

REQUIREMENTS FOR POOL & SPA BARRIERS

FOR NEW POOL OR SPA OWNERS

The City of Yuma has adopted very specific code requirements for pool and spa barriers. The main idea of these requirements is to prevent unauthorized access to the pool by young children, whether they are inside your home or outside of your yard. Although your contract with your pool contractor may include these fences and/or alarms, this information should answer most questions in the event you do the work yourself.

Requirement for all pools/spas:	Minimum 60" tall fence to separate the pool/spa area from the outside of your property / or listed safety cover for your spa
Requirement for all pools/spas:	Minimum 48" tall fence to separate the pool/spa area from any door giving access from within the home
	OR
	Installation of approved alarms at all doors with direct
	access to the pool or spa or approved listed safety cover

Fencing requirements:

While many different materials can be used, there are specific requirements that must be incorporated into the design of your barrier. If the fencing or gates are constructed of vertical members, as in wrought iron fencing, the clear space between the vertical bars can be 4 inches maximum if there are no horizontal members closer than 45 inches apart. If horizontal spacing is less than that, the clear space between vertical members must be reduced to 1 ¾ inches maximum. The reason for this is to prevent a foothold on the outside of the barrier, which creates a ladder effect. Also, any decorative design work on the outside of the fencing which would promote climbing is prohibited. If you have an existing gate that does not meet these provisions, an option is to cover the outside of the barrier with a material such as outdoor-rated siding or an expanded metal mesh. This would eliminate the need for a new gate.

All fencing and gates are required to have a minimum 12 inch wide surface such as a concrete deck or sidewalk within 4 inches of the bottom of the barrier. This requirement can be met by pouring a new ribbon of concrete below the barrier if no solid surface exists at the base. If, for instance, you wish to place a wrought iron fence in concrete post footings on the outside of the new cool decking, keep the bottom horizontal member of the fence within 4 inches horizontally of the edge of the concrete. The idea here is to prevent small children from easily digging under the barrier or being able to squeeze between the fencing and the edge of the cool decking.

Any drive-through gate in your barrier can hinge in either direction and must be self-latching with provisions to be locked in the closed position. All walk gates must hinge outward away from the pool and be self-latching **and** self-closing. The release of any self-latching device needs to be a minimum of 54 inches above the walking surface at the gate.

Alarm requirements (if applicable):

Any alarm and the de-activation button used must be securely attached with screws or nails. Two-sided tapes and glues are not permitted for mounting the devices. Any key of switch-operated alarms that indefinitely disable the devices are prohibited. The alarm would have to sound within 7 seconds of the door opening and should sound continuously for at least 30 seconds, even if the door were to be closed again. A manual means of temporarily deactivating the alarm for no more than 15 seconds, such as a pushbutton, is also required. The device would have to automatically reset under all conditions. This button would need to be mounted a minimum of 54 inches above the floor.

An area that is often overlooked is a walk-through door that allows access directly from the interior of your garage to the pool area. This door would also require the use of an approved door alarm or an additional barrier to isolate it from the pool area.

In the event you have any questions during the construction process, please call the City of Yuma Building Safety Division at 373-5163, Monday through Friday, 7:00 a.m to 5:00 p.m. Because the building inspectors are out of the office a good part of each day, your questions may be answered by an available plans examiner, or you can ask to leave a message for a particular building inspector, possibly the one who has been to your site and is familiar with your project. Most calls will be returned the same day, but not later than the following day.

We look forward to providing any information you may need during the days ahead, as you count down to that first splash!

Location

Pool must be five (5) feet from property lines.

Pool cannot be in front yard.

Yuma Code of Ordinances

Title 15: Land Usage / Chapter 154: Zoning / General Provisions / § 154-007 Projections, Encroachments, and Swimming Pools

- (E) Swimming pools. All swimming pools (municipal, commercial or private) shall be subject to the following criteria:
- (1) All swimming pools shall be enclosed by a fence or wall which has a minimum height of five feet measured from the exterior of the fence. Said fence or wall shall have no openings greater than six inches in any dimension. All gates in said fence or wall shall be of a self-closing and self-latching type.
- (2) All swimming pools shall comply with the minimum front yard setbacks of the applicable zoning district. All swimming pools shall be set back five feet from the side, rear, and street side property lines. The required five-foot wall may be located on the side, rear, or street wide property lines but shall not be located within the front yard setbacks. In all cases, the sight clearance and fence requirements shall be applicable.



Amendments to the 2003 International Residential Code for One- and Two-Family Dwellings

AMENDMENTS TO: APPENDIX G – SWIMMING POOLS, SPAS AND HOT TUBS

Section AG105.2 – Outdoor swimming pool. Amend by adding a paragraph 8.3 with revision to read, "Primary fences shall have a concrete ribbon or other approved material around its entire perimeter."

Section AG105.2 Outdoor swimming pool. Amend by adding a paragraph 9.4 to read, "Secondary barrier at 48 inches with latching mechanism at 54 inches and installed with opening standards in paragraphs 1 through 7."

APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

SECTION AG101 GENERAL

AG101.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- and two-family dwelling.

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 town-house 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 24 inches (610 mm) deep. This includes in-ground, aboveground and onground 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 walls of said 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 conformance with ANSI/NSPI-5 as listed in Section AG107.

AG103.2 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 AG107.

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 conformance with ANSI/NSPI-3 as listed in Section AG107.

AG104.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section AG107.

SECTION AG105 BARRIER REQUIREMENTS

AG105.1 Application. 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.

AG105.2 Outdoor swimming pool. 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 48 inches (1219 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 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).
- 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 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 horizon-tal members is less than 45 inches (1143 mm), the horizon-tal 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 horizon-tal 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 ver-tical 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 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).
- 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 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 greater than 0.5 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:
 - The pool shall be equipped with a powered safety cover in compliance with ASTM F1346; or
 - 9.2. All doors with direct access to the pool through that wall shall be equipped with an alarm which pro-duces an audible warning when the door and its screen, if present, are opened. The alarm shall sound continuously for a minimum of 30 seconds immediately after the door is opened and be capable of being heard throughout the house during normal house-hold activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touchpad or switch, to temporarily deactivate the alarm for a single opening. Such 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 ap-

- proved 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.
- 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, then:
 - 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.
- **AG105.3 Indoor swimming pool.** All walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.
- **AG105.4 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.
- **AG105.5 Barrier exceptions.** Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, 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 to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.
- AG106.2 Suction fittings. All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a $12'' \times 12''$ drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers

- AG106.3 Atmospheric vacuum relief system required. All 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. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:
 - Safety vacuum release system conforming to ASME A112.19.17, or
 - 2. An approved gravity drainage system
- AG106.4 Dual drain separation. Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such 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.

AG106.5 Pool cleaner fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

SECTION AG107 ABBREVIATIONS

AG107.1 General.

ANSI—American National Standards Institute 11 West 42nd 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

SECTION AG108 STANDARDS

AG108.1 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-6-99 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 Pool