

SWIMMING POOL BARRIER REQUIREMENT

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, above-ground or on ground pool, hot tub or spa shall be surrounded by 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 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).
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 1³/₄ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1³/₄ 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 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 1³/₄ inches (44 mm) in width.
6. **Maximum mesh size for chain link fences** shall be a 2¹/₄-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1³/₄ 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 1³/₄ 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 larger than 1/2 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 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 and *labeled* in accordance with UL2017. 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 as 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 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
11. 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. Walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

AG105.4 Prohibited locations. Barriers shall be located to prohibit permanent structures, *equipment* or similar objects from being used to climb them.

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.



Town of Goffstown

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Pool Fence Requirements

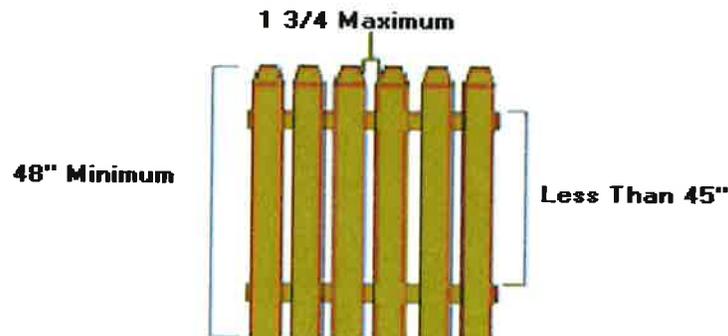
FOR IN-GROUND AND ABOVE GROUND SWIMMING POOLS WITH DECKS

Private swimming pools must be surrounded by a barrier, such as a fence or wall. The barrier must meet the following requirements.

- The top of the barrier shall be at least 48 inches above finished ground level measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between finished ground level and the bottom of the barrier shall be 2 inches measured on the side of the barrier, which faces away from the swimming pool.
- Solid barriers shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

Fences with horizontal rails less than 45" apart

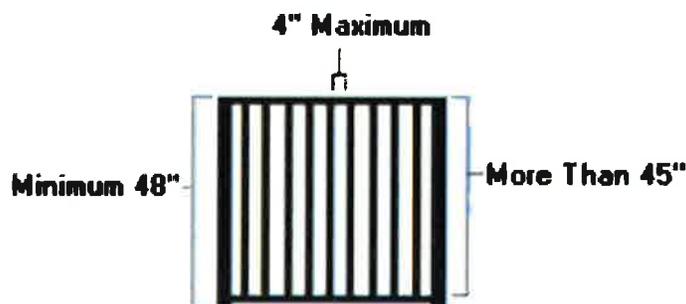
Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1- $\frac{3}{4}$ inches in width. Decorative cutouts shall not exceed 1- $\frac{3}{4}$ inches in width.



If horizontal planks are less than 45" apart the vertical spacing can not be more than 1 $\frac{3}{4}$ "

Fences with horizontal rails more than 45"aparts

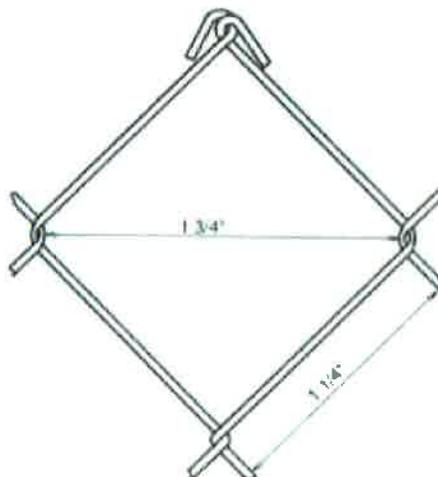
Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Decorative cutouts shall not exceed 1- $\frac{3}{4}$ inches in width.



If horizontal rails are more than 45" apart
the vertical spaces cannot be more than
4" apart

Chain link Fence Mesh Size Limit

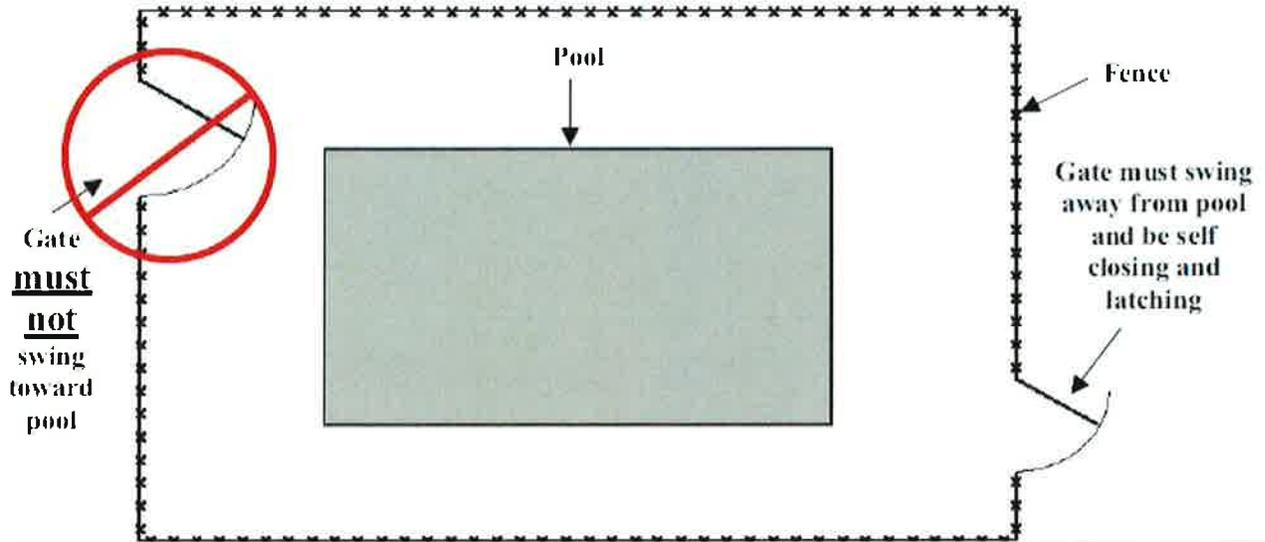
Maximum mesh size for chain link fences shall be a 1 $\frac{1}{4}$ -inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1 $\frac{3}{4}$ -inches. (Figure 3)



Important: The maximum mesh size for a pool fence is smaller than the standard chain link mesh

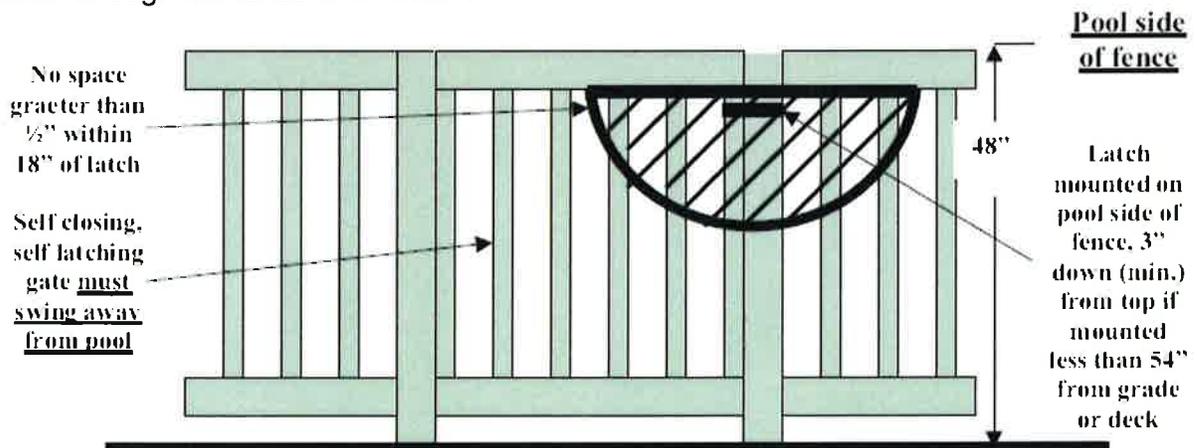
Gate Swing

Gates shall comply with the requirements of a fence for height, picket spacing or chain link mesh size and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outwards away from the pool and shall be self-closing and have a self-latching device. Gates must swing out only so that even if the gate is not completely latched, a young child pushing on the gate in order to enter the pool area will at least close the gate and may actually engage the latch.



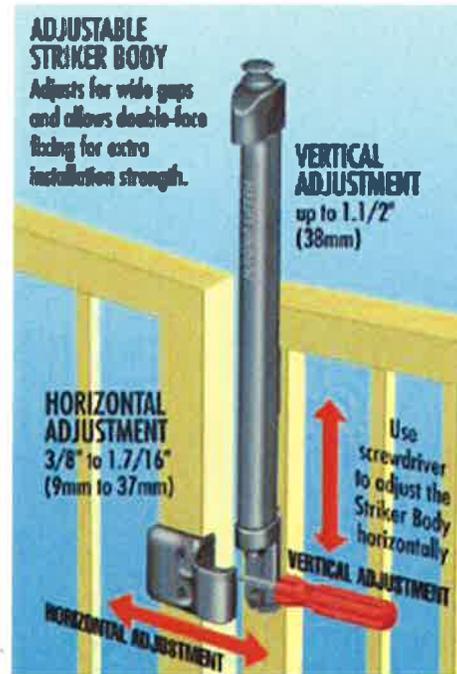
48" high gates with latches mounted less than 54" from the ground

If the latch is mounted less than 54" from grade, it must be mounted on the pool side of the gate, a minimum of 3" down from the top of the gate so you must reach over the fence to unlatch and have no space greater than 1/2" within 18" of the latch so a child can not reach through the fence to unlatch it.



48" high gates with the latch mounted above the top of the gate.

Several manufactures make latches that can be mounted on a 48" high gate and have the operating mechanism above the top of the gate. The operating mechanism must be mounted at least 54" above the bottom of the gate.



Gates more than 48" high

Gates that are more than 48" high must have the latch mounted at least 54" above the bottom of the gate.



Above ground pools

Barrier are required for above ground pools, **a removable ladder is not an acceptable barrier** for an above ground pool. The barrier may be a compliant fence that surrounds the entire pool or yard. Pools that have a wall that is at least 48" do not require a fence around the entire pool and may have a fence just around the ladder area or a ladder with a built in self closing latching gate.

Above ground pools with walls at least 48" above grade



Ladder with built-in gate



Fence around ladder area

Above ground pools on sloped site

Where the walls of an above-ground pool are used as the barrier, are on a sloped site, which will make a portion of the top of the pool structure to be less than 48" to grade, a minimum of 3-foot level surface around the portion of the pool structure that is less than 48" to grade should be provided. The level surface should be measured away from the pool wall to the excavation edge and should be tapered away from the pool at a minimum of 45- degree angle for a distance of one half the level surface.

Above ground pools on sloped site where the pool wall is used as the barrier

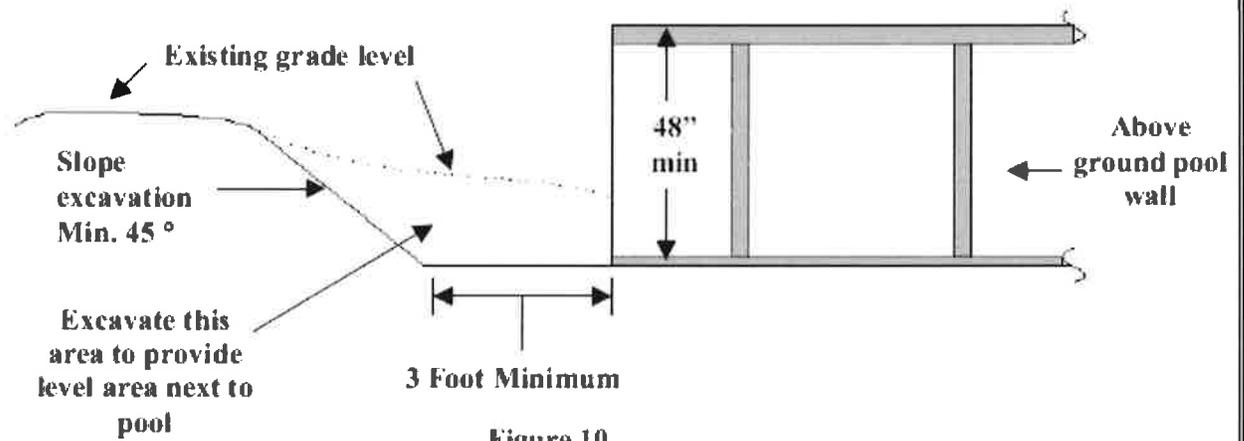


Figure 10