PRIVATE OUTDOOR SWIMMING POOL SPECIFICATIONS

A single private outdoor swimming pool per dwelling unit is permitted as an accessory use to a residential structure provided that such swimming pool is for the private use of the residents of the dwelling unit or their guests.

A) **Pool Location** - A private outdoor pool may be located within the required rear or side yards for the district in which the pool is to be located except that no portion of the body of water in the pool shall be located closer than **ten feet** from any alley or street or **six feet** from the property line. No portion of any walks or accessory pool appurtenances surrounding the body of water shall be closer than **four feet** to any property line.

B) **Required Barrier** – A permanent fence, wall, building wall, or combination thereof that completely surrounds the pool or spa and obstructs access to the pool or spa is required. The term “permanent” shall mean not being able to be removed, lifted, or relocated without use of a tool. The top of the barrier shall be not less than 48 inches above grade. Openings in the barrier shall not allow passage of a 4-inch diameter. See complete specifications in the “pool permit packet.”

C) **Required Permits** - A permit is required for all above ground pool installations which are capable of holding two (2) or more feet of water (whether permanent or storable) and all inground pool installations. Completion of a building permit application, zoning permit application and an electrical permit application are required.

Plans shall be required as part of the permit application process. Plans shall accurately show dimensions and construction of pool and appurtenances and properly established distances to lot lines, buildings walks and fences. Details of water supply system, drainage and water disposal systems, and all appurtenances pertaining to the swimming pool must be included with the submission. Ground-fault circuit interrupters are required. Cords connecting the filter cannot exceed **three feet in length**.

D) **Surface Cleaning** - All swimming pools shall be provided with a recirculating skimming device to remove scum and foreign matter from the surface of the water. Where skimmers are used there shall be at least one skimming device for each 1,000 square feet of surface area or fraction thereof.

E) **Inspection** - No swimming pool constructed pursuant to the issuance of a permit provided for herein shall be used until its construction, facilities, enclosures, gates, and electrical devices have been inspected and approved.

F) **Nuisance** - No person shall make any noise at a swimming pool if the noise unreasonably annoys the occupants of any adjoining property.
This is a sample of the plot plan/drawing which must be submitted with your application. Side yard setback means the distance from the structure to your side property lines. Rear yard setback means the distance from the structure to your rear property line. Please call 610-262-1433 between 8:30 AM and 4:30 PM with any questions you may have.

Please include: 1) Lot Size – (Width & Length)  
2) Dimensions of All Accessory Structures  
3) Side Yard Setbacks from Both Sides  
4) Rear Yard Setback  
5) Distance Between House and All Accessory Structures

(a) A swimming pool, hot tub and spa which is accessory to a one- or two-family dwelling must comply with the "International Residential Code of 2015" which adopts, by reference, the "International Swimming Pool and Spa Code of 2015."

(b) A swimming pool, hot tub or spa that is not accessory to a one- or two-family dwelling must comply with the Public Bathing Law (35 P.S. §§ 672—680d) and the "International Building Code of 2015" which adopts, by reference, the "International Swimming Pool and Spa Code of 2015."
that any such alternative has been approved. An alternative material or method of construction shall be approved where the code official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code, and that the material, method or work offered is, for the purpose intended, not less than the equivalent of that prescribed in this code in quality, strength, effectiveness, durability and safety.

[A] 104.10 Required testing. Where there is insufficient evidence of compliance with the provisions of this code, or evidence that a material or method does not conform to the requirements of this code, or in order to substantiate claims for alternative materials or methods, the code official shall have the authority to require tests as evidence of compliance to be made at no expense to the jurisdiction.

[A] 104.10.1 Test methods. Test methods shall be as specified in this code or by other recognized test standards. In the absence of recognized and accepted test methods, the code official shall approve the testing procedures.

[A] 104.10.2 Testing agency. Tests shall be performed by an approved agency.

[A] 104.10.3 Test reports. Reports of tests shall be retained by the code official for the period required for retention of public records.

[A] 104.11 Alternative engineered design. The design, documentation, inspection, testing and approval of an alternative engineered design shall comply with Sections 104.11.1 through 104.11.6.

[A] 104.11.1 Design criteria. An alternative engineered design shall conform to the intent of the provisions of this code and shall provide an equivalent level of quality, strength, effectiveness, durability and safety. Material, equipment or components shall be designed and installed in accordance with the manufacturer’s instructions.

[A] 104.11.2 Submittal. The registered design professional shall indicate on the permit application that the system is an alternative engineered design. The permit and permanent permit records shall indicate that an alternative engineered design was part of the approved installation.

[A] 104.11.3 Technical data. The registered design professional shall submit sufficient technical data to substantiate the proposed alternative engineered design and to prove that the performance meets the intent of this code.

[A] 104.11.4 Construction documents. The registered design professional shall submit to the code official two complete sets of signed and sealed construction documents for the alternative engineered design.

[A] 104.11.5 Design approval. Where the code official determines that the alternative engineered design conforms to the intent of this code, the system shall be approved. If the alternative engineered design is not approved, the code official shall notify the registered design professional in writing, stating the reasons why the alternative was not approved.

[A] 104.11.6 Inspection and testing. The alternative engineered design shall be tested and inspected in accordance with the requirements of Section 106.12.

[A] 104.12 Material and equipment reuse. Materials, equipment and devices shall not be reused unless such elements have been reconditioned, tested, placed in good and proper working condition and approved.

SECTION 105 PERMITS

[A] 105.1 When required. Any owner, or owner’s authorized agent who desires to construct, enlarge, alter, repair, move, or demolish a pool or spa or to erect, install, enlarge, alter, repair, remove, convert or replace any system, the installation of which is regulated by this code, or to cause any such work to be performed, shall first make application to the code official and obtain the required permit for the work.

[A] 105.2 Application for permit. Each application for a permit, with the required fee, shall be filed with the code official on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The application shall be signed by the owner or the owner’s authorized agent. The permit application shall contain such other information required by the code official.

[A] 105.3 Construction documents. Construction documents, engineering calculations, diagrams and other such data shall be submitted in two or more sets with each application for a permit. The code official shall require construction documents, computations and specifications to be prepared and designed by a registered design professional when required by state law. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that the work conforms to the provisions of this code.

[A] 105.4 Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing unless such application has been pursued in good faith or a permit has been issued; except that the code official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

[A] 105.5 Permit issuance. The application, construction documents and other data filed by an applicant for permit shall be reviewed by the code official. If the code official finds that the proposed work conforms to the requirements of this code and laws and ordinances applicable thereto, and that the fees specified in Section 105.6 have been paid, a permit shall be issued to the applicant.

[A] 105.5.1 Approved construction documents. When the code official issues the permit where construction documents are required, the construction documents shall be endorsed in writing and stamped “APPROVED.” Such approved construction documents shall not be changed, modified or altered without authorization from the code official.
CHAPTER 2
DEFINITIONS

SECTION 201
GENERAL

201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter.

201.2 Interchangeability. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the International Building Code, International Energy Conservation Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code or International Residential Code, such terms shall have the meanings ascribed to them as in those codes.

201.4 Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

SECTION 202
DEFINITIONS

ACCESSIBLE. Signifies access that requires the removal of an access panel or similar removable obstruction.

ACTIVITY POOL. A pool designed primarily for play activity that uses constructed features and devices including lily pad walks, flotation devices, small slide features, and similar attractions.

AIR INDUCTION SYSTEM. A system whereby a volume of air is introduced into hollow ducting built into a spa floor, bench, or hydrotherapy jets.

ALTERATION. Construction or renovation to an existing pool or spa other than repair that requires a permit.

[A] APPROVED. Acceptable to the code official or authority having jurisdiction.

[A] APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the code official.

AQUATIC RECREATION FACILITY. A facility that is designed for free-form aquatic play and recreation. The facilities may include, but are not limited to, wave or surf action pools, leisure rivers, sand bottom pools, vortex pools, activity pools, inner tube rides, body slides and interactive play attractions.

BACKWASH. The process of cleansing the filter medium or elements by the reverse flow of water through the filter.

BACKWASH CYCLE. The time required to backwash the filter medium or elements and to remove debris in the pool or spa filter.

BARRIER. A permanent fence, wall, building wall, or combination thereof that completely surrounds the pool or spa and obstructs the access to the pool or spa. The term "permanent" shall mean not being able to be removed, lifted, or relocated without the use of a tool.

BATHER. A person using a pool, spa or hot tub and adjoining deck area for the purpose of water sports, recreation, therapy or related activities.

BATHER LOAD. The number of persons in the pool or spa water at any given moment or during any stated period of time.

BEACH ENTRY. Sloping entry starting above the waterline at deck level and ending below the waterline. The presence of sand is not required. Also called "zero entry."

CHEMICAL FEEDER. A floating or mechanical device for adding a chemical to pool or spa water.

CIRCULATION EQUIPMENT. The components of a circulation system.

CIRCULATION SYSTEM. The mechanical components that are a part of a recirculation system on a pool or spa. Circulation equipment may be, but is not limited to, categories of pumps, hair and lint strainers, filters, valves, gauges, meters, heaters, surface skimmers, inlet fittings, outlet fittings and chemical feeding devices. The components have separate functions, but when connected to each other by piping, perform as a coordinated system for purposes of maintaining pool or spa water in a clear and sanitary condition.

[A] CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

[A] CONSTRUCTION DOCUMENTS. Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit.

DECK. An area immediately adjacent to or attached to a pool or spa that is specifically constructed or installed for sitting, standing, or walking.

DEEP AREA. Water depth areas exceeding 5 feet (1524 mm).

DESIGN PROFESSIONAL. An individual who is registered or licensed to practice his or her respective design profession as defined by the statutory requirements of the professional registration or licensing laws of the state or jurisdiction in which the project is to be constructed.

DESIGN RATE OF FLOW. The rate of flow used for design calculations in a system.
DEFINITIONS

DESIGN WATERLINE. The centerline of the skimmer or other point as defined by the designer of the pool or spa.

DIVING AREA. The area of a swimming pool that is designed for diving.

DIVING BOARD. A flexible board secured at one end that is used for diving such as a spring board or a jump board.

DIVING PLATFORM. A stationary platform designed for diving.

DIVING STAND. Any supporting device for a springboard, jump board or diving board.

EXERCISE SPA (Also known as a swim spa). Variants of a spa in which the design and construction includes specific features and equipment to produce a water flow intended to allow recreational physical activity including, but not limited to, swimming in place. Exercise spas can include peripheral jetted seats intended for water therapy, heater, circulation and filtration system, or can be a separate distinct portion of a combination spa/exercise spa and can have separate controls.

These spas are of a design and size such that they have an unobstructed volume of water large enough to allow the 99th Percentile Man as specified in APSP 16 to swim or exercise in place.

EXISTING POOL OR SPA. A pool or spa constructed prior to the date of adoption of this code, or one for which a legal building permit has been issued.

FILTER. A device that removes undissolved particles from water by recirculating the water through a porous substance such as filter medium or elements.

FILTRATION. The process of removing undissolved particles from water by recirculating the water through a porous substance such as filter medium or elements.

[BS] FLOOD HAZARD AREA. The greater of the following two areas:

1. The area within a flood plain subject to a 1-percent or greater chance of flooding in any year.
2. The area designated as a flood hazard area on a community’s flood hazard map, or otherwise legally designated.

FLUME. A trough-like or tubular structure, generally recognized as a water slide, that directs the path of travel and the rate of descent by the rider.

GUTTER. Overflow trough in the perimeter wall of a pool that is a component of the circulation system or flows to waste.

HAIR AND LINT STRAINER. A device attached on or in front of a pump to which the influent line (suction line) is connected for the purpose of entrapping lint, hair, or other debris that could damage the pump.

HANDHOLD. That portion of a pool or spa structure or a specific element that is at or above the design waterline that users in the pool grasp onto for support.

HANDRAIL. A support device that is intended to be gripped by a user for the purpose of resting or steadying, typically located within or at exits to the pool or spa or as part of a set of steps.

HYDROTHERAPY JET. A fitting that blends air and water, creating a high-velocity turbulent stream of air-enriched water.

JUMP BOARD. A manufactured diving board that has a coil spring, leaf spring, or comparable device located beneath the board that is activated by the force exerted by jumping on the board’s end.

[A] JURISDICTION. The governmental unit that has adopted this code under due legislative authority.

[A] LABEL. An identification applied on a product by the manufacturer that contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an approved agency and that indicates that the representative sample of the product or material has been tested and evaluated by an approved agency.

[A] LABLED. Equipment, materials or products to which has been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

LADDER. A structure for ingress and egress that usually consists of two long parallel side pieces joined at intervals by crosspieces such as treads.

TYPE A DOUBLE ACCESS LADDER. An “A-Frame” ladder that straddles the pool wall of an above-ground pool and provides ingress and egress and is intended to be removed when not in use.

TYPE B LIMITED ACCESS LADDER. An “A-Frame” ladder that straddles the pool wall of an above-ground/onground pool. Type B ladders are removable and have a built-in feature that prevents entry to the pool when the pool is not in use.

TYPE C LADDER. A “ground to deck” staircase ladder that allows access to an above-ground pool deck and has a built-in entry-limiting feature.

TYPE D IN-POOL LADDER. Located in the pool to provide a means of ingress and egress from the pool to the deck.

TYPE E or F IN-POOL STAIRCASE LADDER. Located in the pool to provide a means of ingress and egress from the pool to the deck.

LIFELINE. An anchored line thrown to aid in rescue.

[A] LISTED. Equipment, materials, products or services included in a list published by an organization acceptable to the code official and concerned with evaluation of products or services that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.
MAINTAINED ILLUMINATION. The value, in foot-candles or equivalent units, below which the average illuminance on a specified surface is not allowed to fall. Maintained illumination equals the initial average illuminance on the specified surface with new lamps, multiplied by the light loss factor (LLF), to account for reduction in lamp intensity over time.

NEGATIVE EDGE. See "Vanishing edge."

NONENTRY AREA. An area of the deck from which entry into the pool or spa is prohibited.

ONGROUND STORABLE POOL. A pool which can be disassembled for storage or transport. This includes portable pools with flexible or nonrigid walls that achieve their structural integrity by means of uniform shape, a support frame or a combination thereof, and that can be disassembled for storage or relocation.

OVERFLOW GUTTER. The gutter around the top perimeter of the pool or spa, which is used to skim the surface.

(A) OWNER. Any person, agent, firm or corporation having a legal or equitable interest in the property.

(A) PERMIT. An official document or certificate issued by the authority having jurisdiction that authorizes performance of a specified activity.

POOL. See "Public swimming pool" and "Residential swimming pool."

POWER SAFETY COVER. A pool cover that is placed over the water area, and is opened and closed with a motorized mechanism activated by a control switch.

PUBLIC SWIMMING POOL (Public Pool). A pool, other than a residential pool, that is intended to be used for swimming or bathing and is operated by an owner, lessee, operator, licensee or concessionaire, regardless of whether a fee is charged for use. Public pools shall be further classified and defined as follows:

CLASS A, COMPETITION POOL. A pool intended for use for accredited competitive aquatic events such as Federation Internationale De Natation (FINA), USA Swimming, USA Diving, USA Synchronized Swimming, USA Water Polo, National Collegiate Athletic Association (NCAA), or the National Federation of State High School Associations (NFHS).

CLASS B, PUBLIC POOL. A pool intended for public recreational use that is not identified in the other classifications of public pools.

CLASS C, SEMI-PUBLIC POOL. A pool operated solely for and in conjunction with lodgings such as hotels, motels, apartments or condominiums.

CLASS D-1, WAVE ACTION POOL. A pool designed to simulate breaking or cyclic waves for purposes of general play or surfing.

CLASS D-2, ACTIVITY POOL. A pool designed for casual water play ranging from simple splashing activity to the use of attractions placed in the pool for recreation.

CLASS D-3, CATCH POOL. A body of water located at the termination of a manufactured waterslide attraction.

The body of water is provided for the purpose of terminating the slide action and providing a means for exit to a deck or walkway area.

CLASS D-4, LEISURE RIVER. A manufactured stream of water of near-constant depth in which the water is moved by pumps or other means of propulsion to provide a river-like flow that transports bathers over a defined path that may include water features and play devices.

CLASS D-5, VORTEX POOL. A circular pool equipped with a method of transporting water in the pool for the purpose of propelling riders at speeds dictated by the velocity of the moving stream of water.

CLASS D-6, INTERACTIVE PLAY ATTRACTION. A manufactured water play device or a combination of water-based play devices in which water flow volumes, pressures or patterns can be varied by the bather without negatively influencing the hydraulic conditions for other connected devices. These attractions incorporate devices or activities such as slides, climbing and crawling structures, visual effects, user-actuated mechanical devices and other elements of bather-driven and bather-controlled play.

CLASS E. Pools used for instruction, play or therapy and with temperatures above 86°F (30°C).

CLASS F. Class F pools are wading pools and are covered within the scope of this code as set forth in Section 405.

Public pools are either a diving or nondiving type. Diving types of public pools are classified into types as an indication of the suitability of a pool for use with diving equipment.

TYPES VI-IX. Public pools suitable for the installation of diving equipment by type.

TYPE O. A nondiving public pool.

RECESSED TREADS. A series of vertically spaced cavities in a pool or spa wall creating tread areas for step holes.

RECCIRCULATION SYSTEM. See "Circulation system."

(A) REPAIR. The restoration to good or sound condition of any part of a pool or spa for the purpose of its maintenance or to correct damage.

RESIDENTIAL. For purposes of this code, residential applies to detached one- and two-family dwellings and townhouses not more than three stories in height.

RESIDENTIAL SWIMMING POOL (Residential Pool). A pool intended for use which is accessory to a residential setting and available only to the household and its guests. All other pools shall be considered public pools for purposes of this code.

TYPES I-V. Residential pools suitable for the installation of diving equipment by type.

TYPE O. A nondiving residential pool.

RETURN INLET. The aperture or fitting through which the water under positive pressure returns into a pool.

RING BUOY. A ring-shaped floating buoy capable of supporting a user, usually attached to a throwing line.
DEFINITIONS

ROPE AND FLOAT LINE. A continuous line not less than \( \frac{1}{4} \) inch (6 mm) in diameter that is supported by buoys and attached to opposite sides of a pool to separate the deep and shallow ends.

RUNOUT. A continuation of water slide flume surface where riders are intended to decelerate and come to a stop.

SAFETY COVER. A structure, fabric or assembly, along with attendant appurtenances and anchoring mechanisms, that is temporarily placed or installed over an entire pool, spa or hot tub and secured in place after all bathers are absent from the water.

SHALL. The term, when used in the code, is construed as mandatory.

SHALLOW AREAS. Portions of a pool or spa with water depths less than 5 feet (1524 mm).

SKIMMER. A device installed in the pool or spa that permits the removal of floating debris and surface water to the filter.

SLIP RESISTANT. A surface that has been treated or constructed to significantly reduce the chance of a user slipping. The surface shall not be an abrasion hazard.

SLOPE BREAK. Occurs at the point where the slope of the pool floor changes to a greater slope.

SPA. A product intended for the immersion of persons in temperature-controlled water circulated in a closed system, and not intended to be drained and filled with each use. A spa usually includes a filter, an electric, solar or gas heater, a pump or pumps, and a control, and can also include other equipment, such as lights, blowers, and water-sanitizing equipment.

PERMANENT RESIDENTIAL SPA. A spa, intended for use that is accessory to a residential setting and available to the household and its guests and where the water heating and water-circulating equipment is not an integral part of the product. The spa is intended as a permanent plumbing fixture and not intended to be moved.

PORTABLE RESIDENTIAL SPA. A spa intended for use that is accessory to a residential setting and available to the household and its guests and where it is either self-contained or nonself-contained.

PUBLIC SPA. A spa other than a permanent residential spa or portable residential spa which is intended to be used for bathing and is operated by an owner, licensee or concessionaire, regardless of whether a fee is charged for use.

SELF-CONTAINED SPA. A factory-built spa in which all control, water heating and water-circulating equipment is an integral part of the product. Self-contained spas may be permanently wired or cord connected.

NONSELF-CONTAINED SPA. A factory-built spa in which the water heating and circulating equipment is not an integral part of the product. Nonself-contained spas may employ separate components such as an individual filter, pump, heater and controls, or they can employ assembled combinations of various components.

SPRAY POOL. A pool or basin occupied by construction features that spray water in various arrays for the purpose of wetting the persons playing in the spray streams.

SUBMERGED VACUUM FITTING. A fitting intended to provide a point of connection for suction side automatic swimming pool, spa, and hot tub cleaners.

SUCTION OUTLET. A submerged fitting, fitting assembly, cover/grate and related components that provide a localized low-pressure area for the transfer of water from a swimming pool, spa or hot tub. Submerged suction outlets have also been referred to as main drains.

SURFACE SKIMMING SYSTEM. A device or system installed in the pool or spa that permits the removal of floating debris and surface water to the filter.

SURGE CAPACITY. The storage volume in a surge tank, gutter, and plumbing lines.

SURGE TANK. A storage vessel within the pool recirculating system used to contain the water displaced by bathers.

SWIMOUT. An underwater seat area that is placed completely outside of the perimeter shape of the pool. Where located at the deep end, swinouts are permitted to be used as the deep-end means of entry or exit to the pool.

TUBE RIDE. A gravity flow attraction found at a waterpark designed to convey riders on an inner-tube-like device through a series of chutes, channels, flumes or pools.

TURNOVER RATE. The period of time, usually in hours, required to circulate a volume of water equal to the pool or spa capacity.

UNDERWATER LEDGE. A narrow shelf projecting from the side of a vertical structure whose dimensions are defined in the appropriate standard.

UNDERWATER SEAT. An underwater ledge that is placed completely inside the perimeter shape of the pool, generally located in the shallow end of the pool.

VANISHING EDGE. Water-feature detail in which water flows over the edge of at least one of the pool walls and is collected in a catch basin. Also called "Negative edge."

WATERLINE. See "Design waterline."

WAVE POOL CAISSON. A large chamber used in wave generation. This chamber houses pulsing water and air surges in the wave generation process and is not meant for human occupancy.

ZERO ENTRY. See "Beach entry."
CHAPTER 3
GENERAL COMPLIANCE

SECTION 301
GENERAL

301.1 Scope. The provisions of this chapter shall govern the general design and construction of public and residential pools and spas and related piping, equipment, and materials. Provisions that are unique to a specific type of pool or spa are located in Chapters 4 through 10.

301.1.1 Application of Chapters 4 through 10. Where differences occur between the provisions of this chapter and the provisions of Chapters 4 through 10, the provisions of Chapters 4 through 10 shall apply.

SECTION 302
ELECTRICAL, PLUMBING, MECHANICAL AND FUEL GAS REQUIREMENTS

302.1 Electrical. Electrical requirements for aquatic facilities shall be in accordance with NFPA 70 or the International Residential Code, as applicable in accordance with Section 102.7.1.

Exception: Internal wiring for portable residential spas and portable residential exercise spas.

302.2 Water service and drainage. Piping and fittings used for water service, makeup and drainage piping for pools and spas shall comply with the International Plumbing Code. Fittings shall be approved for installation with the piping installed.

302.3 Pipe, fittings and components. Pipe, fittings and components shall be listed and labeled in accordance with NSF 50 or NSF 14. Plastic jets, fittings, and outlets used in public spas shall be listed and labeled in accordance with NSF 50.

Exceptions:
1. Portable residential spas and portable residential exercise spas listed and labeled in accordance with UL 1563 or CSA C22.2 No. 218.1.
2. Onground storables pools supplied by the pool manufacturer as a kit that includes all pipe, fittings and components.

302.4 Concealed piping inspection. Piping, including process piping, that is installed in trenches, shall be inspected prior to backfilling.

302.5 Backflow protection. Water supplies for pools and spas shall be protected against backflow in accordance with the International Plumbing Code or the International Residential Code, as applicable in accordance with Section 102.7.1.

302.6 Waste-water discharge. Where waste water from pools and spas, backwash from filters and water from deck drains discharge to the building drainage system, such installation shall be in accordance with the International Plumbing Code or the International Residential Code, as applicable in accordance with Section 102.7.1.

302.7 Tests. Tests on water piping systems constructed of plastic piping shall not use compressed air for the test.

302.8 Maintenance. Pools and spas shall be maintained in a clean and sanitary condition, and in good repair.

302.8.1 Manuals. An operating and maintenance manual in accordance with industry-accepted standards shall be provided for each piece of equipment requiring maintenance.

SECTION 303
ENERGY

303.1 Energy consumption of pools and permanent spas. The energy consumption of pools and permanent spas shall be controlled by the requirements in Sections 303.1.1 through 303.1.3.

303.1.1 Heaters. The electric power to heaters shall be controlled by a readily accessible on-off switch that is an integral part of the heater, mounted on the exterior of the heater or external to and within 3 feet (914 mm) of the heater. Operation of such switch shall not change the setting of the heater thermostat. Such switches shall be in addition to a circuit breaker for the power to the heater. Gas-fired heaters shall not be equipped with continuously burning ignition pilots.

303.1.2 Time switches. Time switches or other control methods that can automatically turn off and on heaters and pump motors according to a preset schedule shall be installed for heaters and pump motors. Heaters and pump motors that have built-in time switches shall be in compliance with this section.

Exceptions:
1. Where public health standards require 24-hour pump operation.
2. Pumps that operate solar- or waste-heat recovery pool heating systems.

303.1.3 Covers. Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means in accordance with Section 104.11.

Exception: Where more than 70 percent of the energy for heating, computed over an operating season, is from site-recovered energy such as from a heat pump or solar energy source, covers or other vapor-retardant means shall not be required.

303.2 Portable spas. The energy consumption of electric-powered portable spas shall be controlled by the requirements of APSP 14.

303.3 Residential pools and permanent residential spas. The energy consumption of residential swimming pools and
permanent residential spas shall be controlled in accordance with the requirements of APSP 15.

SECTION 304
FLOOD HAZARD AREAS

304.1 General. The provisions of Section 304 shall control the design and construction of pools and spas installed in flood hazard areas.

[BS] 304.2 Determination of impacts based on location. Pools and spas located in flood hazard areas indicated within the International Building Code or the International Residential Code shall comply with Section 304.2.1 or 304.2.2.

Exception: Pools and spas located in riverine flood hazard areas that are outside of designated floodways and pools and spas located in flood hazard areas where the source of flooding is tides, storm surges or coastal storms.

[BS] 304.2.1 Pools and spas located in designated floodways. Where pools and spas are located in designated floodways, documentation shall be submitted to the code official that demonstrates that the construction of the pools and spas will not increase the design flood elevation at any point within the jurisdiction.

[BS] 304.2.2 Pools and spas located where floodways have not been designated. Where pools and spas are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool or spa and any associated grading and filling, will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

[BS] 304.3 Pools and spas in coastal high-hazard areas. Pools and spas installed in coastal high-hazard areas shall be designed and constructed in accordance with ASCE 24.

[BS] 304.4 Protection of equipment. Equipment shall be elevated to or above the design flood elevation or be anchored to prevent flotation and protected to prevent water from entering or accumulating within the components during conditions of flooding.

304.5 GFCI protection. Electrical equipment installed below the design flood elevation shall be supplied by branch circuits that have ground-fault circuit interrupter protection for personnel.

2. Swimming pools with a powered safety cover that complies with ASTM F 1346.

305.2 Outdoor swimming pools and spas. Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2.1 through 305.7.

305.2.1 Barrier height and clearances. Barrier heights and clearances shall be in accordance with all of the following:

1. The top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.

2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the barrier that faces away from the pool or spa.

3. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm) where measured on the side of the required barrier that faces away from the pool or spa.

4. Where the top of the pool or spa structure is above grade, the barrier shall be installed on grade or shall be mounted on top of the pool or spa structure. Where the barrier is mounted on the top of the pool or spa, the vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches (102 mm).

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

305.2.3 Solid barrier surfaces. Solid barriers that do not have openings shall not contain indentations or protrusions that form handholds and footholds, except for normal construction tolerances and tool ed masonry joints.

305.2.4 Mesh fence as a barrier. Mesh fences, other than chain link fences in accordance with Section 305.2.7, shall be installed in accordance with the manufacturer's instructions and shall comply with the following:

1. The bottom of the mesh fence shall be not more than 1 inch (25 mm) above the deck or installed surface or grade.

2. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches (102 mm) from grade or decking.

3. The fence shall be designed and constructed so that it does not allow passage of a 4-inch (102 mm) sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not be more than 4 inches (102 mm) from grade or decking.
4. An attachment device shall attach each barrier section at a height not lower than 45 inches (1143 mm) above grade. Common attachment devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gate hook.

5. Where a hinged gate is used with a mesh fence, the gate shall comply with Section 305.3.

6. Patio deck sleeves such as vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.

7. Mesh fences shall not be installed on top of onground residential pools.

305.2.5 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 (1143 mm), the horizontal members shall be located on the pool or spa side of the fence. Spacing between vertical members shall not exceed 1/4 inch (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1/4 inch (44 mm) in width.

305.2.6 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 (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, the interior width of the cutouts shall not exceed 1/4 inches (44 mm).

305.2.7 Chain link dimensions. The maximum opening formed by a chain link fence shall be not more than 1/2 inch (44 mm). Where the fence is provided with slats fastened at the top and bottom which reduce the openings, such openings shall be not more than 1/4 inches (44 mm).

305.2.8 Diagonal members. Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be not more than 1/4 inches (44 mm). The angle of diagonal members shall be not greater than 45 degrees (0.79 rad) from vertical.

305.2.9 Clear zone. There shall be a clear zone of not less than 36 inches (914 mm) between the exterior of the barrier and any permanent structures or equipment such as pumps, filters and heaters that can be used to climb the barrier.

305.2.10 Poolside barrier setbacks. The pool or spa side of the required barrier shall be not less than 20 inches (508 mm) from the water’s edge.

305.3 Gates. Access gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device.

305.3.1 Utility or service gates. Gates not intended for pedestrian use, such as utility or service gates, shall remain locked when not in use.

305.3.2 Double or multiple gates. Double gates or multiple gates shall have at least one leaf secured in place and the adjacent leaf shall be secured with a self-latching device. The gate and barrier shall not have openings larger than 1/4 inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. The self-latching device shall comply with the requirements of Section 305.3.3.

305.3.3 Latches. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade, the release mechanism shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than 1/4 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

305.4 Structure wall as a barrier. Where a wall of a dwelling or structure serves as part of the barrier and where doors or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

1. Operable windows having a sill height of less than 48 inches (1219 mm) above the indoor finished floor and doors shall have an alarm that produces an audible warning when the window, door or their screens are opened. The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL 2017. In dwellings or structures not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located 54 inches (1372 mm) or more above the finished floor. In dwellings or structures required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the finished floor.

2. A safety cover that is listed and labeled in accordance with ASTM F 1346 is installed for the pools and spas.

3. An approved means of protection, such as self-closing doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is not less than the protection afforded by Item 1 or 2.

305.5 Onground residential pool structure as a barrier. An onground residential pool wall structure or a barrier mounted on top of an onground residential pool wall structure shall serve as a barrier where all of the following conditions are present:

1. Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, the wall complies with the requirements of Section 305.2 and the pool manufacturer allows the wall to serve as a barrier.
2. Where a barrier is mounted on top of the pool wall, the top of the barrier is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the requirements of Section 305.2.

3. Ladders or steps used as means of access to the pool are capable of being secured, locked or removed to prevent access except where the ladder or steps are surrounded by a barrier that meets the requirements of Section 305.

4. Openings created by the securing, locking or removal of ladders and steps do not allow the passage of a 4-inch (102 mm) diameter sphere.

5. Barriers that are mounted on top of inground residential pool walls are installed in accordance with the pool manufacturer’s instructions.

305.6 Natural barriers. In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water’s edge not less than 18 inches (457 mm), a barrier is not required between the natural body of water shoreline and the pool or spa.

305.7 Natural topography. Natural topography that prevents direct access to the pool or spa area shall include but not be limited to mountains and natural rock formations. A natural barrier approved by the governing body shall be acceptable provided that the degree of protection is not less than the protection afforded by the requirements of Sections 305.2 through 305.5.

SECTION 306
DECKS

306.1 General. Decks shall be designed and installed in accordance with the International Residential Code or the International Building Code, as applicable in accordance with Section 102.7.1, except as provided in this section.

306.2 Slip resistant. Decks, ramps, coping, and similar step surfaces shall be slip resistant and cleanable. Special features in or on decks such as markers, brand insignias, and similar materials shall be slip resistant.

306.3 Step risers and treads. Step risers for decks of public pools and spas shall be uniform and have a height not less than 3/4 inches (95 mm) and not greater than 7/8 inches (191 mm). The tread distance from front to back shall be not less than 11 inches (279 mm). Step risers for decks of residential pools and spas shall be uniform and shall have a height not exceeding 7/8 inches (191 mm). The tread distance from front to back shall be not less than 10 inches (254 mm).

306.4 Deck steps handrail required. Public pool and spa deck steps having three or more risers shall be provided with a handrail.

306.5 Slope. The minimum slope of decks shall be in accordance with Table 306.5 except where an alternative drainage method is provided that prevents the accumulation or pooling of water. The slope for decks, other than wood decks, shall be not greater than 1/4 inch per foot (1 mm per 24 mm) except for ramps. The slope for wood and wood/plastic composite decks shall be not greater than 1/8 inch per foot (1 mm per 24 mm). Decks shall be sloped so that standing water will not be deeper than 1/8 inch (3.2 mm), 20 minutes after the cessation of the addition of water to the deck.

306.6 Gaps. Gaps shall be provided between deck boards in wood and wood/plastic composite decks. Gaps shall be consistent with approved engineering methods with respect to the type of wood used and shall not cause a tripping hazard.

306.6.1 Maximum gap. The open gap between pool decks and adjoining decks or walkways, including joint material, shall be not greater than 1/8 inch (19.1 mm). The difference in vertical elevation between the pool deck and the adjoining sidewalk shall be not greater than 1/4 inch (6.4 mm).

306.7 Concrete joints. Isolation joints that occur where the pool coping meets the concrete deck shall be water tight.

306.7.1 Joints at coping. Joints that occur where the pool coping meets the concrete deck shall be installed to protect the coping and its mortar bed from damage as a result of the anticipated movement of adjoining deck.

306.7.2 Crack control. Joints in a deck shall be provided to minimize visible cracks outside of the control joints caused by imposed stresses or movement of the slab.

306.7.3 Movement control. Areas where decks join existing concrete work shall be provided with a joint to protect the pool from damage caused by relative movement.

306.8 Deck edges. The edges of decks shall be radiused, tapered, or otherwise designed to eliminate sharp corners.

### TABLE 306.5
MINIMUM DRAINAGE SLOPES FOR DECK SURFACES

<table>
<thead>
<tr>
<th>Surface</th>
<th>Minimum Drainage Slope (Inch per Foot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carpet</td>
<td>1/4</td>
</tr>
<tr>
<td>Exposed aggregate</td>
<td>1/8</td>
</tr>
<tr>
<td>Textured, hand-finished concrete</td>
<td>1/8</td>
</tr>
<tr>
<td>Travertine/brick-set pavers, public pools or spas</td>
<td>1/6</td>
</tr>
<tr>
<td>Travertine/brick-set pavers, residential pools or spas</td>
<td>1/6</td>
</tr>
<tr>
<td>Wood</td>
<td>1/8</td>
</tr>
<tr>
<td>Wood/plastic composite</td>
<td>1/6</td>
</tr>
</tbody>
</table>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.
306.9 Valves under decks. Valves installed in or under decks shall be accessible for operation, service, and maintenance. Where access through the deck walking surface is required, an access cover shall be provided for the opening in the deck. Such access covers shall be slip resistant and secured.

306.9.1 Hose bibs. Hose bibs shall be provided for rinsing down the entire deck and shall be installed in accordance with the International Plumbing Code or International Residential Code, as applicable in accordance with Section 102.7.1, and shall be located not more than 150 feet (45,720 mm) apart. Water-powered devices, such as water-powered lifts, shall have a dedicated hose bibb water source.

Exception: Residential pools and spas shall not be required to have hose bibbs located at 150-foot (45,720 mm) intervals, or have a dedicated hose bibb for water-powered devices.

SECTION 307
GENERAL DESIGN

307.1 General. The provisions of this section apply to all pools and spas.

Exception: The provisions of Sections 307.3 through 307.6 do not apply to listed and labeled portable residential spas and listed and labeled portable residential exercise spas.

307.2 Glazing in hazardous locations. Hazardous locations for glazing shall be as defined in the International Building Code or the International Residential Code, as applicable in accordance with Section 102.7.1 of this code. Where glazing is determined to be in a hazardous location, the requirements for the glazing shall be in accordance with those codes, as applicable.

307.3 Materials. Pools and spas and appurtenances thereto shall be constructed of materials that are nontoxic to humans and the environment; that are generally or commonly regarded to be impervious and enduring; that will withstand the design stresses; and that will provide a watertight structure with a smooth and easily cleanable surface without cracks or joints, excluding structural joints, or that will provide a watertight structure to which a smooth, easily cleaned surface/finish is applied or attached. Material surfaces that come in contact with the user shall be finished, so that they do not constitute a cutting, pinching, puncturing or abrasion hazard under casual contact and intended use.

307.3.1 Beach pools. Clean sand or similar material, where used in a beach pool environment, shall be used over an impervious surface. The sand area shall be designed and controlled so that the circulation system, maintenance, safety, sanitation, and operation of the pool are not adversely affected.

307.3.2 Compatibility. Assemblies of different materials shall be chemically and mechanically compatible for their intended use and environment.

307.4 Materials and structural design. Pools and spas shall conform to one or more of the standards indicated in Table 307.4. The structural design of pools and spas shall be in accordance with the International Building Code or the International Residential Code, as applicable in accordance with Section 102.7.1 of this code.

<table>
<thead>
<tr>
<th>TABLE 307.4 RESERVOIRS AND SHELLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATERIAL</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>Fiberglass reinforced plastic</td>
</tr>
<tr>
<td>Plastic</td>
</tr>
<tr>
<td>Stainless steel (Types 316, 316L, 304, 304L)</td>
</tr>
<tr>
<td>Tile</td>
</tr>
<tr>
<td>Vinyl</td>
</tr>
</tbody>
</table>

307.4.1 Installation. Equipment for pools and spas shall be supported to prevent damage from misalignment and settling and located so as to allow access for inspection, servicing, removal and repair of component parts.

307.5 Freeze protection. In climates subject to freezing temperatures, outdoor pool and spa shells and appurtenances, piping, filter systems, pumps and motors, and other components shall be designed and constructed to provide protection from damage from freezing.

307.6 Surface condition. The surfaces within public pools and spas intended to provide footing for users shall be slip resistant and shall not cause injury during normal use.

307.7 Colors and finishes. The colors, patterns, or finishes of the pool or spa interior shall not obscure objects or surfaces within the pool or spa.

Exception: Residential pools and spas.

307.8 Roofs or canopies. Roofs or canopies over pools and spas shall be in accordance with the International Building Code or International Residential Code, as applicable in accordance with Section 102.7.1 and shall be constructed so as to prevent water runoff into the pool or spa.

307.9 Accessibility. An accessible route to public pools and spas shall be provided in accordance with the International Building Code. Accessibility within public pools and spas shall be provided as required by the accessible recreational facilities provisions of the International Building Code. Accessibility for pools and spas accessory to detached one- and two-family dwellings and townhouses not more than three stories in height shall be provided where required by the International Residential Code.

SECTION 308
DIMENSIONAL DESIGN

308.1 Floor slope. The slope of the floor from the point of the first slope change to the deep area shall not exceed one unit vertical in three units horizontal (33-percent slope).

Exception: Portable residential spas and portable residential exercise spas.
308.2 Walls. Walls shall intersect with the floor at an angle or a transition profile. Where a transitional profile is provided at water depths of 3 feet (914 mm) or less, a transitional radius shall not exceed 6 inches (152 mm) and shall be tangent to the wall and is permitted to be tangent to or intersect the floor.

Exceptions:
1. Portable residential spas and portable residential exercise spas.

2. Onground storable pools.

308.3 Shape. This code is not intended to regulate the shape of a pool or spa other than to take into account the effect that a given shape will have on the safety of the occupants and to maintain the minimum required level of circulation to ensure sanitation.

308.4 Waterline. The design waterline shall have a maximum construction tolerance at the time of completion of the work of plus or minus 1/4 inch (6.4 mm) for pools and spas with adjustable weir surface skimming systems, and plus or minus 1/8 inch (3.2 mm) for pools and spas with nonadjustable surface skimming systems.

SECTION 309
EQUIPMENT

309.1 Electrically operated equipment. Electrically operated equipment shall be listed and labeled in accordance with applicable product standards.

Exception: Portable residential spas and portable residential exercise spas listed and labeled in accordance with UL 1563 or CSA C22.2 No. 218.1.

309.2 Treatment and circulation system equipment. Treatment and circulation system equipment for public pools and spas shall be listed and labeled in accordance with NSF 50 and other applicable standards.

SECTION 310
SUCTION ENTRAPMENT AVOIDANCE

310.1 General. Suction entrapment avoidance for pools and spas shall be provided in accordance with APSP 7.

Exceptions:
1. Portable spas and portable exercise spas listed and labeled in accordance with UL 1563 or CSA C22.2 No. 218.1.

2. Suction entrapment avoidance for wading pools shall be provided in accordance with Section 405.

SECTION 311
CIRCULATION SYSTEMS

311.1 General. The provisions of this section shall apply to circulation systems for pools and spas.

Exceptions:
1. Portable residential spas and portable residential exercise spas.

2. Onground storable pools supplied by the pool manufacturer as a kit that includes circulation system equipment that is in accordance with Section 704.

311.2 System design. A circulation system consisting of pumps, piping, return inlets and outlets, filters, and other necessary equipment shall be provided for the complete circulation of water. Wading pools and spas shall have separate dedicated filtering systems.

Exception: Separate filtering systems are not required for residential pools and spas.

311.2.1 Turnover rate. The equipment shall be sized to turn over the volume of water that the pool or spa is capable of containing as specified in this code for the specific installation.

311.2.2 Servicing. Circulation system components that require replacement or servicing shall be provided with access for inspection, repair, or replacement and shall be installed in accordance with the manufacturer's specifications.

311.2.3 Equipment anchorage. Pool and spa equipment and related piping shall be designed and installed in accordance with the manufacturer's instructions.

311.3 Water velocity. The water velocity in return lines shall not exceed 8 feet (2.4 m) per second. The water velocity in suction piping shall be as required by Section 310.

311.4 Piping and fittings. Plastic pipe and fittings used in circulation systems shall be nontoxic and shall be able to withstand the design operating pressures and conditions of the pool or spa. Plastic pipe shall be listed and labeled as complying with NSF 14. Circulation system piping shall be listed and labeled as complying with one of the standards in Table 311.4.

### TABLE 311.4
CIRCULATION SYSTEM PIPE MATERIAL STANDARD

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylonitrile butadiene styrene (ABS) plastic pipe</td>
<td>ASTM D 1527</td>
</tr>
<tr>
<td>Chlorinated polyvinyl chloride (CPVC) plastic pipe and tubing</td>
<td>ASTM D 2846; CSA B137.6</td>
</tr>
<tr>
<td>Copper or copper-alloy tubing</td>
<td>ASTM B 88; ASTM B 447</td>
</tr>
<tr>
<td>Polyvinyl chloride (PVC) hose</td>
<td>ASTM D 1785; ASTM D 2241; ASTM D 2672; CSA B137.3</td>
</tr>
<tr>
<td>Polyvinyl chloride (PVC) plastic pipe</td>
<td>ASTM D 1785; CSA B137.3</td>
</tr>
<tr>
<td>Stainless steel pipe, Types 304, 304L, 316, 316L</td>
<td>ASTM A 312</td>
</tr>
</tbody>
</table>

2015 INTERNATIONAL SWIMMING POOL AND SPA CODE™
311.4.1 **Fittings.** Fittings used in circulation systems shall be **listed and labeled** as complying with one of the standards in Table 311.4.1.

**Exceptions:**

1. Suction outlet fitting assemblies and manufacturer-provided components certified in accordance with APSP 16.
2. Skimmers and manufacturer-provided components.
3. Gutter overflow grates and fittings installed above or outside of the overflow point of the pool or spa.

311.4.2 **Joints.** Joints shall be made in accordance with manufacturer’s instructions.

311.4.3 **Piping subject to freezing.** Piping subject to damage by freezing shall have a uniform slope in one direction and shall be equipped with valves for drainage or shall be capable of being evacuated to remove the water.

311.4.4 **Suction outlet fitting assemblies.** Suction outlet fitting assemblies shall be **listed and labeled** in compliance with APSP 16.

311.5 **System draining.** Equipment shall be designed and fabricated to drain the water from the equipment, together with exposed face piping, by removal of drain plugs, manipulating valves, or by other methods. Drainage shall be in accordance with manufacturer’s specifications.

311.6 **Pressure or vacuum gauge.** Gauges shall be provided on the circulation system for public pools. Gauges shall be provided with ready access.

1. A pressure gauge shall be located downstream of the pump and between the pump and filter.
2. A vacuum gauge shall be located between the pump and filter and upstream of the pump.

311.7 **Flow measurement.** Public swimming pools and wading pools shall be equipped with a flow-measuring device that indicates the rate of flow through the filter system. The flow rate measuring device shall indicate gallons per minute (lpm) and shall be selected and installed to be accurate within plus or minus 10 percent of actual flow.

311.8 **Instructions.** Written operation and maintenance instructions shall be provided for the circulation system of public pools.

311.9 **Hydrostatic pressure test.** Circulation system piping, other than that integrally included in the manufacture of the pool or spa, shall be subjected to a hydrostatic pressure test of 25 pounds per square inch (psi) (172.4 kPa). This pressure shall be held for not less than 15 minutes.

### SECTION 312

**FILTERS**

312.1 **General.** The provisions of this section apply to filters for pools and spas.

**Exceptions:**

1. Portable *residential* spas and portable *residential* exercise spas.

2. *Onground* storable pools supplied by the pool manufacturer as a kit that includes a filter that is in accordance with Section 704.

312.2 **Design.** Filters shall have a flow rating equal to or greater than the design flow rate of the system. Filters shall be installed in accordance with the manufacturer’s instructions. Filters shall be designed so that filtration surfaces can be inspected and serviced.

312.3 **Internal pressure.** For pressure-type filters, a means shall be provided to allow the release of internal pressure.

312.3.1 **Air release.** Filters incorporating an automatic means of internal air release as the principal means of air release shall have one or more lids that provide a slow and safe release of pressure as a part of the design and shall have a manual air release in addition to an automatic release.

312.3.2 **Separation tanks.** A separation tank used in conjunction with a filter tank shall have a manual method of air release or a lid that provides for a slow and safe release of pressure as it is opened.

### SECTION 313

**PUMPS AND MOTORS**

313.1 **General.** The provisions of this section apply to pumps and motors for pools and spas.

**Exceptions:**

1. Portable *residential* spas and portable *residential* exercise spas.

2. *Onground* storable pools supplied by the pool manufacturer as a kit that includes a pump and motor that is in accordance with Section 704.

### TABLE 311.4.1

**CIRCULATION SYSTEM FITTINGS**

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>STANDARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acrylonitrile butadiene styrene (ABS) plastic pipe</td>
<td>ASTM D 1527</td>
</tr>
<tr>
<td>Chlorinated polyvinyl chloride (CPVC) plastic pipe and tubing</td>
<td>ASTM D 2846; ASTM F 437; ASTM F 438; ASTM F 439; CSA B137.6</td>
</tr>
<tr>
<td>Copper or copper-alloy tubing</td>
<td>ASME B 16.15</td>
</tr>
<tr>
<td>Polyvinyl chloride (PVC) plastic pipe</td>
<td>ASTM D 2464; ASTM D 2466; ASTM D 2467; CSA B137.2; CSA B137.3</td>
</tr>
<tr>
<td>Stainless steel pipe, Types 304, 304L, 316, 316L</td>
<td>ASTM A 182; ASTM A 403</td>
</tr>
</tbody>
</table>

2015 INTERNATIONAL SWIMMING POOL AND SPA CODE™ 19
313.2 **Performance.** A pump shall be provided for circulation of the pool water. The pump shall be capable of providing the flow required for filtering the pool water and filter cleaning, if applicable, against the total dynamic head developed by the complete system.

313.3 **Intake protection.** A cleanable strainer, skimmer basket, or screen shall be provided for pools and spas, upstream or as an integral part of circulation pumps, to remove solids, debris, hair, and lint on pressure filter systems.

313.4 **Location.** Pumps and motors shall be accessible for inspection and service in accordance with the manufacturer's specifications.

313.5 **Safety.** The design, construction, and installation of pumps and component parts shall be in accordance with the manufacturer's specifications.

313.6 **Isolation valves.** Shutoff valves shall be installed on the suction and discharge sides of pumps that are located below the waterline. Such valves shall be provided with access.

313.7 **Emergency shutoff switch.** An emergency shutoff switch shall be provided to disconnect power to recirculation and jet system pumps and air blowers. Emergency shutoff switches shall be: provided with access; located within sight of the pool or spa; and located not less than 5 feet (1524 mm) horizontally from the inside walls of the pool or spa.

**Exception:** *Inground storable pools,* permanent inground *residential* swimming pools, *residential* spas and *residential* water features.

313.8 **Motor performance.** Motors shall comply with UL 1004-1, UL 1081, CSA C22.2 No. 108 or the relevant motor requirements of UL 1563 or CSA C22.2 No. 218.1, as applicable.

### SECTION 314 RETURN AND SUCTION FITTINGS

314.1 **General.** The provisions of this section apply to return and suction fittings for pools and spas.

**Exception:** Portable *residential* spas and portable *residential* exercise spas.

314.2 **Entrapment avoidance.** Entrapment avoidance means shall be provided in accordance with Section 310.

314.3 **Flow distribution.** The suction outlet fitting assemblies, where installed, and the skimming systems shall each be designed to accommodate 100 percent of the circulation turnover rate.

314.3.1 **Multiple systems.** Where multiple systems are used in a single pool to meet this requirement, each subsystem shall proportionately be designed such that the maximum design flow rates cannot be exceeded during normal operation.

314.4 **Return inlets.** One return inlet shall be provided for every 300 square feet (27.9 m²) of pool surface area, or fraction thereof.

**Exception:** *Inground storable pools.*

314.4.1 **Design.** Return and suction fittings for the circulation system shall be designed so as not to constitute a hazard to the bather.

314.5 **Vacuum fittings.** Where installed, *submerged vacuum fittings* shall be accessible and shall be located not greater than 12 inches (305 mm) below the water level.

### SECTION 315 SKIMMERS

315.1 **General.** The provisions of this section apply to skimmers for pools and spas.

**Exceptions:**

1. Portable *residential* spas and portable *residential* exercise spas.

2. *Inground* storable pools supplied by the pool manufacturer as a kit that includes a skimming system that is in accordance with Section 704.

315.2 **Required.** A surface skimming system shall be provided for public pools and spas. Surface skimming systems shall be *listed* and *labeled* in accordance with NSF 50. Either a surface skimming system or perimeter overflow system shall be provided for permanent inground *residential* pools and permanent *residential* spas. Where installed, surface skimming systems shall be designed and constructed to create a skimming action on the pool water surface when the water level in the pool is within operational parameters.

**Exceptions:**

1. Class D public pools designed in accordance with Chapter 6.

2. Skimmers that are an integral part of a spa that has been *listed* and *labeled* in accordance with UL1563 shall not be required to be *listed* and *labeled* in accordance with NSF 50.

315.2.1 **Circulation systems.** Public pool circulation systems shall be designed to process not less than 100 percent of the turnover rate through skimmers.

315.3 **Skimmer sizing.** Where automatic surface skimmers are used as the sole overflow system, not less than one surface skimmer shall be provided for the square foot (square meter) areas, or fractions thereof, indicated in Table 315.3. Skimmers shall be located to maintain effective skimming action.

<table>
<thead>
<tr>
<th>TABLE 315.3 SKIMMER SIZING TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>POOL OR SPA</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Public pool</td>
</tr>
<tr>
<td>Residential pool</td>
</tr>
<tr>
<td>Spas (all types)</td>
</tr>
</tbody>
</table>

For SI: 1 square foot = 0.0929 m².

315.4 **Perimeter coverage.** Where a perimeter-type surface skimming system is used as the sole surface skimming system, the system shall extend around not less than 50 percent of the pool or spa perimeter.
315.4.1 Surge capacity. Where perimeter surface skimming systems are used, they shall be connected to a circulation system with a system surge capacity of not less than 1 gallon for each square foot (40.7 liters per square meter) of water surface. The capacity of the perimeter overflow system and related piping is permitted to be considered as a portion of the surge capacity.

315.5 Equalizers. Equalizers on skimmers shall be prohibited.

315.6 Hazard. Skimming devices shall be designed and installed so as not to create a hazard to the user.

SECTION 316 HEATERS

316.1 General. The provisions of this section apply to heaters for pools and spas.

Exception: Portable residential spas and portable residential exercise spas.

316.2 Listed and labeled. Heaters shall be listed and labeled in accordance with the applicable standard listed in Table 316.2.

316.3 Sizing. Heaters shall be sized in accordance with the manufacturer’s specifications.

316.4 Installation. Heaters shall be installed in accordance with the manufacturer’s specifications and the International Fuel Gas Code, International Mechanical Code, International Energy Conservation Code, NFPA 70 or International Residential Code, as applicable in accordance with Section 102.7.1.

316.4.1 Temperature. A means shall be provided to monitor water temperature.

316.4.2 Access prohibited. For public pools and spas, public access to controls shall be prohibited.

316.5 Heater circulation system. Heater circulation systems shall comply with Sections 316.5.1 and 316.5.2.

316.5.1 Water flow. Water flow through the heater bypass piping, back-siphonage protection, and the use of heat sinks shall be in accordance with the heater manufacturer’s specifications.

316.5.2 Pump delay. Where required by the manufacturer, heaters shall be installed with an automatic device that will ensure that the pump continues to run after the heater shuts off for the time period specified by the manufacturer.

SECTION 317 AIR BLOWER AND AIR INDUCTION SYSTEM

317.1 General. This section applies to devices and systems that induce or allow air to enter pools and spas either by means of a powered pump or passive design.

317.2 Backflow prevention. Air blower systems shall be equipped with backflow protection as specified in UL 1563 or CSA C22.2 No. 218.1.

317.3 Air intake source. Air intake sources shall not induce water, dirt or contaminants.

317.4 Sizing. Air induction systems shall be sized in accordance with the manufacturer’s specifications.

317.5 Inspection and service. Air blowers shall be provided with access for inspection and service.

SECTION 318 WATER SUPPLY

318.1 Makeup water. Makeup water to maintain the water level and water used as a vehicle for sanitizers or other chemicals, for pump priming, or for other such additions, shall be from a potable water source.

318.2 Protection of potable water supply. Potable water supply systems shall be designed, installed and maintained so as to prevent contamination from nonpotable liquids, solids or gases being introduced into the potable water supply through cross-connections or other piping connections to the system. Means of protection against backflow in the potable water supply shall be provided through an air gap complying with ASME A112.1.2 and the International Residential Code or the International Plumbing Code, as applicable in accordance with Section 102.7.1.

318.3 Over-the-rim spouts. Over-the-rim spouts shall be located under a diving board, adjacent to a ladder, or otherwise shielded so as not to create a hazard. The open end of such spouts shall not have sharp edges and shall not protrude more than 2 inches (51 mm) beyond the edge of the pool. The open end shall be separated from the water by an air gap of not less than 1.5 pipe diameters measured from the pipe outlet to the rim.

<table>
<thead>
<tr>
<th>TABLE 316.2 WATER HEATERS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DEVICE</strong></td>
</tr>
<tr>
<td>Electric water heater</td>
</tr>
<tr>
<td>Gas-fired water heater</td>
</tr>
<tr>
<td>Heat exchanger</td>
</tr>
<tr>
<td>Heat pump water heater</td>
</tr>
<tr>
<td>Photovoltaic solar water heaters</td>
</tr>
<tr>
<td>Thermal radiant solar water heater</td>
</tr>
</tbody>
</table>
SECTION 319
SANITIZING EQUIPMENT
319.1 Equipment standards. Sanitizing equipment installed in public pools and spas shall be capable of introducing the quantity of sanitizer necessary to maintain the appropriate levels under all conditions of intended use.

319.2 Chemical feeders. Where installed, chemical feed systems shall be installed in accordance with the manufacturer’s specifications. Chemical feed pumps shall be wired so that they cannot operate unless there is adequate return flow to disburse the chemical throughout the pool or spa as designed.

SECTION 320
WASTE WATER DISPOSAL
320.1 Backwash water or draining water. Backwash water and draining water shall be discharged to the sanitary or storm sewer, or into an approved disposal system on the premise, or shall be disposed of by other means approved by the state or local authority. Direct connections shall not be made between the end of the backwash line and the disposal system. Drains shall discharge through an air gap.

320.2 Water salvage. Filter backwash water shall not be returned to the vessel except where the backwash water has been filtered to remove particulates, treated to eliminate colloidal form bacteria and waterborne pathogens, and such return has been approved by the state or local authority.

320.3 Waste post treatment. Where necessary, filter backwash water and drainage shall be treated chemically or through the use of settling tanks to eliminate or neutralize chemicals, diatomaceous earth, and contaminants in the water that exceed the limits set by the state or local effluent discharge requirements.

SECTION 321
LIGHTING
321.1 General. The provisions of Sections 321.2 and 321.3 shall apply to lighting for public pools and spas. The provisions of Section 321.4 shall apply to lighting for residential pools and spas.

321.2 Artificial lighting required. When a pool is open during periods of low natural illumination, artificial lighting shall be provided so that all areas of the pool, including all suction outlets on the bottom of the pool, will be visible. Illumination shall be sufficient to enable a lifeguard or other persons standing on the deck or sitting on a lifeguard stand adjacent to the pool edge to determine if a pool user is lying on the bottom of the pool and that the pool water is transparent and free from cloudiness.

These two conditions shall be met when all suction outlets are visible from the edge of the deck at all times when artificial lighting is illuminated and when an 8-inch-diameter (152 mm) black disk, placed at the bottom of the pool in the deepest point, is visible from the edge of the pool deck at all times when artificial lighting is illuminated.

321.2.1 Pool and deck illumination. Overhead lighting, underwater lighting or both shall be provided to illuminate the pool and adjacent deck areas. The lighting shall be listed and labeled. The lighting shall be installed in accordance with NFPA 70.

321.2.2 Illumination intensity. For outdoor pools, any combination of overhead and underwater lighting shall provide maintained illumination not less than 10 horizontal foot-candles (10 lumens per square foot) [108 lux] at the pool water surface. For indoor pools, any combination of overhead and underwater lighting shall provide maintained illumination of not less than 30 horizontal foot-candles (30 lumens per square foot) [323 lux] at the pool water surface. Deck area lighting for both indoor and outdoor pools shall provide maintained illumination of not less than 10 horizontal foot-candles (10 lumens per square foot) [108 lux] at the walking surface of the deck.

321.2.3 Underwater lighting. Underwater lighting shall provide not less than 8 horizontal foot-candles (8 lumens per square foot) [86 lux] at the pool water surface area, or not less than a total wattage of \( \frac{1}{4} \) watt/ft\(^2\) (5.4 watts/m\(^2\)) of pool water surface for incandescent underwater lighting where the fixtures and lamps are rated in watts.

Exception: The requirement of this section shall not apply where overhead lighting provides not less than 15 foot-candles (15 lumens per square foot) [161 lux] of maintained illumination at the pool water surface, the overhead lighting provides visibility, without glare, of all areas of the pool, and the requirements of Section 321.2.2 are met or exceeded.

321.3 Emergency illumination. Public pools and public pool areas that operate during periods of low illumination shall be provided with emergency lighting that will automatically turn on to permit evacuation of the pool and securing of the area in the event of power failure. Emergency lighting facilities shall be arranged to provide initial illumination that is not less than 0.1 foot-candle (0.1 lumen per square foot) [1 lux] measured at any point on the water surface and at any point on the walking surface of the deck, and not less than an average of 1 foot-candle (1 lumen per square foot) [11 lux] at the end of the emergency lighting time duration, the illumination level shall be not less than 0.06 foot-candle (0.06 lumen per square foot) [0.65 lux] measured at any point on the water surface and at any point on the walking surface of the deck, and not less than an average of 0.6 foot-candle (0.6 lumen per square foot) [6.46 lux]. A maximum-to-minimum illumination uniformity ratio of 40 to 1 shall not be exceeded.

321.4 Residential pool and deck illumination. Where lighting is installed for, and in, residential pools and permanent residential spas, such lighting shall be installed in accordance with NFPA 70 or the International Residential Code, as applicable in accordance with Section 102.7.1.

SECTION 322
LADDERS AND RECESSED TREADS
322.1 General. Ladders and recessed treads shall comply with the provisions of this section and the applicable provisions of Chapters 4 through 10 based on the type of pool or spa.
322.2 **Outside diving envelope.** Where installed, steps and ladders shall be located outside of the minimum diving water envelope as indicated in Figure 322.2.

322.3 **Ladders.** Ladder treads shall have a uniform horizontal depth of not less than 2 inches (51 mm). There shall be a uniform distance between ladder treads, with a distance of not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The top tread of a ladder shall be located not greater than 12 inches (305 mm) below the top of the deck or coping. Ladder treads shall have slip-resistant surfaces.

322.3.1 **Wall clearance.** There shall be a clearance of not less than 3 inches (76 mm) and not greater than 6 inches (152 mm) between the pool wall and the ladder.

322.3.2 **Handrails and handholds.** Ladders shall be provided with two handrails or two handholds. The clear distance between ladder handrails shall be not less than 17 inches (432 mm) and not greater than 24 inches (610 mm).

322.4 **Recessed treads.** Recessed treads shall have a minimum depth of not less than 5 inches (127 mm) and a width of not less than 12 inches (305 mm). The vertical distance between the pool coping edge, deck, or step surface and the uppermost recessed tread shall be not greater than 12 inches (305 mm). Recessed treads shall have slip-resistant surfaces.

322.4.1 **Vertical spacing.** Recessed treads at the centerline shall have a uniform vertical spacing of not less than 7 inches (178 mm) and not greater than 12 inches (305 mm).

322.4.2 **Drainage.** Recessed treads shall drain into the pool.

322.4.3 **Handrails and grab rails.** Recessed treads shall be provided with a handrail or grab rail on each side of the treads. The clear distance between handrails and grab rails shall be not less than 17 inches (432 mm) and not greater than 24 inches (610 mm).

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**SECTION 323 SAFETY**

323.1 **Handholds required.** Where the depth below the design waterline of a pool or spa exceeds 42 inches (1067 mm), handholds along the perimeter shall be provided. Handholds shall be located at the top of deck or coping.

**Exceptions:**

1. Handholds shall not be required where an underwater bench, seat or swimout is installed.
2. Handholds shall not be required for wave action pools and action rivers.

323.1.1 **Height above water.** Handholds shall be located not more than 12 inches (305 mm) above the design waterline.

323.1.2 **Handhold type.** Handholds shall be one or more of the following:

1. Top of pool deck or coping.
2. Secured rope.
3. Rail.
4. Rock.
5. Ledge.
7. Stair step.
8. Any design that allows holding on with one hand while at the side of the pool.

323.1.3 **Handhold spacing.** Handholds shall be horizontally spaced not greater than 4 feet (1219 mm) apart.

323.2 **Handrails.** Where handrails are installed, they shall conform to this section.
323.2.1 Height. The top of the gripping surface of handrails for public pools and public spas shall be 34 inches (864 mm) to 38 inches (965 mm) above the ramp or step surface as measured at the nosing of the step or finished surface of the slope. The top of the gripping surface of handrails for residential pools and residential spas shall be 30 inches (762 mm) to 38 inches (965 mm) above the ramp or step surface as measured at the nosing of the step or finished surface of the slope.

323.2.2 Material. Handrails shall be made of corrosion-resistant materials.

323.2.3 Nonremovable. Handrails shall be installed so that they cannot be removed without the use of tools.

323.2.4 Leading edge distance. The leading edge of handrails for stairs, pool entries and exits shall be located not greater than 18 inches (457 mm) from the vertical face of the bottom riser.

323.2.5 Diameter. The outside diameter or width of handrails shall be not less than 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm).

323.3 Obstructions and entrapment avoidance. There shall not be obstructions that can cause the user to be entrapped or injured. Types of entrapment include, but are not limited to, wedge or pinch-type openings and rigid, nongiving cantilevered protrusions.
CHAPTER 7
ONGLOUND STORABLE RESIDENTIAL SWIMMING POOLS

SECTION 701
GENERAL

701.1 Scope. This chapter describes certain criteria for the design, manufacturing, and testing of onground storable pools intended for residential use. This includes portable pools with flexible or nonrigid side walls that achieve their structural integrity by means of uniform shape, support frame or a combination thereof, and that can be disassembled for storage or relocation. This chapter includes what has been commonly referred to in past standards or codes as onground or above-ground pools.

701.1.1 Permanent inground residential swimming pool. This chapter does not apply to permanent inground residential pools, as defined in Chapter 8.

701.2 General. In addition to the requirements of this chapter, onground storable residential swimming pools shall comply with the requirements of Chapter 3.

701.3 Floor slopes. Floor slopes shall be uniform and in accordance with Sections 701.3.1 through 701.3.4.

701.3.1 Shallow end. The slope of the floor from the shallow end wall towards the deep area shall not exceed 1 unit vertical in 7 units horizontal (14-percent slope) to the point of the first slope change.

701.3.2 Transition. The slope of the floor from the point of the first slope change towards the deepest point shall not exceed 1 unit vertical in 3 units horizontal (33-percent slope).

701.3.3 Adjacent. The slope adjacent to the shallow area shall not exceed 1 unit vertical in 3 units horizontal (33-percent slope) and the slope adjacent to the side walls shall not exceed 1 unit vertical in 1 unit horizontal (100-percent slope).

701.3.4 Change point. The point of the first slope change shall be defined as the point at which the shallow area slope exceeds 1 unit vertical in 7 units horizontal (14-percent slope) and is not less than 6 feet (1889 mm) from the shallow end wall of the pool.

701.4 Identification. For onground storable residential pools with a vinyl liner, the manufacturer’s name and the liner identification number shall be affixed to the liner. For onground storable residential pools without a liner, the manufacturer’s name and identification number shall be affixed to the exterior of the pool structure.

701.5 Installation. Onground storable pools shall be installed in accordance with the manufacturer’s instructions.

SECTION 702
LADDERS AND STAIRS

702.1 Ladders and stairs. Pools shall have a means of entry and exit consisting of not less than one ladder or a ladder and staircase combination.

702.2 Type A and Type B ladders. Type A, double access, and Type B, limited access. A-frame ladders shall comply with Sections 702.2.1 through 702.2.7. See Figure 702.2.

FIGURE 702.2
TYPICAL A-FRAME LADDER, TYPES A AND B

702.2.1 Barrier required. Ladders in the pool shall have a physical barrier to prevent children from swimming through the riser openings or behind the ladder.

Exception: Barriers for ladders shall not be required where the ladder manufacturer provides a certification statement that the ladder complies with the ladder entrapment test requirements of APSP 4.

702.2.2 Platform. Where an A-frame ladder has a platform between the handrails, the platform shall have a width of not less than 12 inches (305 mm) and a length of not less than 12 inches (305 mm). The platform shall be at or above the highest ladder tread. The walking surface of the platform shall be slip resistant.
702.2.3 Handrails or handholds. A-frame ladders shall have two handrails or handholds that serve all treads. The height of the handrails and handholds shall be not less than 20 inches (508 mm) above the platform or uppermost tread, whichever is higher.

702.2.4 Diameter. The outside diameter of handrails and handholds shall be not less than 1 inch (25 mm) and not greater than 1.9 inches (48 mm).

702.2.5 Clear distance. The clear distance between ladder handrails shall be not less than a space of 12 inches (305 mm).

702.2.6 Treads. Ladder treads shall have a horizontal uniform depth of not less than 2 inches (51 mm).

702.2.7 Riser height. Risers, other than the bottom riser, shall be of uniform height that is not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The bottom riser height shall be not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The vertical distance from the platform or top of the pool structure to the uppermost tread shall be the same as the uniform riser heights.

702.3 Type C staircase ladders (ground to deck). Type C staircase ladders shall comply with Sections 702.3.1 through 702.3.6. See Figure 702.3.

702.3.1 Handrails or handholds. Staircase ladders shall have not less than two handrails or handholds that serve all treads. The height of the handrails and handholds shall be not less than 20 inches (508 mm) above the platform or uppermost tread, whichever is higher.

702.3.2 Diameter. The outside diameter of handrails and handholds shall be not less than 1 inch (25 mm) and not greater than 1.9 inches (48 mm).

702.3.3 Treads. Ladder treads shall have a horizontal uniform depth of not less than 4 inches (102 mm).

702.3.4 Riser height. Risers, other than the bottom riser, shall be of uniform height that is not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The bottom riser height shall be not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The vertical distance from the platform or top of the pool structure to the uppermost tread shall be the same as the uniform riser heights.

702.3.5 Top step. The top step of a staircase ladder shall be flush with the deck or 7 inches (178 mm) to 12 inches (305 mm) below the deck level.

702.3.6 Width. Steps shall have a minimum unobstructed width of 19 inches (483 mm) between the side rails.

702.4 Type D in-pool ladders. Type D in-pool ladders shall be in accordance with Sections 702.4.1 through 702.4.7. See Figure 702.4.

FIGURE 702.4
TYPICAL IN-POOL LADDER, TYPE D

702.4.1 Clearance. There shall be a clearance of not less than 3 inches (76 mm) and not greater than 6 inches (152 mm) between the pool wall and the ladder.

702.4.2 Handrails or handholds. Ladders shall be equipped with two handrails or handholds that extend above the platform or deck not less than 20 inches (508 mm).

702.4.3 Clear distance. The clear distance between ladder handrails shall be not less than 12 inches (305 mm).

702.4.4 Diameter. The outside diameter of handrails and handholds shall be not less than 1 inch (25 mm) and not greater than 1.9 inches (48 mm).

702.4.5 Riser height. Risers, other than the bottom riser, shall be of uniform height that is not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The bottom riser height shall be not less than 7 inches (178 mm) and not greater than 12 inches (305 mm).
702.4.6 Top tread. The vertical distance from the pool coping, deck, or step surface to the uppermost tread shall be not less than 7 inches (178 mm) and not greater than 12 inches (305 mm) and uniform with other riser heights.

702.4.7 Tread depth. Ladder treads shall have a horizontal uniform depth of not less than 2 inches (51 mm).

702.5 Type E protruding in-pool stairs. Type E protruding in-pool stairs shall be in accordance with Sections 702.5.1 through 702.5.7. See Figure 702.5.

702.5.1 Barrier required. In-pool stairs shall have a physical barrier to prevent children from swimming through the riser openings or behind the in-pool stairs.

702.5.2 Handrails or handholds. In-pool stairs shall be equipped with not less than one handrail or handhold that serves all treads with a height of not less than 20 inches (508 mm) above the platform or uppermost tread, whichever is higher.

702.5.3 Removable handrails. Where handrails are removable, they shall be installed such that they cannot be removed without the use of tools.

702.5.4 Leading edge distance. The leading edge of handrails shall be 18 inches (457 mm) ± 3 inches (±76 mm), horizontally from the vertical plane of the bottom riser.

702.5.5 Diameter. The outside diameter of handrails and handholds shall be not less than 1 inch (25 mm) and not greater than 1.9 inches (48 mm).

702.5.6 Tread width and depth. Treads shall have an unobstructed horizontal depth of not less than 10 inches (254 mm) and an unobstructed surface area of not less than 240 square inches (0.15 m²).

702.5.7 Uniform riser height. Risers, other than the bottom riser, shall be of uniform height that is not less than 7 inches (178 mm) and not greater than 12 inches (305 mm).

702.6 Type F recessed in-pool stairs. Type F recessed in-pool stairs shall be in accordance with Sections 702.6.1 through 702.6.7. See Figure 702.5.

702.6.1 Barrier required. In-pool stairs shall have a physical barrier to prevent children from swimming through the riser openings or behind the in-pool stairs.

702.6.2 Handrails or handholds. In-pool stairs shall be equipped with not less than one handrail or handhold that serves all treads with a height of not less than 20 inches (508 mm) above the platform or uppermost tread, whichever is higher.

702.6.3 Removable handrails. Where handrails are removable, they shall be installed such that they cannot be removed without the use of tools.

702.6.4 Leading edge distance. The leading edge of handrails shall be 18 inches (457 mm) ± 3 inches (±76 mm), horizontally from the vertical plane of the bottom riser.

702.6.5 Diameter. The outside diameter of handrails and handholds shall be not less than 1 inch (25 mm) and not greater than 1.9 inches (48 mm).

702.6.6 Tread width and depth. Treads shall have an unobstructed horizontal depth of not less than 10 inches (254 mm) at all points and an unobstructed surface area of not less than 240 square inches (0.15 m²).

702.6.7 Uniform riser height. Risers, other than the bottom riser, shall be of uniform height that is not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The bottom riser height shall be not less than 7 inches (178 mm) and not greater than 12 inches (305 mm). The vertical distance from the pool coping, deck or step surface to the uppermost tread of the stairs shall be the same as the uniform riser heights.

SECTION 703
DECKS

703.1 General. Decks provided by the pool manufacturer shall be installed in accordance with the manufacturer's instructions. Decks fabricated on-site shall be in accordance with the International Residential Code.

703.2 Cantilevered. The top surface of a cantilevered deck shall be not greater than 1 inch (25 mm) higher than the top of the pool wall. See Figure 703.4. The top surface of a noncantilevered deck shall be not higher than the top of the pool wall.

703.3 No gaps. Decks that are installed flush with the top rail of the pool shall have all gap openings between the deck and top rails closed-off or capped.

703.4 Extension over pool. Where a deck extends inside the top rail of the pool, it shall extend not more than 3 inches (76 mm) beyond the inside of the top rail of the pool in accordance with Figure 703.4 and shall have a smooth finish.
704.2 Installation and support. Circulation equipment shall be installed, mounted and supported in accordance with the manufacturer’s instructions.

704.3 Draining the system. In climates subject to freezing, circulation system equipment shall be designed and fabricated to drain the pool water from the equipment and exposed piping, by removal of drain plugs and manipulating valves or by other methods in accordance with the manufacturer’s instructions.

704.4 Turnover. A pump including a motor shall be provided for circulation of the pool water. The equipment shall be sized to provide a turnover of the pool water not less than once every 12 hours. The system shall be designed to provide the required turnover rate based on the manufacturer’s specified maximum flow rate of the filter, with a clean media condition of the filter. The system flow shall not exceed the filter manufacturer’s maximum filter flow rate.

704.5 Piping and fittings. The process piping of the circulation system, including but not limited to hoses, tubing, piping, and fittings, shall be made of nontoxic material and shall be capable of withstanding an internal pressure of not less than 1 1/2 times the rated pressure of the pump. Piping on the suction side of the pump shall not collapse when flow into such piping is blocked.

704.6 Filters. Pressure-type filters shall have an automatic internal means or a manual external means to relieve accumulated air pressure inside the filter tank. Filter tanks composed of upper and lower tank lids that are held in place by a perimeter clamp shall have a perimeter clamp that provides for a slow and safe release of air pressure before the clamp disengages the lids.

704.6.1 Automatic internal air relief. Filter tanks incorporating an automatic internal air relief as the principal means of air release shall be designed with means to provide for a slow and safe release of pressure.

704.6.2 Separation tank. A separation tank used in conjunction with a filter tank shall have a manual air release or the tank shall be designed to provide for a slow and safe release of pressure when the tank is opened.

704.7 Pumps. Pool pumps shall be tested and certified by a nationally recognized testing laboratory in accordance with UL 1081.

704.7.1 Cleanable strainer. Where a pressure-type filter is installed, a cleanable strainer or screen that captures materials such as solids, debris, hair and lint shall be provided upstream of the circulation pump.

704.7.2 Accessible pumps and motors. Pumps and motors shall be accessible for inspection and service in accordance with the pump and motor manufacturer’s instructions.

704.7.3 Pump shutoff valves. An accessible means of shut off of the suction and discharge piping for the pump shall be provided for maintenance and removal of the pump.

704.8 Outlets and return inlets. Outlets or suction outlets and return inlets shall be provided and arranged to produce...
uniform circulation of water so that sanitizer residual is maintained throughout the pool. Where installed, submerged suction outlets shall conform to APSP 16.

704.9 Surface skimmer systems. The surface skimming system provided shall be designed and constructed to skim the pool surface when the water level is maintained between the minimum and maximum fill level of the pool.

704.9.1 Coverage where used as a sole outlet. Where surface skimmers are used as the only pool water outlet system, not less than one skimmer shall be provided for each 800 square feet (74.3 m²), or fraction thereof, of the water surface area.

704.9.2 Coverage where used in combination with other outlets. Where surface skimmers are not the only outlet for pool water, they shall be considered to cover only that fraction of the 800 square feet (74.3 m²).

704.9.3 Location and venting. Skimmers shall be equipped with a vent that serves as a vacuum break.

SECTION 705
SAFETY SIGNS

705.1 Signs to be installed prior to final inspection. Safety signage such as “NO DIVING” signs and other safe use instruction signs that are provided by the pool and ladder manufacturer shall be posted in accordance with the manufacturer’s instructions prior to final inspection.

705.2 Safety signs for ladders. Safety signage for ladders shall be in accordance with Sections 705.2.1 through 705.2.3.2.

705.2.1 A-frame ladders. Safety signage for A-frame ladders shall be in accordance with Sections 705.2.1.1 through 705.2.1.4.1. The words on the signage shall be readable by persons standing in the pool and standing outside of the pool as applicable for the required location of each sign.

705.2.1.1 No diving warning. A-frame ladders shall have the following words posted on the in-pool side of the ladder and on the pool entry side of the ladder: “NO DIVING.” The location of the words shall be above the elevation of the design water level of the pool.

705.2.1.2 Entrapment warning. A-frame ladders shall have the following words posted on the pool side of the ladder: “TO PREVENT ENTRAPMENT OR DROWNING DO NOT SWIM THROUGH, BEHIND, OR AROUND LADDER.”

705.2.1.3 Type A, A-frame ladders. Type A double access A-frame ladders shall have the following words posted on the ladder: “REMOVE AND SECURE LADDER WHEN POOL IS NOT OCCUPIED.”

705.2.1.4 Type B, A-frame ladders. Type B limited access A-frame ladders shall have the following words posted on the ladder: “SECURE LADDER WHEN POOL IS NOT OCCUPIED.”

705.2.1.4.1 Swing up or slide up secured ladders. Type B limited access A-frame ladders that utilize swing-up or slide-up sections for limiting access to the pool shall have the following words posted on the ladder as applicable for the type of securing method:

1. “WHEN POOL IS NOT OCCUPIED, SWING UP AND SECURE.”
2. “WHEN POOL IS NOT OCCUPIED, LIFT OFF.”
3. “WHEN POOL IS NOT OCCUPIED, SLIDE UP AND SECURE.”

705.2.2 Type C staircase ladders. Type C staircase ladders that swing up to limit access to the pool or that are removed to limit access to the pool shall have the following words posted on the ladder: “WHEN NOT IN USE SWING UP AND SECURE OR REMOVE.”

705.2.3 Type D in-pool ladder. Safety signage for Type D in-pool ladders shall be in accordance with Sections 705.2.3.1 and 705.2.3.2. The words on the signage shall be readable by persons standing in the pool or standing outside the pool as applicable for the required location of each sign.

705.2.3.1 No diving warning. Type D in-pool ladders shall have the following words posted on the in-pool side of the ladder and on the pool entry side of the ladder: “NO DIVING.” The location of the words shall be above the elevation of the design water level of the pool.

705.2.3.2 Entrapment warning. Type D in-pool ladders shall have the following words posted on the ladder: “WARNING: TO PREVENT ENTRAPMENT OR DROWNING, DO NOT SWIM THROUGH, BEHIND, OR AROUND LADDER.”
CHAPTER 8
PERMANENT INGROUND RESIDENTIAL SWIMMING POOLS

SECTION 801
GENERAL

801.1 Scope. The provisions of this chapter shall govern permanent inground residential swimming pools. Permanent inground residential swimming pools shall include pools that are partially or entirely above grade. This chapter does not cover pools that are specifically manufactured for aboveground use and that are capable of being disassembled and stored. This chapter covers new construction, modification and repair of inground residential swimming pools.

801.2 General. Permanent inground residential pools shall comply with the requirements of Chapter 3.

SECTION 802
DESIGN

802.1 Materials of components and accessories. The materials of components and accessories used for permanent inground residential swimming pools shall be suitable for the environment in which they are installed. The materials shall be capable of fulfilling the design, installation and the intended use requirements in the International Residential Code.

802.2 Structural design. The structural design and materials shall be in accordance with the International Residential Code.

SECTION 803
CONSTRUCTION TOLERANCES

803.1 Construction tolerances. The construction tolerance for dimensions for the overall length, width and depth of the pool shall be ±3 inches (76 mm). The construction tolerance for all other dimensions shall be ±2 inches (51 mm), unless otherwise specified by the design engineer.

SECTION 804
DIVING WATER ENVELOPES

804.1 General. The minimum diving water envelopes shall be in accordance with Table 804.1 and Figure 804.1. Negative construction tolerances shall not be applied to the dimensions of the minimum diving water envelopes given in Table 804.1.

SECTION 805
WALLS

805.1 General. Walls in the shallow area and deep area of the pool shall have a wall-to-floor transition point that is not less than 33 inches (838 mm) below the design waterline. Above the transition point, the walls shall be within 11 degrees (0.19 rad) of vertical.

SECTION 806
OFFSET LEDGES

806.1 Maximum width. Offset ledges shall be not greater than 8 inches (203 mm) in width.

806.2 Reduced width required. Where an offset ledge is located less than 42 inches (1067 mm) below the design waterline, the width of such ledge shall be proportionately less than 8 inches (203 mm) in width so as to fall within 11 degrees of vertical as measured from the top of the design waterline.

SECTION 807
POOL FLOORS

807.1 Floor slopes. Floor slopes shall be in accordance with Sections 807.1.1 through 807.1.3.

807.1.1 Shallow end. The slope of the floor from the beginning of the shallow end to the deep area floor slope transition point, indicated in Figure 804.1 as Point E to

<table>
<thead>
<tr>
<th>POOL TYPE</th>
<th>MINIMUM DEPTHS AT POINT FEET-INCHES</th>
<th>MINIMUM WIDTHS AT POINT FEET-INCHES</th>
<th>MINIMUM LENGTHS BETWEEN POINTS FEET-INCHES</th>
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<tr>
<td>V</td>
<td>8-6</td>
<td>9-0</td>
<td>5-0</td>
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</table>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. The minimum length between points C and D varies based on water depth at point D and the floor slope between points C and D.
b. See Figure 804.1 for location of points.

2015 INTERNATIONAL SWIMMING POOL AND SPA CODE™
Point D, shall not exceed 1 unit vertical in 7 units horizontal.

807.1.2 Shallow to deep transition. The shallow to deep area floor slope transition point, indicated in Figure 804.1 as Point D, shall occur at a depth not less than 33 inches (838 mm) below the design waterline and at a point not less than 6 feet (1829 mm) from the beginning of the shallow end, indicated in Figure 804.1 as Point E, except as specified in Section 809.7.

807.1.3 Deep end. The slope of the floor in the deep end, indicated in Figure 804.1 as Point B to Point D, shall not exceed a slope of 1 unit vertical in 3 units horizontal (33 percent slope).

807.2 Shallow end water depths. The design water depth as measured at the shallowest point in the shallow area shall be not less than 33 inches (838 mm) and not greater than 4 feet (1219 mm). Shallow areas designed in accordance with Sections 809.6, 809.7 and 809.8 shall be exempt from the minimum depth requirement.

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE 804.1 MINIMUM DIVING WATER ENVELOPE
SECTION 808
DIVING EQUIPMENT
808.1 Manufactured and fabricated diving equipment. Manufactured and fabricated diving equipment shall be in accordance with this section. Manufactured and fabricated diving equipment and appurtenances shall not be installed on a Type O pool.

808.2 Manufactured diving equipment. Manufactured diving equipment shall be designed for swimming pool use.

808.3 Installation. Where manufactured diving equipment is installed, the installation shall be located in the deep area of the pool so as to provide the minimum dimensions as shown in Table 804.1 and shall be installed in accordance with the manufacturer’s instructions.

808.4 Labeling. Manufactured diving equipment shall have a permanently affixed label indicating the manufacturer’s name and address, the date of manufacture, the minimum diving envelope and the maximum weight limitation.

808.5 Slip resistant. Diving equipment shall have slip-resistant walking surfaces.

808.6 Point A. For the application of Table 804.1, Point A shall be the point from which all dimensions of width, length and depth are established for the minimum diving water envelope. If the tip of the diving board or diving platform is located at a distance of WA or greater from the deep end wall and the water depth at that location is equal to or greater than the water depth requirement at Point A, then the point on the water surface directly below the center of the tip of the diving board or diving platform shall be identified as Point A.

808.7 Location of pool features in a diving pool. Where a pool is designed for use with diving equipment, the location of steps, pool stairs, ladders, underwater benches, special features and other accessory items shall be outside of the minimum diving water envelope as indicated in Figure 322.2.

808.8 Stationary diving platforms and diving rocks. Stationary diving platforms and diving rocks built on-site shall be permitted to be flush with the wall and shall be located in the diving area of the pool. Point A shall be in front of the wall at the platform or diving rock centerline.

808.9 Location. The forward tip of manufactured or fabricated diving equipment shall be located directly above Point A as defined by Section 808.6.

808.10 Elevation. The maximum elevation of a diving board above the design waterline shall be in accordance with the manufacturer’s instructions.

808.11 Minimum water envelope. Manufactured diving equipment installation and use instructions shall be provided by the diving equipment manufacturer and shall specify the minimum water dimensions required for each diving board and diving stand combination. The board manufacturer shall indicate the water envelope type by dimensionally relating their products to Point A on the water envelopes as shown in Figure 804.1 and Table 804.1. The board manufacturer shall specify which boards fit on the design pool geometry types as indicated in Table 804.1.

808.12 Platform height above waterline. The height of a stationary diving platform or a diving rock above the design waterline shall not exceed the dimensions in Table 808.12.

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<th>POOL TYPE</th>
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<tr>
<td>IV</td>
<td>60</td>
</tr>
<tr>
<td>V</td>
<td>69</td>
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</table>

For SI: 1 inch = 25.4 mm.

808.13 Headroom above the board. The diving equipment manufacturer shall specify the minimum headroom required above the board tip.

SECTION 809
SPECIAL FEATURES
809.1 Slides. Slides shall be installed in accordance with the manufacturer’s instructions.

809.2 Entry and exit. Pools shall have a means of entry and exit in all shallow areas where the design water depth of the shallow area at the shallowest point exceeds 24 inches (610 mm). Entries and exits shall consist of one or a combination of the following: steps, stairs, ladders, treads, ramps, beach entries, underwater seats, benches, swimouts and other approved designs. The means of entry and exit shall be located on the shallow side of the first slope change.

809.3 Secondary entries and exits. Where water depth in the deep area of a pool exceeds 5 feet (1524 mm), a means of entry and exit shall be provided in the deep area of the pool.

809.4 Over 30 feet in width. Pools over 30 feet (9144 mm) in width at the deep area shall have an entry and exit on both sides of the deep area of the pool.

809.5 Pool stairs. The design and construction of stairs into the shallow and recessed pool stairs shall conform to Sections 809.5.1 through 809.5.3.

809.5.1 Tread dimension and area. Treads shall have a minimum unobstructed horizontal depth of 10 inches (254 mm) and a minimum unobstructed surface area of 240 square inches (0.15 m²).

809.5.2 Riser heights. Risers, other than the top and bottom riser, shall have a uniform height of not greater than 12 inches (305 mm). The top riser height shall be any dimension not exceeding 12 inches (305 mm). The bottom riser height shall be any dimension not exceeding 12 inches (305 mm). The top and bottom riser heights shall not be required to be equal to each other or equal to the uniform riser height. Riser heights shall be measured at the horizontal centerline of the stairs.

809.5.3 Additional steps. In design water depths exceeding 48 inches (1219 mm), additional steps shall not be required.
809.6 Beach and sloping entries. The slope of beach and sloping entries used as a pool entrance shall not exceed 1 unit vertical in 7 units horizontal (14-percent slope).

809.7 Steps and sloping entries. Where steps and benches are used in conjunction with sloping entries, the vertical riser distance shall not exceed 12 inches (305 mm). For steps used in conjunction with sloping entries, the requirements of Section 809.6 shall apply.

809.8 Architectural features. Surfaces of architectural features shall not be required to comply with the 1 unit vertical in 7 units horizontal (14-percent slope) slope limitation.

809.9 Maximum depth. The horizontal surface of underwater seats, benches and swimouts shall be not greater than 20 inches (508 mm) below the design waterline.

SECTION 810
CIRCULATION SYSTEMS

810.1 Turnover rate. The circulation system equipment shall be sized to provide a turnover of the pool water not less than once every 12 hours. The system shall be designed to provide the required turnover rate based on the manufacturer's specified maximum flow rate of the filter, with a clean media condition of the filter.

810.2 Strainer required. Pressure filter systems shall be provided with a strainer located between the pool and the circulation pump.

SECTION 811
SAFETY FEATURES

811.1 Rope and float. In pools where the point of first slope break occurs, a rope and float assembly shall be installed across the width of the pool. The rope assembly shall be located not less than 1 foot (305 mm) and not greater than 2 feet (610 mm) towards the shallow side of the slope break. Rope anchoring devices shall be permanently attached to the pool wall, coping or deck. Rope ends shall attach to the rope anchor devices so that the rope ends can be disconnected from the rope anchor device.
Electrical Guidelines For Above Ground Pools

1- A GFCI protect convenience receptacle is needed 6' to 20' from the pool and should be connected to a general purpose circuit (not the pump circuit.) It must have an in-use cover if installed in a wet location. All receptacles 6’ to 20’ from the pool shall have GFCI protection.

2- No receptacles are allowed within 6’ of the pool.

3- Pool pump receptacle shall be a 20-amp single receptacle (if installed 6’ to 10’ from the pool) and must be GFCI protected with an in-use cover if installed in a wet location. It should be securely fastened, usually to a 4x4 pressure treated post or other structure.

4- Conduit for the pool pump shall have a minimum cover of 18” of dirt or fill on top of the conduit.

5- Pool pump receptacle feed wires shall be individual conductors in rigid conduit (PVC or GRC.) Black, white and green #12 THHN/THWN.

6- The pool pump shall have a maximum 3’ cord (12 gauge) with a plug factory installed.

7- If a new sub-panel is installed to supply power to the pool equipment, it must have feeders that run in conduit with an insulated ground wire.

8- No overhead lines can be within 10’ horizontally of the walls of the pool. There are also other restrictions to the height of wires which may apply.

9- Bonding – An equipotential plane must be installed. It may be a #8 bare solid copper conductor run around the perimeter of the pool. It must be 18”-24” from the water’s edge and 4”-6” below grade. This must be attached to the pool in four locations. The pump, water and any other metal within 5’ of the pool must also be bonded to the equipotential plane. Bonding connections shall be stainless steel, brass, copper or copper alloy.

GFCI = Ground Fault Circuit Interrupter

Please note: These are guidelines to help. ALL current codes and regulations must be followed, even if not listed on this sheet.
APPLICATION FOR PLAN EXAMINATION AND BUILDING PERMIT

Borough of Northampton
1401 Laubach Avenue
Northampton, PA 18067 — Phone 610-262-1433

I. LOCATION OF BUILDING

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<td>(STREET)</td>
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<td>AND</td>
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<td>(CROSS STREET)</td>
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II. TYPE AND COST OF BUILDING — All applicants complete Parts A – D

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<td>Alteration (See 2 above)</td>
<td>Repair, replacement</td>
<td>Wrecking (If multifamily residential, enter number of units in building in Part D, 13)</td>
<td>Moving (relocation)</td>
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B. OWNERSHIP

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C. COST

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<td>c. Heating, air conditioning</td>
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D. PROPOSED USE — For "Wrecking" most recent use

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<td>Transient hotel, motel, or dormitory – Enter number of units</td>
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III. SELECTED CHARACTERISTICS OF BUILDING — For new buildings and additions, complete Parts E – L; for wrecking, complete only Part J, for all others skip to IV.

E. PRINCIPAL TYPE OF FRAME

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K. NUMBER OF OFF-STREET PARKING SPACES

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L. RESIDENTIAL BUILDINGS ONLY

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<tr>
<td></td>
<td>Number of bedrooms</td>
<td>Number of bathrooms</td>
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52. Outdoors

54. Number of bathrooms { Full... Partial...}
CO detectors must be installed in all new residential buildings that must comply with the IRC 2009 and that use fuel-fired appliances or have attached garages. CO detectors are also required in existing residential buildings that use fuel-fired appliances or have attached garages, whenever work will be done that requires a UCC building permit.
IV. IDENTIFICATION – To be completed by all applicants

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<td>2. Contractor</td>
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<tr>
<td>3. Architect or Engineer</td>
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The owner of this building and the undersigned agree to conform to all applicable laws of this jurisdiction.

Signature of applicant: ___________________________ Address: ___________________________ Application date: ___________________________

DO NOT WRITE BELOW THIS LINE

V. PLAN REVIEW RECORD – For office use

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VI. ADDITIONAL PERMITS REQUIRED OR OTHER JURISDICTION APPROVALS

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VII. VALIDATION

Building Permit number ___________________________

Building Permit issued ___________________________ 19 ___________

Building Permit Fee $ ___________________________

Approved by: ___________________________

______________________________

TITLE
### VIII. ZONING PLAN EXAMINERS NOTES

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<td>Notes</td>
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### IX. SITE OR PLOT PLAN - AND STRUCTURAL DRAWINGS AND/OR INFORMATION

![Site Plan Diagram]

Rev. 4/87
TO: Contractors and Subcontractors

FROM: Anthony Lopsonzski, Jr., President of Council
Northampton Borough

RE: Workers’ Compensation Reform Act 44 of 1993

EFFECTIVE SEPTEMBER 1, 1993, the Borough of Northampton will no longer issue a building permit to a contractor, subcontractor or resident (i.e., plumber, electrician, mason, HVAC) who has not demonstrated current coverage and compliance with the requirements of Act 44 by filing with the Zoning Office one of the following:

1. Certificate of Insurance issued by your insurance carrier as proof of Workers’ Compensation insurance for your employees; or

2. Certification of self-insurance from the Department of Labor and Industry; or

3. A notarized affidavit of exemption from Workers’ Compensation insurance stating you will not hire any employees to work on the construction project; or

4. Register via company letterhead or bill head, including address and phone number (Post Office Box IS NOT Acceptable) your Federal or State Identification Number.

Borough resident and/or homeowner please note: If resident and/or homeowner will be performing the work, they must file a notarized affidavit of exemption from Workers’ Compensation insurance stating that they will not hire/employ any individual, or subcontract any work on the construction project.

Should resident and/or homeowner later choose or be forced to subcontract work to comply with the building code, it is the responsibility of the resident to see that the subcontractor comply with the regulations as outlined above.

Under Section 302 of Act 44, every building permit issued by the Borough to a contractor, subcontractor or resident shall clearly set forth one of the following:

1. Name and Workers’ Compensation policy number and the contractor’s and/or subcontractor’s Federal or State Employer Identification Number.
2. Contractor’s Federal or State Employer Identification number and the substance of the affirmation that the applicant is not permitted to employ any individual to perform work pursuant to the building permit.

3. Resident and/or homeowner’s notarized affirmation that he will not employ any individual to perform work pursuant to the building permit.

These certifications shall be filed with the Borough’s copy of the building permit. Upon issuance of a building permit, the Borough will be named as a WC policy certificate holder. The issuer of the policy, your insurance carrier, must inform the municipality within three (3) working days of any change in or termination of coverage.

If the Borough received notice that you have had coverage terminated, lost state-approved self-insurance status, or employed persons without providing coverage, the Borough must and will, under Section 302 (e)(4) issue a stop work order. The stop work order may not be lifted until the contractor and/or subcontractor re-obtains proper coverage.

The Council realizes the impact this Act will have upon contractors, subcontractors and residents and for this reason suggest you:

1. Notify Workers’ Compensation insurance carrier that a certificate of insurance should be forwarded to the Borough of Northampton, Zoning Office, at the address noted above, at the same time you should register via company letterhead or bill head (which includes address and telephone number - Post Office Box is NOT acceptable), with the Zoning Office your Federal or State Employer Identification Number;

2. Provide certification of self-insurance from the Department of Labor and Industry, at the same time you should register via company letterhead or bill head (which includes address and telephone number - Post Office Box is NOT acceptable), with the Zoning Office your Federal or State Employer Identification Number;

3. Notify frequently used subcontractors to follow the same steps, providing the Borough with the information and data required.

These certificates, certifications and affidavits along with Federal and State Identification Numbers will be filed alphabetically in the Zoning Office and need only be updated when there is a change of address, insurance coverage, insurance companies or notification by insurance company expiration or cancellation.

Nothing in the Workers’ Compensation shall be the basis of any liability on the part of the Borough. It is not the Borough’s responsibility to notify you that your insurance has expired or been cancelled, nor shall the Borough incur liability for any damages which may result from the issuance of the stop work order.

It is in your best interest that we have taken the initiative to notify you of the requirements of the Act and to provide you with a means to comply so as not to interrupt, delay or cause financial hardship and yet effectively and efficiently achieve the goals of the Act with regard to employee coverage for work-related illness or injuries.
WORKERS’ COMPENSATION AFFIDAVIT

I, ......................................................, do solemnly

(PLEASE PRINT AND SIGN NAME)

swear that I will not employ/hire any other persons for the project(s) for which I am seeking a building permit.

After receipt of the building permit, if I employ any other persons, I must notify the Borough Office and provide proof of Workers’ Compensation coverage within three (3) working days.

I understand that failure to comply will result in a stop-work order and that such order may not be lifted until proper coverage is obtained, as provided by Section 302(e)(4) of the Act of June 2, 1915 (P.L.736), known as The Pennsylvania Workmens’ Compensation Act, reenacted and amended June 21, 1939 and amended December 5, 1974, and amended July 2, 1993. (P.L. ...).

Subscribed and sworn to before this __________ day of ________________________, 20____.

(Signature of Notary Public) ...................................................... My commission expires
**APPLICATION FOR ZONING PERMIT**

**BOROUGH OF NORTHAMPTON**
1401 Laubach Avenue; P. O. Box 70
Northampton, PA 18067
Phone: 610-262-1433

Application No.

The undersigned applies for a Zoning Permit for the following use, said permit to be issued on the basis of the information contained within this application. The applicant hereby certifies that all information and attachments to this application are true and correct. This applicant is required, in addition to the information requested on this form, to submit plans drawn to scale, showing the actual dimensions and shape of the lot, exact sizes and locations of existing buildings on the lot, and the location and dimensions of the proposed buildings or alterations.

1. Locational Description (address where work will be done)

2. Name of Owner
   Mailing Address
   Home Phone Number Work Phone Number
   Name of Tenant or Applicant
   Mailing Address
   Home Phone Number Work Phone Number

3. Existing Use

4. Property Presently Zoned As

5. Proposed Use:
   - New Construction
   - Remodeling
   - Accessory Building
   - Residence No. Of Units
   - Pool (size) (Ground Fault Interrupter Must Be Installed For All Pools)
   - Business*
   - Industry
   - Sign Size
   - Other (explain)
6. Percentage Of Lot To Be Occupied_____________%

7. Lot Width_____________ Lot Depth_____________ Lot Area_____________

8. Square Feet Of Living Area (Residence)_____________

9. Square Feet In Garage_____________

10. Square Feet Of Commercial_____________ Industrial_____________ Office_____________

11. Building Dimensions - Stories___________ Width___________ Length___________

12. Yard Dimensions - Front___________ Rear___________

   One Side___________ Sum Of Side Yards___________

13. Accessory Building Dimensions - Height___________ Width___________ Length___________

   Side Yard Setbacks___________ ft. and___________ ft. Rear Yard Setback___________ ft.

14. Number Of Off-Street Parking Spaces To Be Provided___________

15. Number Of Off-Street Loading Berths To Be Provided___________

16. On a separate sheet of paper attach a list of other supplemental requirements or conditions that will be met, or explain any points you feel need clarification.

NOTE: This permit shall be void if work is not started within one (1) year.

This permit is only valid for one year from the date of issuance.

Signature_________________________________________ Date____________________________________

*Draw a sketch of what is proposed.*

*Provide a detailed description of operation and hours of business.*
APPLICATION FOR ELECTRICAL PERMIT

BOROUGH OF NORTHAMPTON
1401 Laubach Avenue
Northampton, PA 18067
610-262-1433

Date________________________

Permit Number________________

Location________________________________________

Owner Name_____________________________________

Owner Address____________________________________

Owner Phone Number______________________________

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<th>Type of Building</th>
<th>Used As</th>
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<th>Project Cost Estimate</th>
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(Circle One) New - Alteration - Repair - Addition

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<th>Item</th>
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<td>Switches</td>
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<td>Lighting Circuits</td>
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Contractor’s Name and Address________________________________________

________________________________________
Phone

All electrical work must be inspected by an authorized inspection agency who must forward inspection report to the Borough of Northampton.

Applicant certifies that all information given is correct and that all electrical work performed will comply with the ICC Electrical Code as adopted by the PA UCC.

Signature of Applicant

Signature of Approving/Issuing Officer 07/08