

Plan Detail

Floatation System Facility Construction Permit Application



Submit three sets of plans and specifications:

- Prepared and stamped by an engineer or an architect currently licensed in the state of Washington.
- Drawn to scale with adequate details including items listed below.

NOTE: If your proposed floatation system is a pre-manufactured type, a Washington State licensed engineer or architect's stamp is not required. However, engineered plans from the manufacturer with their engineer's stamp and signature will be required instead. Plans for the rest of the facility may be prepared in a professional manner by a competent draftsman.

Please make sure to include in the plans the pieces of information listed below. You may be asked to provide additional information with regards to your specific design proposal.

General Site Plan

- General layout of the entire facility
- Surface materials used
- Public restrooms with handwashing sinks
- Entrance/exit
- All doors and windows
- Location of a hose bibb
- Lighting and ventilation

Tank (and Reservoir if used) Dimensions and Surfacing Material

- Length
- Width
- Depth of float water (location of water line)
- Surface area
- Total float water volume
- Types of surfacing material
- Location, placement, and dimension of handrails and stairs

Inlets, Outlets, and Make-up Water

- Locations of inlets
- Inlet design/dimensions
- Locations of outlets
- Outlet design/dimensions
- Source and method of adding make-up water, and backflow prevention
- Method of float water disposal, and backflow prevention

Flow Design

- Maximum and minimum flow rates (Clean filter / Dirty filter)
- Maximum and minimum Total Dynamic Head Losses (Clean filter / Dirty filter)

- Normal operation turnover rate (Time it takes to recirculate the amount of Float Water equal to the total float water volume)
- Piping material and schematics including pipe diameter and equipment configuration
- Location, manufacturer, and model of flow meter

Filter, Treatment Method Equipment, and other Chemical Feeding Equipment

- Filter manufacturer, model, filter media rate, filter area
- Provision of extra cartridges if cartridge filter used
- Details on each piece of treatment method equipment including capacity rating
- Details on any other device/equipment
- Interlock mechanism to ensure devices are turned off whenever the pump is turned off

Barrier Protection

- If physical barrier is provided (to exclude unsupervised children from floatation systems), provide detailed barrier design.

Valves and Pump

- Types and placement of all valves
- Pump manufacturer, model, and pump performance curve
- Pump operation control switch

Mechanical Equipment and Chemical Storage

- Adequate space around equipment for maintenance and inspection
- All chemicals stored according to the manufacturer's requirements
- Enclosed and locked
- Well ventilated
- 20 foot candles or more of lighting

Float Tank Rooms

- Overall room layout
- Mechanical ventilation for each float tank room
- Protection against moisture build-up and potential toxic gas leak
- Negative pressure in float tank room as opposed to the common area
- Capable of producing at least 20 foot candles of lighting for cleaning, maintenance, and emergency response
- Detail on shower/toilet/hand sink design
- Flooring material

Emergency Equipment

- Ozone detectors if ozone used (Handheld and/or Stationary) and alarm system
- Location of land-line phone
- First-aid kit