

enclosure) and at least 40 inches (1,016 mm) above grade. In addition, if the latch handle is located less than 54 inches (1,372 mm) from the bottom of the gate, the latch handle shall be located at least 3 inches (76 mm) below the top of the gate and neither the gate nor barrier shall have any opening greater than 0.5 inch (12.7) within 18 inches (457 mm) of the latch handle.

**3109.3.1.3 Locking.** All gates 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.

**3109.4 Residential swimming pools.** Residential swimming pools shall be completely enclosed by a barrier complying with Sections 3109.4.1 through 3109.4.3.

**Exception:** A swimming pool with a power safety cover or a spa with a safety cover complying with ASTM F 1346 need not comply with this section.

**3109.4.1 Barrier height and clearances.** The top of the barrier shall be not less than 48 inches (1219 mm) above grade measured on the side of the barrier that faces away from the swimming pool. The vertical clearance between grade and the bottom of the barrier shall be not greater than 2 inches (51 mm) measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, and the vertical clearance between the top of the pool structure and the bottom of the barrier shall be not greater than 4 inches (102 mm).

**3109.4.1.1 Openings.** Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

**3109.4.1.2 Solid barrier surfaces.** Solid barriers which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

**3109.4.1.3 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 (1143 mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall be not greater than 1 ¾ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1 ¾ inches (44 mm) in width.

**3109.4.1.4 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 (1143 mm) or more, spacing between vertical members shall be not greater than 4 inches (102 mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall be not greater than 1 ¾ inches (44 mm) in

width.

**3109.4.1.5 Chain link dimensions.** Mesh size for chain link fences shall be not greater than a 2 ¼ inch square (57 mm square) unless the fence is provided with slats fastened at top or the bottom that reduce the openings to not more than 1 ¾ inches (44 mm).

**3109.4.1.6 Diagonal members.** Where the barrier is composed of diagonal members, the opening formed by the diagonal members shall be not greater than 1 ¾ inches (44 mm).

**3109.4.1.7 Gates.** Gates shall comply with the requirements of Sections 3109.4.1.1 through 3109.4.1.6 and with the following requirements.

**3109.4.1.7.1 Self-closing; Opening Configuration.** All gates shall be self-closing. In addition, if the gate is a pedestrian access gate, the gate shall open outward, away from the pool.

**3109.4.1.7.2 Self-latching; Location of Latch Handle.** All gates shall be self-latching, with the latch handle located within the enclosure (i.e., on the pool side of the enclosure) and at least 40 inches (1016 mm) above grade. In addition, if the latch handle is located less than 54 inches (1372 mm) from the bottom of the gate, the latch handle shall be located at least 3 inches (76 mm) below the top of the gate, and neither the gate nor barrier shall have any opening greater than ½ inch (12.7) within 18 inches (457 mm) of the latch handle.

**3109.4.1.7.3 Locking.** All gates 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.

**3109.4.1.8 Dwelling wall as a barrier.** Where a wall of a dwelling serves as part of the barrier, one of the following shall apply:

1. Doors with direct access to the pool through that wall shall be equipped with an alarm that produces an audible warning when the door or its screen, if present, are opened. The alarm shall be listed and labeled in accordance with UL 2017. In dwellings not required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located 54 inches (1372 mm) or more above the threshold of the door. In dwellings required to be Accessible units, Type A units or Type B units, the deactivation switch shall be located not higher than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the threshold of the door.
2. The pool shall be equipped with a power safety cover that complies with ASTM F 1346.
3. Other means of protection, such as self-closing doors with self-latching devices, which are approved, shall be accepted so long as the degree of protection afforded is not less than the protection afforded by Item 1 or 2 above.

**3109.4.1.9 Pool structure as barrier.** 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, then the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier that meets the requirements of Sections 3109.4.1.1 through 3109.4.1.8. Where the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

**3109.4.2 Indoor swimming pools.** Walls surrounding indoor swimming pools shall not be required to comply with Section 3109.4.1.8.

**3109.4.3 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**3109.5 Temporary Barriers.** An outdoor swimming pool, including an in-ground, above-ground or on-ground pool, hot tub or spa shall be surrounded by a temporary barrier during installation or construction and shall remain in place until a permanent fence in compliance with Section 3109.3 or barrier in compliance with Section 3109.4 is provided.

**Exceptions:**

1. Above-ground or on-ground pools where the pool structure is the barrier in compliance with Section 3109.4.1.9.
2. Spas or hot tubs with a safety cover which complies with ASTM F 1346, provided that such safety cover is in place during the period of installation or construction of such hot tub or spa. The temporary removal of a safety cover as required to facilitate the installation or construction of a hot tub or spa during periods when at least one person engaged in the installation or construction is present is permitted.

**3109.5.1 Height.** The top of the temporary 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.

**3109.5.2 Replacement by a permanent barrier.** A temporary barrier shall be replaced by a complying permanent barrier within either of the following periods:

1. 90 days of the date of issuance of the building permit for the installation or construction of the swimming pool;
2. 90 days of the date of commencement of the installation or construction of the swimming pool.

**3109.5.2.1 Replacement extension.** Subject to the approval of the code enforcement official, the time period for completion of the permanent barrier may be extended for good cause, including, but not limited to, adverse weather conditions delaying construction.

**3109.6 Entrapment avoidance.** Suction outlets shall be designed and installed in accordance with ANSI/APSP-7.

### **3109.7 Swimming pool and spa alarms**

**3109.7.1 Applicability.** A swimming pool or spa installed, constructed or substantially modified after December 14, 2006, shall be equipped with an approved pool alarm.

**Exceptions:**

1. A hot tub or spa equipped with a safety cover which complies with ASTM F 1346.
2. A swimming pool (other than a hot tub or spa) equipped with an automatic power safety cover which complies with ASTM F 1346.

Pool alarms shall comply with ASTM F2208 (Standard Specification for Pool Alarms) and shall be installed, used and maintained in accordance with the manufacturer's instructions and this section.

**3109.7.2 Multiple alarms.** A pool alarm must be capable of detecting entry into the water at any point on the surface of the swimming pool. If necessary to provide detection capability at every point on the surface of the swimming pool, more than one pool alarm shall be provided.

**3109.7.3 Alarm activation.** Pool alarms shall activate upon detecting entry into the water and shall sound poolside and inside the building.

**3109.7.4 Prohibited alarms.** The use of personal immersion alarms shall not be construed as compliance with this section.

### **3.28. 2015 IBC Appendix N (Assistive Listening Systems Performance Standards).**

The following Appendix N (Assistive Listening Systems Performance Standards) shall be deemed to be added to the 2015 IBC. Appendix N shall read as follows:

#### **APPENDIX N ASSISTIVE LISTENING SYSTEMS PERFORMANCE STANDARDS**

##### **SECTION N101 GENERAL**

**N101.1 Scope.** The provisions of this appendix shall control the performance standards of assistive listening systems.