Town of Stafford, Connecticut
1 Main Street, Stafford Springs, CT 06076
BUILDING DEPARTMENT

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SWIMMING POOL REQUIREMENTS

All pools over 24" in height require Zoning, Health, Building and Electrical permits. A site plan showing the size and location of the pool with dimensions to property lines, well and septic is required as well as documentation for the pool including type, size, height and the material the pool is made of. In addition to the permit process, the homeowner is require to read and sign the following guidelines before a building permit is issued.

If a deck is being built next to the pool, a separate building permit is required and must meet the barrier requirements as listed below.

Residential Swimming Pools, Spas and Hot Tubs Requirements

2015 IRC Portion of the 2018 Connecticut State Building Code

R326.6 Barrier requirements. 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.

R326.6.1 Outdoor swimming pool: An outdoor private swimming pool, including an in-ground, above ground or on-ground pool, hot tubs and spas 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 that 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 shall be 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 (102 mm) diameter sphere.***

3. Solid barriers that do not have openings, such as masonry or stone walls, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry *joints.*

4. Where the barrier is composed of a 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 ***1-3/4 inches (44 mm)*** in width. Where there are Decorative cutouts within vertical or horizontal members, spacing within the cutouts shall not exceed ***1-3/4 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 the vertical members shall not exceed ***4 inches (102 mm)***. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed ***1-3/4 inches (44 mm) in width.***

6. Maximum mesh size for chain link fences shall be ***2-1/4 inches (32 mm) square*** unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than ***1-3/4 inches (44 mm).***

7. Where the barrier is composed of diagonal members, such as lattice fence, the maximum opening formed by the diagonal members shall not be more than ***1-3/4 inches (44 mm).***

8. Access gates shall comply with the requirements of ***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 not have an opening greater than **½ inch (12.7 mm) within 18 inches (457 mm)** of the release mechanism.

9. Where a wall of a *dwelling unit* serves as part of the barrier one of the following shall be met:

   9.1 The pool shall be equipped with a power safety cover in compliance with ASTM F 1346;

   9.2 Doors with direct access to the pool through that wall shall be equipped with an alarm that 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;

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 herein.

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, the ladder or steps shall be surrounded by a barrier which meets the requirements of ***Section R326.6.1. Items 1 through 9.***

R326.6.2 Indoor swimming pool : All walls surrounding an indoor private swimming pool *shall* comply with ***Section R326.6.1, Item 9.***

R326.6.3 Barrier perimeter clearance. The required barrier height *shall* exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier, free of structures, equipment or similar objects.

R326.6.4 Barrier exceptions: Spas or hot tubs with safety cover which complies with ASTM F1346, *shall* be exempt from the provisions of this Chapter.

R326.6.5 Temporary enclosure: A temporary enclosure shall be installed prior to the electrical bonding inspection of any in-ground swimming pool unless the permanent barrier specified in Section R326.6.1 is in place prior to the commencement of the installation. The temporary enclosure shall be a minimum of 4 feet (1219 mm) in height, shall have no openings that will allow passage of a 4-inch (102 mm) sphere and shall be equipped with a positive latching device on any openings.

R326.6.6 Pool alarm. Pursuant to Section 29-265a of the Connecticut General Statutes, no building permit shall be issued for the construction or substantial alteration of a swimming pool at a residence occupied by, or being built for one or more families unless a pool alarm is installed with the swimming pool. As used in this section “pool alarm” means a device which emits a sound of at least 50 decibels when a person or an object weighing 15 pounds (6.8 kg) or more enters the water in a swimming pool.

Exception: Hot tubs and portable spas shall be exempt from this requirement.

R326.7 Entrapment protection for swimming pool and spa suction outlets.
Suction outlets *shall* be installed in accordance with APSP 7.

WIRING REQUIREMENTS FOR SWIMMING POOLS

2017 National Electrical Code Portion of the 2018 Connecticut State Building Code

Pool Pump Receptacle (Outlet) and Wiring Methods

1. For permanent pools, the pump motor receptacle shall be located between 6-feet to 10-feet from the inside pool wall and the receptacle must be a single twist-lock, GFCI (Ground Fault) protected outlet. Article 680.22(A)(2)
2. The outdoor pump receptacle must have a weatherproof cover that can be closed when the pump cord is plugged in. Article 406.9(B)(2)
3. The electrical circuit line for a permanently installed pool pump motor must go directly to a panel box and is to be isolated from all other receptacles. Article 100.12
4. The wire for the pump motor shall not be less than #12 AWG insulated copper and must be in conduit. Article 680.21(A)(1) and Article 680.11
5. In the interior of a one family dwelling Type NM cable may be used.
6. The cord on the pump must be 3-feet long maximum and a minimum of #12 AWG. Article 680.22(A)(3)

Conduit Depth:

Electrical PVC at least 18-inches deep. Table 300.5 (12-inches if all conductors are GFCI protected, rated 120 volts or less with maximum overcurrent protection of 20 amps.) Conductors used in conduit must be individual stranded wires. (ex. THWN, XHHN Etc. NO NM of UF cable in conduit)

Convenience Receptacle (outlet) and Wiring Methods

1. At least one(1) 15-20 amp convenience receptacle must be located no closer than 6-feet but no further than 20-feet from the outside of the pool wall. May be existing and/or wired with any approved wiring method. Article 680.22(A)(1)
2. Convenience receptacle shall be separate from the pool pump receptacle wiring. Article 110.12
3. Convenience receptacle must be GFCI (Ground Fault) protected. 680.22(A)(4)
4. Convenience receptacle shall have an in-use bubble cover where located outdoors. 406.9(B)(1)

Bonding the Pool

1. All metal parts must be bonded together using a #8 (or larger) solid copper wire. 680.26(B)
2. Conductive pool shells must be bonded in a minimum of four (equal) points uniformly spaced around the pool. 680.26(B)(2)
3. Above ground pools must have a #8 (or larger) solid copper wire buried 4-inches to 6-inches below finished grade. This bond wire will be placed 18-inches to 24-inches from the pool wall, all the way around the pool. This equipotential bonding ring shall start and return/terminate at the pool pump. 680.26(B)(2)(b)
4. Bonding points or attachment must use listed non-corrosive lugs. 250.8
5. A minimum of nine (9) square inches of metal must be provided to bond the water. 680.26(C)

Other

1. All permanent and seasonal pools with a water depth greater than 24-inches as well as all outdoor located spas and hot tubs require building permits. Permanently installed pools require permanent electrical wiring and need to be inspected.
2. Pool alarms are required. (UL listed or tested)
3. Circulating equipment must be controlled by an energy saving timer

Residential Swimming Pools Affidavit

Type of Pool:

☐ In Ground

☐ Above Ground

☐ Indoor

Pool Manufacturer: _____

Pool Contractor: _____

Address of Pool Installation: _____

Property Owners Name: _____

I HAVE READ AND UNDERSTAND THE ABOVE CODE REQUIREMENTS AND AGREE TO INSTALL THE POOL FENCE AND REQUIRED POOL ALARM/SAFETY EQUIPMENT ON MY PROPERTY IN COMPLIANCE WITH THE ABOVE.

SIGNATURE OF HOMEOWNER(S) _____

_____

DATE: _____