

WAC 246-262-010 Definitions, abbreviations, and acronyms. The definitions in this section apply throughout this chapter unless the context clearly indicates otherwise.

(1) "Advanced first aid" means a course of instruction recognized by the American Red Cross, department of labor and industries, the U.S. Bureau of Mines, or fire services training program.

(2) "ANSI" means American National Standard Institute.

(3) "Approved" means the department or local health officer has stated in writing that the design plans and specifications are in accordance with chapter 246-262 WAC.

(4) "ARC" means American Red Cross.

(5) "Architect" means a registered architect currently licensed under chapter 18.08 RCW in Washington state.

(6) "APSP" means Association of Pool and Spa Professionals.

(7) "ASTM" means American Society for Testing Material.

(8) "Attendant" means a person trained to operate an attraction and control the users in a safe orderly manner.

(9) "Attraction or ride" means any of the specific types of recreational facilities involving partial or total immersion or intentional contact with the water designated for public recreational use.

(10) "Biomechanics" means the study of the human body as a system operating under the laws of Newtonian mechanics and the biological laws of life.

(11) "Board" means the state board of health.

(12) "Boogie or mini-surf board" means any semirigid device used in a wave pool for flotation or as a riding device.

(13) "Branch line" means suction piping between a junction fitting and a suction outlet.

(14) "Centerline" means the path defined by geometric midpoints of a component or structure, generally used in consideration of the slide path in flume rides.

(15) "CNCA" means Council for National Cooperation in Aquatics.

(16) "Communication system" means any combination of devices permitting the passage of or exchange of messages between park operating personnel and between operating personnel and users. Systems can include, but are not limited to, two-way radios, hardwired intercoms, horns, whistles, hand signals, direct voice, signs, or equivalent.

(17) "Contaminant" means any physical, chemical or biological substance present in the RWCF water which may adversely affect the health or safety of the user and/or the quality of the water.

(18) "Cross-connection" means any physical arrangement connecting:

(a) A potable water system directly or indirectly, with anything other than another potable water system; or

(b) A RWCF to any potable or nonpotable water source capable of contaminating either the RWCF or potable water source as a result of backflow.

(19) "Department" means the Washington state department of health.

(20) "Discharge section" means the component or components making up the exit of the water slide, water tube, inner tube ride, speed slide, ramp slide, drop slide or drop tube, or kiddie flume. These components are the elements controlling the final direction and speed of the user.

(21) "Diving envelope" means the minimum dimensions of an area within the pool necessary to provide entry from a diving board, platform, or attraction segment where users enter above pool water level.

- (22) "Drop slide or drop tube ride" means a sloped trough, chute, or tube exiting the user above the pool operating water level.
- (23) "Engineer" means a registered professional engineer currently licensed under chapter 18.43 RCW in Washington state.
- (24) "Entry access points" means the areas where users enter an attraction.
- (25) "Entry rate" means the frequency at which users are permitted access to the attraction.
- (26) "Equalizer line outlet" means a suction outlet located on the pool wall below the waterline and connected by pipe to the body of a skimmer to prevent air from being drawn into the pump if the water level drops below the skimmer weir.
- (27) "Ergonomics" means a multidisciplinary activity dealing with the interactions between humans and their environment plus the traditional environmental elements atmosphere, heat, light, and sound, as well as objects with which the user comes in contact.
- (28) "FINA" means Federation Internationale de Natation Amateur.
- (29) "Flume or tube entry" means the area at which users enter a water slide, water tube, inner tube ride, speed slide, drop slide, drop tube, or kiddie flume.
- (30) "fps" means feet per second.
- (31) "gpm" means gallons per minute.
- (32) "IAAPA" means International Association of Amusement Parks and Attractions.
- (33) "Injury or illness report" means the written record of all facts regarding an injury or illness associated with the RWCF.
- (34) "Inner tube ride" means an attraction where users ride inner tube-like devices through a series of chutes, channels, flumes, and pools.
- (35) "Innovative recreational water contact facility" means any type of RWCF currently unregulated.
- (36) "Intermediate pool" means any pool between the entry and exit pools in attraction using a series of pools.
- (37) "Junction fitting" means a pipe fitting in the shape of a "T" or a "Y" used to connect suction outlets to a pump or a balancing tank, and provides two branch line connections and one trunk line connection.
- (38) "Kiddie flume or tube attraction" means a flume, chute, or tube designated for and restricted to use by small children.
- (39) "Lifeguard" means an individual currently certified by red cross in advance lifesaving or lifeguard training, or YMCA senior lifesaver, or equivalent certification through the royal Canadian lifeguard services.
- (40) "Lifeguard station" means the designated work station of the lifeguard.
- (41) "Local health officer" means the health office of the city, county, or city-county department or district or a representative authorized by the local health officer.
- (42) "Main drain" means a submerged suction outlet for transferring water from a recreational water contact facility.
- (43) "mg/l" means milligrams per liter.
- (44) "Multiactivity pool" means a pool with more than one type of attraction (i.e., an adult activity pool with a series of tubes, chutes, cable rides, etc., intended for use by individuals with specific swimming abilities).
- (45) "NSF" means National Sanitation Foundation.
- (46) "NSPI" means National Spa and Pool Institute.

(47) "Operating levels" means water levels maintained within attractions during use for proper operation of facility and for controlling safety and sanitation.

(48) "Operations" means all aspects of a RWCF, which must be controlled to make the facility safe, healthy, and usable for the purpose intended.

(49) "Owner" means a person owning and responsible for a RWCF or authorized agent.

(50) "Person" means an individual, firm, partnership, co-partnership, corporation, company, association, club, government entity, or organization of any kind.

(51) "Ponding" means a condition where water fails to drain from walking surfaces.

(52) "ppm" means parts per million.

(53) "Primary zone of visual coverage" means the area assigned to a lifeguard or attendant for primary visual surveillance of user activity.

(54) "Radius of curvature" means the radius arc which denotes the curved surface from the point of departure from the vertical sidewall (springline) of the pool to the pool bottom.

(55) "Ramp slide" means a slide allowing one or more users to slide in unison down a straight incline to a runout or a receiving pool.

(56) "Recirculation filter water" means water which is recirculated by the RWCF for treatment purposes, i.e., filtration and disinfection.

(57) "Response time" means elapsed time between bather distress and initiation of rescue assistance by a lifeguard (or attendant where applicable).

(58) "RWCF" means recreational water contact facility which is an artificial water associated facility with design and operational features that provide patron recreational activity which is different from that associated with a conventional swimming pool and purposefully involves immersion of the body partially or totally in the water and includes, but is not limited to, water slides, wave pools, and water lagoons.

(59) "Secretary" means the secretary of the department.

(60) "Serious injury" means any injury requiring admission to a hospital.

(61) "Speed slide or speed tube" means a sloped trough, flume, tube, or roller track having long straight and/or steep drops where users sustain speeds of 20 miles per hour or more.

(62) "Springline" means the point from which the pool wall breaks from vertical and begins its arc in the radius of curvature (for coved construction) to the bottom of the pool.

(63) "Suction fitting standard" means the ANSI/APSP-16 2011, Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs or the ANSI/APSP/ICC-16 2017, American National Standard for Suction Outlet Fitting Assemblies (SOFA) for Use in Pools, Spas and Hot Tubs.

(64) "Suction outlet" means a fitting; fitting assembly and related components, including the sump or bulkhead fitting, cover, and hardware that provides a localized low pressure area for the transfer of water from a recreational water contact facility. Types of suction outlets include main drains and equalizer line outlets.

(65) "Surfboard" means a rigid device used in a wave pool for riding.

(66) "Tail coverage" means providing insurance coverage for a given period of time for discovery of claims made after the policy term for "claims made" type of insurance.

(67) "Total turnover" means the time it takes for the pool attraction water volume to be recirculated as a sum of the flows from treatment turnover and attraction recirculation systems turnover.

(68) "Treatment turnover" means the minimum time necessary to circulate the entire attraction water volume through the recirculation filter system.

(69) "Trunk line" means suction piping between a junction fitting and a pump or a balancing tank.

(70) "T.U." means turbidity unit as measured by the nephelometric method.

(71) "Wading activity pool" means a pool or area less than 24 inches in total water depth with activities intended for younger children.

(72) "Walking surface" means any direct access surface to the attractions or change rooms where the user will be in bare feet. Areas set aside for picnicking, sunbathing, and lounging are excluded.

(73) "Water slide or water tube" means a sloped trough-like flume or tube structure of varying slope and direction using water as a lubricant and/or method of regulating the rider speed.

(74) "Water treatment operator" means the person appointed to operate the mechanical equipment and perform related water quality monitoring for proper operation of the physical facility.

(75) "Wave pool" means a recreational pool producing waves which usually begin at the deep end and proceed toward and dissipate at the shallow end.

(76) "WWA" means World Waterpark Association.

[Statutory Authority: RCW 70.90.120 and 43.20.050. WSR 22-07-102, § 246-262-010, filed 3/22/22, effective 4/22/22. Statutory Authority: RCW 70.90.120. WSR 12-17-102, § 246-262-010, filed 8/17/12, effective 9/17/12; WSR 10-20-131, § 246-262-010, filed 10/5/10, effective 11/5/10; WSR 92-02-020 (Order 226B), § 246-262-010, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-020, filed 6/22/88.]

WAC 246-262-060 General design, construction, and equipment.

(1) Owners shall locate RWCFs to:

(a) Minimize pollution by dust, smoke, soot, and other undesirable substances;

(b) Eliminate pollution from surrounding surface drainage; and

(c) Ensure pools within the RWCF are more than fifteen feet from any structure, object, or land formation (i.e., pumphouse, tree, etc.), which would provide a user with the opportunity to jump from such a structure into the pool. This does not include any barriers provided to prevent unauthorized access to pool or segments of attractions which enter pool.

(2) Owners shall use only materials in the structure and equipment which are nontoxic, durable, inert, impervious to water, and easily cleaned.

(3) Owners shall design and maintain walking surfaces which are:

(a) Sloped a minimum one-fourth inch per foot;

(b) Of a nonslip finish;

(c) Equipped with sufficient drains to prevent standing water;

(d) Free of resilient coverings, e.g., carpeting; and

(e) At least four feet in width.

(4) Owners shall provide adequate barrier protection to prevent unauthorized access including:

(a) In outdoor facilities, a barrier six feet or more in height with:

(i) Openings, holes, or gaps not to exceed four inches except openings protected by gates or doors; and

(ii) Lockable gates and entrances either regulated during periods of use or provided with a self-closing, self-latching mechanism a minimum of forty-two inches from the ground.

(b) In indoor facilities, suitable barriers to prevent access by unauthorized individuals or pool access by unattended small children.

(5) Owners shall ensure that pools:

(a) Comply with all provisions of chapter 246-260 WAC where pool facilities are a separate attraction;

(b) Have surfaces with:

(i) Materials complying with subsection (2) of this section;

(ii) Watertight and nonabrasive construction;

(iii) Nonslip finish where users are walking; and

(iv) White or light color finish not obscuring the view of objects or surfaces.

(c) Are dimensionally designed to provide for the safety of the user and circulation of the water including, but not limited to:

(i) Absence of protrusions, extensions, means of entanglement, or other obstruction which can cause entrapment or injury;

(ii) Construction tolerances conforming with current ANSI public pool standards;

(iii) Uniform pool floor slopes as follows:

(A) Not exceeding one foot of drop in seven feet of run for pools serving as landing or exiting pools, where total water depth is less than forty-eight inches; and

(B) Providing a maximum slope of one foot of drop in twelve feet of run up to a depth of five and one-half feet in pools where users enter and participate in extended activities.

(iv) Vertical walls for a minimum distance noted in Table 4 of this section, which may be curved (not to exceed allowable radius) to join the floor.

(A) Vertical means walls not greater than eleven degrees from plumb.

(B) Coving or portion of the side wall of a diving area in the pool shall conform as described in subsection (5)(c)(vi) of this section.

(C) In new construction or alterations to existing construction, ledges are prohibited.

(D) Requirements in subsection (5)(c) of this section do not apply to spas.

(v) A maximum intrusion beyond the vertical (as defined in subsection (5)(c)(iv)(A) of this section) with any configuration not to exceed a transitional radius from wall to floor where floor slopes join walls and which:

(A) Has its center of radius no less than the minimum vertical depth specified in Table 4 of this section below the water level;

(B) Has arc of radius tangent to the wall; and

(C) Has a maximum radius of coving (or any intrusion into the pool wall/floor interface) determined by subtracting the vertical wall depth from the total pool depth.

TABLE 4 MAXIMUM RADIUS COVING OR POOL INTRUSION DIMENSIONS BETWEEN POOL FLOOR AND WALL*								
Pool Depth	2'0"	2'6"	3'0"	3'6"	4'0"	4'6"	5'0"	>5'0"
Minimum Slide Wall								
Vertical Depth	1'6"	1'10"	2'2"	2'6"	2'10"	3'2"	3'6"	>3'6"
Maximum Radius								
of Curvature	6"	8"	10"	12"	12"	14"	1'6"	**Maximum radius equals pool depth minus the vertical wall depth

Note: * For pool depths which fall between the depths listed, values can be interpolated.

** Radius of coving cannot intrude into pool within diving envelope or deep water entry area for attractions entering above pool water level.

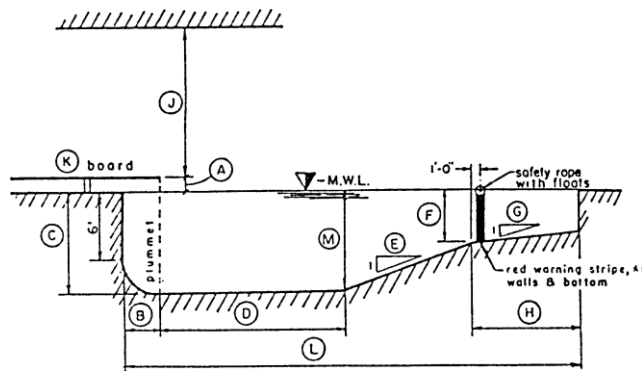
(vi) Provision of diving envelopes in pools or areas of pools designated for diving activities to include:

(A) A diving envelope of no less than the CNCA standard configuration* noted in Figure 1 of this section in areas where user would enter from deck level, diving board, or platform at a height of less than one-half meter (twenty inches).

Note: * This requirement is based on a standard described in CNCA publication "Swimming Pools: a Guide to their Planning, Design, and Operation" 1987. Fourth edition. Human Kinetics Publisher, Inc., Champaign, Illinois. Figure 8.1

FIGURE 1:

Minimum dimensions for pools with provision for diving from deck level or providing boards or platforms at a height less than one-half meter.



Dimension	Minimum	Preferred or Maximum
A Height of board above water		20 in.
B Board overhang	2 ft 6 in.	3 ft
C Depth of water at plummet	9 ft	10 ft*
D Distance from plummet to start of upslope	16 ft	18 ft*
E Inclination of upslope of bottom		1:3
F Depth of water at breakpoint	4 ft 6 in.	
G Slope of bottom in shallow portion of pool	1:12	1:15*
H Length of shallow section of pool	8 ft	14 ft*
I Distance to any overhead structure	13 ft	15 ft*
K Board length		12 ft
L Length of pool	40 ft	50 ft*
M Dimension not less than C minus	6 in.	

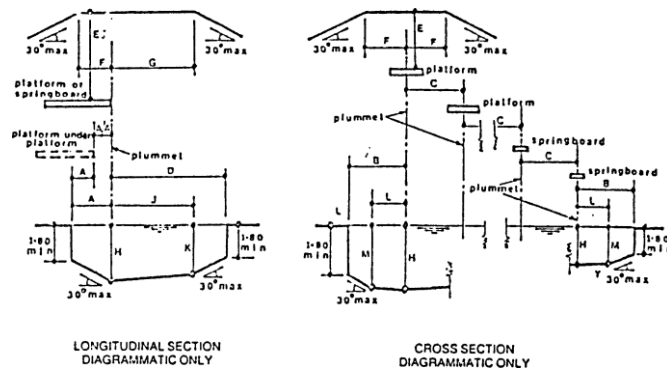
Note: * Values with asterisks are not to be considered as maximums.
 ** Warning stripe at break point may be of any contrasting color.

(B) A diving envelope of no less than the FINA standard configuration** noted in Figure 2 of this section in areas where user would enter from diving board or platform at a height of one-half meter (twenty inches) or greater.

Note: ** This requirement is based on a standard described in FINA publication "FINA Handbook - 1986-1988." Constitution and rules governing swimming, diving, water polo, and synchronized swimming, 1986-1988. Edited by E. Allen Harvey, Vancouver, Canada VGN 3R6, Section D, pp. 114-115.

FIGURE 2:

Minimum dimensions for pools with boards or platforms at a height of one-half meter or more.



	Dimensions	SPRINGBOARD		PLATFORM				
FINA	are in Metres	1 Metre	3 Metres	1 Metres	3 Metres	5 Metres	7.5 Metres	10 Metres
DIMENSIONS FOR	LENGTH	4.80	4.80	4.50	5.00	6.00	6.00	6.00

		Dimensions		SPRINGBOARD				PLATFORM									
FINA		are in Metres		1 Metre		3 Metres		1 Metres		3 Metres		5 Metres		7.5 Metres		10 Metres	
DIVING FACILITIES		WIDTH		0.50		0.50		0.60		1.50		1.50		1.50		2.00	
Revised to 1st Jan 1987		HEIGHT		1.00		3.00		0.60-1.00		2.60-3.00		5.00		7.50		10.00	
			HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	HORIZ	VERT	
A	From plummet BACK TO POOL WALL	DESIGNATION	A-1		A-3		A-1Pl		A-3Pl		A-5		A-7.5		A-10		
		MINIMUM	1.80		1.80		0.75		1.25		1.25		1.50		1.50		
A/A	From plummet BACK TO PLATFORM Plummet directly below	DESIGNATION									AA5/1		AA7.5/3/1		AA10/5/3/1		
		MINIMUM									1.50		1.50		1.50		
B	From plummet to POOL WALL AT SIDE	DESIGNATION	B-1		B-3		B-1Pl		B-3Pl		B-5		B-7.5		B-10		
		MINIMUM	2.50		3.50		2.30		2.90		4.25		4.50		5.25		
C	From plummet to ADJACENT PLUMMET	DESIGNATION	C-1/1		C-3/3/1		C-1/1Pl		C-3/1Pl/3Pl		C-5/3/1		C-7.5/5/3/1		C-10/7.5/5/3		
		MINIMUM	2.40		2.60		1.65		2.10		2.50		2.50		2.75		
D	From plummet to POOL WALL AHEAD	DESIGNATION	D-1		D-3		D-1Pl		D-3Pl		D-5		D-7.5		D-10		
		MINIMUM	9.00		10.25		8.00		9.50		10.25		11.00		13.50		
E	On plummet, from BOARD TO CEILING	DESIGNATION		E-1		E-3		E-1Pl		E-3Pl		E-5		E-7.5		E-10	
		MINIMUM		5.00		5.00		3.50		3.50		3.50		3.50		5.00	
F	CLEAR OVERHEAD behind and each side of plummet	DESIGNATION	F-1	E-1	F-3	E-3	F-1Pl	E-1Pl	F-3Pl	E-3Pl	F-5	E-5	F-7.5	E-7.5	F-10	E-10	
		MINIMUM	2.50	5.00	2.50	5.00	2.75	3.50	2.75	3.50	2.75	3.50	2.75	3.50	2.75	5.00	
G	CLEAR OVERHEAD ahead of plummet	DESIGNATION	C-1	E-1	C-3	E-3	G-1Pl	E-1Pl	G-3Pl	E-3Pl	G-5	E-5	G-7.5	E-7.5	G-10	E-10	
		MINIMUM	5.00	5.00	5.00	5.00	5.00	3.50	5.00	3.50	5.00	3.50	5.00	3.50	6.00	5.00	
H	DEPTH OF WATER at plummet	DESIGNATION		H-1		H-3		H-1Pl		H-3Pl		H-5		H-7.5		H-10	
		MINIMUM		3.50		3.80		3.30		3.60		3.80		4.50		5.00	
J	DISTANCE AND DEPTH	DESIGNATION	J-1	K-1	J-3	K-3	J-1Pl	K-1Pl	J-3Pl	K-3Pl	J-5	K-5	J-7.5	K-7.5	J-10	K-10	
K	ahead of plummet	MINIMUM	5.00	3.40	6.00	3.70	5.00	3.20	6.00	3.50	6.00	3.70	8.00	4.40	11.00	4.75	
L	DISTANCE AND DEPTH	DESIGNATION	L-1	M-1	L-3	M-3	L-1Pl	M-1Pl	L-3Pl	M-3Pl	L-5	M-5	L-7.5	M-7.5	L-10	M-10	
M	each side of plummet	MINIMUM	1.50	3.40	2.00	3.70	1.40	3.20	1.80	3.50	4.25	3.70	4.50	4.40	5.25	4.75	
N	MAXIMUM SLOPE TO REDUCE DIMENSIONS beyond full requirements	POOL DEPTH CEILING HT	30 degrees 30 degrees		NOTE Dimensions C (plummet to adjacent plummet) apply for Platform with widths as detailed. For wider Platforms increase C by half the additional width(s)												

(d) Have adequate handholds around the perimeter in pools designed for extended swimming and bathing activity and excluding wave pools; and

(e) Stairs, ladders, or stepholes with:

(i) Stairs, when provided, meeting the following construction requirements:

(A) Treads of a nonslip finish;

(B) Stair tread edges colored to contrast with the color of the pool and clearly visible to the users;

(C) Recessed in pool areas used for lap swimming or provided with wave action; and

(D) Equipped with handrails extending over the edge of the deck.

(ii) Ladders or stepholes which:

(A) Furnish exit from pools greater than four feet in depth except in landing pools bringing the user toward a shallow area after entering the water;

(B) Are spaced a minimum of one for every fifty feet of pool perimeter greater than four feet deep;

(C) Are provided at both sides of the deep end in pools over thirty feet in width; and

(D) Are equipped with a handrail at the top of both sides extending over the coping or edge of the deck.

(iii) User access at the shallow end of pool.

(6) Owners shall ensure treatment turnover at rates no less than designated as follows:

(a) In receiving pools for water slides, water tubes, inner tube rides, speed slides or tubes, drop slides or tubes, and kiddie flume slides, treatment turnover time can be based on any of the following:

(i) Total attraction volume in one-hour period;

(ii) Treatment turnover equals design peak usage (maximum users per hour) expressed in gpm;

(iii) A rate of one hour for 20,000 gallons per two or less attraction segments. Treatment turnover times may increase proportionately for larger pool volumes per two or less attraction segments;

(iv) Alternative methods where provisions to reduce contaminants are justified to the satisfaction of the department or local health officer; and

(v) Treatment turnover times not to exceed six hours.

(b) For wave pools, a minimum treatment turnover time of two hours; and

(c) For activity pools, a minimum treatment turnover time of four hours.

(7) Owners shall provide pool inlets which are:

(a) Submerged and located to produce uniform circulation of water and chemicals throughout the pool; and

(b) Located on the bottoms of pools greater than two thousand five hundred square feet, unless otherwise justified by the engineer to the satisfaction of the department or local health officer.

(8) Except as provided in (d) and (e) of this subsection owners shall provide pool outlets with:

(a) Overflow and main drain systems with each designed to carry one hundred percent of total recirculation filter flow;

(b) Overflow outlets that have:

(i) Design to maintain a minimum of sixty percent of filter recirculation flow at all times;

(ii) An overflow channel on the pool perimeter to promote uniform circulation and skimming action of the upper water layer for pools greater than twenty-five hundred square feet, with:

(A) Design preventing matter entering channel from returning to the pool;

(B) Dimensions minimizing the hazard for bathers, such as catching arms or feet in an overflow channel;

(C) 0.01 foot slope per foot or more;

(D) Drains sufficiently spaced and sized to collect and remove overflow water to return line to filter where applicable;

(E) Size sufficient to carry one hundred percent of the recirculation flow plus the surge flow equivalent to one-fifth of the balancing tank expressed in gallons per minute.

(iii) Skimmers, when used on pools up to twenty-five hundred square feet, if:

(A) Demonstrated to operate properly under design conditions;

(B) Turbulence is not expected to interfere with operation;

(C) Maximum flow rate through skimmers does not exceed four gpm per inch of weir;

(D) Devices are recessed in the wall of the pool so that no part protrudes beyond the plane of the wall into the pool;

(E) The skimmer is equipped with a device to prevent air lock in the recirculation suction line (i.e., an equalizer line). If equalizer lines are used they must be protected with suction outlets that conform to the suction fitting standard; and

(F) The skimmer is equipped with a removable and cleanable screen designed to trap large solids.

(iv) Sidewall channels, when used on pools up to twenty-five hundred square feet, which accept the total recirculation volume of the pool through the upper side of the pool if:

(A) Overall flow through the channel exceeds four times the treatment recirculation rate;

(B) Design of channel prevents entrapment of the user;

(C) Openings of any screens have less than one-half inch slots;

(D) Channel openings do not allow access beyond the pool, except with the use of specific tools requiring their opening;

(E) Open area of screens prevent a suction or entrapment hazard which could be dangerous to the user; and

(F) The channel provides an action pulling water from the top of the pool to remove floatable debris and oils.

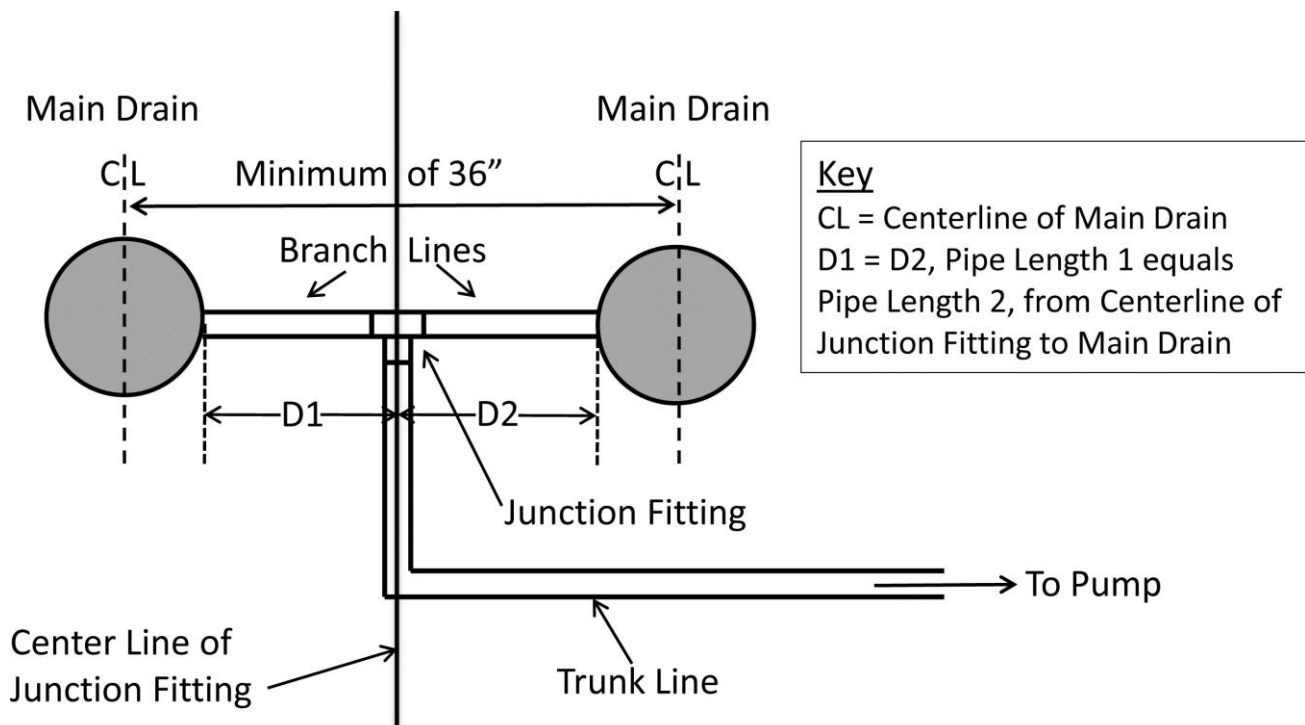
(c) Main drains in all pools must:

(i) Be located at the low points of the pool;

(ii) Have piping that is manifolded with junction fittings placed in the middle of branch line piping between main drains, so that the length of branch line piping is equal on each side of the junction fitting; see Figure 3

FIGURE 3:

Main Drain Branch Line Piping Detail.



(iii) Have a minimum of two main drains spaced at least three feet apart, measured between the centers of the drain covers;

(iv) Conform to the suction fitting standard;

(v) Have covers with a maximum flow of 1.5 feet per second;

(vi) Be designed so that if one main drain becomes blocked, the remaining main drains are rated to at least one hundred percent of the maximum pump flow; see Table 5

(vii) Have means to control flow from recirculation pump or balancing tank.

TABLE 5
MAIN DRAIN FLOW RATING REQUIREMENTS

	Number of Main Drains Per Recirculation System			
	2	3	4	5
Main drain rated flow capacity must be at least equal to the percent of maximum pump flow indicated, depending on the number of main drains.	100%	50%	33.3%	25%

(d) Existing recreational water contact facilities may be modified to operate without main drains, provided that water quality and water clarity standards established in WAC 246-262-050 are met;

(e) New recreational water contact facilities may be constructed without main drains, provided that water quality and water clarity standards established in WAC 246-262-050 are met.

(9) Owners shall maintain recirculation flow which:

(a) Does not exceed six feet per second in suction or valved discharge side of pump; and

(b) Does not exceed ten feet per second in open discharge pipes on the pressure side of the pump or filter discharge. This limit does not apply to the return inlet and the last two feet of pipe leading to the inlet.

(10) Owners shall provide a surge chamber or surge area in RWCFs with an entry pool to:

(a) Accommodate at least two minutes of the total turnover; and

(b) Maintain proper water levels for treatment and operation of the attraction.

(11) Owners having RWCFs with overflow channels requiring balancing tanks shall:

(a) Maintain volume equivalent to fifteen times maximum bathing load expressed in gallons; and

(b) Increase capacity as necessary to provide volume for make-up water and to prevent air lock in the pump suction line.

(12) Owners shall have and maintain recirculation pumps with adequate capacity to:

(a) Provide design flows and pressure for recirculation of the RWCF water over the entire operating pressure of the filter;

(b) Allow proper capacity for backwashing of filters when specified; and

(c) Have self-priming capability when installed above the pool water level.

(13) Where pumps precede the filter, owners shall install hair and lint strainers, which shall:

(a) Be located upstream of recirculation pumps;

(b) Be of corrosion-resistant material sufficiently strong to prevent collapse when clogged;

(c) Have an operable cover; and

(d) Provide valving to isolate the strainer when located below pool water level.

- (14) Owners shall provide valves at appropriate locations to allow isolation and maintenance of equipment.
- (15) Owners shall provide equipment rooms which:
- (a) Enclose pumps, disinfection equipment, filters, and other electrical and mechanical equipment and associated chemicals;
 - (b) Provide adequate working space and access to perform routine operations;
 - (c) Provide lighting and ventilation of the equipment room; and
 - (d) Are not accessible to the public.
- (16) Owners shall ensure the source of make-up water and associated piping in the RWCF:
- (a) Provides sufficient quantity to replace daily losses from the pool;
 - (b) Comes from a supply conforming with chapter 246-290 WAC; and
 - (c) Prevents cross-connections using a minimum air gap of two pipe diameters or approved backflow prevention devices between the make-up water source and the RWCF attraction water or waste water.
- (17) Owners shall equip RWCFs with filtration equipment which:
- (a) Meets the applicable standards of NSF or equivalent;
 - (b) Uses acceptable types and filter rates described in Table 6 of this section:

TABLE 6
FILTER TYPES AND ACCEPTABLE RATES

		Range of Acceptable Filter Rate Expressed in gpm/sq. ft.	
Type of Filter		Minimum	Maximum*
Sand			
Rapid & pressure		—	3
Pressure high rate		10	18
Vacuum high rate		10	18
DE		Continuous feed	Manual feed
Vacuum		0.8	1.0
Pressure		1.0	1.35
Cartridge**			
Applied in temperature ranges:			
	<95°F.	—	0.375
	>95°F.	—	0.188

Note: * Filters sized at maximum application rate shall use flow control valves.
 ** Cartridge filters shall have a nominal micron rating of twenty microns or less.

- (c) Has pressure or vacuum gauges for measuring loss of head (pressure) through the filter with minimum of one gauge preceding and one gauge following the filter;
- (d) Has a flow indicator to measure treatment turnover; and
- (e) Has means of discharging filter backwash to waste with:
 - (i) Discharge in a manner not creating a public nuisance;
 - (ii) Disposal in accordance with applicable local law or regulation;
 - (iii) Minimum air gap of two pipe diameters to prevent cross-connection from waste discharge and recirculation system piping;
 - (iv) Discharge receptor and piping of sufficient size to accept backwash water and prevent flooding; and
 - (v) Provisions to monitor filter effluent during backwash.

(18) Owners shall provide disinfection equipment which:

(a) Provides a continuous and effective residual of disinfectant in the water;

(b) Uses a disinfectant with a residual that is easily monitored;

(c) Conforms with NSF standards when liquid or solid feed materials are used;

(d) Has a design feed rate which will provide effective disinfection levels when RWCFs are in use;

(e) Meets the following conditions if chlorine gas is used:

(i) Chlorine rooms shall:

(A) Be above ground level;

(B) Be constructed so all openings or partitions with adjoining rooms are sealed;

(C) Be located with consideration of prevailing winds to dissipate leaked chlorine away from the RWCF;

(D) Have door opening outward only and to the out-of-doors.

(ii) Mechanical exhaust ventilation of the chlorine room including:

(A) Air inlet located as far as possible from fan intake to promote good air circulation patterns;

(B) Minimum of one air change per minute in the chlorine room when fan is operating;

(C) A remote switch outside the room or a door-activated switch to turn on fan prior to entering;

(D) Suction for fan near the floor; and

(E) Exhaust for fan and chlorinator vent located to prevent contaminating air intakes or prevent undue hazard for the users of the RWCF.

(iii) Gas chlorine systems which:

(A) Are vacuum injection type, with vacuum actuated cylinder regulators; and

(B) Provide adequate-sized backflow and anti-siphon protection at the ejector.

(iv) Breathing protection available in an accessible area for the operator outside of the chlorine room including:

(A) Instructions about limitations with chlorine concentrations and concentrations of oxygen if chlorine-type canister masks are used; and

(B) Self-contained breathing apparatus designed for use in a chlorine atmosphere as preferred equipment for working with chlorine leaks.

(v) Means for automatic shutoff when the recirculation filter pump is off or flow to the pool is interrupted;

(vi) Chlorine gas cylinders shall:

(A) Be stored only in chlorine rooms; and

(B) Not exceed one hundred fifty pounds tare weight per cylinder; except, wave pools, where one-ton cylinders may be used. Only a single, one-ton cylinder shall be stored on the premise at any time.

(19) Owners applying chemicals other than disinfectant shall provide chemical feed equipment with:

(a) Adequate size and design to allow routine cleaning and maintenance;

(b) Materials resistant to action of the chemicals to be used; and

(c) Means for automatic shut off when the recirculation filter pump is off or flow to the pool is interrupted.

(20) Owners shall have testing equipment to provide means for measuring disinfectant residuals, pH, alkalinity, and any other chemicals used routinely in the RWCF water. In pools where compressed chlorine gas is used, means to detect leaks shall be provided, i.e., use of proper strength ammonia vapor.

(21) Owners shall provide easily accessible change room facilities at all RWCFs with:

- (a) Dressing rooms, showers, toilets, urinals, and sinks;
- (b) Change room design including:
 - (i) Separate facilities for both sexes;
 - (ii) Floors of a nonslip finish with suitable drains;
 - (iii) Junctions between walls and floors coved for ease of cleaning;
- (iv) Adequate ventilation to prevent build-up of moisture in the facility; and
- (v) Provisions to minimize cross traffic with nonusers.
- (c) Plumbing fixtures as described in Table 7 of this section.

TABLE 7
MINIMUM PLUMBING FIXTURE REQUIREMENTS
BASED ON MAXIMUM PEAK PERIOD OCCUPANCY

<u>Type of Fixture</u>	<u>Occupancy/Sex</u>	<u>Number of Fixtures Required Per Occupancy Load</u>	
		<u>Male</u>	<u>Female</u>
1. Toilets	First 600	1/200	1/100
	Portion exceeding 600	1/450	1/300
2. Urinals	First 600	1/200	-
	Portion exceeding 600	1/450	-
3. Showers	First 300	1/100	1/100
	Portion exceeding 300	1/200	1/200
4. Sinks	First 400	1/200	1/200
	Next 350	1/350	1/350
	Portion exceeding 750	1/500	1/500
5. Hose bibs		1 accessible to change rooms	
6. Janitor sink		1 within the RWCF	

(d) Showers:

- (i) Delivering water at a temperature range between ninety and one hundred ten degrees Fahrenheit; and
- (ii) Providing liquid or powdered soap in nonglass dispensers.
- (e) Flush toilets and toilet tissue in dispensers;
- (f) Sinks providing:
 - (i) Tempered or hot and cold running water,
 - (ii) Liquid or powdered soap in nonglass dispensers, and
 - (iii) Disposable towels or electric hand dryers.
- (g) Sewage disposed of in a manner approved by the department or local health officer; and
- (h) Hose bibs with vacuum breakers provided at convenient locations.

(22) Owners shall design and maintain lighting at RWCF attractions or change rooms to:

- (a) Illuminate indoor attractions, outdoor attractions used after dusk, or change rooms with a minimum lighting intensity maintained thirty inches above any walking surface, pool deck, or pool area of:

- (i) Thirty foot-candles at indoor facilities;
- (ii) Fifteen foot-candles at outdoor facilities; or
- (iii) Twenty foot-candles in change rooms.
- (b) Allow lifeguards or attendants to clearly see every part of pool waters and walking surfaces; and
- (c) Meet any additional lighting requirements deemed necessary by the department or local health officer.
- (23) Owners shall provide first-aid facilities in every RWCF including:
 - (a) A twenty-four package first-aid kit per WAC 296-24-065;
 - (b) Two or more blankets reserved for emergency use;
 - (c) A telephone with a prominently displayed list of emergency medical service response numbers;
 - (d) A backboard meeting the specifications of the ARC; and
 - (e) Sufficient and suitable area to accommodate persons requiring treatment and necessary first-aid equipment.
- (24) Owners shall provide signs at RWCF entrances and change rooms. Any combination of words, pictures, or symbols may be used to convey the following conditions:
 - (a) Prohibition of use by persons with communicable diseases;
 - (b) Prohibition of use by persons under the influence of alcohol or drugs;
 - (c) Requirement for a cleansing shower before entering the attractions;
 - (d) Warning that persons refusing to obey the attendants are subject to removal from the premises; and
 - (e) Prohibition of food and drink in pool, change room, or on walking surfaces.
- (25) If owners allow or make provision for food service:
 - (a) Food and beverage sale and consumption areas shall be separate from pool, change room, and walking surfaces;
 - (b) Trash containers shall be provided; and
 - (c) No glass containers shall be allowed in the RWCF.
- (26) Owners shall prevent users or spectators access to mechanical, electrical, or chemical equipment facilities.
- (27) Owners shall provide an operable drinking fountain of the angle jet type design meeting the requirements of the American Standards Association.

[Statutory Authority: RCW 70.90.120. WSR 12-17-102, § 246-262-060, filed 8/17/12, effective 9/17/12; WSR 10-20-131, § 246-262-060, filed 10/5/10, effective 11/5/10; WSR 92-02-020 (Order 226B), § 246-262-060, filed 12/23/91, effective 1/23/92. Statutory Authority: RCW 43.20.050. WSR 91-02-051 (Order 124B), recodified as § 246-262-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.90.120. WSR 88-13-125 (Order 311), § 248-97-070, filed 6/22/88.]