FlexWORKS
BY OPW FUELING CONTAINMENT SYSTEMS

Installation Instructions
Above Grade / Below Grade
Piping Transition Sumps

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IMPORTANT: Please read all warnings and follow the installation instructions completely and carefully. Failure to do so will void all warranties and may cause product failure, or result in environmental contamination due to liquid leakage into the soil, creating hazardous spill conditions

WARNING - DANGER: Using electrically operated equipment near gasoline or gasoline vapors may result in fire or explosion, causing personal injury and property damage. Be sure that the working area is free from such hazards, and always use proper precautions.

Above/Below Grade Piping Transition Sump Models:
PSTF-4630 Fiberglass Sump with Fiberglass Top
PST-4630 Polyethylene Sump, Fiberglass Top
PST-5030 One-Piece Polyethylene Sump

FlexWorks Above Grade / Below Grade Piping Transition Sumps are multi-purpose sumps that are designed to house the connections required when transitioning from above ground steel piping to nonmetallic underground piping. These sumps are also well suited for containing valves, filters, meters, pumps and manifolds. Use only OPW supplied hardware and components.

Step #1 - Setting FlexWorks Above Grade / Below Grade Piping Transition Sumps (See diagrams on Page 2)

FlexWorks Transition sumps can be mounted below grade with the cover located under a 30" (minimum) diameter manhole or partially below grade if the sump is not located in the traffic pattern. If installed under a manhole, the sump cover must be located within the manhole skirt just under the manhole cover. Manholes should be mounded up slightly from grade to minimize surface water entry. If the sump is installed partially above grade, the exposed portion must be adequately protected from traffic by structures such as U-guards. A watertight sump cover provides permanent access to the inside of the sump for equipment inspection and maintenance.

Step #2 - Installing Pipe Entries in FlexWorks Transition Sumps

Pipes from above ground storage tanks generally enter through the top fitting entry area adjacent to the cover on the PSTF-4630 and PST-4630 or the extension on the base of the PST-5030, and exit through the opposite side wall. If a PSTF-4630 sump is installed partially above grade, pipes can enter above grade through the upper portion of one side wall and exit through the lower portion of the other side wall below grade. A Fiberglass Sump Height Extender (DSFE-4612) is available for the PSTF-4630 for deeper bury applications.

Step #3 - Make Piping Connections

Install the appropriate FlexWorks pipe and conduit entry fittings into the transition sump top and wall at the proper locations (Refer to the appropriate FlexWorks Entry Fitting Installation Instructions and Manual). Install the pipe and equipment in the containment chamber and make the appropriate piping and test boot connections.

Step #4 - Attach Sump Top (PSTF/PST-4630 Only)

If the Fiberglass Sump Height Extender (DSFE) is to be used on the PSTF-4630, attach it to the containment chamber with the supplied hardware with a bead of Urethane Sealant (SL-1100) inside the bolt holes on the sump flange. (Note: The Fiberglass Height Extender can only be used on the PSTF-4630). Apply a liberal bead of Urethane Sealant (SL-1100) to the inside edge of the flange on the containment chamber top. Place the sump top on the containment chamber. Bolt holes are predrilled on the PSTF-4630. Holes in the PST-4630 chamber must be drilled through the frame using a 3/16" drill bit. Attach the sump mounting frame to the containment chamber with the supplied screws and wing nuts.

Step #5 - Install Cover Seal

Secure the cover seal on the sump top flange inside the cover bolts with a bead of Urethane Sealant (SL-1100). Secure cover with Cover Knobs.

Leak Testing

After all connections are made, fill the sump with water. A drop in the water level within 1 hour indicates a leak that must be corrected before backfilling.

Backfilling

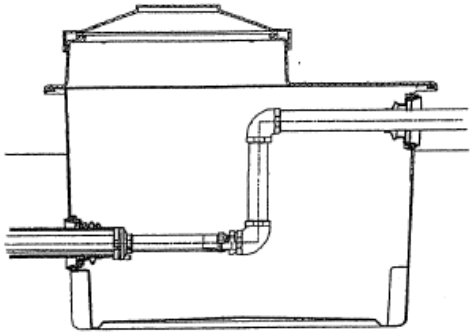
Rounded pea gravel with a minimum diameter of 1/8" and a maximum diameter of 3/4" must be used for backfill around FlexWorks Transition Sumps. To prevent sump distortion or damage, avoid dumping pea gravel directly onto the Sumps when backfilling.

Important: If installing sumps in high water table areas, use pea gravel inside the sump as ballast to prevent the sump from floating up. A slotted pipe can be installed in one corner of the sump to allow monitoring for and removal of contained liquid.

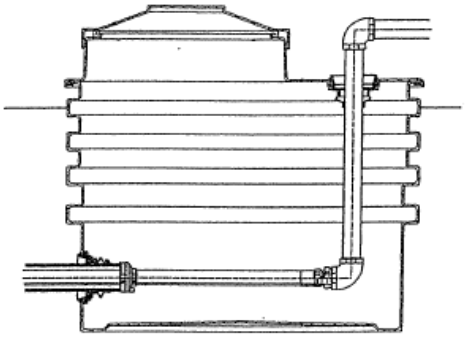
Maintenance

FlexWorks sumps are designed to provide secondary containment of tank equipment and piping connections. All sumps should be regularly checked for the presence of petroleum products. Damage or leaks in the piping, sumps, or fittings should be repaired promptly. Third party approved liquid sensors should be installed in every sump. Any liquid present in the sump should be promptly removed and disposed of properly. The drainage area between the sump and manhole skirt must be kept clear of silt and debris to allow surface water to drain away.

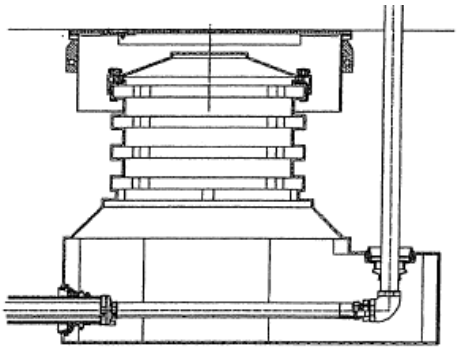
Typical Transition Sump Installations



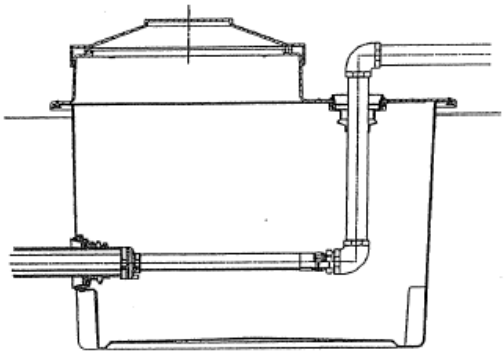
PSTF-4630 Side Entry



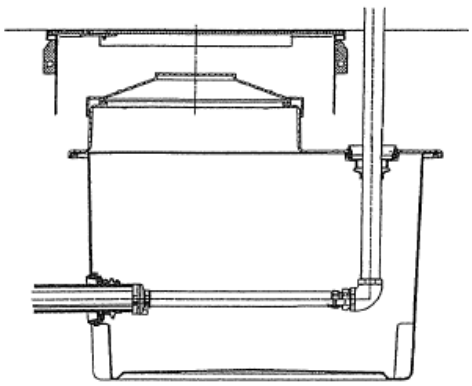
PST-4630 Top Entry



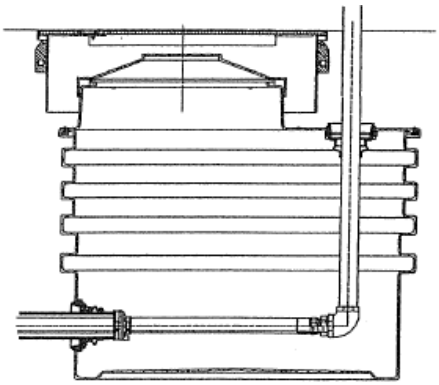
PST-5030 Below Grade



PSTF-4630 Top Entry



PSTF-4630 Below Grade



PST-4630 Below Grade

Notice: FlexWorks products must be used in compliance with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. OPW makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials, and specifications are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation.

Product Warranty

OPW warrants that products sold by it are free from defects in materials and workmanship for a period of one year from the date of shipment by OPW. As the exclusive remedy under this limited warranty, FlexWorks by OPW, Inc., will at it's sole discretion, repair, replace, or issue credit for future orders for any product that may prove defective within the one year period. This warranty shall not apply to any product that has been altered in any way, which has been repaired by any party other than a service representative authorized by OPW or when failure is due to misuse, conditions of use, or improper installation or maintenance. Neither OPW Fueling Containment Systems nor OPW shall in any instance have any liability whatsoever for special, incidental or consequential damages to any party and shall have no liability for the cost of labor, freight, excavation, clean up, downtime, removal, reinstallation, loss of profit, or any other cost or charges in excess of the amount of the original invoice for the products.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

IMPORTANT INFORMATION - FOLLOW ALL INSTRUCTIONS

Please contact your OPW-FCS sales representative or OPW-FCS customer service representative at 1-800-422-2525 for OPW-FCS products installation procedures. All OPW-FCS literature including installation instruction sheets and manuals can be accessed from the OPW-FCS website at: www.opwfcs.com.

OPW FUELING CONTAINMENT SYSTEMS

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