

Notes From the Commish Pools, Decks and Other Summer Fun continued

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A back yard swimming pool can be a source of enjoyment for family and friends during the hot summer months (no promises, this is New England), but also is potentially dangerous when misused, improperly protected or supervised.

The U.S. Consumer Product Safety Commission (CPSC), in a press release dated May 25, 2004, launched “a drowning prevention campaign as part of an intensified initiative to prevent the tragic drowning of 250 children under the age of 5 annually in swimming pools. Among unintentional injuries, drowning has been the second leading cause of death to children under age 5, after motor vehicle incidents.” (<http://www.cpsc.gov/cpsc/pub/prerel/prhtml04/04142.html> accessed April 14, 2005)

The CPSC press release mentioned above contains links to a number of pamphlets with clear diagrams of proper barriers (enclosures or fences) for pools that will help make sense of the Massachusetts State building Code (the Code), additionally there are some audio and video presentations. If you do not have access to the web, the printed pamphlets are available by calling (800) 638-2772 and ask for "Pool Safety" information.

The installation of a private swimming pool in the yard of a one or two family residence is governed by § 421.0 of the Code, the complete text of this section may be found at <http://www.mass.gov/Eeops/docs/dps/BuildingCode/780004.pdf>. Also on the Town of Charlton Building Commissioners web page is a document entitled [Private Swimming Pools](#), with the relevant information from the Code excerpted and highlighted.

The beginning of the odyssey for this type of project is to determine if what you are intending to construct is a swimming pool as defined by the Code, and therefore would require a building permit from the Building Commissioner’s office. The Code defines a private swimming pool as;

“Private swimming pool: *Any structure that contains water over 24 inches (610 mm) in depth and which is used, or intended to be used, for swimming or recreational bathing in connection with an occupancy in Use Group R-3 or R-4 and which is available only to the family and guests of the householder. This includes in-ground, aboveground and on-ground swimming pools, hot tubs and spas.”* ([§ 421.2](#))

Note: *“R-4, This use group shall include all detached one- or two-family dwellings not more than three stories in height, and the accessory structures”.* (§ 310.6)

We can see from the above definition there are many pools, in the yards of homes that contain a sufficient depth of water and are used for recreational purposes that require a building permit and oversight of the Code. The definition includes those soft sided pools that the water holds up. The reason for including the soft sided pools under the jurisdiction of the Code is this type of pool has the same potential for accidents or problems that their ridged counterparts have.

So what does the Code require? There is a requirement for the construction of the pool to be “engineered and designed to withstand the expected forces to which the pool will be subjected” ([§ 421.5](#)), this is usually taken care of by the pool manufacture. Additionally the depth and slope are specified, which is especially important if there will be a diving board ([§ 421.11](#)). The most important safety and control requirement is a barrier, defined as, “A fence, a wall, a building wall or a combination thereof which completely surrounds the swimming pool and obstructs access to the swimming pool.” ([§ 421.2](#)) The barrier has specific requirements for height, spacing of and size of holes and protrusions, gate latches and alarms on door leading to the residence if they are part of the barrier.

The requirement for a code compliant barrier starts as soon as there is any water in the pool, which can be an interesting issue during the construction process. Often pools are filled with water to give them shape or in the case of in ground pools to resist the force of the backfill placed against them. A “temporary” fence is sometimes erected to facilitate the construction process, or to speed the

readiness of the actual pool for use while other appurtenant structures are completed. The Code does not make any provision for temporary fences; whatever is erect must meet the requirements of the Code, outlined later in this article. Any fencing that is erected needs to be maintained for the life of the pool, constructed of a suitable material and has sufficient posts to keep it in place meeting the Code requirements at all times, an exception is when someone is working directly on the project.

The issue of who is responsible for the barrier needs to be made clear when deciding to have a pool installed. Carefully read the contract with your pool installer to see what work is included, who will install what type of barrier and when. For above ground pools consider how sloping land will be handled, will a barrier be erected or will the grade be adjusted. This office has failed more than one inspection on this type of pool because the installer leveled only the area to set up the pool and left an embankment that would allow people to step into the pool.

So on to barrier requirements; they must be a minimum of forty-eight (48) inches tall, if chain link fencing is used the mesh size must be one and one quartet ($1\frac{1}{4}$) inches square, if the fence is composed of horizontal and vertical members and the distance between the tops of the horizontal members is forty-five (45) inches or more, spacing between vertical members shall not exceed four (4) inches in width, if the spacing between the horizontal member is less than forty-five (45) inches, spacing between vertical members shall not exceed one and thee quarter ($1\frac{3}{4}$) inches in width and the horizontal member will be located on the pool side of the fence. ([§ 421.10.1](#))

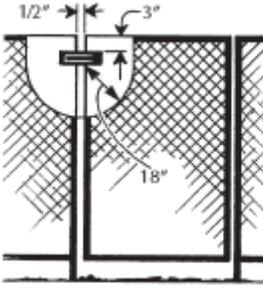
As far as this office knows the only time the good side of stockade type fence must face out or the neighbors yard, is when it encloses a swimming pool, this is so the horizontal members can not be used for climbing purposes. Remember Robert Frost in his poem Mending Wall penned, "Good fences make good

neighbors” Maybe the true lesson here is that we should all treat each other with respect and dignity as we wish to be treated.

For above ground pools the barrier may be the pool wall, as most above ground pools are more than forty-eight (48) inches tall and the walls have no holes in it, that may be used for climbing (we hope, so the water stays in the pool). Also the grade around the pool must not decrease the height of the pool to less than the required forty-eight (48) inches in any direction. The best way to maintaining the required clearance is to cut a stick forty-eight (48) inches long and swing it in an arc from the top edge of the pool; consider the adjoining land, pump, filter or other accessories within this arc that may be used as for climbing into the pool or over a barrier. ([§ 421.10.3](#))

The ladder for an above ground pool is another area of concern, if it is removed from the pool how far away is it place, is it secured with a lock and chain to prevent people from reinstalling it? If you have a two part ladder, what is done with the removable part, is it stored leaning against the house or in the open garage where it can be accessed by unsupervised children?

If a fence is used as the barrier most likely a gate for pedestrians will be installed in it (we want to be able to get to the pool). The pedestrian gate must swing away from the pool and have both a self closing and self latch hardware on it, the latch must be a minimum of fifty-four (54) inches off the ground, or on the inside of the gate three (3) inches down from the top of the gate, also the barrier will have no openings more than one half (1/2) inch wide within eighteen (18) inches of the latch. Gates other than pedestrian access gates will have self latching devices. ([§ 421.10.1 \(8\)](#))



There are pool barrier installations that use the building or deck attached to the home as part of the enclosure, if there are door(s) that lead directly from the interior of the home to the pool area those door(s) and screens, must have an alarm on them that sounds continuously for a minimum of thirty (30) seconds and has distinctive sound from other alarms used in the home such as fire and burglar alarms.. There is a provision in the Code for a keypad to silence the alarm located fifty-four (54) inches off the floor for an adult to temporarily override the alarm. ([§ 421.10.1 \(9.1\)](#))

Notice:

To make the process of obtaining building permits more convenient, the Commissioner has revised all the residential permit applications and instruction. The applications and instructions are available either from the office located in the Town Hall, at 37 Main Street, or online at Town of Charlton [Building Commissioners](#) web page, part of the Town of Charlton web site www.townofcharlton.net. In addition we are working towards posting past *Notes From the Commish* and a section “Frequently Asked Questions”.

The (CPSC) home page, <http://www.cpsc.gov/> is a wealth of information on all types home hazards around the home, their publications are available on line or by calling (800) 638-2772.

Next month some information on zoning.