



TOWN OF OSSINING BUILDING DEPARTMENT

914-762-8419

101 ROUTE 9A, P.O. Box 1166
OSSINING, N. Y. 10562

Swimming Pool Q&A

Do I Need A Building Permit To Install A Temporary Or Permanent Swimming Pool?

Yes. A Building Permit is needed if a swimming pool exceeds 24" in depth, *even if it is a temporary, portable unit that you put up and take down each year.* This includes above and in-ground pools, hot tubs, spas, and fixed in place wading pools.

What Information Do I Need To Obtain A Building Permit?

- Completed Building Permit application
- Copy of your property survey showing the location of the proposed pool (may not be closer than 10' to your property line and may only be in the rear or side yard)
- Manufacturers specifications and drawings for the pool
- A copy of the Declarations Page of your homeowner's insurance policy showing you have Liability coverage on the property
- Copy of your General Contractor's *Westchester County Home Improvement Contractors'* License along with a copy of his Workman's Compensation Insurance policy
- Name of your Westchester County licensed Electrician (this can also be supplied after permit is issued and before electrical work begins). Your Electrician must file for a separate permit with this office before electrical work commences.
- Code 53 number if required (for underground digging – Tel #1-800-962-7962)
- Building Permit fee

Do I Need To Install A Fence or Barrier (Enclosure) Around the Pool?

Yes. Pools greater than 24" and less than 48" in height require an enclosure. Enclosures must be 48" above grade measured on the side of the enclosure that faces away from the pool. The maximum gap from the enclosure to the ground cannot be greater than 2", and if you put the enclosure on top of the pool the bottom of the enclosure cannot be greater than 4" from the top of the pool. Openings (spaces between pickets e.g.) cannot allow the passage of a 4" diameter sphere. Chain link fences used as an enclosure require a maximum mesh size of 2.25" squares.

Gates installed in the enclosure need a self closing and self-latching system and must open outward (away) from the pool. If the self-latching device is located less than 54" from the bottom of the fence it must be installed on the pool side of the gate at least 3" below the top of the gate, and there can be no openings (slats etc.) greater than ½" within 18" of the latching device.

Can I Use A Wall of My House As Part of the Enclosure?

Yes, but, if you use the house as one part of the fence or enclosure the following applies:

- Doors that provide direct access to the pool through that wall must be equipped with an alarm that produces an audible warning when the door and its screen are opened. The alarm must sound for a minimum of 30 seconds immediately after the door is opened and must be capable of being heard in all parts of the house during normal household activities. The alarm must have a manual deactivation switch to temporarily deactivate the alarm for a single opening and the deactivation cannot last longer than 15 seconds. The deactivation switch must be at least 54" above the threshold of the door.
- The pool must be equipped with a power safety cover.

The above conditions may be waived if other satisfactory means of protection are used that satisfy the intent of the Building Code.

Do I Need To Install A Fence or Barrier (Enclosure) Around the Pool During Construction?

Yes. During the installation or construction of a swimming pool, such swimming pool shall be enclosed by a temporary enclosure which shall sufficiently prevent any access to the swimming pool by any person not engaged in the installation or construction of the swimming pool, and sufficiently provide for the safety of any such person. Such temporary enclosure may consist of a temporary fence, a permanent fence, the wall of a permanent structure, any other structure, or any combination of the foregoing, provided all portions of the temporary enclosure shall be not less than four (4) feet high, and provided further that all components of the temporary enclosure shall have been approved as sufficiently preventing access to the swimming pool by any person not engaged in the installation or construction of the swimming pool, and as sufficiently providing for the safety of all such persons. Such temporary enclosure shall remain in place throughout the period of installation or construction of the swimming pool, and thereafter until the installation or construction of a complying permanent enclosure shall have been completed. NOTE: You have ninety days from the date of the building permit being issued to install the permanent enclosure, **whether or not the pool itself is completed.**

What About Pool Ladders?

Pool ladders or steps must be locked or secured to prevent access. When the ladder or steps are locked, secured, or removed, any opening created shall not allow the passage of a 4" diameter sphere.

What About Alarms For The Pool?

All new swimming pools must have a pool alarm that sounds an alarm poolside and at another location on the premises where the swimming pool is located. It must be capable of detecting a child entering the water and give an audible alarm when it detects a child entering the water. The alarm must be installed and maintained per the manufacturer's instructions and is classified by Underwriters Laboratory or another approved independent testing agency.

Note: The above rules are subject to change. Please contact our office for additional information as needed.



**TOWN OF OSSINING
BUILDING & PLANNING DEPARTMENT**

101 ROUTE 9A, P.O. Box 1166

OSSINING, N. Y. 10562

PHONE: (914) 762-8419 FAX: (914) 290-4656

www.townofossining.com bldgdept@townofossining.com

SWIMMING POOLS

BUILDING PERMIT NO. _____

Location _____

I hereby acknowledge and understand that prior to filling the proposed swimming pool with water, an enclosure is to be installed and constructed according to the New York State Building and Fire Code requirements. I also understand that once the pool is filled with water, a pool alarm will be installed according to the New York State Building and Fire Code.

Failure to comply with the New York State Building and Fire Code requirements can result in a court appearance ticket with a maximum fine of \$1,000 per day.

Signature Applicant/Owner

Date

5/27/2021



TOWN OF OSSINING
BUILDING DEPARTMENT
OSSINING OPERATIONS CENTER
101 ROUTE 9A, P.O. Box 1166
OSSINING, N. Y. 10562
(914) 762-8419 FAX ~~(914) 944-0195~~

1228.2. Swimming pool alarms.

(a) **Purpose.** This section is intended to implement the provisions of paragraphs (b) and (c) of subdivision (14) of section 378 of the Executive Law.

(b) **Definitions.** For the purposes of this section, the following words and terms shall have the following meanings:

(1) The word “**approved**” means approved by the code enforcement official responsible for enforcement and administration of the Uniform Code as complying with and satisfying the purposes of this section.

(2) The term “**commercial swimming pool**” means any swimming pool (as defined in paragraph (4) of this subdivision) that is not a residential swimming pool (as defined in paragraph (3) of this subdivision).

(3) The term “**residential swimming pool**” means a swimming pool (as defined in paragraph (4) of this subdivision) which is situated on the premises of a detached one- or two-family dwelling; a multiple single-family dwelling (townhouse) not more than three stories in height; a one-family dwelling converted to a bed and breakfast; a community residence for 14 or fewer mentally disabled persons, operated by or subject to licensure by the Office of Mental Health or the Office of Mental Retardation and Developmental Disabilities; a one-or two-family dwelling operated for the purpose of providing care to more than two but not more than eight hospice patients, created pursuant to Article 40 of the Public Health Law, and defined as a hospice residence in §4002 of said Law; a manufactured home; a mobile home; or a factory manufactured dwelling unit.

(4) The term “**swimming pool**” means any structure intended for swimming, recreational bathing or wading which contains or which is designed to contain water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground pools; indoor pools; hot tubs; spas; and fixed-in-place wading pools.

(5) The term “**substantial damage**” means damage of any origin sustained by a swimming pool whereby the cost of restoring the swimming pool to its before damaged condition would equal or exceed 50 percent of the market value of the swimming pool before the damage occurred.

(6) The term “**substantial modification**” means any repair reconstruction, rehabilitation, addition, or improvement of a swimming pool, the cost of which equals or exceeds 50 percent of the market value of the swimming pool before the repair, rehabilitation, addition, or improvement is started. If a swimming pool has sustained substantial damage, any repairs are considered to be a substantial modification regardless of the actual repair work performed.

(c) **Pool alarms.** Except as otherwise provided in subdivision (e) of this section, each residential swimming pool installed, constructed or substantially modified after December 14, 2006 and each commercial swimming pool installed, constructed or substantially modified after December 14, 2006 shall be equipped with an approved pool alarm which:

(1) is capable of detecting a child entering the water and giving an audible alarm when it detects a child entering the water;

(2) is audible poolside and at another location on the premises where the swimming pool is located;

(3) is installed, used and maintained in accordance with the manufacturer's instructions;

(4) is classified by Underwriters Laboratory, Inc. (or other approved independent testing laboratory) to:

(i) reference standard ASTM F2208, entitled "Standard Specification for Pool Alarms," as adopted in 2002 and editorially corrected in June 2005, published by ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, or

(ii) reference standard ASTM F2208, entitled "Standard Specification for Pool Alarms," as adopted in 2007, published by ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428; and

(5) is not an alarm device which is located on person(s) or which is dependent on device(s) located on person(s) for its proper operation.

(d) Multiple pool alarms. A pool alarm installed pursuant to subdivision (c) of this section must be capable of detecting entry into the water at any point on the surface of the swimming pool. If necessary to provide detection capability at every point on the surface of the swimming pool, more than one pool alarm shall be installed.

(e) Exemptions.

(1) A hot tub or spa equipped with a safety cover classified by Underwriters Laboratory, Inc. (or other approved independent testing laboratory) to reference standard ASTM F1346 (2003), entitled "Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs," published by ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, shall be exempt from the requirements of subdivisions (c) and (d) of this section.

(2) Any swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover classified by Underwriters Laboratory, Inc. (or other approved independent testing laboratory) to reference standard ASTM F1346 (2003), entitled "Standard Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs," published by ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428, shall be exempt from the requirements of subdivisions (c) and (d) of this section.



Code Outreach Program – Swimming Pools for Buildings Governed by the 2015 International Residential Code

The swimming pool season is fast approaching. This edition of the Code Outreach Program focuses on some of the frequently asked questions related to swimming pools, spas, and hot tubs for buildings governed by the 2015 International Residential Code.

Section R326 of the [2015 International Residential Code](#) (2015 IRC) is amended in its entirety by Chapter 2, Item 2.24, Section R326 of the [2017 Uniform Code Supplement](#), by providing New York State specific requirements for new swimming pools, spas, and hot tubs. Section 303 of the [2015 International Property Maintenance Code](#) (2015 IPMC) is amended by the addition of new Sections 303.3 through 303.8 by Chapter 8, Item 8.6 of the 2017 Uniform Code Supplement for existing swimming pools, spas, and hot tubs. Below are some frequently asked questions pertaining to these code sections:

Can a safety cover be substituted for the requirements of R326.5 “Barrier Requirements”?

A safety cover that complies with ASTM F 1346 can be substituted for a permanent barrier for spas and hot tubs only, not swimming pools (R326.5.6). A powered safety cover that complies with ASTM F 1346 can substitute the requirement for an alarm and/or a self-closing device on a door that has direct access to a pool, in situations where the dwelling serves as part of the barrier (R326.5.3 (9)). Lastly, an automatic power safety cover on a swimming pool or, a safety cover on a spa or hot tub can be substituted for the requirements of a pool alarm, if such cover complies with ASTM F1346 (R326.7.1).

Can a neighbor’s fence be used as part of the barrier for a swimming pool?

The owner of the pool is responsible for maintaining a barrier in compliance with Section 303 of the 2015 IPMC, as modified by the 2017 Uniform Code Supplement. An owner can use a portion of a neighbor’s fence as a barrier, provided the entire fence is installed and maintained in accordance with the barrier requirements of the code. However, should the neighbor’s fence become noncompliant, the pool owner is still required to maintain a code-compliant barrier by installing a new fence or by providing another form of a compliant barrier.

If I drain my swimming pool, do I still need to maintain a barrier around it?

A swimming pool is defined in Section R326.2 of the 2015 IRC as amended by the 2017 Uniform Code Supplement as *“Any structure, basin, chamber or tank which is intended for swimming, diving, recreational bathing or wading and which contains, is designed to contain, or is capable of containing water more than 24 inches (610 mm) deep at any point. This includes in-ground, above-ground and on-ground pools; indoor pools; hot tubs; spas; and, fixed-in-place wading pools.”* Draining a pool in and of itself does not remove it from the definition and therefore, would still require a barrier to be maintained.

When do I need to install a barrier around my new pool?

An outdoor swimming pool, including an in-ground, above-ground, or on-ground pool, hot tub, or spa, shall be surrounded by a temporary barrier during installation or construction, which shall remain in place until a permanent barrier in compliance with Section R326.5.3 is provided. The temporary barrier shall be replaced within 90 days of either of the following: the date of issuance of the building permit for the installation or construction of the swimming pool, or, commencement of the installation or construction of the swimming pool. The CEO may extend this time frame for good cause, including, but not limited to, adverse weather conditions which delay construction (R326.5.2).

DBSC is preparing updates to the swimming pool information provided on it’s website. The Division anticipates that the update will be completed by the end of May 2018.

Please look for our next edition of the Code Outreach Program at the beginning of next month.

DBSC - A Division of Department of State
OFPC – An Office of the Division of Homeland Security & Emergency Services

If you have questions pertaining to the Code Outreach Program, email us at COP.codes@dos.nv.gov

If you have questions pertaining to the Uniform Code or Energy Code, email our technical support group at: codes@dos.nv.gov.

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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 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 24 inches (610 mm) deep. This includes in-ground, aboveground 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 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).
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 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 (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

N
Y
N
Y
N
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N

- 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 1.25-inch (32 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 securely locked with a key, combination or other child-proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised. 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:
- 9.1. 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 produces 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 household 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 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.
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
ABBREVIATIONS**

AG106.1 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 AG107
STANDARDS**

AG107.1 General.

ANSI/NSPI

ANSI/NSPI-3 Standard for Permanently Installed
Residential Spas AG104.1

ANSI/NSPI-4 Standard for Above-ground/On-ground
Residential Swimming Pools AG103.2

ANSI/NSPI-5 Standard for Residential In-ground
Swimming Pools AG103.1

ANSI/NSPI-6 Standard for Residential
Portable Spas AG104.2

ASTM

ASTM F 1346-91 Standard Performance Specifications
for Safety Covers and Labeling Requirements for
All Covers for Swimming Pools, Spas and
Hot Tubs AG105.2, AG105.5



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