



SWIMMING POOLS

1. PROPERTY INFORMATION

Municipality: _____ Parcel ID: _____

Site Address: _____

2. APPLICATION FOR: (Check all that apply)

- Storable / Portable Above Ground With Deck Without Deck In-Ground Spa / Hot Tub

A barrier / fence not less than 48" high must be provided for any pool containing more than 24" of water.

- Pool walls will be barrier Fence will be provided around the pool only The house will be part of the fence

Note: Where a wall or walls of the home serve as part of the barrier, check one of the following:

- The pool will be equipped with a power safety cover.
Doors with direct access will be equipped with self-closing and latching devices.
Doors with direct access will be equipped with an audible warning device with deactivation switch 54" off the floor.

Estimated Cost of Construction: _____ Total Square Footage: _____

3. PROPERTY OWNER

Name: _____ Phone: _____ Email: _____

Address: _____ City: _____ State: _____ Zip: _____

4. INSTALLER

Name: _____ Phone: _____ Email: _____

Address: _____ City: _____ State: _____ Zip: _____

5. ELECTRICIAN

Name: _____ Phone: _____ Email: _____

Address: _____ City: _____ State: _____ Zip: _____

THE FOLLOWING INFORMATION MUST ACCOMPANY EACH APPLICATION

Incomplete or missing information may result in additional fees and/or denial of the application.

- Completed "Application" 2 sets of drawings in sufficient detail for review
Zoning Permit / Approval Proof of valid Workers Compensation for contractor or "Notarized Waiver"
Plot / Site Plan showing the location of the deck

I certify that I am the owner of the property or an authorized agent of the owner for which this application has been filed. I hereby certify that all statements contained above are, to the best of my knowledge, true and correct. I further understand that I must comply with the provisions of all laws and ordinances as adopted by the Municipality and the Unified Construction Code of Pennsylvania.

Applicants Signature: _____ Date: _____

Received by: _____ Date: _____ Plan Review No. _____

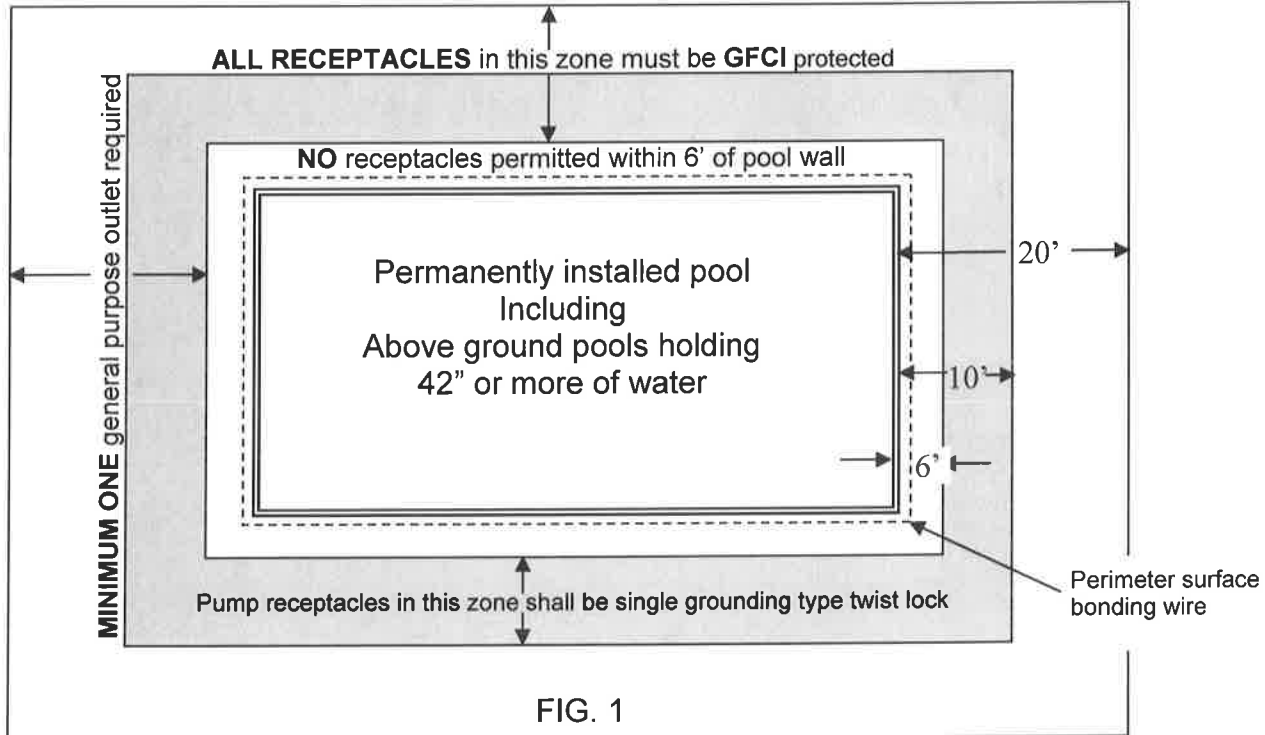
Permit No. _____

ELECTRICAL REQUIREMENTS FOR POOLS, SPAS AND HOT TUBS

The following is use as reference only, IT IS NOT the intent that this document to be used as an instructional guide nor does it address all situations. References materials are from the 2009 International Residential Code and 2008 National Electric Code.

1. Location of Receptacles

- a. NO receptacles shall be placed within 6 feet of the pool
- b. All outlets for 15 and 20 ampere, 125 or 240 volt circuits for swimming pool pump motors shall be GFCI protected regardless of proximity to pool and whether the pump is plug and cord or hard wired.
- c. Receptacles for pumps and other equipment provided for the circulation and or sanitation of the water shall be not less than 10 feet from the pool wall or if all of the following exist not less than 6 feet:
 - (1) Consist of a single receptacle
 - (2) Has locking capabilities such as twist lock
 - (3) Is the grounded type
 - (4) Has GFCI protection
- d. An additional 15 or 20 amp general purpose receptacle shall be located between 6 feet and 20 feet from the inside wall of the pool. This receptacle shall be GFCI protected and located no higher than 6 feet 6 inches above the floor, platform or grade and may be installed with out conduit so long as it is approved for direct burial and 12 inches below grade.
- e. All outside receptacles shall be supported by a 4 x 4 post or equivalent.
- f. All outside receptacles shall have in use covers. (Bubble Covers)
- g. Under water luminaries (lights) shall be installed in accordance with manufactures instructions, NEC 680.23 and IRC 4206.4.



2. Pool Pump and Accessories

- a. Pool pump and accessories shall be at least 3 feet from the pool
- b. A flexible cord and plug for pool pumps shall be no longer than 3 feet and have a min. #12 AWG equipment grounding conductor and a grounding type attachment plug (See 1.B above)
- c. Permanently wired equipment shall be provided with a means disconnection within site of the equipment and no closer than 5 feet from the inside wall of the pool, hot tub or spa.

3. Wiring Methods

- a. Except as modified by the code for special circumstances, circuits installed for pool assisted motors shall be in ridged metal conduit, intermediate metal conduit, reinforced thermosetting resin conduit, ridged poly vinyl chloride conduit or type MC cable listed for the location.

<u>(1) Type Conduit</u>	<u>Minimal burial depth (in)</u>
Ridged metal conduit	6
Intermediate Metal Conduit	6
Nonmetallic for direct burial raceways	18 (May be reduced to 12" if 15 / 20 amp GFCI)
Other approved raceways	18

- b. **Grounding** - Any wiring method shall contain an additional insulated copper equipment grounding wire sized accordingly but not any smaller than 12 AWG.

- c. **Bonding** - All metal parts within 5 feet of the pool wall shall be accomplished with solid copper wire, insulated or bare, not less than #8 AWG or ridged metal conduit of brass or other corrosion resistant metal. (See FIG. 2)

- (1) Bonding shall include but not be limited to: Conductive pool shells, including concrete, structural reinforcing steel or copper conductor grid if reinforcing steel is epoxy coated, 3 feet of the perimeter surface whether paved or unpaved, all metallic parts of the pool, underwater lighting, metal fittings within or attached to the pool, metal parts of pool electrical equipment including any metal conduit or other wiring method, pumps, heaters, covers, etc. **Exception:** Double insulated motors,
- (2) Perimeter surface bonding shall extend 3 feet from the inside walls of the pool and attached to the conductive surfaces of the pool in 4 uniformly spaced parts around the pool. Bonding may be accomplished by one of the following: (See FIG. 1)
 - Bonding of the structural steel or copper grid in concrete or for paved areas.
 - A minimum 8 AWG bare solid copper wire around the perimeter of the pool between 18 and 24 inches from the pool wall and not less than 4 inches or more than 6 inches below the sub grade for **paved or unpaved** areas.
- (3) An intentional bond of a min. conductive surface of 9 square inches shall be installed in contact with the pool water at all times. (See Fig. 3)

4. Protective Barriers (General requirements not all inclusive)

- a. All outdoor pools, hot tubs or spas containing 24" or more of water shall be protected by a barrier which complies with appendix G of the International Residential Code:
- (1) Barriers shall be at least 48" from grade. (The sides of above ground pools is sufficient so long as the top is 48" from grade)
 - (2) Openings in barriers shall not allow the passage of a 4" sphere.
 - (3) Gates shall be self closing and latching.
 - (4) Where a wall or walls of a dwelling serve as part of the barrier one of the following shall be provided:
 - The pool shall be equipped with a power safety cover
 - Doors / screens with direct access shall be equipped with an audible warning device with deactivation switch 54" off the floor
 - Doors shall be equipped with self closing and latching devices
 - (5) Ladders or steps for above ground pools must be capable of being secured, locked or removed.
 - (6) Spas and hot tubs equipped with a safety cover complying with ASTM F1346 are exempt from the barrier requirements.

FIG. 2

All fixed metal parts within 5 feet of the of the inside walls of the pool shall be bonded unless separated by a permanent barrier

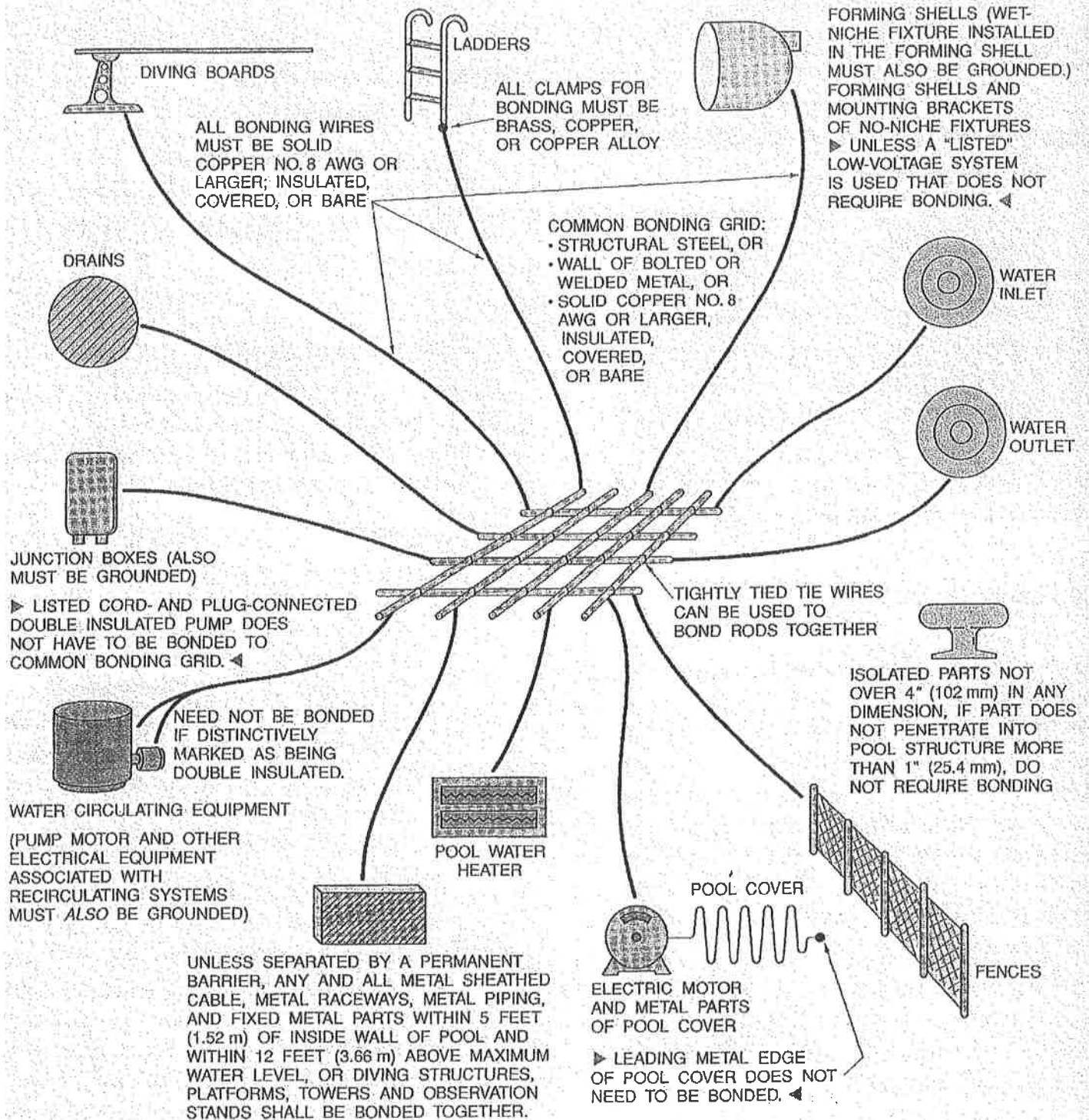
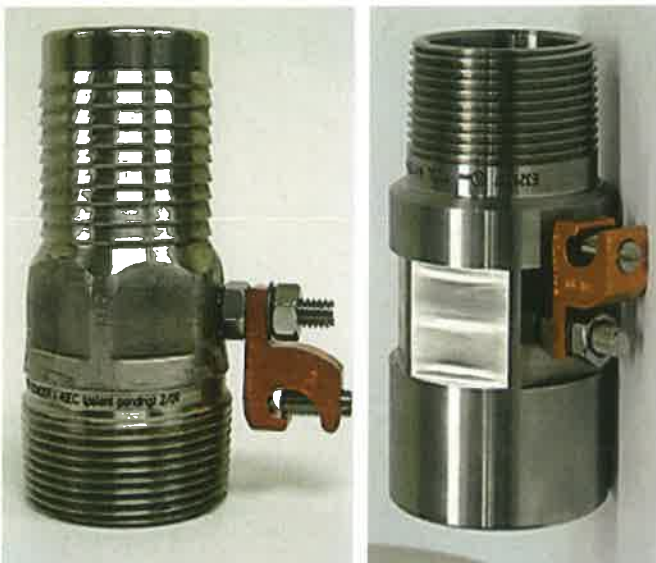


FIG. 3

One example of bonding for pools with no conductive items in contact with water



WATER BONDING

1. Water in concrete pools with bonded reinforcing steel is considered bonded. No additional bonding is required.
2. Water with bonded metal ladders, drains, lighting or other over 9 square inches is considered bonded.
3. Shown here is one method of water bonding for non conductive pools. Follow manufactures instructions for installation