Items needing correction or clarification are marked by an "N" beside the appropriate section number of the Florida Administrative Code citation (Current 64E-9, FAC, or current FBC 454.1). We have left the 64E-9 requirements in this checklist because they are critical for public health and therefore the pool will be checked for these items by the County Health Department at the first operating permit inspection after the Building Official’s approval of the construction.

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| Compliance: | | Florida Building Code or Florida Administrative Code Section: | | Details: |
| **IWF SPECIFIC REGULATIONS** | | | |
| YNN/A | 454.1.9.8.1 | Water discharged from fountains or features shall flow by gravity through main drain fitting(s) to a collection system that flows into a collector tank. | |
| YNN/A | 454.1.9.8.1 | The minimum size of the collector tank shall be equal to the volume of 3 minutes of the combined flow of all feature pumps and the filter pump. Smaller tanks may be utilized if hydraulically justified by the design engineer. | |
| YNN/A | 454.1.9.8.1 | Adequate access shall be provided to the sump or collector tank. Stairs or a ladder shall be provided as needed to ensure safe entry into the tank. | |
| YNN/A | 454.1.9.8.3 | Chemical feeders shall be in accordance with Section 454.1.6.5 except that the disinfection feeder shall be capable of feeding 12 ppm of free chlorine to the pressure side of the recirculation system or the collector tank (based upon a hypothetical 30-minute turnover of the contained volume within the system). | |
| Y☐N☐N/A☐ | 64E-9.008(10) (e) | Feeders feeding chlorinated isocyanurates (stabilized chlorine) are prohibited. | |
| YNN/A | 454.1.9.8.3 | Automated Oxidation Reduction Potential (ORP) and pH Controllers shall be provided. | |
| YNN/A | 454.1.9.8.4 | If night operation is proposed, 6 fc (60 lux) of light shall be provided on the pool deck and the water feature area. | |
| YNN/A | 454.1.9.8.4 | Lighting that may be exposed to the feature pool water shall not exceed 15 volts, shall be installed in accordance with manufacturer’s specifications and be approved for such use by UL or NSF. | |
| YNN/A | 454.1.9.8.5 | All electrical work shall comply with Chapter 27 of the FBC, Building | |
| YNN/A | 454.1.9.8.6 | IWF recirculation rate is based off a maximum turnover rate of 30 minutes. | |
| YNN/A | 454.1.9.8.6.1; 64E-9.008(10) | All (100%) of the water from the collector tank must be first filtered, treated with disinfectant and pH adjustment chemicals, and then final treatment provided by an NSF Standard 50-2012 certified UV disinfection unit with a minimum 40 mJ/cm2 dose before any of this treated water is piped to the water features. | |
| YNN/A | 454.1.9.8.6.2 | In the design above (454.1.9.8.6.1) and the alternative below: excess water not required by the water features shall be returned to the collector tank; the recirculation system shall be sized to treat the contained volume of water based upon a 30 minute turnover with a chlorine feeder/generator capable of producing a dosage of at least 12ppm; and the UV disinfection equipment shall be electrically interconnected such that whenever it fails to produce the required UV dosage, the water spray features pump(s) and flow will be immediately stopped. | |
| YNN/A | 454.1.9.8.6.3 | In lieu of Section 454.1.9.8.6.1, the recirculation system must be designed to continuously return 100% of the water to the collector tank after all (100%) of the water is first filtered, treated with disinfectant and pH adjustment chemicals, and the final treatment provided by a validated UV disinfectant unit described in Section 454.1.6.5.16.6 before any of this treated water is piped to the water features. | |
| YNN/A | 454.1.9.8.6.4 | The flow rate through the feature nozzles of the water features shall be such as not to harm the patrons and shall not exceed 20’ per second (6096 mm/s) unless justified by the design engineer and by the fountain system manufacturer. | |
| YNN/A | 454.1.9.8.6.5 | Automatic level controller is provided. | |
| Y☐N☐N/A☐ | 64E-9.008(10) (e)1 | An automatic skimmer system shall be maintained **if** provided in the collector tank. A variable height skimmer may be used or a custom surface skimmer device may be substituted. | |
| YNN/A | 454.1.9.8.6.6 | An overfill waste line with air gap shall be provided. | |
| YNN/A | 454.1.9.8.6.7 | Means of vacuuming and completely draining collector tank(s) is provided. | |
| YNN/A | 454.1.9.8.6.9 | IWFs shall be fenced in the same fashion as wading pools as noted in Section 454.1.7.7. Where the IWF is at least 50’ (15 240 mm) from all other pools and is not designed to have any standing water, fencing requirements should be carefully considered by the applicant to control usage, but are not required by rule. *NOTE: Gates should open inward to the IWF to prevent small children from being able to leave the fenced IWF area if gate is left unlatched.* | |
| YNN/A | 454.1.9.8.6.10 | A minimum 4’ wide (1219 mm) wet deck area shall be provided around all IWFs. The wet deck shall meet the requirements of Section 454.1.2.2.3; however, up to 50% of the perimeter may be obstructed. | |
| YNN/A | 454.1.9.8.6.11 | IWF is constructed of concrete or other impervious and structurally rigid material. | |
| YNN/A | 454.1.9.8.6.12 | Floor slopes of an IWF shall be a maximum 1’ (305 mm) vertical in 10’ (3048 mm) horizontal and a minimum of 1’ (305 mm) vertical in 50’ (15240 mm) horizontal. | |
| YNN/A | 454.1.9.8.6.13 | In addition to the requirements of Section 454.1.2.3.5, all IWF pool rule signs installed shall have the following added in one inch letters:  DO NOT SWALLOW THE FOUNTAIN WATER, IT IS RECIRCULATED.  DO NOT USE FOUNTAIN IF YOU ARE ILL WITH DIARRHEA. | |
| YNN/A | 454.1.9.1 | All water recreation attractions shall be designed within the limits of sound engineering practice. In addition to the requirements of this section, compliance is required with Sections 454.1.1 through 454.1.6.5 of this chapter depending upon the pool design and function. | |
| **GENERAL REQUIREMENTS NOT IWF SPECIFIC** **(THESE ITEMS MUST BE REVIEWED BUT MAY NOT BE APPLICABLE TO ALL)** | | | |

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| YNN/A | 514.031(1)(a) | Plans review fees received as required by Florida Statute 514.031(1)(a) |
| YNN/A | 514.031(1)(a) | A current version of application (DH 4159, version 9/2015) for approval of swimming pool plans received. |
| YNN/A | 514.031(1)(a) | A set of signed and sealed engineering plans received (proper size). |
| YNN/A | 454.1.9.3.6 | Play features with an overhead clearance of less than 4’ (1219 mm) shall be blocked or barricaded to preclude children becoming entrapped. |
| YNN/A | 64E-9.008(13) | When climbable structures are planned, a lifeguard and/or safety plan is submitted. |
| YNN/A | 454.1.1.1 | Bathing load: If the pool is not a spa pool, the bathing load is computed on the basis of 1 person per each 5 gpm of water recirculated (must be continuously recirculating flow i.e. flowrate while features are not operating). |
| YNN/A | 64E-9.008(9)(a) | The bathing load will be posted at the pool as required in the bathing rules. |
| YNN/A | 454.1.2.3.5 | The lettering for the pool rules sign is at least 1" high (25.4 mm). |
| YNN/A | 454.1.2.3.5 | The following rules will be posted at or near poolside and will be legible from pool deck:  1. NO FOOD OR BEVERAGES IN POOL OR ON POOL WET DECK.  2. NO GLASS OR ANIMALS IN THE FENCED POOL AREA (OR 50 FEET (15 240 MM) FROM UNFENCED POOL).  3. BATHING LOAD: \_\_\_ PERSONS.  4. POOL HOURS: \_\_ A.M. TO \_\_ P.M.  5. SHOWER BEFORE ENTERING.  6. DO NOT SWALLOW THE POOL WATER. (THIS STATEMENT SHALL BE ADDED TO SIGNS AT POOLS THAT CONDUCT ALTERATIONS AS THAT TERM IS DEFINED.) |
| YNN/A | 454.1.3.1.1 | Pool wet decks shall be constructed of concrete or other nonabsorbent material having a smooth slip-resistant finish. Wet deck area finishes shall be designed for such use and shall be installed in accordance with the manufacturer’s specifications. Wooden decks and walkways are prohibited. |
| YNN/A | 454.1.3.1.2 | Indoor and outdoor pool deck has a minimum 2% and maximum 4% uniform slope away from pool or to deck drains. (**Exception:** Plunge pool deck slopes toward pool.) |
| YNN/A | 454.1.3.1.2 | Textured deck finishes that provide pitting and crevices of more than 3/16” (4.8 mm) deep that accumulate soil are prohibited. |
| YNN/A | 454.1.3.1.2 | If settling or weathering occurs that would cause standing water, the original slopes shall be restored or corrective drains installed. |
| YNN/A | 454.1.3.1.3 | Pool deck has unobstructed area with minimum 4' (1219 mm) width around perimeter of pool, handrail & ladder anchors, diving boards/towers, and slides. |
| YNN/A | 454.1.3.1.4 | Traffic barriers provided to prevent obstruction of deck by vehicles (where applicable). |
| YNN/A | 454.1.3.1.5 | Hose bibb with vacuum breaker is provided to wash deck with potable water. |
| YNN/A | 454.1.3.1.5 | Walkways shall be provided between the pool and the sanitary facilities, and shall be constructed of concrete or other nonabsorbent material having a smooth slip-resistant finish for the first 15’ (4572 mm) of the walkway measured from the nearest pool water’s edge. |
| YNN/A | 454.1.3.1.7 | There is no provision for drink or food serving facilities within 12’ (3658 mm) of the water’s edge. |
| YNN/A | 454.1.3.1.8 | The vertical clearance above the pool deck is at least 7'. |
| YNN/A | 454.1.3.1.9 | A latched, lockable gate shall be placed in the fence within 10’ (3048 mm) of the closest point between the pool and the equipment area for service access. |
| YNN/A | 454.1.3.3.4 | A room or space shall be provided for chemicals to be stored in a cool, dry, and well-ventilated area under a roof and the area shall be inaccessible to the public. |
| YNN/A | 454.1.4.1 | Electrical equipment wiring and installation, including the bonding and grounding of pool components shall comply with Chapter 27 of the Florida Building Code, Building |
| YNN/A | 454.1.5.1 | Equipment designated by the manufacturer for outdoor use may be located in an equipment area, all other equipment must be located in an equipment room or enclosure. |
| YNN/A | 454.1.5.1 | An equipment area shall be surrounded with a fence at least 4’ (1219 mm) high on all sides not confined by a building or equivalent structure. A self-closing and self-latching gate with a permanent locking device shall be provided if necessary for access. (Reminder 454.1.3.1.9: A latched, lockable gate shall be placed in the fence within 10’ (3048 mm) of the closest point between the pool and the equipment area for service access.) |
| YNN/A | 454.1.5.1 | An equipment room shall be protected on at least three sides and overhead. Any fence or gate installed shall use members spacing that shall not allow passage of a 4” (102 mm) diameter sphere. The fourth side may be a gate, fence, or open if otherwise protected from unauthorized entrance. |
| YNN/A | 454.1.5.1 | An equipment enclosure shall be lockable or otherwise protected from unauthorized access. |
| YNN/A | 454.1.5.2 | Indoor Equipment: Equipment not designated by the manufacturer for outdoor use shall be located in an equipment room. An equipment room shall be protected on at least three sides and overhead. The fourth side may be a gate, fence or open if otherwise protected from unauthorized entrance. |
| YNN/A | 454.1.5.3 | The equipment enclosure, area or room floor shall be of concrete or other nonabsorbent material having a smooth slip-resistant finish and shall have positive drainage, including a sump pump if necessary. |
| YNN/A | 454.1.5.3 | Ancillary equipment, such as a heater, not contained in an equipment enclosure or room shall necessitate an equipment area as described above (454.1.5.1). |
| YNN/A | 454.1.5.4 | Equipment rooms shall have either forced draft or cross ventilation. |
| YNN/A | 454.1.5.4 | All below-grade equipment rooms shall have a stairway access with forced draft ventilation or a fully louvered door and powered intake within 6” (152 mm) of the floor. |
| YNN/A | 454.1.5.4 | Where stairway access is not necessary to carry heavy items into the below grade room or vault, a “ship’s ladder” may be used if specified by the design engineer who must consider anticipated workload including equipment removal; and the ladder slope, tread height and width; and construction material of the ladder. |
| YNN/A | 454.1.5.5 | The equipment room access is at least 3' x 6' (914 mm by 1829 mm) and shall provide easy access to the equipment. |
| YNN/A | 454.1.5.6 | The size of the equipment enclosure, room or area shall provide working space to perform routine operations. |
| YNN/A | 454.1.5.6 | The equipment room size and layout provides clearances for all equipment as prescribed by the manufacturer to allow normal maintenance and removal without disturbing other piping or equipment. |
| YNN/A | 454.1.5.6 | In rooms with fixed ceilings, the minimum height shall be 7’ (2137 mm). |
| YNN/A | 454.1.5.7 | The equipment room is lighted to provide a minimum 30 fc (300 lux) of illumination at floor level. |
| YNN/A | 454.1.5.8 | Equipment enclosures, rooms or areas shall not be used for storage of chemicals emitting corrosive fumes or for storage of other items to the extent that entrance to the room for inspection or operation of the equipment is impaired. |
| YNN/A | 454.1.5.9 | The equipment room is provided with a hose bibb with vacuum breaker. |
| YNN/A | 454.1.6.1 | The entry doors of all restrooms shall be located within a 200-foot (60 960 mm) walking distance of the nearest water’s edge of each pool served by the facilities. (**Exception**: Where a swimming pool serves only a designated group of residential dwelling units and not the general public, poolside sanitary facilities are not required if all living units are within a 200’ (60 960 mm) horizontal radius of the nearest water’s edge, are not over three stories in height unless serviced by an elevator, and are each equipped with private sanitary facilities.) |
| YNN/A | 454.1.6.1 | Restrooms: Pools with a bathing load larger than 40 persons shall provide separate sanitary facilities labeled for each sex. |
| YNN/A | 454.1.6.1 | Unisex restrooms: Swimming pools with a bathing load of 20 persons or less may utilize one unisex restroom. Unisex restrooms shall meet all the requirements for materials, drainage and signage as indicated in Sections 454.1.6.1.1 through 454.1.6.1.4. Each shall include a water closet, a diaper change table, a urinal and a lavatory. |
| YNN/A | 454.1.6.1 | Unisex Restrooms: Pools with bathing loads of 40 persons or less may utilize two unisex restrooms or meet the requirements of Table 454.1.6.1. Unisex restrooms shall meet all the requirements for materials, drainage and signage as indicated in Sections 454.1.6.1.1 through 454.1.6.1.4. Each shall include a water closet, a diaper change table, a urinal and a lavatory. Pools with a bathing load larger than 40 persons shall provide separate sanitary facilities labeled for each sex. |
| YNN/A | 454.1.6.1.1 | |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **TABLE 454.1.6.1** | | | | | | | **PUBLIC SWIMMING POOL—REQUIRED FIXTURE COUNT** | | | | | | | **SIZE OF POOL (square feet)** | **MEN’S RESTROOM** | | | **WOMEN’SRESTROOM** | | | **For SI: 1 FT2 = 0.0929 m2.** | **Urinals** | **WC** | **Lavatory** | **WC** | **Lavatory** | | 0 – 2,500 | 1 | 1 | 1 | 1 | 1 | | 2,501 – 5,000 | 2 | 1 | 1 | 5 | 1 | | 5,001 – 7,500 | 2 | 2 | 2 | 6 | 2 | | 7,501 – 10,000 | 3 | 2 | 3 | 8 | 3 | |
| YNN/A | 454.1.6.1.1 | Fixtures shall be provided as indicated on Table 454.1.6.1. The fixture count on this chart is deemed to be adequate for the pool and pool deck area that is up to three times the area of the pool surface provided. |
| YNN/A | 454.1.6.1.1 | When multiple fixture sets are required and separate facilities are provided for each sex, the fixtures used in ancillary family-style restrooms can be used to meet the requirements of this section. |
| YNN/A | 454.1.6.1.1 | **Exception**: When a public swimming pool meets all of the following conditions the following shall apply:  1.The pool serves only a designated group of dwelling units,  2.The pool is not for the use of the general public, and  3.A building provides sanitary facilities;  The fixture requirement for the building shall be determined and if it exceeds the requirement in Table 454.1.6.1 then the building requirement shall regulate the fixture count, otherwise the fixture count shall be based on the requirement for the pool. **Under no circumstances shall the fixture counts be cumulative.** |
| YNN/A | 454.1.6.1.1 | Pools greater than 10,000 FT² have one additional fixture set for each 7,500 FT² (697 m2) or major fraction thereof above 10,000 FT² (929 m2)., and meet 3:2 female/male ratio requirements provided for women as the combined total of water closets and urinals provided for men. Lavatory counts are equal. |
| YNN/A | 454.1.6.1.1 | One diaper changing table is provided at each restroom unless all pools restricted to adult use. (Swim diapers are recommended for use by children that are not toilet trained. Persons that are ill with diarrhea cannot enter the pool.) |
| YNN/A | 454.1.6.1.2 | Outside access to facilities shall be provided for bathers at outdoor pools. Where the restrooms are located within an adjacent building and the restroom doors do not open to the outside, the restroom doors shall be within 50’ (15 240 mm) of the building’s exterior door. |
| YNN/A | 454.1.6.1.2 | If the restrooms are not visible from any portion of the pool deck, signs shall be posted showing directions to the facilities. Directions shall be legible from any portion of the pool deck; letters shall be a minimum of 1” (25 mm) high. |
| YNN/A | 454.1.6.1.3 | Floors of sanitary facilities shall be constructed of concrete or other nonabsorbent materials, shall have a smooth, slip-resistant finish, and shall slope to floor drains |
| YNN/A | 454.1.6.1.3 | Sanitary facilities: There are no foot baths, carpet or duck boards on the floor. |
| YNN/A | 454.1.6.1.3 | The intersection between the floor and walls shall be coved where either floor or wall is not made of waterproof materials such as tile or vinyl. |
| YNN/A | 454.1.6.1.4 | A hose bibb with vacuum breaker is in or within 25’ (7620 mm) each restroom for ease of cleaning. |
| YNN/A | 454.1.6.2 | A minimum of one rinse shower shall be provided on the pool deck of all outdoor pools within the perimeter of the fence. |
| YNN/A | 454.1.6.3 | An atmospheric break or approved backflow prevention device shall be provided in each pool water supply line that is connected to a public water supply. |
| YNN/A | 454.1.6.3 | Vacuum breakers shall be installed on all hose bibbs. |
| YNN/A | 454.1.6.5.1; 64E-9.008(10) | Recirculation and treatment equipment such as filters, recessed automatic surface skimmers, ionizers, ozone generators, disinfection feeders and chlorine generators shall be tested and approved using the NSF/ANSI Standard 50, Circulation System Components and Related Materials for Swimming Pool, Spas/Hot Tubs, dated 2012, which is incorporated by reference. |
| Y☐N☐N/A☐ | 64E-9.004(5) | The pool recirculation system must be operated at all times when the pool is open for use. The recirculation system may be shut off three hours after the pool closes but must resume operation three hours before opening the pool. Shut down time must be controlled by a time clock. When a variable speed pump is used, the recirculation system shall be operated such that it achieves the equivalent of 6 hours of treatment at 100% design flowrate during the daily closed period, or at least one complete water volume turnover, whichever is greater. Exception: vacuum DE systems are excluded from this allowance. *NOTE: If multiple recirculation pumps are used the required flowrate, filtration, & chemical treatment must be maintained or the entire system shall not operate. Example: System must not be able to operate without one pump if the additional pumps are not able to maintain the proper flowrate, filtration, and chemical treatment (some type of audible alarming system audible may be employed to ensure requirement is met).* |
| YNN/A | 64E-9.004(1) | Pool makeup water supply is from an approved potable water system or meets those requirements with bacteriological/chemical reports to county health department. |
| YNN/A | 454.1.6.5.4 | The recirculation pump (when mounted above the water level of the pool) is specified as self-priming. |
| YNN/A | 454.1.6.5.4 | If the recirculation pump takes suction prior to filtration, the pump is specified with hair and lint strainer. |
| YNN/A | 454.1.6.5.5 | Filters are sized to handle the required recirculation flowrate. |
| YNN/A | 454.1.6.5.1; 64E-9.008(10) | D.E. type filters: Components and materials have been tested and approved using the NSF/ANSI Standard 50, Circulation System Components and Related Materials for Swimming Pool, Spas/Hot Tubs, dated 2012, which is incorporated by reference. |
| YNN/A | 454.1.6.5.4 | D.E. type filters: The recirculation pump provides 60' (18 288 mm) T.D.H. for pressure systems and 50' (15 240 mm) T.D.H. for vacuum systems. Note: Should the total dynamic head required not be appropriate for a given project, the design engineer shall provide an alternative. |
| YNN/A | 454.1.6.5.5.2.1 | D.E. Type filters: The filter is sized such that the filtration rate does not exceed 2 gpm/FT². |
| YNN/A | 454.1.6.5.5.2.1 | D.E. type filters: Pressure filter(s) are equipped with air relief valves, influent/effluent pressure gauges (2" minimum face diameter), and a sight glass in the waste line. |
| YNN/A | 454.1.6.5.5.2.2 | D.E. type filters: Vacuum filter systems shall be equipped with a vacuum gauge which has a 2” (51 mm) face and reads from 0–30 inches of mercury. |
| YNN/A | 454.1.6.5.5.2.3 | D.E. type filters: A precoat pot or collector tank is be provided. |
| YNN/A | 454.1.6.5.5.3 | The D.E.-type filter tank and elements shall be installed such that the recirculation flow draw down does not expose the elements to the atmosphere whenever only the main drain valve is open or only the surface overflow gutter system valve is open. |
| YNN/A | 454.1.6.5.5.3 | D.E. type filters: The filter area shall be determined on the basis of effective filtering surfaces with no allowance given for areas of impaired filtration, such as broad supports, folds, or portions which may bridge |
| YNN/A | 454.1.6.5.5.3 | D.E. type filters: Filter septa have a minimum 1" (25 mm) clear spacing between elements (up to 4 FT² (0.4 m2) effective area per septum) and the minimum spacing between elements is 1/8" (3 mm) larger for each additional square foot or fraction thereof of septum area over 4 FT² (0.4 m2). |
| YNN/A | 454.1.6.5.5.3 | D.E. type filters: Vacuum filter tank has coved intersections between the wall and the floor and the tank floor slopes to the filter tank drain. |
| YNN/A | 454.1.6.5.8 | D.E. type filters: The filter and vacuuming system shall have the necessary valves and piping to allow filtering to pool, vacuuming to waste, vacuuming to filter, complete drainage of the filter tank, backwashing for sand and pressure D.E.- type filters and precoat recirculation for D.E.-type filters. |
| YNN/A | 454.1.6.5.15 | D.E. type filters: Disposal of water from pools using D.E. powder shall be accomplished through separation tanks which are equipped with air bleed valves, bottom drain lines, and isolation valves, or through a settling tank with final disposal being acceptable to local authorities. D.E. separator tanks shall have a capacity as rated by the manufacturer, equal to the square footage of the filter system |
| YNN/A | 454.1.6.5.1; 64E-9.008(10) | Sand type filters: Components and materials have been tested and approved using the NSF/ANSI Standard 50, Circulation System Components and Related Materials for Swimming Pool, Spas/Hot Tubs, dated 2012, which is incorporated by reference. |
| YNN/A | 454.1.6.5.4 | Sand type filters: The recirculation pump provides 60' (18 288 mm) T.D.H. for pressure systems and 50' (15 240 mm) T.D.H. for vacuum systems. Note: Should the total dynamic head required not be appropriate for a given project, the design engineer shall provide an alternative. |
| YNN/A | 454.1.6.5.5.1 | Sand type filters: The filter is sized such that the filtration rate does not exceed 3 gpm/FT² for rapid sand filter or 15 gpm/FT² for high rate sand filters (or 20 if so rated by NSF). |
| YNN/A | 454.1.6.5.5.2.1 | Sand type filters: Pressure filter systems shall be equipped with an air relief valve, influent and effluent pressure gauges with minimum face size of 2” (51 mm) reading 0–60 psi (0–414 kPa), and a sight glass when a backwash line is required. |
| YNN/A | 454.1.6.5.5.2.2 | Sand type filters: Vacuum filter systems shall be equipped with a vacuum gauge which has a 2” (51 mm) face and reads from 0–30 inches of mercury. |
| YNN/A | 454.1.6.5.5.3 | Sand type filters: Vacuum filter tank has coved intersections between the wall and the floor and the tank floor slopes to the filter tank drain. |
| YNN/A | 454.1.6.5.8 | Sand type filters: The filter and vacuuming system shall have the necessary valves and piping to allow filtering to pool, vacuuming to waste, vacuuming to filter, complete drainage of the filter tank, backwashing for sand and pressure D.E.- type filters and precoat recirculation for D.E.-type filters. |
| YNN/A | 454.1.6.5.1; 64E-9.008(10) | Cartridge filters: Components and materials have been tested and approved using the NSF/ANSI Standard 50, Circulation System Components and Related Materials for Swimming Pool, Spas/Hot Tubs, dated 2012, which is incorporated by reference. |
| YNN/A | 454.1.6.5.4 | Cartridge type filters: The recirculation pump provides 60' (18 288 mm) T.D.H. for pressure systems and 50' (15 240 mm) T.D.H. for vacuum systems. Note: Should the total dynamic head required not be appropriate for a given project, the design engineer shall provide an alternative. |
| YNN/A | 454.1.6.5.5.1 | Cartridge type filters: The filter complies with the maximum filtration rate of 0.375 gpm/FT² for pleated type cartridges. |
| YNN/A | 454.1.6.5.5.2.1 | Cartridge type filters: Pressure filter systems shall be equipped with an air relief valve, influent and effluent pressure gauges with minimum face size of 2” (51 mm) reading 0–60 psi (0–414 kPa), and a sight glass when a backwash line is required. |
| YNN/A | 454.1.6.5.5.2.2 | Cartridge type filters: Vacuum filter systems shall be equipped with a vacuum gauge which has a 2” (51 mm) face and reads from 0–30 inches of mercury. |
| YNN/A | 454.1.6.5.5.3 | Cartridge type filters: Vacuum filter tank has coved intersections between the wall and the floor and the tank floor slopes to the filter tank drain. |
| YNN/A | 454.1.6.5.5.3 | Cartridge type filters: All cartridges used in public pool filters shall be permanently marked with the manufacturer’s name, pore size and area in square feet of filter material. |
| YNN/A | 454.1.6.5.5.3 | Cartridge type filters: All cartridges with end caps shall have the permanent markings on one end cap. |
| YNN/A | 454.1.6.5.8 | Cartridge type filters: The filter and vacuuming system shall have the necessary valves and piping to allow filtering to pool, vacuuming to waste, vacuuming to filter, complete drainage of the filter tank, backwashing for sand and pressure D.E.- type filters and precoat recirculation for D.E.-type filters. |
| YNN/A | 454.1.6.5.6 | All plastic pipe used in the recirculation system shall be imprinted with the manufacturer’s name and the NSF-pw logo for potable water applications. Size, schedule and type of pipe shall be included on the drawings. |
| YNN/A | 454.1.6.5.6 | Plastic pipe subject to a period of prolonged sunlight exposure shall be coated to protect it from ultraviolet light degradation. |
| YNN/A | 454.1.6.5.7 | Return line, main drain line, and surface overflow system lines each have proportioning valves. |
| YNN/A | 454.1.6.5.8 | All pressure piping is sized such that the flow velocity does not exceed 10' per second (3048 mm/s) at the design flow rate. (**Exception**: Precoat lines when higher velocity is needed for agitation purposes.) |
| YNN/A | 454.1.6.5.8 | All suction piping is sized such that the flow velocity does not exceed 6' per second (1829 mm/s) at the design flow rate. (**Exception**: Vacuum filter header assembly where velocity may be up to 10' per second (3048 mm/s).) |
| YNN/A | 454.1.6.5.8 | Main drain systems and surface overflow systems which discharge to collector tanks are sized such that the flow velocity does not exceed 3' per second (914 mm/s) at the design flow rate. |
| YNN/A | 454.1.6.5.10.2 | Outlets are covered by a secure grate which requires the use of a tool to remove. |
| YNN/A | 514.0315(1) | A public swimming pool or spa must be equipped with an anti-entrapment system or device that complies with American Society of Mechanical Engineers/American National Standards Institute standard A112.19.8, or any successor standard. <http://www.floridahealth.gov/environmental-health/swimming-pools/_documents/svrs-testingguide12-18-2017.pdf> |
| YNN/A | 454.1.6.5.10.2 | The open area of the main drain grate(s) is such that the flow velocity at the grate(s) does not exceed 1½' per second (457 mm/s) at the design flow rate of the recirculation pump. <http://www.floridahealth.gov/environmental-health/swimming-pools/_documents/approved.pdf> |
| YNN/A | 454.1.6.5.10.5 | The main drain outlet shall be connected to a collector tank. |
| Y☐N☐N/A☐ | 454.1Definitions | Collector tank is a reservoir, with a minimum of 2.25 FT2 water (0.2 m2) surface area open to the atmosphere, from which the recirculation or feature pump takes suction, which receives the gravity flow from the main drain line and surface overflow system or feature water source line, and that is cleanable. |
| YNN/A | 454.1.6.5.13 | A rate of flow indicator (flowmeter), reading in gpm, shall be installed on the return line. |
| YNN/A | 454.1.6.5.13 | The rate of flow indicator shall be properly sized for the design flow rate and shall be capable of measuring from one-half to at least 1½ times the design flow rate. |
| YNN/A | 454.1.6.5.13 | The clearances upstream and downstream from the rate of flow indicator shall comply with manufacturer’s installation specifications. |
| YNN/A | 454.1.6.5.14 | Pool heaters shall comply with nationally recognized standards acceptable to the jurisdictional building department and to the design engineer. |
| YNN/A | 454.1.6.5.14 | A sketch of any proposed heater installation including valves, thermometer, pipe sizes, and material specifications shall be included in the application for permit prior to installation. |
| YNN/A | 454.1.6.5.14 | If heater is provided, a fixed thermometer is mounted in the pool recirculation line downstream of the heater outlet line connection. Note: Thermometers mounted on heater outlets do not meet this requirement. |
| YNN/A | 454.1.6.5.14 | Sufficient valves and piping are provided to allow isolation or removal of the pool heater. |
| YNN/A | 454.1.6.5.14 | Heater bypass valve is designed for proportioning flow (gate valve is unacceptable). |
| YNN/A | 454.1.6.5.14 | Material used in solar and other heaters are non-toxic and acceptable for potable water use. |
| YNN/A | 454.1.6.5.14 | Heaters shall not prevent the attainment of the required turnover rate. |
| YNN/A | 454.1.6.5.15 | Pool waste water shall be discharged through an air gap; disposal shall be to sanitary sewers, storm sewers, drain fields, or by other means, in accordance with local requirements including obtaining all necessary permits. Method of water & DE powder disposal is acceptable. |
| YNN/A | 454.1.6.5.15 | All lines shall be sized to handle the expected flow. |
| YNN/A | 454.1.6.5.15 | There shall not be a direct physical connection between any drain from a pool or recirculation system and a sewer line. |
| YNN/A | 454.1.6.5.16 | Disinfection and pH adjustment shall be added to the pool recirculation flow using automatic feeders meeting the requirement of ANSI/NSF 50. |
| YNN/A | 454.1.6.5.18 | Only NSF-60 approved chemicals shall be provided. |
| YNN/A | 454.1.6.5.16 | All chemicals shall be fed into the return line after the pump, heater and filters unless the feeder was designed by the manufacturer and approved by the NSF to feed to the collector tank or to the suction side of the pump. |
| YNN/A | 454.1.6.5.16.1 | Gas Chlorination: The chlorinator shall be capable of continuously feeding a chlorine dosage of 6 mg/L to the recirculated flow of the filtration system. The application point for chlorine shall be located in the return line downstream of the filter, recirculation pump, heater, and flow meter, and as far as possible from the pool. |
| YNN/A | 454.1.6.5.16.1.1 | Gas Chlorination: Gas chlorinators shall be located in above-grade rooms and in areas which are inaccessible to unauthorized persons |
| YNN/A | 454.1.6.5.16.1.1.1 | Gas Chlorination: Chlorine rooms shall have: continuous forced draft ventilation capable of a minimum of one air change per minute with an exhaust at floor level to the outside, a minimum of 30 footcandles (300 lux) of illumination with the switch located outside and the door shall open out and shall not be located adjacent to the filter room entrance or the pool deck. A shatterproof gas-tight inspection window shall be provided. |
| YNN/A | 454.1.6.5.16.1.1.2 | Gas Chlorination: Chlorine areas shall have a roof and shall be enclosed by a chain-link-type fence at least 6’ (1829 mm) high to allow ventilation and prevent vandalism. |
| YNN/A | 454.1.6.5.16.1.2 | Gas Chlorination: When booster pumps are used with the chlorinator, the pump shall use recirculated pool water supplied via the recirculation filtration system. The booster pump shall be electrically interlocked with the recirculation pump to prevent the feeding of chlorine when the recirculation pump is not operating. |
| YNN/A | 454.1.6.5.16.1.3 | Gas Chlorination: A means of weighing chlorine containers shall be provided. When 150-pound (68 kg) cylinders are used, platform type scales shall be provided and shall be capable of weighing a minimum of two full cylinders at one time. The elevation of the scale platform shall be within 2” (51 mm) of the adjacent floor level, and the facilities shall be constructed to allow easy placement of full cylinders on the scales. |
| YNN/A | 454.1.6.5.16.2 | Hypohalogenation: The hypohalogenation-type feeder and electrolytic chlorine generators shall be adjustable from 0 to full range. |
| YNN/A | 454.1.6.5.16.2 | Hypohalogenation: The feeder is capable of feeding a dosage of 6 ppm to the minimum required turnover flow rate (if solution type feeders, a 5% calcium hypochlorite or 10% sodium hypochlorite solution). |
| YNN/A | 454.1.6.5.16.2 | Hypohalogenation: An electrical feeder, when used, has electrical interlock with the recirculation pump to prevent the disinfectant from siphoning or feeding directly into the pool or pool piping under any type failure of the recirculation equipment. A flow sensor controller may be used. |
| YNN/A | 454.1.6.5.16.2 | Hypohalogenation: Solution crock has a volume equal to at least 50% of the maximum daily feed capacity of the chlorine solution feeder. Solution crock is marked to indicate contents. |
| YNN/A | 454.1.6.5.16.3 | Feeders for pH adjustment shall be provided on all pools. |
| YNN/A | 454.1.6.5.16.3 | pH adjustment feeder: pH adjustment feeders shall be positive displacement type, shall be adjustable from 0 to full range. |
| YNN/A | 454.1.6.5.16.3 | pH adjustment feeder: An electrical feeder has electrical interlock with the recirculation pump to prevent discharge when the recirculation pump is not operating. |
| YNN/A | 454.1.6.5.16.3 | pH adjustment feeder: When soda ash is used for pH adjustment, the maximum concentration of soda ash solution to be fed shall not exceed 1/2-pound (0.2 kg) soda ash per gallon of water. Feeders for soda ash shall be capable of feeding a minimum of 3 gallons (11 L) of the above soda ash solution per pound of gas chlorination capacity. |
| YNN/A | 454.1.6.5.16.3 | pH adjustment feeder: The solution crock volume is at least 50% of the maximum daily capacity of the feeder and is marked to indicate the contents. |
| YNN/A | 454.1.8.12 | Automated ORP & PH controllers are provided (ONLY REQUIRED FOR SPA TYPE POOLS). |
| YNN/A | 64E-9.004(9) | A test kit is provided and is capable of testing for free active halogens, total or combined available chlorine, total alkalinity, calcium hardness & pH. |
| YNN/A | 64E-9.004(9)(a) | If a salt solution in the pool water is necessary for a chlorine generator, a sodium chloride test kit is provided. |
| Y☐N☐N/A☐ | 64E-9.004(e) | Landscape irrigation water that wets the wet deck area of the pool, the pool itself, enters the collector tank, or wets an interactive water feature must be potable water from a public water system or shall meet the bacteriological quality of potable water as evidenced by annual laboratory analysis submitted to the department. Reclaimed water may not be used in these areas. If reclaimed water is used in the vicinity of the pool (inside of the pool fence or within 100’ of the pool water’s edge) it must employ drip irrigation or soaker hoses. Signs shall be posted notifying pool patrons that reclaimed water is in use, and is not to be consumed. |

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| **ELECTRICAL** | | |
| Y☐N☐N/A☐ | 454.1.4.1; 454.1.10.4.1 | Outlets supplying repaired, replaced, altered, or relocated pool pump motors connected to single-phase, 120-volt through 240-volt branch circuits, whether by receptacle or by direct connection, and outlets supplying all other repaired, replaced, altered, or relocated electrical equipment and underwater luminaires operating at voltages greater than the low voltage contact limit, connected to single-phase, 120-volt through 240-volt branch circuits, rated 15- and 20-amperes, whether by receptacle or by direct connection, shall be provided with ground-fault circuit interrupter protection for personnel. |
| **EQUIPOTENTIAL BONDING** | | |
| Y☐N☐N/A☐ | 454.1.10.4.2 | Any of the parts specified in Sections 680.26(B)(1) through (B)(7) of the NFPA 70, National Electrical Code that are repaired, replaced, altered, or installed new at an existing swimming pool shall be connected to the existing bonding system using solid copper conductors, insulated, covered, or bare, not smaller than 8 AWG or with rigid metal conduit of brass or other identified corrosion-resistant metal. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | Connections to bonded parts shall be made in accordance with Section 250.8 of NFPA 70, National Electrical Code. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | An 8 AWG or larger solid copper bonding conductor provided to reduce voltage gradients in the pool area shall not be required to be extended or attached to remote panelboards, service equipment, or electrodes. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | All metallic float-in light rings shall be connected to the equipotential bonding grid. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | Float-in light rings with no provision for bonding, and other devices which do not provide an electrical connection between a metallic underwater luminaire and the forming shell of a wet niche fixture, including screws or bolts not supplied by the luminaire’s manufacturer and listed for use with the specific luminaire, shall not be allowed for use with any underwater luminaire that is required to be grounded. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | Where none of the bonded parts is in direct connection with the pool water, the pool water shall be in direct contact with an approved corrosion-resistant conductive surface that exposes not less than 9 IN2 (5800 mm2) of surface area to the pool water at all times. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | The conductive surface shall be located where it is not exposed to physical damage or dislodgement during usual pool activities, and it shall be bonded in accordance with Section 680.26(B) of the NFPA 70, National Electrical Code. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | A bonded concrete pool shell shall be considered to be a conductive surface. |
| Y☐N☐N/A☐ | 454.1.10.4.2 | The interior metallic surface or surfaces of any forming shell (wet niche) shall not be covered with any material, including plaster, except potting compound covering internal bonding connections in conformance with 680.23(B)(2)(b) of NFPA 70, National Electrical Code, shall be allowed. |

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| **ULTRAVIOLET (UV) LIGHT DISINFECTANT EQUIPMENT** | | |
| YNN/A | 454.1.6.5.16.6 | Ultraviolet (UV) light disinfectant equipment may be used as supplemental water treatment on public pools [and additional treatment on interactive water features (IWFs)] subject to the conditions of this paragraph and manufacturer’s specifications. UV is encouraged to be used to eliminate or reduce chlorine-resistant pathogens, especially the protozoan cryptosporidium. |
| YNN/A | 454.1.6.5.16.6(1) | UV equipment and electrical components and wiring shall comply with the requirements of the National Electrical Code and the manufacturer shall provide a certification of conformance to the jurisdictional building department. |
| YNN/A | 454.1.6.5.16.6(2) | UV equipment shall meet UL standards and shall be electrically interlocked with recirculation pump(s) on all pools and with feature pumps(s) on an IWF such that when the UV equipment fails to produce the required dosage as measured by an automated sensor, the feature pump(s) are disabled so the water features do not operate. |
| YNN/A | 454.1.6.5.16.6(3) | UV equipment used in higher risk facilities such as interactive water features, wading pools, and activity pools shall be validated by a capable party that it delivers the required and predicted UV dose at the validated flow, lamp power and water UV transmittance conditions, and has complied with all professional practices summarized in the USEPA Ultraviolet Disinfectant Guidance Manual dated November 2006, which is publication number EPA 815-R-06-007 available from the department at http://www.floridashealth.org/Environment/water/swim/ index.html or at <http://www.epa.gov/safewater/disinfection/lt2/pdfs/guideit2_uguidance.pdf>. **Exception**: Not applicable when Section 454.1.9.8.6.1 alternative is used. |
| YNN/A | 454.1.6.5.16.6(4) | UV equipment shall constantly produce a validated dosage of at least 40 mJ/cm2 (millijoules per square centimeter) at the end of lamp life. |
| YNN/A | 454.1.6.5.16.6(5) | The UV equipment shall not be located in a side stream flow and shall be located to treat all water returning to the pool or water features. |
| **OZONE EQUIPMENT** | | |
| YNN/A | 454.1.6.5.16.4 | Ozone generating equipment may be used for supplemental water treatment on public swimming pools subject to the conditions of this section. |
| YNN/A | 454.1.6.5.16.4.1 | Ozone generating equipment electrical components and wiring shall comply with the requirements of Chapter 27 of this code and the manufacturer shall provide a certificate of conformance. The process equipment shall be provided with an effective means to alert the user when a component of this equipment is not operating. |
| YNN/A | 454.1.6.5.16.4.2; 64E-9.008(10) | Ozone generating equipment shall meet NSF/ANSI Standard 50-2012. |
| YNN/A | 454.1.6.5.16.4.3 | The concentration of ozone in the return line to the pool shall not exceed 0.1 mg/L. |
| YNN/A | 454.1.6.5.16.4.4 | The injection point for ozone generating equipment shall be located in the pool return line after the filtration and heating equipment, prior to the halogen injection point, and as far as possible from the nearest pool return inlet with a minimum distance of 4’ (1219 mm). Injection methods shall include a mixer, contact chamber, or other means of efficiently mixing the ozone with the recirculated water. The injection and mixing equipment shall not prevent the attainment of the required turnover rate of the recirculation system. Ozone generating equipment shall be equipped with a check valve between the generator and the injection point. Ozone generating equipment shall be equipped with an air flow meter and a means to control the flow. The generator shall be electrically interlocked with the recirculation pump to prevent the feeding of ozone when the recirculation pump is not operating. A flow sensor controller can also be used to turn off the feeder when flow is sensed. |
| YNN/A | 454.1.6.5.16.4.5 | Ozone generating equipment shall be installed in equipment rooms with either forced draft or cross draft ventilation. Below-grade equipment rooms with ozone generators shall have forced draft ventilation and all equipment rooms with forced draft ventilation shall have the fan control switch located outside the equipment room door. The exhaust fan intake for forced draft ventilation and at least one vent grille for cross draft ventilation shall be located at floor level. |
| YNN/A | 454.1.6.5.16.4.6 | A self-contained breathing apparatus designed and rated by its manufacturer for use in ozone contaminated air shall be provided when ozone generator installations are capable of exceeding the maximum pool water ozone contact concentration of 0.1 milligram per liter. The self-contained breathing apparatus shall be available at all times and shall be used at times when the maintenance or service personnel have determined that the equipment room ozone concentration exceeds 10 mg/L. Ozone generator installations which require the self-contained breathing apparatus shall also be provided with Draeger-type detector tube equipment which is capable of detecting ozone levels of 10 mg/L and greater. **Exception**: In lieu of the self-contained breathing apparatus, an ozone detector capable of detecting 1 mg/L may be used. Said detector shall be capable of stopping the production of ozone, venting the room and sounding an alarm once ozone is detected. |

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| **IONIZATION EQUIPMENT** | | |
| YNN/A | 454.1.6.5.16.5 | Ionization units may be used as supplemental water treatment on public pools subject to the condition of this section. |
| YNN/A | 454.1.6.5.16.5.1 | Ionization equipment and electrical components and wiring shall comply with the requirements of Chapter 27 of this code and the manufacturer shall provide a certification of conformance. |
| YNN/A | 454.1.6.5.16.5.2; 64E-9.008(10) | Ionization equipment shall meet NSF/ANSI Standard 50-2012, Circulation System Components and Related Materials for Swimming Pools, Spas/Hot Tubs, or equivalent, shall meet UL standards and shall be electrically interlocked with recirculation pump. |

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| **COPPER/SILVER IONIZATION EQUIPMENT** | | |
| YNN/A | 454.1.10.3 | The installation of copper or copper/silver ionization units and ozone generators capable of producing less than a pool water ozone contact concentration of 0.1 milligrams per liter (mg/L) shall not be considered a pool repair or alteration provided compliance when the following is met: |
| YNN/A | 454.1.10.3(1) | The ionization or ozone generator unit complies with paragraph 64E-9.008(10) (e), Florida Administrative Code. |
| Y☐N☐N/A☐ | 64E-9.008(10) (e) | Disinfection and pH adjustment shall be maintained as added to the pool recirculation flow using automatic feeders meeting the requirement of NSF/ANSI Standard 50-2012. All chemicals shall be fed into the return line after the pump, heater and filters, unless the feeder was designed by the manufacturer and approved by the NSF to feed to the collector tank or to the suction side of the pump. Feeding chlorinated isocyanurates disinfectant is prohibited in spas, wading pools and interactive water features. Dual or multiuse feeders can be used if approved for and feeding an acceptable rate of alternate disinfectant. Where pH adjustment feeders are not present on these three types of pools that were required to replace chlorinated isocyanurates feeders, pH adjustment feeders shall be installed. Exception: spa pools of 100 FT2 or less with original department approval to be built without a pH adjustment feeder.  4. Ozone generating equipment –  a. The concentration of ozone in the return line to the pool shall not exceed 0.1 mg/L.  b. Ozone generating equipment shall be maintained as equipped with an air flow meter and a means to control the flow. The generator shall be maintained as electrically interlocked with the recirculation pump to prevent the feeding of ozone when the recirculation pump is not operating. A flow sensor controller can also be used to turn off the feeder when flow is not sensed.  5. UV equipment used for any purpose shall constantly produce a dosage of at least 40 mJ/cm2 (milliJoules per square centimeter).  6. Ozone generators shall produce no more than a pool water contact concentration of 0.1 milligrams per liter (mg/L). The contact concentration in mg/L shall be calculated as the amount of ozone in grams per hours divided by the recirculation flow rate in gallons per minute times 4.41. |
| YNN/A | 454.1.10.3(2); 64E-9.008(10) | The manufacturer provides one set of signed and sealed engineering drawings indicating the following:  a. The unit does not interfere with the design flow rate.  b. The unit and the typical installation meet the requirements of the National Electrical Code.  c. A copper test kit and information regarding the maximum allowed copper and silver level and the minimum required chlorine level shall be available to the pool owner.  d. The unit shall meet the requirements of NSF/ANSI Standard 50-2012. |
| YNN/A | 454.1.10.3(3) | At least 7 days before the time of installation, the installer will provide a photocopy of the above drawings and a letter of intent identifying the pool on which the unit is to be installed. |
| YNN/A | 454.1.10.3(4) | Upon completion of the installation, a professional engineer or electrician licensed in the state of Florida shall provide a letter to the county health department, indicating the unit was properly installed in accordance with the typical drawings, the National Electrical Code and local codes. |