

## 10.9 Swimming Pools

a. Definitions:

- (1) Aboveground pool-type O: A removable pool of any shape that has a minimum water depth of thirty-six inches (36") and maximum water depth of forty-eight inches (48"). The wall is located on the surrounding earth and may be readily disassembled or stored and reassembled to its original integrity.
- (2) Hot tub: A spa constructed of wood with sides and bottoms formed separately, joined together by pressure from surrounding hoops, bands or rods, as distinct from spa units formed of plastic, concrete, metal or other materials.
- (3) In ground pool: A permanently installed swimming pool that is constructed in the ground, out of doors or in a building in such a manner that it cannot be readily disassembled for storage.
- (4) On ground residential swimming pool-type O: A removable pool package whose walls rest fully on the surrounding earth and has an excavated area below the ground level where diving, diving equipment and use of a water slide are prohibited. The floor slope adjacent to the shallow area shall have a maximum floor slope of 1:3, and the slope adjacent to the sidewalk shall have a maximum slope of 1:1.
- (5) Spa, permanent residential: A spa in which the water heating and water-circulating equipment is not an integral part of the product. The spa shall be intended as a permanent plumbing fixture.
- (6) Spa, residential portable, either self-contained or not self-contained:
  - (a) Self-contained spa: A spa in which all control, water heating and water circulating equipment is an integral part of the product.
  - (b) Non self-contained spa: A spa in which the water heating and water circulating equipment is not an integral part of the product. Non self-contained spas may contain separate components such as an individual filter, pump, heater and controls or they may employ assembled combinations of various components.
- (7) Swimming pool, in ground residential: A constructed pool, permanent or non-portable, that is intended for non-commercial use as a swimming pool by not more than three (3) owner families and their guests, over twenty-four inches (24") in depth, has a surface area exceeding 250 square feet and/or a volume over 3,250 gallons.
- (8) Type O: Any residential pool where the installation of diving equipment is prohibited.

b. Permit Required: No in ground pool, nor on ground residential swimming pool, as defined above, shall be constructed, altered, remodeled or improved unless a permit therefore shall first be obtained from the building inspector.

c. Submission of Plans: Plans and specifications for swimming pools which require a permit shall be submitted with the application for the swimming pool permit and shall include:

- (1) plans, including a profile, drawn to scale showing all dimensions;
- (2) equipment, layout of filters, pumps, strainers, sumps, gutters, skimmers, inlets, outlets, waste discharge lines, circulations and other piping;
- (3) type, care and description of chlorination;
- (4) capacity of pool;

- (5) proposed location on tract of land.

d. Design and Construction:

- (1) The material used for lining aboveground pools, in ground pools and on ground residential swimming pools shall be light in color and provide a tight tank with smooth and easily cleaned surfaces.
- (2) The walls of aboveground pools, ingrown pools and on ground residential swimming pools shall be vertical. Conspicuous markings shall show the depth of the shallow and deep portions, and the location and depth of the points where the slope of the bottom of the pool changes.
- (3) Overflow gutters for swimming pools whose construction provides for said gutters shall completely surround the pool, provided that if such pool is less than thirty (30) feet in width, it may be provided with a skimmer built in to the sides and corners of the pool to take the place of gutters if approved by the building inspector.
- (4) Pools under thirty feet (30') in width shall have at least one (1) outlet at the deepest point of sufficient size to permit the pool to be completely emptied in eight (8) hours. Inlets shall be located to make possible a uniform circulation of water throughout the pool.
- (5) Ingrown pools shall be completely surrounded by a walkway.
- (6) Aboveground pools, ingrown and on ground residential swimming pools shall provide for a complete recirculation of water through all parts of the pool.
- (7) Disinfecting equipment shall be adequate to conform to sanitary requirements.

e. Barrier Protection Requirements:

- (1) Walls, fences and structures as barrier protection. Barrier walls and fences may be stand alone walls and fences or may be in combination with a structural pool, spa or hot tub walls, or a building/dwelling wall to form the barrier around the swimming pool, spa or hot tub.
  - (a) Dimensions: The top of the wall/fence shall be at least forty-eight inches (48") above grade measured on the side of the wall/fence which faces away from the swimming pool, spa or hot tub. The maximum vertical clearance between grade and the bottom of the wall/fence shall be four inches (4").
  - (b) Chain link fence: Where a chain link fence is provided as the barrier, the perpendicular distance between parallel sides of the link shall not exceed two and one-quarter inches (2-1/4") which corresponds to a two and one-quarter inches (2-1/4") mesh size or chain link fencing as contained in specification for residential fencing of the Chain Link Fence Manufacturer's Institute.
  - (c) Picket/ornamental fence: Where a picket/ornamental fence is provided as the barrier, the horizontal open air spacing between pickets shall be a maximum of four inches (4") between all vertical pickets and support posts. Where a picket/ornamental type fence is provided, the maximum vertical

opening between the grade and the lowest part of the horizontal bottom rail or pickets of the fence shall not exceed four inches (4"). Decorative detail shall not provide climbability. Minimum openings between decorative detail shall be one and three-quarter inches (1-3/4") or greater.

- (d) Spacing, less than forty-five inches (45"): Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than forty-five inches (45"), the horizontal member shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed one and three-quarters inches (1-3/4") in width. Decorative cutouts shall not exceed one and three-quarters inches (1-3/4") in width.
  - (e) Spacing, more than forty-five inches (45"). Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is forty-five inches (45") or more, spacing between vertical members shall not exceed four inches (4"). Decorative cutouts shall not exceed one and three-quarters inches (1-3/4") in width.
- (2) Pedestrian access gates: Access gates in the barrier shall comply with the requirements of Section 10.9(e), and be self-closing, self-latching, accommodate a locking device, and open outward away from the pool, spa or hot tub except where natural topography or other conditions dictate that it open inward.
- (a) Latch Release. Release of the latch on the self-latching device for the gate shall be activated as follows: a height no less than fifty-four inches (54") above grade for chain link access gates and at a height no less than fifty-four inches (54") above the horizontal bottom rail of a picket/ornamental access gate, or; on the pool, spa or hot tub side of the gate at a distance no less than three inches (3") below the top of the gate.
  - (b) Self-latching devices. Where a self-latching device is also self-locking and is opened by means of a key, electronic opener, or integral combination lock, it may be located at any height on the gate, so long as it does not negate the function of the gate. Said gate need not comply with Section (d) below:
  - (c) Chain link access gate: Where the gate is a chain linked gate, and where the release of the self-latching device is activated in accordance with (c), there shall be no opening greater than one-half inch (1/2") in diameter within eighteen inches (18") where the latch release is activated when the gate is closed.
  - (d) Picket/ornamental access gate: Where the gate is a picket/ornamental type, such that the distance between the vertical members is greater than one and three-quarter inches (1-3/4"), and where the release of the self-latching device is activated in accordance with section 2(b) above, there shall be no opening the gate/fence greater than one-half inch in diameter within eighteen inches (18") of where the latch release is activated when the gate is closed.
- (3) Other access gates: Gates other than pedestrian access gates need not have a self-closing, self-latching feature, but shall be provided with the means to secure the gate when it is not in use.

- f. Pool Wall as Barrier for Aboveground/On ground Pools:
- (1) Pool Wall. An aboveground, on ground pool wall itself may be the barrier if the pool structure is on grade and the wall is at least forty-eight inches (48") in height. Other types of barriers can be mounted on the pool structure or can be a barrier that surrounds the pool at ground level. Where the barrier is mounted on the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be four inches (4").
  - (2) Ladders or Steps. Where an aboveground/on ground pool structure is used as a barrier, or where the barrier is mounted on the pool structure, and the means of access to the pool is a ladder or steps, then
    - (a) the ladder or steps shall be capable of being secured, locked or removed to prevent access, or
    - (b) the ladder or steps shall be surrounded by a barrier which meets the requirements of section e., or
    - (c) a lockable and self-closing and self-latching gate at deck level shall be provided.
  - (3) Fence Rail Mounted on Top of Forty-eight Inch Aboveground/On ground Pool Wall Structure. Where provided, the top rail of a pool fence, deck fence, patio fence, walkaround fence and gate, mounted on top of a pool structure or deck of an aboveground/on ground pool which is in conformance with section f(1) shall be a minimum of thirty-six inches (36") above the deck surface.
    - (a) Picket/ornamental type fence. Where a picket/ornamental type fence is provided, maximum open air spacing between all vertical pickets and support posts (vertical) and between the top rail of the pool and the lower horizontal bottom rail of the fence shall not exceed four inches (4"). A sphere greater than four inches (4") shall not pass through openings in the fence.
    - (b) Visibility. Where fencing is required and/or provided with the pool or deck, the fencing shall have at least sixty-five percent (65%) open area to allow visibility from outside to inside the pool area.
  - (4) Deck. Where an aboveground/on ground pool has a deck which abuts or is adjacent to a dwelling and direct access to the deck is through the exterior wall of the dwelling, such access shall be in accord with section g.
- g. Wall of Building with Three-sided Fencing as Barrier. The wall of a building/dwelling may be used to form the barrier or part of the barrier as provided herein. Section e. shall apply to all residences with a swimming pool, spa or hot tub when a wall of a building/dwelling serves as a barrier to said swimming pool, spa or hot tub.
- (1) Doors. Doors in the wall of a building/dwelling which allow direct access through the wall to the pool, spa or hot tub area must be provided with one of the following - an alarm capable of detecting unauthorized entry through a door into the pool, spa or hot tub area and which when activated, emits a sound of sufficient volume to be

heard in the building/dwelling. The audible warning, at no less than 85 dB, shall commence not more than seven (7) seconds after the door and/or its screen, if present, are open and shall sound continuously for a minimum of thirty (30) seconds, or - as a self-latching device on a self-closing door which is either fifty-four inches (54") above floor level or at any convenient height if the device uses a key, electronic opener or integral combination lock so long as it does not negate the function of the door.

- h. Windows. Windows in the wall of the building/dwelling which allow direct access to the wall to the pool, spa or hot tub area, and are located four feet (4') or higher above the floor level, and where there is no foothold in the building/dwelling wall, shall be exempt and considered equivalent protection to the barrier set out in section e. Windows in the all of the building/dwelling which allow direct access through the wall to the pool, spa or hot tub area and where the lowest opening is at a height of less than four feet (4') above floor level shall comply with one of the following requirements:
- (1) Window guards, screens or other means of equal protection, shall limit access such that there are no openings large enough to allow a four inch (4") sphere to pass through, or
  - (2) Windows shall be fixed in such a way that they will not open sufficiently far to create a gap which will allow a four inch (4") sphere to pass through or
  - (3) The lowest opening panel of a window shall be located not less than four feet (4') above the floor and there shall be no footholds wider than 4/10th's of an inch on the internal wall down to approximately three and one-half feet (3-1/2') below the lowest opening panel.
- i. Safety Cover for Spa/Hot Tubs as a Barrier. A safety cover for a hot tub or spa which complies with ASTM F 13.46 (1991) is acceptable.
- j. Automatic Power Safety Cover for Swimming Pools as a Barrier. An automatic power safety cover for a swimming pool which complies with ASTM F 13.46 (1991) is acceptable.
- k. Natural Topography as a Barrier. Natural topography which prevents direct access to swimming pool, spa or hot tub areas shall include, but not be limited to, mountains and natural rock formations. A natural barrier shall be approved by the building inspector so long as the degree of protection is not less than the protection afforded by manufactured or constructed means.
- l. Screen Enclosure as Barrier. Screen enclosures that meet or exceed the door, wall, fence and gate requirements of this code are acceptable.
- m. Other Layers of Protection as a Barrier: Other means of protection shall not be used unless demonstrated to provide an equivalent level of protection as approved by the building inspector.
- n. Clear Zone. There shall be a clear zone of at least four feet (4') between the barrier for or on a pool, spa or hot tub and any permanent structures or pool equipment, such as pumps, filters, heaters and similar equipment which can be used to climb the barrier.
- o. Supplemental Layers of Protection-Indoor Swimming Pools, Spas and Hot Tubs. A residential indoor swimming pool, spa or hot tub shall be provided with the means or combination of means to exclude children from the pool, spa or hot tub area and which shall comply with sections i., j. and k.