Polyethylene Tank Chamber/Sump
Installation
Installing a UPP Fusion Polyethylene Tank Sump/Chamber Base

1. Mark base for access shaft opening and bolt holes to suit access shaft.

2. Cut base opening using jig saw or hand saw only.
   Note: For square collars, use hole saw to cut all 4 corners of the opening.

3. Drill bolt holes.
4. Clean tank containment collar with acetone.

5. Apply adhesive backed gasket to access shaft flange ensuring there are no gaps. Use a sharp knife to create slits through the gasket at the location of the bolt holes.

6. Mount the sump/chamber base onto tank. Fit backing plates and bolt together using M12 (½") bolt sets (not supplied). Ensure all bolts are tightened equally. Recommended torque: 20 Nm (14.75 lbft).

7. Backfill up to the top of the tank collar. Ensure backfill is well compacted and is fully into the area under the tank sump.
Installing a UPP Electrofusion Tank Sump/Chambers Riser

1. Scrape weld area on base with hand scraper. Clean weld area with acetone.

2. Clean weld area on the riser with acetone.

3. Place riser on base and ensure it is mounted squarely.

8. Vacuum test using UPP Vacuum Test Unit to prove joint between tank collar and tank sump base. Recommended test setting: 1 ft: -30 mbar.

Note: Make sure plugs in tank manway are in position and sealed.

9. Install Pipework per customer specification.

10. Repeat vacuum test (step 8) to prove all entry seals are tight.
Attaching a harness assembly

4. Attach the harness assembly

Figure 14: For Deep Burial, pass the harness over the riser and position the top strap above the lower rib.

5. Pull the top strap tight with cam buckle.

Figure 15: For Shallow Burial, pass the harness over the riser and position top strap below top rib.

6. Position 4 drop-straps in line with base corners.

Figure 16: Pull top strap tight with cam buckle

Figure 17: Position 4 Drop Straps
7. Loop harness rings over corners.

8. Center riser on the base, ensuring it sits squarely with an even gap all round.

9. Repeat for opposite corner and two remaining corners, ensuring riser is still sitting squarely.

10. Connect the white welding lead to the terminals. Begin weld. EF1 orange units will stop automatically after 6 minutes. Mark the time near the weld terminals. Refer to FFS manual 408001007 for Electrofusion Instructions.

Pull strap in tension and then gently ratchet until webbing has wound itself and is locked in place. From this point add two full ratchets.

DO NOT OVER-TIGHTEN.
11. After a minimum of 20 minutes cooling time, release harness by pulling and holding release tabs on top assembly to override ratcheting function.

12. Repeat the vacuum test (Step 8 on page 4) procedure to prove the welded joint.

Follow Vacuum testing procedure.

**Height adjustment to Suit Final Grade**

**Trim the Riser.**

1. Select the trim mark closest to the desired height.
2. Highlight Trim mark on riser with a marker pen.
3. Trim riser using highlighted trim mark as a guide and ensure cut edge is square and flat. Remove any burrs using hand scraper.
4. Maintain 30 mm (1.2") clear vertical rise to ensure water tight lid location is correct.

Note: Trim using handsaw or jig saw ONLY.

**Figure 23: Release Harness Straps**

**Figure 24: Trim Riser**

5. Clean groove with Acetone/IPA.
6. Attach gasket to channel in underside of lid.
7. Position ends of gasket together first and work the gasket around the channel.

**Attach the Gasket**

**Figure 25: Attach the Gasket**

8. After welding riser to tank sump base, vacuum test to verify tightness of the complete sump.

Ensure plugs are replaced in Test Ports after testing to maintain liquid tight system.

**Place Lid on Riser and Attach Latches**

**Figure 26: Place Lid on Riser**

**Figure 27: Replace Plugs in Test Port**
Final Backfilling
Prior to backfilling the chamber lid must be in position to prevent any deflection of the riser.

Acceptable backfill materials are:
- Well-rounded pea gravel size 3 mm (1/8") to 20 mm (3/4").
- Crushed rock size 3 mm (1/8") to 16 mm (5/8").
- Clean washed sand.

Particular care should be taken to ensure enough backfill is laid down around the underside of the chamber should it overhang the tank containment collar.

IMPORTANT: Backfill material should fully support UPP pipe-work and be free from ice or organic silt or peat, which could disappear over time causing voids or possible ground movement. No mechanical compactors should be used such as vibrating plates, compactors or road rollers.

Installing a UPP Mechanical Tank Sump/Chambers Riser

1. Cut riser to required height using ribs as a guide.

2. Clean gasket surfaces of chamber base and riser using cleaning solvent (Acetone).

3. Apply the quarter circle gasket pieces one by one to top of chamber base - ensure holes in gasket line up with holes in chamber for best fit and make sure all joints between gasket quarter circles are butted together to make a water-tight seal.

4. Place riser on base and line up bolt holes.

5. Tighten all bolts (supplied M 12 x 60) around chamber initially before repeating to make sure all bolts are fully tightened.
Composite Access Cover with Skirt

Parts and Materials Required

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Cure Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCC-90, PCC90-DIP</td>
<td>Composite Cover</td>
<td></td>
</tr>
<tr>
<td>PCC90-SK</td>
<td>Fibreglass Skirt</td>
<td></td>
</tr>
<tr>
<td>Soudaflex 40FC</td>
<td>UPP recommended bonding agent - Refer to Material Safety Data Sheet.</td>
<td>24 hrs</td>
</tr>
<tr>
<td>CM200PF</td>
<td>2 Part polyurethane sealant - refer to Material Safety Data Sheet</td>
<td>Traffic time 36 hrs</td>
</tr>
<tr>
<td></td>
<td>Packing piece or clean sand</td>
<td></td>
</tr>
<tr>
<td>Basic kit</td>
<td>Nitrile gloves, adhesive applicator gun, 80/120 grit abrasive paper, approved cleaning solvent</td>
<td></td>
</tr>
</tbody>
</table>

Product preparation

1. Remove protective packaging from the cover and place on clean level surface.
2. Remove cover from frame.
3. Make sure the frame and cover are not damaged prior to installation.
4. Abrade and clean areas to be bonded with Acetone.
5. Use UPP recommended bonding agent to fix the frame onto the skirt ensuring that the frame is centered and within the skirt recessed profile.
6. Allow skirt and frame to bond fully before continuing (see material data sheet).

Area preparation

7. Prepare the area ready for the installation of the cover and place skirt or equivalent on top of the backfill taking account of the frame burial depth and desired finished surface level.

Apply sealing compound

10. Extend small plastic tube (supplied) sufficiently to run into backfill and secure it into the drainage hole in the frame with Soudaflex 40FC.
11. Fit foam packing piece between skirt and chamber riser on top of the backfill, or cover backfill with a layer of well compacted sand.

12. Apply 2 part polyurethane sealing compound. Allow to cure for recommended time (refer to the compound’s material data sheet).

13. Ensure finished level of sealant is below the uppermost toggle location bosses on the riser.

Prepare the Forecourt Surface

• Install a minimum finished base thickness of 200 mm in C30-35 concrete to achieve maximum load capabilities of EN124 C250 covers.

Maintenace

• Composite Access Cover seals are replaceable and are considered a service spare. The existing seal can be easily removed and the sealing channel cleaned of all silicon mastic.
• A continuous bead of silicon mastic should be applied in the groove as bedding prior to fitting the new seal.

Crowning

• The dispersion of water away from the cover can be improved by crowning the cover slightly above the finished surface level.
Installation Overview Illustrations

Pay special attention to this area underneath the chamber base.

1:100 incline towards rear of cover to facilitate drainage of surface water.

15° Slope for Surface Water Drainage From Lip of Frame to Forecourt Surface

Drainage Pipe: 26mm

Drainage Pipe Runs into Pea Shingle Of Connects to a Drainage Line, Running To The Oil/Water separator.

Tank Top Termination

Backfill Material

Lid Installation Overview

PC76 Cover

Reinforced Concrete