

# POOL INFORMATION

## Required Technical Information with Application

1. Submit 2 copies of the plot plan showing the proposed pool, equipment, and fence with the distances to the side, rear and front property lines and location and distances to all components of the septic system. Show locations of all other existing structures.
2. **Above Ground** - Submit 1 copy of equipment specifications, fencing style and sizes and pool style and sizes. This information is available from the pool supplier.
3. **In Ground** - Submit 2 copies of pool construction drawings and 1 copy of fencing style and sizes and equipment specifications.
4. **Heated Pools** - 1 copy of heater specs.
5. **Hot Tubs and Spas** - Tub and spa specs and UL listing of cover if not protected by a fence.

## Samples of Construction Requirements per 2003 International Residential Code

### Electrical Requirements for Aboveground Pools

Equipment 20 amps or less may have a flexible cord not exceeding 3 feet to a grounded, GFCI receptacle located between 5-10 feet from the inside wall of the pool. It shall be single and of the locking and grounding type. At least one 125-volt 15- or 20- amp receptacle, GFCI protected, supplied by a general purpose branch circuit shall be located at least 10 feet and not more than 20 feet from the inside wall. All metal parts of the pool and all metal surfaces within 5 feet shall be bonded with 8AWG copper wire. This includes pumps and motors unless double insulated. Please check with a qualified electrician to ensure proper wiring methods.

### Electrical Requirements for In-Ground Pools

Check with the pool contractor or electrician.

## Fence and Barrier Requirements

**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 stonewall, 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, 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 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 house-hold 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.

# TYPICAL ABOVE GROUND CODE COMPLIANT POOL

Must provide site plan, manufactures installation instructions and electrical requirements for pump when applying for permit.

- Provide minimum horizontal clear distance around pool that maintains a height of 4 ft. and a removable or locking ladder G105.2
- All bonding must be with #8 bare copper solid wire E4204.2
- (A) Bonding wire must be 18" to 24" from pool 4" to 6" under surface attached to pool at minimum of 4 points. (attachment not required if shell is not conductive) E4204.2(2.2)
- Pump must be bonded or if pump does not have a bonding lug the bonding wire must be connected to the ground at the receptacle. E4203.7(6.1)
- All bonding connections must be made by listed and labeled clamp for that application. Do not use sheet metal screws on connection to pool use a stainless steel nut and bolt for clamp. E4204.5.2
- No ground rods allowed E4204.5.1(3)
- (B) Pool water must be bonded with a minimum of 9 Square inches in contact with water or listed approved fitting. E4204.3
- (C) Single twist-lock GFCI protected receptacle with in use cover no closer than 6' from pool for pump. Pump cord can't be longer than 3', E4203.1.1
- (D) One general use GFCI protected receptacle 6' to 20' from pool with in use cover. E4203.1.2 If this receptacle is new it must have WR on it (weather-resistant type) E4002.8
- (E) Minimum 18" below surface (E3803.1) in conduit with insulated ground. E4205.5 Must use weatherproof wiring (no Romex) E4205.5

