

# 2015 International Residential Code

## Chapter 1

(1) Chapter 1, "Scope and Administration," is hereby amended as follows:

Note: For reserved sections herein, refer to the Building Code of the City of Peoria Administrative Provisions for these code requirements.

**R101.1 Title.** These provisions shall be known as the Residential Code for One- and Two-Family Dwellings, as amended by the city of Peoria, and shall be cited as such and will be referred to herein as "this code."

**R101.3 Intent.** ~~Reserved. The purpose of this code is to provide minimum requirements to safeguard the public safety, health and general welfare, through affordability, structural strength, means of egress facilities, stability, sanitation, light and ventilation, energy conservation and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.~~

**R102.1 General.** ~~Reserved. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.~~

**R102.2 other laws.** ~~Reserved. The provisions of this code shall not be deemed to nullify any provisions of local, state, or federal law.~~

**R102.3 Application of reference.** ~~Reserved. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section or provision of this code.~~

**R102.5 Appendicies.** ~~Provisions in the appendicies shall not apply unless specifically referenced in the adopting ordinance. The following appendicies 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 –PIPING STANDARDS FOR VARIOUS APPLICATIONS; APPENDIX H – PATIO COVERS; APPENDIX J – EXISTING BUILDINGS AND STRUCTURES; APPENDIX K – SOUND TRANSMISSION; APPENDIX N – VENTING METHODS; APPENDIX P – SIZING OF WATER PIPING SYSTEMS.**~~

**R102.6 Partial Invalidity.** ~~Reserved. In the event any part or provision of this code is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.~~

**R102.7 Existing structures.** The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the *International Property Maintenance Code* or the *International Fire Code*, as amended by the City of Peoria, or as is deemed necessary by the *building official* for the general safety and welfare of the occupants and the public.

**SECTION R103. DEVELOPMENT AND ENGINEERING DEPARTMENT OF BUILDING SAFETY** Reserved.

**SECTION R104. DUTIES AND POWERS OF THE BUILDING OFFICIAL** Reserved.

**SECTION R105. PERMITS** Reserved.

**SECTION R106. CONSTRUCTION DOCUMENTS** Reserved.

**SECTION R107. TEMPORARY STRUCTURES AND USES** Reserved.

**SECTION R108. FEES** Reserved.

**SECTION R109. INSPECTIONS** Reserved.

**SECTION R110. CERTIFICATE OF OCCUPANCY** Reserved.

**SECTION R111. SERVICE UTILITIES** Reserved.

**SECTION R112. BOARD OF APPEALS** Reserved.

**SECTION R113. VIOLATIONS** Reserved.

**SECTION R114. STOP WORK ORDER** Reserved.

## Chapter 2

(2) Chapter 2, “Definitions,” is hereby amended as follows:

### **SECTION R202. DEFINITIONS**

**Fire separation distance.** The distance measured from the building face to one of the following:

1. To the closest interior lot line.
2. to the centerline of a street, an alley, or public way.
3. to an imaginary line between two buildings on the lot.

The distance shall be measured at a right angle from the face of the framing wall.

**Standard Plans.** Plans authorized by the Development and Engineering Department to be used in construction on a repetitive basis. Standard plans may include options allowing variations to the building design that may alter the interior and exterior appearance.

(3) Chapter , “Building Planning,” is hereby amended as follows:

**R301.1.4 Lot corner identification.** In construction applications where legally surveyed lot corner identification markers are not readily verifiable or are missing, the building official, when deemed necessary, shall require lot boundary markers to be surveyed and permanently identified in accordance with State law at the owner’s or applicant’s expense. The survey shall be executed by a registrant licensed to do such work by the Arizona State Board of Technical Registration.

**R301.2 Climatic and geographic design criteria.** Buildings shall be constructed in accordance with provisions of this code as limited by the provisions of this section. ~~Additional criteria shall be established by the local jurisdiction and set forth in Table R301.2(1).~~

#### **Table R301.2(1)**

(Due to space limitations the table could not be reproduced; only the values are listed)

Ground snow load:	0
Wind speed (mph):	115
Topographic effects	No
Special wind region	No
Wind-borne debris zone	No
Seismic design category:	B
Weathering:	<u>Negligible</u>
Frost line depth:	12
Termite:	Moderate to Heavy
Winter design temperature:	34°
Ice shield underlayment required:	No
Flood hazards:	See Peoria City Code
Air freezing index:	0
Mean annual temperature:	71.2° F

**R301.2.4 Floodplain construction.** Buildings and structures constructed in whole or in part in flood hazard areas (including A or V Zones) as established in Table R301.2(1), and substantial improvement and restoration of substantial damage of buildings and structures in flood hazard areas, shall be designed and constructed in accordance with the Peoria City Code. ~~Buildings and structures that are located in more than one flood hazard area shall comply with the provisions associated with the most restrictive flood hazard area. Buildings and structures located in whole or in part in identified floodways shall be designed and constructed in accordance with ASCE 24.~~

~~**R301.2.4.1 Alternative provisions.** As an alternative to the requirements in Section R322, ASCE 24 is permitted subject to the limitations of this code and the limitations therein.~~

**Table R301.5**  
**MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS**  
**(in pounds per square foot)**

USE	LIVE LOAD
Uninhabitable attics without storage	10
Uninhabitable attics with limited storage	20
Habitable attics and attics served with fixed stairs	30
Balconies (exterior) and decks	40
Fire escapes	40
Guards and handrails	200
Guard in-fill components	50
Passenger vehicle garages	50
Rooms other than sleeping rooms	40
Sleeping rooms	<del>30</del> 40
Stairs	<del>40</del>

**Section R302**  
**FIRE-RESISTANT CONSTRUCTION**

**R302.1 Exterior walls.** Construction, projections, openings and penetrations of *exterior walls of dwellings* and accessory buildings shall comply with Table R302.1(1); or *dwellings* equipped throughout with an *automatic sprinkler system* installed in accordance with Section P2904 shall comply with Table R302.1(2).

**Exceptions:**

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.
2. Walls ~~of~~ between *dwellings* and *accessory structures* located on the same lot.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the *lot*. Projections beyond the *exterior wall* shall not extend over the *lot line*.
4. Detached garages accessory to a *dwelling* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.

**R302.5.1 Opening protection.**

Openings from a private garage or carport directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage or carport and residence shall be equipped with solid wood doors 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 device.

## Section R303.9

### Section R303. LIGHT, VENTILATION, ~~AND HEATING~~ AND COOLING

**R303.9 Required heating and cooling.** Where the winter design temperature in Table R301.2(1) is below 60°F (16°C). Every *dwelling unit* shall be provided with heating and cooling facilities capable of maintaining a ~~minimum~~ room temperatures between ~~of~~ 70°F (21°C) ~~68°F (20°C) and 90°F (50°C)~~ at a point 3 feet (914 mm) above the floor and 2 feet (610 mm) from exterior walls in all habitable rooms ~~at the design temperature~~. The installation of one or more portable space heaters or portable space coolers shall not be used to achieve compliance with this section.

## SECTION R301.4

**R310.4 Bars, grilles, covers and screens.** Bars, grilles, covers, screens or similar devices are permitted to be placed over emergency escape and rescue openings, bulkhead enclosures, or window wells that serve such openings, provided that the minimum net clear opening size complies with Sections R310.1.1 to R310.1.3, and such devices shall be releasable or removable from the inside without the use of a key, tool, special knowledge or force greater than that required for normal operation of the escape and rescue opening. The dwelling shall be equipped with smoke alarms installed in accordance with Section R314.

## Sections R313.1 & R313.2

### SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS

**R313.1 Townhouse automatic fire sprinkler systems.** An automatic residential fire sprinkler system shall be installed in *townhouses*.

**Exception:** An automatic residential fire sprinkler system shall not be required when *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed, unless required by the Peoria Fire Code.

**R313.1.1 Design and installation.** Automatic residential fire sprinkler systems for *townhouses* shall be designed and installed in accordance with Section P2904 or NFPA 13D.

**R313.2 One- and two-family detached dwellings automatic fire systems.** An automatic residential fire sprinkler system shall be installed in detached one- and two-family *dwellings* as required by the Peoria Fire Code.

**Exception:** An automatic residential fire sprinkler system shall ~~not be required for installed in~~ *additions* or *alterations* to existing buildings ~~that are not already provided with an automatic residential sprinkler system~~ as required by the Peoria Fire Code.

**R313.2.1 Design and installation.** Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.

## Section R320.2

### R320.2 Model Home Complex

**R320.2.1 No-step entrance.** At least one single family dwelling as part of a Model Home Complex, as described in the Peoria Zoning Ordinance, shall have a no-step entrance as described in Section R320.2.2

**R320.2.2 Dwellings.** Residential single family dwellings, as part of a Model Home Complex, as described in the Zoning Ordinance, shall have a route of travel as described herein. The route of travel shall be a continuous no-step path connecting each subdivision sales office or public way to the primary entry.

The route of travel shall conform to the following requirements:

1. The running slope shall not exceed 1:20.
2. Routes of travel complying with this section are not required to have handrails.
3. The route of travel shall be a firm, stable, and slip resistant surface for a minimum width of 36 inches (914 mm) continuous and clear for a height of 7 feet (2.134 m) above the route.
4. The entry to the model home shall have a maneuvering space of a minimum 48 inches (1219 mm) by 48 inches (1219 mm) on the exterior side of the entry door.
5. The threshold at the entry shall not exceed ½ inch (13 mm).
6. The no step entry shall be identified by a readily viewable sign.

## **R322 FLOOD-RESISTANT CONSTRUCTION RESERVED**

### **SECTION R326 SWIMMING POOLS, SPAS AND HOT TUBS**

#### **GENERAL**

**R326.1 General.** The provisions of this section shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one and two-family dwelling.

#### **DEFINITIONS**

**R326.2 Definitions.** For the purpose 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 over 18 inches (457 mm) deep. This includes in-ground, above ground and on-ground swimming pools, hot tubs, spas, and fixed in place wading pools.

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

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

**R326.3 In-ground pools.** In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG108.

**R326.3.1 Above-ground and on-ground pools.** Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG108.

**R326.3.2 Pools in flood hazard areas.** In flood hazard areas established by Table R301.2(1), pools designed and constructed in compliance with ASCE 24.

**R326.3.3 Permanently installed spas and hot tubs.** Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG108.

**R326.3.4 Portable spas and hot tubs.** Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6.

**R326.4 Application.** The provisions of this section 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.

**R326.4.1 Outdoor swimming pool.** It is the responsibility of the property owner and any other person in responsible charge of a swimming pool to ensure that the required swimming pool barrier, including all gates, doors, locks, latches, and other portions of the barrier are maintained safe and in 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 section. All barriers shall be installed, inspected, and approved prior to plastering or filling with water. An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with 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 (5 mm) measured on the side of the barrier which faces away from the swimming pool. The maximum clearance at the bottom of the barrier may be increased to 4 inches (102 mm) when grade is a solid, non-removable surface. Where the top of the pool structure is above grade, such as an aboveground 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 passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stonewall, shall not contain indentations or protrusions except 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 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 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 1.75 inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a 2.25-inch (57 mm) square and ~~unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).~~ The mesh shall not be less than 11 gauge.

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 1.75 inches (44 mm).

8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, 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 need not be self-closing or self-latching and shall be equipped with a padlock or similar locking 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 greater than 0.5 inches (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 key operated powered safety cover in compliance with ASTM F1346. The keyed pool cover switch shall be located not less than 54 inches (1372 mm) above the floor or adjacent ground level and where the entire pool cover can be visually inspected;  
or

9.2. All doors leading from the dwelling unit or guest room, directly into a yard with a swimming pool, shall swing away from the pool, shall be self closing and self latching, and shall be equipped with a locking device. The release mechanism for the latch shall be located not less than 54 inches (1372 mm) above the floor. A locking latch which uses a key, electronic opener, or integral combination lock may be located at any height on the door. Sliding doors shall not form any part of a required barrier unless the self-closing and self-latching mechanism is specifically approved.

Windows used for emergency escape or rescue which face into a yard with a swimming pool shall be equipped with a latching device located not less than 54 inches (1372 mm) above the floor. All other operable dwelling unit windows facing into a yard with a swimming pool shall be equipped with a screwed in place wire mesh screen, a keyed lock that prevents opening the window more than 4 inches (102 mm), or a latching device not less than 54 inches (1372 mm) above the floor.

**Exception:** One and two family dwellings, in an age restricted community, are not required to have the house wall serve as a barrier requirement, as long as there are no children under the age of 6 permanently residing on the property.

10. 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:

10.1. The ladder or steps shall be capable of being secured in an inaccessible position with a lock or latch located 54 inches (1372 mm) above the adjacent ground level, or

10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. 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.

11. Where there are natural barriers between properties, such as lakes and solid rock vertical cliffs not less than 10 feet (3048 mm) in height and a slope of not less than 1 horizontal to 10 vertical, fence barriers shall not be required between properties where the natural barrier exist. To ensure proper natural barriers are maintained, barrier fences shall project a minimum of 24 inches (610 mm) into lakes to where there is at least 24 inches (610 mm) depth from the lake surface to the top of the submerged horizontal member or the lake bottom when there is no submerged horizontal member. There shall be no horizontal member less than 45 inches above the lake surface. Where the solid rock cliff extends above the property, the intersecting barriers, with the solid rock cliff, shall not allow passage of a 4 inch diameter (102 mm) sphere.

**R326.4.2 Indoor swimming pool.** All walls surrounding an indoor swimming pool shall comply with Section R325.4.1

**R326.4.3 Prohibited locations.** Barriers shall be located not less than 45 inches (1143 mm), measured horizontally from permanent structures, equipment or similar objects so as to prohibit them from being used to climb the barriers.

**R326.4.4 Barrier exceptions.**

1. For portable spas and hot tubs with a safety cover which compiles with ASTM F 1346, as listed in Section R326, shall be exempt from the provisions of R326.4.1, Item 9.
2. For spas and hot tubs, a hard safety cover which is latched or locked may be used provided the spa or hot tubs not more than 8 feet (2.44 m) in width at any point.
3. Existing swimming pools located on a one-family dwelling property on or before January 1, 2017 need not be retroactively fitted with a barrier between the dwelling and the pool provided all occupants of the dwelling are at least six years of age or older or there is a door alarm. The alarm shall be listed in accordance with UL 2017. All other portions of the swimming pool barrier separating properties shall be installed and maintained as required by Section 105.2.
  1. This exception does not eliminate an owner's responsibility for providing a temporary barrier or otherwise physically restricting visiting children's direct access from the dwelling to the swimming pool.
  2. This exception shall expire and the required permanent barrier shall be retroactively installed between the dwelling and the swimming pool whenever:
    1. One ore more children under six years of age become occupants of the property.
    2. There is a change of use or character to the primary building occupancy on the property.
    3. A new pool or spa is being installed on the same property including spa additions to the existing swimming pool.

**R326.5 Suction Entrapment Avoidance.** Pools, spas, hot tubs, catch basins and other similar bather accessible bodies of water associated with swimming pool construction shall be designed to produce circulation throughout the body of water and provide means to protect against user suction entrapment in accordance with ANSI/APSP-7.

**R326.5.1 Surface skimming or perimeter overflow system.** To avoid suction entrapment, fully submerged suction outlets (main drains) shall not be required in swimming pools, wading pools, spas, hot tubs and catch basins. Surface skimming or perimeter overflow system shall be permitted in lieu of fully submerged suction outlet fittings and shall provide 100% of the required system flow.

**R326.5.2 Fully submerged suction outlets (main drains).** Fully submerged manufactured suction outlets (main drains) for use in swimming pools, wading pools, hot tubs and catch basins shall be listed by a nationally recognized testing laboratory in accordance with ASME/ANSI A11.19.9M.

**Exception:** Custom designed suction outlet fittings certified by a licensed professional engineer that conform to Sect 3. General requirements of ASME/ANSI A112.19.8M.

**R326.5.3 Methods of entrapment avoidance.** Entrapment avoidance of fully submerged suction outlets can be achieved by one of the following methods:

**R326.5.3.1 Dual Drains.** A minimum of two (2) suction outlets shall be provided for each pump or pumps in the suction outlet system, separated by a minimum of three feet (3') [91.44 cm] measured from center to center of suction pipes or located on two (2) different planes; i.e. one (1) on the bottom and one (1) on the vertical wall, or one (1) each on two (2) separate vertical walls. These suction outlets shall be plumbed such that water is drawn through them simultaneously through a common line to the system. Each suction outlet fitting shall be rated for the maximum system flow.

**R326.5.3.2 Channel Drain System.** One or more channel gates shall be acceptable as protection against suction entrapment if they are 3 inches or greater in width and 31 inches or greater in length and fastened to prevent removal as specified in ASME/ANSI A112.19.8M.

**R326.5.3.3 Gravity flow system.** A Gravity Flow system shall be acceptable as protection against suction entrapment if it has one or more submerged suction outlet(s) with approved cover/grates in any combination fed by gravity into a collection tank vented to atmosphere. However, a modulating float valve allowing direct suction is not permitted.

**R326.5.3.4 Combination Inlet/Outlet Fixtures for Swim Jets.** Combination Inlet/Outlet Fixtures shall be acceptable as protection against suction entrapment for a Swim Jet system not related to the filtration system, if they are manufactured and have their own dedicated pump(s), and the suction outlet and the return are located in a single fitting.

**R326.5.3.4 Venturi Debris Removal Systems.** Venturi Debris Removal Systems shall be acceptable as protection against suction entrapment if they are intended to remove debris through a single, floor mount suction outlet where low pressure is created by the entrainment of water with a deck mount canister that is not directly or indirectly connected to a pump's suction. The single suction outlet shall have an approved cover/gate.

**R326.6 Shallow Water Suction Outlets.** Where all suction fittings are located less than 24 inches below normal operating water level, one of the following shall be required:

1. gravity flow system
2. one (1) additional drain
3. vent system to atmosphere
4. suction vacuum release device tested and approved for the purpose by a nationally recognized testing laboratory in accordance with ASME A112.19.17.

**R326.7 Wall Vacuum Fittings.** Where provided, the vacuum cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches and no greater than 18 inches below the water level and shall comply with IAPMO SPS 4/ANSI/APSP-7.

## **SECTION R326.8 ABBREVIATIONS**

### **R326.8.1 General.**

ANSI. American National Standards Institute

11 West 42<sup>nd</sup> Street, New York, NY 10036

ASTM. American Society for Testing and Materials  
1916 Race Street, Philadelphia, PA 19103

NSPI. National Spa and Pool Institute  
2111 Eisenhower Avenue, Alexandria, VA 22314

UL – Underwriters Laboratories, Inc.  
333 Pfingsten Road  
Northbrook, Illinois 60062-2096

## **SECTION 326.9 STANDARDS**

### **R326.9.1 General.**

#### **ANSI/NSPI**

ANSI/NSPI-3-99 Standard for Permanently Installed  
Residential Spas

ANSI/NSPI-4-99 Standard for Above-ground/On-ground  
Residential Swimming Pools

**ANSI/NSPI-5-99 Standard for Residential In-ground**  
Swimming Pools

ANSI/NSPI-5-2003 Standard for Residential  
Portable Spas

ANSI/ASME A112.19.8M-1987 Suction  
Fittings for Use in Swimming Pools,  
Wading Pools, Spas, Hot Tubs and  
Whirlpool Bathing Appliances

#### **ASTM**

ASTM F 1346-91 (1996) Performance Specification  
For Safety Covers and Labeling Requirements for  
All Covers for Swimming Pools, Spas and  
Hot Tubs

#### **ASME**

ASME A112.19.17 Manufacturers Safety Vacuum  
Release Systems (SVRS) for Residential and  
Commercial Swimming Pool, Spa, Hot Tub and  
Wading Pools

#### **IAPMO**

AIPMO SPS-4-2009 Special Use Suction Fittings for Swimming pools, spas and hot tubs (for suction side  
automatic swimming pool cleaners)

## **SECTION R327 FIREPLACE RESTRICTIONS**

### **R327.1 Definitions**

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

**Fireplace:** 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.

**Solid fuel:** Includes, but is not limited to, wood, coal, or other non-gaseous 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.

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

### **R327.2 General**

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;
3. A fireplace, woodstove or other solid fuel burning appliance that 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;
4. A fireplace, wood stove or other solid fuel burning appliance which as 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 subparagraph 2, 3, or 4 above.

Exceptions: The following installations are not regulated and are not prohibited by this section:

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.

### **R327.3 Fireplace or wood stove alterations prohibited.**

Fireplaces constructed or installed on or after January 1, 2017 that contain a gas or electric log insert or a woodstove insert, shall not be altered to directly burn wood or any other solid fuel. On or after January 1, 2017, 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 section.

Fireplaces constructed or installed on or after January 1, 2017, shall not be altered without first obtaining a permit from the City to ensure compliance with this section.

## **SECTION R 327 SOUND ATTENUATION**

**R327.1 Sound Attenuation.** Buildings shall be subject to the following provisions:

1. Buildings shall be designed for a maximum interior noise level of 45 decibels.
2. Exterior wall penetrations by pipe ducts or conduits shall be caulked.
3. Mailboxes shall not be used through the door or wall.
4. Windows shall have two panes of glass and sound transmission rating of STC-22. All operable windows shall be weather stripped and airtight in accordance with ASTM R-283-84-T Standard. Perimeter window frames shall be sealed to airtight specifications.
5. All non-glazed portions of exterior side-hinged doors shall be solid-core wood or insulated hollow metal or at least one and three-quarters inch thick and fully weather stripped. The perimeter doorframes shall be sealed to airtight specifications.
6. Fireplaces shall be provided with well fitting dampers, unless otherwise prohibited elsewhere in the Code.
7. Exterior walls shall be at least four inches in nominal depth and shall be finished on the outside with block, siding, sheathing, or stucco on one-inch Styrofoam. R-19 fiberglass or cellulose insulation shall be installed continuously throughout the cavity space behind the wall. Total insulation R-value of the exterior wall assembly shall be R-18.
8. Attics and roof rafter spaces shall be insulated with a minimum insulation R-value of at least R-30.

If the specified requirements of section R327 are not met, the Building Official may approve as an alternative, a certification by an architect or engineer registered pursuant to Title 32, Chapter 1 to achieve a maximum interior noise level of forty-five (45) decibels at time of final construction.

(4) Chapter 4, "Foundations," is hereby amended as follows:

## **SECTION R401.1 FOUNDATIONS**

**R401.1 Application.** The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundation in flood hazard areas ~~as established by table R301.2.(1) shall meet the provisions of section R322~~ shall be in accordance with the Peoria City Code. Wood foundations shall be designed and installed in accordance with AWC PWF.

**R401.3 Drainage.** ~~All lot drainage shall comply with the requirements of the Peoria City Code. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection that does not create a hazard. Lots shall be graded to drain surface water away from foundation walls. The grade shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm).~~

**Exception:** Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building.

**R403.1.1 Minimum size.** The minimum width, W, and thickness, T, for concrete footings shall be in accordance with Tables R403.1(1) through R403.1(3) and Figure R403.1(1 or R403.1.3, as applicable. The footing width shall be based on the load-bearing value of the soil in accordance with Table R401.4.1. Footing projections, P, shall be not less than 2 inches (51 mm) and shall not exceed the thickness of the footing. Footing thickness and projection for fireplaces shall be in accordance with Section R1001.2. The size of footings supporting piers and columns shall be based on the tributary load and allowable soil pressure in accordance with Table R401.4.1 Footings for wood foundations shall be in accordance with the details set forth in Section R403.2, and Figures R403.1(2) and R403.1(3).

Exception: For enclosure of existing carport and patio covers, non-bearing wood framed exterior walls within the projection of the existing roof may be supported on an existing, uncracked concrete slab. The minimum slab thickness shall be 3.5 inches and the construction shall comply with the requirements of R317 for protection against decay.

(5) Chapter 5, "Floors," is hereby amended as follows:

### **Section 502.3.1**

#### **R502.3.1 Sleeping areas and attic joists.**

Table R502.3.1(42) shall be used to determine the maximum allowable span of floor joists that support sleeping areas and *attics* that are accessed by means of a fixed stairway in accordance with Section R311.7 provided that the design live load does not exceed ~~30~~ 40 pounds per square foot (~~1.44~~1.92 k Pa) and the design dead load does not exceed 20 pounds per square foot (0.96 kPa). The allowable span of ceiling joists that support *attics* used for limited storage or no storage shall be determined in accordance with Section R802.4.

(6) Chapter 6, "Wall Construction," is hereby amended as follows:

Amend Table R602.3(1) as follows:

Braced Wall Spacing b (feet)    Method LIB~~b~~

(7) Chapter 11, "Energy Efficiency," is hereby amended as follows:

Section N1101.15

**N1101.15 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 N1102.4.1.1, N1102.4.1.2 and N1103.3.2, 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. N1102.4.1.1 – Building Envelope – Thermal and Air Barrier Checklist
  - b. N1102.4.1.2 – Testing – Air Leakage Rate
  - c. N1103.3.2 – Sealing – Duct Tightness
4. The other requirements identified as "mandatory" in Chapter 11 shall be met.
5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Code Official.

**N1103.3.1 (R403.3.1) Insulation (Prescriptive).** Supply and return ducts in attics shall be insulated to a minimum of R-8 where 3 inches (76.2 mm) in diameter and greater and R-6 where less than 3 inches (76.2 mm) in diameter. Supply and return ducts in other portions of the building shall be insulated to a minimum of R-6 where 3 inches (76.2 mm) in diameter or greater and R-4.2 where less than 3 inches (76.2 mm) in diameter.

**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 and return 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 16
  - 2.2. Maximum U-factor is decreased to 0.30 for all fenestration products
  - 2.3. Wall cavity insulation minimum R-value is increased to R-19.
  - 2.4. Residential buildings that meet section R102.1.1 or R405 of the 2015 International Energy Conservation Code.

**TABLE N1106.4 (R406.4)  
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
1	52
2	<del>52</del> 59 <sup>1</sup>
3	51
4	54
5	55
6	54
7	53
8	53

<sup>1</sup> Energy generated from on-site renewable energy shall not be included in the calculation of the Energy Rating Index value.

(8) Chapter 13, “General Mechanical System Requirements”, is hereby amended as follows:

**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.

(9) Chapter 24, “Fuel Gas”, is hereby amended to read as follows:

**G2406.2 (303.3) Prohibited Locations.** Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

Add exception number 6 to read 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 (404.12) Minimum Burial depth.** Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade, except as provided for in Section G2415.12.2. Underground non-metallic piping systems shall be installed a minimum depth of 18 inches (457mm) below grade.

~~**G2415.12.1 (404.12.1) Individual outside appliances.** Individual lines to outdoor lights, grills, or other appliances shall be installed not less than 8 inches (203 mm) below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.~~

(10) Chapter 39, “Power and Lighting Distribution”, is hereby amended to read as follows:

**E3908.8 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) Electrical 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 metallic 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.

(11) Appendix J, "Existing Buildings and Structures", is hereby amended to read as follows:

**AJ102.1 General.** Regardless of the category of work being performed, the work shall not cause the structure to become unsafe or adversely affect the performance of the building; shall not cause an existing **electrical**, mechanical or plumbing system to become unsafe, hazardous, insanitary or overloaded; and unless expressly permitted by these provisions, shall not make the building any less conforming to this code or to any previously approved alternative arrangements than it was before the work was undertaken.

**AJ102.1.1 Historic Buildings.** The provisions of this code relating to the construction, repair, alteration, addition, restoration and movement of structures, and change of occupancy shall not be mandatory for historic buildings where such buildings are judged by the building official to not constitute a distinct life safety issue. Historic Buildings include any building or structure that is listed or preliminarily determined to be eligible for listing in the National Register of Historic Places; or determined by the Secretary of the U.S. Department of Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined to qualify as an historic district; or designated as historic under a state or local historic preservation program that is approved by the Department of Interior.

**AJ401.2 Door and window dimensions.** Minor reductions in the clear opening dimensions of replacement doors and windows that result from the use of different materials shall be allowed, whether or not they are permitted by this code.

**Exception:** Emergency escape and rescue openings.

If existing clear opening dimensions exceed the light and ventilation requirements of section R303 and for emergency escape and rescue openings in Section 301, the reduction in dimensions shall not make the windows non-compliant with these sections.

**AJ501.5.2 Electrical service replacement or upgrade.** Service to the one-family dwelling unit shall be a minimum of 100 amperes, three-wire capacity and service equipment shall be dead front having no live parts exposed whereby accidental contact could be made. ~~Type “S” fuses shall be installed when fused equipment is used.~~

**Exception:** Existing service of 60 amperes, three-wire capacity, and feeders of 30 ampere or larger two or three-wire capacity shall be accepted if adequate for the electrical load being served.