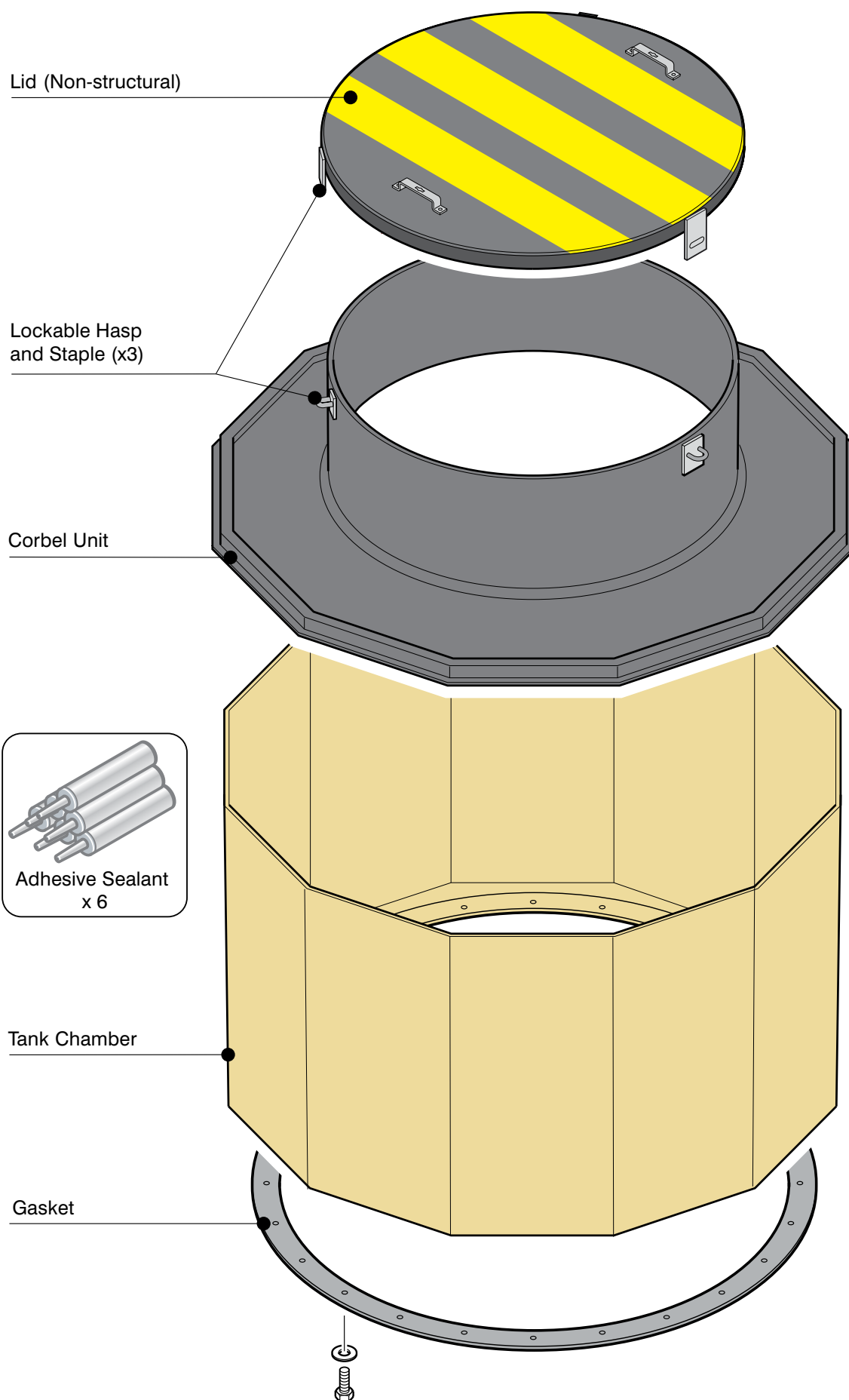


INSTALLATION INSTRUCTIONS

S16-290-GA & S16-2100-GA Tank Chamber Systems

FIBRELITE 

PART OF OPW A DOVER COMPANY



INSTALLATION INSTRUCTIONS

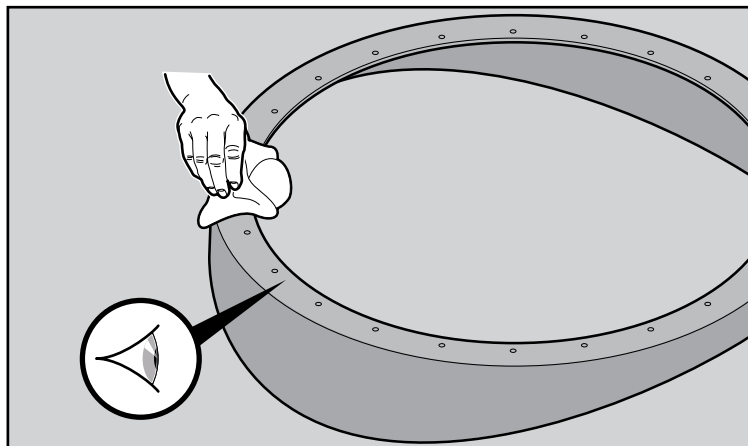
(Sump Installation)

FIBRELITE 

PART OF OPW A DOVER COMPANY

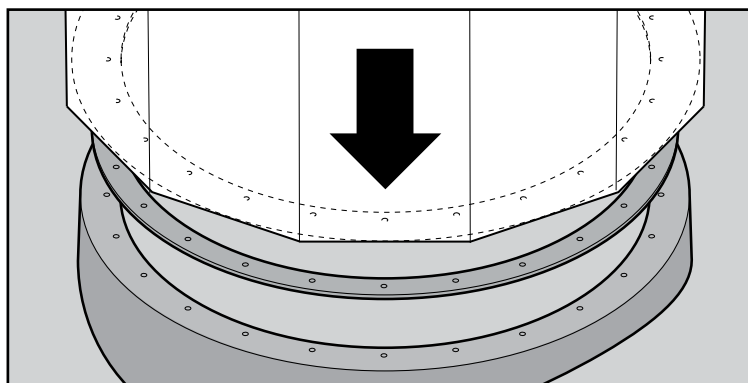
1

Clean the tank connection flange and ensure it is free of all grit etc. Check for flatness and deformation as this can cause the sump to become distorted or fail to seal. If in doubt contact Fibrelite's technical department: + 44 (0) 1756 799 773



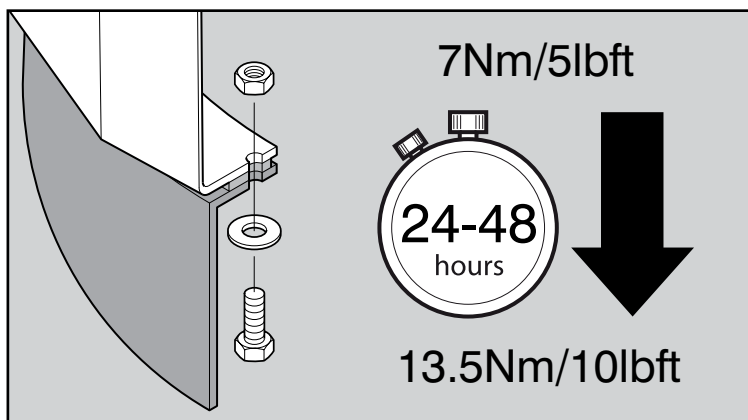
2

Remove protective cover from base of chamber and position chamber onto tank flange, aligning the holes. Ensure the seal on the base of chamber is not damaged and is free from grit etc.



3

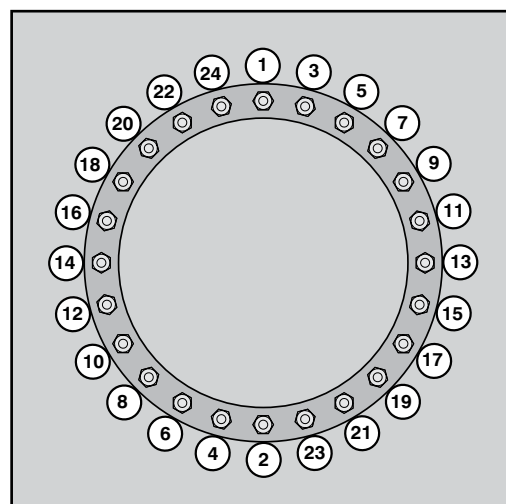
Fit a bolt and washer into each of the 24 holes (use only those supplied). Fit a washer and nut to each of the bolts. Tighten each bolt to 13.5Nm/10lbft torque, employing the following method, to avoid distortion of chamber.



4

Starting with any bolt tighten to 7Nm/5lbft torque. Move to the bolt positioned at 180° and tighten to 7Nm/5lbft torque. Move 180° plus one bolt pitch and tighten to 7Nm/5lbft of torque. Repeat until all bolts are tightened to 7Nm/5lbft torque. Now repeat the procedure tightening all bolts to 13.5Nm/10lbft torque.

Note: The seal will initially relax and it is an advantage if each bolt is tighten to 13.5Nm/10lbft torque after a period of 24 to 48 hours after initial assembly.

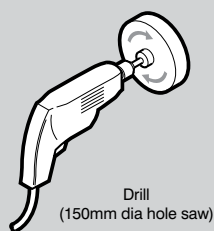


INSTALLATION INSTRUCTIONS

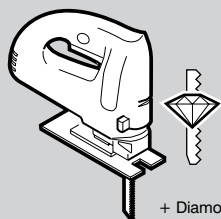
(Pipework and Entry Seal Kits)

FIBRELITE

PART OF OPW A DOVER COMPANY



Drill
(150mm dia hole saw)



Jigsaw
+ Diamond tipped blades



Gloves



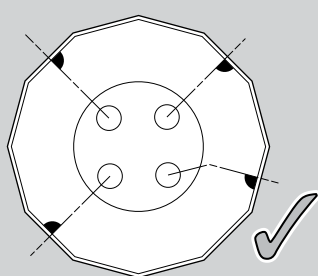
Safety Goggles



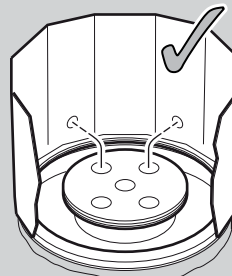
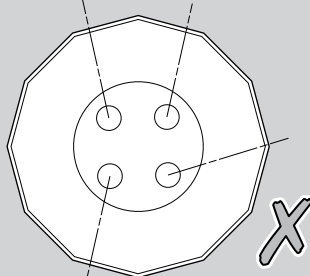
Face Mask

5

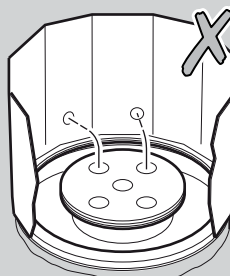
WARNING Care must be taken to position the pipework and conduit so it exits the sump at 90° angle to the sump wall. Otherwise undue stress will be placed on the sump wall and entry boot, which may lead to leaks in the future.



Position pipeway at 90° angles to the sump wall.



Ensure pipe entry boot is positioned away from the joints.



6

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 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.

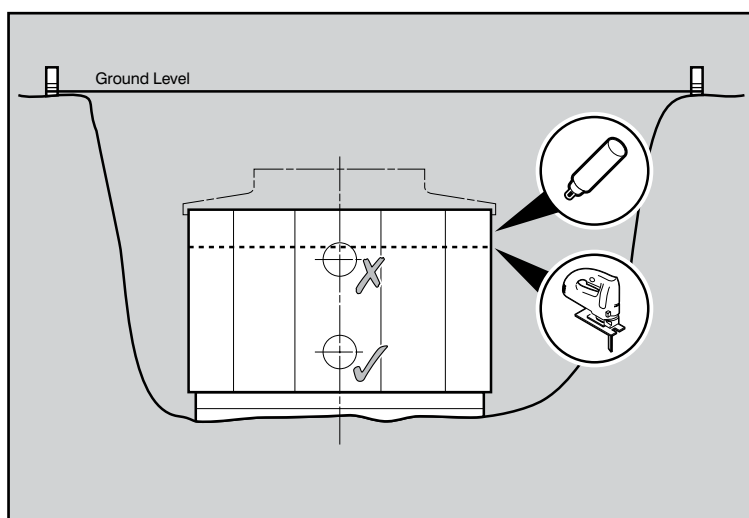
Standard Entry Kit = 145mm

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.

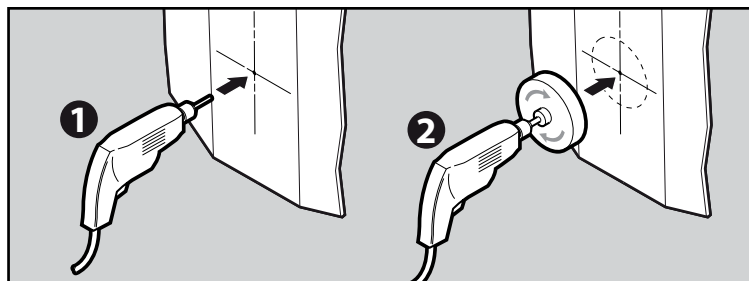
PLAN THIS CAREFULLY.

Refer to measurement chart.



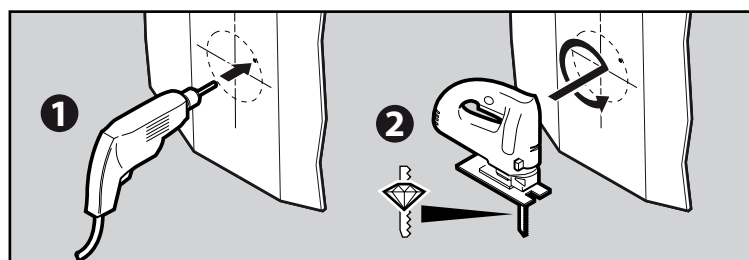
7

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.



8

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 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).



NOTE : When backfilling ensure the pipework is not disturbed.
WARNING : Do not backfill until the sump has been vacuum tested.

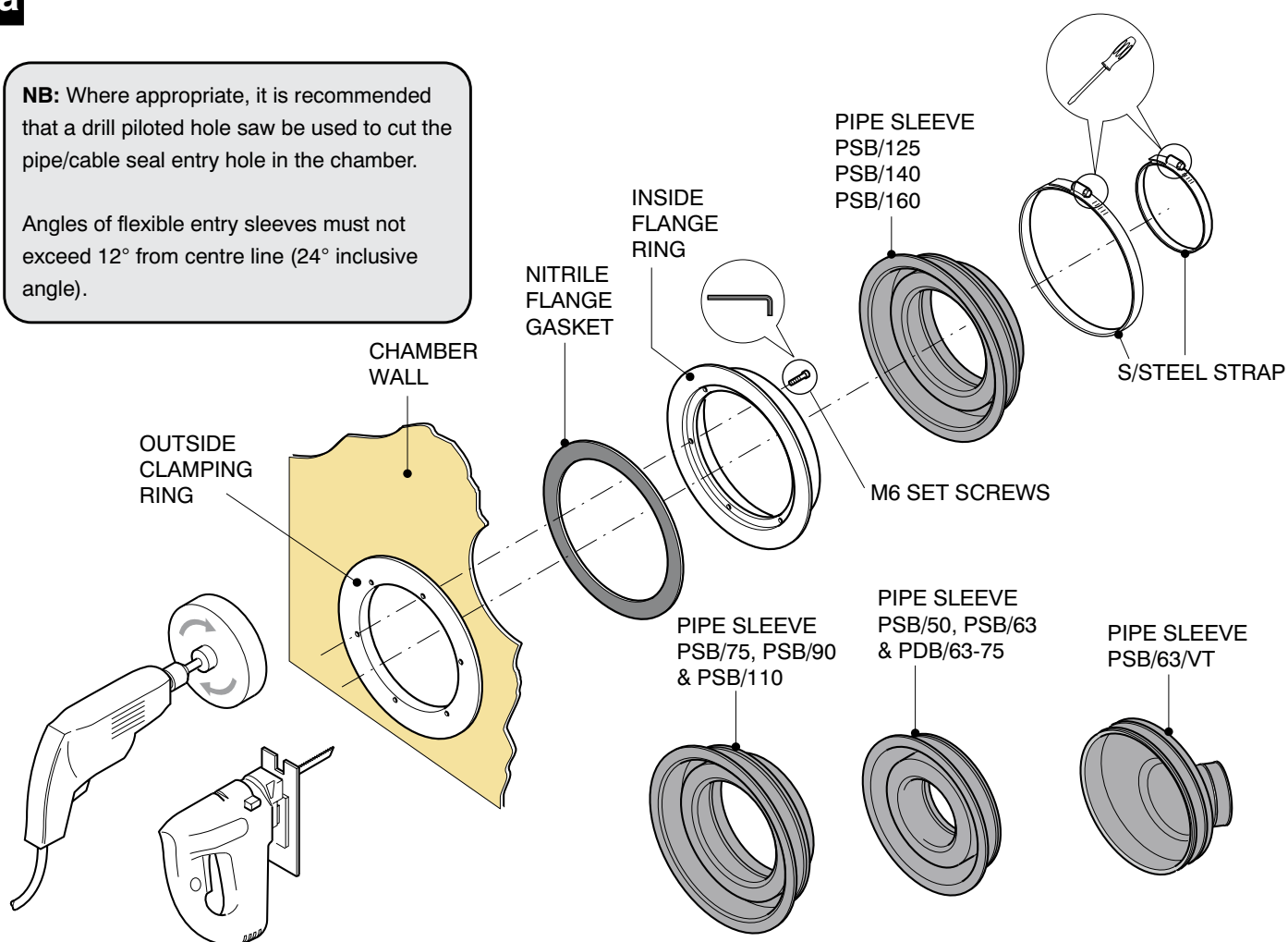
INSTALLATION INSTRUCTIONS

(Pipe Sealkit Fitting Instructions)

9a

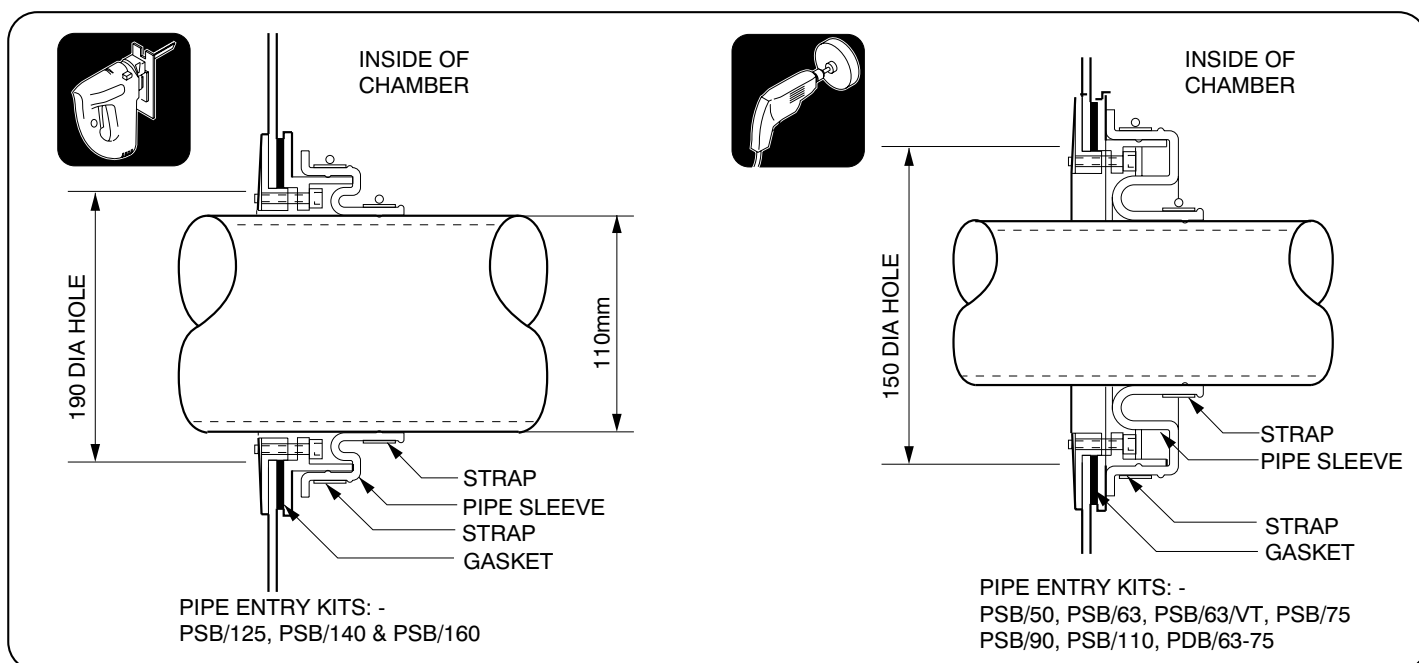
NB: Where appropriate, it is recommended that a drill piloted hole saw be used to cut the pipe/cable seal entry hole in the chamber.

Angles of flexible entry sleeves must not exceed 12° from centre line (24° inclusive angle).



DRILL AND HOLE SAW
ATTACHMENT OR JIGSAW

NB: Straps/clips are to be tightened in accordance with the pipe manufacturers recommendation



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.

INSTALLATION INSTRUCTIONS

(Conduit Entry Seal Kit Installation Guide)

FIBRELITE 
PART OF OPW A DOWDER COMPANY

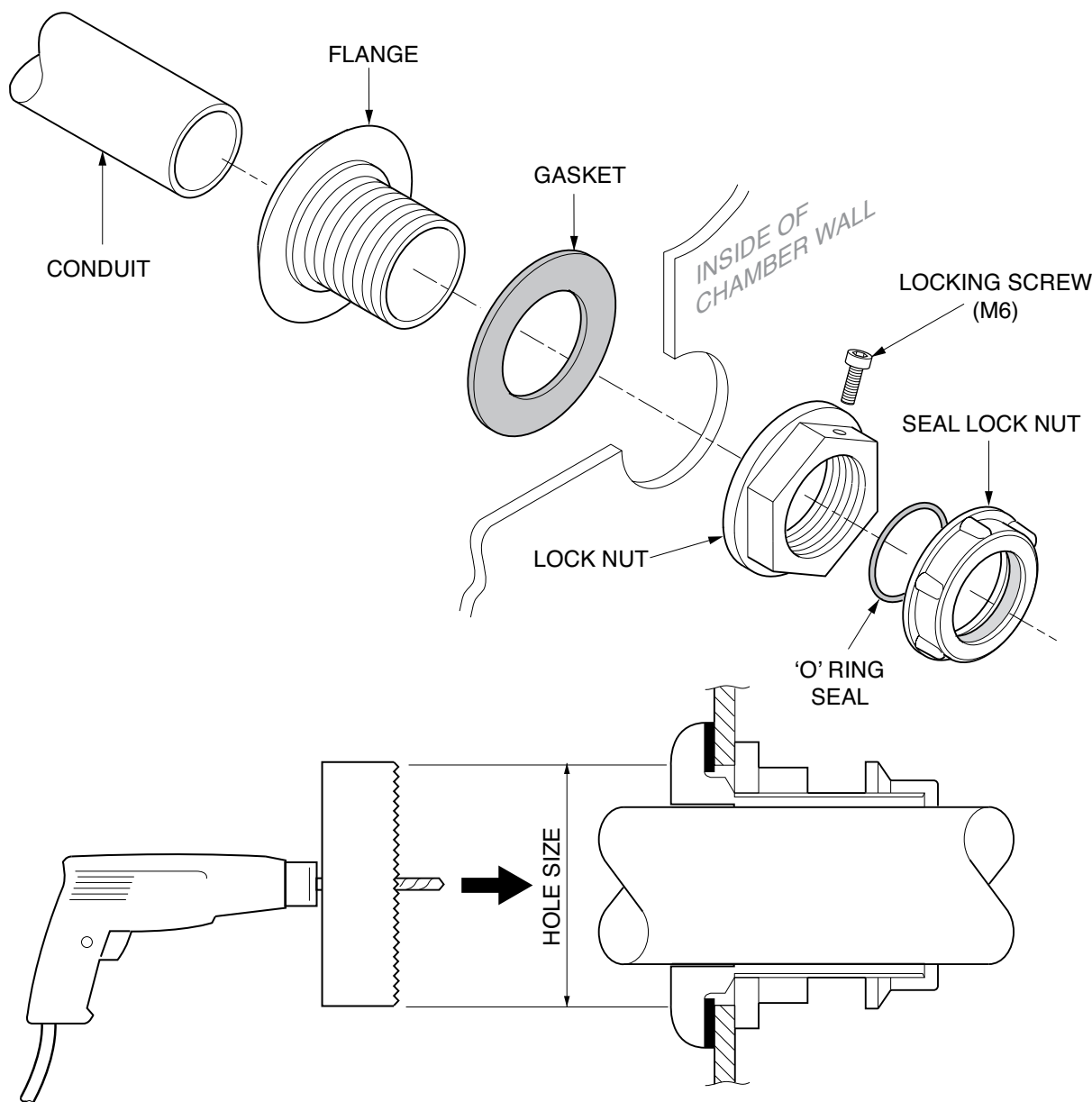
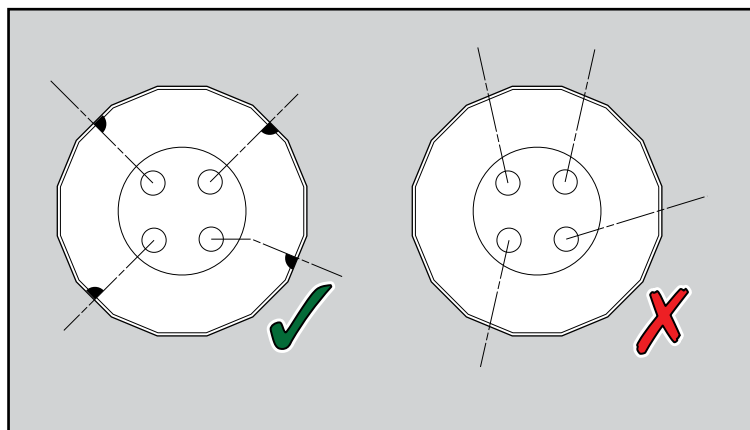
9b PEC KITS

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 3/4", 1" and 1 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 |

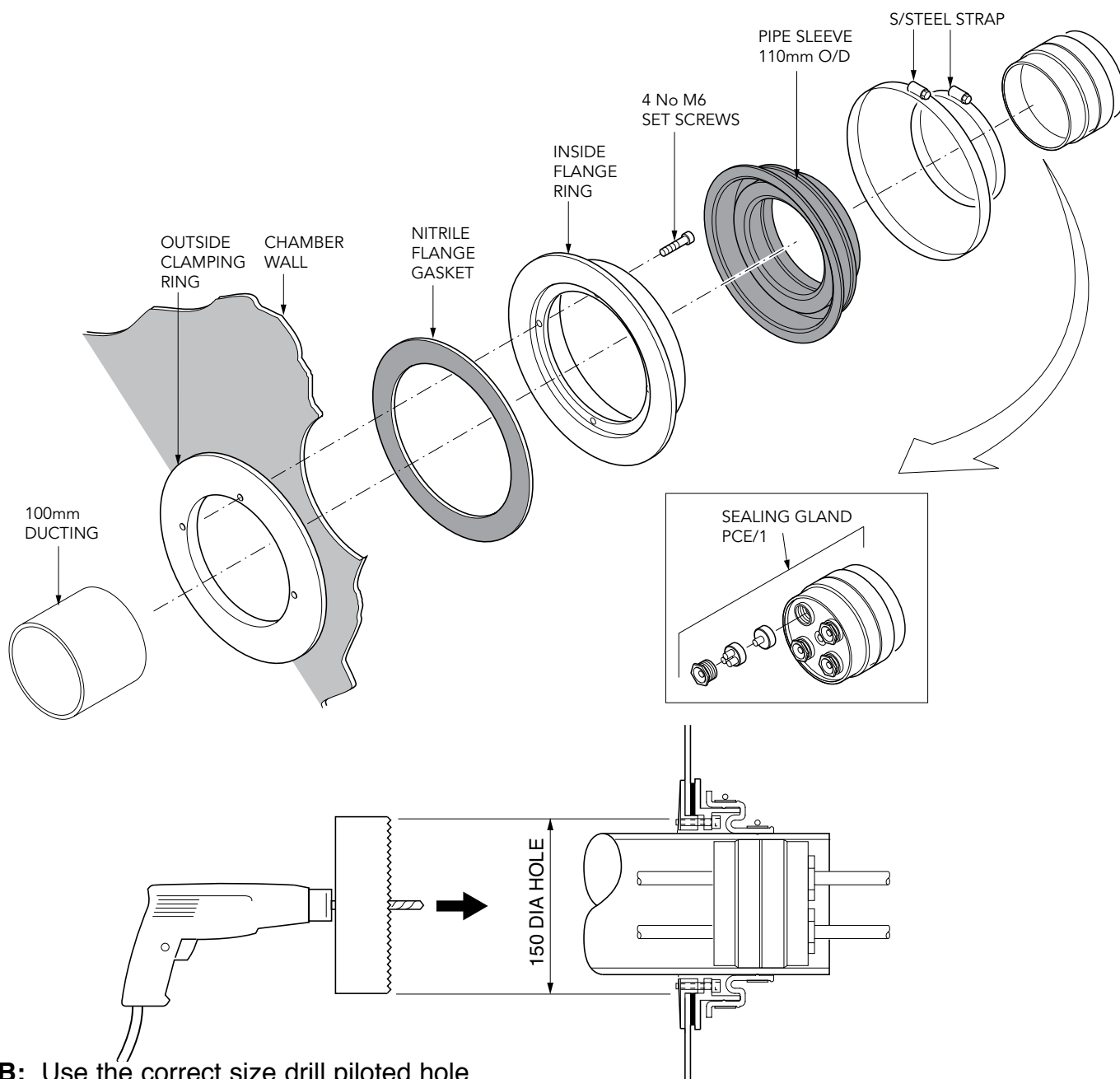
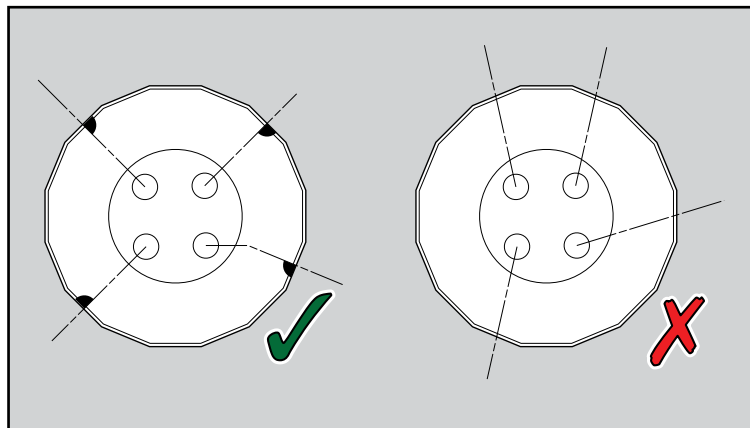
INSTALLATION INSTRUCTIONS

(Conduit Entry Seal Kit Installation Guide)

FIBRELITE 
PART OF OPW A DOVER COMPANY

9C PCE/1/KIT

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

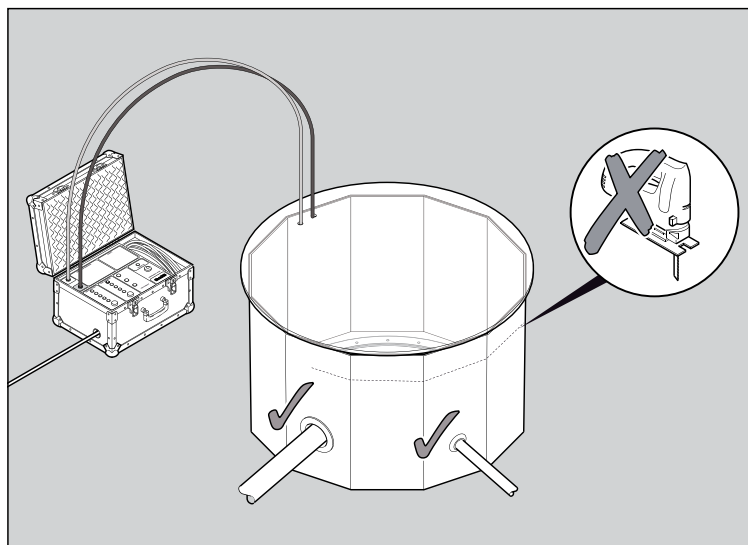


NB: Use the correct size drill piloted hole saw for each entry kit. The cable entry seal must be fitted perpendicular to the chamber wall and the conduit must enter the entry kit perfectly aligned. When backfilling ensure the conduit is not disturbed.

INSTALLATION INSTRUCTIONS

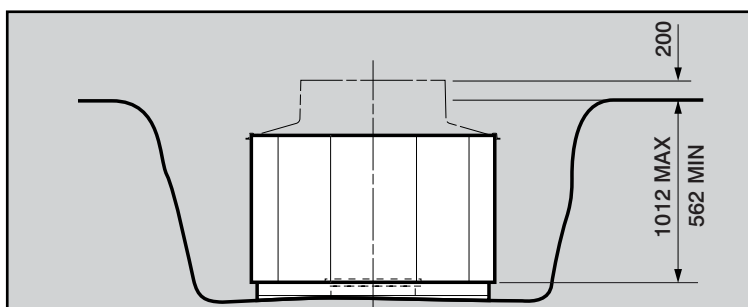
(Sump Vacuum Test)

- 10** After penetrations have been fitted, ensure all connections on the manway lid are sealed. 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.



(Achieving the Correct Height)

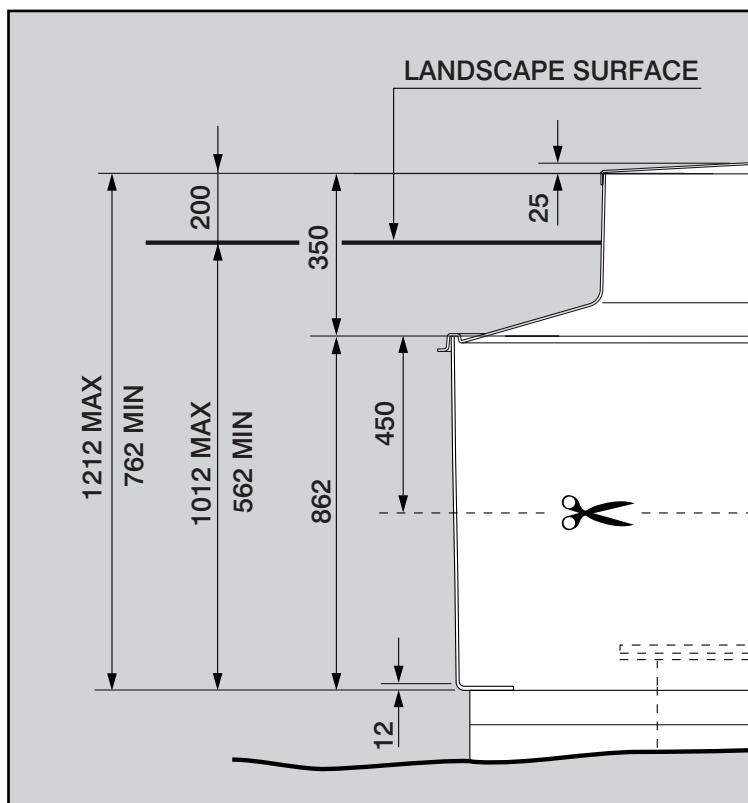
- 11** Place the corbel onto the sump - only “dry fit” the corbel, do not bond at this stage. The recommended height of the corbel above the landscape surface is 200mm.



12 IMPORTANT

Refer to this measurement chart;

| Measurement (Landscape surface to external sump base) | Action |
|---|--|
| Max. 1012mm Min. 562mm | Cut the appropriate amount of material from the sump. (Max 450mm) |
| More than 1012mm | It will be necessary to bond an extension. NB:- It maybe necessary to cut material from the extension once bonded onto the sump. |
| Less than 562mm | Raise landscape area level. |

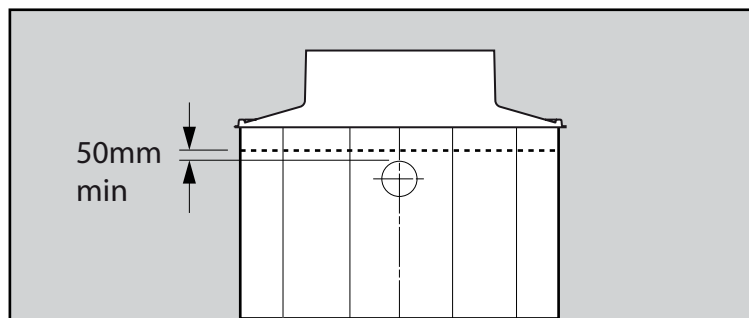


See next page for extension bonding instructions

INSTALLATION INSTRUCTIONS

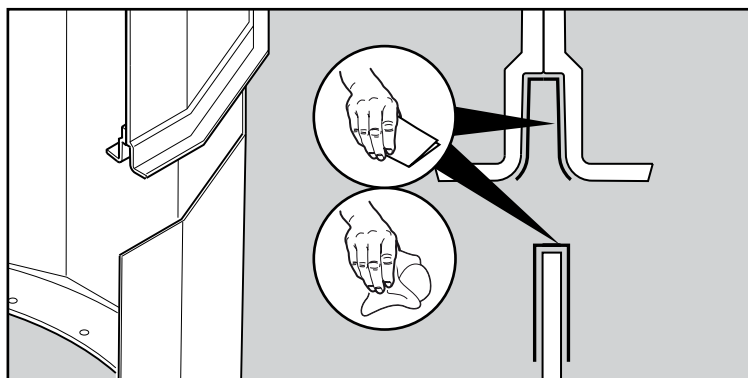
(Achieving the Correct Height)

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

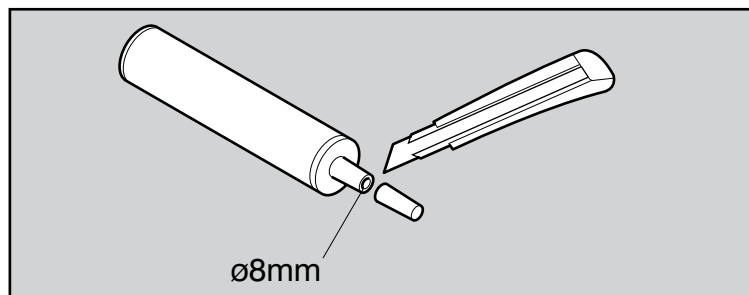


(Bonding the Extension / Chamber)

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

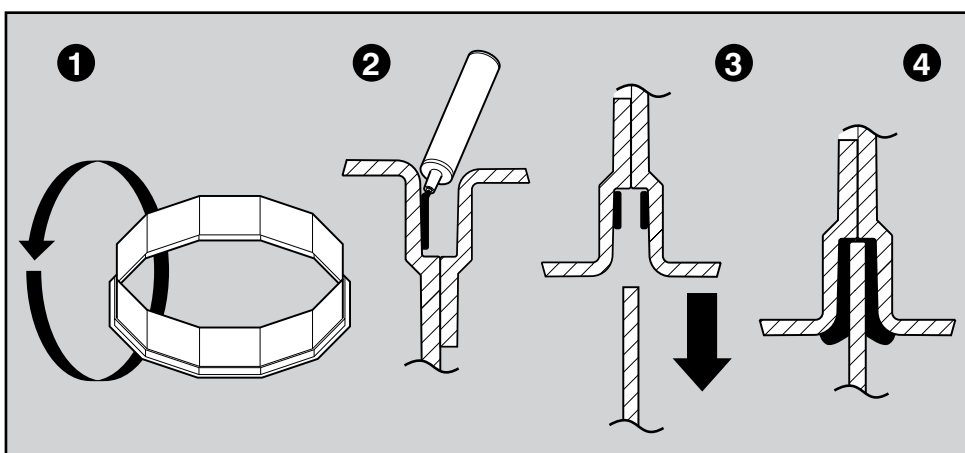


- 15** Cut nozzle of the adhesive sealant tube to approx. Ø8mm.

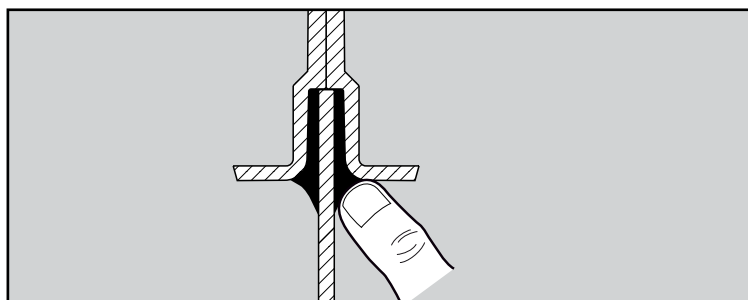


- 16** To permanently fix the extension, invert the extension and apply a bead of adhesive sealant to the vertical wall of the extension recess.

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



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



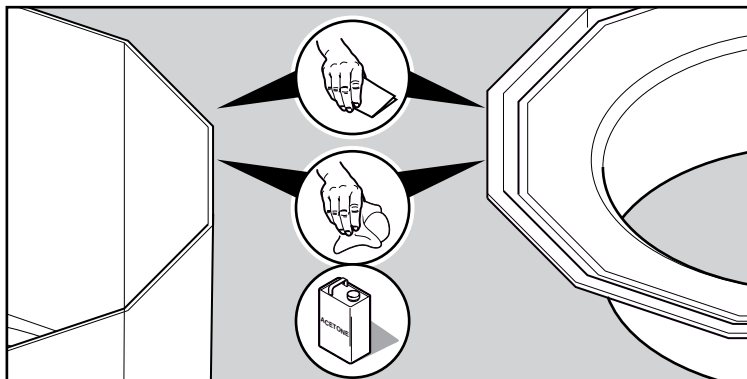
INSTALLATION INSTRUCTIONS

(Bonding the Corbel)

FIBRELITE 

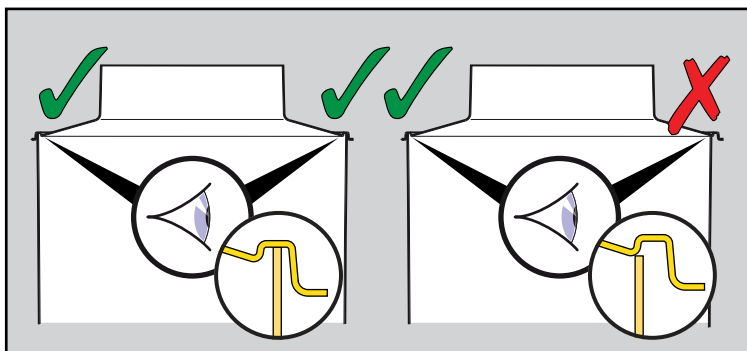
PART OF OPW A DOVER COMPANY

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



- 19** Dry fit the corbel on the sump to ensure it fits - push corbel groove onto sump wall.

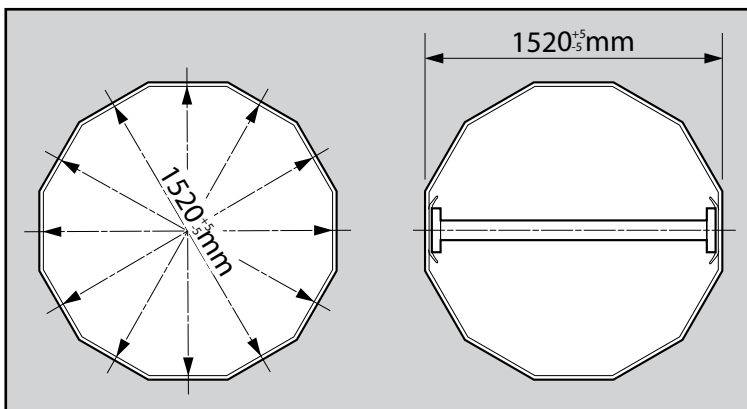
If it does not fit, pipework may have distorted the sump wall shape.



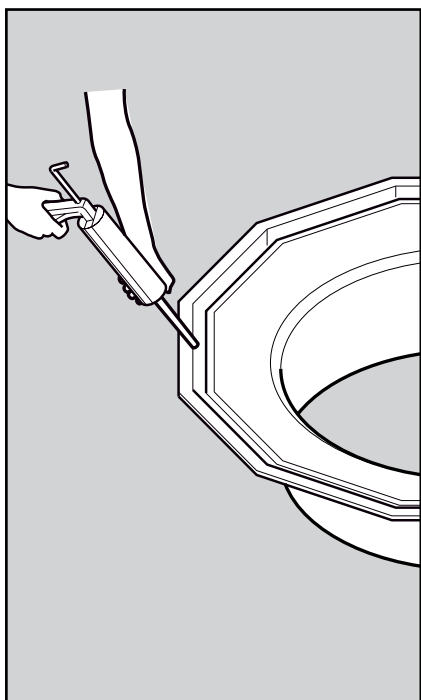
- 20** Measure distance between opposite walls, this should be 1520mm. If less than this you will need to brace out the sump.

Using wooden batons (1520mm \pm 5mm long) with timber spreader plates (150 x 150) to spread the load, brace out the sump to the correct size.

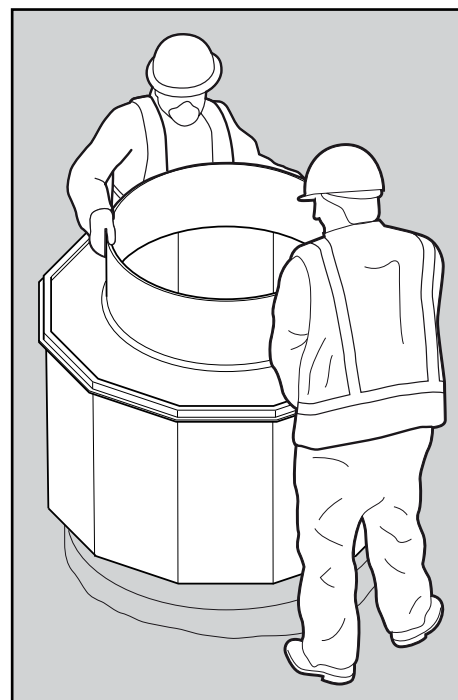
Repeat this process on all walls to get the correct shape.



- 21** Apply 2 tubes of soudaflex 40FC sealant in the groove of the corbel. Sealant should fill 1/2 the groove.



- 22** Place the corbel on the sump using 2 people and push it into position.



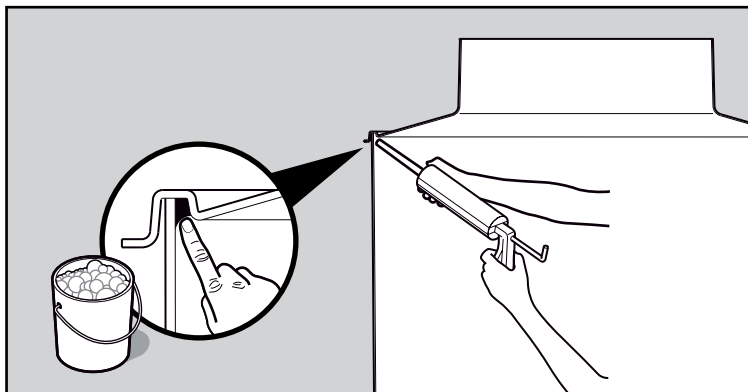
INSTALLATION INSTRUCTIONS

(Bonding the Corbel)

FIBRELITE 
PART OF OPW A DOWDER COMPANY

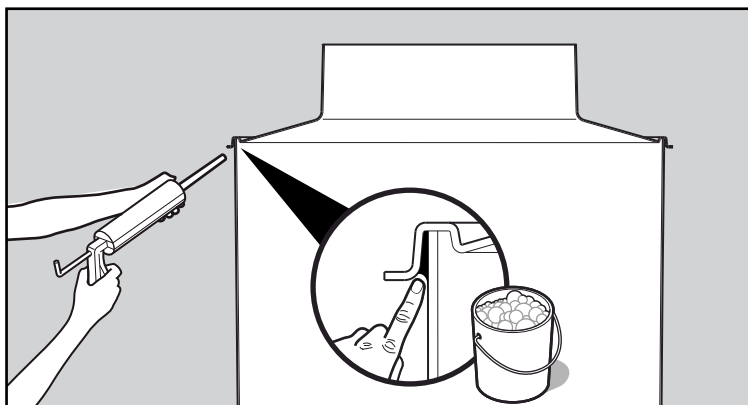
- 23** Seal around the inside edge of the corbel joint from inside the sump. Smooth off the sealant with soapy water.

Use 1.5 tubes of soudaflex 40fc sealant.



- 24** Seal around the outside joint and smooth off sealant with soapy water.

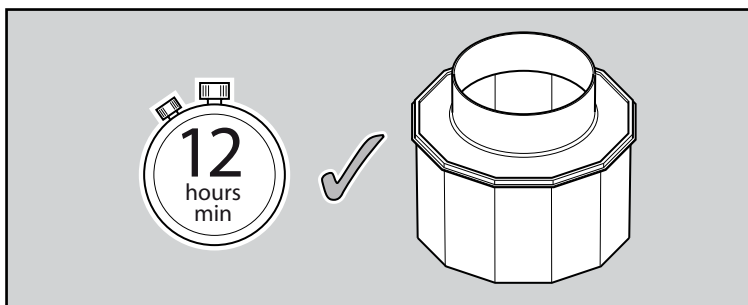
Use 1.5 tubes of 40fc sealant.



(Performing Corbel Vacuum Test)

- 25** Wait a min of 12 hours before vac testing, preferably overnight to allow sealant to set before vacuum testing.

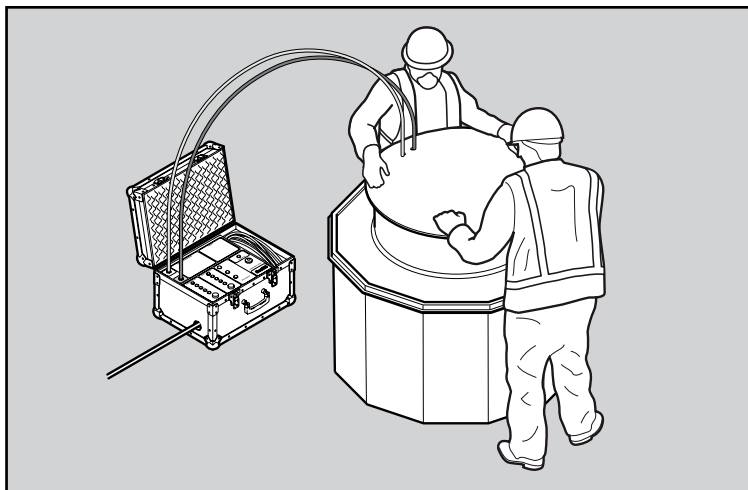
Do not disturb the sump during this time.



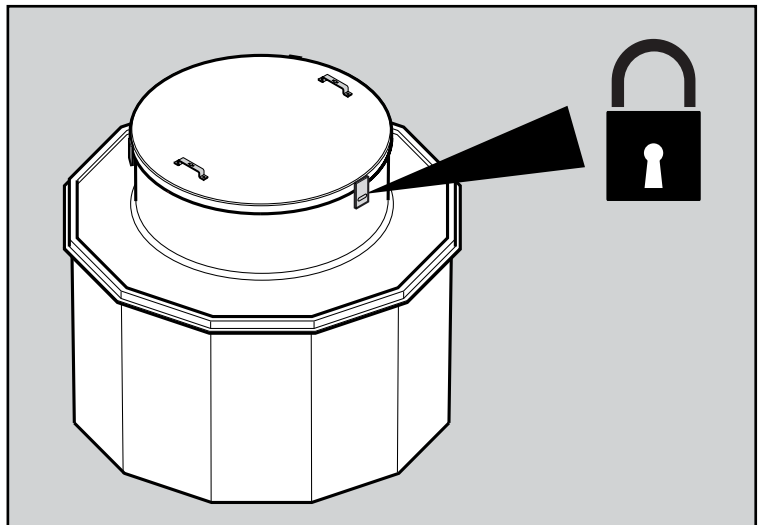
- 26** Ensure all pipework and electrical entries have been completed before vacuum testing, this is a final test for all penetrations in the sump.

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

Refer to vacuum testing instructions for correct method.



- 27** Ensure the hinged lid operates correctly. If necessary fit a padlock to the latch.



- 28** 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.

