CITY OF SCOTTSDALE AMENDMENTS
TO THE
INTERNATIONAL RESIDENTIAL CODE
2015 EDITION

Ordinance No. 4284, Resolution No. 10599
2016 City of Scottsdale Building Codes and Amendments

SCOTTSDALE REVISED CODE
CHAPTER 31 – BUILDINGS AND BUILDING REGULATIONS

ARTICLE II. INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS
DIV. 1. ADOPTED CODE
Sec. 31-50. International Residential Code for One- and Two-Family Dwellings adopted and amended.


DIV. 2. AMENDMENTS TO IRC
Sec. 31-51. IRC CHAPTER 1 - amendments.

Sec. 31-52. IRC CHAPTER 3 BUILDING PLANNING - amendments.
Only the following portions of CHAPTER 3 BUILDING PLANNING, are amended.
(a) Complete Table R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA, as follows:

| Wind speed: | 90 |
| Seismic design category: | B |
| Weathering: | negligible |
| Frost line depth: | final grade |
| Termite: | moderate to heavy |
| Decay: | none to slight |

(b) All other headings in Table R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA, are deleted.

(c) Amend Table R301.5 MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS, as follows. All other values remain unchanged.
TABLE R301.5
MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS (In pounds per square foot)

<table>
<thead>
<tr>
<th>USE</th>
<th>LIVE LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uninhabitable attics with limited storage</td>
<td>40</td>
</tr>
<tr>
<td>Sleeping rooms</td>
<td>40</td>
</tr>
</tbody>
</table>

(d) Section R303.3 Bathrooms, is amended as follows:

R303.3 Bathrooms. Bathrooms, water closet compartments and other similar rooms shall be provided with:

1. Aggregate glazed area in windows of at least 3 square feet (0.279 m²), one-half of which must be openable. However, glazed areas are not required where artificial light is provided.
2. A mechanical ventilation system, with a minimum ventilation rate of 50 cfm (23.6 L/s) for intermittent ventilation, or 20 cfm (9.4 L/s) for continuous ventilation. Ventilated air shall be exhausted directly to the outside.

Except where functioning as a component of a whole house ventilation system, exhaust fans in bathrooms with a shower or tub shall be provided with a delay timer or humidity/condensation control sensor. Exhaust fans shall be switched separately from lighting systems.

(e) Section R303.9 Required heating and cooling, is amended as follows:

R303.9 Required heating and cooling.

Dwellings shall be provided with heating per Section R303.9.1 and cooling per Section 303.9.2.

R303.9.1 Heating.

Heating facilities shall be provided, capable of maintaining room temperature at 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms, based on the winter design temperature of 34°F (01°C) for Phoenix, per 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: Heating systems are not required for interior spaces where the primary purpose of the space is not associated with human comfort.

R303.9.2 Cooling.

Cooling facilities shall be provided, capable of maintaining room temperature at 85°F (29°C) in all habitable rooms, bathrooms and toilet rooms, based on the summer design
temperature of 107°F (42°C) for Phoenix, per Appendix D of the International Plumbing Code.

**Exception:** Cooling systems are not required for interior spaces where the primary purpose of the space is not associated with human comfort.

(f) **R313 AUTOMATIC FIRE SPRINKLER SYSTEMS is amended as follows:**

R313 AUTOMATIC FIRE SPRINKLER SYSTEMS.
See Scottsdale Revised Code, Chapter 36, for automatic fire sprinkler system requirements.

(g) **R314.3 Location, is amended by adding the following:**

R314.3 Location.
5. In dwelling units where the ceiling height of a room open to the hallway serving the bedrooms exceeds that of the hallway by 24 inches (610 mm) or more, smoke alarms shall be installed in the hallway and in the adjacent room.

Sec. 31-53. IRC CHAPTER 4 FOUNDATIONS - amendments.
Only the following portions of CHAPTER 4 FOUNDATIONS, are amended.
(a) Tables R403.1(1), R403.1(2) & R403.1(3) and Notes are revised to read as follows:

All footings in these tables shown as 12 to 16 inches wide shall be at least 16 inches wide.

All footings in these tables shown as 17 to 24 inches wide shall be at least 24 inches wide.

All footings in these tables shown as 25 to 32 inches wide shall be at least 32 inches wide.

All footings in these tables shown as greater than 32 inches wide shall as stated or larger.
   a. Maximum bearing pressure from service loads shall not exceed 1500 psf.
   b. An isolated column carrying a load greater than 750 lbs. shall be supported on a minimum 4 square feet of footing, with minimum width of 24 inches.
   c. A certified soils report from a registered design professional may be used in lieu of these requirements.

(b) **R403.1.4 Minimum depth, is amended as follows:**

R403.1.4 Minimum depth.
All footings shall be placed at least 18 inches (457 mm) below the undisturbed ground surface or engineered fill. Where applicable, the depth of footings shall also conform to Section R403.1.4.1.

Sec. 31-54. IRC CHAPTER 5 FLOORS - amendments.
Only the following portion of CHAPTER 5 FLOORS, is amended.
R502.11.4.1 Deferred submittals, is amended as follows:
R502.11.4.1 Deferred submittals.
Floor truss design drawings may be submitted in compliance with Section 107.3.4.1 of the IBC.

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Exhibit A
Resolution 10599
Sec. 31-55. IRC CHAPTER 8 ROOF-CEILING CONSTRUCTION - amendments.
Only the following portion of CHAPTER 8 ROOF-CEILING CONSTRUCTION, is amended.
R802.10.1.1 Deferred submittals, is amended as follows:

R802.10.1.1 Deferred submittals.
Roof truss design drawings may be submitted in compliance with Section 107.3.4.1 of the IBC.

R806.1 Ventilation, is amended by adding the following exception:
Exception: Enclosed attic and rafter spaces are not required to be ventilated where there is 24 inches or less between the bottom of roof sheathing and the ceiling.

Sec. 31-56. IRC CHAPTER 9 ROOF ASSEMBLIES - amendments.
Only the following portion of CHAPTER 9 ROOF ASSEMBLIES, is amended.
Section R905.5 Mineral-surfaced roll roofing, is revised by adding the following:

905.5.6 Drip edge.
A drip edge shall be provided at eaves and rake edges. Adjacent segments of drip edge shall overlap at least 2 inches (51 mm). Drip edges shall extend at least 1/4 inch (6.4 mm) below the roof sheathing and extend onto the roof deck at least 2 inches (51 mm). Drip edges shall be fastened to the roof deck not less than 12 inches (305 mm) on center with fasteners specified in Section R905.2.5. Underlayment shall be installed over the drip edge along eaves, and under the drip edge along rake edges.

Sec. 31-57. IRC CHAPTER 10 CHIMNEYS AND FIREPLACES - amendments.
Only the following portion of CHAPTER 10 CHIMNEYS AND FIREPLACES, is amended.
(a) R1007 CLEAN BURNING FIREPLACES, WOODSTOVES AND SOLID FUEL BURNING DEVICES is added as follows:

SECTION R1007 CLEAN BURNING FIREPLACES, WOODSTOVES AND SOLID FUEL BURNING DEVICES

R1007.1 Purpose.
This Section regulates fireplaces, woodstoves, and other solid fuel burning devices to reduce air pollution caused by particulate matter and carbon monoxide.

R1007.2 Installation restrictions.
1. Only the following fireplaces, woodstoves and solid fuel burning devices are permitted:
   1.1 A fireplace with a permanently-installed gas or electric log insert.
   1.2 A fireplace, woodstove, or solid fuel burning device certified by the United States Environmental Protection Agency as conforming to 40 Code of Federal Regulations Part 60, Subpart AAA, as amended.
   1.3 A fireplace, woodstove or solid fuel burning device listed by a nationally-recognized testing agency as meeting performance standards equivalent to 40 Code of Federal Regulations Part 60, Subpart AAA, as amended.
1.4 A fireplace, woodstove or other solid fuel burning device determined by the Maricopa County Air Quality Department as meeting performance standards equivalent to 40 Code of Federal Regulations Part 60, Subpart AAA, as amended.

1.5 A fireplace with a permanently-installed woodstove insert which complies with paragraph 1.2, 1.3, or 1.4 above.

2. The following are not regulated by these requirements:

2.1 Furnaces, boilers, incinerators, kilns, and similar space-heating equipment.

2.2 Industrial process equipment.

2.3 Cook-stoves, barbecue grills, and similar appliances designed primarily for cooking.

R1007.3 Alterations prohibited.
1. No permanently-installed gas or electric log insert, or woodstove insert, in a fireplace, shall be altered or removed to convert the fireplace to burn wood or other solid fuel.

2. No alteration shall be made to a fireplace, woodstove or solid fuel burning device to void its certification or remove its compliance with this section.

R1007.4 Permits required.
Construction, installation and alteration of all fireplaces; woodstoves; and gas, electric and solid fuel burning devices and equipment, are subject to the requirements, permits and inspections of this code.

(b) R1008 CHIMNEYS AND FIREPLACES is added as follows:

R1008.1 Outdoor wood-burning devices.
Outdoor fireplaces, woodstoves, fire pits and other devices capable of burning wood shall be installed:

1. At least 8 feet from any property line that abuts another property; or

2. At least 10 feet from any property line in a zero lot line subdivision.

Exceptions:
1. When a property line abuts a street or alley, the setback for these devices shall comply with the Zoning Ordinance.

2. The building official may allow a smaller setback if safety standards are met.

R1008.2 Outdoor gas devices.
Outdoor fireplaces, fire pits and other devices that burn gas only shall be vented as required by IRC Chapter 24 - Fuel Gas.

R1008.3 Chimneys and flues.
Fireplaces, woodstoves, fire pits and other devices with a chimney or flue shall comply with Section R1003.9 Termination.

R1008.4 Code compliance.
1. Construction, installation and alteration of all outdoor fireplaces; woodstoves; fire pits and similar gas, electric and solid fuel burning devices and equipment, are subject to the requirements, permits and inspections of this code.
   **Exception:** No permit is required for the masonry surround for outdoor fireplaces; woodstoves; fire pits and similar gas, electric, and solid fuel burning devices.

2. With the permit application, a site plan shall be submitted indicating the location of the device and its proximity to the property line, alley, public right-of-way and all structures on the property.

**Sec. 31-58. IRC CHAPTER 11 ENERGY EFFICIENCY - amendments.**
*Only the following portions of CHAPTER 11 ENERGY EFFICIENCY, are amended.*

(a) **Section N1102.4.1.2 (R402.4.1.2) Testing,** is amended to read as follows:

   **Section N1102.4.1.2 (R402.4.1.2) Testing.** The building or dwelling unit shall be tested and verified as having an air leakage rate not exceeding five air changes per hour for detached dwelling units and seven air changes per hour for attached dwelling units in Climate Zones 1 and 2, and three air changes per hour in Climate Zones 3 through 8. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Where required by the code official, testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the code official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope.

(b) **Section N1103.5.1.1. (R403.5.1.1) Circulation systems,** is amended as follows:

   **Section N1103.5.1.1 (R403.5.1.1) Circulation systems.** Heated water circulation systems shall be provided with a circulation pump. The system return shall be a dedicated return pipe or a cold water supply pipe. Gravity and thermo-syphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall:
   1. Automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.
   2. Limit the temperature of the water entering the cold water piping to no hotter than 104°F (40°C).

(c) **Section N1103.5.1.2 (R403.5.1.2) Circulation system piping is added as follows:**

   **Section N1103.5.1.2 (R403.5.1.2) Circulation system piping.** Heated water circulation systems shall be provided when the length of hot water piping or tubing from the source of hot water to the furthest fixture exceeds:

   1. 21 feet for a 3/4 inch line
   2. 32 feet for a 5/8 inch line
   3. 43 feet for a 1/2 inch line
   4. 50 feet for a 3/8 inch line or less
Where the water piping or tubing length contains more than one size of pipe, the largest size shall be used for determining the maximum allowable length of pipe before a circulating hot water system is required. For the purpose of this section, the source of hot water shall be a water heater, boiler, circulation loop piping, distribution manifold, or heat-traced piping.

(d) Section N1103.5.2 (R403.5.2) Demand recirculation systems, is deleted.

(e) Section N1104.1 (R404.1) Lighting equipment (Mandatory), is amended to read as follows:

**N1104.1 (R404.1) Lighting equipment (Mandatory)**

A minimum of 90 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

**Exception:** Low-voltage lighting.

(f) Table N1106.4 Maximum Energy Rating Index, is amended for Climate Zone 2 as follows:

TABLE N1106.4

<table>
<thead>
<tr>
<th>CLIMATE ZONE</th>
<th>ENERGY RATING INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>57(^1)</td>
</tr>
</tbody>
</table>

\(^1\)Energy generated from on-site renewable energy shall not be included in the calculation of the Energy Rating Index value.

Sec. 31-59. IRC CHAPTER 15 EXHAUST SYSTEMS - amendments.

Only the following portions of CHAPTER 15 EXHAUST SYSTEMS, are amended.

(a) M1503.1 General, is amended by deleting the exception.

(b) M1507.2 is amended as follows:

**M1507.2 Recirculation of air.**

Exhaust air from bathrooms, kitchens and toilet rooms shall be exhausted directly to the outdoors, not recirculated or discharged indoors.

Sec. 31-60. IRC CHAPTER 29 WATER SUPPLY AND DISTRIBUTION – amendments.

Only the following portion of CHAPTER 15 WATER SUPPLY AND DISTRIBUTION, is amended.

**IRC Table P2903.2 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS, is amended as follows:**

TABLE P2903.2: MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS\(^2\)

<table>
<thead>
<tr>
<th>PLUMBING FIXTURE OR FIXTURE FITTING</th>
<th>PLUMBING FIXTURE OR FIXTURE FITTING</th>
</tr>
</thead>
</table>

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Lavatory faucet | 1.5 gpm at 60 psi
Shower head\textsuperscript{a} | 2.0 gpm at 80 psi
Sink faucet | 2.2 gpm at 60 psi
Water closet | 1.28 gallons per flushing cycle\textsuperscript{c, d}

For SI: 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
\textsuperscript{a} A handheld shower spray shall be considered a shower head.
\textsuperscript{b} Consumption tolerances shall be determined from referenced standards.
\textsuperscript{c} 1.6 gallons per flushing cycle is permitted where a water closet is connected to a building's existing sanitary drainage piping.
\textsuperscript{d} For a dual-flush water closet, the effective flush volume is the composite, average flush volume of two reduced flushes and one full flush.

Sec. 31-61. IRC CHAPTER 30 SANITARY DRAINAGE - amendments.
Only the following portion of CHAPTER 30 SANITARY DRAINAGE, is amended.
P3009.15 Small gray systems, is added as follows:

\textbf{P3009.15 Small gray systems.}
All gray water systems shall comply with the Arizona Department of Environmental Quality requirements. A gray water system requires no percolation test. A single discharge line from a clothes washer to outdoor irrigation requires no permit.

Sec. 31-62. IRC CHAPTER 39 POWER AND LIGHTING DISTRIBUTION - amendments.
Only the following portion of CHAPTER 39 POWER AND LIGHTING DISTRIBUTION, is amended.
Section E3908.8 Types of equipment grounding conductors, is amended as follows:

\textbf{Section E3908.8 Types of equipment grounding conductors.}
Equipment grounding conductors shall comply with the National Electric Code as adopted and amended in Article VIII of this Chapter.

[Sections 31-63 – 31-65: Reserved]

DIV. 3. ADOPTION AND AMENDMENTS TO IRC: APPENDICES
Sec. 31-65. Appendices to IRC.
The following appendices 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 WITH TYPE B VENTS

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

APPENDIX H - PATIO COVERS

APPENDIX J - EXISTING BUILDINGS AND STRUCTURES

APPENDIX K - SOUND TRANSMISSION

APPENDIX R - LIGHT STRAW-CLAY CONSTRUCTION

APPENDIX S - STRAWBALE CONSTRUCTION

APPENDIX U - SOLAR-READY PROVISIONS—DETACHED ONE- AND TWO-FAMILY DWELLINGS, MULTIPLE SINGLE-FAMILY DWELLINGS (TOWNHOUSES)

APPENDIX AG - APPENDIX G TO THE 2012 INTERNATIONAL RESIDENTIAL BUILDING CODE – SWIMMING POOLS, SPAS AND HOT TUBS – previously made a public record by City of Scottsdale Resolution # 9257 and adopted in City of Scottsdale Ordinance # 2060

Sec. 31-66. APPENDIX H – PATIO COVERS – amendments.

APPENDIX H – PATIO COVERS is amended to add the following:

AH103.3 Fire rating.

All patio covers shall be protected with a one-hour fire-resistive wall and parapet where:

1. Combustible patio covers are less than 3 feet from the property line.
2. Non-combustible patio covers are less than 1 foot 6 inches from the property line.

Exception: Where the one-hour fire-resistive wall and parapet are required, a one-hour roof-ceiling assembly may be substituted for the parapet if:

a. The roof-ceiling framing members are parallel to the one-hour wall, and the one-hour roof-ceiling assembly extends at least 5 feet from wall.

b. The roof-ceiling framing members are perpendicular to the one-hour wall, and the entire span of the framing is at least one-hour fire-resistive construction.

c. Openings in the roof are at least 5 feet from the property line.

Sec. 31-67. APPENDIX J of IBC applicable to IRC.

Appendix J – Grading, of the IBC, and the city amendments to APPENDIX J, are applicable to the IRC.

Sec. 31-68. APPENDIX AG: APPENDIX G TO THE 2012 INTERNATIONAL RESIDENTIAL BUILDING CODE – SWIMMING POOLS, SPAS AND HOT TUBS – amendments.

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, 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.

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 drownings and near-drownings 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 (1,524 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 (1,143 mm), the
horizontal members shall be located on the swimming pool side of the fence.
Spacing between vertical members shall not exceed 1¾ inches (44 mm) in width.
Where there are decorative cutouts within vertical members, spacing within the
cutouts shall not exceed 1¾ 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 (1,143 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 1¾ inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a 2¼ inch (57 mm) square, unless
the fence has slats fastened at the top or the bottom which reduce the openings to
not more than 1¾ 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 1¾
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 (1,372 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 ½ 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 (3,048 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 (1,372 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
UL

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