Town Office of Planning And Zoning

Town of Newport

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Swimming Pool Requirements

Permits Required for Swimming Pools, except those less than 24" deep or of a surface area less than 250 square feet and without a permanently installed water circulation system. (Permanently means necessary to sanitary use)

Plot Plan: Indicate distances of pool to property lines, buildings, wells, septic tanks and leach fields. Show location of, and describe, protective barrier and the location, dimensions and construction of the pool.

Protective Barriers

Protective Barriers are required for new and existing swimming pools which contain 24 inches or more of water at any point. (Spas and hot tubs with a safety cover that complies with ASTM F 1346 are exempt from additional barrier provisions.) The design controls for barriers are described in detail in the state building code and in general as follows:

- 1. Barrier Height to top = 48" & 2" from bottom to grade.
- 2. Openings not to pass a 4" sphere.
- 3. Solid barriers to be free of indentations or protrusions so as not to be climbable by small children.
- 4. Horizontal members of non-solid barriers shall be on the poolside where tops of such members are less than 45" apart. Spacing between or decorative cutouts within vertical members shall not exceed 1 ³/₄" in width.
- 5. Horizontal members greater than 45" apart may have vertical

members spaced 4" apart but decorative cutouts shall not exceed 1 $^{3}4$ " in width.

- 6. Maximum mesh size for chain link shall be a 2 ¼" square unless slatted to reduce openings to 1 ¾" maximum.
- 7. Barriers composed of diagonal members shall have openings no greater than 1 ³/₄".
- Access gates shall be designed per 1-7 above, shall be lockable, shall open outward away from the pool, and shall be self-closing and selflatching. The latch release shall be 54" high or at least 3" down from the top on the poolside of the gate. There shall be no opening larger than ¹/₂" within 18" of the latch release. (See Drawing Below)



9. Where a wall serves as part of a barrier, one of the following conditions shall be met:

9.1 The pool shall be equipped with a powered safety cover or in compliance with ASTM F 1346; or 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 above the threshold of the door.

10. Access ladders for above ground pools shall be capable of being secured, locked or removed to prevent access or enclosed with barriers and gates as described above. Above ground pool walls, 48" in height may be accepted as barriers.

Electrical Requirements (Effective July 1, 2008)

- Definitions: Storable Pools are those 1. installed on or above the ground and capable of holding a maximum depth of 42" of water or those having non-metallic, molded polymeric or inflatable fabric walls, regardless of dimension. Permanently Installed Pools include any pool capable of holding water in a depth greater than 42", or those that are installed in the ground, or installed partially in the ground, or are installed inside a building regardless of water depth.
- 2. Flexible cord assemblies for permanently installed pool motors shall have a properly sized copper equipment-grounding conductor not smaller than 12 AWG and, except for storable pools, said cord shall not exceed 3 feet in length.
- 3. Pools shall not be located in violation of overhead conductor clearance or underground wiring location provisions of the 2008 National Electrical Code.
- 4. Underground branch circuits for pool-associated motors shall be installed in approved conduit at minimum cover depths of 6" for rigid & intermediate metal conduit and 18" for other approved conduit. <u>No UF Cable permitted</u>.
- 5. Any wiring method employed shall contain an insulated copper equipment-grounding conductor properly sized and not smaller than 12 AWG.
- 6. Receptacles for circulation & sanitation equipment shall be 6 feet to 10 feet from the inside walls of a pool including single-locking-grounding receptacles, and any other receptacle, may be not less than 6 feet from said walls.
- 7. Any receptacle within 20 feet of said pool walls shall be GFCI protected and there shall be at least one such receptacle for general use between 6 and 20 feet of the inside wall of the pool, and not higher than

6 feet 6 inches above the level area serving the pool.

- 8. All power supplied to pool pump motors, including hard wired power, shall be via GFCI protected circuits.
- 9. "Equipotential Bonding" with #8 solid copper wire shall be installed to reduce voltage gradients in the pool area. Such bonding shall include the following:
 - A. Conductive pool shells and reinforcing steel; (An aboveground pool does not have reinforcing rods, so you will need to bond the circulating pump to one metal pool support.)
 - B. Perimeter Surfaces paved or unpaved, to feet 3 horizontally beyond the inside walls of permanently installed pools, and if no reinforcement steel is present (e.g. unpaved areas) AWG the #8 copper conductor shall be routed to follow the contour of the pool from 18" to 24" from the inside walls of the pool and to a depth of between 4" & 6" within or under the perimeter surface.
 - C. Metallic components.
 - D. Underwater Lighting.
 - E. Metal Fittings.
 - F. Electrical Equipment.
 - G. Metal wiring methods and equipment.
 - H. Pool water shall be intentionally bonded by a conductive surface having an area of at least 9 square inches.

The above bonding requirements are listed in a general manner and are abbreviated excerpts from Section 680.26 of the 2008 National Electrical Code. This section contains language that may modify and enlarge upon these requirements and should be consulted for any needed clarification.

Storable Pools

- 1. Pool pumps shall be approved insulated types having equipmentgrounding conductors within approved flexible cords and approved grounding type attachment plugs.
- 2. Cord-connected pool filter pumps shall be provided with a ground fault circuit interrupter (GFCI) that is an integral part of the attachment plug or located in the power supply cord within 12" of the attachment plug.
- 3. All electrical equipment, including power supply cords, used with storable pools shall be protected by GFCIs.
- 4. All 125-volt receptacles within 20 feet of the inside walls of a storable pool shall be GFCI protected. No receptacle shall be located within 6 feet from the inside walls of a storable pool.
- 5. Storable pools are usually not high enough to provide protection to children, even with the ladder secured. (Ladders should never be left in place when the pool is unattended) Therefore, a barrier such as a 4 foot high fence with an approved gate is required. Details are available at the Town Office of Planning and Zoning.

This handout is for informational purposes only and shall not be considered a substitute for the Code adopted by the State of New Hampshire.

Entrapment Protection for Swimming Pool and Spa Suction Outlets

<u>Suction outlets</u> shall be designed to produce circulation throughout the pool or spa, and shall be designed and installed in accordance with ANSI/APSP-7.

<u>Single outlet systems</u>, such as automatic vacuum cleaner systems, or <u>multiple suction</u> <u>outlets</u>, whether isolated by valves or otherwise, shall be protected against user entrapment. Such protection shall include approved covers to protect against evisceration/disembowelment, the hazards of entrapment of the hair, limb and the body by suction or mechanical means.

<u>Atmospheric vacuum relief systems</u> are required to protect users should approved covers become missing or broken.

<u>Dual drain separation</u>. Single or multiple pump circulation systems shall have a minimum of two approved suction outlets separated by a minimum of 3 feet horizontally or vertically and piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump(s).

<u>Pool cleaner fittings</u>, where provided, shall be located in an accessible position(s) at least 6 inches and not more than 12 inches below the minimum operational water level or as an attachment to the skimmer(s).

Other Recommended Precautions *

□ Alarms: Alarms are available for doors, fences, in pools, and as a clip-on for children. Alarms detect unwanted entrances to your pool, spa, or hot tub.

 \Box Rope and Float Line: Place these across the pool to alert swimmers to the separation of the deep end from the shallow end of the pool.

☐ Rescue Equipment: Equipment such as a life ring and shepherd's hook should be placed near the pool in an easily accessible spot.

□ Posted Emergency Information: Post all CPR, other emergency information, and warning signs, as well as the emergency telephone number - 911 - near the pool, spa, or hot tub.

□ Outside Telephone: Be sure to have a telephone in case you need to summon help. (* Source: The Association of Pool & Spa Professionals)