



TOWNSHIP OF CRANFORD
BOROUGH OF GARWOOD

SWIMMING POOL REQUIREMENTS



All swimming pool installations are required to comply with the requirements of the 2015 International Swimming Pool and Spa Code, and the Township of Cranford Zoning Code. For pools installed in Garwood, the pool must comply with the Borough of Garwood Zoning Code.

All proposed pools require approvals from the Zoning Department prior to review by the Building Department. All pools will also require a prior approval from the engineering department.

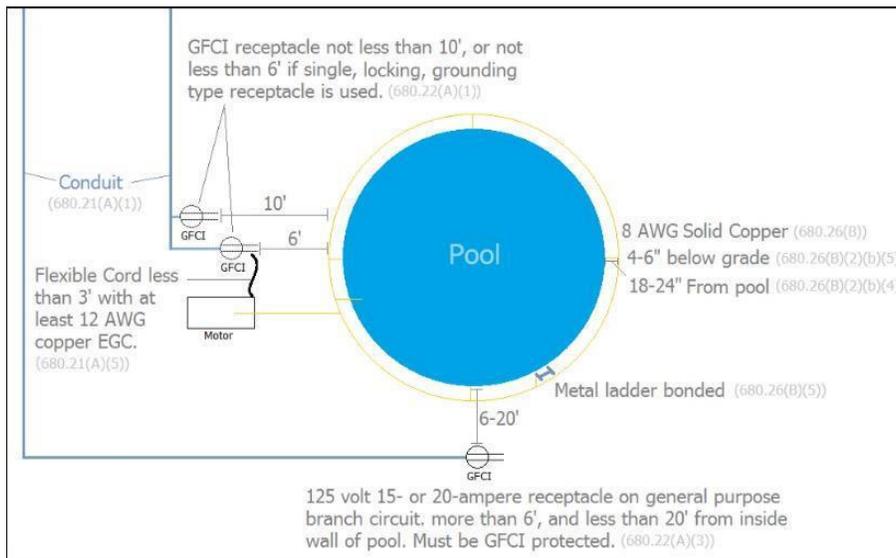
Submit completed applications for the work intended, and 2 copies of plans and all specs including, but not limited to, pumps, filters, heaters, drains, lights, gas riser diagram, fence and latch, etc.

The completed construction permit application shall include:

- Construction Permit Application Folder
- Building Subcode Technical Section (Pool, spa & fence)
- Electrical Subcode Technical Section
- Plumbing Subcode Technical Section (Gas piping, pool heater & pool drains)
- Fire Subcode Technical Section*
- Application for Certificate
- Zoning Permit Application
- Copy of all contractors licenses and/or registrations
- 2 copies of property survey (show pool, spa, fence, etc.)
- 2 copies of topographical survey
- 2 copies of:
 - Signed/Sealed pool plan
 - Pumps
 - Filter
 - Heater
 - Fence
 - Gas Riser diagram (if installing pool heater)
 - Manufacturer Instructions (above ground)
 - Ladder w/ Built in Gate (above ground pool)
 - Lights
 - Pool Drains
 - Latch
- Upon completion of the pool installation, a final topographical survey must be submitted to the building department for the issuance of a certificate of occupancy.
- Pools cannot be utilized until a certificate of occupancy is issued.

Electrical Requirements:

- Direct burial cable is not permitted for pool pump wiring. Metal or PVC conduit system is required outside the dwelling unit. A wet location wire with insulated green ground is required. Interior may be any wiring method recognized in Chapter 3 of the 2015 National Electrical Code.
- Minimum filter motor attachment cord size #12 AWG (max 3 feet in length)
- Minimum wire size #12 AWG. A 20 ampere locking type outlet is required for filter motor connection for above ground pools. This receptacle shall be located not closer than 6 feet from the pool wall. It shall be ground fault protected and shall employ an In-Use cover. This circuit shall be dedicated to the filter motor.
- A convenience outlet shall be located not less than 6 feet and not more than 20 feet from the inside wall of the pool. It shall be ground fault protected and shall be connected to a general purpose branch circuit in the dwelling. In-Use cover is required.
- All metal parts within 5 feet of the pool shall be bonded together with a #8 solid copper wire and shall be bonded to the filter motor. i.e. fences, bilco doors, etc.
- Burial depth is routinely 18 inches for conduit (6 inches for rigid galvanized metal conduit)
- A #8 solid copper wire is required to be installed between the pool chassis and a lug provided on the filter motor. A proper lug, nut, bolt and lock washer is required on the pool chassis. (stainless or brass) An equipotential bonding grid must be formed around the pool with a minimum #8 sold copper wire and connected to the pool pump in at least 4 points equally spaced around a metal pool frame.
- The filter pump may be hard wired but a disconnecting means is required. A timer is required for the filter pump motor.
- Pool water must be bonded electrically (call for more information) A minimum 9 square inch in direct contact with the water.
- For pools, spas and hot tubs, refer to the 2014 National Electrical Code, Article 680 (Other codes may apply)



Pool Fence Requirements

Private swimming pools must be surrounded by a barrier, such as a fence or wall. The barrier must meet the following requirements.

- The top of the barrier shall be at least 48 inches above finished ground level measured on the side of the barrier, which faces away from the swimming pool. The maximum vertical clearance between finished ground level and the bottom of the barrier shall be 2 inches measured on the side of the barrier, which faces away from the swimming pool.
- Solid barriers shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

Fences with horizontal rails less than 45" apart

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, 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 in width. Decorative cutouts shall not exceed 1- $\frac{3}{4}$ inches in width.

If horizontal planks are less than 45" apart the vertical spacing can not be more than 1 $\frac{3}{4}$ "

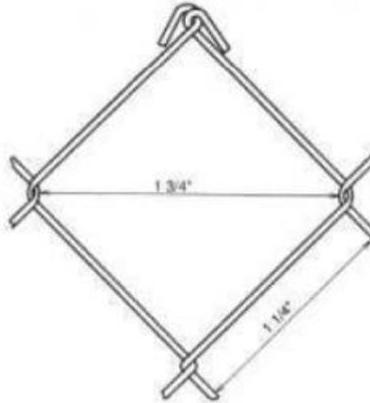
Fences with horizontal rails more than 45"aparts

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- $\frac{3}{4}$ inches in width.

If horizontal rails are more than 45" apart the vertical spaces cannot be more than 4" apart

Chain link Fence Mesh Size Limit

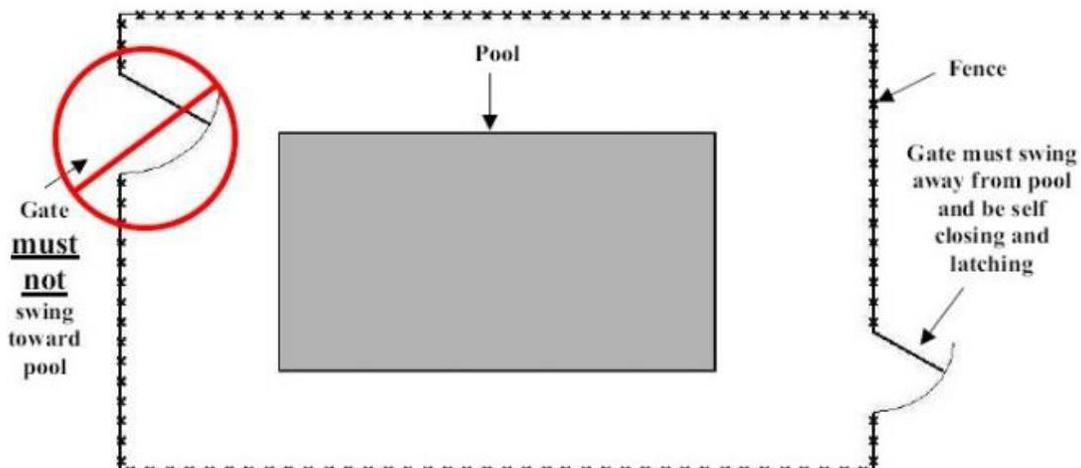
Maximum mesh size for chain link fences shall be a 1 ¼-inch square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1 ¾-inches. (Figure 3)



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

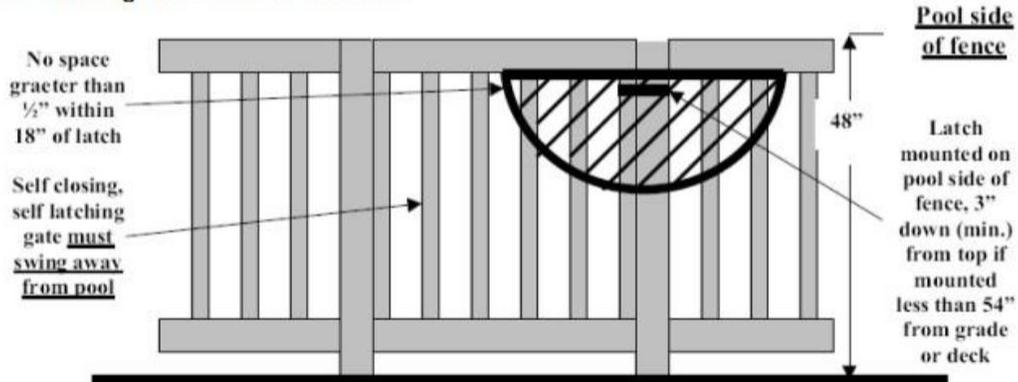
Gate Swing

Gates shall comply with the requirements of a fence for height, picket spacing or chain link mess size and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outwards away from the pool and shall be self-closing and have a self-latching 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.



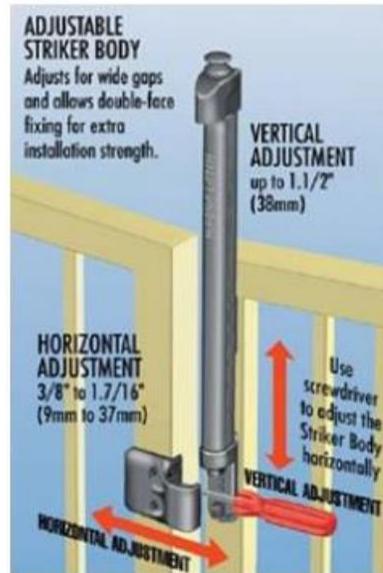
48" high gates with latches mounted less than 54" from the ground

If the latch is mounted less than 54" from grade, it must be mounted on the **pool** 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 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 manufactures 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. Zoning requires a compliant fence around the pool or around the property.

Above ground pools with walls at least 48" above grade



Ladder with built-in gate



Fence around ladder area

Above ground pools on sloped site

Where the walls of an above-ground pool are used as the barrier, are on a sloped site, which will make a portion of the top of the pool structure to be less than 48" to grade, a minimum of 3-foot level surface around the portion of the pool structure that is less than 48" to grade should be provided. The level surface should be measured away from the pool wall to the excavation edge and should be tapered away from the pool at a minimum of 45-degree angle for a distance of one half the level surface.

