AREA CODE 908

Mayor's Office-226-7601
Administrator/Clerk-226-7606
Assessing-226-7623
Building Dept.-226-7640
CFO-226-7602
Computer Services-226-7649
Emergency Mgmt.-226-7718
Eng./CME Assoc.-732-727-8000
Environmental-226-7621
Finance-226-7615
Fire Official-756-4761

BOROUGH OF SOUTH PLAINFIELD
2480 Plainfield Avenue
South Plainfield, NJ 07080

AREA CODE 908

Health-226-7630
Library-754-7885
Municipal Court-226-7651
Plan Bd/Bd. of Adj.-226-7641
Police-755-0700
Public Works-755-2187
Recreation-226-7713
Recycling-226-7621
Social Services-226-7625
Tax/Sewer-226-7610
Senior Center-754-1047

Pool Installation Guidelines

A) Zoning

Provide a completed zoning permit application with twenty five-dollar ($25.00) zoning permit fee along with a to scale copy of your survey. Provide a completed Building Subcode, Electrical Subcode, and Construction Permit jacket. Show location of pool, pool decks, & any pool equipment or appurtenant structures. Pool & all equipment, decks must be located a minimum of five feet (5) from property lines on interior lots in the R- 7.5 + R-10 zones. (10' from rear + 6'from side and 40' from front in R-15 zones). Pool & all equipment must be thirty feet (30') from secondary front property lines in R-7.5 + R-10 zones and (40') in R-15 zones (corner + through lots). Maximum lot coverage 35%. **All swimming pools which contain over 24 inches of water must obtain a permit.**

B) Above Ground Pools

Provide copy of manufacturers installation instructions.
All pools must have a 48-inch high barrier enclosing the pool with a self-closing and self-latching gate that opens away from the pool or must provide that the pool wall is 48 inches above grade for the entire pool perimeter and the access ladder or stairs are enclosed with a code complying barrier and gate. See code requirements for barrier and gates. You must submit a detailed drawing showing the location and type of barrier and gate you will be installing and location of latching release mechanism.

C) Inground Pools

Provide two sets of sealed Construction documents done by a New Jersey Professional Engineer or Architect showing dimensions and construction of the pool and appurtenances as well as details of the water supply system, drainage and water disposal systems and equipment. Detailed construction documents of structures, vertical elevations and sections through the pool showing depth shall be included.

Provide diving board details as per referenced standards.

Provide barrier and gate details same as above.

APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

SECTION AG101
GENERAL

AG101.1 General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one- or two-family dwelling.

SECTION AG102
DEFINITIONS

AG102.1 General. For the purposes of these requirements, the terms used shall be defined as follows and as set forth in Chapter 2.

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.

HOT TUB. See "Swimming pool."

IN-GROUND POOL. See "Swimming pool."

RESIDENTIAL. That which is situated on the premises of a detached one- or two-family dwelling or a one-family townhouse not more than three stories in height.

SPA, NONPORTABLE. See "Swimming pool."

SPA, PORTABLE. A nonpermanent structure intended for recreational bathing, in which all controls, water-heating and water-circulating equipment are an integral part of the product.

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

SWIMMING POOL, INDOOR. A swimming pool which is totally contained within a structure and surrounded on all four sides by the walls of the enclosing structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103
SWIMMING POOLS

AG103.1 In-ground pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG108.

AG103.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG108.

SECTION AG104
SPAS AND HOT TUBS

AG104.1 Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG108.

AG104.2 Portable spas and hot tubs. Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section AG108.

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 subject to this code. 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 $1^3/_4$ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1^3/_4$ 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 $1^3/_4$ inches (44 mm) in width.

6. Maximum mesh size for chain link fences shall be a $2^1/_4$-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than $1^3/_4$ 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 $1^3/_4$ 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 (13 mm) within 18 inches (457 mm) of the release mechanism.

9. 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:

   9.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 8.

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.

SECTION AG106
ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

See N.J.A.C. 5:23-3.15(b) 8vi. of the plumbing subcode.

SECTION AG107
ABBREVIATIONS

AG107.1 General.

ANSI—American National Standards Institute
11 West 42nd Street, New York, NY 10036

ASME—American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990

ASTM—ASTM International
100 Barr Harbor Drive, West Conshohocken, PA 19428

NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue, Alexandria, VA 22314

UL—Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, Illinois 60062-2096

SECTION AG108
STANDARDS

AG108.1 General.

ANSI/NSPI

ANSI/NSPI-3-99 Standard for Permanently Installed Residential Spas. AG104.1

ANSI/NSPI-4-99 Standard for Above-ground/On-ground Residential Swimming Pools AG103.2

ANSI/NSPI-5-99 Standard for Residential In-ground Swimming Pools AG103.1

ANSI/NSPI-6-99 Standard for Residential Portable Spas AG104.2

ANSI/NSPI-5-2003 Standard for Residential In-ground Swimming Pools. AG103.1

ANSI/ASME A112.19.8M-1987 (R1996) Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances AG106.2

ASTM

ASTM F 1346-91 (2003) Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs AG105.2, AG105.5

ASME

ASME A112.19.17 Manufacturers Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool. AG106.3

UL

UL2017-2000 Standard for General-purpose Signaling Devices and Systems—with Revisions through June 2004. . . . . AG105.2

temptation to children, including very young children and infants who do not know how to swim. The installation of an effective barrier can help reduce the number of children who die or are injured as the result of open access to a swimming pool, spa or hot tub.

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 $1^3/_4$ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1^3/_4$ 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 $1^3/_4$ inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a $2^1/_4$-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than $1^3/_4$ 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 $1^3/_4$ 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 (13 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 in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present, are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touch pad or switch, to temporarily deactivate the alarm for a single opening. Deactivation shall last for not more than 15 seconds. The deactivation switches 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 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 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.

❖ This section provides prescriptive requirements for the construction of the swimming pool barrier.

1. The barrier height requirement of 48 inches (1219 mm) above the ground is based on reports that document the ability of children under the age of 5 to climb over barriers that are less than 48 inches

(1219 mm) in height. The basis for the 4-inch (102 mm) criterion for an opening between the barrier and the top of the pool frame is the same as for guard construction as addressed in Section R312. Refer to Commentary Figure AG105.2(1).

2. The general provision is applicable only when one of the conditions addressed in Items 4, 5, 6 and 7 is not present. For example, a chain-link fence would be regulated by the requirements of Item 6, which reduces the general opening criterion of 4 inches (102 mm) to $2^1/_4$ inches (57 mm). The basis for the 4-inch (102 mm) criterion is the same as for guard construction per Section R312. It is based on studies of the body measurements of children 13 to 18 months old.

3. This provision reduces the potential for gaining a foothold and climbing the barrier.

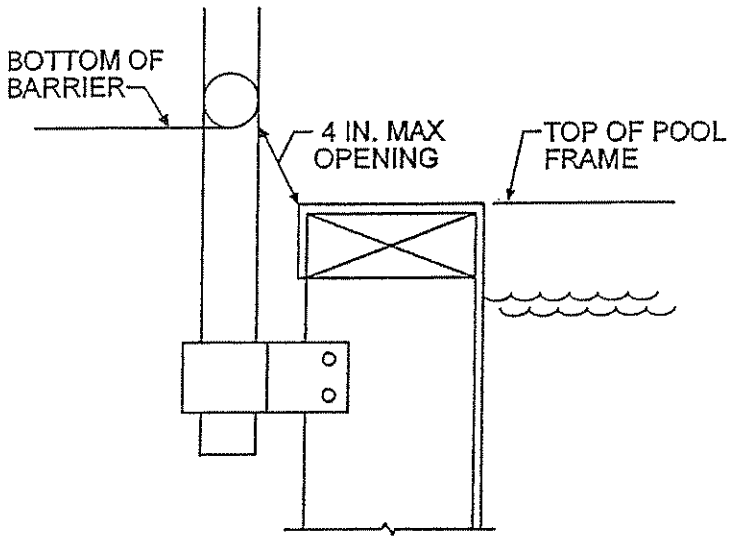
4. The more stringent 1.75-inch (44 mm) provision for spacing between vertical members applies when the spacing between horizontal members is less than 45 inches (1143 mm). It acknowledges the potential for a child to gain both a handhold and a foothold on closely spaced horizontal members and reduces the potential for a child to gain a foothold by limiting the space between the vertical members on the same barrier. If the horizontal members are spaced less than 45 inches (1143 mm) apart, they must also be located on the swimming pool side of the fence as shown in Commentary Figure AG105.2(2) so that they are not available to be used to climb the barriers.

5. This requirement is the counterpart to Item 4 in that it permits the opening in the barrier to be 4 inches (102 mm) if the vertical spacing of the horizontal members equals or exceeds 45 inches (1143 mm) as illustrated in Commentary Figure AG105.2(2). It is consistent with Item 2, which limits openings in the barrier to a 4-inch (102 mm) diameter. The spacing of horizontal members 45 inches (1143 mm) apart precludes them from being used by small children to climb the barrier.

6. The $2^1/_4$-inch (57 mm) dimension is intended to reduce the potential for a child to gain a foothold [see Commentary Figure AG105.2(3)]. The mesh size is permitted to be larger than $2^1/_4$-inches (57 mm) square if slats are used to reduce the mesh opening to $1^3/_4$ inches (44 mm) in order to decrease the potential for a child to obtain a foothold or handhold.

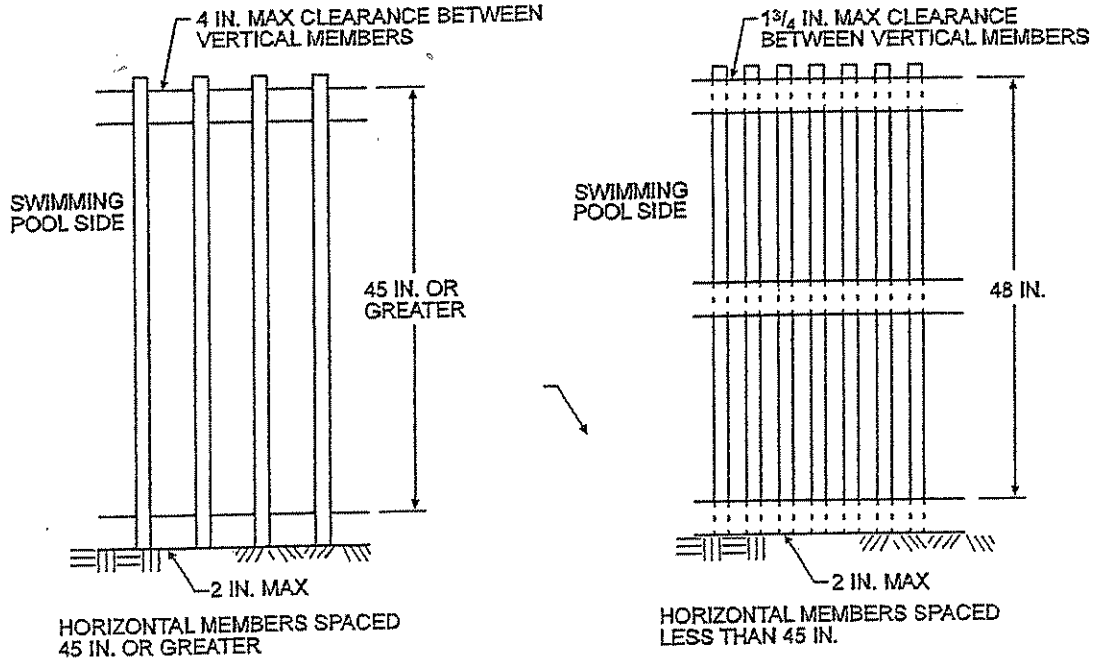
7. A slightly larger opening is permitted for barriers composed of diagonal members other than chain link fences, on the basis that such barriers would be more difficult to gain a foothold and handhold on than a chain link fence. The $1^3/_4$-inch (44 mm) dimension is consistent with Items 4, 5 and 6.

8. A gate represents the same potential hazard relative to climbing as do the other portions of the barrier; therefore, it must be constructed in accordance with applicable Items 1 through 7. Additionally, because the gate also represents a potential breech of the barrier because the gate can be opened, the code provides prescriptive details for the construction and operation of the gate. A self-closing pedestrian gate must open away from the pool because if the latch fails to operate, a child pushing on the gate will not gain immediate access to the pool. Pushing on the gate may also engage the latch. Large, nonpedestrian



For SI: 1 inch = 25.4 mm.

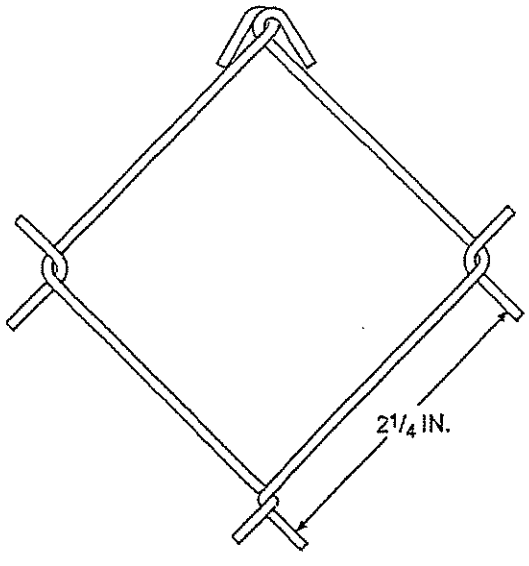
Figure AG105.2(1)
OPENING LIMITATIONS



For SI: 1 inch = 25.4 mm.

Figure AG105.2(2)
PRIVATE SWIMMING POOL BARRIER CONSTRUCTION

gates are not required to be self-closing because of prohibitive cost and maintenance concerns coupled with the fact that these gates are typically operated by persons other than small children. The 54-inch (1372 mm) latch height requirement limits the potential for small children to reach and activate the latch. If the latch is located lower than 54 inches (1372 mm), the code's prescriptive location requirements preclude the latch from being activated by small children who are not on the pool side of the gate.



For SI: 1 inch = 25.4 mm.

Figure AG105.2(3)
CHAIN-LINK FENCE MESH FOR PRIVATE SWIMMING POOLS

9. Many residential settings with backyard pools use the dwelling as a portion of the barrier required around the pool, such as where the fence bounding the property terminates at the dwelling. This limits access to the pool by unsupervised children around the perimeter of the fence, but there is still potential for children to access the pool from within the dwelling. Indeed, almost half the children involved in drowning or near-drowning accidents gained access to the pool from the dwelling.

The provisions of this section restrict such access by small children and are applicable to all doors in walls that form a portion of the barrier required around swimming pools.

Protection of such door openings to pool areas can be achieved in any one of the methods described in Items 9.1 through 9.3. The first alternative does not require protection of the exterior door itself but limits access to the pool by means of a power safety cover. The performance criteria specified when this option is selected assures that the power safety cover is an adequate and reliable barrier to the pool. In Item 9.2, the alarm is configured to allow adults who are accessing the house to open the door, enter the house and deactivate the system to prevent a false alarm. The buttons used to deactivate the system must be mounted 54 inches (1372 mm) above the floor, which is presumed to be beyond the reach of small children.

Item 9.3 permits doors to pool areas to be protected by devices that render the door self-closing and self-latching. Any other requirements would be performance based because the code requires equivalency only with Item 9.1 or 9.2. One possible criterion could require the release mechanism for the latching device to be located a minimum of 54 inches (1372 mm) above the floor, which is presumed to be beyond the reach of small children. In addition, doors protected by the method specified in Item 9.3 should probably open away from the pool area. This is so that if the door failed to latch, a child outside the pool area pushing against the door would cause it to close and not swing to an open position.

9. 10. The code permits the wall of the pool itself to serve as the barrier to the pool, if the wall extends at least 48 inches (1219 mm) above the finished ground level around the perimeter of the pool. Where [illegible], the ladder must be surrounded by a complying barrier to limit access to the ladder.

AG105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

❖ Indoor pools represent the same hazards as outdoor pools. For this reason, the walls and doors surrounding an indoor swimming pool are regulated in the same manner as an exterior wall of a dwelling where the wall is used as a barrier for an outdoor pool. The provisions of Section AG105.2, Item 9 apply in their entirety.

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

❖ The purpose of a swimming pool barrier would be defeated if children could climb on benches, planters, pumps and similar permanent features adjacent to the barrier and gain access to the pool area. Therefore, the area adjacent to the barrier must be carefully designed and constructed to avoid such a condition. This provision is performance in character and must be reviewed on a case-by-case basis.

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.

❖ The provisions of this appendix chapter are not applicable to spas and hot tubs where an approved safety cover serves as the protective barrier. The requirements of ASTM F 1346 contain a number of criteria so that the safety cover can provide a level of protection that is equivalent to that provided by a swimming pool enclosure barrier. The following requirements are representative of several of the specifications found in the standard:

1. There should be a means of fastening the safety cover to the hot tub or spa, such as key locks, combination locks, special tools or similar devices that will prohibit children from removing or operating the cover. The fastening mechanism, design and location are vital components that help prevent a child's entry to the water.
2. The safety cover should have a label that provides a warning and message regarding the risk of drowning. The label is also very important for the transfer of information to second owners and temporary users.
3. The cover should have been tested to demonstrate that it is capable of supporting the weight of one child [50 pounds (23 kg)] and one adult [225 pounds (102 kg)] so an adult and a child can be supported during a rescue operation.
4. There should be no openings in the cover itself or at any point where the cover joins the surface of the hot tub or spa that would allow a child's head to pass through. The 4-inch (102 mm) spacing for guards in Section R312 and openings in pool enclosures of Section AG105.2 are also applicable.
5. Safety covers are to be installed in accordance with the manufacturer's instructions.

SECTION AG106
ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AG106.1 General. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single-outlet systems, such as automatic vacuum cleaner systems, or multiple suction outlets, whether isolated by valves or otherwise, shall be protected against user entrapment.

❖ Vacuum devices for suction inlet systems in pool water circulation are a safety hazard. Body entrapment or hair entrapment can cause drowning and evisceration. Therefore, it is important that protection be provided against possible entrapment at the pool entrances to suction inlets and that vacuum relief be provided for the vacuum system. Sections AG106.2 through AG106.5 contain requirements for the various types of safety devices.

AG106.2 Suction fittings. Pool and spa suction outlets shall have a cover that conforms to ANSI/ASME A112.19.8M, or an 18 inch × 23 inch (457 mm by 584 mm) drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers.

❖ ANSI/ASME A112.19.8M requires cover material for pool and spa suction outlets to be tested for structural integrity and for entrapment/entanglement potential. It also requires that the cover be marked with the maximum flow rate for which the cover has been tested. Exceeding the maximum flow rate will increase the potential for a child or small adult being entrapped by the increased suction. The code also allows 18-inch by 23-inch (457 mm by 584 mm) drain grates or approved channel drain systems as alternative protection meth-

installed indoors or outdoors, on the ground or supporting structure, or in the ground or supporting structure. Generally, a spa or hot tub is not designed or intended to have its contents drained or discharged after each use.

Storable Swimming or Wading Pool: A pool with a maximum dimension of 18 feet (5.49 m) and a maximum wall height of 42 inches (1.07 m) and so constructed that it may be readily disassembled for storage and reassembled to its original integrity. A pool with nonmetallic inflatable walls regardless of dimensions is considered to be a storable pool.

Wet-Niche Lighting Fixture: A lighting fixture intended for installation in a forming shell mounted in a pool or fountain structure where the fixture will be completely surrounded by water.

680-5. Transformers and Ground-Fault Circuit-Interrupters.

(a) Transformers. Transformers used for the supply of underwater fixtures, together with the transformer enclosure, shall be identified for the purpose. The transformer shall be an isolated winding type having a grounded metal barrier between the primary and secondary windings.

(b) Ground-Fault Circuit-Interrupters. Ground-fault circuit-interrupters shall be self-contained units, circuit-breaker types, receptacle types, or other approved types.

(c) Wiring. Conductors on the load side of a ground-fault circuit-interrupter or of a transformer, used to comply with provisions of Section 680-20(a)(1), shall not occupy raceway, boxes, or enclosures containing other conductors.

Exception No. 1: Ground-fault circuit-interrupters shall be permitted in a panelboard that contains circuits protected by other than ground-fault circuit-interrupters.

Exception No. 2: Supply conductors to a feed-through, receptacle-type, ground-fault circuit-interrupter shall be permitted in the same enclosure.

Exception No. 3: Conductors on the load side of a ground-fault circuit-interrupter shall be permitted to occupy raceway, boxes, or enclosures containing only conductors protected by ground-fault circuit-interrupters.

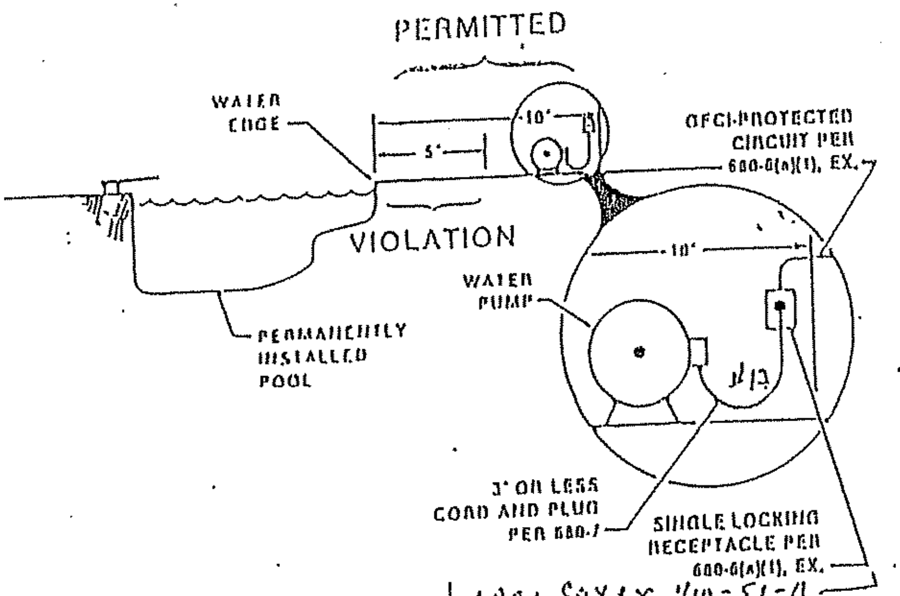
Exception No. 4: Grounding conductors.

680-6. Receptacles, Lighting Fixtures, Lighting Outlets, Switching Devices, and Ceiling Fans.

(a) Receptacles.

(1) Receptacles on the property shall be located at least 10 feet (3.05 m) from the inside walls of a pool or fountain.

Exception: Receptacle(s) that provide power for water-pump motor(s) for a permanently installed pool or fountain, as permitted in Section 680-7, shall be permitted between 5 and 10 feet (1.52 and 3.05 m) from the inside walls of the pool or fountain, and, where so located, shall be single and of the locking and grounding types and shall be protected by ground-fault circuit-interrupter(s).

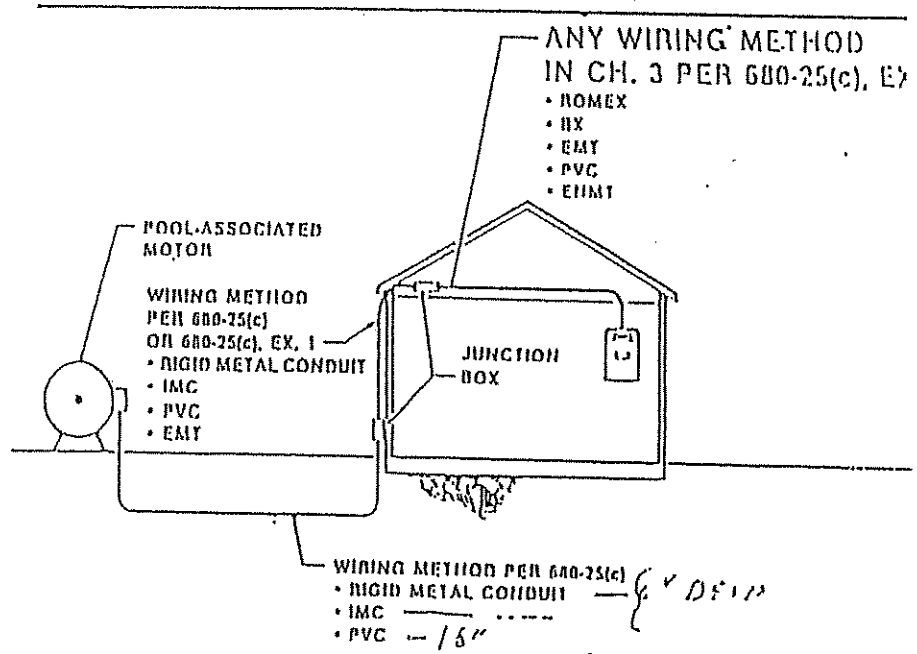


...ING POOLS, FOUNTAINS
...AR INSTALLATIONS

...0-6(a)(1), Ex.

...sion

This revision changes *recirculating pump motors* to *water-pump motors*. Motors installed between 5' and 10' from the water edge of the pool must be connected to a single locking device and the circuit must be GFCI-protected.



SWIMMING POOLS, FOUNTAINS, AND SIMILAR INSTALLATIONS

680-25(c), Ex. 3

REVISION AND NEW EXCEPTION

This revision and new exception allow inter wiring between the house and pool motor to wired by any of the wiring methods in Chap 3. Wiring from the interior of the house to pool motor must comply with 680-25(c).

Above Ground Pool Barrier Code Requirement

New above ground pools must be protected from entry by one of the following methods.

1. **The pool wall must be a minimum of 48" above grade for the entire pool perimeter and the ladder access must be enclosed with a 48" high code complying barrier (self-closing, self-latching gate which opens away from the pool area). The release mechanism and barrier material must meet all code requirements.**
2. **A minimum 48" high barrier that complies with all the requirements in #1 must enclose the entire pool/yard.**

New above ground pools with decks or existing above ground pools, which add decks that access the pool, must be protected from entry by one of the following methods.

1. **The pool wall must be 48" above grade for the entire pool perimeter and a 48" high code complying barrier must be installed on the deck to prevent unauthorized entry.**
2. **A minimum 48" high barrier that complies with all the requirements in #1 must enclose the entire pool/deck/yard.**

Stockade type fences must have the smooth side facing away from the pool.
Board on board type fences must not have more than a 1 ¾" opening between the vertical members on the side facing away from the pool.
Maximum mesh size for chain link fences shall be 2 ¼" square.
Deck pool barriers made of horizontal and vertical members must have no more than a 1 ¾" opening between the vertical members and the horizontal members must be on the poolside.
All barriers should be owned by and on the pool owner's property.
A code variation must be granted along with a notarized letter from both property owners if pool owner uses neighbor's fence.

. ENCLOSURE FOR ABOVE GROUND SWIMMING POOL

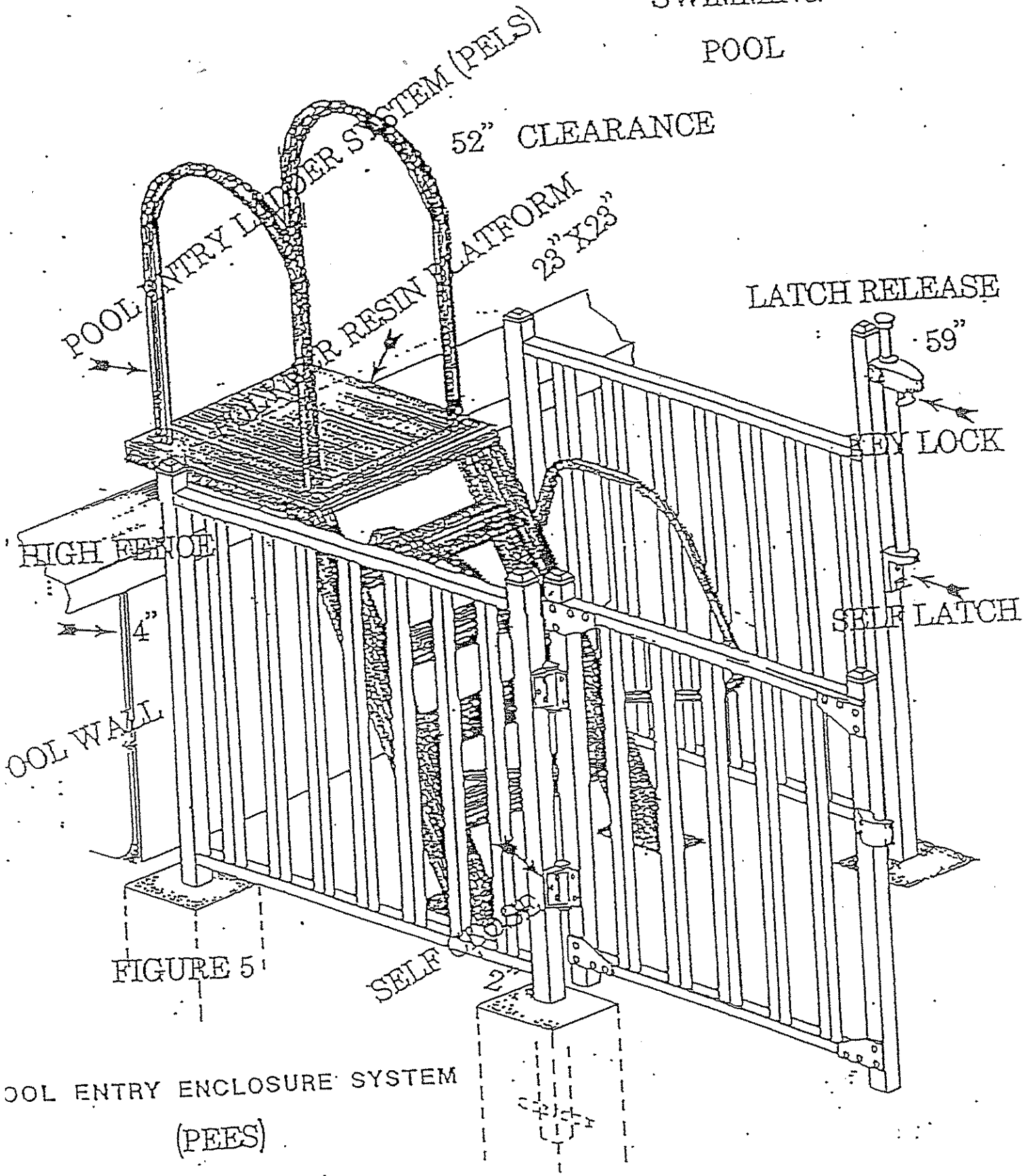


FIGURE 5

OOL ENTRY ENCLOSURE SYSTEM

(PEES)

MODEL BARRIER CODE ENCLOSURE

Construction Code Communicator

State of New Jersey
Jon S. Corzine, Governor

Department of Community Affairs
Joseph V. Doria, Jr., Commissioner

Volume 20 Number 3 Winter 2008

ısidential Swimming Pools and the Plumbing Subcode

There has been some confusion regarding the latest and spa requirements and the new suction entrapment ention language that is referenced in the Uniform truction Code. In the 2006 International Residential Code '2006), Appendix G (Swimming Pools, Spas, and Hot) addresses requirements for constructing new ential swimming pools. When the IRC/2006 was adopted e One- and Two-Family Dwelling Subcode, Section)6, "Entrapment Protection for Swimming Pool and Spa on Outlets," was deleted, and was replaced with a nce to the Plumbing Subcode, *N.J.A.C.* 5:23-3.15(b)8.vi. nas resulted in confusion with regard to enforcement g the permitting and inspection process for new ential swimming pools. There has also been confusion he way that swimming pool installers are interpreting w requirements.

There are two key areas that should be highlighted. ential swimming pools that are constructed with erged suction (bottom drains) must now have two n outlets that are at least three feet apart. These outlets ave American Society of Mechanical Engineers (ASME) ved type covers. The pool must also have some type ospheric safety vacuum release system provided at mp or pumps. The atmospheric safety vacuum release n must conform to ASME A112.19.17. To date, there

(continued on page 3)

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are a number a different types of devices that are approved. If the residential swimming pool is constructed without submerged suction outlets, it is not required to be equipped with an atmospheric safety vacuum release system.

An exception to *N.J.A.C.* 5:23-3.15(b)8.vi of the Plumbing Subcode, paragraph 7.23.4.1 of the National Standard Plumbing Code (which was adopted on September 15, 2008) states: "Swimming pools installed in or on the lots of one- or two-family dwellings" are not required to be equipped with main-drain suction outlets in the lowest point of the swimming pool floor.

A permit application for a residential swimming pool with bottom suction drains must include plumbing, building, and electrical technical sections. The plumbing inspector is responsible for the inspection of the bottom suction drains, the vacuum release system, and the pool heater (if one is being installed). If there are no bottom drains and no vacuum release system or pool heater, then a plumbing technical section is not required.

I hope that this article clears up some of the confusion with these new pool requirements.

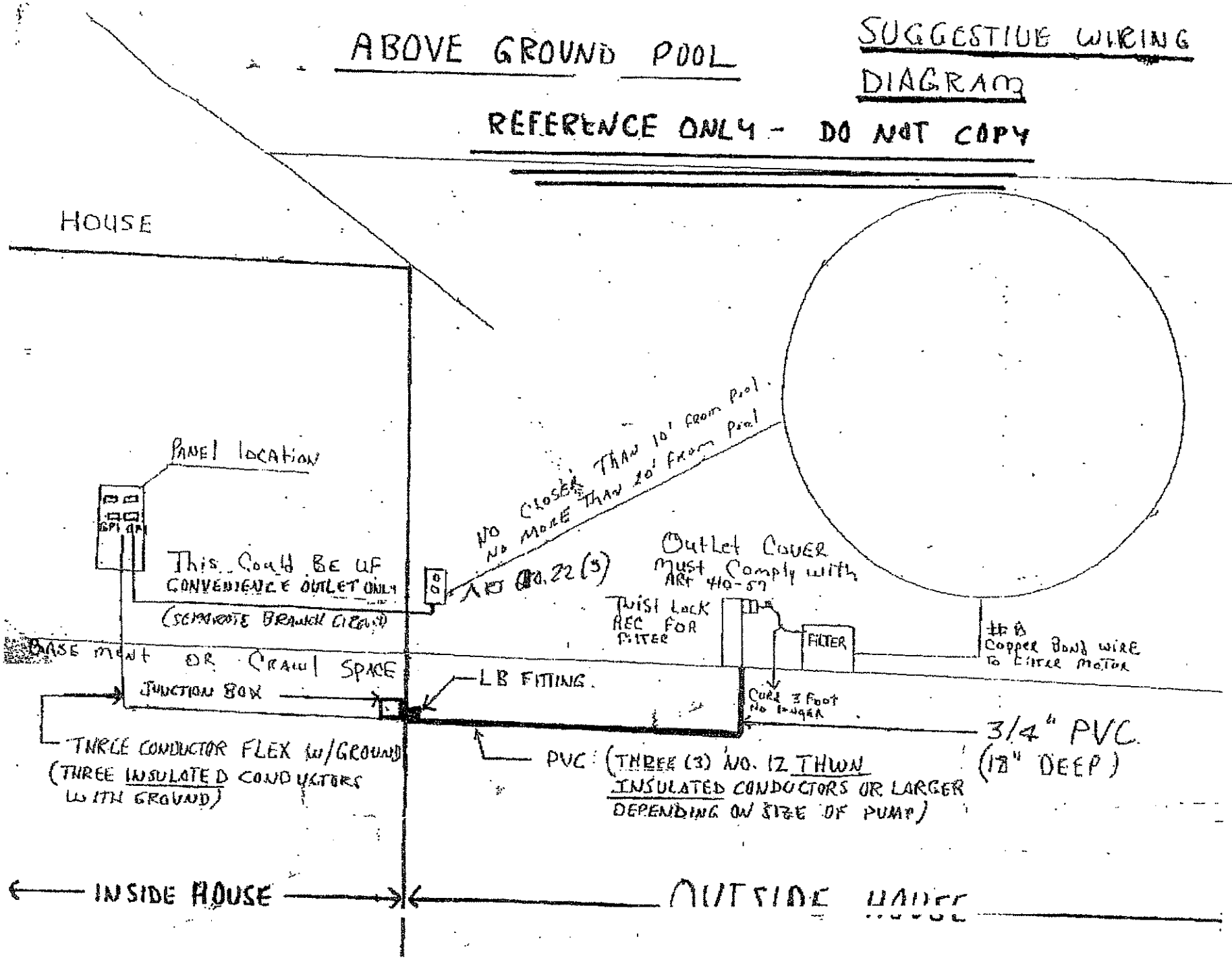
Should you have any questions, you may contact me at (609) 984-7609.

Source: Thomas C. Pitcherello
Code Assistance Unit

ABOVE GROUND POOL

SUGGESTIVE WIRING DIAGRAM

REFERENCE ONLY - DO NOT COPY



Scheduling Inspections

When Work is complete please contact the
South Plainfield Building Department for Inspections

Please have your permit # available when calling

Phone # - (908) 226-7640

Inspection Hours

Building	Monday thru Friday	9:30 am to 3:00 pm
Electric	Monday thru Friday	1:00 pm to 4:00 pm
Plumbing	Monday, Wednesday and Friday	10:30 am to 4:00 pm

For Fire Inspections please call – (908) 756-4761