Requirements for Swimming Pools

- A B-100 permit from Northeast District Dept. of Health, a Zoning Permit and a Building Permit are required.
- An “Engineered Stamped” plan must be submitted with any permit application for an “In-ground Pool”.
- Every pool shall have an audible pool alarm per Connecticut Public Act No. 99-140 (attached).
- Pools less than 48” in height shall have a 48” high fence (see attached fencing requirements).
- The access to all pools shall have a self-latching, self-closing gate system (see attached).
- The pool must be inspected when all the wiring is complete.

Electrical Requirements for Swimming Pools

- The electrical circuit for the pool must be protected with a Ground Fault Circuit Interrupter (GFCI).
- A twist-lock type plug must be installed on the pump motor.
- The pump motor shall be on an electrical timer to activate the pump during off-peak hours.
- A twist-lock receptacle must be installed to receive the pump motor plug.
- The receptacle cover must be the type that fully encloses the plug when it is plugged in.
- A #8 or larger solid copper wire must be mechanically bonded from the ground lug on the pump to all metallic parts of the pool (i.e. the pool structure, slide, ladder, etc.).
- A GFCI convenience receptacle must be located between 10 ft and 20 ft. from the pool in order to safely plug in and operate appliances (i.e. radios, etc.).
Section AG105 Barrier Requirements

G105.1 Application   The provisions of this appendix 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 the 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 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).

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 13/4 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 have no opening larger than 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;

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 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 AG105.2, items 1 – 9, inclusive.
Installation of a new swimming pool REQUIRES application for a permit to the local building official when the pool depth will be over 24 inches deep. This permit requirement includes in-ground swimming pools, above-ground swimming pools, on-ground swimming pools, hot tubs and spas.

**Outdoor private swimming pools MUST comply with the State Building Code barrier and entrapment protection minimum requirements.** The primary reason for compliance with these minimum code requirements is for preservation of individual’s life safety. They provide an effective barrier around the pool area to reduce the potential for young children to gain uncontrolled access, and to provide a level of protection against possible entrapment at the pool suction inlets. In addition to the State Building Code swimming pool requirements Connecticut General Statute Section 29-265a has specific criteria for installation of a pool alarm prior to issuance of a building permit.

An inflatable swimming pool containing water over twenty-four inches deep is a relatively new product that has been made available to the Connecticut consumer. **The inflatable walls of an above grade inflatable swimming pool, (containing water over twenty-four inches deep), are not an effective pool barrier and require a pool barrier that is typically a fence enclosure.**

The 2005 State Building Code provides detailed provisions for barriers around swimming pools, along with entrapment protection for swimming pool and spa suction outlets. All newly installed swimming pools, hot tubs and spas must comply with the August 1, 2009 Amendments to the 2005 State Building Code.

These requirements address:
- minimum heights and maximum openings allowed in fences
- criteria for the fence gates and latches
- criteria for the means of direct entry into a pool area from the house
- criteria for the pool and spa suction outlet cover and grate
- minimum number and separation distance of suction outlets
- criteria for circulation systems equipped with atmospheric vacuum relief systems
- minimum and maximum depths for pool vacuum cleaner fittings
- criteria for power safety covers

Your local building official can provide you information and can answer your questions about the State Building Code and its relationship to swimming pools. If further clarification governing installation of swimming pools and the State Building Code is needed the Office of State Building Inspector can be contacted by telephone at (860)-685-8310.
Department of Building Inspection

Swimming Pool Alarm Affidavit

As an addendum to the Building Permit Number ___________________________

the Homeowner/Agent known as: _________________________________________

PRINT Applicants Name (as it appears on the Building Permit Application)

Will have installed or altered an □ Above Ground □ In-ground or □ Hot Tub/Spa

Swimming Pool and it is to be located at this address:

Street Address (as it appears on the Building Permit application)

I, _________________________________, □ the owner or □ agent, hereby swear and attest that I will install a POOL ALARM, as required by Connecticut Public Act 99-140 and as a condition of receiving a building permit whether I intend to construct, substantially alter, or occupy said swimming pool.

Signature of □ Homeowner or □ Agent Dated _______________________________

OATH

___________________________ “Subscribed and sworn before me on this
(Notary, Commissioner of Superior Court, Justice of the Peace)
___________________________ (day) of ____________________ (month) _______________ (year).”

My commission will expire on: ________________________________.

Connecticut Public Act 99-140 states in summary: Public Act 99-140 prohibits issuance of a building permit to construct or substantially alter a swimming pool at any residence, whether occupied or being constructed, unless a pool alarm is installed with the pool. It defines a pool alarm as a device that will emit a sound of at least 50 decibels when an object weighing at least 15 pounds enters the pool.