SWIMMING POOLS

Any structure intended for swimming or recreation that is capable of holding water over 24 inches deep shall comply with the following rules and regulations. This includes in-ground, above-ground swimming pools, hot tubs and spas.

Zoning Requirements
- A pool is not permitted within a required front yard.
- The water surface of a pool shall be setback a minimum of 15 feet from all lot lines.
  - Decks surrounding pools must meet the required setback in that zoning district for accessory structures. (Call the Township for details.)
  - Patios at grade are not required to meet setbacks.
- A pool shall not be located under or within 20 feet of overhead electrical lines.
- A pool shall not be located over a water or sewer easement.
- A pool shall not be located over or within 10 feet of a septic tank or drain field.

* It is the responsibility of the property owner to locate the property lines; the Township does not provide this service. *

Timer
- A time switch that can automatically turn the pool pump on and off, according to a preset schedule, must be installed.

Electrical Requirements
- No receptacles are allowed within 6 feet of a pool.
- A GFCI protected convenience receptacle is needed and should be 6 feet to 20 feet from the pool and should be connected to a general purpose circuit, (not the pump circuit.). It must have an in-use cover.
- Pool pump receptacle shall be mounted on a post at a minimum of 4 inches x 4 inches and 24 inches deep. (Usually a 4-inch x 4-inch pressure-treated post).

- Pool pump receptacle may be no closer than 6 feet from the pool and must be GFCI protected with an in-use cover. If located between 6 feet to 10 feet away from pool, must be a 20 amp twist lock type.
- Pool pump shall have a maximum 3 foot cord with a twist lock plug factory installed.

* All receptacles within 20 feet from the inside of the pool wall must be GFCI protected. *

- An equipotential plane is required. It shall be installed with #8 bare solid copper, situated 18-24 inches from the pool, 4-6 inches below grade around the entire pool, and connected to the pool in at least (4) locations.
  - All metal within 5’ of the inside wall of the pool shall be bonded to the pool with #8 solid copper.
  - Pool motor shall be bonded to the pool with a #8 solid copper wire.
  - If the ladder is metal, it must also be bonded to the pool.

- Bonding connectors shall be stainless steel, brass, copper, or copper alloy.
- Pool water must be bonded with a minimum conductive surface area of 9 square inches. Bond to #8 solid copper bond system.
- Pool pump receptacle feed wire shall be individual conductors in rigid conduit (PVC or metal.) Black, white, green #12 THHN/THWN.
- Conduit for the pool pump shall have a minimum cover of 18 inches, (dirt or fill) on top of the conduit. (This is cover for the top of the conduit, NOT trench depth.)
- If a new sub-panel is installed to supply power to pool equipment, it must have feeders that run in conduit with an insulated ground wire.
### Barrier Requirements

- A barrier of at least 48 inches above grade measured from the side of the barrier that faces away from the pool is required. (Could be pool wall height or fencing.)

- The pool must be 48 inches high from the finished grade level to the top of the pool ledge at all points around the pool, if not; a compliant barrier must be erected.

- If 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 not exceed 4 inches.
  - This passage of a 4-inch sphere maximum spacing applies for the area between:
    - The pool top and fence bottom.
    - Both sides of the ladder and/or deck.
    - Between balusters of the fence on pool top.

- Where the means of access is a ladder or steps:
  - A ladder or steps shall be capable of being **secured, locked or removed** when not in use to prevent access; OR
  - Where the steps are permanent, then a gate with barriers is required at the **bottom** of the staircase. The gate must open away from the steps and follow all barrier requirements that are listed in these pages. The latch must be placed on the inside of this gate. See lock and latch requirements.
Fencing as a Barrier

Vertical and Horizontal (Ladder Effect)
- If the barrier is made up of vertical and horizontal members and the space between the horizontals are less than 45 inches, then the horizontal members must be constructed on the pool side.
- Spacing between the vertical members shall not be greater than 1 ¾ inch. If the horizontal members are more than 45 inches, then the horizontal members can be on the outside of the pool and the vertical spacing can be increased to a 4-inch maximum.

Diagonal (Lattice Type)
- Maximum opening formed by the diagonal members shall not be more than 1 ¾ inch.
Chain Link
- Maximum mesh size opening shall not be greater than 2 ¼-inch square, unless the fence has slate fastened at the top or bottom, then the openings cannot be greater than 1 ¾ inches.

Pedestrian Gates (Pool Access)
- Gates shall be self-closing and self-latching.
- Gates shall be equipped to accommodate a locking device.
- The release mechanism for the latch shall be at least 54 inches measured from the bottom of the gate;
  OR
- The mechanism shall be located on the pool side of the gate, 3 inches below the top of the gate with no openings greater than ½-inch within 18 inches of the release latch.

Gates other than Pedestrian Access (Equipment Access)
- Gates shall be self-latching.
- Gates shall be equipped to accommodate a locking device.
- Where the release mechanism of the latch is located less than 54 inches from the bottom of the gate, measured up, the mechanism and opening shall follow these guidelines:
  - The mechanism shall be located on the pool side of the gate, 3 inches below the top of the gate with no openings greater than ½-inch within 18 inches of the release latch.
Dwelling as part of the Barrier

All doors from the house with direct access to the pool area shall have a listed and labeled alarm. The alarm is an audible warning when the door and/or its screen, if present, are opened.

The following requirements must be followed:

- Listed and labeled in accordance with UL 2017.
- The deactivation switch shall be located at least 54 inches above the threshold of the door.

Please Note:

This is only a guide to assist homeowners installing their own pools. For complete copies of the code, please visit the 2009 IRC, specifically, Chapter 42 and Appendix G (found online at dli.state.us.gov, UCC). For clarification or to verify if a method or material you are using is not listed here, contact your inspector.
STAIR HANDRAIL REQUIREMENTS
All stairs with 4 or more risers shall have a handrail on at least one side (see Figure 32A) [R311.7.7]. The handrail height measured vertically from the sloped plane adjoining the tread nosing shall be not less than 34 inches and not more than 38 inches (see Figure 30) [R311.7.7.1]. Handrails shall be graspable and shall be composed of decay-resistant and/or corrosion resistant material. Handrails shall be Type I, Type II, or provide equivalent graspability (see Figure 32B). Type I shall have a perimeter dimension of at least 4" and not greater than 6-1/4". Type II rails with a perimeter greater than 6-1/4" shall provide a graspable finger recess area on both sides of the profile [R311.7.7.3]. All shapes shall have a smooth surface with no sharp corners. Handrails shall run continuously from a point directly over the lowest riser to a point directly over the highest riser and shall return to the guard at each end (see Figure 33). Handrails may be interrupted by guard posts at a turn in the stair [R311.7.7.2].

Figure 32A. Handrail Mounting Examples

Fasten handrails per manufacturer recommendations

Figure 32B. Handrail Grip Size

NONCIRCULAR
[Circular R311.7.7.3 Type I]
Perimeter: 4" - 6-1/4"

CIRCULAR
Perimeter: 4" - 6-1/4"

RECESSED
[Type II R311.7.7.3]
Perimeter: >6-1/4"