

INSTALLATION INSTRUCTIONS Transition Sumps

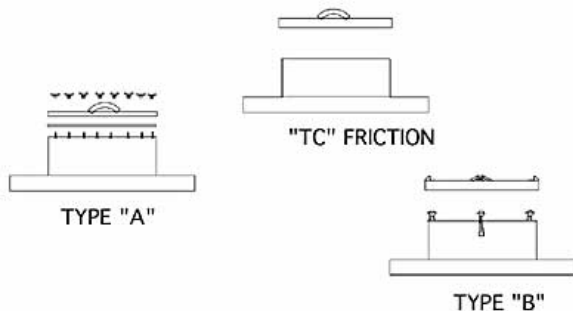
Please read this manual completely prior to installation. These instructions do not supersede local laws and regulations. Always comply with local requirements.

- 1). Inspect Containment Box upon receipt for any shipment damage.
- 2). Locate and install piping, conduit and service penetration fittings as needed. Follow penetration manufacturer's instructions as required.
- 4). Install piping, maintaining proper fall/entry angles. Test piping and penetrations as instructed by local and regional regulations and manufacturers instructions.

SUMP REDUCERS & LIDS:

To prevent leakage and to insure unit integrity, all FRP sump reducers must be slip fitted over the sump body, bonded and sealed (See Bonding Instructions below).

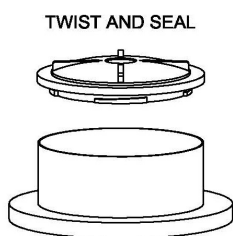
T. C. or Friction fit lids simply slip over the sump top. Type "B" Water-Resistant lids utilize pull downs to hold the lid securely against the sealing gasket on the reducer rim. Type "A" lids are gasketed and bolted watertight with wing nuts, lock and flat washers.



TWIST-SEAL LID:

1. After sump(s) have been installed on site and all work inside has been completed, inspect the gasket in the lid to make sure it is free of damage or debris. Also make

sure the surface of the reducer where the gasket will come in contact is clean and smooth. Lubricate the gasket with supplied grease.



2. Align the arrow on the edge of the lid with the arrow on the side of the reducer.
3. Place lid into reducer and turn in a clock-wise direction until gasket is firmly seated.
4. FOR VACUUM TESTING: Re-test sump(s) with vacuum. Pull maximum of one inch of vacuum for 15 to 30 minutes.



PRE-BONDING SURFACE PREPARATION:

CAUTION: Be sure to wear a dust mask and always wear gloves when handling fiberglass bonding materials.

After placing reducer on sump, use disc sander, with medium to heavy grit sand paper, to scuff up all seam areas a minimum of 4" each side of the point where the components join. It is very important that this be done fully, as the bonding materials will not adhere to any surface that has not been sanded. Brush sanding dust from seam areas.

SEAM LAMINATIONS (FOR REDUCERS OR 2-PC SUMPS):

Use one plastic bucket with acetone to clean roller, brushes and squeegee. Return tools to this bucket between use to prevent bonding materials from drying on them. **BE SURE TO SHAKE THE ACETONE OUT OF TOOLS BEFORE RE-USE!**

Lay out fiberglass mat at each seam to be bonded.

Mix small quantities for ease of handling. Hardener ratio at 70 degrees F. & 30% humidity is two (2) ounces per gallon for resin and one (1) ounce for putty. This will vary with temperature and direct sunlight. If used in direct sunlight or in temperatures above 80 degrees, reduce hardener as per instructions from supervisor or Western Fiberglass, Inc. personnel. Mix thoroughly, scraping the sides of the buckets with the stir stick.

Use a squeegee and apply putty liberally to area of first seam, being sure to completely cover all fasteners and fill all gaps. The putty will provide a smooth transition for the fiberglass material to cover.

Wet-out or soak, with brush, liquid resin over fiberglass cloth material completely, material will go clear when fully saturated. Lay first piece of fiberglass material across seam area evenly. Use roller tool to "roll-out" air bubbles gently, so as not to displace putty. Remove all bubbles. If necessary, apply additional layers of material in same manner. Your laminate should appear clear, with no air bubbles or pockets in view and all fasteners covered. If additional resin is required, use only resin from Western Fiberglass, Inc. The resin used in construction of all Western Fiberglass, Inc. components is corrosion resistant resin, made for use in fuel and chemical applications.

BACKFILL REQUIREMENTS:

Sufficient backfill must be used below and along the sump side to provide support and protection against ground movement. All sumps should be filled with water or have internal support bracing installed prior to backfill and concrete pour. Once concrete hardens, the bracing may be removed (optional) and all water should be drained.



CONCRETE RECOMMENDATIONS:

Place sump in desired position. Do not place the sump on a hard surface. Sump should be surrounded by 24 inches of pea gravel. Please note, upon finishing the installation, use a minimum of 6 inches of concrete from the grade line. Have plans for a raised concrete apron of 3-4 inches above grade for water to channel away from the sump opening in a pad of 360 degrees around the sump opening for a distance of 12-15 inches.

If the sump is shallow or exposed, bollards must be installed to eliminate drive over traffic.

Prior to pouring concrete, place plastic sheeting around the top of the pea gravel to prevent concrete from seeping into gravel and resting atop the sump shoulder. Do not place the skirt or any other pieces that may bear weight on to the sump shoulder. This may cause damage to sump over time.

TEST PROCEDURES FOR SINGLE WALL:

After the sump to tank fitting is completed, you shall test the integrity of your seal. This is important to insure that the sump bond will not allow any contained fluid to leak. Check with local regulations for required testing procedures. A common test procedure is to fill the sump with water after the sump / tank bond has completely cured, usually overnight, and observe bond seam for any leaks.

TEST PROCEDURES FOR DOUBLE WALL:

After completion of the sump body test as described above, you may test the sump body interstitial space by applying no more than 2 psi to the port(s) installed within the sump body. The annular space may also be tested using liquid or vacuum. For test times or other requirements, always follow local regulations and restrictions.