

WAC 246-260-041 Swimming pool design, construction, and equipment. For more general design, and construction requirements that pertain to all pools, see WAC 246-260-031.

(1) **Location.** Owners shall ensure pump houses, planters, balconies, landscape features, trees, and structures are located fifteen feet or more horizontally away from any swimming pool, or provide barriers or other means to prevent diving or ready access to a pool from the structures. These structures do not include:

- (a) Building walkways above the second story;
- (b) Inaccessible roofs eight feet or more in height; or
- (c) Any barriers provided to prevent unauthorized pool access (e.g., fencing).

(2) **Walking deck surfaces.** Owners shall design and maintain walking deck surfaces as follows:

(a) For pools less than fifteen hundred square feet, walking deck surfaces must be at least four feet wide around the entire perimeter of pools;

(b) For pools less than fifteen hundred square feet, walking deck surfaces must be at least:

- (i) Six feet wide at the shallow end of a variable-depth pool; and
- (ii) Six feet wide on a minimum of twenty-five percent of the deck space of free form pools.

(c) For pools fifteen hundred square feet or larger, walking deck surfaces must be at least six feet wide:

- (i) Around the entire perimeter of outdoor pools;
- (ii) On fifty percent of the perimeter of indoor pools; and
- (iii) The remaining fifty percent perimeter of the indoor pool must be a minimum of four feet wide.

(d) For pools fifteen hundred square feet or more, walking deck surfaces must be at least sixteen square feet per bather. To determine maximum bather load see subsection (10) of this section. If the owner provides maximum facility occupancy loading less than that of subsection (10) of this section, and the occupancy limit is posted and enforced, that loading may be used in lieu of the maximum bather load figure as described under subsection (10) of this section; and

(e) General use pools may not have sand and grass areas within the pool enclosure unless these areas are separated to prevent direct access from the pool area and the facility provides a means for cleansing bather's feet before reentering the pool and deck area.

(3) **Pool general floor and wall dimensional design.**

(a) Owners shall ensure pool dimensional designs for floors and walls provide for safety, circulation and quality of water;

(b) Pool floors must have uniform slopes with:

(i) A maximum slope of a one-foot drop in twelve feet of run at pool depths to five or less in pools fifteen hundred square feet or more; and

(ii) Floor slopes not intruding into the area designated as the diving envelope.

(c) Pool sidewalls may not curve or intrude into the pool beyond the vertical more than twelve inches at three and one-half feet and eighteen inches at a depth of five feet. The radius of curvature of wall-floor junctions may not exceed the maximum radius designated in Table 041.1 of this section for depths over five feet. Vertical means walls not greater than eleven degrees from plumb:

Table 041.1

Maximum Radius Coving or Pool Intrusion Dimensions Between Pool Floor and Wall*

POOL DEPTH	3'	3'6"	5'	Greater than 5'
MINIMUM SIDEWALL DEPTH (Springline)	2'2"	2'6"	3'6"	At 3'6"
MAXIMUM RADIUS OF CURVATURE	10"	12"	1'6"	**Maximum radius equals pool depth minus the vertical wall depth

*Note: For pool depths falling between the depths listed, values can be interpolated.
 For pool depths less than three feet and greater than five feet, values shall be extrapolated.
 Radius of coving shall not intrude into pool within diving envelope.

(d) Pool configuration must have a transitional radius from wall to floor where floor slopes join walls so that:

(i) The center of the radius not less than the minimum vertical depth specified under Table 041.1 of this section below the water surface level;

(ii) The arc of the radius is tangent to the wall; and

(iii) The maximum radius of coving, or any intrusion into the pool wall/floor interface, is determined by subtracting the vertical wall depth from the total pool depth.

(4) **Ledges.** In new construction or alterations to existing construction, ledges are prohibited in swimming pool sidewalls, except as specified in WAC 246-260-091(3).

(5) **Specific design requirements for pools furnishing areas for diving.** Owners shall ensure areas designated for diving activities include a diving envelope meeting minimum requirements in:

(a) D-8.01, Table 1, APHA Public Pool Regulations, 1981, if the pool user would enter from the deck level twelve inches or less from water surface level.

(b) CNCA standard configuration in areas where user would enter from the deck level over twelve inches from water level, or has a platform or diving board provided at a height of less than one-half meter (twenty inches). This requirement is based on a standard described under CNCA publication *Swimming Pools: A Guide to Their Planning, Design, and Operation* 1987, Fourth Edition. Human Kinetics Publisher, Inc., Champaign, Illinois, Figure 8.1; or

(c) Dimensions for Diving Facilities, FINA facility rules, 2000-2001, if the pool user enters from the diving board or platform at a height of twenty inches (one-half meter) or greater from water surface level.

(6) **Pool appurtenances.**

(a) If a swimming pool contains diving boards and/or diving platforms, owners shall ensure that the boards and platforms:

(i) Are installed according to manufacturer's instructions;

(ii) Have slip-resistant tread surfaces;

(iii) Have steps and ladders leading to diving boards with handrails; and

(iv) Are protected with guardrails and one intermediate rail, both extending at least to the water edge when one meter or more above the water.

(b) Owners shall ensure starting blocks:

(i) Are firmly secured when in use; and

(ii) If water depth is less than nine feet, starting blocks must be removed or covered with protective equipment unless used by competitive swimmers trained in proper use of starting blocks.

(c) Owners shall ensure that water slides conform with requirements of chapter 246-262 WAC.

(7) **Turnover.** Owners of swimming pools shall design and maintain water treatment recirculation rates to completely turn over the entire pool water volume of pool in six hours or less.

(8) **Pool depth markings.** Owners shall provide water depth markings in feet:

(a) Located on the pool vertical wall at or above the water level so as to be easily readable from the water, in numbers at least two inches high. If overflow channels do not allow for placement of vertical wall markings above the water level, they are not required;

(b) Located on the horizontal surface of pool coping or deck of pools within eighteen inches of the water's edge, easily readable while standing on the deck facing the water, in numbers at least four inches high;

(c) Placed at the maximum and minimum water depths and at all points of slope change;

(d) Spaced at increments of water depth of two feet or less;

(e) Spaced along sides of pools at horizontal intervals of twenty-five feet or less;

(f) Arranged uniformly on both sides and ends of pool;

(g) Placed on all major deviations in shape;

(h) Applied in a contrasting color; and

(i) Made of slip-resistant material on decks.

(9) **Safety line or marking line.**

(a) Owners shall provide either safety float lines or marking lines separating areas where the pool bottom breaks from a uniform slope in the shallow area leading to deeper water. Neither float lines or marking lines are required in pools with uniform floor slopes not exceeding one foot of slope for every twelve feet of horizontal floor length.

(b) Safety float lines, when used, must:

(i) Be kept in place at all times, except when the pool is used for a specific purpose such as lap swimming or competitive use;

(ii) Be placed one foot toward the shallow end away from the break point line;

(iii) Be strung tightly allowing bathers to hold onto the line for support;

(iv) Provide floats on the line at a minimum distance of every four feet; and

(v) Have a receptacle for receiving the safety line either recessed into the wall or constructed so as not to constitute a safety hazard when the safety line is removed.

(c) Marking lines, when used, must:

(i) Be placed on pool sides and bottoms at the break point line; and

(ii) Be of a contrasting color to the background color of the pool sidewalls and floor.

(d) In pools with uniform slopes not exceeding one foot of drop in twelve feet of run from the shallow end to the deep end, a safety float line or marking line is not required.

(10) **Bather load.** Owners shall ensure maximum number of bathers in the pool facility at any one time do not exceed a number determined by the formula noted under Table 041.2.

Table 041.2

Swimming Pool Maximum Bathing Load*

Type of pool	Value A (**SF Shallow (5 ft. or less))	Value B (SF Deep (> 5 ft.))	Maximum bather load Value A + B
Indoor	SF/25	SF/30	
Outdoor	SF/15	SF/30	

* This formula will be used in determining certain features of pools as noted elsewhere in these rules and regulations.

** SF means square feet of surface area.

(11) **Emergency equipment.** Owners shall provide first aid and have emergency equipment readily available at swimming pool facilities during operating hours, including:

- (a) A telephone within the facility for general use pools;
- (b) A telephone accessible within one minute for limited use pool facilities;
- (c) A suitable area to accommodate persons requiring first-aid treatment;

- (d) A standard 16-unit first-aid kit (see Appendix C, Table); and
- (e) A blanket reserved for emergency use.

(f) For facilities with lifeguards:

- (i) A rescue tube or rescue buoy at each pool lifeguard station;
- and

- (ii) A backboard with means to secure a victim to a board and immobilize head, neck, and back.

(g) For pool facilities without lifeguards:

- (i) A reaching pole at least twelve feet long with a double crook life hook;

- (ii) A reaching pole at least twelve feet long for every fifteen hundred square feet of pool surface area; and

- (iii) A throwing buoy, throw-rope bag, or other similar device with a rope the width of the pool or fifty feet long, whichever is less, for reaching and retrieving a victim.

(h) No later than June 1, 2008, owners of existing pools with single main drains shall install emergency equipment to shut off all pumps hooked to the recirculation lines for the pools. This emergency equipment must be placed within twenty feet of the pool and marked with an emergency shutoff sign. The shutoff switch must include an audible alarm which can be heard by those in the area, or have an alarm that goes to a point where staff is always present during the periods the pool is open.

(i) Pools providing dual main drains meeting the requirements of this section, or other acceptable methods of providing equivalent protection to the emergency shutoff switch, are exempt from this requirement.

(ii) The owner shall check the shutoff switch at least twice annually to determine it is properly operating.

(iii) The department will develop a guidance document to aid owners and designers in potential options to the emergency shutoff switch and audible alarm.

(12) **Foot baths.** Foot baths at water recreation facilities are prohibited. This does not preclude the construction and use of foot showers, if the area is well drained.

[Statutory Authority: RCW 70.90.120. WSR 05-09-004, § 246-260-041, filed 4/7/05, effective 5/8/05. Statutory Authority: Chapters 70.90

and 43.20 RCW. WSR 04-18-096, § 246-260-041, filed 9/1/04, effective 10/31/04.]