

INTERNATIONAL BUILDING CODE  
BARRIER REQUIREMENTS  
FOR  
SWIMMING POOLS, SPAS AND HOT TUBS

APPENDIX G

SECTION AG105  
BARRIER REQUIREMENTS

AG105.1 Application. The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against drowning and near-drowning by restricting access to swimming pools, spas and hot tubs.

AG105.2 Outdoor swimming pool. An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) 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 (51 mm) 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 the 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 (102 mm).

2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

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

4. 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 (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

5. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.

6. Maximum mesh size for chain link fence shall be a 2.25 inch (~~57~~mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).

7. 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 1.75 inches (44 mm).

8. Access gates shall comply with the requirements of Section AG105.2, items 1 through 7, and shall be securely locked with a key, combination or other child-proof lock sufficient to prevent access to the swimming pool through such gate when the swimming pool is not in use or supervised. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than the pedestrian access gates shall have a self-latching device. Where the release

**1220.5. Swimming pool alarms. [amended text 12/14/2006]**

**(a) Purpose.** Paragraph (b) of subdivision (14) of section 378 of the Executive Law, as added by Chapter 450 of the Laws of 2006, requires that the New York State Uniform Fire Prevention and Building Code (the Uniform Code) provide that any "residential or commercial swimming pool constructed or substantially modified after the effective date of this paragraph (December 14, 2006) shall be equipped with an acceptable pool alarm capable of detecting a child entering the water and of giving an audible alarm." The Introducer's Memorandum in Support of Chapter 450 states, in pertinent part, that "drowning is the second leading cause of unintentional injury-related deaths in children between the ages of one and fourteen nation wide, and the third leading cause of injury-related deaths of children in New York. . . . (T)echnological advances have produced several different types of pool alarms designed to sound a warning if a child falls into the water. When used in conjunction with access barriers, these alarms provide greater protection against accidental pool drownings." This section and section 1221.3 of Part 1221 of this Title are intended to implement the provisions of Executive Law section 378(14)(b).

**(b) Definitions.** The terms "approved," "commercial swimming pool," "residential swimming pool," "swimming pool," "substantial damage," and "substantial modification" shall, for the purposes of this section, have the meanings ascribed in subdivision (b) of section 1221.3 of Part 1221 of this Title.

**(c) Pool alarms.** Each residential swimming pool installed, constructed or substantially modified after December 14, 2006 and each commercial swimming pool installed, constructed or substantially modified after December 14, 2006 shall be equipped with an approved pool alarm which:

- (1) is capable of detecting a child entering the water and giving an audible alarm when it detects a child entering the water;
- (2) is audible poolside and at another location on the premises where the swimming pool is located;
- (3) is installed, used and maintained in accordance with the manufacturer's instructions;
- (4) is classified by Underwriter's Laboratory, Inc. (or other approved independent testing laboratory) to