

**Chester**  
**Building Official**  
**Code Enforcement**

Thom Roy  
84 Chester Street  
Chester, N.H. 03036  
(603) 887-5552  
(603) 887-4404 (Fax)  
chesterbi@gsinet.net



**“...for all children under the age of 14, drowning is second only to car accidents as the leading cause of death...”<sup>1</sup>**

*A swimming pool shall not be constructed, installed, enlarged or altered until construction documents have been submitted and a permit has been obtained from the building official. Plans sufficient to show conformance to requirements shall be submitted as part of the application.*

*Swimming Pools –above ground, in-ground and on-ground require permits. An exception allows that no permit is required for prefabricated pools of less than 24 inches deep. Spas, hot tubs, and decorative pools, wading pools, etc would require a permit.*

*Code Definition (in part) of Permanently Installed Swimming Pools: IRC 2009 Chapter 42 – “.... those that are constructed in the ground or partially in the ground, and all others capable of holding water with a depth greater than 42 inches....”*

*A pool and any associated equipment must meet the minimum lot line setbacks.*

*The pool cannot be placed over the septic tank or the over leach field.*

This information sheet for swimming pools applies only to outdoor residential dwelling units (single family, two-family or one-family townhouse). Additional provisions may apply for other applications. Additional provisions for indoor pools apply. Additional provisions may apply for spas and hot tubs.

Swimming pool regulations do not apply to any pool less than 24 inches, except where such pools might be equipped with a water re-circulating system or involve structural materials.

Code Definition (in part) of Permanently Installed Swimming Pools: IRC 2009 Chapter 42 – “.... those that are constructed in the ground or partially in the ground, and all others capable of holding water with a depth greater than 42 inches....”

Barrier Requirements for safe operation in and around swimming pools are paramount to protection of drowning and near drowning and are meant to restrict unsupervised access.

Outdoor private swimming pools, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be subject to the barrier requirements as defined by Appendix G, of the IRC 2009<sup>2</sup>. A summary of those provisions are provided herein:

1. The top of the barrier shall be at least 48 inches above finish ground level measured on the side of the barrier that faces away from the swimming pool. The barrier must be build such as to obstruct access to the pool.  
The maximum clearance from grade to bottom of barrier is 2 inches or if barrier is placed on the top of the pool the maximum clearance from top of pool to bottom of barrier is 4 inches.
2. When the barrier is constructed of horizontal and vertical members and the distance between the horizontal members is less than 45 inches than the vertical member spacing must not exceed 1.75 inches or when horizontal construction is more than 45 inches between horizontal members the vertical spacing must not exceed 4 inches. The horizontal members must be located on the poolside of the barrier.
3. Openings in the barrier shall not allow the passage of a 4" sphere.
4. Maximum mesh size for chain link fence shall be a 2 ¼ inch square unless the fence is provided with slats fastened at the top or the bottom reducing the openings to not more than 1 ¾ inches.
5. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not more than 1 ¾ inches.
6. Access gates shall comply with the requirements of items 1 through 5 above, and shall be equipped to accommodate a locking device.
7. Access gates shall open outwards away from the pool and shall be self-closing and have a self-latching device.
8. Gate release mechanisms must be greater than 54 inches from grade or release mechanisms must be placed on the poolside at least 3 inches below top of gate and there can be no openings greater than 1/2 inch within 18 inches of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:
  - a. All 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 its screen, if present, are open. (30 seconds continuous – automatically resetting – 15 second deactivation is allowed with control at least 54 inches from floor) or
  - b. Pool shall be equipped with an approved power safety cover.

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 fixed or removable ladder or steps, the ladder or steps shall be surrounded by a barrier which meets the requirements of items 1 through 8 above or the ladder or steps shall be capable of being secured, locked or removed.

Permanent structures, equipment, or similar objects are not to be located so as to provide access or allow climbing upon any of the pool barrier or otherwise lessen the protection provided by the barrier; this includes the creation of any ground contours constructed such as to allow for any decreased barrier protection.

Electrical code compliance shall meet the following minimal standards and be in full compliance with NEC Article 680, Swimming Pools.

1. The pool motor wiring must be a minimum of 12-gauge copper and must have a green insulated equipment conductor. THWN singles must be in conduit the entire length once outside the dwelling.
2. For in-pool lighting the insulated grounding conductor must be completed to the panel box and must continue both inside and outside the dwelling.
3. No non-pool wiring underground within 5 feet of the pool.
4. The disconnecting means for all equipment must be readily accessible and within site. (Except lighting). And must be located a least 5 feet horizontally away from the pool.
5. Bonding – **all** parts of pool structure and equipment – exception allowed for storable pools. Bonding conductor size = min. 8 AWG – must be solid, not stranded wire.
6. Bonding – the entire perimeter surface of the pool must be bonded within a minimum of 3 feet horizontally beyond the inside walls of the pool.
7. Cord-and-plug – maximum cord length 3 feet with grounding type attachment plug and copper equipment grounding conductor of not smaller than 12 AWG. Exception 25 foot length allowed for storable pools
8. All 15 – 20 amp 125-volt receptacles within 20 ft must be GFCI protected (except inside of dwelling). All outside GFCI receptacles must be “WR” rated.
9. Receptacles that supply pool pump motors and that are 15-20 amps, 125v – 240v shall be GFCI protected.
10. GFCI protection is required for all lights greater than 5 ft and less than 10 ft from pool and less than 5 ft above horizontal line.

11. No lights less than 5 ft from pool unless 12 ft above surface – existing fixtures on structure may be ok if less than 5 ft from pool and GFCI protected and greater than 5 ft above water.
12. No receptacles within 10 feet of the pool unless: consisting of single dedicated receptacle, locking type, grounding type and GFCI protected. Generally this receptacle is to accommodate the power to the pool pump and filter motor and may be located within 6 feet if the above is met; otherwise it has to be a minimum of 10 feet away.
13. A minimum of one (additional) receptacle must be provided at least 6 ft and not more than 20 ft from pool walls. The receptacle is not to be located more 6 ft 6 inches above pool or grade.
14. Any tri-plex service above or within 10 ft of pool must have 22 ft clearance.

Note: The **pool water** shall be intentionally bonded by means of a conductive surface of not less than 9 square inches.

**It is highly recommended that the barrier and electric planning be submitted and reviewed with your application prior to proceeding with the installation. These are minimum requirements and are not subject to waivers.**

<sup>1</sup>(as cited from statistics from medscape.com)

<sup>2</sup>(for full text of the code read Appendix G, IRC 2009)