

Wading Pool Plan Detail

Items to Include in the Plans

Wading Pool Dimensions and Surfacing Material

- Length.
- Width.
- Shallow water depth.
- Deep water depth.
- Type of pool surfacing material.
- Pool floor slope.
- Dimensions of pool walls.

Note: This plan detail doesn't yet include additional requirements needed to comply with the new federal law, the *Virginia Graeme Baker Pool and Spa Safety Act*. For guidance, see www.doh.wa.gov/WaterRecRules.

Dimensions and Surfaces of Walking Surfaces

- Width.
- Total square feet of walking surfaces.
- Slope degree and direction.
- All decks, locker rooms, and walkways to and from the pool are sloped to drains.
- Surface is non-slip.
- Type of surfacing material used.
- Materials easy to clean, fast drying, and water sealed.

Wading Pool Entry and Exit

- Stairs, shallow pool entry, or ramp provided.

Barrier Protection

- Type of barrier provided.
- Horizontal and vertical member construction of the barrier.
- Maximum openings at the base of the barrier.
- Barrier isn't compromised to reduce the minimum barrier height measured from the outside of the barrier (for example, a sloping hill or bench).
- At pools without lifeguards:
 - All gates or doors leading into the pool are self-closing and self-latching.
 - Windows that are accessible to the public and opening to the pool, may not open more than 4 inches (bedroom windows that open need more barrier protection).
 - Separate locking method used to lock gates and doors when the pool is closed.
 - Latches are installed on all gates and doors. Use one of the following latches types:
 - Continuously locked.
 - Coded.
 - Made with an 18 inch radius of protection to prevent a person from reaching through the outside of the gate to unlatch the door or gate.
 - Or raised 60 inches or more in height.
 - Check Americans with Disabilities Act for latch requirements (see WAC 51-1100) and Fire Code (see 51-54-1000) for additional guidance for emergency exits. For more information, see <https://fortress.wa.gov/ga/apps/sbcc/page.aspx?nid=4>.

Inlets and Outlets and Make-up Water

- Number of inlets.
- Location of inlets.
- Designed flow per inlet.

- If outlet is an overflow channel, show:
 - Details on the overflow channel design.
 - Details of the accompanying balancing tank.
 - Design will be sufficient to handle peak design surges and turnover.
 - Design prevents flooding of the overflow system.
 - Design provides an equalizer line or similar protection for the recirculating pump.
 - Controls provided to ensure against flooding and preventing air lock on the pump.
- If outlet is a skimmer (pool less than 2500 square feet of surface area) show:
 - Total length of each weir.
 - Total height of each weir.
 - Design can handle from 3 to 5 feet per second across the weirs at normal operating flow.
 - Design of normal operating flow going across the weir (minimum of 60 percent).
 - Equalizer line users have opening to the pool protected with a grate rated through IAPMO or UL to protect against hair entrapment.

Main Drains

- Spacing between main drains and a minimum of two separate drains.
- There is more than one drain so no single drain becomes the sole source of suction.
- Maximum velocity through any one drain pipe shall not exceed 6 feet per second assuming 100 percent of the total recirculation flow at peak flow conditions.
- Main drain gratings:
 - Total open area of the grates.
 - Maximum flow potential across the drains does not exceed 1.5 feet per second
 - Dimensions of the drain grates.
 - Means to secure and fasten the drain grates to the main drain sump.

Fresh Water

- Note method for addition of fresh water.
- Protections to prevent back pressure or back siphonage.
- Size of the fresh water makeup in relation to anticipated daily needs.

Valves, Strainer Basket, and Pump

- Identify valve placement in the design.
- Flow control from the overflow and the main drain system assures at least 60 percent of the flow comes from the overflow system.
- Note design flow of the pump in relation to the overall range of flows with the filter clean and with the filter dirty.
- Provide estimated range of flows determined by the design (hydraulic calculations welcome).

Turnover Rate, Filter, Disinfection Equipment, and other Chemical Feeding Equipment

- Provide turnover rate.
- Turnover rate meets the minimum turnover requirement when filter is dirty.
- GPM/SF rate of flow with filter clean and dirty.
- Filter and disinfection equipment listed to NSF 50 or equal.
- Equipment sized to ensure it meets anticipated peak flows and demands, and average demands.
- If using cartridge filters, specify an extra set of cartridges.
- When recirculation pump is turned off, controls for feeding disinfectant and other chemical feeding equipment for controlling pH also turns off (describe how this is accomplished).
- If using supplemental disinfectants, such as ozone, copper/silver, or UV, please contact the office to ensure that they are correctly used.

Mechanical Equipment and Chemical Storage

- Adequate space provided for access to equipment for routine maintenance and use.
- All gauges and flow meters are placed where they can be easily read and provide accurate readings.
- All chemicals are stored in a separate room or according to the manufacturer's requirements.
- Mechanical room:
 - Enclosed.
 - Locked.
 - Well ventilated.
 - Floor sloped to drain.
 - Lighting sufficient for equipment maintenance and reading of meters and gauges.

Locker Rooms and Plumbing Fixtures

- Plumbing fixtures conform with applicable requirements – toilets, urinals, showers, sinks, and hose bibs, diaper changing stations, drinking fountains, and janitor sinks.
- Locker rooms designed to minimize cross traffic between persons in street shoes and those barefoot.
- [See requirements for fixtures for General use pools, WAC 246-031, Table 031.3, Limited use pools Table 031.4].

Mechanical Ventilation

- Conforms with ASHRAE standards for indoor pools.
- Provides good air patterns in the indoor pool facility to eliminate short circuiting of fresh air to exhaust air.
- Provides protection against moisture buildup.
- Air pressure in indoor pool facility slightly then in lower air pressure than surrounding rooms or areas.
- Total air flow and the minimum fresh air component detailed.

Lighting – Outdoor Pools

- Pools used after dusk meet minimum lighting conditions of 10 foot candles on the decks and pool surface.
- Pool closed before dusk.
 - Letter from the owner provided.

Lighting - Indoor Pools

- Meets minimum standards for indoor pools of 30 foot candles on pool surfaces, 10 foot candles on pool decks.
- Lights have protective covers.
- The direction of natural light from windows and potential for glare problems from sunlight considered.

Bather Load

- Bather load projections calculated in accordance with size of the pool, walking surfaces, plumbing fixtures, surge volume in overflow channel, and balancing tank.

For more information, contact the Washington State Department of Health's Water Recreation Program at www.doh.wa.gov/watersafetycontact.