

INFORMATIONAL GUIDE:

SWIMMING POOLS & HOT TUBS

*Electrical
Decks
Pool barriers /Fences*

Rev Date: 09/23/2017

SWIMMING POOLS, SPAS AND HOT TUBS

SECTION AG 105 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 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 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. 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.
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 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 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 above, 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 (12.7 mm) inch 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 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 UL 2017. 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 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:
- 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. 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 F1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

AG106.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

Revised 08/28/2017

Revised June 2010

W:\MASTERS\BUILDINGSWIMMING POOL REQUIREMENTS\RESIDENTIAL RECREATIONAL POOL REQ 2009 UCC REVISED JUNE 2010.pdf

ELECTRICAL REQUIREMENTS FOR POOLS GREATER THAN 42 INCHES IN DEPTH

IRC 2009: SECTIONS (4203, 4204, 4205 and 4002.10)

Two receptacles are required.

Receptacle Number One

Located between 6 and 10 feet from the inside wall of the pool.
Provide power to pump motors only.
Single outlet, locking and grounding type.
GFCI protected.
Flexible cords cannot exceed 3 feet.
If wired directly to pump (no cord or plug), a disconnect must be readily accessible and within sight.
Must be supplied with #12 wire AWG.
Must have weatherproof cover (wet location) when cord is plugged in.

Receptacle Number Two

Located between 6 and 20 feet from inside wall of pool.
GFCI protected.
May be duplex outlet.
Must have weatherproof cover when cords are plugged in.

Restricted Space

No receptacles may be within 6 feet of the pool wall.
All receptacles located within 20 feet of the pool must be GFCI protected.
Both receptacles may be on the same circuit.
Burial Depth 12" when circuit is maximum 120 volt, GFCI protected at panel, and over current protection is 20 amps maximum.
Otherwise 18" burial depth is required

Grounding

All electrical equipment associated with the pool shall be grounded.

Bonding

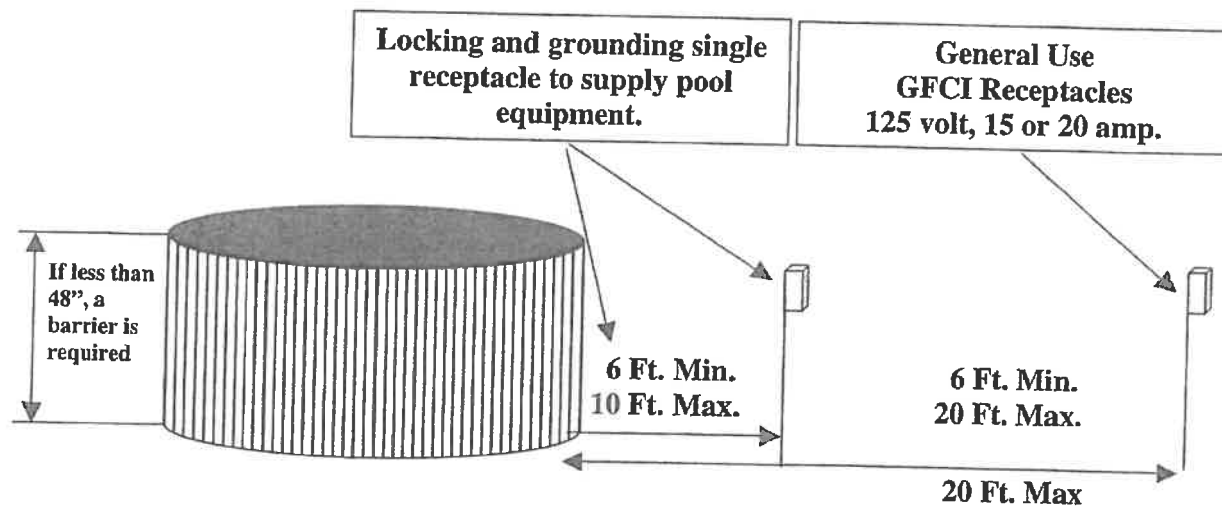
Metallic components, electrical equipment and pool water shall be bonded together with an 8 AWG or larger solid copper bonding conductor.

REVISED JUNE 2010

ABOVEGROUND POOLS

ELECTRICAL & FENCE REQUIREMENTS

One inspection will be conducted at the completion of the project

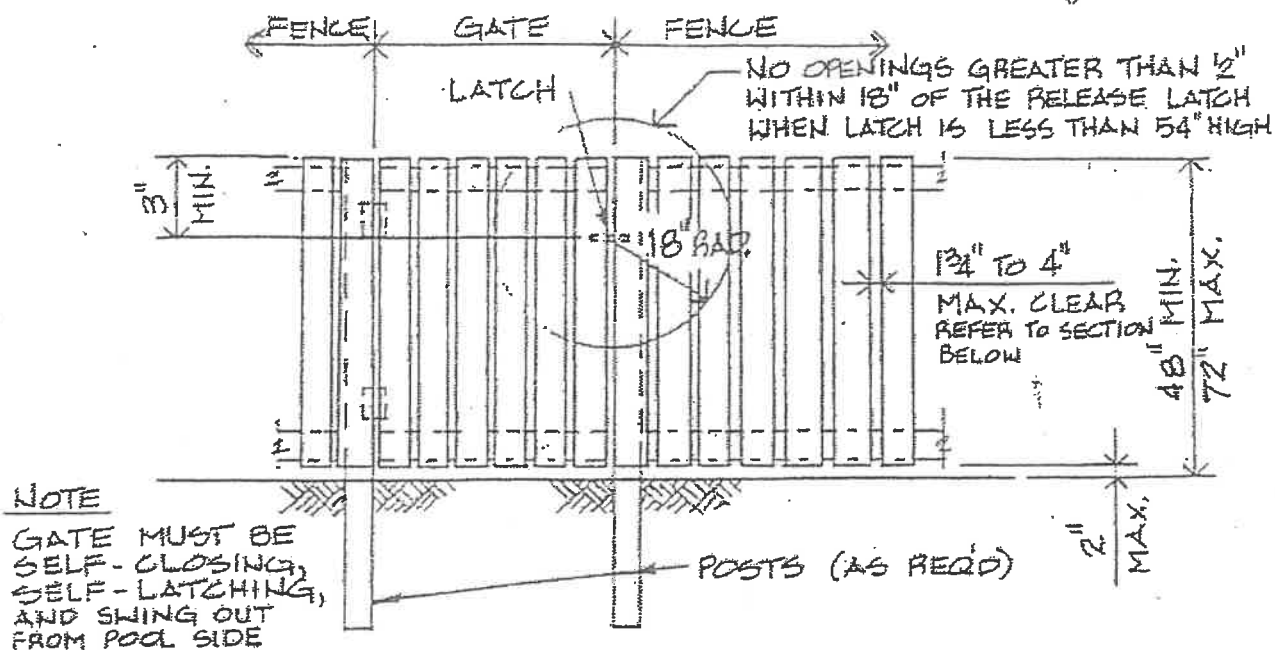


Both receptacles can be on one post between 6 ft. and 10' from pool wall.

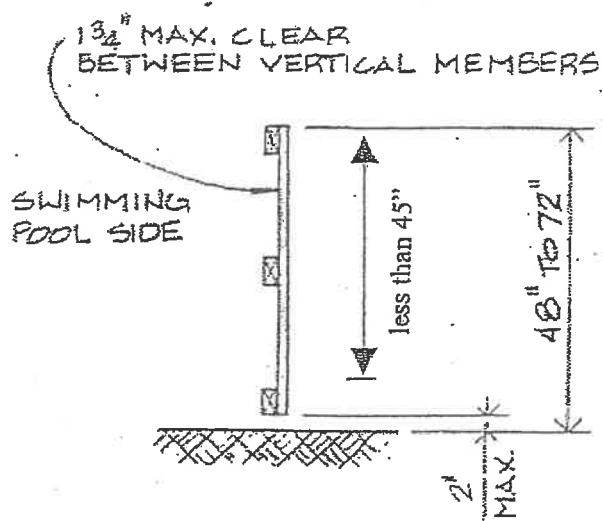
A pool more than 24 inches deep and less than 48 inches in height requires a barrier.

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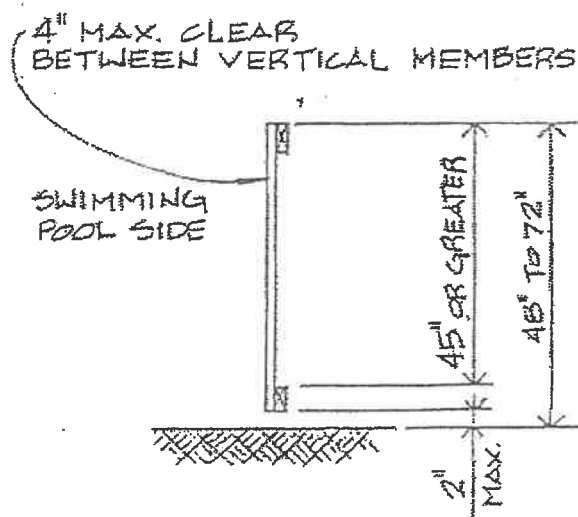
Latch shall be mounted on pool side of gate when less than 54" high and 3" min from top of gate



POOL GATE AND BARRIER ELEVATION



HORIZONTAL MEMBERS SPACED LESS THAN 45"



HORIZONTAL MEMBERS SPACED 45" OR GREATER.

POOL BARRIER SECTIONS

SITE PLAN sealed by a design professional

§123-99: Permits require two parts: Narrative and map (as applicable)

1. Narrative: include the following
 - A. General Description
 - B. Description of accelerated erosion control
 - C. Description of sedimentation control and limitations on grading
 - D. Description of stormwater control and utilization of groundwater recharge
 - E. Dates for project
 - F. Description of how stormwater facility will be operated and maintained including maintenance of existing drainage systems
 - G. Acknowledgment that any changes to stormwater facilities must be approved by the Township
2. Map: Show the following
 - A. Existing and proposed features
 - B. Property lines
 - C. Area of the project
 - D. Contour lines 5' (greater than 4%) 2' (4% or less)
 - E. Water bodies
 - F. Natural features including existing swales, woodlands, trees, shrubs
 - G. Existing roads and easements including drainage easements
 - H. Utilities
 - I. Soil types and depths
 - J. Areas of cut and fill
 - K. Changes to land surfaces
 - L. Impervious coverage calculations
 - M. Finished Contours

Projects that involve excavations less than 5 feet in depth and less than 1200 SF in size

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