



Requirements for Swimming Pool and Spa Alarms

Brief Summary of Requirements Swimming Pool and Spa Alarm:

Every swimming pool that is installed, constructed or substantially modified after December 14, 2006, must be equipped with an approved pool alarm which:

- is capable of detecting a person entering the water at any point on the surface of the pool and giving an audible alarm to provide detection capability at every point on the surface of a swimming pool, it may be necessary to install more than one pool alarm
- is audible poolside and at another location on the premises where the swimming pool is located
- is not an alarm device which is located on a person, or which is dependent on a device located on a person for its proper operation
- meets ASTM F2208

Pool alarms are not required in:

- a hot tub or spa equipped with a safety cover
- a swimming pool equipped with an automatic power safety cover

Barrier (Fence) Requirements for Outdoor Residential Swimming Pools

Brief Summary of Barrier Requirements for Outdoor Residential Swimming Pools:

- The barrier must completely surround the swimming pool and must obstruct access to the swimming pool.
- The barrier must be at least 4 feet (48 inches) high.
- In the case of an above-ground pool, the barrier may be at ground level or mounted on top of the pool structure; however, if the barrier is mounted on top of the pool structure, the space between the top of the pool structure and the bottom of the barrier cannot exceed 4 inches.
- A building wall can form part of the required barrier. However, where a wall of a dwelling serves as part of the barrier, at least one of the following requirements must be satisfied:
 - the pool must be equipped with a powered safety cover
 - all doors with direct access to the pool through that wall must be equipped with an alarm or other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body



In the case of an above-ground pool, the pool structure itself can serve as a part of the required barrier, provided that the pool structure is sufficiently rigid to obstruct access to the pool. However, 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, then:

- the ladder or steps shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier
- when the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter sphere.
- Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

Temporary Barriers

Brief Summary of Requirements for Temporary Barriers:

During the installation or construction of a swimming pool, the pool must be ENTIRELY enclosed by a temporary barrier. The temporary barrier may be a temporary fence, a permanent fence, the wall of a permanent structure, any other structure, or any combination of those. However, the temporary barrier must:

- be at least four (4) feet high
- prevent access to the swimming pool by any person not installing or constructing the pool
- remain in place until a permanent pool barrier is provided
- be replaced by a permanent pool barrier within either:
 - 90 days of the date of issuance of the building permit for the installation or construction of the swimming pool; or
 - 90 days of the date of commencement of the installation or construction of the swimming pool.

The code enforcement official may extend the time period to complete the permanent barrier for good cause, including, but not limited to, adverse weather conditions delaying construction.

There are some exceptions to the requirement for temporary pool barriers:

- Above-ground or on-ground pools where the pool structure itself serves as the barrier
- Spas or hot tubs with a safety cover, as long as the safety cover remains in place during the installation or construction
 - The safety cover can be removed temporarily for the installation or construction of the hot tub or spa if at least one person engaged in the installation or construction is present



Entrapment Protection for Residential Swimming Pool and Spa Suction Outlets

According to the Consumer Products Safety Commission, there are an average of 283 drowning deaths and 2,700 emergency room visits related to swimming pools and spas involving children under the age of five each year. One cause of drowning deaths and injuries is entrapment. Entrapment occurs when a person becomes caught in the strong suction in and around swimming pool and spa drains. In some instances, the suction force around drains is so strong that the bather cannot break free and either drowns or is fatally injured before being rescued.

Brief Summary of Requirements for Entrapment Protection for Residential Swimming Pool and Spa Suction Outlets:

- Suction outlets must 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 must be protected against user entrapment
- **Suction Fittings:** All pool and spa suction outlets (except surface skimmers) must be provided with:
 - a cover that conforms with reference standard ANSI/ASME A112.19.8 *Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs, and Whirlpool Bathtub Appliances*, or
 - a drain grate that is 18 inches x 23 inches or larger, or
 - an approved channel drain system
- **Atmospheric vacuum relief system required:** All pool and spa single- or multiple-outlet circulation systems must be equipped with atmospheric vacuum relief should grate covers located in the pool become missing or broken
- The vacuum relief system needs to include at least one of the following two approved or engineered methods:
 1. Safety vacuum release system conforming to ASME A112.19.17; or
 2. An approved gravity drainage system
- **Dual drain separation:** Single or multiple pump circulation systems must have:
 - at least two of the approved type of suction outlets, and
 - a minimum horizontal or vertical distance of 3 feet between the outlets, and
 - the suction outlets piped so that water is drawn through them simultaneously through a vacuum-relief-protected line to the pump or pumps
- **Pool cleaner fittings:** Where provided, vacuum or pressure cleaner fittings shall be located in accessible positions at least 6 inches and not more than 12 inches below the minimum operational water level, or
- as an attachment to the skimmers