



**Town of FOUNTAIN HILLS  
Building Safety Department  
Swimming pool plan review / Inspection Checklist  
(Based upon the 2006 edition of the International  
Residential Code Appendix G)**

5/15/08

PLAN CHECK NUMBER	ADDRESS	DATE
Reviewed by: Jason Field Plans Examiner	(480) 816-5127	E-Mail: <a href="mailto:JField@fh.az.gov">JField@fh.az.gov</a>

**INSTRUCTIONS:**

- Conditional approval.** Plans are approved, subject to the items checked on this checklist. This checklist is an integral part of the approved plans. All items contained on the list are minimum code requirements and must be complied with if your construction is to receive inspection approvals. The items that are circled are those that are found to be especially applicable to your plans. Items may also be circled to remind you of an important code requirement. Every effort has been made to note all necessary corrections during our plan review. However, it is ultimately the responsibility of the builder to perform the construction according to the minimum code requirements, regardless of whether or not items are circled. Approval of the plans does not permit the violation of any part of the Town of Fountain Hills Code.
- Resubmittal Required.** Plans must be revised and resubmitted for review. Please note the items marked on this list and/or noted on the plans for required revisions or for the submittal of additional information

We encourage questions at any time. The person in Building Safety who reviewed your plans is noted above and you may contact him to discuss the plan review comments.

**Inspection Notes:**

The approved plans, along with this list, must be available to the building inspector on the site at the time when inspections are performed. Failure to have the plans, stamped "approved," on site at the time of inspection may result in the following:

- No inspection being performed or approved;
- A re-inspection fee for the amount of \$150.00 paid at the Building Safety office prior to scheduling a follow up inspection
- Unnecessary delays to your construction.

**PLAN REVIEW COMMENTS:** The following items briefly summarize the minimum code requirements of the International Residential Code (IRC). For detailed requirements, and, in some cases, exceptions, to the code requirements listed below, please refer to the code sections that are cited in the right hand column.

**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.

**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 shall include any body of water 18 inches deep or more than 8 feet across. 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.

Administration & General Submittal Requirements			
1.		<b>Catalog Cut Sheets.</b> Provide catalog cut sheets for drain covers, SVRS, pumps, and heaters at time of plan submittal. The sheets shall indicate all listing information such as: 1. Certified testing agency (UL, ASME, ANSI, and NSPI ETC.)	
2.		<b>Suction Vacuum Release Systems. (SVRS).</b> Provide type and location of SVRS (above or below) water level.	
3.		<b>Anti-Vortex systems.</b> Vortex covers are prohibited.	
4.		<b>Inspections.</b> There will be a minimum of three inspections required. 1. Pre Gunitite 2. Pre Plaster 3. Final. The pool contractor shall be on site to assist with the final testing of the entire SVRS system.	

Swimming Pools			
4.		<b>In-ground pools.</b> In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG108.	<b>AG103.1</b>
5.		<b>Above-ground and on-ground pools.</b> Aboveground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG108	<b>AG103.2</b>
Spas and Hot Tubs			
6.		<b>Permanently installed spas and hot tubs.</b> Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG108	<b>AG104.1</b>
7.		<b>Portable spas and hot tubs.</b> Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/SPI-6 as listed in Section AG108.	<b>AG104.2</b>
Barrier Requirements			
8.		<b>Application.</b> The provisions of this chapter 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.	<b>AG105.1</b>
9.		<p><b>Outdoor swimming pools, Spas, and Stand alone Hot Tubs.</b> An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a barrier which shall comply with the following:</p> <ol style="list-style-type: none"> <li>1. <u>The top of the barrier shall be at least 60 inches (1530 mm) above grade measured on the side of the barrier that faces away from the swimming pool, and shall not exceed 72 inches (1836mm) maximum height, except as permitted by zoning code.</u> 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).</li> <li>2. Openings in the barrier shall not allow passage of a 4-inch diameter (102 mm) sphere.</li> <li>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.</li> </ol>	<b>AG105.2</b>

4. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 54 inches, 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 54 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. 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).

6. 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).

7. 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 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 (13 mm) within 18 inches (457 mm) of the release mechanism.

8. Where a wall of a dwelling serves as part of the barrier, one of the following conditions shall be met: In addition to selecting items 9.1, 9.2 or 9.3 of AG105.9 below, the following provision shall be included: Emergency escape or rescue windows from sleeping rooms with access to the swimming pool or body of water shall be equipped with a latching device not less than 54 inches (1372 mm) above the floor. All other openable dwelling unit or guest room windows with similar access shall be equipped with a screwed in place wire mesh screen or a key lock that prevents opening the window more than 4 inches (102mm) or a latching device located not less than 54 inches (1372 mm) above the floor.

except: when item 9.4 is selected as the barrier between the interior of the dwelling and the pool or body of water, then items 9.1 or 9.2 or 9.3 within section AG105.2.9 will be considered satisfied.

**9.1.** The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or

**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 in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

**9.3.** Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.

**9.4** Installation of a 54 inch high pool fence that completely separates the pool from the inside of the house and complies with gate, latch and spacing requirements found within section AG105.

**9.5** 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 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.

## Entrapment Protection for Swimming Pools and Spas

<b>10.</b>		<p><b>General.</b> Suction outlets shall be designed to produce circulation throughout the pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, or multiple suction outlets, whether isolated by valves or otherwise, shall be protected against user entrapment.</p>	<b>AG106.1</b>
<b>11.</b>		<p><b>Suction fittings.</b> Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8M, or an 18 inch×23 inch (457mm by 584 mm) drain grate or larger, or an approved channel drain system.</p> <p><b>Exception:</b> Surface skimmers</p>	<b>AG106.2</b>
<b>12.</b>		<p><b>Atmospheric vacuum relief system required.</b> Pool and spa single- or multiple-outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. This vacuum relief system shall include at least one approved or engineered method of the type specified herein, as follows:</p> <ol style="list-style-type: none"> <li>1. Safety vacuum release system conforming to ASME A112.19.17; or</li> <li>2. An approved gravity drainage system.</li> </ol>	<b>AG106.3</b>
<b>13.</b>		<p><b>Dual drain separation.</b> Single or multiple pump circulation systems have a minimum of two suction outlets of the approved type. A minimum horizontal or vertical distance of 3 feet (914 mm) shall separate the outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum-relief-protected line to the pump or pumps</p>	<b>AG106.4</b>
<b>14.</b>		<p><b>Pool cleaner fittings.</b> Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least 6 inches (152 mm) and not more than 12 inches (305 mm) below the minimum operational water level or as an attachment to the skimmer(s).</p>	<b>AG106.5</b>
<b>15.</b>		<p><b>SVRS Devices.</b> Shall be located on the main drain line within 5 ft of each pump. A quick acting valve shall be installed to simulate a vacuum.</p>	

