S7SB and S6SB Tank Sump Systems



Installation Instructions for:

Round Cover Systems	Square Cover Systems
S6SB-290	S6SB-276
S7SB-290	S7SB-276



INSTALLATION INSTRUCTIONS (Pipework and Entry Seal Kits) Drill Jigsaw Gloves Safety Goggles Face Mask (150mm dia hole saw) Diamond tipped blades WARNING Care must be taken to position the pipework and conduit so it exits the sump at 90° angle to the sump wall. Otherwise undue stress will be placed on the sump wall and entry boot, which may lead to leaks in the future. Position pipeway at 90º angles to the sump wall. Ensure pipe entry boot is positioned away from the joints. Before installing pipework, fix a string line at ground level across the sump to check if material needs to be cut off the sump. If so, mark the sump with a line Ground Level along the cut mark. Check to ensure you have the necessary minimum clearance required from the top of the sump to the centreline of the pipework/pipe entry kits. Standard Entry Kit = 145mm Large Entry Kit = 170mm For shallow burials, it may be necessary to cut less material off the sump, and cut the remainder off the corbel and skirt to allow pipe entry boots to be fitted. PLAN THIS CAREFULLY. Refer to measurement chart. Mark a centre point in the centre of a sump panel. Drill a pilot hole to ensure the hole saw can be positioned and used safely. For larger holes (190mm) we recommend that the hole is marked and jigsaw is used to cut the hole. Firstly, drill a hole through the wall, so the jigsaw 1

Firstly, drill a hole through the wall, so the jigsaw can be inserted and used easily and safely. (Fibreglass will blunt normal blades very quickly, we recommend diamond tipped blades or blades to cut ceramics). (Pipe Sealkit Fitting Instructions)







The exit position of the pipework through the chamber wall must be as close as possible to 90°. The pipe kit should be fitted so that the pipework is centrally positioned to the seal. When backfilling ensure that the pipework is not disturbed from this central position.

(Conduit Entry Seal Kit Installation Guide)



5b PCE/1/KIT

Conduit must be installed at 90° angle to the side wall.





(Conduit Entry Seal Kit Installation Guide)



5C PEC KITS

Refer to pipe entry boot instructions on positioning of the hole.

Conduit must be installed at 90° angle to the side wall.

Use Fibrelite entry seal kit model PEC/32 to fit UPP + NUPI 32mm conduit.

PEC/27, PEC/33, PEC/50 to fit metal conduit sizes $\frac{3}{4}$ ", 1" and $\frac{1}{2}$ " respectively.





NB: Use the correct size drill piloted hole saw for each entry kit. The cable entry seal must be fitted perpendicular to the chamber wall and the conduit must enter the entry kit perfectly aligned. When backfilling ensure the conduit is not disturbed.

ENTRY KIT	HOLE SIZE
PEC/27	Ø51mm
PEC/32	Ø51mm
PEC/33	Ø60mm
PEC/50	Ø73mm

INSTALLATION INSTRUCTIONS (Sump Vacuum Test)



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After penetrations have been fitted perform vacuum test.

Refer to Vacuum test instructions.

Do not backfill around sump or cut material off the sump until the test has passed successfully.



Fix string lines 10mm above grade level across the sump - across length and width of the tank farm to highlight any falls.



Place the corbel onto the sump (only 'dry fit' the corbel do not bond at this stage). Check the measurement from the top of the corbel to the string line, which is set 10mm above the general grade level. Check all sides of the sump and select the largest and smallest measurement to take account of falls across the forecourt.





(Achieving the Correct Height)

9a **Round Cover Systems**

Measurement (clearance dimension)	Action
Max. 1210mm Min. 695mm	No trimming required.
less than 695mm	Trim the sump up to a maximum height of 515mm from the top of the sump.
more than 1210mm	The burial depth of the tank is greater than the maximum burial depth of the standard system. Bond a 300mm extension onto the sump as per the next page and trim as appropriate.



FIBR<u>ELITE</u>

9b **Square Cover Systems**

Measurement (clearance dimension)	Action
Max. 1160mm Min. 645mm	No trimming required.
less than 645mm	Trim the sump up to a maximum height of 515mm from the top of the sump.
more than 1160mm	The burial depth of the tank is greater than the maximum burial depth of the standard system. Bond a 300mm extension onto the sump as per the next page and trim as appropriate.



10 Before trimming the sump check pipe entry positions allow 50mm from top edge to be able to fit the corbel in position.



WARNING Do not trim sump until sump has been vacuum tested with pipework installed and completed.

(Optional Extension Bonding)





Abrade and wipe with a degreasing solvent the chamber top edge / wall and the extension recess shoulder



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Cut nozzle of the adhesive sealant tube to approx. $\ensuremath{\textit{Ø8mm}}$



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To permanently fix the extension, invert the extension and apply a bead of adhesive sealant to the vertical wall of the extension recess.

Position the extensions(s) onto the chamber, ensure the extension is horizontal and press down uniformly.



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Apply a fillet of adhesive sealant (same nozzle size) to the external horizontal joint and smooth off.







5 Abrade and wipe with a degreasing solvent the chamber or extension top edge/wall and the corbel groove.





Dry fit the corbel on the sump to ensure it fits - push corbel groove onto sump wall. If it does not fit, pipework may have distorted the sump wall shape.



Measure distance between opposite walls, this should be 1170mm. If less than this you will need to brace out the sump.

Using wooden batons (1170 \pm 5mm long) with timber spreader plates (150 x 150) to spread the load, brace out the sump to the correct size.

Repeat this process on all walls to get the correct shape.



19 Place the corbel on the sump using 2 people and push it into position.



8 Apply 2 tubes of soudaflex

40FC sealant

in the groove

of the corbel.

should fill 1/2 the groove.

Sealant

INSTALLATION INSTRUCTIONS (Bonding the Corbel)



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 - Seal around the inside edge of the corbel joint from inside the sump. Smooth off the sealant with soapy water.
 - Use 1.5 tubes of soudaflex 40FC sealant.



- Seal around the outside joint and smooth off sealant with soapy water.
- Use 1.5 tubes of 40FC sealant.



(Performing Corbel Vacuum Test)

- Wait a min of 12 hours before vac testing, preferably overnight to allow sealant to set before vacuum testing.
 - Do not disturb the sump during this time.



Ensure all pipework and electrical entries have been completed before vacuum testing, this is a final test for all penetrations in the sump.

Warning: Test the corbel at a 0.6m depth setting only or irreparable damage may occur.

Refer to vacuum testing instructions for correct method.





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Once the corbel test has been performed with a PASS result, the area around the sump can be carefully backfilled with peagravel or sand. Back-fill equally around the sump in layers to prevent damage or deformation.



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Complete backfilling to appropriate level. Frame must be supported by a minimum depth of 200mm of concrete

Concrete reinforcement must be positioned as close to the frame as possible. Minimum block of 500mm square around the frame. Joint must be tied as per diagram. Continuous pour preferred if possible.

VERY IMPORTANT

OUTER EDGE "A" OF FRAME SET 5 - 10MM ABOVE GENERAL FORECOURT AREA WITH CONCRETE RAMPED AWAY OVER 300MM.





26 Test completed system.

Warning: Test the corbel at a 0.6m depth setting only or irreparable damage may occur.

When testing at this stage the drain hole which is drilled in the corbel turret must be blanked off to achieve a test.



