

**CITY OF SCOTTSDALE AMENDMENTS
TO THE INTERNATIONAL RESIDENTIAL CODE
FOR ONE- AND TWO-FAMILY DWELLINGS,
2012 EDITION**

ORDINANCE 4060

ORDINANCE NO. 4060

AN ORDINANCE OF THE COUNCIL OF THE CITY OF SCOTTSDALE, MARICOPA COUNTY, ARIZONA, AMENDING CHAPTER 31, ARTICLE III OF THE SCOTTSDALE REVISED CODE, RELATING TO THE BUILDING CODE. ADOPTING THE 2012 EDITION OF THE "INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS" AND APPENDICES A, B, C, D, G, H, I, J, K, O AND "CITY OF SCOTTSDALE AMENDMENTS TO THE 2012 INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS".

BE IT ORDAINED by the Mayor and City Council of the City of Scottsdale, Arizona, as follows:

Section 1. Section 31-31(2) of the Scottsdale Revised Code is hereby repealed and replaced by a new Section 31-31(2), which shall read as follows:

Sec. 31-31. Adoption.

The following documents are adopted by reference and shall be the building code of the city. Three (3) copies of each shall at all times remain in the office of the city clerk and be open to inspection.

(2) The International Residential Code for One-and Two-Family Dwellings, 2012 Edition, including appendices A, B, C, D, G, H, I, J, K, O as published by the International Code Council, Inc. and the City of Scottsdale Amendments to the International Residential Code for One- and Two-Family Dwellings, 2012 Edition, declared public records by Resolution No. 9257 of the City of Scottsdale, are hereby referred to, adopted and made a part hereof as if fully set forth in this ordinance.

Section 2. Section 31-32(b) of the Scottsdale Revised Code is hereby repealed and replaced by a new Section 31-32(b), which shall read as **specified in that certain document entitled "City of Scottsdale Amendments to the International Residential Code for One- and Two-Family Dwellings, 2012 Edition", and hereby referred to, adopted and made a part hereof as if fully set out in this Ordinance.**

Section 3. Any person found guilty of violating this Ordinance shall, in addition to any other applicable penalty, is subject to the following:

105.6 Suspension or revocation. The building official is authorized to suspend or revoke a permit issued under the provisions of this code wherever the permit is issued in error or on the basis of incorrect, inaccurate or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this code.

111.4 Revocation. The building official is authorized to, in writing, suspend or revoke a certificate of occupancy or completion issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

114.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the approved construction documents or directive of the building official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law.

Section 4. The repeal of any provision of the Scottsdale Revised Code effectuated by this Ordinance does not affect the rights and duties that matured or penalties that were incurred and proceedings that were begun before the effective date of this Ordinance.

Section 5. If any section, subsection, sentence, clause, phrase or portion of this ordinance or any part of these amendments to the Building Codes adopted herein by reference is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdictions, such decision shall not affect the validity of the remaining portions thereof. If there is any conflict or inconsistency between the provisions of this ordinance, the more restrictive provisions apply.

Section 6. The effective date of this ordinance shall be **January 07, 2013**.

PASSED AND ADOPTED BY THE Council of the City of Scottsdale, Maricopa County, Arizona this 4th day of December, 2012.

ATTEST:

CITY OF SCOTTSDALE
A municipal corporation

Carolyn Jagger
City Clerk

W.J. "Jim" Lane
Mayor

APPROVED AS TO FORM:
OFFICE OF THE CITY ATTORNEY

Bruce Washburn, City Attorney
By: Joe Padilla, Senior Assistant City Attorney

Section 31-32 (b) Amendments. The International Residential Code for One- and Two- Family Dwellings, 2012 Edition, adopted by Scottsdale Revised Code Section 31-31(2) is amended in the following respects:

Chapter 1 – Administration is deleted in its entirety and replaced with the following:

Chapter One – Administration of the International Building Code, 2012 Edition, as adopted per Scottsdale Revised Code Sec. 31-31 and amended by Scottsdale Revised Code Sec. 31-32 shall also apply to the Residential Code of the City of Scottsdale.

Appendices. Provisions in the appendices shall not apply unless specifically referenced in the adopting ordinance. The following appendices of the 2012 International Residential Code are adopted:

APPENDIX A - SIZING AND CAPACITIES OF GAS PIPING

APPENDIX B - SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES, AND APPLIANCES LISTED FOR USE AND TYPE B VENTS

APPENDIX C - EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS

APPENDIX D - RECOMMENDED PROCEDURE FOR SAFETY INSPECTION OF AN EXISTING APPLIANCE INSTALLATION

APPENDIX G - SWIMMING POOLS, SPAS AND HOT TUBS

APPENDIX H - PATIO COVERS

APPENDIX J - EXISTING BUILDINGS AND STRUCTURES

APPENDIX K - SOUND TRANSMISSION

APPENDIX O - GRAY WATER RECYCLING SYSTEM

Amend Appendix O by deleting “Note” at the beginning of the chapter.

APPENDIX J - GRADING of the IBC as amended

Section R202 DEFINITIONS is amended by adding the following terms and definitions:

ABOVE-GROUND/ON-GROUND POOL. See “Swimming pool.”

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

FIREPLACE means a built in place masonry hearth and fire chamber or 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.

HOT TUB. See “Swimming pool.”

IN-GROUND POOL. See “Swimming pool.”

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height.

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

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

SPA, NONPORTABLE. See “Swimming pool.”

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SWIMMING POOL, PUBLIC, SEMI-PUBLIC OR SEMI-PRIVATE. Regulated by Maricopa County Environmental Services Department; Water & Waste Water Management. Information can be found at: <http://www.maricopa.gov/EnvSvc/WaterWaste/SwimPools/SwimPools.aspx>.

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

Complete Table R301.2(1) as follows:

Wind speed :	90
Seismic design category :	B
Weathering :	negligible
Frost line depth :	final grade
Termite :	moderate to heavy
Decay :	none to slight
<i>Delete all other headings</i>	

Revise Table R301.5 as follows:

TABLE R301.5

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (In pounds per square foot)

<u>USE</u>	<u>LIVE LOAD</u>
Uninhabitable attics with limited storage ^{b, g}	40
Sleeping rooms	40

All other values to remain unchanged.

Revise Section R303.1 (Habitable rooms), Exception 2 by adding a new first sentence:

2. With the exception of living rooms, bedrooms, kitchens, breakfast and dining rooms,

Section R302.5.1 (old 309.1) is amended to read as follows:

R302.5.1 Opening protection.

Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors, paneled or non-paneled, not less than 1-3/8 inches (35 mm) in thickness, solid or

honeycomb-core steel doors not less than 1-3/8 inches (35 mm) thick, or 20-minute fire-rated doors, equipped with a self-closing and self-latching device.

Section R303.3 is amended to read as follows:

R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet (0.279 m²) one-half of which must be openable and a mechanical ventilation system. The minimum ventilation rates shall be 50 cfm (23.6 L/s) for intermittent ventilation or 20 cfm (9.4 L/s) for continuous ventilation. Ventilation air from the space shall be exhausted directly to the outside.

Exception: The glazed areas shall not be required where artificial light is provided.

Section R303.9 is amended to read as follows:

R303.9 Required Heating and Cooling

Dwellings shall be provided with heating and cooling facilities as stated in section 303.9.1 & 3.3.9.2.

R303.9.1 Heating

Interior spaces intended for human occupancy shall be provided with active or passive heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature of 34°F (01°C) for Phoenix locality, indicated in Appendix D of the International Plumbing Code. Cooking appliances shall not be used to provide space heating to meet the requirements of this section.

Exception: Interior spaces where the primary purpose is not associated with human comfort.

R303.9.2 Cooling

Interior spaces intended for human occupancy shall be provided with cooling facilities capable of maintaining a room temperature of 85°F (29°C) in all habitable rooms, bathrooms and toilet rooms based on the summer outdoor design temperature of 107°F for Phoenix locality, indicated in Appendix D of the International Plumbing Code.

Exception: Interior spaces where the primary purpose is not associated with human comfort.

R303.9.3 Heating & Cooling supply.

Every owner and/or operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied shall comply with section R303.9.

Exception: Interior spaces where the primary purpose is not associated with human comfort.

R303.9.4 Maintenance

All heating and cooling equipment shall be maintained in good working order so the requirements of Section R303.9.1 & R303.9.2 are met.

Section R310.1 Emergency escape and rescue required is amended by adding the following:

R310.1.5 Emergency Egress

Where emergency egress windows from a bedroom or basement open into a backyard, a means of access to a public way must be provided. The route to the public way shall not be less than the requirements for an egress window (IRC 310.1).

If there is a pool in the backyard, any gate used for emergency access must be self-closing and self-latching, and openable from the inside without the use of a key or special knowledge.

If the backyard is large enough for a person to travel 50 feet from the house, it is not necessary to provide access to a public way.

Section R310.2.1 Ladders, steps is amended by adding the following:

R310.2.1 Ladder, steps and guardrail.

When a guardrail is used for protection around a window well enclosure, the egress ladder shall extend to the top of the guardrail.

Section R311.3.2 Floor elevations for other exterior doors is amended by adding the following sentence:

R311.3.2 Floor elevations for other exterior doors.

Doors other than the required egress door may swing over these landings.

Section R313 AUTOMATIC FIRE SPRINKLER SYSTEMS is deleted.

Section R314.3 Location is amended by adding the following:

R314.3 Location.

4. Where the ceiling height of a room adjacent to the hallway servicing bedrooms exceeds that of the opening to the hallway by 24 inches (610 mm) or more, smoke detectors shall be installed in the hallways and in the adjacent room and shall meet all the requirements of Section 314.

Section R314 SMOKE ALARMS is amended by adding the following:

R314.6 Apartments, Condominiums and Conversions.

All apartments and condominiums constructed without a sprinkler system and all conversions made in buildings without a sprinkler system shall install smoke alarms in compliance with Section 907.2.10 of the most current adopted building code.

Exception: If construction is not being done or if construction does not include the removal of the ceiling membrane – exposing the building framing – the smoke alarms may be battery operated only, provided the battery is a long life lithium battery or equal.

All structures shall be in compliance on or before January 1, 2009.

Table R403.1 is revised to read as follows:

TABLE R403.1MINIMUM WIDTH OF CONCRETE, PRECAST OR MASONRY FOOTINGS (inches)^{a, b}

	LOAD-BEARING VALUE OF SOIL (psf)			
	1500	2000	3000	4000
Conventional light-frame construction				
1-Story	16	16	16	16
2-Story	16	16	16	16
3-Story	24	20	20	20
4-inch brick veneer over light frame or 8-inch hollow concrete masonry				
1-Story	16	16	16	16
2-Story	24	24	20	20
3-Story	32	24	24	24
8 inch solid or fully grouted masonry				
1-Story	16	16	16	16
2-Story	32	24	24	24
3-Story	42	32	24	24

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m².

- a. Isolated columns carrying loads in excess of 750 lb's shall be supported on minimum 4 square feet of footing, with minimum width of 24 inches. Maximum bearing pressure from service loads shall not exceed 1500 psf unless recommended by the soils report.
- c. A certified soils report from a registered design professional may be used in lieu of these requirements.

*Revise Section R403.1.4 as follows:***R403.1.4 Minimum depth.**

All footings shall be placed at least 18 inches (457 mm) below the undisturbed ground surface. Where applicable, the depth of footings shall also conform to Sections R403.1.4.1 through R403.1.4.2.

Revise Top of Slope Note to read:

H/3 or 1.5 times footing width (whichever is greater) but need not exceed 40 ft. max.

*Modify Section R502.11.4 Truss design drawings by adding the following:***R502.11.4.1 Deferred Submittals.**

At the option of the registered design professional in responsible charge, floor truss design drawings may be submitted in compliance with Section 107.3.4.1 Deferred Submittals.

*Modify R802.10.1 by adding:***R802.10.1.1 Deferred Submittals.**

At the option of the registered design professional in responsible charge, roof truss design drawings may be submitted in compliance with Section 107.3.4.1 Deferred Submittals.

Modify R806.1 by adding exception:

Exception: Enclosed attic and rafter spaces are not required to be ventilated where the dimension is 24 inches or less between the ceiling and bottom of roof sheathing. Roof assembly installation shall comply with R904.

R905.5 Mineral-surfaced roll roofing is amended by adding the following:

905.5.6 Drip edge.

R905.2.8.5 Drip edge.

A drip edge shall be provided at eaves and gables. Adjacent pieces of drip edge shall be overlapped a minimum of 2 inches (51 mm). Drip edges shall extend a minimum of 0.25 inch (6.4 mm) below the roof sheathing and extend up the roof deck a minimum of 2 inches (51 mm). Drip edges shall be mechanically fastened to the roof deck at a maximum of 12 inches (305 mm) o.c. with fasteners as specified in Section R905.2.5. Underlayment shall be installed over the drip edge along eaves and under the underlayment on gables. Unless specified differently by the shingle manufacturer, Mineral-surfaced rolled roofing is permitted to be flush with the drip edge.

Add R1000, Clean Burning Fireplaces, to read:

SECTION R1000 - CLEAN BURNING FIREPLACES

R1000.1 Clean Burning Fireplaces.

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

The effective date of the regulations and prohibitions set forth in this Standard took effect on December 31, 1998.

R1000.2 Definitions: The following terms are defined in Chapter 2:

FIREPLACE SOLID FUEL WOODSTOVE

R1000.3 Installation Restrictions:

- a) On or after the effective date, no person, firm or corporation shall construct or install a fireplace or a woodstove, and the Building Official shall not approve or issue a permit to construct or install a fireplace or a woodstove, unless the fireplace or woodstove complied with one of the following:
 - 1. A fireplace which has a permanently installed gas or electric log insert.
 - 2. A fireplace, woodstove, 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, woodstove 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, woodstove 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 woodstove insert which complies with subparagraphs 2, 3, or 4 above.
- b) The following installations are not regulated by this Standard and are not prohibited by this Standard:
 1. Furnace, 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 and other outdoor fireplaces.

R1000.5 Fireplace or Woodstove Alterations Prohibited:

- a) On or after the effective date, no person, firm or corporation shall alter or remove a gas or electric log insert or a woodstove insert from a fireplace for purposes of converting the fireplace to directly burn wood or other solid fuel.
- b) On or after the effective date, no person, firm or corporation shall alter a fireplace, woodstove or other solid fuel burning appliance in any manner that would void its certification or operational compliance with the provisions of this Standard.

R1000.6 Permits Required:

In addition to the provisions and restrictions of this Standard, construction, installation or alternation of all fireplaces, woodstoves and other gas, electric or solid-fuel burning appliances and equipment shall be done in compliance with provisions of the Construction Code and shall be subject to the permits and inspections required by the Construction Code.

R1004.3 Decorative shrouds is amended by adding the following:

R1004.3 Decorative shrouds.

Decorative shrouds shall not be installed at the termination of chimneys for factory-built fireplaces except where the shrouds are listed and labeled for use with the specific factory-built fireplace system and installed in accordance with the manufacturer's installation instructions.

Exception: Where a factory-built fireplace/chimney system designed as a wood-burning appliance has a gas log permanently installed, a shroud of non-combustible construction may be installed which has a minimum of two opposite sides open. Each opening shall be a minimum of twice the area of the flue. The design of the shroud shall be approved by the building official.

Add the following section to Chapter 10 Chimneys and Fireplaces:

R1007 Outdoor Fireplaces, wood stoves or wood fire pits

R1007.1 Outdoor Fireplaces

Fireplaces, wood stoves or fire pits (either surface or in-ground) approved to be installed outdoors, whether as a manufactured product or site built, that are capable of burning wood shall meet one of the following requirements:

R1007.1.1 not be installed closer than 8 feet to any property line that abuts another property other than an alley or public way.

R1007.1.2 shall not be installed closer than 10 feet to any property line in a zero lot line subdivision other than an alley or public way.

R1007.2 Chimneys and flues

Any fireplace, wood stove or fire pit, whether manufactured or site built, which requires or has a chimney or flue installed, shall meet all the requirements for termination as per Section **R1003.9 Termination**

R1007.2.1 Chimney Termination

Fireplace and wood stove chimney termination, and firepits, which, due to their construction or listing are capable of burning wood, shall be set back at least 8 feet (244 cm) from a property line, 10 feet (305 cm) from a property line in zero lot line subdivisions.

Exception: When documentation is provided indicating that buildings are precluded from being built closer than 10 feet (305 cm) from the proposed fireplace, wood stove or firepit, a lesser separation may be considered by the building official.

When a letter provided by the owner of the property stating that the fireplace or firepit will be used for gas flames only, the distance may be reduce to not less than 48 inches (122 cm) from a property line or any opening into a building as required in the International Fuel Gas Code

FPN: This section was created due to a rise in complaints from neighbors experiencing rogue smoke.

R1007.3 Permits Required:

The installation of all exterior fireplaces, woodstoves and fire pits either gas, electric or solid-fuel burning appliances shall be done in compliance with provisions of the Construction Code and shall be subject to the permits and inspections required by the Construction Code. A site plans shall be submitted at the time of permit application indication the location of the appliance and its proximity to any property line, alley or public way and all structures located on the property.

Section N1103.4.1 is amended to read: (FPN – brought over from the IgCC)

N1103.4.1 (R403.4.1) Circulating hot water systems (Mandatory) *(FPN moved from M2005.5)*

Circulating hot water systems shall be provided when the length of hot water piping or tubing from the source of hot water to the furthest fixture exceeds 21 feet for a ¾ inch line, 32 feet for a 5/8 inch line, 43 feet for a ½ inch line and 50 feet for a 3/8 or less inch line. When the hot water distribution system contains more than one pipe or tube size, the largest size shall be used for determining the maximum allowable length before a circulating hot water system is required. The circulating system shall be equipped with an automatic or readily accessible manual on switch and a temperature sensor activated shut-off that can automatically turn off the hot-water circulating pump when the set temperature is reached. For the purpose of this section, the source of hot water shall be considered to be a water heater, boiler, circulation loop piping, distribution manifold or heat-traced piping.

Section N1103.9.3 (R403.9.3) is amended by adding the following exception:

Exception #2: Pools with a dual speed or variable speed pool motor.

Revise M1507.2 by adding the following:

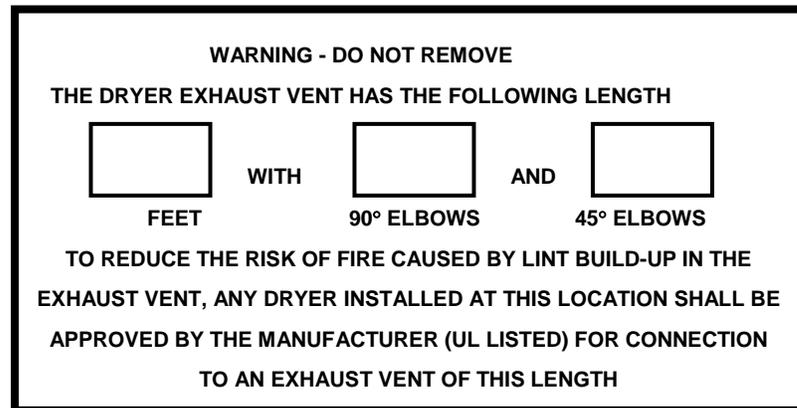
M1507.2 Recirculation of air.

kitchens

M1502.4.4 Duct length is amended by adding the following:

M1502.4.5 Length identification.

Where the exhaust duct is concealed within the building construction, the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located within 6 feet (1829 mm) of the exhaust duct connection. The label or tag shall indicate the total length and total number of 90 degree and 45 degree turns of the dryer exhaust system. The owner and/or the supplier shall verify that any new or replacement dryer meets the exhaust specifications shown.



Delete Table 3801.4 in its entirety, including notes and replace it with the following:

Allowable applications for conduit types listed in the Table E3801.4 shall be as per the National Electric Code as amended and adopted in Scottsdale Revised Code, Section 31, Article IV.

E3908.8 Types of Equipment Grounding Conductors is amended by adding the following to number 2, 3, 4, 7 & 8:

with an individual equipment grounding conductor.

E3908.8.1 is amended to read as follows:

E3908.8.1 Flexible metal conduit.

Flexible metal conduit shall be installed with an individual equipment grounding conductor.

E3908.8.2 is amended to read as follows:

E3908.8.2 Liquid-tight flexible metal conduit.

Liquid-tight flexible metal conduit shall be installed with an individual equipment grounding conductor.

Appendix G is amended by the following:

**APPENDIX G
SWIMMING POOLS, SPAS AND HOT TUBS
SECTION AG101 - GENERAL**

AG101.1 General.

The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

AG101.2 Pools in flood hazard areas.

Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Section AG101.2.1 or AG101.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

AG101.2.1 Pools located in designated floodways.

Where pools are located in designated floodways, documentation shall be submitted to the building official which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the jurisdiction.

AG101.2.2 Pools located where floodways have not been designated.

Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

SECTION AG102 – DEFINITIONS

AG102.1 General.

For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See “Swimming pool.”

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See “Swimming pool.”

IN-GROUND POOL. See “Swimming pool.”

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling, or a one-family townhouse not more than three stories in height.

SPA, NON-PORTABLE. See “Swimming pool.”

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

SWIMMING POOL. Any structure intended for swimming or recreational bathing that contains water more than 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103 – SWIMMING POOLS

AG103.1 In-ground pools.

In-ground pools shall be designed and constructed in compliance with ANSI/NSPI-5.

AG103.2 Above-ground and on-ground pools.

Above-ground and on-ground pools shall be designed and constructed in compliance with ANSI/NSPI-4.

AG103.3 Pools in flood hazard areas.

In flood hazard areas established by Table R301.2(1), pools in coastal high-hazard areas shall be designed and constructed in compliance with ASCE 24.

SECTION AG104 – SPAS AND HOT TUBS

AG104.1 Permanently installed spas and hot tubs.

Permanently installed spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-3.

AG104.2 Portable spas and hot tubs.

Portable spas and hot tubs shall be designed and constructed in compliance with ANSI/NSPI-6.

AG105 – BARRIER REQUIREMENTS

AG105.1 Application.

The provisions of this appendix shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drowning's and near-drowning's by restricting access to swimming pools, spas and hot tubs.

AG105.2 Outdoor swimming pool.

An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, spa or hot tub, shall be surrounded by a barrier which shall comply with the following:

1. The top of the barrier shall be at least 5 feet (1524 mm) above grade measured on the side of the barrier which 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 which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an above-ground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

2. Openings in the barrier shall not allow the passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions, except for normal construction tolerances and tooled masonry joints.
4. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1-3/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1-3/4 inches (44 mm) in width.
5. Where the barrier is composed of horizontal and vertical members, and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1-3/4 inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 2-1/4 inch (57 mm) square, unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1-3/4 inches (44 mm).
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1-3/4 inches (44 mm).
8. Access gates shall comply with the requirements of Items 1 through 7 above, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool, and shall be self-closing and have a self-latching device. Gates, other than pedestrian access gates, shall 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, the release mechanism and openings shall comply with the following:

- 8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate; and
 - 8.2. The gate and barrier shall have no opening larger than 1/2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met:
- 9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346;
 - 9.2. Doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. The alarm shall:
 - 9.2.1 Activate within 7 seconds and sound continuously for a minimum of 30 seconds.
 - 9.2.2 Be heard throughout the house during normal household activities with a sound pressure level of not less than 85 dba when measured indoors at 10 feet (3048 mm).
 - 9.2.3 Reset automatically reset under all conditions.
 - 9.2.4 Repeat 9.2.1, 9.2.2 and 9.2.3 until the door, and/or its screen, if present, are closed.
 - 9.2.5 Be equipped with a manual means, such as touchpad or switch located 54 inches (1372 mm) or more above the threshold of the door, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. Doors that remain open after 15 seconds shall activate the alarm as outlined in 9.2.4.
 - 9.2.6 Not be equipped with an on/off switch of any type other than the temporary deactivation switch.
 - 9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the building official, shall be acceptable as long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described herein.

10. Where an above-ground 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:
 - 10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access; or
 - 10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Items 1 through 9 above. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

AG105.3 Indoor swimming pool.

Walls surrounding an indoor swimming pool shall comply with Item 9 of Section AG105.2.

AG105.4 Prohibited locations.

Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

AG105.5 Barrier exceptions.

Spas or hot tubs with a safety cover which comply with ASTM F 1346 shall be exempt from the provisions of this appendix.

SECTION AG106 – ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AG106.1 General.

Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

SECTION AG107 – NOTIFICATIONS

AG107.1 Barrier requirements notification – pool contractor.

Before constructing a new swimming pool, spa or hot tub, the pool contractor shall give the pool owner written notice of the above barrier requirements. Failure to provide this notice shall be enforced in accordance with Section 31-33 of the Scottsdale Revised Code.

AG107.2. Safety notification.

Any person, firm or corporation, on entering into an agreement to sell or rent a dwelling with access to any swimming pool, spa or hot tub, shall give the buyer or renter written notice explaining pool, spa or hot tub safety and the responsibilities of pool, spa and hot tub use and ownership. Failure to provide this notice shall be enforced in accordance with Section 31-33 of the Scottsdale Revised Code.

SECTION AG108 – MAINTENANCE

AG108.1 Maintenance of barrier.

The owner and person, firm or corporation in possession of a swimming pool, spa or hot tub, shall keep the required barrier(s), including all gates, fencing, doors, locks, alarms, and latches in safe and good working order at all times. No person shall alter or remove any portion of a swimming pool barrier except to repair, reconstruct, or replace the barrier in compliance with the provisions of this chapter. Any barrier removed shall be promptly replaced.

AG108.2 Public nuisance.

Any swimming pool, spa or hot tub safety barrier(s) not maintained to the minimum requirements by the code under which the barrier(s) was installed is hereby declared to be unsafe and a public nuisance. In addition to enforcement under this chapter, violations of this section may be enforced in accordance with Chapter 18 of the Scottsdale Revised Code.

SECTION AG109 – ABBREVIATIONS

AG109.1 General.

ANSI—American National Standards Institute
11 West 42nd Street
New York, NY 10036

APSP—Association of Pool and Spa Professionals
NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue
Alexandria, VA 22314

ASCE—American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 98411-0700

ASTM—ASTM International
100 Barr Harbor Drive
West Conshohocken, PA 19428

UL—Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 60062-2096

SECTION AG110 – REFERENCED STANDARDS

AG110.1 General.

ANSI/NSP

ANSI/NSPI-3 – 99 Standard for Permanently Installed Residential Spas - AG104.1

ANSI/NSPI-4 – 99 Standard for Above-ground/On-ground Residential Swimming Pools - AG103.2

ANSI/NSPI-5 – 03 Standard for Residential In-ground Swimming Pools - AG103.1

ANSI/NSPI-6 – 99 Standard for Residential Portable Spas - AG104.2

ANSI/APSP

ANSI/APSP-7 – 06 Standard for Suction Entrapment Avoidance in Swimming Pools, Wading Pools, Spas, Hot Tubs and Catch Basins - AG106.1

ASCE

ASCE/SEI-24 – 05 Flood-resistant Design and Construction - AG103.3

ASTM

ASTM F 1346 – 91(2003) Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools Spas and Hot Tubs - AG105.2, AG105.5

UL

UL 2017 – 2000 Standard for General-purpose Signaling Devices and Systems—with revisions through June 2004 - AG105.2

APPENDIX H – PATIO COVERS is amended to read:

SECTION AH103 - PERMITTED USES**AH103.3 Fire rating**

All patio covers shall be protected with a one-hour fire-resistive wall and parapet under the following conditions:

1. Combustible patio covers located less than 3 feet from an adjacent property line.
2. Non-combustible patio covers located less than 1 foot - 6 inches from an adjacent property line.

Exception: Where the one-hour fire-resistive wall and parapet is required, a one-hour roof-ceiling assembly may be substituted for the parapet in the following manner:

- 1) Where the roof-ceiling framing members are parallel to the one-hour wall, the one-hour roof-ceiling assembly shall extend at least 5 feet from wall.
- 2) Where the roof-ceiling framing members are perpendicular to the one-hour wall, the entire span of such framing shall be of not less than one-hour fire-resistive construction.
- 3) Openings in the roof shall not be located within 5 feet of the property line.

AH103.4 Location

Patio covers may cantilever over an easement a distance not greater than 1/3 the width of the easement. No portion of the patio cover structure shall be placed within an easement.

END OF AMENDMENTS