURISDICTION**

Section	Section Title of Description and Directives	Jurisdictional Requirements	
<b>CHAPTER 1. SCOPE</b>			
101.3 Exception 1.1	Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.2	Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.3	Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
<b>CHAPTER 4. SITE DEVELOPMENT AND LAND USE</b>			
402.2.1	Flood hazard area preservation, general		No
402.2.2	Flood hazard area preservation, specific		No
402.3	Surface water protection		No
402.5	Conservation area	Yes	

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402.7	Agricultural land	Yes	
402.8	Greenfield sites	Yes	
407.4.1	High-occupancy vehicle parking	Yes	
407.4.2	Low-emissions, hybrid and electric vehicle parking	Yes	
409.1	Light pollution control	Yes	
<b>CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
503.1	Minimum percentage of waste material diverted from landfills.	50%	
<b>CHAPTER 6. ENERGY CONSERVATION, EFFICIENCY AND CO2e EMISSIONS REDUCTION</b>			
302.1, 302.1.1, 602.1	zEPI of Jurisdictional Choice . The jurisdiction shall indicate a zEPI of 46 or less in each occupancy for which it intends to require enhanced energy performance.	Occupancy: _____ zEPI: _____	
604.1	Automated demand response infrastructure		No
<b>CHAPTER 7. WATER RESOURCES CONSERVATION, QUALITY AND EFFICIENCY</b>			
702.7	Municipal reclaimed water		No
<b>CHAPTER 8. INDOOR ENVIRONMENT QUALITY AND COMFORT</b>			
804.2	Post-Construction Pre-Occupancy Baseline IAQ Testing		No
807.1	Sound transmission and sound levels	Yes	
<b>CHAPTER 10. EXISTING BUILDINGS</b>			
1007.2	Evaluation of existing buildings	Yes	
1007.3	Post Certificate of Occupancy zEPI, energy demand and CO2e emissions reporting		No

### SECTION 309. 2012 INTERNATIONAL ENERGY CONSERVATION CODE

The 2012 International Energy Conservation Code has been adopted as the Energy Conservation Code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Energy Conservation Code:

Revise the following sections to read:

**C101.2 Scope.** This code applies to commercial buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Commercial Building by Section C202, shall have the option of complying under the Residential Provisions of the code,

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

**R101.2 Scope.** This code applies to residential buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Residential Building by Section R202, shall have the option of complying under the Commercial Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Commercial Provisions shall be followed.

Add Section R102.1.2

**R102.1.2 RESNET Testing & Inspection Protocol.** The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections R402.4.1.1, R402.4.1.2 and R403.2.2 and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:
  - a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. R402.4.1.2 – Testing – Air Leakage Rate
  - c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

Add Section R401.2.1

**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System (“HERS”) Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor’s maximum

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rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.



## **Addendum to the Building Code Advisory Board**

Prepared by the Maricopa County Planning and Development Department

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**Cases:** TA2013001 – 2012 International Codes

**Meeting Date:** May 21, 2013

**Agenda Item:** 1

**Supervisor District:** All

**Applicant:** Staff

**Request:** Motion to Reconsider a Recommendation for at Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as amended

This addendum is to attach email comments received from the Enhanced Regulatory Outreach Program.

**Attachments:** Ann Hutchinson - New River - Desert Hills Community Association (1 page)  
Rusdon Ray- GER Drafting Services (2 page)  
Michael Fink (1 page)  
Doris Siefker (1 page)

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 16, 2013 2:49 PM  
**To:** 'Plan-Dev@nrdhca.com'  
**Subject:** FW: Regulatory Outreach

Dear sir or madam: thank you for your comments and interest in this subject. These comments will be provided to the BCAB at their 5/21/13 meeting, and to the P&Z at their 6/6/13 meeting.

**From:** [Plan-Dev@nrdhca.com](mailto:Plan-Dev@nrdhca.com) [<mailto:Plan-Dev@nrdhca.com>]  
**Sent:** Wednesday, May 15, 2013 3:20 PM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

### Citizen Comments

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Ann Hutchinson  
Organization: New River - Desert Hills Community Association  
City: New River - Desert Hills  
Zip: 85087  
Phone Number: 623-742-6514  
Phone Type: home  
Email: [Plan-Dev@nrdhca.com](mailto:Plan-Dev@nrdhca.com)

Does citizen want to be contacted: no

---

Comment is regarding: other

### Comments:

The President of the New River - Desert Hills Community Association ask that these "Considerations and Questions" be submitted for the May 21 Building Code Advisory Council meeting. • Have you considered that going from having Energy Code to the 2012 Code will have a tremendous impact on anyone that has been planning (includes the engineering and financial side)? It is common practice for the planning to occur at least one year before submitting any documents to the County. Not only will the cost of materials be more, but there will be the mandatory cost of construction documents prepared by a design professional (designer, architect or engineer) plus the additional testing. • Has there been any research regarding the availability of materials? From an informal study, it appears that many existing doors and windows do not meet the codes. It is not evident that the manufactures have caught up with the code. • What is the cost and availability of 3rd Party contractors to do the additional testing procedure (even the REISNET and HERS alternative) • Could you clarify how remodeling (only those portions unaltered will be exempted) would comply to the code without having to change the other portions of the home (i.e. if the walls or roof insulation need to be changed, it is virtually impossible not to have to change the rest of the home)? • Could remodeling be exempt while additions not be exempt? • Construction documents to be prepared by a design professional (designer, architect or engineer). • Could the County make the 2012 International Energy Conservation Code optional for 1 year to allow builders/people to get acquainted with the code (or at least the residential portion)?

Time of Request: 5/15/2013 3:20:05 PM

**From:** Rusdon Ray [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 16, 2013 2:54 PM  
**To:** Darren Gerard - PLANDEVX  
**Subject:** RE: Regulatory Outreach

Awesome. I hope I'm able to be to those meetings as well.

Thanks for your reply Darren.

Rusdon Ray  
GER Drafting Services  
2243 E. Claxton  
Gilbert, AZ 85297  
[\(480\)988-2472](tel:(480)988-2472) Office  
[\(480\)988-5359](tel:(480)988-5359) Fax  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

*The Defenders of Liberty*  
**God - Religion - Freedom - Peace - Family**

---

**From:** Darren Gerard - PLANDEVX [<mailto:DarrenGerard@mail.maricopa.gov>]  
**Sent:** Thursday, May 16, 2013 2:50 PM  
**To:** 'houseplansinaweek@gmail.com'  
**Subject:** RE: Regulatory Outreach

Mr. Ray: thank you for your comments and interest in this subject. These comments will be provided to the BCAB at their 5/21/13 meeting, and to the P&Z at their 6/6/13 meeting.

**From:** [houseplansinaweek@gmail.com](mailto:houseplansinaweek@gmail.com) [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 16, 2013 11:18 AM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

**Citizen Comments**

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Rusdon Ray  
Organization:  
City: Queen Creek  
Zip: 85142  
Phone Number:  
Phone Type:  
Email: [houseplansinaweek@gmail.com](mailto:houseplansinaweek@gmail.com)

Does citizen want to be contacted: yes

---

Comment is regarding: express opposition

---

**Comments:**

I hear the 2012 Codes are up for adoption. We have for the first time done our research into the ICC Codes and find them to be over the top now in just about every aspect and now they are doubling down and exponentially increasing building cost etc. not to mention a loss of personal choices by adding in the green and energy codes. Please do not adopt or encourage the adoption of these outrageous codes.

Time of Request: 5/16/2013 11:17:53 AM

**From:** Darren Gerard - PLANDEVX  
**Sent:** Friday, May 17, 2013 9:45 AM  
**To:** 'michael.j.fink@intel.com'  
**Cc:** Lynn Favour - PLANDEVX  
**Subject:** RE: Regulatory Outreach - Another Comment Re: TA2013001

Mr. Fink: thank you for your comments and interest in this subject. These comments will be provided to the BCAB at their 5/21/13 meeting, and to the P&Z at their 6/6/13 meeting. Please note the BCAB is well versed in the existing and proposed codes.

**From:** [michael.j.fink@intel.com](mailto:michael.j.fink@intel.com) [<mailto:michael.j.fink@intel.com>]  
**Sent:** Thursday, May 16, 2013 2:55 PM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

**Citizen Comments**

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Michael Fink  
Organization: self  
City: Phoenix  
Zip: 85045  
Phone Number:  
Phone Type:  
Email: [michael.j.fink@intel.com](mailto:michael.j.fink@intel.com)

Does citizen want to be contacted:

---

Comment is regarding: express opposition

**Comments:**

As I suspected, just doing 5 minutes worth of research on these codes turned up all sorts of nefarious intentions and results. These come from United Nations' Agenda21. There are many stories of innocent, law-abiding individuals being persecuted under these codes for no good reason. That should be enough to reject these codes, but here are some more reasons: I'll bet the council members haven't read a single word of these documents. Therefore I'm sure they have not thought about how they can be abused, how they fall short in some areas, and how they are overkill in others. Lastly, I'm sure the councilmembers cannot answer the question, "what problem are we trying to solve?"

Time of Request: 5/16/2013 2:54:58 PM

**From:** Lynn Favour - PLANDEVX  
**Sent:** Tuesday, May 21, 2013 8:56 AM  
**To:** 'dks7@cox.net'  
**Subject:** RE: Regulatory Outreach

Ms. Siefker,

Thank you for your interest in this subject and for your insights. Your comments are important to us and will be provided to the Building Code Advisory Board at their 5/21/13 meeting and to the Maricopa County Planning and Zoning Commission at their 6/6/13 meeting.

**From:** [dks7@cox.net](mailto:dks7@cox.net) [<mailto:dks7@cox.net>]  
**Sent:** Monday, May 20, 2013 3:42 PM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

#### **Citizen Comments**

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Doris Siefker  
Organization:  
City: Glendale  
Zip: 85306  
Phone Number: 602.938.0052  
Phone Type: home  
Email: [dks7@cox.net](mailto:dks7@cox.net)

Does citizen want to be contacted: no

---

Comment is regarding: express opposition

---

#### **Comments:**

While looking for a ranch property I've done extensive research on International codes. These codes are very long and boring, they remove the property owner from the decision process of their own property. ie: R303 required temp in your house should be between 70 and 90. Really? Sorry, hot flashes must have temps lower than that. R302.1 required automatic sprinkler system in every room, how can we afford that? As you can see this is no different than the IRS. ALL CODE ENFORCEMENT PROCEDURES MUST INCLUDE THE 4TH AMENDMENT "SEARCH AND SEIZURE" PROTECTIONS AS WELL AS DUE PROCESS APPEAL PROCEDURES. NO to the International Codes

Time of Request: 5/20/2013 3:42:20 PM



## Addendum to the Planning and Zoning Commission

Prepared by the Maricopa County Planning and Development Department

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<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	June 6, 2013
<b>Agenda Item:</b>	6
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Commission-initiated
<b>Request:</b>	Text Amendment Maricopa County Local Additions & Addenda to adopt and amend updated construction safety codes

This addendum is to attach public comments received since the Commission report was originally linked onto the Enhanced Regulatory Outreach Program (EROP) website. This addendum is provided to the Commission in tandem with the report. It includes public comments received via EROP, public comments sent directly to the Board of Supervisors (BOS) offices, and the draft extract 4/25/13 ZIPPOR minutes.

The most recent comment from the New River – Desert Hills Community Association, date 5/15/13, expresses some concern with TA2013001. Three (3) people have registered opposition to TA2013001 via EROP. Eighteen (18) people sent emails of opposition to the BOS offices (two of which were duplicates of opposition registered on EROP).

This matter was discussed at the May 21<sup>st</sup> Building Code Advisory Board (BCAB) meeting. They answered technical questions from the audience, and voted unanimously to recommend approval of TA2013001 to the BOS.

dvj

Attachments: Additional Public Comments Received via EROP (4 pages)  
Additional Public Comments (24 pages)  
Extract DRAFT 4/25/13 ZIPPOR minutes (2 pages)

## **ADDITIONAL PUBLIC COMMENTS RECEIVED VIA EROP**

New River - Desert Hills Community Association  
Rusdon Ray- GER Drafting Services  
Michael Fink  
Doris Siefker

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 16, 2013 2:49 PM  
**To:** 'Plan-Dev@nrdhca.com'  
**Subject:** FW: Regulatory Outreach

Dear sir or madam: thank you for your comments and interest in this subject. These comments will be provided to the BCAB at their 5/21/13 meeting, and to the P&Z at their 6/6/13 meeting.

**From:** [Plan-Dev@nrdhca.com](mailto:Plan-Dev@nrdhca.com) [<mailto:Plan-Dev@nrdhca.com>]  
**Sent:** Wednesday, May 15, 2013 3:20 PM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

### **Citizen Comments**

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Ann Hutchinson  
Organization: New River - Desert Hills Community Association  
City: New River - Desert Hills  
Zip: 85087  
Phone Number: 623-742-6514  
Phone Type: home  
Email: [Plan-Dev@nrdhca.com](mailto:Plan-Dev@nrdhca.com)

Does citizen want to be contacted: no

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Comment is regarding: other

### **Comments:**

The President of the New River - Desert Hills Community Association ask that these "Considerations and Questions" be submitted for the May 21 Building Code Advisory Council meeting. • Have you considered that going from having Energy Code to the 2012 Code will have a tremendous impact on anyone that has been planning (includes the engineering and financial side)? It is common practice for the planning to occur at least one year before submitting any documents to the County. Not only will the cost of materials be more, but there will be the mandatory cost of construction documents prepared by a design professional (designer, architect or engineer) plus the additional testing. • Has there been any research regarding the availability of materials? From an informal study, it appears that many existing doors and windows do not meet the codes. It is not evident that the manufactures have caught up with the code. • What is the cost and availability of 3rd Party contractors to do the additional testing procedure (even the REISNET and HERS alternative) • Could you clarify how remodeling (only those portions unaltered will be exempted) would comply to the code without having to change the other portions of the home (i.e. if the walls or roof insulation need to be changed, it is virtually impossible not to have to change the rest of the home)? • Could remodeling be exempt while additions not be exempt? • Construction documents to be prepared by a design professional (designer, architect or engineer). • Could the County make the 2012 International Energy Conservation Code optional

for 1 year to allow builders/people to get acquainted with the code (or at least the residential portion)?

Time of Request: 5/15/2013 3:20:05 PM

**From:** Rusdon Ray [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 16, 2013 2:54 PM  
**To:** Darren Gerard - PLANDEVX  
**Subject:** RE: Regulatory Outreach

Awesome. I hope I'm able to be to those meetings as well.

Thanks for your reply Darren.

Rusdon Ray  
GER Drafting Services  
2243 E. Claxton  
Gilbert, AZ 85297  
[\(480\)988-2472](tel:(480)988-2472) Office  
[\(480\)988-5359](tel:(480)988-5359) Fax  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

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**From:** Darren Gerard - PLANDEVX [<mailto:DarrenGerard@mail.maricopa.gov>]  
**Sent:** Thursday, May 16, 2013 2:50 PM  
**To:** 'houseplansinaweek@gmail.com'  
**Subject:** RE: Regulatory Outreach

Mr. Ray: thank you for your comments and interest in this subject. These comments will be provided to the BCAB at their 5/21/13 meeting, and to the P&Z at their 6/6/13 meeting.

**From:** [houseplansinaweek@gmail.com](mailto:houseplansinaweek@gmail.com) [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 16, 2013 11:18 AM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

#### **Citizen Comments**

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Rusdon Ray  
Organization:  
City: Queen Creek  
Zip: 85142  
Phone Number:  
Phone Type:  
Email: [houseplansinaweek@gmail.com](mailto:houseplansinaweek@gmail.com)

Does citizen want to be contacted: yes

---

Comment is regarding: express opposition

---

**Comments:**

I hear the 2012 Codes are up for adoption. We have for the first time done our research into the ICC Codes and find them to be over the top now in just about every aspect and now they are doubling down and exponentially increasing building cost etc. not to mention a loss of personal choices by adding in the green and energy codes. Please do not adopt or encourage the adoption of these outrageous codes.

Time of Request: 5/16/2013 11:17:53 AM

**From:** Darren Gerard - PLANDEVX

**Sent:** Friday, May 17, 2013 9:45 AM

**To:** 'michael.j.fink@intel.com'

**Cc:** Lynn Favour - PLANDEVX

**Subject:** RE: Regulatory Outreach - Another Comment Re: TA2013001

Mr. Fink: thank you for your comments and interest in this subject. These comments will be provided to the BCAB at their 5/21/13 meeting, and to the P&Z at their 6/6/13 meeting. Please note the BCAB is well versed in the existing and proposed codes.

**From:** [michael.j.fink@intel.com](mailto:michael.j.fink@intel.com) [<mailto:michael.j.fink@intel.com>]

**Sent:** Thursday, May 16, 2013 2:55 PM

**To:** Regulatory

**Subject:** Regulatory Outreach

**Citizen Comments**

---

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Michael Fink

Organization: self

City: Phoenix

Zip: 85045

Phone Number:

Phone Type:

Email: [michael.j.fink@intel.com](mailto:michael.j.fink@intel.com)

Does citizen want to be contacted:

---

Comment is regarding: express opposition

---

**Comments:**

As I suspected, just doing 5 minutes worth of research on these codes turned up all sorts of nefarious intentions and results. These come from United Nations' Agenda21. There are many stories of innocent, law-abiding individuals being persecuted under these codes for no good reason. That should be enough to reject these codes, but here are some more reasons: I'll bet the council members haven't read a single word of these documents. Therefore I'm sure they have not thought about how they can be abused, how they fall short in some areas, and how they

are overkill in others. Lastly, I'm sure the councilmembers cannot answer the question, "what problem are we trying to solve?"

Time of Request: 5/16/2013 2:54:58 PM  
**From:** Lynn Favour - PLANDEVX  
**Sent:** Tuesday, May 21, 2013 8:56 AM  
**To:** 'dks7@cox.net'  
**Subject:** RE: Regulatory Outreach

Ms. Siefker,

Thank you for your interest in this subject and for your insights. Your comments are important to us and will be provided to the Building Code Advisory Board at their 5/21/13 meeting and to the Maricopa County Planning and Zoning Commission at their 6/6/13 meeting.

**From:** [dks7@cox.net](mailto:dks7@cox.net) [<mailto:dks7@cox.net>]  
**Sent:** Monday, May 20, 2013 3:42 PM  
**To:** Regulatory  
**Subject:** Regulatory Outreach

#### **Citizen Comments**

**Issue:** PD-TA2013001 – 2012 International Codes

Citizen's Name: Doris Siefker  
Organization:  
City: Glendale  
Zip: 85306  
Phone Number: 602.938.0052  
Phone Type: home  
Email: [dks7@cox.net](mailto:dks7@cox.net)

Does citizen want to be contacted: no

---

Comment is regarding: express opposition

---

#### **Comments:**

While looking for a ranch property I've done extensive research on International codes. These codes are very long and boring, they remove the property owner from the decision process of their own property. ie: R303 required temp in your house should be between 70 and 90. Really? Sorry, hot flashes must have temps lower than that. R302.1 required automatic sprinkler system in every room, how can we afford that? As you can see this is no different than the IRS. ALL CODE ENFORCEMENT PROCEDURES MUST INCLUDE THE 4TH AMENDMENT "SEARCH AND SEIZURE" PROTECTIONS AS WELL AS DUE PROCESS APPEAL PROCEDURES. NO to the International Codes

Time of Request: 5/20/2013 3:42:20 PM

## **ADDITIONAL PUBLIC COMMENTS RECEIVED**

Marlene Lyons  
Kathryn L. Bowman  
Sandi Bartlett  
Judi Morris  
Danny Ray  
Lina Hatch  
Susan Hicks  
Anita Christy  
Edward J. Sullivan  
Randy Hatch  
Rusdon Ray – GER Drafting Services  
P.J. O'Malley  
Maurio Fischbeck  
Cory Carpenter  
Edie Gallacher  
Khyl Powell – Contractor Storage Yards LLC  
Jane Stapp  
Suzanne Jordan

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:30 AM  
**To:** 'marlyons@aol.com'  
**Subject:** TA2013001

Ms. Lyons: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** [marlyons@aol.com](mailto:marlyons@aol.com) [<mailto:marlyons@aol.com>]  
**Sent:** Monday, May 20, 2013 4:37 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; [mrwilcox@mail.caripopa.gov](mailto:mrwilcox@mail.caripopa.gov)  
**Subject:** Council Members

Please vote YES to return the 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

Marlene Lyons  
District 12

-  
**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:29 AM  
**To:** 'kl\_bowman@msn.com'  
**Subject:** TA2013001

Ms. Bowman: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Kathryn Bowman [[mailto:kl\\_bowman@msn.com](mailto:kl_bowman@msn.com)]  
**Sent:** Monday, May 20, 2013 6:09 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** ICC 2012 International Codes

Dear Maricopa County Board of Supervisors,

I did not weigh in on this issue when it came before the Gilbert Town Council, since I live in a county island. But I certainly will not stand idly by while the Maricopa Planning and Development Department appears to be recommending that you pass the next round of the ICC's 2012 International Codes. More than likely, these staff members haven't even read these thousands of pages of codes. Like the federal government's Affordable Care Act, "you need to pass them in order to find out what's in them."

The bottom line for me is this: If a building, construction, plumbing, electrical, etc., code isn't a life-safety issue, why use the force of LAW to mandate codes that should be left to the free market decisions of professionals in the industry? Especially when those codes add thousands of dollars to the cost of a home and create interminable delays?

As a politically active blogger friend pointed out, the language in the "*Enhanced Regulatory Outreach Program. Maricopa County Building Code Advisory Board Special Meeting*" definitely has a problem when it states:

"These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to **our customers**. Note the **green construction code will be voluntary**."

"Customers" should have the freedom to make their own decisions about where they want to shop and what they want to buy! If professionals in the building industry were treated like "customers" by government planners, developers, building inspectors, and code enforcers, those professionals would be able to pick and choose among the non-life/safety codes and decide what to offer their own customers. Their customers, the home buyers, would in turn decide if they want what those professionals have recommended.

Please use a healthy degree of skepticism in thinking that this is what Maricopa County voters want. What we need everywhere in Maricopa County right now is LESS GOVERNMENT REGULATION, not MORE MANDATES!!!

Kathryn L. Bowman

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:28 AM  
**To:** 'sbartlett5@cox.net'  
**Subject:** TA2013001

Ms. Bartlett: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Sandi Bartlett [<mailto:sbartlett5@cox.net>]

**Sent:** Monday, May 20, 2013 7:38 PM

**To:** Undisclosed-Recipient:;

**Subject:** Please Don't Pass Unnecessary Laws that Depress our Economy

Dear Maricopa County Board of Supervisors,

Your Planning and Development Department appears to be poised to recommend that you pass the next round of the ICC's 2012 International Codes. More than likely, these staff members haven't read these thousands of pages of codes. Like the federal government's Affordable Care Act, "you need to pass them in order to find out what's in them."

The ICC (International Code Council) has been around for less than 10 years. Yet, they are wielding incredible power over municipalities across America, with their code recommendations. They are hardly "international," unless you count Guam, the US Virgin Islands, and Puerto Rico. <http://www.iccsafe.org/gr/Pages/adoptions.aspx>.

The ICC is made up of wonderful, official, illustrious, and well-intended people in "professional" positions, but the bottom line is this: If a building, construction, plumbing, electrical, etc., code isn't a life-safety issue, why use the force of LAW to mandate codes that should be left to the free market decisions of professionals in the industry? Especially when those codes add thousands of dollars to the cost of a home and create interminable delays?

Over the last few months, Rusdon Ray, a local Gilbert draftsman and home designer, along with several tradesmen and home owners, have been working with Gilbert management and council members to stop the ICC's 2012 International Codes from becoming law.

For background, please go to [www.nonewcodes.com](http://www.nonewcodes.com). Attached is a flier, which has been distributed to several communities via email. Rusdon and his team have also drafted a Proposal to the Gilbert Town Council, attached.

Also, please note the language in the attached *"Enhanced Regulatory Outreach Program. Maricopa County Building Code Advisory Board Special Meeting."*

"These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to our customers. Note the green construction code will be voluntary.

"Our customers"? Customers have the freedom to make their own decisions about where they want to shop and what they want to buy. If professionals in the building industry were treated like "customers" by government planners, developers, building inspectors, and code enforcers, those professionals would be able to pick and

choose among the non-life/safety codes and decide what's best for their own customers. Their customers, the home buyers, would in turn decide if they want what those professionals have recommended.

Respectfully,  
Sandi Bartlett  
AZ GOP LD17 Corresponding Secretary  
LD17 PC and State Committeeman  
[sbartlett5@cox.net](mailto:sbartlett5@cox.net)  
480 600 2874

**Dear Council Members,**

**We** ask for you to vote YES to return these 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

**Whereas:** The current ICC building codes have a direct impact on the citizens of Gilbert

yet were not written by anyone from or familiar with Gilbert; and

**Whereas:** Those in the building industry have been rebuffed by plan reviewers and

building inspectors in working together in a common sense fashion in the best interests of

the home owners and citizens of Gilbert, due to the existing 2006 ICC codes; and

**Whereas:** Our earnest requests have been met with insults and retaliatory measures from

Town Staff, having the negative effect on tradesmen and citizens alike, causing them to

resort to silent compliance to illogical and nonsensical requirements; and

**Whereas:** The current town management has been unable and unwilling to work with the

citizens or those in the trades to put together a simple set of comprehensible life/safety

codes while these current 2006 ICC codes are still in place as law as passed by previous

councils; and

**Whereas:** The current ICC building codes were passed into law by previous and current

council members without having been read or understood, we ask you to rescind them as

mandated law on the citizens of Gilbert and return them to their rightful place in the free

market economy as suggestions and recommendations as intended.

- 2006 International Building Code
- 2006 International Residential Code
- 2006 International Mechanical Code
- 2006 International Plumbing Code
- 2006 International Fuel Gas Code
- 2006 International Energy Conservation Code
- 2006 International Fire Code
- 2005 National Electrical Code
- The Arizonans with Disabilities Act and Implementing Rules
- Significant Changes and Amendments to the IRC - 2006 Edition

We ask for you to vote YES to return these 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:27 AM  
**To:** 'spoiledjudi@cox.net'  
**Subject:** TA2013001

Ms. Morris: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** judi [<mailto:spoiledjudi@cox.net>]  
**Sent:** Monday, May 20, 2013 8:46 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** Don't pass ICC

Dear Maricopa County Board of Supervisors,

Your Planning and Development Department appears to be poised to recommend that you pass the next round of the ICC's 2012 International Codes. More than likely, these staff members haven't read these thousands of pages of codes. Like the federal government's Affordable Care Act, "you need to pass them in order to find out what's in them." Really?

The ICC (International Code Council) has been around for less than 10 years. Yet, they are wielding incredible power over municipalities across America, with their code recommendations. They are hardly "international," unless you count Guam, the US Virgin Islands, and Puerto Rico. <http://www.iccsafe.org/gr/Pages/adoptions.aspx>.

The ICC is made up of wonderful, official, illustrious, and well-intended people in "professional" positions, but the bottom line is this: If a building, construction,

plumbing, electrical, etc., code isn't a life-safety issue, why use the force of LAW to mandate codes that should be left to the free market decisions of professionals in the industry? Especially when those codes add thousands of dollars to the cost of a home and create interminable delays?

Over the last few months, Rusdon Ray, a local Gilbert draftsman and home designer, along with several tradesmen and home owners, have been working with Gilbert management and council members to stop the ICC's 2012 International Codes from becoming law.

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Also, please note the language in the attached "*Enhanced Regulatory Outreach Program. Maricopa County Building Code Advisory Board Special Meeting.*"

"These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to **our customers**. Note the **green construction code will be voluntary.**"

"Our customers"? Customers have the freedom to make their own decisions about where they want to shop and what they want to buy. If professionals in the building industry were treated like "customers" by government planners, developers, building inspectors, and code enforcers, those professionals would be able to pick and choose among the non-life/safety codes and decide what's best for their own customers. Their customers, the home buyers, would in turn decide if they want what those professionals have recommended.

Thank you for your consideration.  
j morris

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:26 AM  
**To:** 'dray1977@hotmail.com'  
**Subject:** TA2013001

Mr. Ray: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** D Ray [<mailto:dray1977@hotmail.com>]  
**Sent:** Monday, May 20, 2013 9:23 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton

Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** Unnecessary codes

I find it hard to believe that new laws and codes could be passed with out those who are passing them reading them. That boggles my mind that elected Representatives vote for laws which they haven't even read. As you weigh the decision as to whether or not to accept the ICC 2012 codes please think about that. What makes the 2012 codes better then the 2009 codes or 2006 codes or so on. Has the ability to build a safe house or building changed? I would have to say NO. These new codes are arbitrarily put together to control consumers and markets. Whatever happened to private property rights or citizens not having there money wasted? Safety is one thing but the construction industry has been building things safely for a long time why over regulate. This seems to be the new mantra is "REGULATION REGULATION cause we know best." Some regulation has a place but that really should only be for safety and we have gone way past that. If I want to build an energy efficient house and save money so be it, but on the other side if I want to build a not energy efficient house let me pay the bill and the taxes on the energy. Thank you for your time.

Danny Ray

Licensed Contractor for the last 10 years in Mesa, AZ

-  
**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:14 AM  
**To:** 'linahatch@hotmail.com'  
**Subject:** TA2013001

Ms. Hatch: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** lina hatch [<mailto:linahatch@hotmail.com>]  
**Sent:** Monday, May 20, 2013 10:45 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** FW: Please Don't Pass Unnecessary Laws that Depress our Economy

We are suffering from too much top down government control in our country, in Arizona, and even in our local communities. We must regain control over our lives, especially in our own homes and property.

Dear Maricopa County Board of Supervisors,

Your Planning and Development Department appears to be poised to recommend that you pass the next round of the ICC's 2012 International Codes. More than likely, these staff members haven't read these thousands of pages of codes. Like the federal government's Affordable Care Act, "you need to pass them in order to find out what's in them."

The ICC (International Code Council) has been around for less than 10 years. Yet, they are wielding incredible power over municipalities across America, with their code recommendations. They are hardly "international," unless you count Guam, the US Virgin Islands, and Puerto Rico. <http://www.iccsafe.org/gr/Pages/adoptions.aspx>.

The ICC is made up of wonderful, official, illustrious, and well-intended people in "professional" positions, but the bottom line is this: If a building, construction, plumbing, electrical, etc., code isn't a life-safety issue, why use the force of LAW to mandate codes that should be left to the free market decisions of professionals in the industry? Especially when those codes add thousands of dollars to the cost of a home and create interminable delays?

Over the last few months, Rusdon Ray, a local Gilbert draftsman and home designer, along with several tradesmen and home owners, have been working with Gilbert management and council members to stop the ICC's 2012 International Codes from becoming law.

For background, please go to [www.nonewcodes.com](http://www.nonewcodes.com). Attached is a flier, which has been distributed to several communities via email. Rusdon and his team have also drafted a Proposal to the Gilbert Town Council, attached.

Also, please note the language in the attached "*Enhanced Regulatory Outreach Program. Maricopa County Building Code Advisory Board Special Meeting.*"

"These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to **our customers**. Note the **green construction code will be voluntary.**"

"Our customers"? Customers have the freedom to make their own decisions about where they want to shop and what they want to buy. If professionals in the building industry were treated like "customers" by government planners, developers, building inspectors, and code enforcers, those professionals would be able to pick and choose among the non-life/safety codes and decide what's best for their own customers. Their customers, the home buyers, would in turn decide if they want what those professionals have recommended.

Lina Hatch  
LD17 PC  
Gilbert

**Dear Council Members,**

We ask for you to vote YES to return these 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

**Whereas:** The current ICC building codes have a direct impact on the citizens of Gilbert

yet were not written by anyone from or familiar with Gilbert; and

**Whereas:** Those in the building industry have been rebuffed by plan reviewers and

building inspectors in working together in a common sense fashion in the best interests of

the home owners and citizens of Gilbert, due to the existing 2006 ICC codes; and

**Whereas:** Our earnest requests have been met with insults and retaliatory measures from

Town Staff, having the negative effect on tradesmen and citizens alike, causing them to

resort to silent compliance to illogical and nonsensical requirements; and

**Whereas:** The current town management has been unable and unwilling to work with the

citizens or those in the trades to put together a simple set of comprehensible life/safety

codes while these current 2006 ICC codes are still in place as law as passed by previous

councils; and

**Whereas:** The current ICC building codes were passed into law by previous and current

council members without having been read or understood, we ask you to rescind them as

mandated law on the citizens of Gilbert and return them to their rightful place in the free

market economy as suggestions and recommendations as intended.

- 2006 International Building Code
- 2006 International Residential Code
- 2006 International Mechanical Code
- 2006 International Plumbing Code
- 2006 International Fuel Gas Code
- 2006 International Energy Conservation Code
- 2006 International Fire Code
- 2005 National Electrical Code
- The Arizonans with Disabilities Act and Implementing Rules
- Significant Changes and Amendments to the IRC - 2006 Edition

We ask for you to vote YES to return these 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:25 AM  
**To:** 'bshicks3@msn.com'  
**Subject:** TA2013001

Ms. Hicks: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Susan HICKS [<mailto:bshicks3@msn.com>]  
**Sent:** Monday, May 20, 2013 11:28 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X  
**Subject:** \*Maricopa County is Considering Passing the 2012 International Codes

\*Maricopa County is Considering Passing the 2012 International Codes\*

I hear the County Board of Supervisors is poised to pass thousands of pages of building codes as LAW without reading them. Reminds me of Obamacare?

DON'T DO THIS....IT SHOULD BE ARIZONA'S CODES NOT INTERNATIONAL CODES!  
Set our own codes and do it wisely! PLEASE!

Respectfully,  
Susan Hicks  
Gilbert, AZ

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 11:12 AM  
**To:** 'anitalchristy@cox.net'  
**Subject:** TA2013001

Ms. Christy: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Anita Christy [<mailto:anitalchristy@cox.net>]  
**Sent:** Monday, May 20, 2013 3:28 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** Please Don't Pass Unnecessary Laws that Depress our Economy

Dear Maricopa County Board of Supervisors,

Your Planning and Development Department appears to be poised to recommend that you pass the next round of the ICC's 2012 International Codes. More than likely, these staff members haven't read these thousands of pages of codes. Like the federal government's Affordable Care Act, "you need to pass them in order to find out what's in them."

The ICC (International Code Council) has been around for less than 10 years. Yet, they are wielding incredible power over municipalities across America, with their code recommendations. They are hardly "international," unless you count Guam, the US Virgin Islands, and Puerto Rico. <http://www.iccsafe.org/gr/Pages/adoptions.aspx>.

The ICC is made up of wonderful, official, illustrious, and well-intended people in "professional" positions, but the bottom line is this: If a building, construction, plumbing, electrical, etc., code isn't a life-safety issue, why use the force of LAW to mandate codes that should be left to the free market decisions of professionals in the industry? Especially when those codes add thousands of dollars to the cost of a home and create interminable delays?

Over the last few months, Rusdon Ray, a local Gilbert draftsman and home designer, along with several tradesmen and home owners, have been working with Gilbert management and council members to stop the ICC's 2012 International Codes from becoming law.

For background, please go to [www.nonewcodes.com](http://www.nonewcodes.com). Attached is a flier, which has been distributed to several communities via email. Rusdon and his team have also drafted a Proposal to the Gilbert Town Council, attached.

Also, please note the language in the attached "*Enhanced Regulatory Outreach Program. Maricopa County Building Code Advisory Board Special Meeting.*"

"These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to **our customers**. Note the **green construction code will be voluntary.**"

"Our customers"? Customers have the freedom to make their own decisions about where they want to shop and what they want to buy. If professionals in the building industry were treated like "customers" by government planners, developers, building inspectors, and code enforcers, those professionals would be able to pick and choose among the non-life/safety codes and decide what's best for their own customers. Their customers, the home buyers, would in turn decide if they want what those professionals have recommended.

Thank you for your consideration.

In the name of God, Family, and Civic Duty,  
Anita Christy  
[www.GilbertWatch.com](http://www.GilbertWatch.com)

**Dear Council Members,**

**We** ask for you to vote YES to return these 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

**Whereas:** The current ICC building codes have a direct impact on the citizens of Gilbert

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**Whereas:** Those in the building industry have been rebuffed by plan reviewers and

building inspectors in working together in a common sense fashion in the best interests of

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**Whereas:** Our earnest requests have been met with insults and retaliatory measures from

Town Staff, having the negative effect on tradesmen and citizens alike, causing them to

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codes while these current 2006 ICC codes are still in place as law as passed by previous

councils; and

**Whereas:** The current ICC building codes were passed into law by previous and current

council members without having been read or understood, we ask you to rescind them as

mandated law on the citizens of Gilbert and return them to their rightful place in the free

market economy as suggestions and recommendations as intended.

- 2006 International Building Code
- 2006 International Residential Code
- 2006 International Mechanical Code
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- 2006 International Fuel Gas Code

- 2006 International Energy Conservation Code
- 2006 International Fire Code
- 2005 National Electrical Code
- The Arizonans with Disabilities Act and Implementing Rules
- Significant Changes and Amendments to the IRC - 2006 Edition

We ask for you to vote YES to return these 2006 ICC codes back to suggestions and recommendations for which they were written and intended. This action would take effect 3-6 months after a vote in which time we can review, revise and approve a Life-Safety set of Gilbert Governing Codes.

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 12:22 PM  
**To:** 'edsull4217@msn.com'  
**Subject:** RE: International2012 ICC Codes

Mr. Sullivan: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** EDWARD J SULLIVAN [<mailto:edsull4217@msn.com>]  
**Sent:** Sunday, May 19, 2013 12:45 PM  
**To:** Stephen Chucri - DIST2X  
**Subject:** International2012 ICC Codes

Please vote against this further invasion of our schools. e j sullivan

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 12:47 PM  
**To:** 'dks7@cox.net'  
**Subject:** RE: NO to Passing the 2012 International Codes

Ms. Siefker: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Doris K Siefker [<mailto:dks7@cox.net>]  
**Sent:** Sunday, May 19, 2013 8:37 AM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** NO to Passing the 2012 International Codes

**I DID THE RESEARCH, DID YOU????**

You are implementing a policy that will untimely eliminate ALL OF OUR freedoms and destroy our way of life. You need to know what's going on to stop this process. You are selling Arizonans out to global regional development with help from the *International Council for Local Environmental Initiatives (ICLEI): Local Governments for Sustainability* (established via Executive Order by Bill Clinton).

Our founding fathers understood that private property rights are the basis of individual freedom and economic security. Without private property rights there is no way to check the power of the state over the individual. When the state gains control over private property rights the ability to create wealth stagnates or even declines, thereby creating poverty and misery rather than freedom and wealth. History is full of examples of how *unnecessary* state control of property rights produces poverty and misery.

In communities that have adopted the International code discover that they cannot build a house for grandma on five acres of their own land because the county's comprehensive plan requires no more than one home per 40-acres. Many communities discover that their comprehensive plan includes a provision to incorporate by reference the entire set of 13 different codes developed by the International Code Council. Each of these codes amounts to government dictating human behavior.

These codes go far beyond building and fire safety codes. They include: residential, property maintenance, energy conservation, wild land interface, and other behavior modification codes.

The only way to protect our community and our property and profit if FOR YOU TO REJECT the entire concept of government-dictated land use and behavior codes.

**HAVE YOU READ THEM?????** These codes are very long and exceedingly boring, and those that write them know that hardly anyone will ever read them.

This code essentially removes the property owner from the decision process, and authorizes government to make key decisions about the use of the owners' property. There is neither authorization nor justification for this function of government in any Constitution.

The legitimate function of government is to (1) protect the rights of its citizens, and (2) provide the services the citizens authorize.

- 1) The 'Code Official' – anybody the jurisdiction calls – a 'Code Official' – is the sole interpreter – no due process – Gestapo!
- 2) Every day an offense occurs is a separate mandatory misdemeanor – \$555/day and/or a month in jail in Charleston, W.Va. They can fine you out of your home and jail you at their whim!
- 3) Anything the 'Code Official' says is not in good working condition – sticky window, dented or plugged gutter, torn window screen – whatever he says is not in good working order – hundreds of dollars of fines per day and/or jail time – usually a month – for every day the offense occurs.
- 4) Any unsanitary condition – whatever the 'Code Official' says is an 'unsanitary condition' – empty pop cans – puddles – dog droppings on your property – same deal – same fines and/or jail time – every day.
- 5) Any plant that the 'Code Official' says is a 'noxious weed' – same deal – same fines and/or jail time – every day. He can steal raw land.
- 6) He can fine you out of your home and jail you with no due process. Any court proceedings are window dressing as there is no remedy associated with this 'code.'
- 7) It can be 'adopted' – just by an 'administrative decree.'

WITHOUT COURT ACTION OR NOTICE THE CODE OFFICIAL CAN:

- Enter your house whenever he – the sole interpreter – deems reasonable.

- Prevent you from entering your house.
- Tear your house down with your stuff in it.
- Bill you for the demolition.
- Place a lien on it for fines and/or demolition charges – steal it.
- And ‘best’ of all, no insurance will cover the losses.
- Homeowners are left with an unpaid mortgage, any remaining fines, any remaining taxes, and any remaining demolition charges after they steal your property

These codes restrict what homeowners can do with their own properties in thousands of different ways. If you rebel against one of the codes, the penalties can be extremely harsh.

And there is often “selective enforcement” of these codes. That means that they will leave most people alone but they will come down really hard on people that they do not like.

You think I am being an extremist? Look what the IRS has done!

**ALL CODE ENFORCEMENT PROCEDURES MUST INCLUDE THE 4<sup>TH</sup> AMENDMENT “SEARCH AND SEIZURE” PROTECTIONS AS WELL AS DUE PROCESS APPEAL PROCEDURES.**

**NO TO PASSING THE 2012 INTERNATIONAL CODES**

*Doris K Siefker*

*Free trade, less Government, lower taxes, sound money and the necessity for character in Government.*

**From:** Anita Christy [<mailto:anitalchristy@cox.net>]

**Sent:** Saturday, May 18, 2013 11:11 AM

**To:** Anita Christy

**Subject:** Maricopa County is Considering Passing the 2012 International Codes - Don't Call Me "honey"

Dear Friends of Liberty,

I have a pet peeve. I don't like it when total strangers--less than 70 years of age--call me “honey.” What does that have to do with Maricopa County considering passage of the 2012 International Codes? You'll see.

Have you been following this issue of town and city governments passing into **Law** thousands of pages of codes all across Arizona without even reading them? To bring you up to date, please see the email below from Rusdon Ray, a local draftsman and home designer, who has been fighting this nonsense. Please attend the Maricopa County meeting May 21 if you can. Or send the MCBOS an email. For background, please go to [www.nonewcodes.com](http://www.nonewcodes.com). Attached is a flier, which you are encouraged to distribute in

your neighborhood. Rusdon and his team have also drafted a Proposal to the Gilbert Town Council, attached.

Back to “Don’t Call Me Honey.” I want to draw your attention to the language tyrants typically use when trying to convince you that you are glad they are holding your head in a bucket of water.

Look at the first attachment. It’s titled “*Enhanced Regulatory Outreach Program. Maricopa County Building Code Advisory Board Special Meeting.*” What’s wrong with this paragraph?

“These are code updates and not expected to be substantial changes from current codes except that the County has not previously adopted the green construction code, energy conservation code or the existing building code – all of which are anticipated to be a benefit to **our customers**. Note the **green construction code will be voluntary.**”

Imagine how professional draftsmen, builders, contractors, electricians, plumbers, architects, home owners, etc., feel when Code Enforcers force them to follow unnecessary, expensive codes, and then have the gall to call them “our customers.”

Customers have the freedom to make their own decisions about where they want to shop and what they want to buy. If professionals in the building industry were treated like “customers” by government planners, developers, building inspectors, and code enforcers, those professionals would be able to pick and choose among the non-life/safety codes and decide what’s best for their own customers. Their customers, the home buyers, would in turn decide if they want what those professionals have recommended.

Don’t insult and offend the builders, tradesmen, and home buyers you are **forcing to follow arbitrary codes** by calling them “**customers.**” You don’t treat them like customers. You treat them like victims of a tyrannical top down government.....

honey.

In the name of God, Family, and Civic Duty

Anita Christy  
[www.GilbertWatch.com](http://www.GilbertWatch.com)

**From:** Rusdon Ray [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 16, 2013 1:30 PM  
**To:** 'Rusdon Ray'  
**Subject:** Maricopa County is Considering to Pass the 2012 International Codes

We knew this was coming but didn't think it would be so soon. Maricopa County is also proposing to adopt these new International 2012 ICC codes. (See the attached EROP Notice). Below are the emails of the 5 members of the Maricopa County Board of

Supervisors. Please take a moment and send them an email. Let them know how you feel about our representatives passing books of International mandates on their citizens especially when they have not even read or understand them. [www.nonewcodes.com](http://www.nonewcodes.com)

You can email them all at once. Just copy and paste.

[barneyd@mail.maricopa.gov](mailto:barneyd@mail.maricopa.gov)  
[chucris@mail.maricopa.gov](mailto:chucris@mail.maricopa.gov)  
[akunasek@mail.maricopa.gov](mailto:akunasek@mail.maricopa.gov)  
[chickman@mail.maricopa.gov](mailto:chickman@mail.maricopa.gov)  
[mrwilcox@mail.maricopa.gov](mailto:mrwilcox@mail.maricopa.gov)

P.S. - We are making progress in Gilbert, and they are reviewing and considering our proposal to write our own local Gilbert set of readable & understandable life-safety codes. Attached is Our Proposal to members of the Gilbert Town Council that they are reviewing.

Rusdon Ray  
GER Drafting Services  
2243 E. Claxton  
Gilbert, AZ 85297  
[\(480\)988-2472](tel:(480)988-2472) Office  
[\(480\)988-5359](tel:(480)988-5359) Fax  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

**The Defenders of Liberty**  
**God - Religion - Freedom - Peace - Family**

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 2:06 PM  
**To:** 'Americanpride Last'  
**Subject:** RE: Mr. Chucri, I am concerned about Housing Codes

Sir: The hearing will be held at 9:30 a.m. Thursday, June 6<sup>th</sup> in the BOS Auditorium, 205 W. Jefferson St. in downtown Phoenix. Attached is a hearing notice with regard to proposed regulatory amendments. (Please note that on-street and garage parking is metered. The Light Rail Line does have a stop in this vicinity and park-n-ride facilities along the outer portions of its route.) Darren

**From:** Americanpride Last [<mailto:redmountainteaparty@gmail.com>]  
**Sent:** Thursday, May 23, 2013 1:59 PM  
**To:** Darren Gerard - PLANDEVX  
**Subject:** Re: Mr. Chucri, I am concerned about Housing Codes

Thank you very much.

If possible, I might try to attend that meeting. What time of the day will it be held?

Randy Hatch

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:02 PM  
**To:** 'redmountainteaparty@gmail.com'  
**Subject:** RE: Mr. Chucri, I am concerned about Housing Codes

Mr. Hatch: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Americanpride Last [<mailto:redmountainteaparty@gmail.com>]  
**Sent:** Monday, May 20, 2013 3:41 PM  
**To:** Stephen Chucri - DIST2X  
**Subject:** Mr. Chucri, I am concerned about Housing Codes

Mr. Chucri,

I am very concerned about the continued expansion of government control at every level of government including the county. We understand that you are currently considering the passage of additional international building codes.

I call upon you as my representative to vote NO on any new building codes. We are already buried under the weight of overwhelming government regulation.

Thank you for your consideration of this request.

Randy Hatch

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[Click Here To Join My Email List](#)

**From:** Rusdon Ray [<mailto:houseplansinaweek@gmail.com>]  
**Sent:** Thursday, May 23, 2013 1:50 PM  
**To:** Darren Gerard - PLANDEVX  
**Subject:** RE: 2012 ICC Codes - Please do not adopt them - See Attached Research

Thanks Darren.

**Rusdon Ray**  
GER Drafting Services  
2243 E. Claxton  
Gilbert, AZ 85297  
[\(480\)988-2472](tel:(480)988-2472) Office  
[\(480\)988-5359](tel:(480)988-5359) Fax  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:24 PM  
**To:** houseplansinaweek@gmail.com  
**Subject:** RE: 2012 ICC Codes - Please do not adopt them - See Attached Research

Mr. Ray: thank you for attending and speaking at the 5/21 BCAB meeting. These additional comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing.  
Darren

**From:** Rusdon Ray [<mailto:houseplansinaweek@gmail.com>]

**Sent:** Thursday, May 16, 2013 12:07 PM

**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X

**Subject:** 2012 ICC Codes - Please do not adopt them - See Attached Research

Dear Maricopa County Board of Supervisors,  
Are you aware that you will soon be voting on whether or not to adopt the International 2012 ICC Codes?

I am a Resident of Maricopa County and have been involved with these codes in my profession. I deal with them daily but not until recently have I questioned them or even known where they even come from. Do any of you know? Not only have you not written them or even read them, but you probably don't even know who has written them.

I have provided in this email some important info to consider before the vote on whether or not to adopt the New International 2012 ICC Codes. Thanks for your service.

Here's a list of 17 things that are reasons why the new 2012 ICC codes should not be adopted as law.

1. Manual J-calcs required on all homes(Chapter 11 Energy Code)
2. Drains in window wells (R310.2.2)
3. Air infiltration design (Chapter 11 Energy Code)
4. Air duct leakage test (Chapter 11 Energy Code)
5. Blower door test (Chapter 11 Energy Code)
6. 75% of light bulbs to be high efficiency type (Chapter 11 Energy Code)
7. Locking caps required on refrigerant lines on all refrigerators required (M1411.6)
8. Larger range hoods required (M1503.4)
9. Whole house venting required (Chapter 11 Energy Code)
10. No commercial appliances allowed in residential (M1901.3)
11. Outside Air Venting Requirement (M1507.3)
12. Exterior plug required on decor balconies (E3901.7)
13. Additional outlets required in entryways of homes (E3901.11)
14. All exterior plugs required to be GFCI protected (E309.2/.5)
15. AFCI plugs required on every outlet in entire house (E3902.12)
16. New Style Tamper resistant outlets required on every outlet throughout house (E4002.14)
17. Two Layers of Water proof Wrap required (Section 2510)

Now this is only a small sample. Even if all these were taken out, there would still be hundreds of new requirements and regulations added to the existing thousands of pages of existing Codes.

Here's a better list of relaxed codes.

1. Independent Garage HVAC systems allowed (M1601.6)
2. "Gooseneck" handrails now allowed (R311.7.8.1)
3. Smoke Alarms. Now recognizes wireless systems (R314 wireless interconnection.)
4. SIP Panels now recognized (R613)

5. Water heaters allowed on garage floor (M307.3)

These are really insignificant compared to the hundreds of new requirements and do not justify the adoption of the new 2012 codes by any means, but rather justify exactly the opposite and this is why. These relaxed requirements are a list of things that have been required for the past decade unnecessarily, and hundreds if not more of just these sorts of things would be implemented in the New 2012 codes and are still existing in the 2006 codes.

All said and done, these new 2012 codes would be taking us another step backwards in Maricopa County. On step closer to government making all our decisions for us. **With Freedom comes responsibility and your responsibility is to protect our freedom.** We will stand with you in those efforts.

The current ICC building codes have a direct impact on the citizens of Maricopa County yet were not written by anyone from or familiar with Maricopa County.

The over burdensome codes have a negative effect on tradesmen and citizens alike, causing them to resort to silent compliance to illogical and nonsensical requirements. The current board of Supervisors should instead work with the citizens or those in the trades to put together a simple set of comprehensible life/safety codes rather than add onto the existing thousands of pages of unread codes hundreds of new unread codes. The current ICC building codes were passed into law by previous and current council members without having been read or understood. We ask you to Not follow suit by readopting and passing thousands of pages of laws on the citizens of Maricopa County, especially when these codes have not been read or understood by those passing them into law.

**Check out the web page [www.nonewcodes.com](http://www.nonewcodes.com) especially the video link of Nancy Pelosi.**

The guiding principles that our country was founded on dealing with the free market are these:

"Life and Liberty are secure only so long as the right of property is secure"

"The highest level of prosperity occurs when there is a Free Market and a minimum of government regulations"

"Only limited and carefully defined powers should be delegated to government, all other being retained by the people"

"Strong local self-government in the keystone to preserving human freedom"

(See the 28 Principles of Liberty in The 5000 Year Leap)

I appreciate you contacting and meeting with us. I hope we can continue the conversation.

Please read this informative article by Henry Lamb directly addressing the ICC codes?

<http://www.renewamerica.com/columns/lamb/110424>

If you have not read it, will you read it and let me know what you think? It's not too long. Thanks. Henry Lamb died a year ago. Earl Taylor with NCCS recommends his books. This article addresses the codes.

Thanks for the careful consideration of this issue. I know you are hearing both sides. There are always two sides to every issue. Tyranny thrives on ignorance.

Let me know if you have any questions. We've been doing a lot of research on these codes recently. I would appreciate a response. Thanks.

**Rusdon Ray**  
GER Drafting Services  
2243 E. Claxton  
Gilbert, AZ 85297  
[\(480\)988-2472](tel:4809882472) Office  
[\(480\)988-5359](tel:4809885359) Fax  
[www.houseplansinaweek.com](http://www.houseplansinaweek.com)

**The Defenders of Liberty**  
**God - Religion - Freedom - Peace - Family**

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:30 PM  
**To:** 'pjomal@aol.com'  
**Subject:** FW: International building codes

Mr. O'Malley: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** PJ O'Malley [<mailto:pjomal@aol.com>]  
**Sent:** Thursday, May 16, 2013 4:03 PM  
**To:** Stephen Chucri - DIST2X  
**Subject:** International building codes

Dear Supervisor Chucri: I understand that Maricopa County is considering adopting ICC building codes. They were not written by anyone from or familiar with our fine county; international codes have little to nothing to do with us.

ICC building codes have been passed into law by several Arizona cities without the council members having read or understood them.

I ask that you refuse to adopt these international codes whose main objective is to make it easier to mesh us into a one-world system of total governance.

PJ O'Malley  
Mesa

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:34 PM  
**To:** 'mountainviewteaparty@gmail.com'  
**Subject:** RE: International 2012 ICC Codes

Mr. Fischbeck: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Mountain View Tea Party [<mailto:mountainviewteaparty@gmail.com>]  
**Sent:** Thursday, May 16, 2013 9:51 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** International 2012 ICC Codes

Dear Advisory Board Members,

Before you vote on passing the 2012 International Codes, please read them. The part that i read would put more costs on a new home buyer. Mesa is not adopting the 2012 codes. We just built a new house in Mesa in 2012. There were many code compliant regulations as the codes stand now. The things i read should remain optional to the home buyer if he wants them or not. They were not safety issues.

Please vote "No.t'

Thanks,

Maurio Fischbeck  
1634 E Laurel Cir  
Mesa, AZ 85203

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:36 PM  
**To:** 'corycarpenter13@gmail.com'  
**Subject:** RE: 2012 ICC Codes

Mr. Carpenter: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Cory Carpenter [<mailto:corycarpenter13@gmail.com>]  
**Sent:** Saturday, May 18, 2013 6:47 AM  
**Subject:** 2012 ICC Codes

Maricopa County Supervisors,

I am a resident of Maricopa County. I am opposed to the adoption of any new international construction codes. I suggest we move toward a plan to repeal all international construction codes and to adopt local codes written with Maricopa County and its resident in mind with input from the people under these jurisdictions.

Thank you,

Cory Carpenter  
Maricopa County Resident  
480-231-3968  
[corycarpenter13@gmail.com](mailto:corycarpenter13@gmail.com)

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:41 PM  
**To:** 'gallacher1@cox.net'  
**Subject:** RE: NO to the 2012 International Codes

Ms. Gallacher: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Edie Gallacher [<mailto:gallacher1@cox.net>]  
**Sent:** Saturday, May 18, 2013 1:48 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** NO to the 2012 International Codes

Dear Maricopa County Board of Supervisors,

Please do not put into law the 2012 International Building Codes. I am confident that I care more about my family's health and safety than does a board of international citizens who write "one-size-fits-all" building codes. I can make educated choices with my freedoms rather than being forced to accept all of the international standards.

I urge you not to pass the 2012 International Building Codes.

Thank you,  
Edie Gallacher

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:45 PM  
**To:** 'khyl@cox.net'  
**Subject:** RE: No new 2012 building codes

Mr. Powell: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Khyl Powell [<mailto:khyl@cox.net>]  
**Sent:** Saturday, May 18, 2013 4:32 PM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** No new 2012 building codes

Honorable members of the Maricopa County Board of Supervisors, When is it all going to end. Yes, technology and building materials advance. Of course, builders and home owners should be encouraged to take advantage of new savings and improvements in the building industry. However, mandating and/or adopting new international building codes is NOT NECESSARY. WE DON'T NEED MORE RULES AND EXCESSIVE REGULATIONS. Please vote NO and block the adoption of new mandatory building regulations.

Khyl Powell

Contractor Storage Yards LLC  
5235 E. Southern Ave. D106 - 180  
Mesa, Arizona 85206  
[www.csyards.com](http://www.csyards.com)  
Office 480-813-0627  
Fax 480-813-0626

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:49 PM  
**To:** 'hotmail\_b45f2cf5c6416822@live.com'  
**Subject:** RE: NO to Passing the 2012 International Codes

Ms. Stapp: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** [hotmail\\_b45f2cf5c6416822@live.com](mailto:hotmail_b45f2cf5c6416822@live.com) [[mailto:hotmail\\_b45f2cf5c6416822@live.com](mailto:hotmail_b45f2cf5c6416822@live.com)] **On Behalf Of** Jane Stapp  
**Sent:** Sunday, May 19, 2013 3:21 PM  
**To:** Doris K Siefker; Denny Barney - DIST1X; Stephen Chucri - DIST2X; Andrew Kunasek - DIST3X; Clinton Hickman - DIST4X; MaryRose Wilcox - DIST5X  
**Subject:** RE: NO to Passing the 2012 International Codes

No to passing the International Codes...please

**From:** Darren Gerard - PLANDEVX  
**Sent:** Thursday, May 23, 2013 1:58 PM  
**To:** 'mamasue.jordan@gmail.com'  
**Subject:** RE: No to new International Codes

Mr. & Mrs. Jordan: thank you for your comments and interest in this subject. Your comments will be provided to the Planning & Zoning Commission at the June 6<sup>th</sup> public hearing. Darren

**From:** Suzanne Jordan [<mailto:mamasue.jordan@gmail.com>]  
**Sent:** Monday, May 20, 2013 11:00 AM  
**To:** Denny Barney - DIST1X; Stephen Chucri - DIST2X; Clinton Hickman - DIST4X; Andrew Kunasek - DIST3X; MaryRose Wilcox - DIST5X  
**Subject:** No to new International Codes

Once again we are astonished that anyone would even be considering this new level of regulations! And why you as commissioners would be giving away local control to international rules! We must keep control of our communities, our cities, our counties. Please do not vote in any international codes that we would have to live with!!!

Suzanne and Kenneth Jordan, PCs and State Committeemen

**Text Amendment: TA2013001**

**All Districts**

Applicant: Staff  
Location: Countywide  
Request: Initiate a Text Amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the 2012 International Building Code, 2012 International Residential Code, 2012 International Plumbing Code, 2012 International Mechanical Code, 2012 International Fuel Gas Code, 2012 International Green Construction Code, 2012 International Energy Conservation Code, 2012 International Existing Building Code, and the 2011 National Electric Code – 2012 International Codes.

Darren Gerard, Deputy Planning Director, presented the above item and read the list of the codes being adopted into the record:

2012 International Building Code  
2012 International Residential Code  
2012 International Plumbing Code  
2012 International Mechanical Code  
2012 International Fuel Gas Code  
2012 International Green Construction Code  
2012 International Energy Conservation Code  
2012 International Existing Building Code  
2011 National Electric Code

Mr. Gerard noted this item was going to the Building Code Advisory Board (BCAB) for technical review and what was before the Commission was the formatting of the ordinance itself. He stated the Green Codes would be written into the Local Additions and Addenda as voluntary. They were optional and would not be mandated on the general citizenry; however, someone might be able to take advantage of the Green Codes as a reason for progressive design to warrant a RUPD overlay zoning district or something along those lines, which would then be mandated for that development. The Energy Conservation Code was going to have an alternative so that if it was demonstrated that a residence had a 70 HERS rating or less that would be considered to comply with the energy code. Staff believed the existing Building Code was going to be of significant assistance to our community because it would allow existing structures that had additions or existing structures that perhaps were not permitted properly to be able to come in under the previous code at the time that it was constructed. This would ensure that life safety issues were addressed, but it would not place the burden of the building having to meet all current codes in place at this time. Staff had verbatim language before the Commissioners, but would have a clean leg-edit version for the meeting

**Extracts of the Zoning, Infrastructure, Policy, Procedure, and Ordinance Review (ZIPPOR) Committee of April 25, 2013**

**Case Number: - TA2013001 – 2012 International Codes**

on June 6<sup>th</sup> and the Chief Building Official would be in attendance to address any technical questions the Commissioners might have at that time.

Chairman Deutsch asked if there were any questions for staff.

Commissioner Aster asked if most everything before them would come back for an approval or non-approval vote on June 6<sup>th</sup>, and Mr. Gerard responded, "Yes."

Chairman Deutsch asked if there were any questions for staff; if anyone from the public wished to speak; and if there was any discussion amongst the Commissioners.

**COMMISSION ACTION: Vice-Chairman Smith moved to initiate TA2013001; Commissioners Aster and Burrows seconded the motion which passed with a unanimous vote of 6-0.**

DRAFT



## Second Addendum to the Planning and Zoning Commission

Prepared by the Maricopa County Planning and Development Department

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<b>Cases:</b>	TA2013001 – 2012 International Codes
<b>Meeting Date:</b>	June 6, 2013
<b>Agenda Item:</b>	6
<b>Supervisor District:</b>	All
<b>Applicant:</b>	Commission-initiated
<b>Request:</b>	Text Amendment to the Maricopa County Local Additions & Addenda to adopt construction safety codes as amended
<b>Support/Opposition:</b>	21 opposition emails, one (1) letter of support, and one (1) general comment letter.
<b>Recommendation:</b>	<b>Approval</b> per revised language from the 5/21/13 BCAB, attached.

### Discussion:

This addendum is to provide the Commission with updated text amendment language as recommended by staff after the May 21, 2013 Building Code Advisory Board (BCAB) meeting.

TA2013001 is a text amendment to the Maricopa County Local Additions & Addenda (adopted construction safety codes) to adopt and amend the following:

- 2012 International Building Code
- 2012 International Residential Code
- 2012 International Plumbing Code
- 2012 International Mechanical Code
- 2012 International Fuel Gas Code
- 2012 International Green Construction Code
- 2012 International Energy Conservation Code
- 2012 International Existing Building Code
- 2011 National Electric Code

This text amendment to the Maricopa County Local Additions and Addenda proposes to replace the currently-adopted 2009 suite of building codes, with local amendments, with the updated 2012 suite of International Building Codes, with local amendments. In addition, three new construction codes are being considered for adoption. These codes include (1) the 2012 International Existing Building Code, (2) the 2012 International Energy Conservation Code, and (3) the 2012 International Green Construction Code (voluntary basis only). The purpose of the text amendment is to ensure updated construction safety codes with the Maricopa Association of Governments / Arizona Building Officials (MAG/AZBO) amendments that are

consistent with other jurisdictions in the County and State. The April 9, 2013, April 30, 2013 and May 21, 2013 BCAB meeting minutes and the leg-edit Local Additions and Addenda showing all proposed changes are attached. Also attached are the specific pages amended as a result of the May 21, 2013 BCAB meeting to:

- Cover page: to update to May 2013 draft
- Chapter 2: page 7 to add Licensing Time Frame Fees recently approved by the Board of Supervisors
- Chapter 3: page 8 to add Home Builders Association amendments
- Chapter 3: pages 18 and 19 to add Home Builders Association amendments

The attached proposed text amendment language is a repeal and replace of the existing document language for the Maricopa County Local Additions & Addenda. The leg-edit revised document is attached in its entirety. Most of the changes are code updates and not substantial changes from current codes. The County has not previously adopted the Green Construction Code, which will be voluntary; the Existing Building code, which will benefit adaptive reuse for existing buildings; and the Energy Conservation Code.

More specifically, the changes to the Local Additions and Addenda and the ICC/NEC Codes, shown in leg-edit form on the attached proposed language exhibit, are as follows:

**Cover Page:**

1. Updated to March 2013, now May 2013.  
Reason for change: Update to current year.

**Table of Contents:**

1. Updated to reference the 2012 codes and add the IGCC, IECC and IEBC.  
Reason for change: Update to correct year reference and add the new codes.

**Chapter 1:**

1. No Changes.

**Chapter 2:**

1. Removed the \$75 fee for "Expedited in-house plan review". Now added the Licensing Time Frame Fees.  
Reason for change: This is not a service we offer. Licensing fees approved by BOS.
2. Section 209. Noise Level Reduction. Updated Zoning Ordinance reference from Section 1007 to 1010.  
Reason for change: To reflect a change made to the Zoning Ordinance section.
3. Section 210.2 Definitions, Swimming Pool. Added "This does not include decorative fountains that contain water under 12" deep".  
Reason for change: Without this language, pool barriers are required around fountains, which is not necessary or practical.
4. Section 211.1.5 of Residential Woodburning Regulations. Text changed in its entirety to match current Arizona Revised Statutes (ARS) for the four types of allowable fireplaces/wood stoves.

Reason for change: To be consistent with ARS.

### **Chapter 3:**

1. Section 301. Adopts and amends 2012 IBC and Appendix G Flood Resistance Construction.

Reason for change: We don't usually adopt appendices, but this one is necessary to maintain our standing in the National Flood Insurance Program (NFIP).

Of note, Section 202 through Section 3109 are the MAG/AZBO amendments that did not change other than some slight editorial corrections. We are still exempting single family residences from fire sprinkler requirements.

2. Section 302. Adopts and amends 2012 IRC. No changes other than some code section corrections. We are still exempting single family residences from fire sprinkler requirements. Also added the Home Builders Association amendments.

Reason for change: To update code section references.

3. Section 303. Adopts and amends 2012 IMC with new MAG/AZBO amendments for Domestic Systems and Standards.

Reason for change: To be consistent with MAG/AZBO jurisdictions.

4. Section 304. Adopts and amends 2012 IPC with new MAG/AZBO amendment for Water Closet clearances. Kept same MAG/AZBO amendments for Discharge Piping and Vent Through Roof.

Reason for change: To be consistent with MAG/AZBO jurisdictions.

5. Section 305. Adopts and amends 2011 NEC with the City of Phoenix Amendments, which have not changed except for section number corrections to fit the new code.

Reason for change: To be consistent with MAG/AZBO jurisdictions.

6. Section 306. Adopts and amends 2003 IFC.

No changes: This code still only applies to County-owned buildings.

7. Section 307. Adopts and amends 2012 IFGC with same MAG/AZBO amendment for Burial Depth.

Reason for change: To be consistent with MAG/AZBO jurisdictions.

8. Section 308. Adopts and amends 2012 IGCC with City of Phoenix proposed amendments. Specifies that code is optional.

Reason for change: To allow optional use of code for builders who want to be energy conscious.

9. Section 309. Adopts and amends 2012 IECC with City of Phoenix and SRP and Home Builders Association proposed amendments for scoping and the RESNET testing and HERS ratings and pool motor requirements recommended by MAG/AZBO.

Reason for change: To be consistent with MAG/AZBO jurisdictions.

10. Section 310. Adopts 2012 IEBC with no amendments.

Reason for change: To allow greater flexibility in the redevelopment of existing buildings.

This item is being processed through the County's Enhanced Regulatory Outreach Program (EROP). A stakeholder meeting was held on February 22, 2013. This item was presented to the Maricopa County Building Code Advisory Board (BCAB) on April 9<sup>th</sup> for discussion and was presented and approved on April 30, 2013, for initiation and recommendation. In order to provide ample opportunity for additional public testimony another BCAB hearing was held on May 21, 2013, where the BCAB affirmed its prior recommendation for approval.

In accordance with state statutes, this text amendment is also presented to the Commission. Assuming Commission action today, the Board of Supervisors (BOS) hearing for adoption will be July 17, 2013. The regulations will take immediate effect upon approval, but with a three month grace period where compliance with either the 2009 or 2012 ICC Codes will be allowed. This schedule is subject to change depending on information and recommendations received by the public and by the actions of the BOS.

Staff has not received any additional opposition since preparation of the first Addendum Report. There have been 21 emails of opposition, one (1) letter of support and (1) general comment letter.

**Recommendation:**

Staff recommends that the Commission recommend **Approval of TA2013001 revised per the language attached** to this Addendum - to the BOS.

Prepared by Tom Ewers, Plan Review Manager

Attachments: Updated LAA pages per BCAB recommendation (5 pages)  
May 21, 2013 BCAB Minutes (6 pages)  
Proposed language (50 pages)

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

~~March 2013~~ May 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

Special Event Fee (tents) \$ 100 per event

### Additional Fees:

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system	\$500
(Less than six (6) feet high)	
Roof mounted residential solar system	\$300

### Licensing Time Frame Fees:

\$350 – Pre-application meeting fee for non residential projects  
\$150 – Pre-application meeting fee for residential projects subject to a violation  
\$50 – Pre-application meeting fee for residential projects not subject to a violation  
\$50 – Fee for a change to an application for a license in progress  
\$50 – Fee for an application to be added to an application for a license in progress  
\$50 – Fee to re-initiate application for a license administratively denied due to time (within 180 days)  
\$150 – Fee to appeal administrative denial of a license (within 30 days)

### Copy Charges:

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### Grading Fees:

### Plan Review Fees:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

**Section R313 Automatic fire sprinkler systems** is deleted.

N1101.15.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

N1101.17 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

~~N1103.2.2.1 Sealed air handler. Air handlers shall have a manufacturer’s designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.12 Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.12.1 Individual Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

- a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
- b. R402.4.1.2 – Testing – Air Leakage Rate
- c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

### Add Section R401.2.1

R401.2.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R401.4 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R403.2 Ducts. Ducts and air handlers shall be in accordance with Sections R403.2.1 through R403.2.3.

R403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exceptions: Ducts or portions thereof located completely inside the building thermal envelope.

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
  - 2.1 Minimum SEER rating of space heating/cooling system is increased to 15.
  - 2.2 Maximum U-factor is decreased to 0.35 and maximum SHGC is decreased to .022 for all fenestration products.
  - 2.3 Wall cavity insulation minimum R-value is increased to R-19.
  - 2.4 Residential buildings that meet the requirements of Sections R102.1.1 or R405.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 3 – Adoption of National Codes

- 2.5 Residential buildings with attic radiant barriers in accordance with ASTM C1313, installed in accordance with ASTM C1743.

~~R403.2.2.1 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

~~**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System ("HERS") Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.~~

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.

BUILDING CODE ADVISORY BOARD  
MEETING MINUTES

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**DATE:** May 21, 2013  
**TIME:** 2:00 p.m.

**LOCATION:** 501 North 44<sup>th</sup> Street, 1<sup>st</sup> Floor  
Phoenix, AZ 85008

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**MEMBERS PRESENT:**

Mr. Tracy Finley, Chairman  
Mr. Vincent Territo, Vice Chairman  
Mr. John Kight  
Mr. Robert Ghan  
Mr. Gabriel Millican  
Mr. Arthur Luera

**STAFF PRESENT:**

Tom Ewers, Plan Review Manager/Chief Building Official  
Lynn Favour, Deputy Director  
Ralph Shepard, Plan Review Supervisor  
Debra Stark, Director  
Kathy Semder, Administrative Assistant

**PUBLIC PRESENT:**

Bruce Bartholomew  
Jackson Moll  
Candice Copple  
Jerry Clingman  
Ann Hutchinson  
Alan Muller  
Rusdon Ray

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**ROLL CALL**

Chairman Finley called the meeting to order at 2:01 p.m.

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**APPROVAL OF MINUTES**

Chairman Finley asked if everyone looked at the minutes from the previous April 30, 2013 meeting and were there any comments. Member Kight made a motion to approve the minutes. Member Luera seconded the motion. Motion passed unanimously.

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**REPORT OF COMMITTEES**

None

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**UNFINISHED BUSINESS**

None

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**NEW BUSINESS**

None

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**OTHER BUSINESS****New Hearing for the 2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda**

Ms. Stark advised that this Special Meeting for the 2012 ICC Code Adoptions – 2013 Maricopa County Local Additions and Addenda is being held today because the Board of Supervisors have received emails and phone calls from the public with regards to this process. Because of our newly adopted Enhanced Regulatory Outreach Program (EROP) it was decided to have the process fully vetted with the public by having another meeting. The concerns seem to be mostly about the energy requirements and we want to ensure that when this matter reaches the Board of Supervisors everything has already been thoroughly addressed. We have some members from the public here in the audience today that wish to speak on the issues and amendments. Ms. Stark went on to explain that last week the City of Phoenix just adopted the 2012 Codes pretty much the same way Maricopa County is looking to adopt them, including the voluntary Green codes and some different options for the Energy codes.

Mr. Ewers explained that a Member of the Building Code Advisory Board (BCAB) must first make a procedural motion to reopen the hearing. Member Kight made the motion to reconsider TA2013001 for the purpose of accepting additional public input. Member Luera seconded the motion. Motion passed unanimously. Chairman Finley added Vice Chairman Territo to the roll call.

Chairman Finley announced the first public speaker, Jackson Moll of the Home Builders Association of Central Arizona. Mr. Moll explained that his organization generally separates building codes into two categories, life safety issues and non-life safety issues, such as the Energy Conservation and Green Construction Codes. Typically the Association is opposed to the adoption of those energy

codes, however sometimes they do favor the voluntary adoption of the codes. There are four amendments they have adopted relative to the 2012 codes that they would like to see Maricopa County adopt as well, whether the codes are adopted as voluntary or mandatory standards. Two amendments were included in the packet, the first is the use of the HERS (Home Energy Rating System) index as an alternative method of compliance which creates a 100 percent performance based path to compliance. The City of Phoenix adopted this amendment with a score of 73 last week and Chandler is currently in the process. The second amendment relates to the use of sample testing, because the Energy Code requires a number of different testings, such as blower door and duct testing, for every home. The industry has developed a way to sample test production homes, with a number of quality assurance standards in place.

There are two additional amendments that went through the City of Phoenix that Mr. Moll can provide to the Committee for review. The first addresses a requirement in the code related to air handlers with a 2 percent leakage rate and an overall 4 percent leakage rate for the entire house. Because the overall leakage rate is already included in the regulations they do not see a need for redundant regulation for this matter. The second amendment relates to a trade off table created for supply duct insulation because the code requires R8 insulation. They have found that in some instances it doesn't actually fit so the trade off table maintains the relative energy efficiency and provides additional options for compliance. To summarize, Mr. Moll does support the idea of a voluntary compliance with the code for both Energy Conservation and Green Construction, but with the four amendments added. On pure life safety codes it is more complicated, there are legitimate arguments that the government does have an interest in regulating life safety issues. Because Maricopa County has been on the 2009 Codes and is preparing to move to the 2012 Codes, they are primarily concerned with the International Residential Code but haven't received any feedback from their members.

Chairman Finley announced the next public speakers, Alan Muller and Ann Hutchinson of the New River – Desert Hills Community Association. Mr. Muller explained that they don't have a problem with the adoption of the 2012 Codes, but they would like the adoption process to move at a slower pace. They view some of the proposed changes as very drastic and feel it would drive up the cost of construction, approximately 30 percent of the home building costs, if everything was implemented immediately. Mr. Muller asked Member Luera his background and experience related to the six different areas represented. Member Luera addressed Mr. Muller's concerns by explaining that although costs will increase those higher costs are already in the standards for the construction jobs being done today. The energy savings and these stipulations have already been in practice for the past 10 years so it's not exactly new and what Maricopa County is trying to do is simply make these processes part of their governing laws. Mr. Muller asked the board if they have objections to any of the codes or how fast the process is moving, to which none of the Members acknowledged having any issues. Another concern for Mr. Muller is the certification requirement

which he believes will hurt the "little guy" who builds only one or two houses a year and to offset that he is interested in the possibility of a County sponsored certification program. Mr. Ewers explained that several agencies currently offer training and energy consulting such as RESNET, RESCHECK, Leeds, etc. and part of the amendments under consideration by the BCAB Members is to not require certification for every house plan. Member Luera asked Mr. Muller to provide a list of his concerns which would help them understand and try to resolve any items.

Ms. Hutchinson explained that the Energy and Green Codes are not life safety issues so she doesn't see why there seems to be a rush to adopt these codes. Her concern is for smaller builders and homeowners whose costs will increase significantly, especially if these new product requirements are not readily available in the marketplace. Ms. Hutchinson feels that by making the Energy Code voluntary it will give people time to adjust to the changes while still allowing Maricopa County to move forward with energy efficiency. This will also allow stores the opportunity to increase their energy saving product choices since she believes the products out there now, such as windows, wouldn't meet the new codes. Ms. Hutchinson then introduced Mr. Hutchinson, who was a homebuilder for thirty years and now works as a technical consultant for the Desert Hills Community, and he provided the background building information for her and Mr. Muller.

Member Luera commented that Ms. Hutchinson is correct in stating the materials not being to code can increase costs because that is happening now in some instances however the savings in energy within a year will offset those initial increased costs. Member Luera asked how long of a time period for consideration and Ms. Hutchinson replied that probably a year or two at most would be beneficial to everyone before making it mandatory. Mr. Muller stated that there should also be some verbiage added to allow for alternatives if a specific product is not available. Vice Chairman Territo explained that the code does allow for modifications and alternative materials already.

Member Ghan clarified that Ms. Hutchinson is looking to have the Energy Code be voluntary like the Green Code. He explained that the City of Phoenix has already been using the energy codes for years and compliance is not as cost prohibitive as Ms. Hutchinson might think. Ms. Stark advised that Maricopa County will probably have an implementation strategy similar to what the City of Phoenix did for the adoption of the residential codes within a specified time frame. Chairman Finley commented that when the energy codes first came out in the 2000 IRC there was a big push against it but it was determined that by doing a simple energy analysis of the entire structure there was very little increased costs because the homes were already very energy efficient. Vice Chairman Territo explained that the Energy Code is for the health, safety and general welfare of the public. A major concern is to protect the unsuspecting public from people who want to cheaply build and flip homes without adhering to standards.

Chairman Finley announced the final public speaker, Rusdon Ray of Queen Creek. Mr. Ray stated that property values are now going up for several reasons, especially areas not governed by a Homeowners Association (HOA) because people don't like over-regulation. He agrees that the codes have good intentions however he doesn't feel that these good intentions will be realized through mandates and enforcement of the law. Mr. Ray explained that increased home costs and longer building construction times are the results of over-regulation, which hurts both the builders and the home owners. Mr. Ray asked if anyone in Maricopa County wrote the ICC Codes to which Vice Chairman Territo replied that they adopt the codes. Member Luera asked Mr. Ray to clarify his specific point related to the topic of the meeting. Mr. Ray would like Maricopa County to only adopt the 2012 Codes as optional because it would be ideal to move toward more self-government and less regulation. Vice Chairman Territo asked Mr. Ray if he is proposing Maricopa County stays with the 2009 Codes forever and Mr. Ray replied that it would be better to go through what is already on record and reduce all non life-safety issues, such as the electrical outlet tamper resistant codes which just add unnecessary costs to the home building project. Member Kight advised that Mr. Ray's example of a paper clip in an outlet is true because the circuit is not complete, however once something is grounded you can get shocked. Member Kight explained that the codes are developed on a three year cycle with input from the panel members and the ICC takes their electrical code verbatim from the National Electric Code which is a consensus based group. This group reviews evidence and data to make knowledgeable decisions and then vote on what becomes code. It is up to us here on the BCAB to assess whether those consensus based panels are doing their job properly and Member Kight believes they are to date.

Mr. Ray stated that he is here not only for himself but also to represent the homeowners who are hampered by this over regulation. Chairman Finley asked Mr. Ray if he was proposing the town of Gilbert to write a specific building code just for the town, which is still regulation and basically switching regulation from one group to another. Mr. Ray explained that is would be switching to a local government that is voted into service. Member Millican asked how it would work if every local jurisdiction adopts a different code, because the point of adopting a greater code is to provide a consistent set of regulations across a large amount of building area. He further questioned if we would have to wait for the same disaster to occur in each city before that particular city creates a regulation to prevent it. Mr. Ray replied that it would be more efficient to have less of those regulations mandated by law because they just increase costs for non life safety issues. Mr. Ray stated that there are requirement inconsistencies already between the different cities because you can't have efficient enforcement of laws when there are thousands of pages to regulate. Chairman Finley responded that the inconsistencies would happen here in Maricopa County if we choose not to adopt the 2012 Codes because three other municipalities have already adopted them and more jurisdictions are currently in the process. Vice Chairman Territo commented that we are trying to keep pace with the new codes because there is an impact to the homeowners insurance based on what codes you do, and do

not, adopt. Ms. Stark explained that when City of Phoenix did not adopt the 2009 Codes, they received the worst ever rating from the ISO, which translated to higher insurance rates for residents and businesses. The other issue is training so that all of our employees and contractors/builders are trained on the new codes to provide greater consistency in application of the codes. Mr. Ray believes that adoption of the codes is limiting choice in the free market and will lead to less prosperity.

Chairman Finley asked if there were any other members of the public who wished to speak. Member Kight asked if we proceed with a second motion now would everything progress as it would have before and Chairman Finley answered yes it would. Vice Chairman Territo asked what the ramifications would be for delaying just that code and Mr. Ewers explained that by recommending an implementation schedule that wouldn't affect the adoption of the code but be more of a procedural matter after adoption, set by the Board of Supervisors. Chairman Finley asked if the procedural matter would come back to the BCAB and Mr. Ewers advised it would go to the Board of Supervisors.

Member Kight made a motion to reaffirm a prior action and recommend to the Maricopa County Board of Supervisors to approve TA2013001 and adopt the 2013 Maricopa County Local Additions and Addenda which adopted would then amend the 2012 ICC Codes and 2011 NEC Code. Member Kight made a further motion to include the two additional amendments from the Home Builders Association. Member Millican seconded the motion. The motion passed unanimously.

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### **SET DATE OF NEXT MEETING**

Chairman Finley confirmed the next regular meeting is scheduled for July 9, 2013.

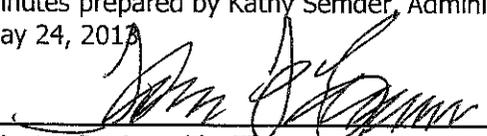
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### **ADJOURNMENT**

Member Kight made a motion to adjourn the meeting. Vice Chairman Territo seconded the motion. The motion passed unanimously and the meeting was adjourned at 3:01 p.m.

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Minutes prepared by Kathy Semder, Administrative Assistant  
May 24, 2013

  
Minutes Reviewed by Thomas F. Ewers, Chief Building Official

# Maricopa County Local Additions & Addenda

Maricopa County Planning and Development Department  
501 N. 44<sup>th</sup> St.  
Phoenix, AZ 85008

~~March~~ 2013 May 2013



Maricopa County

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 1 – Purpose & Title

### **SECTION 101. PURPOSE**

The purpose of this document is to provide all local addenda, amendments, and additions to the adopted national building codes in one location.

### **SECTION 102. TITLE**

This document shall be referred to and known as "Local Additions & Addenda".

### **SECTION 103. SEPARABILITY**

If any section, subsection, sentence clause, phrase or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not effect the validity of the remaining portions thereof.

### **SECTION 104. AMENDMENT**

This document may be amended from time to time. It may be amended by simple motion of the Board of Supervisors, provided all state required legal advertising for amending a Building Code has been satisfied. Staff may correct typographical errors and/or reformat this document without being considered an amendment.

### **SECTION 105. REVOCATION**

This document shall abolish, replace, and/or supercede any previous amendments, changes or additions to the national codes previously approved by Maricopa County.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

### **SECTION 201. PURPOSE**

The purpose of this Chapter is to provide all local changes to the adopted national building codes that relate to the administration of those codes in on location.

### **SECTION 202. VIOLATION & PENALTY (Reserved)**

### **SECTION 203. BUILDING CODE ADVISORY BOARD (Reserved)**

### **SECTION 204. ORGANIZATION & ENFORCEMENT**

Code Enforcement Agency

The Code Enforcement Agency created under the building code shall be defined in Maricopa County as the Planning and Development Department. This Planning and Development Department is charged by the Board of Supervisors to implement the building code and other pertinent laws, ordinances and/or regulations through the County's One Stop Shop Program.

Building Official

The Building Official shall be the Director of the Planning and Development Department (or his/her duly authorized representatives), who is charged with the administration and enforcement of the building code and Building Safety Ordinance.

General

Wherever the building code refers to the intent, purpose, implementation, inspection, enforcement, regulation, issuance of documents, compliance or other similar activity related to "this code", the phrase for purposed of implementing the "One Stop Shop Program" shall mean "this code or other pertinent laws, ordinances, and/or regulations implemented through the Code Enforcement Agency."

### **SECTION 205. PERMITS**

**Building Permits:** A building permit shall not be required for a detached non-habitable accessory building that is single story and no greater than 200 square feet in floor area, provided such building does not include plumbing, electrical, or mechanical services or equipment. A building permit shall not be required to replace an existing water heater provided the work is done in accordance with manufacturer's specifications.

**Permit Expiration:** A permit may be renewed within one year of expiration provided that no change in ownership or engineer/architect of record has occurred. Renewal after expiration for

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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more than one year shall not be permitted. Any such permit shall be deemed to be revoked and a new permit must be issued.

The design and construction of structures located within the unincorporated areas of Maricopa County shall comport to the codes in effect at the time of permit application, provided the specific permit remains valid, regardless of whether or not the County adopts subsequent codes. When approved by the Building Official, utility-scale solar generating facilities in which permit applications have been submitted, the design and construction may continue to utilize the codes in effect at the time of initial permit application, regardless of the number of permits required to complete the project, provided that 1) all construction is covered by an issued permit, 2) any permits issued for construction remain valid, and 3) continuous construction takes place until the facility is commissioned for commercial service and the facility receives final inspection. Once the above conditions have been met, subsequent construction activity shall comply with the codes in effect at the time of the subsequent permit applications. Further, should a permit lapse, the work contemplated by the permit shall be subject to a new permit application and shall comport to the codes in effect at the time the new permit application is submitted. For purposes of this section, the term "Utility-Scale" shall be as defined by the Maricopa County Zoning Ordinance.

**Temporary Event Permit Exemption:** Structures erected pursuant to an approved Temporary Use Permit shall not require a building permit if standing for a period not to exceed 96 contiguous hours. The responsible party shall provide documentation, as specified in the Temporary Use Permit that said structures were erected and maintained subject to all applicable building safety codes and manufacturer's specifications. The documentation shall be provided to the Department within two working days following the end of the special event to be filed with the Temporary Use Permit. Failure to provide the required documents will render the Temporary Use Permit null and void and constitute a zoning violation in accordance with Chapter 15 of the Maricopa County Zoning Ordinance.

### **SECTION 206. INSPECTIONS**

**Pre-Permit Inspection:** A pre-permit inspection may be necessary and shall be the responsibility of the permit holder to post the property in a manner approved by the Building Official.

**Permit Holder Responsibilities:** It shall be the responsibility of the permit holder to:

1. Call for an inspection.
2. Stake property corners.
3. Designate property lines prior to the inspection of any primary use.
4. Post the inspection card.
5. Provide a copy of the approved plans on the site.
6. Provide access to the site.
7. Have someone at the site during the inspection.

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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Failure to complete the above shall result in no inspection at the time and an assessment of a re-inspection fee. A survey of the lot may be required by the Building Official to verify that the building/structure is located in accordance with the approved plans.

**Partial Inspections:** Partial inspections may be requested and conducted when necessary due to common construction practices. If a partial inspection is approved, documentation shall be maintained during construction that identifies what segments of work have obtained what types of partial inspection approval.

**Re-inspections:** Re-inspection fees shall apply when:

1. Property lines have not been designated as required.
2. The inspection card is not posted or available on the work site.
3. Approved plans are not readily available to the inspector on the site.
4. There is no access on the date for which the inspection is requested.
5. Work is not ready for inspection.
6. Work has been covered.
7. Late cancellation.
8. There is a deviation from plans significant enough to require approval of revised plans.

To obtain a re-inspection, the applicant shall follow the same procedures required for an inspection after paying a re-inspection fee.

### SECTION 207. CERTIFICATE OF OCCUPANCY

The purpose of a Certificate of Occupancy is to insure that all department requirements have been met. A Certificate of Occupancy is required for all permits except those issued over the counter.

**Temporary Certificate:** A Temporary Certificate of Occupancy may be issued with the concurrence of all impacted departments and when appropriate fees are paid. Bonding, if required, shall be provided in accordance with the direction of the Building Official prior to issuance of a Temporary Certificate.

**Permanent Utility Authorization:** Permanent utility approval shall not be authorized until after a permanent Certificate of Occupancy has been issued. Said authorization to the utility company shall include a copy of the Certificate of Occupancy or letter of approval.

### SECTION 208. FEES

**Determination of Value:** Values shall be determined through the use of the most current published Building Valuation data in the publication "Building Standards" as modified for Arizona. The Building Official may develop similar increases for unpublished valuations.



# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

## Chapter 2 – Administration

expedite processing, provided that the owner and/or architect/engineer have remained the same and that the building plans have not been changed.

No subsequent step in the permit process shall be undertaken without all fees due being paid.

**Fees:** The Building Official may develop a requirement for an initial flat rate filing fee for permits that require plan review. Should this type of fee be developed, said fee shall be considered as a part of and credited against any required plan review fees. The building plan review fees specified in the code are separate fees from the permit fees specified, these fees are also separate from the fees specified for investigations. Building plan review fees are assessed in addition to these other fees. All fees may be rounded up to the next full dollar amount at the discretion of the Building Official.

The following fees are hereby established for use.

TABLE 1-A – BUILDING CODE/PERMIT FEES

<b>Total Valuation</b>	<b>Fee</b>
\$1 to \$500	\$23.50
\$501 to \$2,000	\$23.50 for the first \$500 plus \$3.05 for each additional \$100, or fraction thereof, to and including \$2,000
\$2,001 to \$25,000	\$69.25 for the first \$2,000 plus \$14.00 for each additional \$1000, or fraction thereof, to and including \$25,000
\$25,001 to \$50,000	\$391.75 for the first \$25,000 plus \$10.10 for each additional \$1000, or fraction thereof, to and including \$50,000
\$50,001 to \$100,000	\$643.75 for the first \$50,000 plus \$7.00 for each additional \$1000, or fraction thereof, to and including \$100,000
\$100,001 to \$500,000	\$993.75 for the first \$100,000 plus \$5.60 for each additional \$1000, or fraction thereof, to and including \$500,000
\$500,001 to \$1,000,000	\$3,233.75 for the first \$500,000 plus \$4.75 for each additional \$1000, or fraction thereof, and including \$1,000,000
\$1,000,001 and up	\$5,608.75 for the first \$1,000,000 plus \$3.65 for each additional \$1000, or fraction thereof

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### Other Inspections and Fees:

1. Inspections outside of normal business hours	\$ 150 per residential inspection \$ 250 per commercial inspection
2. Reinspection fees	\$ 150 per residential inspection \$ 250 per commercial inspection
3. Inspections for which no fee is indicated	\$ 150 per inspection
<del>4. Expedited in-house plan review</del>	<del>\$ 75 per hour</del>
<del>54. Expedited plan review by consultant</del>	<del>Actual costs</del>
<del>65. Standard plan review (5 options)</del>	<del>2 times normal plan review fee</del>
<del>76. Change to approved plan (includes standards)</del>	<del>\$ 250</del>
<del>87. Code Modification</del>	<del>\$ 100 per request</del>
<del>98. Alternate material, design or methods</del>	<del>\$ 100 per request</del>
<del>109. Tests required</del>	<del>\$ 100 per test &amp; test fees paid by applicant</del>
<del>1110. Appeal to the Building Code Advisory Board</del>	<del>\$ 500</del>
<del>1211. Amendment to the Code</del>	<del>\$1500</del>
<del>1312. Requested/needed staff directive</del>	<del>\$ 250</del>
<del>1413. Requested staff research report</del>	<del>\$ 100 residential property \$ 250 commercial property</del>

### Flat Rate Fees:

Air conditioner	\$ 50
Elec. Serv Residential 1 – 200 amps	\$ 50
Elec. Serv Res or Comm 201 – 400 amps	\$ 75
Elec. Serv over 400 amps	\$ 120
Temporary meter	\$ 50
Evaporative cooler	\$ 50
Gas Line (connect or clearance)	\$ 50
Mobile home "Pre-HUD Upgrade"	\$ 50
Plumbing sewer line SFR	\$ 50
Irrigation System	\$ 50
Sprinkler	\$ 50
Mechanical	\$ 50
Plumbing (Install or replace Equip/fixture/devices)	\$ 50
Demolition Permit	\$ 50
Manufactured/Mobile Home Setup/Installation	\$ 300
Commercial Manufactured Building (factory built building)	Based on installation value & Table 1-A
Occupancy Change	\$ 75
Hot tub or Spa (in or above ground)	\$ 75
Swimming pool above ground	\$ 75
Compliance Inspection	\$ 100
Move on House (compliance inspection)	\$ 100

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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Renew permit for final	\$ 100
Special Event Fee (tents)	\$ 100 per event

### **Additional Fees:**

Plumbing (water/sewer collector lines)	\$30 min based on valuation
Amendment to approved plan data	\$30
Unpaved Parking Area Paving	\$100
Temporary Certificate of Occupancy	
Without bonding	\$250
With bonding	\$500
Subdivision Infrastructure Permit	\$300
Ground mounted residential solar system (Less than six (6) feet high)	\$500
Roof mounted residential solar system	\$300

### **Licensing Time Frame Fees:**

<u>\$350 – Pre-application meeting fee for non residential projects</u>
<u>\$150 – Pre-application meeting fee for residential projects subject to a violation</u>
<u>\$50 – Pre-application meeting fee for residential projects not subject to a violation</u>
<u>\$50 – Fee for a change to an application for a license in progress</u>
<u>\$50 – Fee for an application to be added to an application for a license in progress</u>
<u>\$50 – Fee to re-initiate application for a license administratively denied due to time (within     180 days)</u>
<u>\$150 – Fee to appeal administrative denial of a license (within 30 days)</u>

### **Copy Charges:**

Additional copy of:	
Permit	\$ 2
Job card	\$ 2
Certificate of Occupancy	\$ 2
Copy (Approved Plans – per set)	\$ 15 per set (Restamping Only)
Copy (per page)	
Standard copier	\$ 1
Oversize copier	\$ 6

### **Grading Fees:**

### **Plan Review Fees:**

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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Volume of material (Cut and Fill)	Fee
<50 cubic yards	No fee
50 – 100 cubic yards	\$ 23.50
101 – 1,000 cubic yards	\$ 37.00
1,001 – 10,000 cubic yards	\$ 49.25
10,001 – 200,000 cubic yards	\$ 49.25 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof
200,001 or more cubic yards	\$269.75 plus \$ 7.25 for each additional 10,000 cubic yards or fraction thereof
Additional plan review required by changes, additions, or revisions to approved plans	\$ 50.00

### Permit Fees:

Volume of material (Cut and Fill)	Fee
<50 cubic yards	\$ 23.50
50 – 100 cubic yards	\$ 37.00
101 – 1,000 cubic yards	\$ 37.00 plus \$ 17.50 for each additional 100 cubic yards or fraction thereof
1,001 – 10,000 cubic yards	\$194.50 plus \$ 14.50 for each additional 1,000 cubic yards or fraction thereof
10,001 – 100,000 cubic yards	\$325.00 plus \$ 66.00 for each additional 10,000 cubic yards or fraction thereof
100,001 or more cubic yards	\$919.00 plus \$ 24.50 for each additional 10,000 cubic yards or fraction thereof

**Payment of Fees:** No application shall be scheduled for hearing by any board or commission acting pursuant to the "Maricopa County Local Additions and Addenda", or administratively approved unless and until all fees and fines owed to the Department as a result of any activity or inactivity attributable to the property that is the subject of the application are brought

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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current and paid in full or any amounts owed pursuant to an agreement of compliance are current, as the case may be. This requirement shall not be waived by the board/commission.\*1\*2

### **SECTION 209. ADDITIONAL REGULATIONS**

**NOISE LEVEL REDUCTION:** Any building within the vicinity of a military airport or ancillary military facility as defined by State Statute shall have a noise level reduction incorporated in the design and construction of any residential building or portions of buildings where the public is received, office areas and where normal noise level is low for first occupancy, including libraries, schools and churches, pursuant to building permits issued after December 31, 2001 in order to achieve a maximum interior noise level of forty-five decibels in areas within noise contours described in Section ~~1007~~ 1010 of the Maricopa County Zoning Ordinance. All residential buildings in territory in the vicinity of a military airport but outside the noise contours as described in this section shall be constructed with a minimum of R18 exterior wall assembly, a minimum of R30 roof and ceiling assembly, dual-glazed windows and solid wood, foam-filled fiberglass or metal doors to the exterior or, if the specified building standards are not met, the County may approve as an alternative, a certification by an architect or engineer registered pursuant to A.R.S. Title 32, Chapter 1 to achieve a maximum interior noise level of forty-five decibels at the time of final construction.

### **SECTION 210. BARRIERS FOR SWIMMING POOLS, SPAS & HOT TUBS**

#### **SECTION 210.1 - GENERAL**

##### **210.1.1**

**Scope.** The provisions of this section apply to the design and construction of barriers for swimming pools located on the premises of Group R, Division 3 Occupancies.

##### **210.1.2**

**Standards of Quality.** In addition to the other requirements of this code, safety covers for pools and spas shall meet the requirements for pool and spa safety covers as listed below. The standard listed below is a recognized standard. (See Section 3504.)

1. ASTM F 1346, Standard Performance Specification for Safety Covers and Labeling Requirement for All Covers for Swimming Pools, Spas and Hot Tubs

#### **SECTION 210.2 – DEFINITIONS**

For the purpose of this section, certain terms, words and phrases are defined as follows:

**ABOVEGROUND/ON-GROUND POOL.** See definition of "swimming pool."

# MARICOPA COUNTY LOCAL ADDITIONS & ADDENDA

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**BARRIER** is a fence, wall, building wall or combination thereof that completely surrounds the swimming pool and obstructs access to the swimming pool.

**GRADE** is the underlying surface, such as earth or a walking surface.

**HOT TUB.** See definition of "spa, nonself-contained" and "spa, self-contained."

**IN-GROUND POOL.** See definition of "swimming pool."

**SEPARATION FENCE** is a barrier that separates all doors of a dwelling unit with direct access to a swimming pool from the swimming pool.

**SPA, NONSELF-CONTAINED** is a hydro massage pool or tub for recreational or therapeutic use, not located in health-care facilities, designed for immersion of users and usually having a filter, heater and motor-driven blower. It may be installed indoors or outdoors, on the ground or on a supporting structure, or in the ground or in a supporting structure. A nonself-contained spa is intended for recreational bathing and contains water over 24 inches (610mm) deep.

**SPA, SELF-CONTAINED** is a continuous-duty appliance in which all control, water-heating and water-circulating equipment is an integral part of the product, located entirely under the spa skirt. A self-contained spa is intended for recreational bathing and contains water over 18 inches deep.

**SWIMMING POOL** is any structure intended for swimming or recreational bathing that contains water over 18 inches deep and/or wider than 8 feet at any point. This includes in-ground, aboveground and on-ground swimming pools, and fixed-in-place wading pools. This does not include decorative fountains that contain water less than 12 inches deep.

**SWIMMING POOL, INDOOR** is a swimming pool that is totally contained within a residential structure and surrounded on all four sides by walls of said structure.

**SWIMMING POOL, OUTDOOR** is any swimming pool that is not an indoor pool.

### SECTION 210.3 – REQUIREMENTS

**210.3.1 Outdoor Swimming Pool.** An outdoor swimming pool shall be provided with a barrier that shall be installed, inspected and approved prior to plastering or filling with water. The barrier shall comply with the following:

1. The top of the barrier shall be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on

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the side of the barrier that faces away from the swimming pool. The maximum vertical clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid surface such as a concrete deck, or when the barrier is mounted on the top of the aboveground pool structure. When barriers have horizontal members spaced less than 54 inches apart, the horizontal members shall be placed on the pool side of the barrier. Any decorative design work on the side away from the swimming pool, such as protrusions, indentations or cutouts, which render the barrier easily climbable, is prohibited.

2. Openings in the barrier shall not allow passage of a 1 ¾-inch-diameter (44.5 mm) sphere.

### **EXCEPTIONS:**

1. When vertical spacing between such openings is 54 inches or more, the opening size may be increased such the passage of a 4-inch-diameter (102 mm) sphere is not allowed.
2. For fencing composed of vertical and horizontal members, the spacing between vertical members may be increased up to 4 inches (102 mm) when the distance between the tops of horizontal members is 54 inches or more.
3. Chain link fences used as the barrier shall not be less than 11 gage.
4. Access gates shall comply with the requirements of Items 1 through 3. Pedestrian access gates shall be self-closing and have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, (1) the release mechanism shall be located on the pool side of the barrier at least 3 inches (76 mm) below the top of the gate, and (2) the gate and barrier shall have no opening greater than ½ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism. Pedestrian gates shall swing away from the pool. Any gates other than pedestrian access gates shall be equipped with lockable hardware or padlocks and shall remain locked at all times when not in use.
5. Where a wall of a Group R, Division 3 Occupancy dwelling unit serves as part of the barrier and contains door openings between the dwelling unit and the outdoor swimming pool that provide direct access to the pool, a separation fence meeting the requirements of Items 1, 2, 3 and 4 of Section 210.3.1 shall be provided.

### **EXCEPTIONS:** When approved by the Building Official, one the following may be used:

1. Self-closing and self-latching devices installed on all doors with direct access to the pool with the release mechanism located a minimum of 54 inches (1372 mm) above the floor.
2. An alarm installed on all doors with direct access to the pool. The alarm shall sound continuously for a minimum of 30 seconds within seven seconds after the door and its screen, if present, are opened, and be capable of providing a sound pressure level of not less than 85 dBA when measured indoors at 10 feet

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(3048 mm). The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means such a touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last no longer than 15 seconds. The deactivation switch shall be located at least 54 inches (1372 mm) above the threshold of the door.

3. Other means of protection may be acceptable so long as the degree of protection afforded is not less than that afforded by any of the devices described above.
4. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure, and the means of access is a ladder or steps, then (1) the ladder or steps shall be capable of being secured, locked or removed to prevent access or (2) the ladder or steps shall be surrounded by a barrier that meets the requirements of Items 1 through 5. When the ladder or steps are secured, locked or removed, any opening created shall be protected by a barrier complying with Items 1 through 5.

**210.3.2 Indoor Swimming Pool.** For an indoor swimming pool, protection shall comply with the requirements of Section 210.3.1 Item 5

**210.3.3 Spas and Hot Tubs.** For a nonself-contained and self-contained spa or hot tub protection shall comply with the requirements of Section 210.3.1

**EXCEPTION:** A self-contained spa or hot tub equipped with a listed safety cover shall be exempt from the requirements of Section 210.3.1

**210.3.4** Where a window faces a swimming pool enclosure, said window shall be equipped with a screwed in place wire mesh screen, a keyed lock that prevents opening the window more than 4" or a latching device located not less than 54" above the floor. Emergency escape or rescue windows in bedrooms which face swimming pool enclosures shall be equipped with a latching device located no less than 54" above the floor.

**210.3.5** Protective enclosures shall be located at a minimum horizontal distance of 54" from any equipment, permanent structures, planters, or similar objects that could be used to climb the enclosure. This provision shall not apply to the area between the pool and the protective enclosure if the protective enclosure is a solid wall with no openings.

### **SECTION 211. RESIDENTIAL WOODBURING REGULATIONS**

#### **211.1 FIREPLACE RESTRICTIONS**

##### **211.1.1 Purpose**

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The purpose of this subsection is to regulate fireplaces, wood stoves, or other solid-fuel burning devices to reduce the amount of air pollution caused by particulate matter and carbon monoxide.

### 211.1.2 Applicability

The Residential Woodburning Restriction Ordinance applies to any residential wood burning device in sections of Area A that are within Maricopa County or within incorporated cities and towns in such sections.

**AREA A** – As defined in Arizona Revised Statutes (ARS) §49-541(1), the area in Maricopa County delineated as follows:

- Township 8 North, Range 2 East and Range 3 East
- Township 7 North, Range 2 West through Range 5 East
- Township 6 North, Range 5 West through Range 6 East
- Township 5 North, Range 5 West through Range 7 East
- Township 4 North, Range 5 West through Range 8 East
- Township 3 North, Range 5 West through Range 8 East
- Township 2 North, Range 5 West through Range 8 East
- Township 1 North, Range 5 West through Range 7 East
- Township 1 South Range 5 West through Range 7 East
- Township 2 South, Range 5 West through Range 7 East
- Township 3 South Range 5 West through Range 1 East
- Township 4 South Range 5 West Through Range 1 East

### 211.1.3 Effective Date

The effective date of the regulations and prohibitions set forth this subsection shall be December 31, 1998.

### 211.1.4 Definitions

For purposes of this subsection, the following words and terms shall be defined as follows:

**FIREPLACE** means a built in place masonry hearth and fire chamber of a factory-built appliance, designed to burn solid fuel or to accommodate gas or electric log insert or similar device, and which is intended for occasional recreational or aesthetic use, not for cooking, heating, or industrial processes.

**SOLID FUEL** includes but is not limited to wood, coal, or other nongaseous or nonliquid fuels, including those fuels defined by the Maricopa County Air Pollution Control Officer as "inappropriate fuel" to burn in residential wood-burning devices.

**WOOD STOVE** means a solid-fuel burning heating appliance, including a pellet stove, which is either freestanding or designed to be inserted into a fireplace.

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### 211.1.5 Installation Restrictions

- (a) On or after December 31, 1998, no person, firm or corporation shall construct or install a fireplace or a wood stove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a wood stove, unless the fireplace or wood stove complies with one of the following:
1. ~~A fireplace which has a permanently installed gas or electric log insert.~~
  2. ~~A fireplace, wood stove or other solid-fuel burning appliance which has been certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  3. ~~A fireplace, wood stove or other solid-fuel burning appliance which has been tested and listed by a nationally recognized testing agency to meet performance standards, equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  4. ~~A fireplace, wood stove or other solid-fuel burning appliance which has been determined by the Maricopa County Air Pollution Control Officer to meet performance standards equivalent to those adopted by 40 Code of Federal Regulations Part 60, Subpart AAA as in effect on July 1, 1990.~~
  5. ~~A fireplace which has a permanently installed wood stove insert which complies with subparagraphs 2, 3, or 4 above.~~
- (b) ~~The following installations are not regulated by this Article and are not prohibited by this Article:~~
1. ~~Furnaces, boilers, incinerators, kilns, and other similar space heating or industrial process equipment.~~
  2. ~~Cook stoves, barbecue grills, and similar appliances designed primarily for cooking.~~
  3. ~~Fire pits, barbecue grills, and other outdoor fireplaces.~~

### ~~211.1.6 Fireplace or Wood Stove Alterations Prohibited~~

- (a) ~~On or after December 31, 1998 no person, firm or corporation shall alter or remove a gas or electric log insert or a wood stove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.~~
- (b) ~~On or after December 31, 1998 no person, firm or corporation shall alter a fireplace, wood stove or other solid fuel burning appliance in any manner that would void its certification or operational compliance with the provisions of this subsection.~~
1. Provides the sole or primary source of heat or fuel for cooking for a residence.

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2. Meets performance standards for new residential wood heaters manufactured on or after July 1, 1990, or sold at retail on or after July 1, 1992, as prescribed by 40 Code of Federal Regulations Part 60, Subpart AAA.
3. Burns gaseous fuels, including gas logs.
4. Meets rules adopted by the Board of Supervisors as prescribed in ARS § 49-479 for burning wood in approved appliances.

### **211.1.76 Permits Required**

In addition to the provisions and restrictions of this subsection, construction, installation or alteration of all fireplaces, wood stoves and gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the County Building Code and shall be subject to the permits and inspections required by the County Building Code.

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### ~~SECTION 301. 2009 INTERNATIONAL BUILDING CODE~~

The 2009 International Building Code has been adopted as the building code for Maricopa County along with the following M.A.G. amendments:

#### **Amendments to the 2009 International Building Code:**

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

**308.2 Group I-1.** This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

- Residential board and care facilities
- Assisted living centers
- Halfway houses
- Group homes
- Congregate care facilities
- Social rehabilitation facilities
- Alcohol and drug abuse centers
- Convalescent facilities

A facility such as the above with 10 or fewer persons shall be classified as a Group R-4 Condition 1 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 424 of this code.

**308.3 Group I-2.** This occupancy shall include buildings and structures used for medical, surgical, psychiatric, nursing, custodial, personal or directed care on a 24-hour basis of more than five persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to the following:

- Child care facilities
- Hospitals
- Nursing homes (both intermediate-care facilities and skilled nursing facilities)
- Mental hospitals

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### ~~Detoxification facilities~~

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code* in accordance with Section 101.2.

This occupancy shall also include buildings and structures used for assisted living homes providing supervisory, personal, or directed care on a 24-hour basis of more than 10 persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. A facility such as the above with ten or fewer persons shall be classified as R-4 Condition 2.

**310.1 R-4** Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living homes including not more than 10 occupants, excluding staff.

**310.1.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as a Group I-1.

**310.1.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

R-4 occupancies shall meet the requirements for construction as defined in Group R-3 except as otherwise provided for in this code, and Section 424 or shall comply with the *International Residential Code* in accordance with Section 101.2 where the building is in compliance with Section 424 of this code.

### **310.1 Definitions**

**Personal Care Service.** Assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and the administration of medications and treatments.

**Directed Care Service.** Care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need, or making basic care decisions.

**Supervisory Care Service.** General supervision, including daily awareness of resident functioning and continuing needs.

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~~**Residential Care/Assisted Living Home.** A building or part thereof housing a maximum of 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides supervisory, personal, or directed services. This classification shall include, but not be limited to, the following: residential board and care facilities, assisted living homes, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug abuse centers and convalescent facilities.~~

### **424 Residential Care/Assisted Living Homes**

~~**424.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides licensed cares services. Except as specifically required by this division, R-4 occupancies shall meet all applicable provisions of Group R-3.~~

~~**424.2 General.** Buildings or portions of buildings classified as R-4 occupancies shall meet all the applicable provisions of Group R-3, may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building, and shall not exceed 2000 square feet above the first story except as provided in Section 506.~~

~~**424.3 Special Provisions.** R-4 occupancies having more than 2000 square feet of floor area above the first floor shall be of not less than one-hour fire-resistive construction throughout.~~

~~**424.3.1 Mixed Uses.** R-4 occupancies shall be separated from other uses as provided in Table 508.4.~~

### ~~**424.4 Access and Means of Egress Facilities.**~~

~~**424.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route per the Arizonans with Disabilities Act. Sleeping rooms and associated toilets shall be accessible.~~

~~Exception: Existing buildings shall comply with Section 3409. Bathing and toilet facilities need not be made accessible, but shall be provided with grab bars in accordance with ICC/ANSI A 117.1.~~

### ~~**424.4.2 Exits**~~

~~**424.4.2.1 Number of Exits.** Every story, basement, or portion thereof shall have not less than two exits.~~

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~~Exception: Basements and stories above the first floor containing no sleeping rooms may have one means of egress as provided in Chapter 10.~~

**424.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1014, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**424.4.2.3 Emergency Exit Illumination.** In the event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the ICC Electric Code.

**424.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception 1 to Section 1029.1 does not apply to R-4 occupancies.

**424.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with Sections 1008.1.4.4, and items 1, 2, 4, 5 and 6, or 1008.1.9.8.

### 424.4 Smoke Detectors and Sprinkler Systems

**424.5.1 Smoke Alarms.** All habitable rooms and hallways in R-4 occupancies shall be provided with smoke alarms installed in accordance with Section 907.2.11.

**424.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with Section 903.3. Sprinkler systems installed under this Section shall be installed throughout, including attached garages, and in Condition 2 facilities shall include attics and concealed spaces of or containing combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In R-4 Condition 2 occupancies, such systems shall contain water-flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

Add new exception to **716.5.4**

Exceptions:

1. Such walls are penetrated by ducted HVAC systems, have a required fire-resistance rating of 1 hour or less and are in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.3.1 or 903.3.1.2. For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals.

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~~Section 903.2.8, Group R:~~ An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2, Door Swing.** Egress doors shall be side-hinged swinging.

Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2006 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

Chapter 13 Energy Efficiency is deleted in its entirety.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

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~~1503.4.6 Overflow Drainage Required.~~ Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
27. Residential		
One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 27)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### ~~SECTION 302. 2009 INTERNATIONAL RESIDENTIAL CODE~~

The 2009 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following M.A.G. amendments.

~~Amendments to the 2009 International Residential Code:~~

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Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,9</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

**Section R313 Automatic fire sprinkler systems** is deleted

Chapter 11 Energy Efficiency is deleted in its entirety.

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building (no other changes)

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.10 (404.9) Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.10.1 Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping

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~~terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.~~

3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2009 INTERNATIONAL MECHANICAL CODE**

The 2009 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County with one amendment to delete Section 301.2.

### **SECTION 304. 2009 INTERNATIONAL PLUMBING CODE**

The 2009 International Plumbing Code has been adopted as the plumbing code for Maricopa County with two amendments.

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.

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- ~~4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.~~
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**904.1 Roof extension** All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2008 NATIONAL ELECTRICAL CODE**

The 2008 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following M.A.G. amendments.

Revise the following sections to read:

#### **210-8. Ground-Fault Circuit-Interrupter Protection for Personnel**

FPN: See 215.9 for ground-fault circuit-interrupter protection for personnel on feeders.

**(A) All Occupancies.** All 125-volt, single-phase, 15 and 20-ampere receptacles installed in the locations specified in (1) through (9) shall have ground-fault circuit-interrupter protection for personnel.

1. Bathrooms
2. Garages, and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas and areas of similar use.
3. Outdoors

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~~Exception No. 1 to (3): Receptacles that are not readily accessible and are supplied by a dedicated branch circuit for electric snow-melting or deicing equipment shall be permitted to be installed in accordance with 426.28.~~

Exception No. 2 to (3): In industrial establishments only, where the conditions of maintenance and supervision ensure that only qualified personnel are involved, an assured equipment grounding conductor program as specified in 590.6(B)(2) shall be permitted for only those receptacle outlets used to supply equipment that would create a greater hazard if power is interrupted or having a design that is not compatible with GFCI protection.

4. Crawl Spaces – at or below grade level
5. Unfinished basements – for purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and the like.

Exception to (5): A receptacle supplying only a permanently installed fire alarm or burglar alarm system shall not be required to have ground-fault circuit-interrupter protection.

FPN: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.

Receptacles installed under the exception to 210.8(A)(5) shall not be considered as meeting the requirements of 210.52(G).

6. Kitchens –
  - (a) Dwelling units – where the receptacles are installed to serve countertop surfaces
  - (b) Other than dwelling units – all locations
7. Sinks – where the receptacle are installed within 1.8m (6 ft) of the outside edge of the sink.

Exception No. 1 to (7): In industrial laboratories, receptacles used to supply equipment where removal of power would introduce a greater hazard shall be permitted to be installed without GFCI protection.

Exception No. 2 to (7): For receptacles located in patient care areas of health care facilities other than those covered under 210.8(A)(1), GFCI protection shall not be required.

8. Boathouses
9. Indoors:
  - (a) Damp locations

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~~(b) Wet locations~~

**(B) Boat Hoists.** GFCI protection shall be provided for outlets not exceeding 240 volts that supply boat hoists installed in dwelling unit locations.

**250.118 Types of Equipment Grounding Conductors.** The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

FPN: For effective ground-fault current path, see 250.2 Definition.

1. A copper, aluminum, or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered, or bare; and in the form of a wire or a busbar of any shape.
2. Rigid metal conduit.
3. Intermediate metal conduit.
4. Electrical metallic tubing with an additional equipment grounding conductor.
5. Listed flexible metal conduit with an additional equipment grounding conductor, and meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The combined length of flexible metal conduit and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft) for feeders and 15 m (50ft) for branch circuits.
  - c. The additional equipment grounding conductor is terminated at each termination or junction point.
6. Listed liquidtight flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1 1/4), the circuit conductors contained in the conduit are protected of overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metallic tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the grounding path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft).
  - e. Where used to connect equipment where flexibility is necessary after installation, an equipment grounding conductor shall be installed.
7. ~~Listed liquidtight flexible metal conduit with an additional equipment grounding conductor and meeting all of the following conditions:~~

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- ~~a. The conduit is terminated in listed fittings.~~
- b. The combined length of liquidtight flexible metal conduit and flexible metal conduit in the same ground return path does not exceed 15 m (50ft) for branch circuits and 1.8 m (6ft) for feeders.
- c. The additional equipment grounding conductor is terminated at each termination or junction point.
- 8. Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
  - a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground return path does not exceed 1.8 m (6ft).
- 9. Armor of Type AC cable with an additional equipment grounding conductor and as provided in 320.108.
- 10. The copper sheath of mineral-insulated, metal-sheathed cable.
- 11. Type MC cable where listed and identified for grounding in accordance with the following:
  - a. The combined metallic sheath and grounding conductor of interlocked metal tape-type MC cable.
  - b. The metallic sheath or the combined metallic sheath and grounding conductors of the smooth or corrugated tube-type MC cable.
- 12. Cable trays as permitted in 392.3 and 392.7.
- 13. Cablebus framework as permitted in 370.3.
- 14. Other listed electrically continuous metal raceways and listed auxiliary gutters.
- 15. Surface metal raceways listed for grounding.

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- 1. One-and two-family dwellings.
- 2. Multifamily dwellings permitted to be of Types III, IV, and V construction
- 3. Other dwelling unit accessory buildings and structures in accordance with 334.10 (1) and (2).

FPN No. 1: Types of building construction and occupancy classifications are defined in NFPA 220-2006, *Standard on Types of Building Construction*, or the applicable building code, or both.

FPN No. 2: See Annex E for determination of building types [NFPA 220, Table 3-1].

- 4. Cable trays in structures permitted to be Types III, IV, or V where the cables are identified for the use.

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~~FPN: See 310.10 for temperature limitation of conductors.~~

**(A) Type NM.** Type NM cable shall be permitted as follows:

1. For both exposed and concealed work in normally dry locations.
2. To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

1. For both exposed and concealed work in dry, moist, damp, or corrosive locations.
2. In outside and inside walls of masonry block or tile.
3. In a shallow chase in masonry, concrete, or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe, or similar finish.

**(C) Type NMS.** Type NMS cable shall be permitted as follows:

1. For both exposed and concealed work in normally dry locations.
2. To be installed or fished in air voids in masonry block or tile walls.

### 334.12 Uses Not Permitted.

**(A) Types NM, NMC, and NMS.** Types NM, NMC, and NMS cables shall not be permitted as follows:

1. In any dwelling or structure not specifically permitted in 334.10 (1), (2), and (3).
2. As service-entrance cable.
3. In hoistways or on elevators or escalators.
4. Embedded in poured cement, concrete, or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

1. Where exposed to corrosive fumes or vapors.
2. Where embedded in masonry, concrete, adobe, fill or plaster.
3. In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
4. In wet or damp locations.

### ~~SECTION 306. 2003 INTERNATIONAL FIRE CODE~~

~~The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:~~

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### ~~AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE~~

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

Delete all Appendices A through G.

### ~~SECTION 307. 2009 INTERNATIONAL FUEL GAS CODE~~

The 2009 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.9.1, and one revision as follows:

**404.9 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

**THE  
REMAINING  
PAGES ARE THE  
NEW TEXT FOR  
CHAPTER 3.**

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### SECTION 301. 2012 INTERNATIONAL BUILDING CODE

The 2012 International Building Code has been adopted as the building code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Building Code:

Adopt Appendix G Flood-Resistant Construction

Revise the following Sections to read:

**109.4 Work** commencing before permit issuance. Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to a fee established by the Building Official that shall be in addition to the required *permit fees*. Said fee to be the building permit fee doubled.

#### SECTION 202 DEFINITIONS.

**PERSONAL CARE SERVICE** is assistance with activities of daily living that can be performed by persons without professional skills or professional training and includes the coordination or provision of intermittent nursing services and administration of medications or treatments.

**SUPERVISORY CARE SERVICE** is general supervision, including daily awareness of resident functioning and continuing needs.

**DIRECTED CARE SERVICE** is care of residents, including personal care services, who are incapable of recognizing danger, summoning assistance, expressing need or making basic care decisions.

**ASSISTED LIVING FACILITY** is a residential care institution, including adult foster care, that provides or contracts to provide supervisory care services, personal care services or directed care services on a continuing basis.

**ASSISTED LIVING CENTER** is an assisted living facility that provides resident rooms to eleven or more residents.

**ASSISTED LIVING HOME** is an assisted living facility that provides resident rooms to ten or fewer residents.

#### INSTITUTIONAL GROUP I

**308.3 Institutional Group I-1.** This occupancy shall include buildings, structures or portions thereof for more than 10 persons who reside on a 24 hour basis in a supervised

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environment, receive custodial care and are capable of self-preservation, except as provided for assisted living centers. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living centers

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

**308.3.2 Six to Ten Persons Receiving Care.** A facility such as above, housing not fewer than six and not more than 10 persons receiving such care, shall be classified as Group R-4, except as provided for assisted living homes.

**308.4 Institutional Group I-2.** This occupancy shall include buildings and structures used for medical care on a 24-hour basis for more than five persons who are incapable of self-preservation. This group shall include, but not be limited to, the following:

Foster care facilities

Detoxification facilities

Hospitals

Assisted living centers

Psychiatric hospitals

**SECTION 310.2 DEFINITIONS.** The following terms are defined in Chapter 2:

ASSISTED LIVING FACILITY

ASSISTED LIVING CENTER

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ASSISTED LIVING HOME

BOARDING HOUSE

CONGREGATE LIVING FACILITIES

DIRECTED CARE SERVICES

DORMITORY

GROUP HOME

PERSONAL CARE SERVICE

SUPERVISORY CARE SERVICES

TRANSIENT

**310.5.1 Care facilities with a dwelling.** Licensed care facilities for 10 or fewer persons receiving care that are within a single-family dwelling are permitted provided that the requirements of Section 425 of this code are met.

**310.6 Residential Group R-4.** This occupancy shall include buildings, structures or portions thereof for more than five but not more than 10 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. The persons receiving care are capable of self-preservation, except as provided for assisted living homes. This group shall include, but not be limited to, the following:

Alcohol and drug centers

Assisted living homes

Congregate care facilities

Convalescent facilities

Group homes

Halfway houses

Residential board and custodial care facilities

Social rehabilitation facilities

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Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code and Section 425.

**310.6.1 Condition 1.** This occupancy condition shall include facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as Group I-2.

**310.6.2 Condition 2.** This occupancy condition shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency situation without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-1.

### **SECTION 425. ASSISTED LIVING HOMES**

**425.1 Applicability.** The provisions of this section shall apply to a building or part thereof housing not more than 10 persons, excluding staff, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment, which provides licensed care services. Except as specifically required by this division, R-4 occupancies shall meet all the applicable provisions of Group R-3.

**425.2 General.** Building or portions of buildings classified as R-4 may be constructed of any materials allowed by this code, shall not exceed two stories in height nor be located above the second story in any building and shall not exceed two thousand square feet above the first story, except as provided in Section 506.

**425.3 Special Provisions.** R-4 occupancies having more than 2000 square feet above the first story shall be of not less than one-hour fire-resistive construction throughout.

**425.3.1 Mixed Uses.** R-4 occupancies shall be separated from other occupancies as provided in Table 508.4.

#### **425.4 Access and Means of Egress Facilities.**

**425.4.1 Accessibility.** R-4 occupancies shall be provided with at least one accessible route as provided in Section 1104.1.

#### **425.4.2 Exits.**

**425.4.2.1 Number of Exits.** Every story, basement or portion thereof shall have not less than two exits.

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Exception: Basements and stories above the first floor containing no sleeping rooms used by residents may have only one means of egress as provided in Chapter 10.

**425.4.2.2 Distance to Exits.** The maximum travel distance shall comply with Section 1016, except that the maximum travel distance from the center point of any sleeping room to an exit shall not exceed 75 feet.

**425.4.2.3 Emergency Exit Illumination.** In event of a power failure, exit illumination shall be automatically provided from an emergency system powered by storage batteries or an onsite generator set installed in accordance with the International Electric Code.

**425.4.2.4 Emergency Escape and Rescue.** R-4 occupancies shall comply with the requirements of Section 1029, except that Exception #1 to 1029 does not apply to R-4 occupancies.

**425.4.2.5 Delayed Egress Locks.** In R-4 Condition 2 occupancies, delayed egress locks shall be permitted in accordance with 1008.1.9.7, Items 1,2,4,5 and 6.

### **425.5 Smoke Alarms and Sprinkler Systems.**

**425.5.1 Smoke Alarms.** R-4 occupancies shall be provided with smoke alarms installed in accordance with 907.2.11.2, and such alarms shall be installed in all habitable rooms.

**425.5.2 Sprinkler Systems.** R-4 occupancies shall be provided with a sprinkler system installed in accordance with 903.3.1.3. Sprinkler systems installed under this section shall be installed throughout, including attached garages, and in Condition 2 facilities, shall include concealed spaces of, or containing, combustible materials. Such systems may not contain unsupervised valves between the domestic water riser control valve and the sprinklers. In Condition 2 occupancies, such systems shall contain water flow switches electrically supervised by an approved supervising station, and shall sound an audible signal at a constantly attended location.

**1008.1.2 Door Swing.** Delete the text of Exception #4 and replace with the following:

4. Doors within or serving a single dwelling unit in Groups R-2 and R-3, as applicable in 101.2 and R-4.

**Section 903.2.8 Group R:** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area except one and two family dwellings.

**Section 1008.1.2 Door Swing.** Egress doors shall be side-hinged swinging.

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Exceptions:

4. Doors within or serving a single dwelling unit in Groups R-2, R-3 as applicable in Section 101.2, and R-4

Add 1101.3 as follows:

**1101.3 Other Regulations:** In addition to the requirements of this code all structures and sites must comply with the "Arizonans with Disabilities Act" (Arizona Revised Statutes, Title 41, Chapter 9, Article 8), and the "Arizonans with Disabilities Act Implementing Rules" (Arizona Administrative Code, Title 10, Chapter 3, Article 4). These regulations incorporate the federal "Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities". These requirements will apply to new construction and alterations and are not applicable in existing buildings or portions of existing buildings that do not meet the standards and specifications of these regulations. These regulations are hereby adopted and made a part hereof as though fully set forth in this section. Where these regulations differ from the requirements of Chapter 11 of the 2012 International Building Code, the stricter shall apply.

Revise as follows:

**1210.2 Walls.** Walls within 2 feet (10 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of 4 feet (1219 mm) above the floor and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

**1503.4.4 Where Required.** All roofs, paved areas, yards, courts and courtyards shall drain into a separate storm sewer system, or a combined sewer system, or to an approved place of disposal.

**1503.4.5 Roof Design.** Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. Design shall be based on 6" rainfall in 1 hour.

**1503.4.6 Overflow Drainage Required.** Overflow (emergency) roof drains or scuppers shall be provided where the roof perimeter construction extends above the roof in such a manner that water will be entrapped if the primary drains allow buildup for any reason.

**1503.4.6.1 Separate Systems Required.** Overflow roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location, which would normally be observed by the building occupants or maintenance personnel.

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**1503.4.6.2 Overflow Drains and Scuppers.** Where roof drains are required, overflow drains having the same size as the roof drains shall be installed with the inlet flow line located 2 inches (51mm) above the low point of the roof, or overflow scuppers having three times the size of the roof drains may be installed in the adjacent parapet walls. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by the plumbing code. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Table 1607.1 Revise as follows:

OCCUPANCY OR USE	UNIFORM (PSF)	CONCENTRATED (LBS.)
25. Residential One- and two-family dwellings		
Uninhabitable attics with limited storage	40	
Habitable attics and sleeping areas	40	
(no other changes in item 25)		

**Section 3109 Swimming Pool Enclosures** is deleted.

### **SECTION 302. 2012 INTERNATIONAL RESIDENTIAL CODE**

The 2012 International Residential Code has been adopted as the Residential Building Code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Residential Code:**

Revise Table R 301.5 as follows:

Use	Live Load
Attics with limited storage <sup>b,g</sup>	40
Habitable attics and attics served with fixed stairs	40
Sleeping rooms	40

No other changes to table

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**Section R313 Automatic fire sprinkler systems** is deleted.

N1101.15.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

N1101.17 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

~~N1103.2.2.1 Sealed air handler. Air handlers shall have a manufacturer’s designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

M1307.7 Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

**M1503.1 General.** Range hoods shall discharge to the outdoors through a single wall duct. The duct serving the hood shall have a smooth interior surface, shall be airtight, and shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with a pre-manufactured transition fitting. Ducts serving range hoods shall not terminate in an attic or crawl space or areas inside the building.

G2406.2 Add new item 6 text after the exceptions as follows:

6. Liquefied Petroleum Appliances. LPG appliances shall not be installed in an attic, pit or other location that would cause a ponding or retention of gas.

G2415.12 Minimum Burial Depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457 mm) for plastic piping.

**SECTION G2415.12.1 Individual Outside appliances** is deleted

**SECTION P2803.6.1 Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

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1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

**SECTION P2904 DWELLING UNIT FIRE SPRINKLER SYSTEMS** is deleted.

### **SECTION 303. 2012 INTERNATIONAL MECHANICAL CODE**

The 2012 International Mechanical Code has been adopted as the Mechanical Code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Mechanical Code:**

Revise the following sections to read:

**505.1 Domestic Systems.** Where domestic range hoods and domestic appliances equipped with downdraft exhaust are located within dwelling units, such hoods and appliances shall discharge to the outdoors through sheet metal ducts constructed of galvanized steel, stainless steel, aluminum or copper. Such ducts shall have smooth inner walls, shall be air tight, shall be equipped with a backdraft damper, and shall be independent of all other exhaust systems. Changes in size or direction shall be accomplished with an approved transition fitting.

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**1004.1 Standards.** Oil-fired boilers and their control systems shall be listed and labeled in accordance with UL 726. Electric boilers and their control systems shall be listed and labeled in accordance with UL 834. Boilers shall be designed and constructed in accordance with the ASME *Boiler and Pressure Vessel Code* and Arizona Boiler Rules, Title 20 Chapter 5.

### **SECTION 304. 2012 INTERNATIONAL PLUMBING CODE**

The 2012 International Plumbing Code has been adopted as the plumbing code for Maricopa County along with the following amendments.

#### **Amendments to the 2012 International Plumbing Code:**

Add to Section 405.3.1:

Exception: Side clearances for accessible or ambulatory water closets shall comply with ICC/ANSI A117.1.

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater except where the discharge is to the outdoors, not subject to freezing and the piping terminates not less than 6 inches (152mm) and not more than 12 inches (305mm) above grade.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor or to the outdoors.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed as to flow by gravity.
10. Not terminate more than 6 inches (152mm) above the floor or waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 6-5-.4 or materials tested, rated and approved for such use in accordance with ASME A112.4.1.
14. Direct the discharge in a downward direction.

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Add to Section 904.1:

All open vent pipes that extend through a roof shall be terminated at least six inches (152mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134mm) above the roof.

### **SECTION 305. 2011 NATIONAL ELECTRICAL CODE**

The 2011 National Electrical Code has been adopted as the electrical code for Maricopa County along with the following amendments.

Revise the following sections to read:

#### **ARTICLE 210 – Branch Circuits**

##### **Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel**

**(B) Other Than Dwelling Units.** All 125-volt, single-phase, 15- and 20-ampere receptacles installed in the locations specified in 210.8(B)(1) through (8) shall have ground-fault circuit-interrupter protection for personnel.

**(6)** Indoor damp and wet locations.

#### **ARTICLE 250 – Grounding and Bonding**

##### **250.118 Types of Equipment Grounding Conductors.**

The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:

- (1) A copper, aluminum or copper-clad aluminum conductor. This conductor shall be solid or stranded; insulated, covered or bare; and in the form of a wire or a busbar of any shape.
- (2) Rigid metal conduit.
- (3) Intermediate metal conduit.
- (4) Electric metallic tubing with an additional equipment grounding conductor.
- (5) Listed flexible metal conduit meeting all the following conditions:
  - a. The conduit is terminated in listed fittings.
  - b. The circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.

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- c. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - d. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (6) Listed liquidtight flexible metal conduit meeting all the following conditions:
- a. The conduit is terminated in listed fittings.
  - b. For metric designators 12 through 16 (trade sizes 3/8 through 1/2), the circuit conductors contained in the conduit are protected by overcurrent devices rated at 20 amperes or less.
  - c. For metric designators 21 through 35 (trade sizes 3/4 through 1-1/4), the circuit conductors contained in the conduit are protected by overcurrent devices rated not more than 60 amperes and there is no flexible metal conduit, flexible metal tubing, or liquidtight flexible metal conduit in trade sizes metric designators 12 through 16 (trade sizes 3/8 through 1/2) in the ground-fault current path.
  - d. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
  - e. If used to connect equipment where flexibility is necessary to minimize the transmission of vibration from equipment or to provide flexibility for equipment that requires movement after installation, an equipment grounding conductor shall be installed.
- (7) Flexible metallic tubing where the tubing is terminated in listed fittings and meeting the following conditions:
- a. The circuit conductors contained in the tubing are protected by overcurrent devices rated at 20 amperes or less.
  - b. The combined length of flexible metal conduit and flexible metallic tubing and liquidtight flexible metal conduit in the same ground-fault current path does not exceed 1.8 m (6 ft).
- (8) Armor of Type AC cable as provided in 320.108.
- (9) The copper sheath of mineral-insulated, metal-sheathed cable.
- (10) Type MC cable that provides an effective ground-fault current path in accordance with one or more of the following:
- a. It contains an insulated or uninsulated equipment grounding conductor in compliance with 250.118(1).
  - b. The combined metallic sheath and uninsulated equipment grounding/bonding conductor of interlocked metal tape-type MC cable that is listed and identified as an equipment grounding conductor.

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- c. The metallic sheath or the combined metallic sheath and equipment grounding conductors of the smooth or corrugated tube-type MC cable that is listed and identified as an equipment grounding conductor.
- (11) Cable trays as permitted in 392.10 and 392.60.
- (12) Cablebus framework as permitted in 370.3
- (13) Other listed electrically continuous metal raceways and listed auxiliary gutters.
- (14) Surface metal raceways listed for grounding.

### **ARTICLE 334 – Nonmetallic-Sheathed Cable; Types NM, NMC and NMS**

#### **II. Installation**

**334.10 Uses Permitted.** Type NM, Type NMC and Type NMS cables shall be permitted to be used in the following:

- (1) One- and two- family dwellings and their attached or detached garages, and their storage buildings.
- (2) Multifamily dwellings permitted to be of Types III, IV and V construction except as prohibited in 334.12.
- (3) Other dwelling unit accessory buildings and structures in accordance with 334.10(1) and 334.10 (2) and other provisions of this Code.
- (4) Cable trays in structures permitted to be Types III, IV or V in accordance with 334.10(1) and (2) where the cables are identified for the use.
- (5) Types I and II construction in accordance with 334.10(1) and (2) where installed within raceways permitted to be installed in Types I and II construction.

**(A) Type NM.** Type NM cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

**(B) Type NMC.** Type NMC cable shall be permitted as follows:

- (1) For both exposed and concealed work in dry, moist, damp or corrosive locations.
- (2) In outside and inside walls of masonry block or tile.
- (3) In a shallow chase in masonry, concrete or adobe protected against nails or screws by a steel plate at least 1.59 mm (1/16 in.) thick and covered with plaster, adobe or similar finish.

**C) Type NMS.** Type NMS cable shall be permitted as follows:

- (1) For both exposed and concealed work in normally dry locations.
- (2) To be installed or fished in air voids in masonry block or tile walls.

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### 334.12 Uses Not Permitted.

**(A) Types NM, NMC and NMS.** Type NM, Type NMC and Type NMS cables shall not be permitted as follows:

- (1) In any dwelling or structure not specifically permitted in 334.10(1), (2) and (3).
- (2) As service-entrance cable.
- (3) In hoistways or on elevators or escalators
- (4) Embedded in poured cement, concrete or aggregate.

**(B) Types NM and NMS.** Types NM and NMS cables shall not be used under the following conditions or in the following locations:

- (1) Where exposed to corrosive fumes or vapors.
- (2) Where embedded in masonry, concrete, adobe, fill or plaster.
- (3) In a shallow chase in masonry, concrete or adobe and covered with plaster, adobe or similar finish.
- (4) In wet or damp locations.

### SECTION 306. 2003 INTERNATIONAL FIRE CODE

The 2003 International Fire Code has been adopted as the Fire Code only for properties owned by Maricopa County, regardless of the jurisdiction within which the property lies, along with the following amendments:

#### AMENDMENTS TO THE 2003 INTERNATIONAL FIRE CODE:

Delete all references to the International Existing Building Code from sections 102.3, 102.4, 102.5 and any other sections.

Revise section 104.6 to read:

104.6 Official Records. The fire code official shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than ninety (90) days after final occupancy approval, unless otherwise provided by other regulations.

Delete Section 105 Permits.

Delete Section 107 Maintenance.

Delete Section 109.3 Violation Penalties.

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Delete all Appendices A through G.

### **SECTION 307. 2012 INTERNATIONAL FUEL GAS CODE**

The 2012 International Fuel Gas Code has been adopted as the Fuel Gas Code for Maricopa County with one amendment to delete sections 301.2 and 404.11.1, and one revision as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade for metal piping and 18 inches (457mm) for plastic piping.

Delete Section 404.12.1

### **SECTION 308. 2012 INTERNATIONAL GREEN CONSTRUCTION CODE**

The 2012 International Green Construction Code has been adopted as the Green Construction Code for Maricopa County along with the following amendments:

#### **Amendments to the 2012 International Green Construction Code:**

Revise the following sections to read:

#### **SECTION 101 GENERAL**

##### **[A] 101.1 Title.**

These regulations shall be known as the Maricopa County Green Construction Code hereinafter referred to as "this code."

##### **101.2 General.**

The use of this code is optional, unless specifically required through ordinance by Maricopa County. This code is an overlay document to be used in conjunction with the other codes and standards adopted by the jurisdiction. This code is not intended to be used as a standalone construction regulation document and permits are not to be issued under this code. This code is not intended to abridge or supersede safety, health or environmental requirements under other applicable codes or ordinances.

TABLE 302.1

REQUIREMENTS DETERMINED BY THE JURISDICTION

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Section	Section Title of Description and Directives	Jurisdictional Requirements	
<b>CHAPTER 1. SCOPE</b>			
101.3 Exception 1.1	Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade plane with a separate means of egress, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.2	Group R-3 residential buildings, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
101.3 Exception 1.3	Group R-2 and R-4 residential buildings four stories or less in height above grade plane, their accessory structures, and the site or lot upon which these buildings are located, shall comply with ICC 700.	Yes	
<b>CHAPTER 4. SITE DEVELOPMENT AND LAND USE</b>			
402.2.1	Flood hazard area preservation, general		No
402.2.2	Flood hazard area preservation, specific		No
402.3	Surface water protection		No
402.5	Conservation area	Yes	
402.7	Agricultural land	Yes	
402.8	Greenfield sites	Yes	
407.4.1	High-occupancy vehicle parking	Yes	
407.4.2	Low-emissions, hybrid and electric vehicle parking	Yes	
409.1	Light pollution control	Yes	
<b>CHAPTER 5. MATERIAL RESOURCE CONSERVATION AND EFFICIENCY</b>			
503.1	Minimum percentage of waste material diverted from landfills.	50%	
<b>CHAPTER 6. ENERGY CONSERVATION, EFFICIENCY AND CO2e EMISSIONS REDUCTION</b>			
302.1, 302.1.1, 602.1	zEPI of Jurisdictional Choice . The jurisdiction shall indicate a zEPI of 46 or less in each occupancy for which it intends to require enhanced energy performance.	Occupancy: _____ zEPI: _____	
604.1	Automated demand response infrastructure		No
<b>CHAPTER 7. WATER RESOURCES CONSERVATION, QUALITY AND EFFICIENCY</b>			
702.7	Municipal reclaimed water		No
<b>CHAPTER 8. INDOOR ENVIRONMENT QUALITY AND COMFORT</b>			
804.2	Post-Construction Pre-Occupancy Baseline IAQ Testing		No
807.1	Sound transmission and sound levels	Yes	

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CHAPTER 10. EXISTING BUILDINGS			
1007.2	Evaluation of existing buildings	Yes	
1007.3	Post Certificate of Occupancy zEPI, energy demand and CO2e emissions reporting		No

### SECTION 309. 2012 INTERNATIONAL ENERGY CONSERVATION CODE

The 2012 International Energy Conservation Code has been adopted as the Energy Conservation Code for Maricopa County along with the following amendments:

#### Amendments to the 2012 International Energy Conservation Code:

Revise the following sections to read:

**C101.2 Scope.** This code applies to commercial buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Commercial Building by Section C202, shall have the option of complying under the Residential Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

**R101.2 Scope.** This code applies to residential buildings and the building sites and associated systems and equipment. Group R-2 when defined as a Residential Building by Section R202, shall have the option of complying under the Commercial Provisions of the code, regardless of height. Once defined as such on the submittal documents, all components of the Commercial Provisions shall be followed.

Add Section R102.1.2

**R102.1.2 RESNET Testing & Inspection Protocol.** The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections R402.4.1.1, R402.4.1.2 and R403.2.2 and shall meet the following conditions:

1. Third Party Testing and Inspections shall be completed by RESNET certified Raters or Rating Field Inspectors and shall be subject to RESNET Quality Assurance Field Review procedures.
2. Sampling in accordance with Chapter 6 of the RESNET Standards shall be performed by Raters or Rating Field Inspectors working under a RESNET Accredited Sampling Provider.
3. Third Party Testing is required for the following items:

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- a. R402.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. R402.4.1.2 – Testing – Air Leakage Rate
  - c. R403.2.2 – Sealing – Duct Tightness
4. The other requirements identified as “mandatory” in Chapter 4 shall be met.
  5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

### Add Section R401.2.1

R401.2.1 Alternative approach for compliance. A Home Energy Rating System (“HERS”) Index of 73 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in Section 401.2 above. Compliance may be demonstrated by use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R401.4 Testing. All mandatory compliance testing and inspections required by this chapter shall be conducted in accordance with Chapter 8 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network. Compliance with mandatory testing may be demonstrated through the use of sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.

R403.2 Ducts. Ducts and air handlers shall be in accordance with Sections R403.2.1 through R403.2.3.

R403.2.1 Insulation (Prescriptive). Supply ducts in attics shall be insulated to a minimum of R-8. Ducts in floor trusses shall be insulated to a minimum of R-6.

Exceptions: Ducts or portions thereof located completely inside the building thermal envelope.

1. Ducts or portions thereof located completely inside the building thermal envelope.
2. Supply ducts may be insulated to a minimum of R-6 when one or more of the following conditions are met:
  - 2.1 Minimum SEER rating of space heating/cooling system is increased to 15.
  - 2.2 Maximum U-factor is decreased to 0.35 and maximum SHGC is decreased to .022 for all fenestration products.
  - 2.3 Wall cavity insulation minimum R-value is increased to R-19.
  - 2.4 Residential buildings that meet the requirements of Sections R102.1.1 or R405.

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- 2.5 Residential buildings with attic radiant barriers in accordance with ASTM C 1313, installed in accordance with ASTM C1743.

~~R403.2.2.1 Sealed air handler. Air handlers shall have a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested in accordance with ASHRAE 193.~~

~~**R401.2.1 Alternative Approach for Compliance.** A Home Energy Rating System ("HERS") Index of 70 or less, confirmed in writing by a Residential Energy Services Network certified energy rater may be used in place of the approach described in section 401.2 above. Compliance may be demonstrated by sampling in accordance with Chapter 6 of the Mortgage Industry National Home Energy Rating Systems Standard as adopted by the Residential Energy Services Network.~~

Delete Section R403.9.3 and replace with:

**R403.9.3** Motors with a total horsepower of one or more for pools and in-ground permanently installed spas shall have the capability of operating at two or more speeds with a low speed having a rotation rate that is no more than one-half of the motor's maximum rotation rate and shall be operated with a pump control with the capability of operating the pump at two or more speeds. Residential pool pump motor controls that are sold for use with a two or more speed motor shall have a default circulation speed setting no more than one-half of the motor's maximum rotation rate. Any high speed override capability shall be for a temporary period not to exceed one twenty-four hour cycle without resetting to the default setting.

### **SECTION 310. 2012 INTERNATIONAL EXISTING BUILDING CODE**

The 2012 International Existing Building Code has been adopted as the Existing Building Code for Maricopa County with no amendments.