

SWIMMING POOL, HOT TUB PERMIT CHECKLIST

- ☐ FILL OUT AND SIGN THE "SWIMMING POOL, HOT TUB BUILDING AND ZONING PERMIT APPLICATION" FORM.
- ☐ PROVIDE A COPY OF THE PROPERTY SURVEY PLAN AND DRAW THE SWIMMING POOL, HOT TUB ON IT. SHOW SETBACK DIMENSIONS FROM POOL, HOT TUB TO EACH SIDE, REAR AND FRONT PROPERTY LINES. SHOW ALL DOORS REQUIRING A POOL ALARM THAT LEAD INTO THE POOL AREA.
- ☐ PROVIDE A PICTURE, BROCHURE AND/OR CONSTRUCTION PLAN OF THE PROPOSED POOL. PROVIDE CROSS SECTION PLANS AND DETAILS FOR INGROUND POOLS. PROVIDE BARRIER FENCE DETAILS INCLUDING GATE LATCHES. ALL GATES MUST SWING AWAY FROM THE POOL.
- ☐ FILL OUT AND SIGN THE "PERMIT AGREEMENT" FORM.
- ☐ FILL OUT AND SIGN THE "WORKERS COMPENSATION AFFIDAVIT OF EXEMPTION" FORM.
OR,
PROVIDE A PROOF OF WORKERS COMPENSATION INSURANCE CERTIFICATE NAMING MOON TOWNSHIP AS A CERTIFICATE HOLDER.
- ☐ READ AND SIGN THE "SWIMMING POOL, HOT TUB AFFIDAVIT" FORM.
- ☐ FILL OUT "ELECTRIC PERMIT" APPLICATION AND SUBMIT WITH PAYMENT CHECK.

Meet with Building Code Official to submit and review all information submitted.

It usually takes about a week to process a pool, hot tub permit.

This office will call to let you know when the permit is ready to be picked up and how much the building permit fee is.

Building Permit fees will be required to be paid when you pick up the permit.

SWIMMING POOL, HOT TUB BUILDING and ZONING PERMIT APPLICATION

Township of Moon, 1000 Beaver Grade Road, Moon Township, PA 15108 - Phone 412-262-1700- Fax 412-262-5344

1. Location of Proposed Construction: _____
(Street No.) (Street name)
2. Applicant's name: _____ Email: _____
Applicant's Address: _____
Phone No: (cell) _____ Office: _____ Home _____
3. Type of Use: ☐ Residential ☐ Commercial ☐ Industrial ☐ Other (specify) _____
4. Type of Improvement: ☐ Above Ground Pool ☐ In Ground Pool ☐ Hot Tub ☐ Other (specify) _____
5. Property Information: Zoning District: _____ County Lot & Block: _____
Subdivision Name: _____ Lot No. _____ Lot Size: _____
Owner's Name: _____
Owner's Address: _____
Owner's Phone No. _____ Email _____
Occupant's Name: _____ Occupant's Phone No.: _____
Zoning Setbacks: (the distance between the structure and the property lines)
Front Yard: _____ Rear Yard _____ Right Side _____ Left Side _____
7. Building Code Information for proposed construction:
Total Cost of Construction: _____
☐ Above Ground Pool ☐ In Ground Pool ☐ Hot Tub Size _____ x _____ Pool Depth _____ Diving Board _____
8. Contractor Company Name: _____
Contact Person: _____ Cell No, _____
Contractor's Address: _____
Contractor's Office Phone No.: _____ Email: _____

The applicant/owner hereby certifies that the statements made herein and representations contained in all accompanying matter part of this application are true and correct. The applicant/owner shall be responsible for reviewing and fully understanding all Permit conditions and insuring compliance to all applicable codes and ordinances. The applicant/owner shall also be responsible for any fees incurred in relation to the above project. The applicant/owner grants Moon Township officials the right to enter onto the property for the purpose of inspection the work permitted and posting notices. As applicant, I hereby certify that the proposed work is authorized by the owner to make the applicant as his authorized agent

Applicant Owner:
Signature: _____ Signature: _____

PERMIT AGREEMENT

In consideration of the issuance by the Township of Moon (the "Township") of a Building Permit, Zoning Permit and other permits for the property located at

address: _____
and to the undersigned property owner(s) or the agent (the "Applicant"), the Applicant acknowledges that, in reviewing plans and specifications, in issuing permits and inspection work of the Applicant; the employees, consultants, elected or appointed official of the Township are only performing their duties to require compliance with the minimum requirements of the applicable ordinances of the Township and the Pennsylvania Uniform Construction Code pursuant to the police power of the Township and are not warranting to the Applicant or to any third party the quality of adequacy of the design, engineering or work of the Applicant or their agents or contractors.

Applicant further acknowledged that although plan review and inspections will be provided, it will not be possible for the Township to review every aspect of the Applicant's design and engineering or to inspect every aspect of the Applicant's work. Accordingly, neither the Township nor any of its elected appointed officials, consultants, or employees shall have any liability to the Applicant for defects or shortcomings in such design, engineering or work, even if it is alleged that such defects or shortcomings should have been discovered during the Township's review or inspection. Furthermore, the Applicant agrees to defend, hold harmless and indemnify the Township, its elected officials, consultants and employees from and against any and all claims, demands, actions, and causes of actions of any one or more third parties arising out of or relating to the Township's review or inspection of the Applicant's design, engineering, or work or issuance of a permit or permits, or arising out of or relating to the design, engineering or work done by Applicant pursuant to such permit or permits. All references in this Agreement to Applicant's design, engineering or work shall include such design, engineering, and work, which is performed by the Applicant or by the Applicant's employees, agents, independent contractors, subcontractors or any other person or entities performing work pursuant to the issuance of the Building Permit, Zoning Permit and other Permits by the Township.

Owner's Signature _____ Date _____

Print Name _____

Owner's Signature _____ Date _____

Print Name _____

Address of proposed work _____

WORKERS COMPENSATION AFFIDAVIT OF EXEMPTION

Basis for exemption is (please check one):

- ☐ The Contractor for this building permit is a sole proprietorship without employees
- ☐ The Contractor is a corporation, and the only employees working on the project have and are qualified as "Executive Employees" under Section 104 of the Workers' Compensation Act. Please explain: _____
- ☐ All of the contractor's employees on the project are exemption religious grounds under Section 304.2 of the Workers' Compensation Act. Please explain: _____
- ☐ Owner is the contractor _____
- ☐ Other. Please explain: _____

Please be aware of the following requirements under the Pennsylvania Workers' Compensation Act:

- ⇒ Any subcontractors used on this project will be required to carry their own workers' compensation coverage.
- ⇒ Violation of the Workers' Compensation Act or the terms of this information form will subject the contractor to a stop-work order and other fines and penalties as provided by law.

My signature on behalf of or as the contractor as stated on this form constitutes my verification that the statements contained here are true.

Signature _____ Date _____

Name (Please Print) _____

Cell Phone Number _____

SWIMMING POOL, HOT TUB AFFIDAVIT

As the owner/contractor of the property located at

_____ in Moon Township, PA.
I am aware of, and I have received a copy of the requirements for the enclosure and safety devices of a swimming pool, hot tub, and spa in accordance with PA Uniform Construction Code.

I take full responsibility, as the property owner, for ensuring that the building permit for the pool and fence enclosure is obtained and that the pool or spa shall be appropriately protected by a code compliant constructed fence or barrier during and after construction.

A swimming pool, hot tub or spa, shall not be used or occupied until Moon Township has granted all final electrical, mechanical and building inspections approvals.

All approved inspections and occupancy permit must be obtained prior to use of the swimming pool, hot tub.

Above ground pools require,
Electrical rough and final inspections
Final building inspection.

In-ground pools require,
Electrical rough and final inspections.
Electrical bonding inspection before concrete is poured
Final building inspection including the pool, hot tub, door alarms, and gates,
fence pool barrier.

I am aware that all future additional alterations, deck, swimming pool barrier fence, etc. always requires a building permit and compliance inspections.

Owner Name (print)	Signature	Date
--------------------	-----------	------

Owner Name (print)	Signature	Date
--------------------	-----------	------

Contractor Name (print)	Signature	Date
-------------------------	-----------	------

Township of Moon

1000 Beaver Grade Road; Moon Twp., PA 15108

New Fee Schedule Effective January, 2017

ELECTRICAL INSPECTION FEE SCHEDULE

All Electrical Permit Applications
must be accompanied with a check

RESIDENTIAL FEES (Two Trip Maximum)

Residential Flat Rate, New Construction. (Up to 200A)	\$229.00
Residential Flat Rate, New Construction. (Over 200A to 400A)	\$354.00
Residential Additions with or without Svcs. up to 200 A	\$154.00
Services & Sub-panels up to 200A <i>(One trip only)</i>	\$79.00
Minimum Trip & Re-inspection fee <i>(One trip only)</i>	\$79.00
Temporary Service Inspection up to 200A <i>(One trip only)</i>	\$79.00
Services over 200A and up to 400A <i>(One trip only)</i>	\$104.00
Residential Alterations up to 15 outlets & Svcs. to 200A <i>(One trip only)</i> . .	\$94.00
Hot Tubs <i>(One trip only)</i>	\$89.00
Photo Voltaic Systems up to 5 KW <i>(Two trips only)</i>	\$254.00
Above Ground Swimming Pools <i>(One trip only)</i>	\$89.00
In Ground Swimming Pools <i>(Two trips only)</i>	\$179.00
<i>(Swimming Pool panels and/or pool houses are extra, use above fees)</i>	

FEES OTHER THAN RESIDENTIAL

Services & Sub-panels up to 200A	\$79.00
Temporary Service Inspection up to 200A <i>(One trip only)</i>	\$79.00
Services & Sub-panels over 200A and up to 400A	\$104.00
Each Additional 100A over 400A	\$20.00
1-50 Outlets Switches, receptacles, lighting, etc. (Rough & Final)	\$154.00
Each Electrical Outlet or Device Over 50	\$0.75
Equipment Up to 10 h.p., KVA, KW (Transformers, Motors, HVAC, etc.)	\$30.00
Each Additional h.p., KVA, KW, Over 10	\$1.00
1-50 Outlets Low voltage, fire alarm, data, security, etc. (Rough & Final) . .	\$154.00
Each Low Voltage Device Over 50	\$0.75
Illuminated Signs (Each)	\$89.00
Photo Voltaic Cells (Based on the above KW rating and associated equipment)	

Electrical Inspections are available on Monday's, Wednesday's & Friday's.

NOTE: Inspections WILL NOT be performed until the application(s) are filed, AND the appropriate fees are submitted. **ABSOLUTELY NO EXCEPTIONS.** If you have any questions, contact Moon Twp. at 412-262-1700 or the Main Office at 412-766-2565.

Permit Fee

Permit No.

Receipt No.

Permit Approved By

ELECTRICAL PERMIT APPLICATION

TOWNSHIP OF MOON 1000 BEAVER GRADE ROAD MOON TOWNSHIP, PA 15108
(412) 269-2836 FAX (412) 262-5344 1-800-922-6062 (412) 563-3006

Project Address: _____
(No.) (Street) (City) (State) (Zip)

Subdivision: _____ Lot No. _____

Applicant's Name: _____ Phone: (_____) _____
(Name)

(Mailing Address) (No.) (Street) (City) (State) (Zip)

Landowner's Name: _____ Phone: (_____) _____
(Name)

(Mailing Address) (No.) (Street) (City) (State) (Zip)

Occupant's Name: _____ Phone: (_____) _____
(Name)

(Mailing Address) (No.) (Street) (City) (State) (Zip)

Contractor's Name: _____ Phone: (_____) _____
(Name)

(Mailing Address) (No.) (Street) (City) (State) (Zip)

Type of Improvement:

☐ Repair/Replace ☐ New Construction ☐ Addition ☐ Alteration ☐ Other _____

Description of work (wiring, equipment, data, service size, number switching, lighting, receptacles, etc.)

Current and former use of property in detail (residential, commercial, industrial, school, church, office, etc.): _____

The Applicant/Owner hereby certifies that the statements made herein and representations contained in all accompanying matter part of this application are true and correct. The Applicant/Owner shall be responsible for reviewing and fully understanding all Permit conditions and insuring compliance to all applicable Codes and Ordinances. The Applicant/Owner shall also be responsible for any fees incurred (Engineering, etc.) in relation to the above proposed project. The Applicant/Owner grants Moon Twp. Officials the right to enter onto the property for the purpose of inspecting the work permitted and posting notices. As applicant, I hereby certify that proposed work is authorized by the owner of record, and I have been authorized by the owner to make this application as his authorized agent.

Signed: _____ Applicant _____ Date _____

Signed: _____ Owner _____ Date _____

ELECTRICAL WIRING REQUIREMENTS FOR ABOVE GROUND SWIMMING POOLS

ANY POOL HOLDING WATER IN A DEPTH GREATER THAN 1.0 m (42 in.) IS TO BE CONSIDERED A PERMANENTLY INSTALLED POOL.

Pool Pump Receptacle Outlet and Wiring Method

A) Receptacle(s) that provide power for water-pump motors or for other loads directly related to the circulation and sanitation system shall be located at least 3.0 m (10 ft) from the inside walls of the pool, or **not less than 1.83 m (6 ft) from the inside walls of the pool if they meet all of the following conditions:**

- 1) Consist of single receptacle(s)
- 2) Employ a locking configuration (Twist-lock)
- 3) Are of the grounding type
- 4) Have GFCI protection

3) Receptacle(s) must have an (in-use) weatherproof cover that can be closed when plugged in.

5) Conductors for pool-associated motors shall be installed in rigid metal conduit, intermediate metal conduit, rigid nonmetallic conduit (PVC), reinforced thermosetting resin conduit, or Type MC cable listed for swimming pools. Any wiring method employed shall contain an insulated copper equipment grounding conductor sized in accordance with 250.122 but not smaller than 12 AWG. The pump motor plug and cord that comes with the pump may be for testing purposes only and not a listed cord & plug. UL does not always test and list the cord and plug, only the pump motor. Therefore, you must purchase a twist-lock plug & a 'hard usage' cord with a #12 insulated grounding conductor listed for wet locations. The cord & plug shall not exceed 3 ft. in length. See Articles 680.21(5) and 680.25 (1).

The equipment grounding conductor must have a green insulated covering. Article 680.21(A) (1) of the NEC specifies that the grounding conductor for the pool pump, must be insulated and Article 250.119 identifies it to be green in color. (Therefore, YOU CANNOT USE UF CABLE FOR THE POOL PUMP.) It does not employ a green insulated equipment grounding conductor but instead a bare equipment grounding conductor.

6) Article 310.8 specifies the type of conductors for wet locations. They shall be any of the below listed types: Types MTW, RHW, RHW-2, TW, THW, THW-2, THHW, THHW-2, THWN, THWN-2, XHHW, XHHW-2, ZW, etc.

Depth of trench for the branch circuits

Article 680.10. The branch circuit conductors listed above and the raceways must be buried at least 18" deep. Exception: 1&2 Family dwellings. When rated 120 Volts or Less with GFCI Protection and a maximum overcurrent protection of 20 Amperes based on Table 300.5, Column 4 of the 2008 NEC Handbook Commentary.

Metal - All Rigid Metal Conduit must be at least 6" deep.

Convenience Receptacle(s)

At least one (1) convenience receptacle, other than the pool pump receptacle, must be installed between 6' and 20' measured from the inside wall of the pool. It cannot be on the same circuit with the pump motor.

Convenience receptacle(s) must be GFCI protected. (Tamper & weather resistant. Art. 406.11; 406.8(A)(B)(1).

Must have an in-use weatherproof cover where exposed to the weather.

Wiring Method: (YOU CAN USE UF CABLE FOR THE CONVENIENCE RECEPTACLE.)

IF cable Rated 120 Volts or Less, that is GFCI protected and that has a maximum overcurrent protection of 20 Amperes or less based on Table 300.5, Column 4 of the 2008 NEC can be buried at least 6" deep.

IF cable not GFCI Protected must be buried 18 inches deep.

Metal - All Rigid Metal Conduit must be buried no less than 6" deep.

NOTE: In addition to the above NEC wiring methods, the PA energy code requires that a timer be installed for pool pump motor. Check with the Building Inspector in the community.

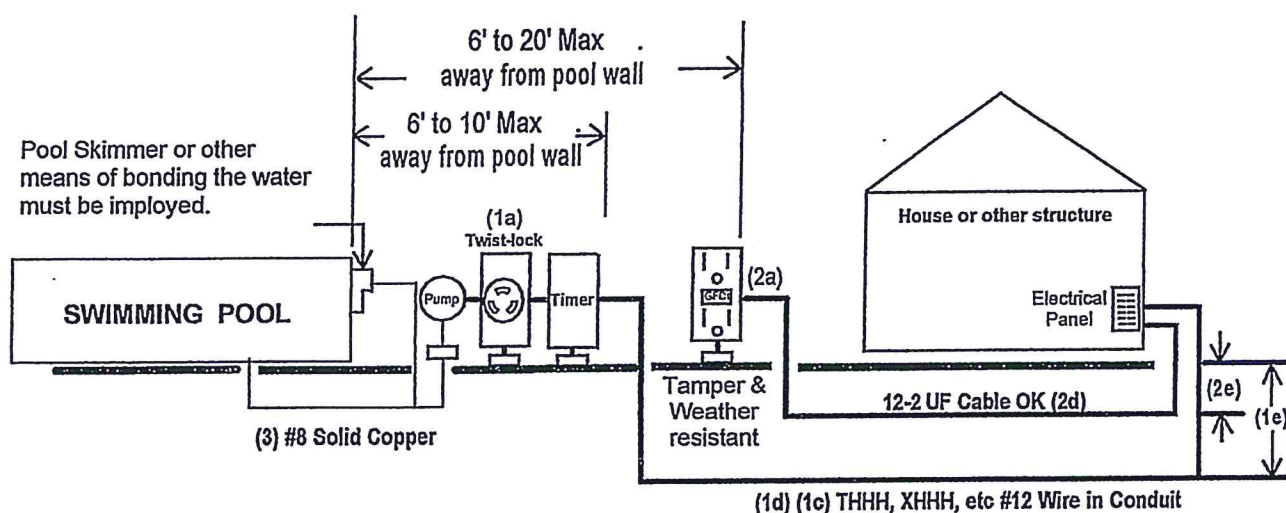
Bonding of all metallic parts if applicable

- a. All metal parts must be bonded together using a #8 (or larger) solid copper wire.
- b. You must use non-corrosive clamps listed and stamped on the connectors.
- c. Pool Water. An intentional bond of a minimum conductive surface area of 9 square inches shall be installed in contact with the pool water. This bond shall be permitted to consist of parts that are required to be bonded in Article 680.26(B).

YOU DO NOT NEED TO INSTALL GROUND RODS OR RUN THE #8 BONDING CONDUCTOR BACK TO THE SERVICE PANEL OR SUB-PANEL.

FOR ILLUSTRATED PURPOSES ONLY

Your situation may be different



- 1a. Single twist-lock receptacle in a weather-proof box with an "in-use cover."
- 1e. The minimum depth of trench: 18 IN deep. (Unless based on table 300.5 for 1&2 family dwellings.) Conductor types are: THHW, THWN, THWN-2, XHHW, or other approved conductors. See Article 310.8(C)(2.) They are to be Black, (or other color to identify the ungrounded conductor), white (grounded conductor) and green (an insulated equipment conductor). You CAN reidentify any color conductor for the ungrounded conductor (hot) and grounded conductor (neutral) with tape. (See Article 200.6) But you CANNOT reidentify the equipment grounding conductor. It must be green throughout its entire length. (See Article 250.119)
- 2 a. Convenience receptacle(s) GFCI protected in a weather-proof box with an "in-use cover."
(Tamper resistant & weather resistant. Art. 406.11; 406.8(A)(B)(1).)
- 2 d&e. At least one Convenience receptacle must be installed using UF cable or other approved wiring method. The trench can be a minimum of 12" deep when rated 120 Volts or less with GFCI protection and a maximum overcurrent protection of 20 Amperes. NEC Table 300.5, Column 4. (For 12 Inch burial depth, the conductors must be GFCI protected at the house, if they are not GFCI protected, the burial depth must be at least 18 inches.)
3. Minimum #8 (or larger) solid copper conductor for bonding purposes.

The above swimming pool rules are based on the 2008 National Electrical Code. Some rules are paraphrased for clarification. If you are installing electrical wiring in addition to the above requirements or do not fully understand these regulations, please refer to Article 680 in the 2008 NEC.

CODE REQUIREMENTS FOR SWIMMING POOLS

Localities in Pennsylvania enforce the regulations established by the Pennsylvania Uniform Construction Code, PA UCC regarding the installation, use and maintenance of all swimming pools, hot tubs and spas for both private and public residential and commercial pools.

No persons shall begin construction of a swimming pool nor substantially alter or reconstruct any swimming pool without having first submitted construction plans and specifications to the local building department for review and approval. No work shall be commenced until having first obtained the required permits for the pool, electrical work, mechanical work and fence or barrier protection as required by the regulations.

It is unlawful for any person to construct, maintain, use, possess or control any swimming pool not properly protected by a permanent fence or barrier in accordance with the regulations regardless of the date of construction. Any person who shall violate any provisions of the regulations may be subject to legal action as allowed by the PA UCC.

PERMITS:

A building permit is required for installing all new pools, hot tubs, and spas. An electrical permit is required for any electrical circuits or electrical work added for the pool and a gas or mechanical permit is required for pool heaters or other mechanical equipment for the pool.

The property owner is responsible for ensuring the pool is properly protected by a fence or barrier meeting code requirements during construction and after completion and approval. In addition, any fence erected must be constructed with the "finished side" facing outward towards surrounding properties or right-of-way.

PA ONE CALL SYSTEM Call: "811"

STOP-CALL BEFORE YOU DIG

APPENDIX G

SWIMMING POOLS, SPAS AND HOT TUBS

(The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.)

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.

AG101.2 Pools in flood hazard areas. Pools that are located in flood hazard areas established by Table R301.2(1), including above-ground pools, on-ground pools and in-ground pools that involve placement of fill, shall comply with Sections AG101.2.1 or AG101.2.2.

Exception: Pools located in riverine flood hazard areas which are outside of designated floodways.

AG101.2.1 Pools located in designated floodways. Where pools are located in designated floodways, documentation shall be submitted to the *building official*, which demonstrates that the construction of the pool will not increase the design flood elevation at any point within the *jurisdiction*.

AG101.2.2 Pools located where floodways have not been designated. Where pools are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool will not increase the design flood elevation more than 1 foot (305 mm) at any point within the *jurisdiction*.

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.

AG103.3 Pools in flood hazard areas. In flood hazard areas established by Table R301.2(1), pools in coastal high hazard areas shall be designed and constructed in conformance with ASCE 24.

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. 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 $1\frac{3}{4}$ 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.
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 $1\frac{3}{4}$ inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a $2\frac{1}{4}$ -inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than $1\frac{3}{4}$ 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 $1\frac{3}{4}$ 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 $\frac{1}{2}$ 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 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 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 as 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.

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

AG106.1 General. Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

SECTION AG107 ABBREVIATIONS

AG107.1 General.

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

APSP—Association of Pool and Spa Professionals
NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue
Alexandria, VA 22314

ASCE—American Society of Civil Engineers
1801 Alexander Bell Drive
Reston, VA 98411-0700

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

UL—Underwriters Laboratories, Inc.
333 Pfingsten Road
Northbrook, IL 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-5-2003 Standard for
Residential In-ground Swimming Pools AG103.1

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

ANSI/APSP

ANSI/APSP-7-06 Standard for Suction Entrapment
avoidance in Swimming Pools, Wading Pools, Spas,
Hot Tubs and Catch Basins AG106.1

ASCE

ASCE/SEI-24-05 Flood Resistant
Design and Construction AG103.3

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

UL

UL 2017-2000 Standard for General-purpose
Signaling Devices and Systems—with Revisions
through June 2004 AG105.2

N1103.8 Pools. Pools shall be provided with energy conserving measures in accordance with Sections N1103.8.1 through N1103.8.3.

N1103.8.1 Pool heaters. All pool heaters shall be equipped with a *readily accessible* on-off switch to allow shutting off the heater without adjusting the thermostat setting. Pool heaters fired by natural gas or LPG shall not have continuously burning pilot lights.

N1103.8.2 Time switches. Time switches that can automatically turn off and on heaters and pumps according to a preset schedule shall be installed on swimming pool heaters and pumps.

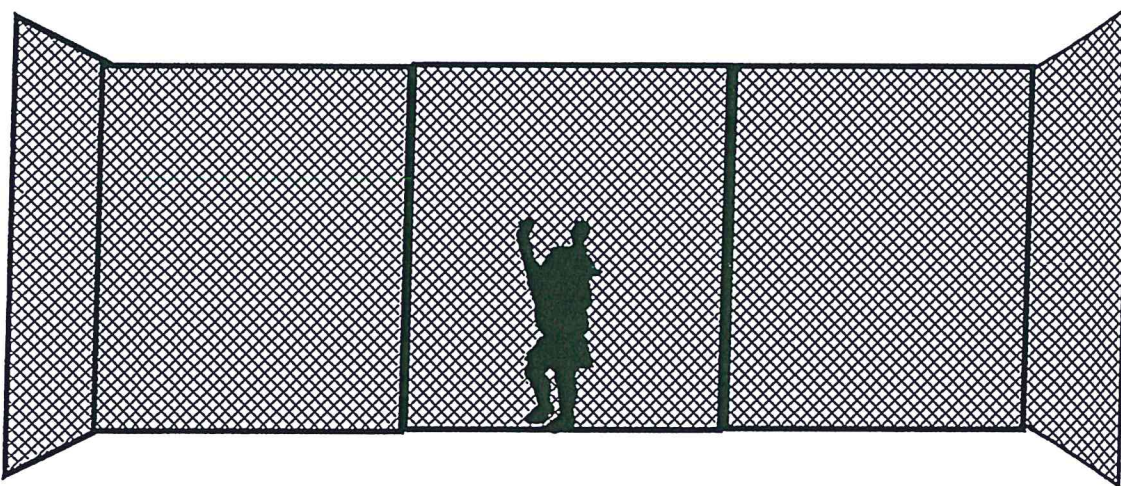
Exceptions:

1. Where public health standards require 24-hour pump operation.
2. Where pumps are required to operate solar- and waste-heat-recovery pool heating systems.

N1103.8.3 Pool covers. Heated pools shall be equipped with a vapor retardant pool cover on or at the water surface. Pools heated to more than 90°F (32°C) shall have a pool cover with a minimum insulation value of R-12.

MOON TOWNSHIP PENNSYLVANIA

Swimming Pool, Hot Tub and Spa Permit
Building Code Guidelines



KEEP YOUR POOL
SAFE

CODE REQUIREMENTS FOR SWIMMING POOLS

Localities in Pennsylvania enforce the regulations established by the Pennsylvania Uniform Construction Code, PA UCC regarding the installation, use and maintenance of all swimming pools, hot tubs and spas for both private and public residential and commercial pools.

No persons shall begin construction of a swimming pool nor substantially alter or reconstruct any swimming pool without having first submitted construction plans and specifications to the local building department for review and approval. No work shall be commenced until having first obtained the required permits for the pool, electrical work, mechanical work and fence or barrier protection as required by the regulations.

It is unlawful for any person to construct, maintain, use, possess or control any swimming pool not properly protected by a permanent fence or barrier in accordance with the regulations regardless of the date of construction. Any person who shall violate any provisions of the regulations may be subject to legal action as allowed by the PA UCC.

PERMITS:

A building permit is required for installing all new pools, hot tubs, and spas. An electrical permit is required for any electrical circuits or electrical work added for the pool and a gas or mechanical permit is required for pool heaters or other mechanical equipment for the pool.

The property owner is responsible for ensuring the pool is properly protected by a fence or barrier meeting code requirements during construction and after completion and approval. In addition, any fence erected must be constructed with the "finished side" facing outward towards surrounding properties or right-of-way.

PA ONE CALL SYSTEM

STOP-CALL BEFORE YOU DIG

CALL PA ONE CALL BEFORE YOU DIG 1-800-242-1776

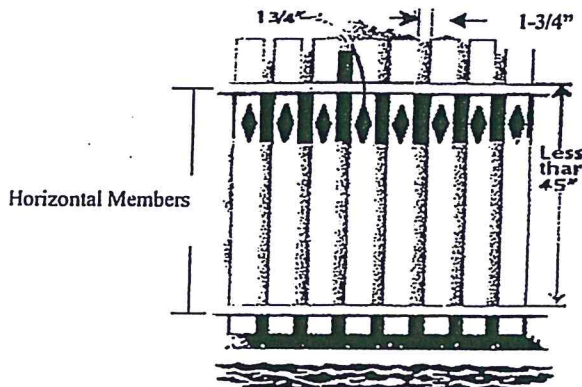
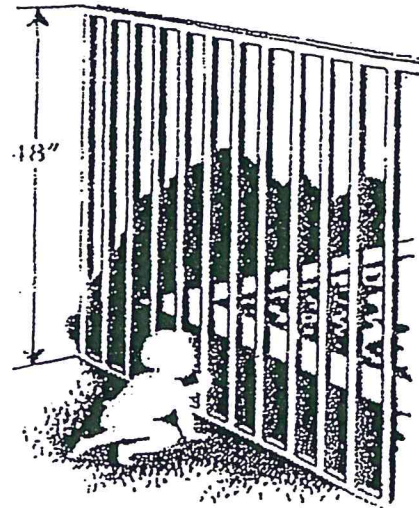
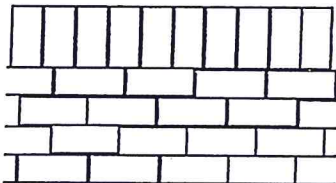
Outdoors private swimming pools, including in-ground, aboveground or on-ground pools, hot tub or spa shall be provided with a barrier. Access gates for private pools shall be equipped to accommodate a locking device.

Swimming Pool Barrier Guidelines

A successful pool barrier prevents a child from getting OVER, UNDER, or THROUGH and keeps the child from gaining access to the pool except when supervising adults are present. A young child can get over a pool barrier if the barrier is too low or if the barrier has handholds or footholds for a child to use when climbing.

The top of a pool barrier must be at least **48 inches** above grade, measured on the side of the barrier which faces away from the swimming pool.

For a Solid Barrier: no indentations or protrusions shall be present, other than normal construction tolerances and masonry joints.

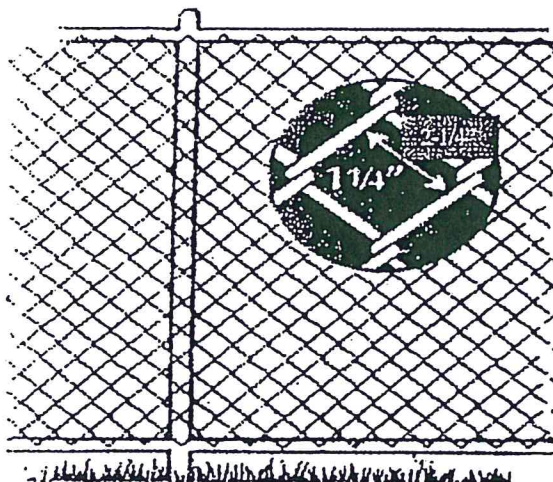
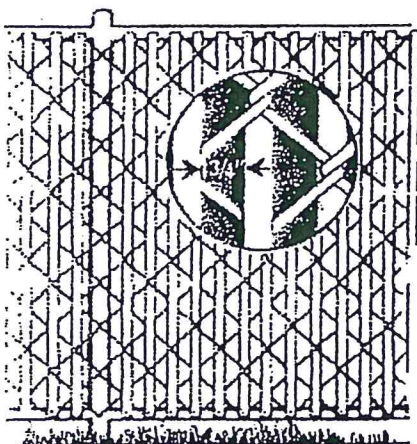
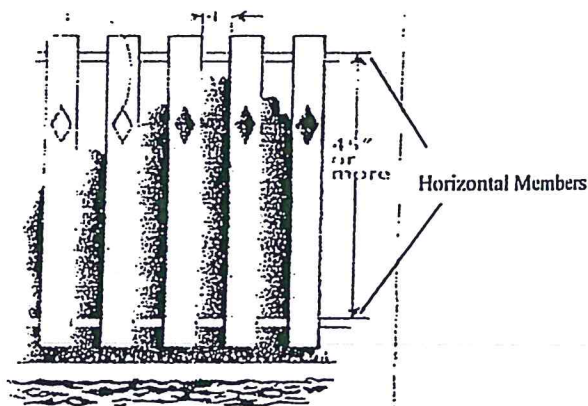


Barriers (Fences) Made Up of Closely Spaced Horizontal Members:

If the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be on the swimming pool side of the fence. The spacing of the vertical members shall not exceed 1-3/4 inches. This size is based on the foot width of a young child and is intended to reduce the potential for a child to gain a foothold. If there are any decorative cutouts in the fence, the space within the cutouts shall not exceed 1-3/4\"/>

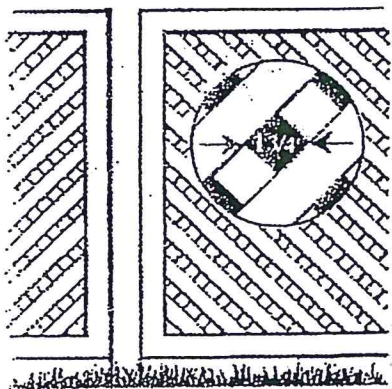
Barriers (Fences) Made Up of Widely Spaced Horizontal Members

If the distance between the tops of horizontal members is more than 45 inches, the horizontal members may be on the side of the fence facing away from the pool. The spacing between vertical members should not exceed 4 inches. This size is based on the head breadth and chest depth of a young child and is intended to prevent a child from passing through an opening. Again, if there are any decorative cutouts in the fence, the space within the cutouts shall not exceed 1-3/4 inches.



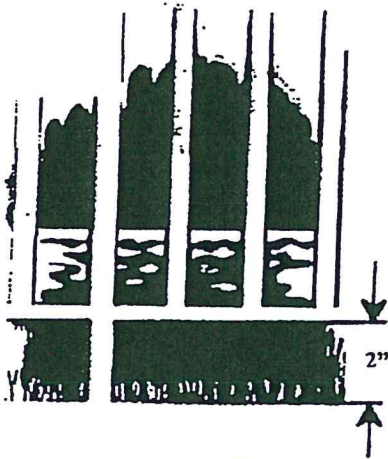
Barriers Made of Chain Link Fence

The mesh size shall not exceed 2-1/4 inches square unless slats, fastened at the top or bottom of the fence, are used to reduce mesh openings to no more than 1-3/4 inches.



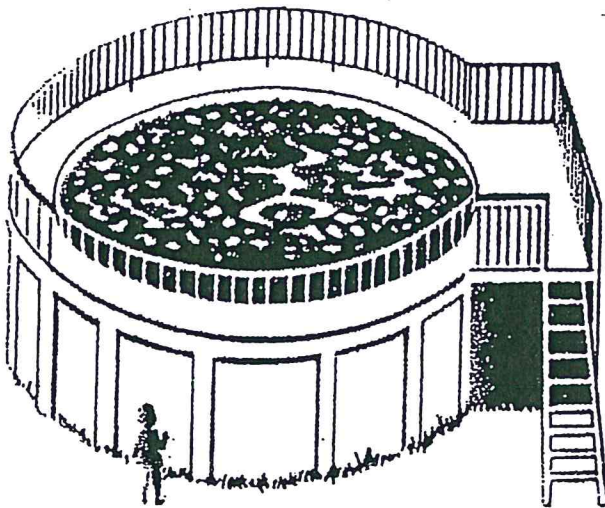
Barriers Fences Made Up of Diagonal Members (Latticework)

The maximum opening in the lattice should not exceed 1-3/4 inches.



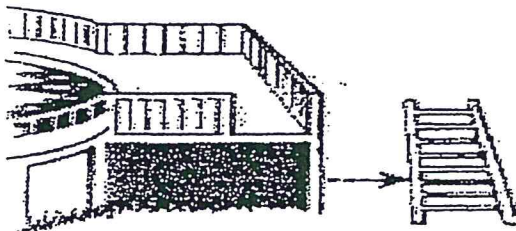
In-ground Pools

For any pool barrier, the maximum clearance at the bottom of the barrier shall not exceed **2 inches** above grade, when the measurement is done on the side of the barrier facing away from the pool.

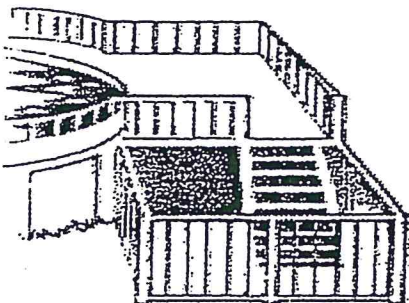


Aboveground Pools

Aboveground pools shall have barriers. The pool structure itself may serve as a barrier fence or a barrier is mounted on top of the pool structure.

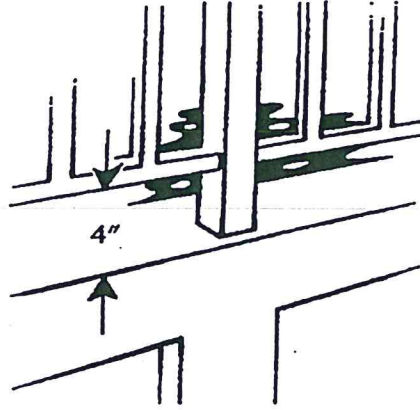


The steps or ladder can be designed to be secured, locked or removed to prevent access, or a barrier such as those described above can surround the steps or ladder.



ABOVEGROUND POOL WITH BARRIER ON TOP OF POOL

If an **aboveground** pool has a barrier on the top of the pool, the maximum vertical clearance between the top of the pool and the bottom of the barrier shall not exceed **4 inches**.



GATES

There are two kinds of gates, which might be found on residential property. Both can play a part in the design of a swimming pool barrier.

PEDESTRIAN GATES

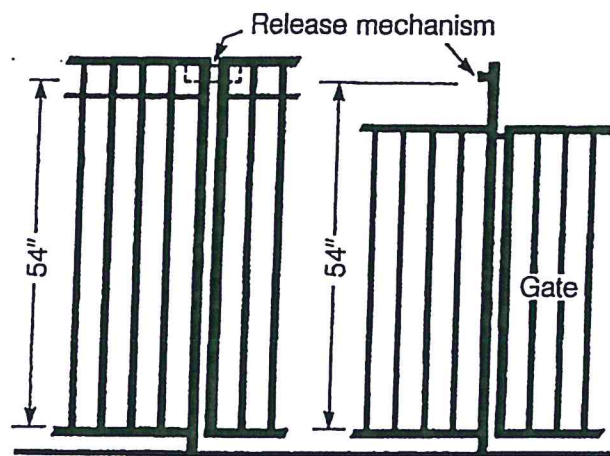
These are the gates people must walk through. Swimming pool barriers should be equipped with a gate or gates, which restrict access to the pool. A locking device must be included in the gate design. **Pedestrian gates must open outward and away from the pool and shall be self-closing and self-latching.**



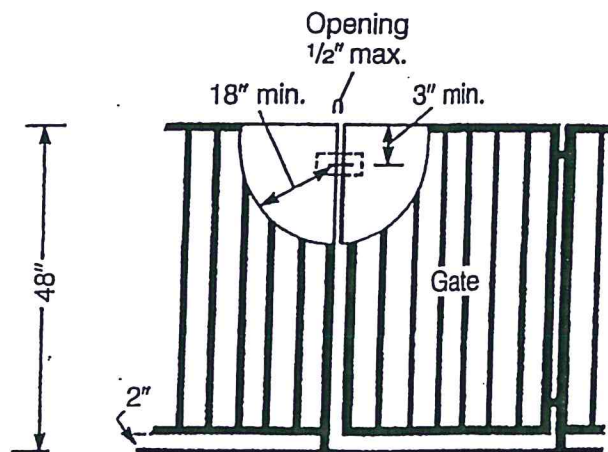
If a gate is properly designed, even if the gate is not completely latched, a young child pushing on the gate in order to enter the pool area will at least close the gate and may actually engage the latch.

Where the release mechanism of the self-latching device is **less than** 54 inches from the bottom of the gate, the release mechanism for the gate shall be located on the pool side of the gate and be at least 3 inches below the top of the gate on the side facing the pool. Placing the release mechanism at this

height prevents a young child from reaching over the top of a gate and releasing the latch. Gate latches installed in this manner shall have no openings greater than $\frac{1}{2}$ inch with 18 inches of the latch release mechanism. This prevents a young child from reaching through the gate and releasing the latch.



The release mechanism shall be located at 54" or higher from the bottom of the gate.



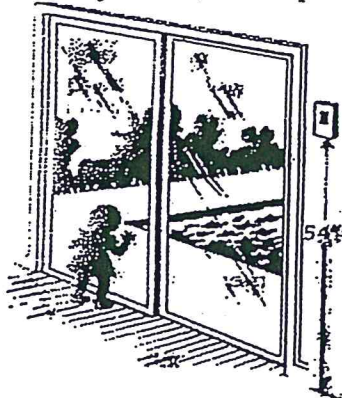
The release mechanism shall be located less than 54" from the bottom of the gate.

ALL OTHER GATES (Vehicle Entrances, ETC.)

Other gates must be equipped with self-latching devices. The self-latching devices must be installed as described for pedestrian gates.

WHEN THE HOUSE WALL FORMS PART OF THE POOL BARRIER

In many homes, doors open directly onto the pool area or onto a patio, which leads to the pool.



In such cases, the wall of the house is an important part of the pool barrier, and passage through any doors in the house wall must be controlled by one of the following security measures.

1) All doors, which give direct access to a swimming pool, must be equipped with an audible alarm, which sounds when the door and/or screen are opened. The alarm must sound for 30 seconds or more immediately after the door is opened. The alarm must be capable of being heard throughout the house during normal household activity. (The alarm sound should be distinct from other sounds in the house, such as the telephone, doorbell and smoke alarm.) The alarm must have an automatic reset feature.

Because adults will want to pass through house doors in the pool barrier without setting off the alarm, the alarm must have a switch that allows adults to temporarily deactivate the alarm for up to a maximum of 15 seconds. The deactivation switch could be a touchpad (keypad) or a manual switch, and must be located at least 54 inches above the threshold of the door covered by the alarm.

2) Pools equipped with a powered safety cover which complies with ASTM F1346 or

3) Other means of protection approved by the building official.

CODE REQUIREMENTS FOR SWIMMING POOLS

Localities in Pennsylvania enforce the regulations established by the Pennsylvania Uniform Construction Code, PA UCC regarding the installation, use and maintenance of all swimming pools, hot tubs and spas for both private and public residential and commercial pools.

No persons shall begin construction of a swimming pool nor substantially alter or reconstruct any swimming pool without having first submitted construction plans and specifications to the local building department for review and approval. No work shall be commenced until having first obtained the required permits for the pool, electrical work, mechanical work and fence or barrier protection as required by the regulations.

It is unlawful for any person to construct, maintain, use, possess or control any swimming pool not properly protected by a permanent fence or barrier in accordance with the regulations regardless of the date of construction. Any person who shall violate any provisions of the regulations may be subject to legal action as allowed by the PA UCC.

PERMITS:

A building permit is required for installing all new pools, hot tubs, and spas. An electrical permit is required for any electrical circuits or electrical work added for the pool and a gas or mechanical permit is required for pool heaters or other mechanical equipment for the pool.

The property owner is responsible for ensuring the pool is properly protected by a fence or barrier meeting code requirements during construction and after completion and approval. In addition, any fence erected must be constructed with the "finished side" facing outward towards surrounding properties or right-of-way.

PA ONE CALL SYSTEM

STOP-CALL BEFORE YOU DIG

CALL PA ONE CALL BEFORE YOU DIG 1-800-242-1776