

SWIMMING POOLS, HOT TUBS, AND SPAS

Regulations regarding swimming pools are covered in the building codes, International Property Maintenance Code Section 303 and the International Residential Code Section AG105. Many of these regulations pertain to barriers. Outdoor swimming pools, either above-ground or in-ground, as well as hot tubs and spas require a barrier to protect against unsupervised entry. Swimming pools and similar facilities create an attractive temptation to children who may not know how to swim. Providing an effective barrier can help reduce the number of accidental deaths or injuries that result from drowning. This summary of the regulations is intended to help clarify the intent of the standards.

BARRIER REQUIREMENTS

Application

These regulations apply to any structure intended for swimming or recreational bathing that contains water over 24 inches deep. This includes in-ground, above-ground and on-ground swimming pools, hot tubs and spas.

The provisions control the design of barriers for residential swimming pools, spas and hot tubs. The design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

Outdoor Swimming Pools

Barriers shall comply with the following:

1. Barrier height and clearances

The top of the barrier shall be at least 48 inches 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 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.

2. Openings

Openings in the barrier shall not allow passage of a 4-inch-diameter sphere.

3. Ladder or steps

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:

- 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 items 1 through 10.

4. Solid barrier surfaces

Solid barriers which do not have openings, such as a masonry wall or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

5. Closely spaced horizontal members

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, The horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1 $\frac{3}{4}$ inches in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 $\frac{3}{4}$ inches in width.

6. Widely spaced horizontal members

Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members shall not exceed 4 inches. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 $\frac{3}{4}$ inches in width.

7. Chain link

Maximum mesh size for chain link fences shall be a 2 $\frac{1}{4}$ inch square unless the fence has slats fastened at the top or the bottom which reduce the openings to not more than 1 $\frac{3}{4}$ inches.

8. Diagonal members

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 1 $\frac{3}{4}$ inches.

9. Gates

Access gates shall comply with the requirements of items 1 through 8, 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 from the bottom of the gate, the release mechanism and openings shall comply with the following:

- a) The release mechanism shall be located on the pool side of the gate at least 3 inches below the top of the gate; and
- b) The gate and barrier shall have no opening larger than ½ inch within 18 inches of the release mechanism.

10. Building walls

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

- a) The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or
- b) 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, or
- c) Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by items a) or b) of this section.

11. Prohibited locations

Barriers shall be located to prohibit permanent structures, equipment or similar objects from being used to climb them.

12. Barrier exceptions

Spas or hot tubs with a safety cover which complies with ASTM F 1346 shall be exempt from the provisions of these regulations.