

## **Section 3.12. Public Spas**

### **3.12.1. General**

#### **3.12.1.1. Application**

(1) This Section applies to the design and *construction* of site-assembled *public spas* and factory-built *public spas*.

(2) If material alterations to a *public spa* or the equipment installed in a *public spa* affect the bottom slope, the water volume or the capacity of the water circulation system, the adversely affected portions shall comply with the requirements of this Division.

(3) Except as provided in Sentence (4), if material alterations or repairs concern any pool fitting that passes water or air, or both, in or out of the pool tank, the affected fitting shall comply with Sentences 3.11.8.1.(20) and 3.12.4.1.(4) to (10).

(4) If the material alterations or repairs concern a fitting cover or grille, the affected fitting cover or grille shall comply with Sentences 3.12.4.1.(7) to (10).

(5) For the purposes of this Section, every reference to a *public pool* or a *recirculation system* in a definition in Article 1.4.1.2. of Division A, or a Sentence or Clause in Section 3.11. that is made applicable to *public spas* by this Section, is deemed to be a reference to a *public spa* or water circulation system, respectively.

### **3.12.2. Public Spa and Deck Design and Construction Requirements**

#### **3.12.2.1. Construction Requirements**

(1) In addition to the requirements of this Subsection, *public spas* shall comply with the requirements of Sentences 3.11.3.1.(13) to (17), (19), (20) and (22) and Clause 3.11.3.1.(24)(a).

(2) A *public spa* shall be constructed to have a water depth of not more than 1 200 mm.

(3) The slope of the bottom of any portion of a *public spa* shall not exceed 8%.

(4) A *public spa* shall be surrounded by a hard-surfaced *pool deck* that,

(a) shall have a minimum clear deck space of not less than 1.8 m at the main entrance point,

(b) shall have a clear deck space of 900 mm on all sides, except as required by Clause (a) and permitted by Sentence (5),

(c) shall be sloped away from the pool to waste drains or to adjacent lower ground at a slope of between 2% and 4%, in the case of an outdoor *public spa*, and

(d) shall be impervious and sloped away from the pool to waste drains at a slope of between 1% and 4%, in the case of an indoor *public spa*.

(5) One section of the hard-surfaced *pool deck* that does not exceed 25% of the perimeter of the *public spa* may have a minimum clear deck space of not more than 300 mm if,

(a) the *public spa* has an area less than 6 m<sup>2</sup>, and

(b) the *public spa* has no interior dimension more than 2.5 m.

(6) The maximum depth of water to a seat or bench in a *public spa* shall be 600 mm.

(7) If a set of steps is provided for entry into and egress from the *public spa* water, the steps,

(a) shall be equipped with a handrail,

(b) shall have a non-slip surface, and

(c) shall have a band of contrasting colour along the entire juncture of the side and top of the edges.

(8) Every *public spa* shall be provided with dressing rooms, water closets and shower facilities that are conveniently available on the premises.

(9) Except where no space is provided between ladder treads and the spa wall, the space between the spa wall and submerged portions of any treads of a ladder for entry into and egress from the water shall be not more than 150 mm and not less than 75 mm.

### **3.12.3. Ramps and Access into Public Spas**

#### **3.12.3.1. Ramps into Public Spas**

(1) Not more than 50% of the total perimeter of a *public spa* may be replaced by one or more ramps that permit a bather seated in a wheelchair to enter the water with or without the wheelchair.

(2) If a *public spa* has one or more ramps described in Sentence (1), the *public spa* shall comply with Article 3.11.5.1. and Sentences 3.11.5.2.(3) and (4).

#### **3.12.3.2. Access into Public Spas**

(1) Where more than one *public spa* is provided within a *suite* located on a *storey* that is required by Article 3.8.2.1. to have a *barrier-free* path of travel, a *barrier-free* access described in Sentence (2) shall be provided to at least one *public spa*.

(2) *Barrier-free* access for entry into and egress from a *public spa* shall be provided by,

(a) a ramp conforming to Article 3.12.3.1.,

(b) a pool lift conforming to the manufacturer's specifications and installation instructions and conforming to Sentences 3.11.3.3.(2) to (6), or

(c) a transfer wall conforming to Sentences (3) to (5).

(3) A transfer wall providing *barrier-free* access for entry into and egress from a *public spa* shall,

- (a) have a height not less than 405 mm and not more than 485 mm measured from the *pool deck*,
- (b) have a depth of at least 300 mm and not more than 400 mm,
- (c) be slip-resistant and have edges that are rounded, and
- (d) have at least one grab bar that,
  - (i) is perpendicular to the pool and extends the full depth of the transfer wall,
  - (ii) is located not less than 100 mm and not more than 150 mm above the transfer wall,
  - (iii) has a clearance of at least 610 mm on both sides,
  - (iv) complies with Clauses 3.8.3.8.(7)(a) and (b), and
  - (v) is made of a slip-resistant material.

(4) The deck area required to make a lateral transfer to the transfer wall shall,

- (a) be outside and adjacent to the *barrier-free* path of travel described in Sentence (1),
- (b) have no obstructions at the side of the transfer wall serving the transfer space,
- (c) have a clear space of 900 mm by 2 200 mm, and
- (d) have a slope less than 2% provided at the base of the transfer wall surface.

(5) The deck area described in Clause (4)(c) shall be centred on,

- (a) the grab bar where one grab bar is provided, or
- (b) the clear space between the grab bars where more than one grab bar is provided.

### **3.12.4. Water Circulation for Public Spas**

#### **3.12.4.1. Water Circulation Systems**

(1) In addition to the requirements of this Subsection, the water circulation system of a *public spa* shall comply with the requirements of Sentences 3.11.8.1.(2), (3), (6), (7), (9), (10), (11), (13) and (20).

(2) A *public spa* shall be equipped with a water circulation system that is capable of filtering, disinfecting and passing the *public spa* water through the *public spa* with a turnover period of not more than,

- (a) 30 minutes for a *public spa* with a volume of water that exceeds 6 m<sup>3</sup>,

- (b) 20 minutes for a *public spa* with a volume of water that exceeds 4 m<sup>3</sup> but does not exceed 6 m<sup>3</sup>, or
  - (c) 15 minutes for a *public spa* with a volume of water that does not exceed 4 m<sup>3</sup>.
- (3) If cartridge-type filters are used for a *public spa*, the filters shall be a surface-type that is designed for a maximum flow rate of 0.27 L/s/m<sup>2</sup> effective filter area.
- (4) Except as provided in Sentence (6), every circulation system in a *public spa* shall be served by a minimum of two suction or gravity outlets,
- (a) that are interconnected to a full size manifold, and
  - (b) except as provided in Sentence (5), that are separated by a clear distance of not less than 900 mm.
- (5) If compliance with Clause (4)(b) is impracticable because of dimensional restrictions at the bottom of the *public spa*, the outlets may be located on two different planes of the *public spa* if,
- (a) at least one of the outlets through which the *public spa* can be emptied to a full-size manifold is located on the bottom of the *public spa*, and
  - (b) the bottom of all outlets, other than skimmers, are not more than 75 mm from the floor of the *public spa*.
- (6) A circulation system in a factory-built *public spa* may be served by a built-in suction or gravity outlet with multiple openings that are connected to a full-size manifold.
- (7) All fittings at or below the water surface that allow water or air or both to be passed to or from the *public spa* shall be securely held in place by corrosion resistant fastening that requires a tool for removal and is galvanically compatible with the fittings and grilles or covers.
- (8) Except as provided in Sentence (9), all suction or gravity fittings installed at or below the water line of a *public spa* shall,
- (a) have a maximum opening of 7 mm in one direction, and
  - (b) be designed so that the flow of water through the openings does not exceed 0.45 m/s.
- (9) Sentence (8) does not apply to suction and gravity outlets that are equipped with anti-entrapment covers that comply with the requirements of ASME A112.19.8, “Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs”.
- (10) The calculation of water velocities for the purposes of Clause (8)(b) and Sentences (11) and (12) and the calculation of water flow rates for the purposes of Sentence (9) shall be based on the assumption that all possible sources of suction flow are present at the same time.
- (11) The water velocity in a suction pipe shall not exceed 1.8 m/s.

(12) The water velocity in a pressure pipe shall not exceed,

- (a) 3.0 m/s for plastic piping, and
- (b) 1.8 m/s for copper piping.

(13) Every suction system that serves a *public spa* shall be equipped with a vacuum relief mechanism that shall include,

- (a) a vacuum release system,
- (b) a vacuum limit system, or
- (c) other engineered systems that are designed, constructed and installed to conform to good engineering practice appropriate to the circumstances.

(14) Equipment shall be installed to continuously disinfect the water in a *public spa* by means of a chlorination, hypochlorination or bromination system that is capable of regulating the dosage of chlorine or bromine.

(15) If a two-speed pump is utilized for a *public spa*, the filter and heater shall be sized to accommodate the maximum pump output, without exceeding the manufacturer's design flow rate of the filter element or heater and without by-passing the filter element.

(16) A *public spa* equipped with hydro-massage jet fittings shall be provided with a timing device,

- (a) that controls the period of operation of the jet pump, and
- (b) that is placed in a location where the user must exit the *public spa* to reset the timer.

(17) A *public spa* water heater shall be equipped with an upper limit cut-off device,

- (a) that is independent of the normal *public spa* water temperature thermostat, and
- (b) that limits the maximum water temperature of the *public spa* to 40°C.

(18) A *public spa* shall be equipped with a water circulation system that is capable of both completely and partially draining and refilling the *public spa* water.

### **3.12.5. Emergency Provisions for All Public Spas**

#### **3.12.5.1. Lighting and Emergency Provisions**

(1) In addition to the requirements of this Subsection, *public spas* shall comply with the requirements of Sentences 3.11.10.1.(1) to (6).

(2) An emergency telephone directly connected to an emergency service or to the local telephone utility shall be installed within 30 m of the *public spa*.

(3) All pumps used in a *public spa* shall be capable of being deactivated by an emergency stop button that is,

- (a) clearly labelled, and

(b) located at a point that is,

- (i) readily accessible to and within sight of persons using the *public spa*, and
- (ii) within 15 m of the *public spa*.

(4) The emergency stop button required in Sentence (3) shall,

- (a) be a switch separate from the *public spa*'s timing device,
- (b) activate an audible and a visual signal when used, and
- (c) have an emergency sign conforming to Sentence 3.11.10.1.(14).

(5) If a *public spa* and *public pool* are located in the same room or space, the emergency stop buttons required in Sentences (3) and 3.11.10.1.(12) shall deactivate all pumps serving the *public spa* and *public pool*.

### **3.12.6. Service Rooms and Storage for All Public Spas**

#### **3.12.6.1. Service Rooms and Storage Facilities**

(1) *Service rooms* and storage facilities for all *public spas* shall comply with the requirements of Article 3.11.11.1.