TOWNSHIP OF EVESHAM – POOL INSTALLATION GUIDELINES

Any structure intended for swimming, recreational bathing or wading that contains water over 24 inches (610 mm) deep requires a permit. This includes in-ground, above-ground and on-ground pools; hot tubs; spas and fixed-in-place wading pools. (Section 3109, IBC, NJ Edition/NEC)

When making application for a zoning permit to erect or construct a private swimming pool, the following shall be required:

Application:

- 1) Completed zoning permit application with \$50.00 check made payable to the Township of Evesham.
- 2) Completed UCC permit application folder. Fees will be determined after application is reviewed and approved.

Survey:

On the most recent survey, show the location and size of the pool and all associated improvements. Indicate the distance from the edge of the improvement to all lot lines. For example, measure from the edge of the pool's concrete apron, pavers, decking, hardscaping, waterfalls, diving boards, pumps, pool house pump enclosure, filters, etc to the lot lines. The minimum distance required in all zoning districts is 15' from the edge of the improvement to the lot line.

Inground pool applications must be accompanied by (2) topographical surveys indicating elevation of pool and proposed grading of the surrounding areas, whether disturbed or not, showing drainage pattern. This must be prepared, signed and sealed by a professional engineer

Discharge water from a pool may not flow overland across lot lines per §62-62D of the Code.

If retaining walls are proposed or required, indicate their location on the survey and submit construction detail plans with elevations.

On the survey, show location of any fence whether or not the fence is under your contract. Please note that all pool fences and pool access safety devices are inspected under the most recent IRC or IBC Codes as adopted by the State of New Jersey.

Fence/Pool Barrier:

Please note: If pool compliant fence is not currently installed on the property we require that application for installation of the fence be made at the same time as application for the pool. If the fence is the responsibility of the pool contractor, then it may be listed on the Building Subcode Technical form; otherwise a separate Building Subcode Technical form must be completed by either the homeowner or contractor and submitted at the same time as the pool application.

<u>Temporary Fence</u>: A sturdy temporary fence with locking gate (if a gate is installed) must be in place around excavations deeper than 24" inches at all times during and after construction. If fences are not in place during progress inspections, you (the pool installer) will be subject to a monetary penalty.

Required Inspections (final checklist for your permit will be provided at time of permit payment):

- Steel or Concrete Collar (prior to
- pouring)
- ❖ Bonding/Steel Bonding (Electric)
- Main Drains
- ❖ 25 PSI Pipe Test
- ❖ Equipotential Bonding Grid (Electric)
- Underground Conduit
- ❖ Safety Barrier (Code-complying fence must be erected & inspected prior to filling pool.)
- ❖ Final (Building, Electrical and, if needed, Plumbing, Fire [fuel-fired pool heaters])

Prior to Use of Pool:

- 1) All final inspections shall be performed and approved. **
- 2) All prior approval and requirement must be met.
- 3) A Certificate of Approval must be issued. Certificates of Approval are mailed directly to the homeowner within (10) business days of the approved final inspections.
- **If a code compliant fence/pool barrier is installed:
 - Final building inspection for pool barrier must be approved and approved. Be please aware that fence/pool barrier is considered a life safety issue. For the safety of your family and others in your community it is important this inspection be completed and that the fence be to code.
- **If a gas pool heater is installed:
 - ❖ All plumbing and fire inspections must be performed and approved.

NOTE TO HOMEOWNERS:

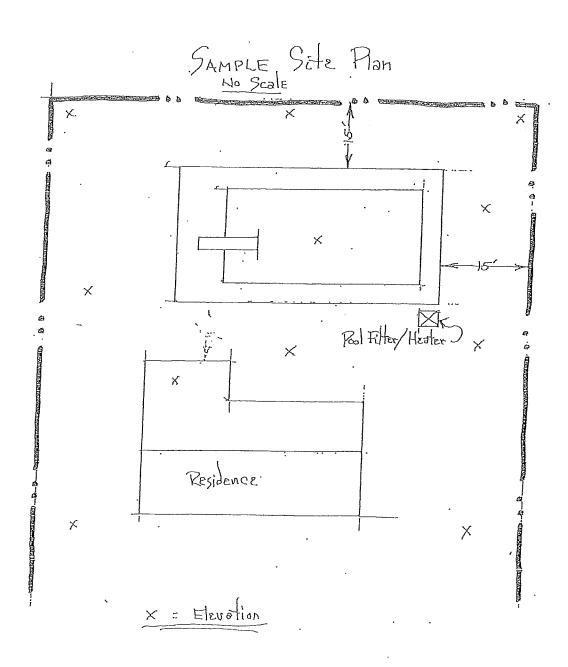
Final payment should <u>NOT</u> be made until all final inspections are completed and a Certificate of Approval is issued from this office.

NOTICE:

SWIMMING POOLS

Ordinance #62-62 requires that in no case shall any swimming pool or appurtenance be closer than (15) feet to any lot line.

This distance shall be measured from the side and rear property lines to the edge of the concrete apron or any improvement connected to the pool. The pool filter/heater must also be placed (15) feet from all property lines.



2017 NEC ABOVE GROUND POOL HANDOUT

Required #8 solid copper equipotential bond conductor must follow the entire contour of the pool. Only listed splices shall be permitted. The conductor shall be 18"-20" from the walls of the pool. The conductor shall be 4"-6" below grade. The bond shall be connected to the pool frame in four areas. When the frame of the pool is of non-conductive material the walls of the pool must be bonded where the two seam of the walls are bolted together. The pump motor shall also bond to the pool frame with a #8 wire. Art 680.26(B)(C).

A UL listed water bond fitting must be installed in the skimmer box or in the water pipe to the pump motor.

Above Ground Pool

Pump with not more than 3" of #12 cord

M

All conductors shall be copper. All outdoor receptacles covers shall be in-use (bubble cover) weatherproof type. #12 NM cable(romex) is a permitted wiring method inside of the dwelling only.

Panel

House

located between 6' and 10' from pool. Art 680.22(1). A timer must be installed according to the '09' IECC 403.9.2. Connection 120V-240V single ephase 680-21(c) and GFCI protected.

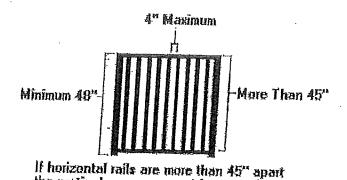
Single twist-lock pump receptacle

General purpose GFI protected receptacle located between 6' and 20' from pool. The receptacle must be a WR type. The words WR will be stamped on the face of the receptacle 680.22(A)1-4

3/4 electrical PVC conduit and fittings. The burial depth is a minimum of 18". Conductors must be black, white, and green, minimum #12 Type THHN copper on a dedicated 20 AMP circuit.

Fences with horizontal rails more than 45" apart

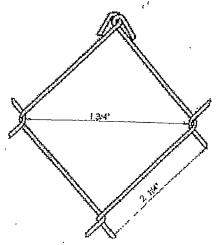
Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Decorative cutouts shall not exceed 1-1/2 inches in width.



Chain link Fence Mesh Size Limit

the vertical spaces cannot be more than 4" apail

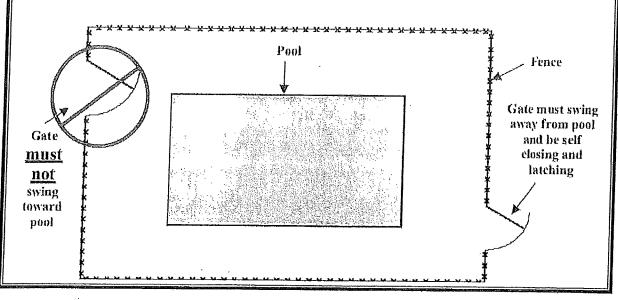
Maximum mesh size for chain link fences shall be a $1\,\%$ -inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than $1\,\%$ -inches. (Figure 3)



Important: The maximum mesh size for a pool fence is smaller than the standard chain link mesh

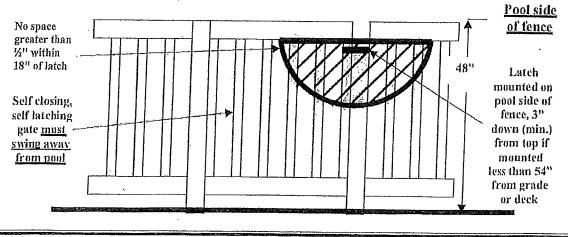
Gate Swing

Gates shall comply with the requirements of a fence for height, picket spacing or chain link mesh size and shall be equipped to accommodate a locking device. Pedestrian access gates shall open <u>outwards</u> away from the pool and shall be <u>self-closing</u> and have a <u>self-latching</u> device. Gates must swing out only so that 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.



48" high gates with latches mounted less than 54" from the ground

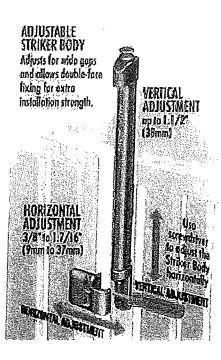
If the latch is mounted less than 54" from grade, it must be mounted on the <u>pool</u> side of the gate, a minimum of 3" down from the top of the gate so you must reach over the fence to unlatch and have no space greater than $\frac{1}{2}$ " within 18" of the latch so a child can not reach through the fence to unlatch it.



48" high gates with the latch mounted above the top of the gate.

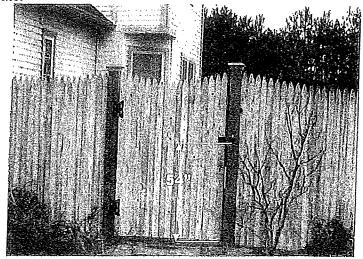
Several manufacturers make latches that can be mounted on a 48" high gate and have the operating mechanism above the top of the gate. The operating mechanism must be mounted at least 54" above the bottom of the gate.





Gates more than 48" high

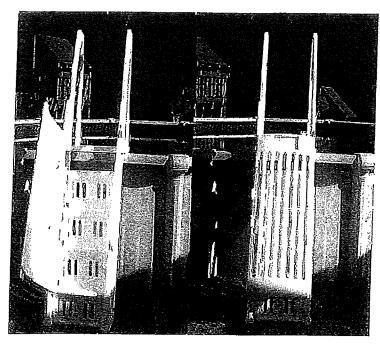
Gates that are more than 48" high must have the latch mounted at least 54" above the bottom of the gate.

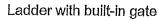


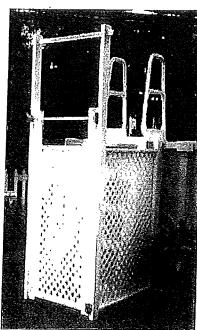
Above ground pools

Barriers are required for above ground pools. A removable ladder is not an acceptable barrier for an above ground pool. The barrier may be a compliant fence that surrounds the entire pool or yard. Pools that have a wall that is at least 48" do not require a fence around the entire pool and may have a fence just around the ladder area or a ladder with a built-in self-closing latching gate.

Above ground pools with walls at least 48" above grade







Fence around ladder area

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.

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 *town-house* 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 subject to this code.

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

11

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.
- 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 13/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 13/4 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 13/4 inches (44 mm) in width.
- 6. Maximum mesh size for chain link fences shall be a 2¹/₄-inch (57 mm) square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1³/₄ inches (44 mm).
- 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 1³/₄ 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.

Ш

11

- 9. Deleted.
- 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. Deleted.
 - 10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9.

AG105.3 Indoor swimming pool. Walls surrounding an indoor swimming pool shall comply with Section AG105.2, Items 1 through 7.

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 ANSI/APSP ANSI/APSP-7-06 Standard for Suction Entrapment avoidance in Swimming Pools, Wading Pools, Spas, ASCE ASCE/SEI-24-05 Flood Resistant **ASTM** ASTM F 1346-91 (2003) Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, ULUL 2017-2000 Standard for General-purpose Signaling Devices and Systems—with Revisions