

RESIDENTIAL INGROUND POOL REQUIREMENTS 2009 UNIFORM CONSTRUCTION CODE

All inspections require at least a 24-hour advance notice. To schedule an inspection call LTL Consultants, Ltd. at 610 987-9290 or 888 987-8886 (toll free). Be prepared to provide the permit number and street address for the job site, not the subdivision name and lot number. Inspections will be conducted in accordance with the 2009 PA Uniform Construction Code. Copies of the building code are available for review at **the local Township office or at the office of LTL Consultants, Ltd.**

The contractor should verify all building dimensions and zoning setbacks before excavation begins.

The following inspections are required:

FOOTING/BONDING INSPECTION

Includes zoning site inspection, soil's condition, re-enforcement (if required according to pool type), and bonding of all metallic materials.*

ELECTRICAL INSPECTION

Typically performed at Final inspection. By contract, all municipalities serviced by LTL Consultants require that all electrical inspections be completed by LTL Consultants. Third party electrical inspections **SHALL NOT** be accepted.

FINAL INSPECTION

Includes electrical final inspection, completion of bonding, safety barrier and pedestrian devices required in accordance with the enclosed document (admission to the residential electrical panel is required).

***Note:** Concrete or other permanent hardening material **SHALL NOT** be placed prior to inspector's approval.

COMMONLY MISSED ITEMS....

It is the homeowners' responsibility to have all inspections completed before proceeding to the next construction step. You must have the weather card in an accessible area if you wish to have the inspections documented.

Any decks, patios or porches associated with your new pool must be inspected according to a schedule that coincides with your pool inspections. It is the homeowners' responsibility to have all inspections completed.

Punitive action may be a consequence of ignoring these simple steps.

Proper fence, gate and ladder installation as well as bonding and electrical inspections must be completed within 30 days of pool construction.

Revised June 2010

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.

Revised June 2010

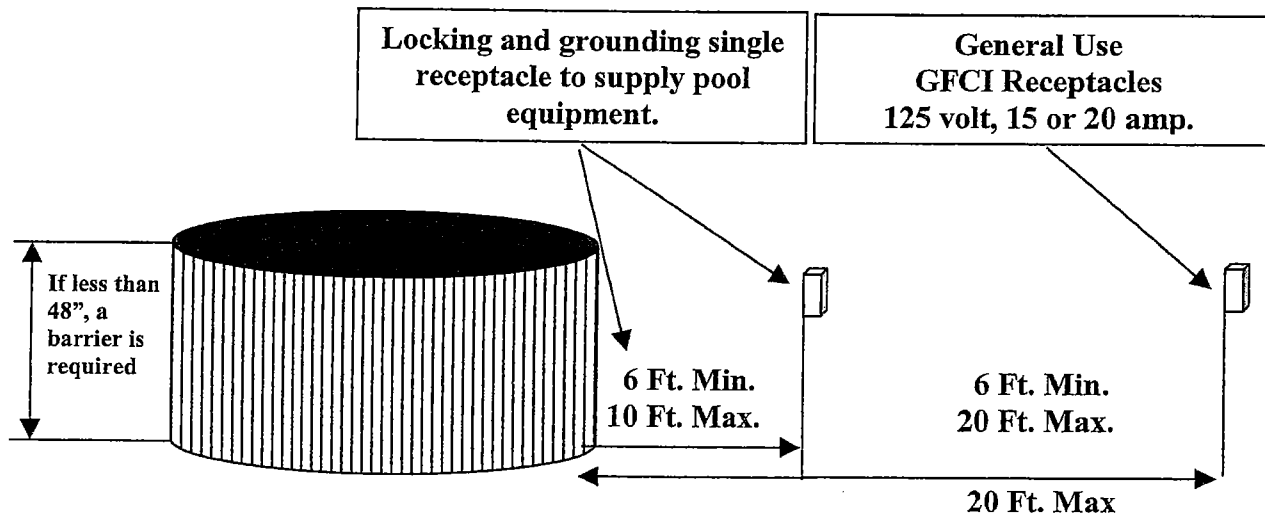
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ABOVEGROUND POOLS

ELECTRICAL & FENCE REQUIREMENTS

One inspection will be conducted at the completion of the project

If you have any questions call LTL Consultants, Ltd. at 610-987-9290
BEFORE you do the work!



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

A pool more than 24 inches deep and less than 48 inches in height requires a barrier. If your pool is between 24" and 48", contact LTL Consultants Ltd. for barrier requirements.

REVISED JUNE 2010

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

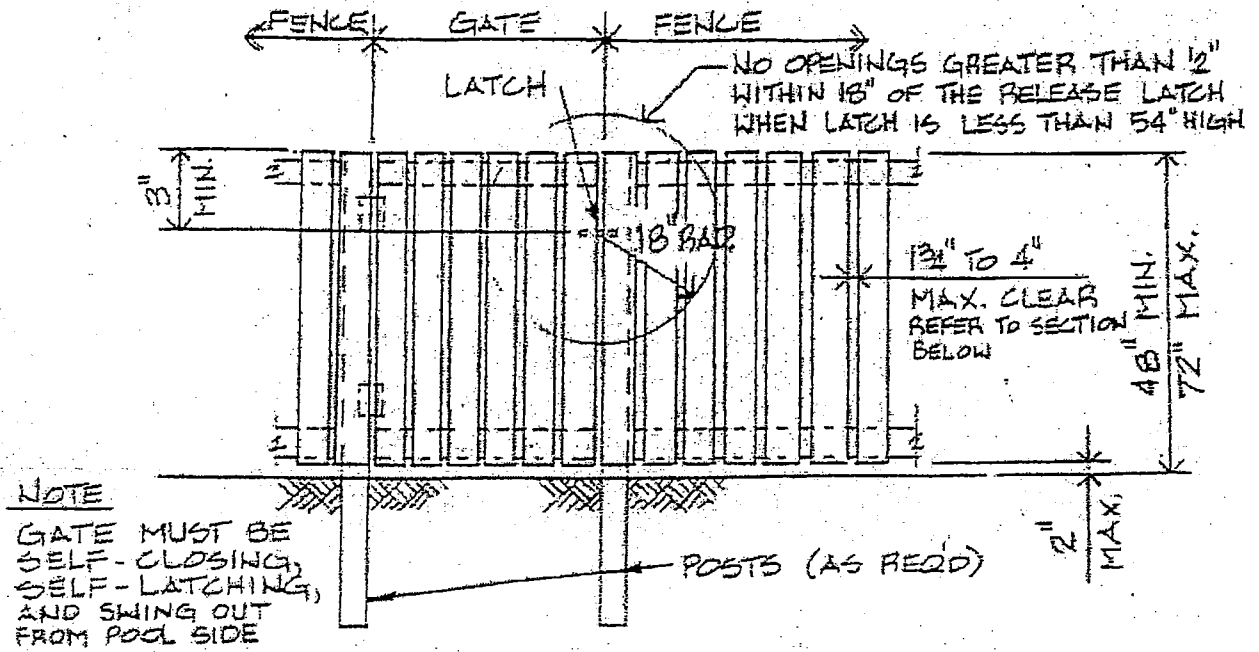
All electrical equipment associated with the pool shall be grounded.

Bonding

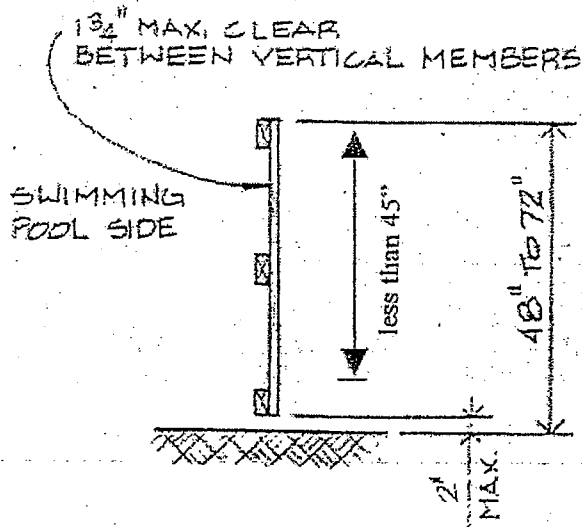
Metallic components, electrical equipment and pool water shall be bonded together with an 8 AWG or larger solid copper bonding conductor.

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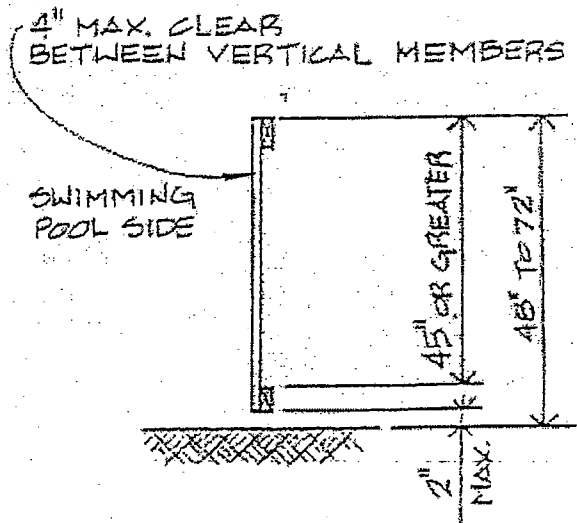
Latch shall be mounted on pool side of gate when less than 54" high and 3" min from top of gate



POOL GATE AND BARRIER ELEVATION



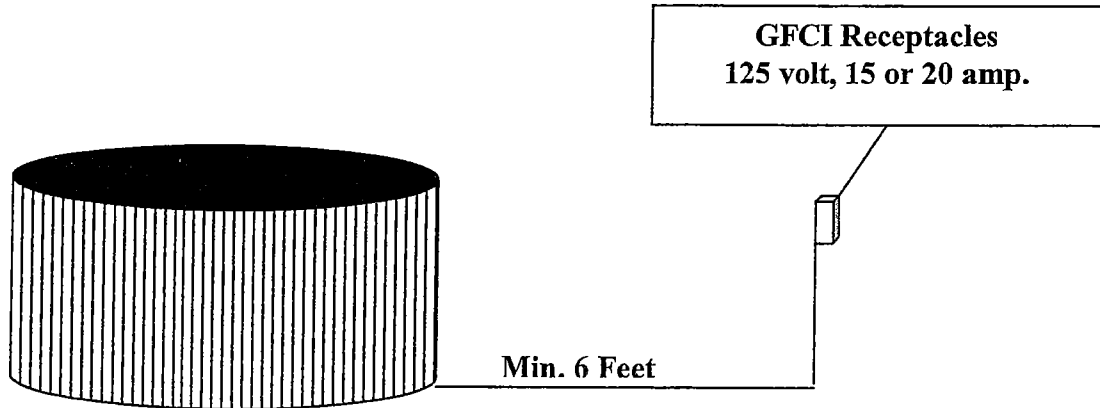
HORIZONTAL MEMBERS SPACED LESS THAN 45"



HORIZONTAL MEMBERS SPACED 45" OR GREATER

POOL BARRIER SECTIONS

Storable Pools (less than 42 inches in depth) Electrical & Fence Requirements



IRC-2009:

SECTION 4207.1

- Pump motor must be double insulated with 3 prong plug
- Pump cord and plug shall be provided with a GFCI that is an integral part of attachment plug or located in power supply within 12" of attachment plug.

SECTION 4207.2

- All receptacles within 20 feet of the pool must be GFCI

SECTION 4207.4

- No receptacles within 6 feet of the pool

Storable Pools Between 24 and 42 Inches deep require a barrier.

Barriers must be 48 inches minimum in height from grade.

Contact LTL Consultants Ltd. for Barrier Information

at 610-987-9290 or Toll Free – 1-888-987-8886

Revised June 2010