

# RESIDENTIAL CODE OF NEW YORK STATE - APPENDIX G

## SWIMMING POOLS, SPAS AND HOT TUBS

### SECTION AG101

#### GENERAL

**AG101.1** General. The provisions of this appendix shall control the design and construction of swimming pools, spas and hot tubs installed in or on the lot of a one and two-family dwelling.

### SECTION AG-102

#### DEFINITIONS

**AG102.1** General. For the purposes of these requirements, the terms used shall be defined as follows as set forth in Chapter 2.

**ABOVE-GROUND/ON-GROUND POOL.** See “Swimming pool”

**BARRIER.** A fence, wall, building wall or combination there of which completely surrounds the swimming pool and obstructs access to the swimming pool.

**HOT TUB.** See “Swimming Pool.”

**In-GROUND POOL.** See “Swimming Pool.”

**RESIDENTIAL.** That which is situated on the premises of a detached one or two-family dwelling or a one family townhouse not more than three stories in height.

**SPA. NONPORTABLE.** See “Swimming pool.”

**SPA. PORTABLE.** A nonpermanent structure intended for recreational bathing, in which all controls, water heating and water circulating equipment are an integral part of the product.

**SWIMMING POOL.** Any structure intended for swimming or recreational bathing that contains water over 24 inches (610 mm) deep. This includes in-ground, aboveground and on-ground swimming pools, hot tubs and spas.

**SWIMMING POOL, INDOOR.** A swimming pool that is totally contained within a structure and surrounded on all four sides by walls of said structure.

### SECTION AG103

#### SWIMMING POOLS

**AG103.** In ground pools. In ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG107.

### SECTION AG-104

#### SPAS AND HOT TUBS

**AG104.1** Permanently installed spas and hot tubs. Permanently installed spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-3 as listed in Section AG107.

**AG104.2 Portable spas and hot tubs.** Portable spas and hot tubs shall be designed and constructed in conformance with ANSI/NSPI-6 as listed in Section AG107.

### 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 potential 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, aboveground 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 (1219mm) above the 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 (51mm) measured on the side 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 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. (102mm).

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

3. Solid barriers, which do not have openings, such as masonry or stonewall, shall not contain indentations or protrusions except for 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 (1143mm), the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 (44mm) inches 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 (1145mm) or more, spacing between vertical members shall not exceed 4 inches (102mm). Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44mm) in width.

6. Maximum mesh size for chain link fences shall be a 1.25 inch (32mm) 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 (44mm).

7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum openings formed by the diagonal members shall not be more than 1.75 inches (44mm).

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 pedestrian gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372mm) from the bottom of the gate, the release mechanism and openings shall comply with the following.

8.1 The release mechanism shall be located on the pool side of the gate at least 3 inches (76mm) below the top of the gate, and

8.2 The gate and barrier shall have no openings greater than 0.5 inch (12.7mm) within 18 inches (457mm) of the release mechanism.

9. Where a wall of a dwelling serves as part of the barrier one following conditions must be met:

9.1 The pool shall be equipped with a powered safety cover in compliance with ASTM F1346 or

9.2 All 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 its screen, if present are opened. The alarm

shall sound continuously for a minimum of 30 seconds

immediately after the door is opened and be capable of being

heard throughout the house during normal household activities.

The alarm shall automatically reset under all conditions. The alarm

system shall be equipped with a manual means, such as a touchpad

or switch to temporarily deactivate the alarm for a single opening.

Such deactivation shall last for not more than 15 seconds. The

deactivation switch (es) shall be located at least 54 inches

(1372mm) above the threshold of the door; or

9.3 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 no

less than the protection afforded by Item 9.1 or 9.2 described

above.

10. 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:

10.1 The ladder or steps shall be capable of being secured, locked or removed to prevent access, or

10.2 The ladder or steps shall be surrounded by a barrier, which meets the requirements of section AG105.2, items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch diameter (102mm) sphere.

**AG105.3 INDOOR SWIMMING POOL.** All walls surrounding an indoor swimming pool shall comply with Section AG105.2 item 9.

**AG105.4 PROHIBITED LOCATIONS.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

**AG105.5 BARRIER EXCEPTIONS.** Spas or hot tubs with a safety cover, which complies with **ASTM F1346**, as listed in Section AG107, shall be exempt from the provisions of this appendix.

**SECTION AG106  
ABBREVIATIONS**

**AG106.1 General.**

ANSI--- AMERICAN NATIONAL STANDARDS INSTITUTE

WEST 42<sup>ND</sup> STREET, NEW YORK, NY 10036

ASTM---AMERICAN SOCIETY FOR TESTING AND MATERIALS

1916 RACE STREET, PHILADELPHIA, PA 19103

NSPI---NATIONAL SPA AND POOL INSTITUTE

11 EISENHOWER AVE., ALEXANDRIA, VA 22314

**SECTION AG107  
STANDARDS  
AG107.1 GENERAL.**

**ANSI/NSPI**

ANSI/NSPI-3 Standard for permanently installed Residential spas. ----- AG104.1

ANSI/NSPI-4 Standard for above-ground/on ground Residential swimming pools-----AG103.2

ANSI/NSPI-5 Standard for residential in-ground Swimming pools-----AG103.1

ANSI/NSPI-6 Standard for residential Portable spas-----AG104.2

**ASTM**

ASTM F 1346-91 Standard performance specifications for safety covers and labeling requirements for all covers for swimming pools, spas and hot tubs-----AG105.2, AG105.5