

# *Borough of Flemington*

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## **CONSTRUCTION CODE REQUIREMENTS FOR POOLS**

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THE FOLLOWING INFORMATION IS AN EXPLANATION OF THE REQUIREMENTS FOR FILING THE PERMITS FOR POOLS AND TO PROVIDE YOU WITH SOME EXAMPLES OF SOME TYPICAL BARRIERS AS PRESCRIBED IN THE NEW JERSEY EDITION OF THE 2009 INTERNATIONAL RESIDENTIAL CODE, THIS ALSO CONTAINS THE ELECTRICAL REQUIREMENTS AS PRESCRIBED UNDER THE 2008 NATIONAL ELECTRIC CODE.

ALL APPLICATIONS FOR A CONSTRUCTION PERMIT SHALL INCLUDE THE FOLLOWING INFORMATION:

- (1) CONSTRUCTION PERMIT FOLDER.
- (2) COMPLETED BUILDING AND ELECTRICAL APPLICATIONS, IF HOMEOWNER IS NOT DOING THEIR OWN ELECTRICAL WORK THE APPLICATION MUST BE SEALED BY A NJ LICENSED CONTRACTOR.
- (3) TWO SETS OF THE PLANS OR MANUFACTURERS SPECIFICATIONS FOR THE POOL TO BE INSTALLED.
- (4) A COPY OF THE SURVEY FOR THE PROPERTY TO REFLECT THE PROPOSED POOL LOCATION. NO POOL OR ELEVATED POOL DECK SHALL BE LOCATED CLOSER THAN 10 FEET TO ANY PROPERTY LINE.

NOTE: ALL SWIMMING POOLS, SPAS AND HOT TUBS REQUIRE A BUILDING AND ELECTRICAL PERMIT BEFORE THE PROJECT IS STARTED. FINAL INSPECTION MUST BE OBTAINED FROM THE CONSTRUCTION OFFICE PRIOR TO USE OF THE POOL. FAILURE TO DO SO MAY RESULT IN VIOLATIONS AND SIGNIFICANT FINES.

### SECTION 3105 AWNINGS AND CANOPIES

**3105.1 General.** *Awnings* or canopies shall comply with the requirements of this section and other applicable sections of this code.

**3105.2 Definition.** The following term shall, for the purposes of this section and as used elsewhere in this code, have the meaning shown herein.

**RETRACTABLE AWNING.** A retractable *awning* is a cover with a frame that retracts against a building or other structure to which it is entirely supported.

**3105.3 Design and construction.** *Awnings* and canopies shall be designed and constructed to withstand wind or other lateral loads and live loads as required by Chapter 16 with due allowance for shape, open construction and similar features that relieve the pressures or loads. Structural members shall be protected to prevent deterioration. *Awnings* shall have frames of noncombustible material, *fire-retardant-treated wood*, wood of Type IV size, or 1-hour construction with combustible or noncombustible covers and shall be either fixed, retractable, folding or collapsible.

**3105.4 Canopy materials.** Canopies shall be constructed of a rigid framework with an *approved* covering that meets the fire propagation performance criteria of NFPA 701 or has a *flame spread index* not greater than 25 when tested in accordance with ASTM E 84 or UL 723.

### SECTION 3106 MARQUEES

**3106.1 General.** Marquees shall comply with this section and other applicable sections of this code.

**3106.2 Thickness.** The maximum height or thickness of a marquee measured vertically from its lowest to its highest point shall not exceed 3 feet (914 mm) where the marquee projects more than two-thirds of the distance from the property line to the curb line, and shall not exceed 9 feet (2743 mm) where the marquee is less than two-thirds of the distance from the property line to the curb line.

**3106.3 Roof construction.** Where the roof or any part thereof is a skylight, the skylight shall comply with the requirements of Chapter 24. Every roof and skylight of a marquee shall be sloped to downspouts that shall conduct any drainage from the marquee in such a manner so as not to spill over the sidewalk.

**3106.4 Location prohibited.** Every marquee shall be so located as not to interfere with the operation of any exterior standpipe, and such that the marquee does not obstruct the clear passage of *stairways* or *exit discharge* from the building or the installation or maintenance of street lighting.

**3106.5 Construction.** A marquee shall be supported entirely from the building and constructed of noncombustible materials. Marquees shall be designed as required in Chapter 16. Structural members shall be protected to prevent deterioration.

### SECTION 3107 SIGNS

**3107.1 General.** Signs shall be designed, constructed and maintained in accordance with this code.

### SECTION 3108 TELECOMMUNICATION AND BROADCAST TOWERS

**3108.1 General.** Towers shall be designed and constructed in accordance with the provisions of TIA-222.

**Exception:** Single free-standing poles used to support antennas not greater than 75 feet (22 860 mm), measured from the top of the pole to grade, shall not be required to be noncombustible.

**3108.2 Location and access.** Towers shall be located such that guy wires and other accessories shall not cross or encroach upon any street or other public space, or over above-ground electric utility lines, or encroach upon any privately owned property without the written consent of the owner of the encroached-upon property, space or above-ground electric utility lines. Towers shall be equipped with climbing and working facilities in compliance with TIA-222. Access to the tower sites shall be limited as required by applicable OSHA, FCC and EPA regulations.

### SECTION 3109 SWIMMING POOL ENCLOSURES AND SAFETY DEVICES

**3109.1 General.** Swimming pools shall comply with the requirements of this section and other applicable sections of this code.

**3109.2 Definition.** The following word and term shall, for the purposes of this section and as used elsewhere in this code, have the meaning shown herein.

**SWIMMING POOLS.** Any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep. This includes in-ground, above-ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools.

**3109.3 Public swimming pools.** Public swimming pools shall be completely enclosed by a fence at least 4 feet (1290 mm) in height or a screen enclosure. Openings in the fence shall not permit the passage of a 4-inch-diameter (102 mm) sphere. The fence or screen enclosure shall be equipped with self-closing and self-latching gates.

**3109.4 Residential swimming pools.** Residential swimming pools shall comply with Sections 3109.4.1 through 3109.4.3.

**Exception:** A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346.

**3109.4.1 Barrier height and clearances.** The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier that 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 that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).

**3109.4.1.1 Openings.** Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

**3109.4.1.2 Solid barrier surfaces.** Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

**3109.4.1.3 Closely spaced horizontal members.** 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  $1\frac{3}{4}$  inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed  $1\frac{3}{4}$  inches (44 mm) in width.

**3109.4.1.4 Widely spaced horizontal members.** 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  $1\frac{3}{4}$  inches (44 mm) in width.

**3109.4.1.5 Chain link dimensions.** Maximum mesh size for chain link fences shall be a  $2\frac{1}{4}$  inch square (57 mm square) unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to no more than  $1\frac{3}{4}$  inches (44 mm).

**3109.4.1.6 Diagonal members.** Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be no more than  $1\frac{3}{4}$  inches (44 mm).

**3109.4.1.7 Gates.** Access doors or gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6 and shall be equipped to accommodate a locking device. Pedestrian access doors or gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Doors or gates other than pedestrian access doors or gates shall have a self-latching device. Release mechanisms shall be in accordance with Sections 1008.1.9 and 1109.12. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the door or gate, the release mechanism shall be located on the pool side of the door or gate at least 3

inches (76 mm) below the top of the door or gate, and the door or gate and barrier shall have no opening greater than  $\frac{1}{2}$  inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

**3109.4.1.8 Dwelling wall as a barrier.** Deleted.

**3109.4.1.9 Pool structure as barrier.** 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 surrounded by a barrier which meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8.

**3109.4.2 Indoor swimming pools.** Walls surrounding indoor swimming pools shall not be required to comply with Section 3109.4.1.8.

**3109.4.3 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**3109.5 Entrapment avoidance.** Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

## SECTION 3110 SWIMMING POOLS AND SPAS

**3110.0 Swimming pools and spas.** Swimming pools and spas shall be constructed in accordance with Sections 3110.1 through 3110.6.

**3110.1 Public swimming pools.** Public swimming pools shall be designed and constructed in conformance with ANSI/APSP-1 as listed in Chapter 35.

**3110.2 Public spas.** Public spas shall be designed and constructed in conformance with ANSI/APSP-2 as listed in Chapter 35.

**3110.3 Permanently installed residential spas.** Permanently installed residential spas shall be designed and constructed in conformance with ANSI/APSP-3 as listed in Chapter 35.

**3110.4 Above-ground and on-ground residential swimming pools.** Above-ground and on-ground residential swimming pools shall be designed and constructed in conformance with ANSI/APSP-4 as listed in Chapter 35.

**3110.5 Residential in-ground swimming pools.** Residential in-ground swimming pools shall be designed and constructed in conformance with ANSI/APSP-5 as listed in Chapter 35.

**3110.6 Portable spas.** Portable spas shall be designed and constructed in conformance with ANSI/APSP-6 as listed in Chapter 35.

## Electrical Requirements for Swimming Pools

All Electrical Wiring Shall comply with the 2008 NEC article 680, below are some helpful hints  
All plans shall be signed by the applicant, must list the project address and township, block and lot, date prepared. Any of the items checked below are missing from the plans, the information which is missing must be added to the plans and resubmitted before a permit can be issued.

- 1. All wire, including the cord shall be 12 AWG minimum.
- 2. 12/2 with ground is acceptable inside the house only! Type UF, NM (romex) or MC.
- 3. All conductors shall be buried in ridged non-metallic electrical conduit (do not use water pipe), wired with single insulated conductors, buried a minimum of 18 inches below grade.
- 4. The ground wire in the conduit shall be insulated.
- 5. A GFCI protected 120 volt convenience receptacle located outdoors is required to be located not less than 10 feet nor more than 20 feet from the inside wall of the pool. This receptacle may be existing, the wiring need not be in conduit, and it cannot be on the same circuit as the pool if the pool pump is rated over 50 % of the circuit ampacity. It must be GFCI protected and not more than 20 feet from the pool.
- 6. If you wish to have the receptacle for the pool pump located less than 10 feet from the pool, it must meet the following requirements:
  - a. It cannot be less than 5 feet from the pool.
  - b. It must be 20 amp. rated twist lock single receptacle.
  - c. The cover shall be capable of being closed with the plug inserted.
  - d. The circuit shall be GFCI protected.
- 7. The cord on the pool pump must be 12 AWG and not longer than 3 feet .
- 8. Free standing receptacles, switches etc... shall be supported by something other than the conduit. (for example: if backed by a pressure treated 4" X 4" would provide the required support)
- 9. The bonding wire shall be # 8 AWG solid; insulated or bare minimum, lugs shall be copper, brass or stainless.
- 10. The following shall be bonded together: the pool structure, pump motor, metal ladder, metal fence and any other metal objects within 5 feet of the pool.
- 11. A ground rod is not required at the pool.

### Enclosure For Above Ground, Outdoor, Private Swimming Pool

\* Requires Fourth Side Fence Enclosure Under The Deck To Secure Open Under Of Ladder

\*Not Illustrated

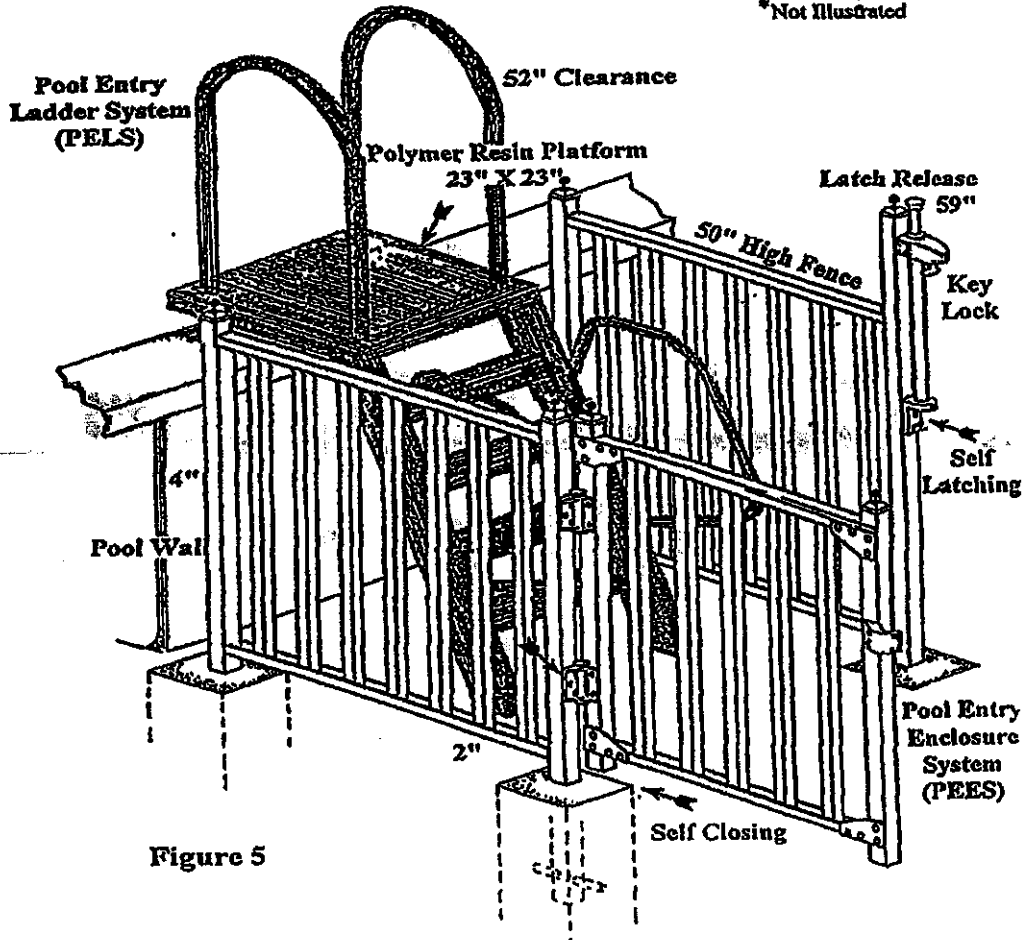


Figure 5

Model Barrier Code Enclosure

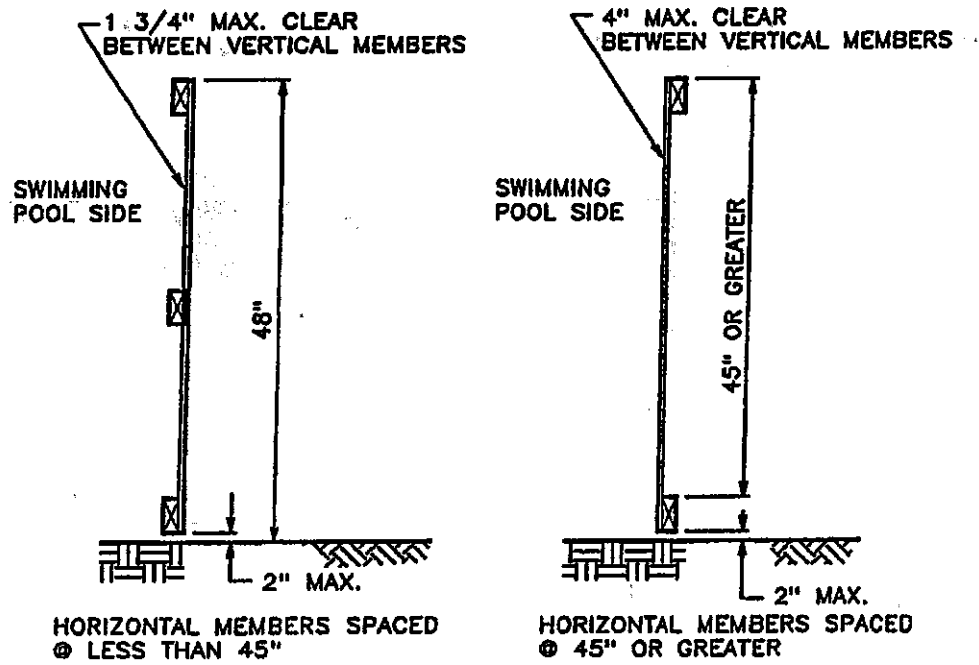


Figure 421.10.1(1)  
PRIVATE SWIMMING POOL BARRIER CONSTRUCTION

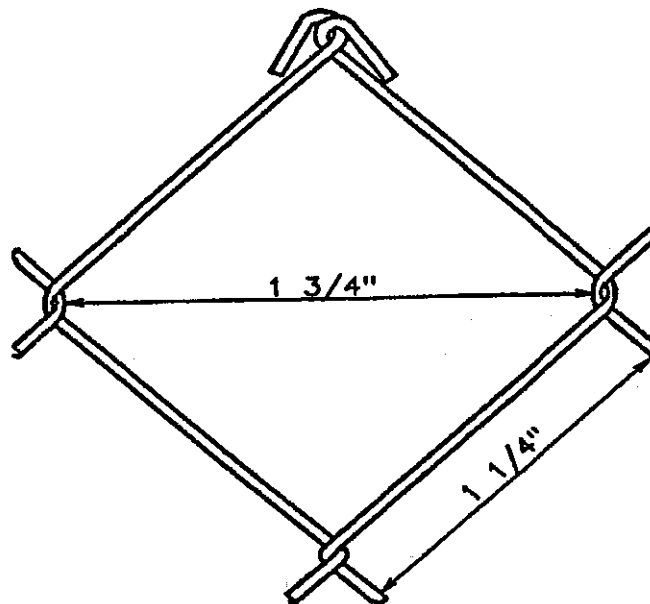


Figure 421.10.1(2)  
CHAIN LINK FENCE MESH FOR PRIVATE SWIMMING POOLS