Q. When do I need a building permit?

A. 126-10 <u>Building permit required for construction.</u>

No person, firm or corporation shall commence the erection, construction, enlargement, alteration, removal, improvement, demolition, conversion or change in the nature of the occupancy of any building or structure or cause the same to be done without first obtaining a separate building permit from the building Department for each such building or structure; except that no building permit shall be required for the performance of ordinary repairs which are not structural in nature.

Ordinary repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or bearing support or the removal or change of any means of egress or the rearrangement of parts of a structure affecting exist requirements, nor shall ordinary repairs include addition to, alteration, relocation or removal of any standpipe water supply, sewer drainage, soil, waste, vent or similar piping, any electrical wiring, controls or equipment and any other equipment or controls for which certificates are required by the provisions of any ordinance.

Q. When do I need a plumbing permit?

A. A plumbing permit is required for all new plumbing work. The work must be done by a plumber licensed by Westchester County.

Q. When do I need an electric permit?

A. An electric permit is required for all new electric work. The work must be done by an electrician licensed by Westchester County.

Q. When do I need a mechanical permit?

A. All new HVAC work needs a mechanical permit.

Q. **How do I know if my contractor is licensed?**

A. **Tips on finding a licensed contractor.**
http://www.westchestergov.com/consumer_homecontractors.htm

Q. Do I need smoke alarms and carbon monoxide detectors in my house?

A. Yes. Section 313 of the New York State Residential Code regulates smoke alarms and co detectors in new construction. Chapter J of the New York State Residential Code [AJ403] regulates smoke alarms and co detectors in existing residences that are renovated or altered. Section 611 of the New York State Property Maintenance Code regulates carbon monoxide detectors in existing structures. Section 704 of the New York State Property Maintenance Code regulates smoke alarms in existing structures.

[F] R313.1 Smoke alarms. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional story of the dwelling, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

When more than one smoke alarm is required to be installed within an individual dwelling unit the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exception: Interconnection is not required where smoke alarms are permitted to be battery operated in accordance with Section .

All smoke alarms shall be listed and installed in accordance with the provisions of this code and the household fire warning equipment provisions of NFPA 72.

R313.1.1 Existing buildings undergoing repair, alteration, change of occupancy, addition or relocation shall be provided with smoke alarms as required by Appendix . **[F] R313.1.2 Power source.** In new construction, the required smoke alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source, or an on-site electrical power system and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system or in buildings that undergo repair, alteration, change of occupancy, addition or relocation in accordance with Appendix . **R313.2 Combination smoke and carbon monoxide alarms.** Combination smoke and carbon monoxide alarms are permitted, provided the alarm is listed for such use. Combination smoke and carbon monoxide alarms shall have distinctly different alarm signals for smoke or carbon monoxide alarm activation.

R313.4 Carbon monoxide alarms. Carbon monoxide alarms shall be installed in the following locations:

Exception: Conformance with this section is not required where fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, fireplaces, or motor-vehicle-related occupancies are not located within the structure.

1. Within each dwelling unit on any story having a sleeping area.
2. On any story of a dwelling unit where fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, fireplaces or attached garages are located. A carbon monoxide alarm installed on any story of a dwelling unit having a sleeping area shall suffice for that story where fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, fireplaces or attached automotive parking garages are also located.

When more than one carbon monoxide alarm is required to be installed within an individual dwelling unit, the alarms shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual unit. The alarm

shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exception: Interconnection is not required where carbon monoxide alarms are permitted to be battery operated in accordance with Section

All carbon monoxide alarms shall be listed and labeled as complying with UL 2034 or CAN/CSA 6.19, and shall be installed in accordance with the manufacturer's installation instructions and this code.

.1 Prohibited locations. Carbon monoxide alarms shall not be located within or near the openings to garages, bathrooms or furnace rooms. Carbon monoxide alarms shall also not be located in or near locations specified in the manufacturer's installation instructions.

R313.4.2 Existing buildings. Carbon monoxide alarms shall be installed in existing buildings undergoing repair, alteration, change of occupancy, addition or relocation as required by Appendix J.

R313.4.3 Power source. In new construction, the required carbon monoxide alarms shall receive their primary power from the building wiring when such wiring is served from a commercial source or an on-site electrical power system, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system or in buildings that undergo repair, alteration, change of occupancy, addition or relocation in accordance with Appendix J.

SECTION AJ403
FIRE AND LIFE SAFETY PROTECTION

AJ403.1 General. Repairs shall be done in a manner that maintains the level of fire protection provided.

AJ403.2 Smoke alarms. When repairs requiring a permit occur, the individual dwelling unit shall be provided with smoke alarms located as required for new dwellings; the smoke alarms shall be interconnected and hard wired.

Exceptions:

1. Repairs to the exterior surfaces of dwellings are exempt from the requirements of this section.
2. Except for bed and breakfast dwellings, smoke alarms in existing areas shall not be required to be interconnected and hard wired where interior wall or ceiling finishes are not removed to expose the structure.

AJ403.2.1 Power source. Smoke alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure.

AJ403.2.2 Interconnection. Smoke alarms shall not be required to be interconnected where battery operated alarms are permitted.

AJ403.3 Carbon monoxide alarms. When repairs of fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, or fireplaces and chimneys occur, the individual dwelling unit shall be provided with carbon monoxide alarms as required for new dwellings.

Exception: In other than bed and breakfast dwellings, carbon monoxide alarms shall be permitted to be battery operated when installed in buildings without commercial power or an on-site electrical power system, or in buildings where existing interior wall or ceiling finishes are not removed to expose the structure. Carbon monoxide alarms shall not be required to be interconnected where battery operated alarms are permitted.

SECTION 611

CARBON MONOXIDE ALARMS

611.1 General. This section covers the application, installation, performance and maintenance of carbon monoxide alarms and their components in new and existing buildings and structures. **611.1.1 Definitions.** For the purposes of this Section , the following terms shall have the following meanings: **611.1.1.1 Existing buildings and structures.** In the case of one- and two-family dwellings, multiple single-family dwellings (townhouses), and buildings owned as a condominium or cooperative and containing dwelling accommodations, the term "existing buildings and structures" shall mean (1) buildings and structures constructed after July 30, 2002 and on or before December 31, 2007 and (2) buildings and structures constructed on or before July 30, 2002 and offered for sale any time after July 30, 2002.

In all other cases, the term "existing buildings and structures" shall mean (1) buildings and structures constructed after August 9, 2005 and on or before December 31, 2007 and (2) buildings and structures constructed on or before August 9, 2005 and offered for sale any time after August 9, 2005.

611.1.1.2 Multiple dwelling. The term "multiple dwelling" shall mean a dwelling which is either rented, leased, let or hired out, to be occupied, or is occupied as the temporary or permanent residence or home of three or more families living independently of each other, including but not limited to the following: a tenement, flat house, maisonette apartment, apartment house, apartment hotel, tourist house, bachelor apartment, studio apartment, duplex apartment, kitchenette apartment, hotel, lodging house, rooming house, boarding house, boarding and nursery school, furnished room house, club, sorority house, fraternity house, college and school dormitory, convalescent, old age or nursing homes or residences, and a dwelling, two or more stories in height, and with five or more boarders, roomers or lodgers residing with any one family. **611.1.1.3 New buildings and structures.** The term "new buildings and structures" shall mean buildings and structures constructed after December 31, 2007. **611.1.1.4 Offered for sale.** A building or structure shall be considered to be "offered for sale" if (1) the building or structure is offered for sale or (2) a controlling interest in any corporation, limited liability company, partnership, limited partnership, or other firm or business entity of any kind that owns the building or structure is offered for sale. However, transfer of franchises shall not be deemed a sale. **611.2 Equipment.** Carbon monoxide alarms shall be listed and labeled as complying with UL 2034 or CAN/CSA 6.19, and shall be installed in accordance with the manufacturer's installation instructions and this section. **611.2.1 Combination smoke and carbon monoxide alarms.** Combination smoke and carbon monoxide alarms are permitted, provided the alarm is listed for such use. Combination smoke and carbon monoxide alarms shall have distinctly different alarm signals for smoke or carbon monoxide alarm activation. **611.3 Where required.** Single and multiple station carbon monoxide alarms shall be provided in the locations described in this section.

Exception: Conformance with this section is not required where fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, fireplaces, or motor-vehicle-related occupancies are not located within the structure.

611.3.1 New buildings and structures: one- and two-family dwellings, multiple single-family dwellings (townhouses), and buildings owned as a condominium or cooperative and containing dwelling accommodations. A carbon monoxide alarm shall be installed in the following locations:

1. Within each dwelling unit on any story having a sleeping area.
2. On any story of a dwelling unit where fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, fireplaces, or attached garages are located. A carbon monoxide alarm installed on any story of a dwelling unit or sleeping unit having a sleeping area shall suffice for that story where fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, fireplaces, or attached automotive parking garages, are also located.

611.3.2 New buildings and structures: Group I-1 occupancies. A carbon monoxide alarm shall be installed in the following locations:

1. On every story having a sleeping area.
2. On any story where fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, fireplaces or motor-vehicle-related occupancies are located. A carbon monoxide alarm installed on any story having a sleeping area shall suffice for that story where fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, fireplaces or motor-vehicle-related occupancies are also located.

611.3.3 New buildings and structures: Group R occupancies, nursery schools (with sleeping units), bed and breakfast uses, and multiple dwellings (as defined in Section) not covered by Section or . A carbon monoxide alarm shall be installed in the following locations:

1. In dwelling units and sleeping units where fuel-fired appliances and equipment, solid fuel-burning appliances and equipment or fireplaces are located. In multiple-story dwelling units or sleeping units, a carbon monoxide alarm shall be installed on every story that contains sleeping areas or has fuel-fired appliances and equipment, solid fuel-burning appliances and equipment or fireplaces.
2. In dwelling units and sleeping units that are on the same story as fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, fireplaces, or motor-vehicle related occupancies.

611.3.4 Existing buildings and structures: one- and two-family dwellings, multiple single-family dwellings (townhouses), and buildings owned as a condominium or cooperative and containing dwelling accommodations. A carbon monoxide alarm shall be installed within each dwelling unit or sleeping unit on the lowest story having a sleeping area. **611.3.5 Existing buildings and structures: Group I-1 occupancies.** A carbon monoxide alarms shall be installed on every story having a sleeping area.

611.3.6 Existing buildings and structures: Group R occupancies, nursery schools (with sleeping units), bed and breakfast uses, and multiple dwellings (as defined in Section) not covered by Section or . A carbon monoxide alarm shall be installed in the following locations:

1. In dwelling units and sleeping units where fuel-fired appliances and equipment, solid fuel-burning appliances and equipment or fireplaces are located. In multiple-story

dwelling units or sleeping units, a carbon monoxide alarm shall be installed on the lowest story having a sleeping area.

2. In dwelling units and sleeping units that are on the same story as fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, fireplaces, or motor-vehicle related occupancies.

611.3.7 Work completed within one- and two-family dwellings, multiple single-family dwellings (townhouses), buildings owned as a condominium or cooperative and containing dwelling accommodations, Group R occupancies, bed and breakfast uses, and multiple dwellings (as defined in Section) not covered by Section . A carbon monoxide alarm shall be installed within each dwelling unit or sleeping unit on the lowest story having a sleeping area where work includes the installation of fuel-fired appliances and equipment, solid-fuel burning appliances and equipment, construction of fireplaces and chimneys, or an addition or connection of the dwelling unit to a motor-vehicle-related occupancy. The requirements of this section shall apply without regard to the date of construction of the building or structure where the work is performed, and without regard to whether such building or structure shall or shall not have been offered for sale. **611.3.8 Work completed within Group I-1 occupancy.** A carbon monoxide alarm shall be installed on any story having a sleeping area where work includes the installation of fuel-fired appliances and equipment, solid fuel-burning appliances and equipment, construction of fireplaces and chimneys, or an addition or connection of the dwelling unit to a motor-vehicle-related occupancy. The requirements of this section shall apply without regard to the date of construction of the building or structure where the work is performed, and without regard to whether such building or structure shall or shall not have been offered for sale. **611.4 Prohibited locations.** Carbon monoxide alarms shall not be located within or near the openings to garages, bathrooms, or furnace rooms. Carbon monoxide alarms shall also not be located in or near locations specified in the manufacturer's installation instructions.

611.5 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring when such wiring is served from a commercial or on-site power source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection.

Exceptions:

1. Carbon monoxide alarms installed in buildings without a commercial or on-site power source shall be permitted to be battery operated.
2. In existing buildings and structures, cord-type, direct plug, or battery-operated carbon monoxide alarms shall be permitted.

611.6 Interconnection. When more than one carbon monoxide alarm is required to be installed within an individual dwelling unit or sleeping unit, the alarms shall be interconnected.

Exception: Interconnection is not required where cord-type, direct plug, or battery-operated carbon monoxide alarms are permitted.

611.7 Maintenance. Carbon monoxide alarms shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. **611.8 Disabling of alarms.** Carbon monoxide alarms shall not be removed or disabled, except for service or repair purposes. **704.2 Smoke alarms.** Single or multiple-station smoke alarms shall

be installed and maintained in Groups R-2, R-3, R-4 and in dwellings not regulated in Group R occupancies, regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.
3. In each story within a dwelling unit, including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level, provided that the lower level is less than one full story below the upper level.

Single or multiple-station smoke alarms shall be installed in other groups in accordance with the *Fire Code of New York State* .

704.3 Power source. In Group R occupancies and in dwellings not regulated as Group R occupancies, single-station smoke alarms shall receive their primary power from the building wiring, provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exception: Smoke alarms are permitted to be solely battery operated in buildings where no construction is taking place, buildings that are not served from a commercial power source and in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.

704.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling unit in Group R-2, R-3, R-4 and in dwellings not regulated as Group R occupancies, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings which are not undergoing alterations, repairs or construction of any kind.
2. Smoke alarms in existing areas are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.

Q. Does my building need 911 identification numbers on it?

A. Yes. Village Code section 130 requires all buildings to be numbered.

Chapter 130: BUILDINGS, NUMBERING OF

[HISTORY: Adopted by the Board of Trustees of the Village of Mamaroneck 7-25-1955 as Sec. 3 of Ch. 11 of the Unified Code of Ordinances, effective 10-2-1955. Section 130-4 added at time of adoption of Code; see Ch. 1, General Provisions. Art. I. Other amendments noted where applicable.]

GENERAL REFERENCES
Authority of Board to provide for identification of property — See Ch. 9, Art. I.

§ 130-1. Numbering in accordance with plan required.

All dwelling houses or other buildings erected or fronting on any street, lane, alley or other public space within the Village of Mamaroneck shall be numbered in accordance with the plan hereinafter provided.

§ 130-2. Location and availability of plan.

The numbering on all dwelling houses or other buildings as aforesaid shall be in accordance with the plan prepared by the Engineering Department and on file in such office, and the books containing said plan shall be public records and shall be open for inspection at all times and shall be accessible to all persons.

§ 130-3. Display of numbers required; standards.

It shall be the duty of the owner or agent of any dwelling house or other building to affix or inscribe the proper number or numbers as designated in the plan referred to in § 130-2 above in plain and legible figures at least two (2) inches in length in a conspicuous place in front of said building or premises.

§ 130-4. Penalties for offenses.

[Added 3-23-1987 by L.L. No. 5-1987, effective 4-2-1987]

Any person violating any of the provisions of this chapter shall be punishable, upon conviction thereof, by a fine not exceeding two hundred fifty dollars ($250.) or imprisonment not exceeding fifteen (15) days, or both.

Q. Does my swimming pool need a fence?

A. Yes. Appendix G of the New York State Residential Code regulates new pool and section 303 of the New York State Property Maintenance Code regulates existing pools.

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 AG102 DEFINITIONS

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

ABOVE-GROUND/ON-GROUND POOL. See "Swimming pool."

BARRIER. A fence, wall, building wall or combination thereof 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 capable of containing 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 which is totally contained within a structure and surrounded on all four sides by walls of said structure.

SWIMMING POOL, OUTDOOR. Any swimming pool which is not an indoor pool.

SECTION AG103 SWIMMING POOLS

AG103.1 In-ground pools. In-ground pools shall be designed and constructed in conformance with ANSI/NSPI-5 as listed in Section AG108.

AG103.2 Above-ground and on-ground pools. Above-ground and on-ground pools shall be designed and constructed in conformance with ANSI/NSPI-4 as listed in Section AG108.

SECTION AG104 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 AG108.

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 AG108.

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 drownings and near-drownings 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 (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 aboveground 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 (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 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 (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 fences 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 pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) 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 (76 mm) below the top of the gate, and
    8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall 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 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 (1372 mm) above the threshold of the door; or
    9.3. Other means of protection, such as self-closing doors with self-latching devices, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.
10. Where an aboveground 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 (102 mm) 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 F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix.

SECTION AG106
ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS

AG106.1 General. Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

AG106.2 Suction fittings. All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12″ × 12″ drain grate or larger, or an approved channel drain system.

Exception: Surface skimmers

AG106.3 Atmospheric vacuum relief system required. All pool and spa single or multiple outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17, or
2. An approved gravity drainage system

AG106.4 Dual drain separation. Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.

AG106.5 Pool cleaner fittings. Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible posi-

tion(s) at least (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

SECTION AG107
ABBREVIATIONS

AG107.1 General.

ANSI—American National Standards Institute
11 West 42nd Street, New York, NY 10036

ASTM—ASTM International
100 Barr Harbor Drive, West Conshohocken, PA 19428

NSPI—National Spa and Pool Institute
2111 Eisenhower Avenue, Alexandria, VA 22314

SECTION AG108
STANDARDS

AG108.1 General.

ANSI/NSPI

ANSI/NSPI-3-99 Standard for Permanently Installed Residential Spas AG104.1

ANSI/NSPI-4-99 Standard for Above-ground/On-ground Residential Swimming Pools AG103.2

ANSI/NSPI-5-99 Standard for Residential In-ground Swimming Pools AG103.1

ANSI/NSPI-6-99 Standard for Residential Portable Spas AG104.2

ANSI/ASME A112.19.8M-1987 Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, Hot Tubs and Whirlpool Bathing Appliances AG106.2

ASTM

ASTM F 1346-91 (1996) Performance Specification for Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs AG105.2, AG105.5

ASME

ASME A112.19.17-2002 Manufacturers Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub and Wading Pool AG106.3

SECTION 303
SWIMMING POOLS, SPAS AND HOT TUBS303.1 Swimming pools. Swimming pools shall be maintained in a clean and sanitary condition, and in good repair. **[B] 303.2 Enclosures.** The provisions of this section shall control the design of barriers for residential swimming pools, spas and hot tubs. For public swimming pools, spas and hot tubs refer to Chapter 31 of the *Building Code of New York State* . Design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs. **303.3 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 (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 aboveground 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 (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 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 (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 fences shall be a 2.25-inch (32 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 303.3 , 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 access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) 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 (76 mm) below the top of the gate, and

8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.
9. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall 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 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 (1372 mm) 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 not less than the protection afforded by Item 9.1 or 9.2 described above.
10. Where an aboveground 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 303.3 , 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 (102 mm) sphere.
303.4 Indoor swimming pool. All walls surrounding an indoor swimming pool shall comply with Section 303.3 , Item 9. **303.5 Prohibited locations.** Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers. **[B] 303.6 Barrier exceptions.** Spas or hot tubs with a safety cover which complies with ASTM F 1346, shall be exempt from the provisions of this section.