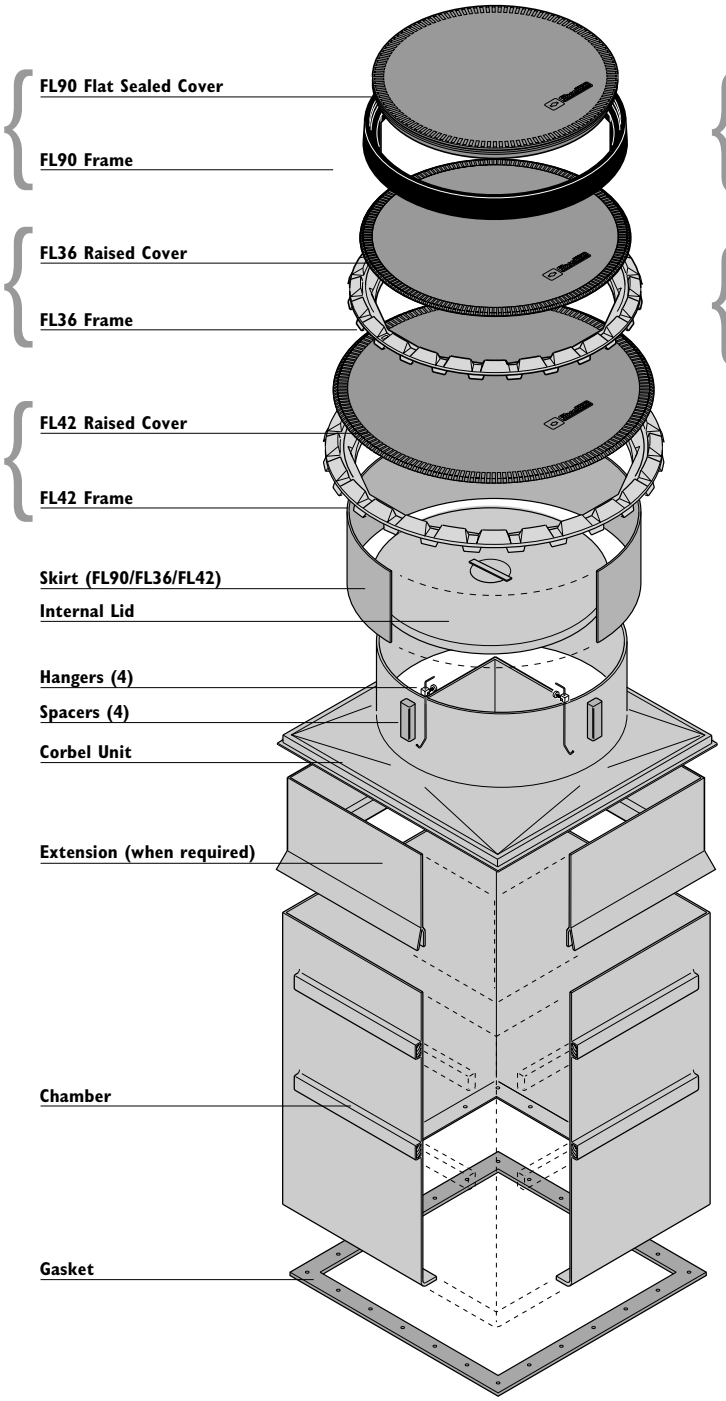
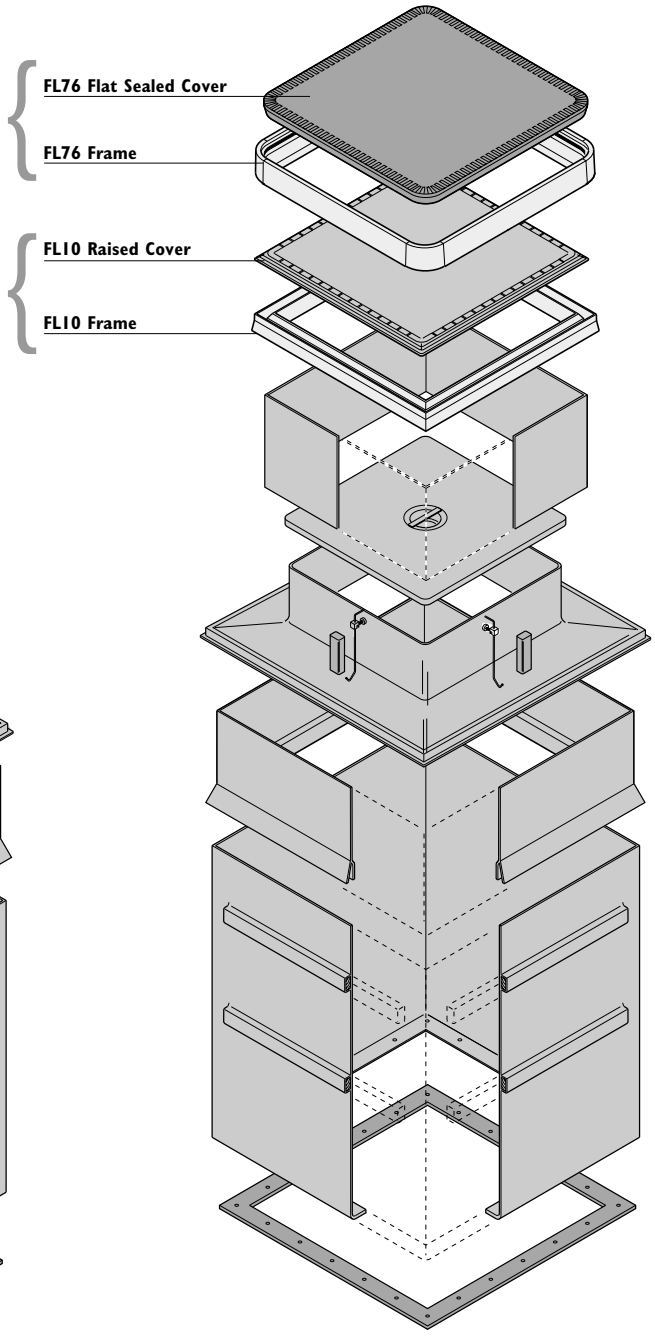
Standard Plus Access Chambers

INSTALLATION INSTRUCTIONS

For Systems:
S5310
S5376
S5336
S5342
S5390





standard plus®

FIBRELITE

Introduction

The Standard Plus access chamber is a resin injected fibreglass reinforced plastic unit with a height adjustable open skirt. The product is designed to be installed down to depths of 1.8m.

To ensure total integrity on completion, the product and its assembly have been designed to be vacuum tested during installation, on completion and future periodic inspections if required, from the internal lid down.

The vacuum test - using the Sherlock System - is designed to simulate water pressure and to locate leaks as small as .2mm to ensure complete success.

FIBRELITE

Stage 1

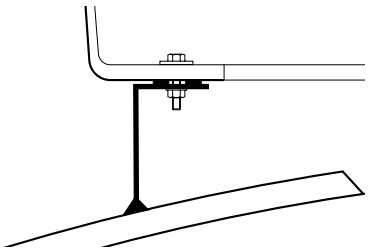
Fitting Chamber to Reverse Flange

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 Chamber to become distorted or fail to seal. If in doubt contact our technical department (01756) 799773.
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/10lbfft torque, employing the following method, to avoid distortion of chamber.

   Working from the centre of the chamber out tighten each set of centre bolts to 7Nm/5lbfft. Move one bolt pitch alternately about the co-axial centre and tighten to 7Nm/5lbfft. Repeat until all bolts are tightened to 7Nm/5lbfft. Now repeat the procedure tightening all bolts top 13.5Nm/10lbfft.

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



Stage 2

Fitting of pipework / Visigauge

1. Complete all pipe work fitting the appropriate pipe kits to the chamber walls. Refer to enclosed Pipe Seal Kit fitting instructions.
2. Install cable entry kits, at this stage without cables. Refer to Cable Entry Seal Fitting instructions.
3. If required and not already factory fitted install visigauge as per visigauge installation instructions stages 1 and 2.

UNDERTAKE THE FIRST sherlock® 1 SUMP TEST.

Stage 3

To achieve correct height

1. Measure the distance between the top edge of the chamber and a point 10mm above forecourt level. (Refer to 'Vital measurements' on page 5 for details.)

   a) If this measurement is within the minimum to maximum range proceed as per stage 4.

   b) If this measurement is less than the minimum value, material must be removed from the chamber so that the final measurement will fall within the specified range.

NB. The maximum amount of material that can be removed from the chamber is 570mm. On completion of chamber trimming proceed as per stage 4.

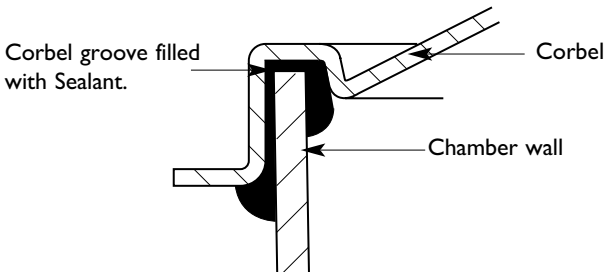
   c) If this measurement is in excess of the maximum value, the system will require an extension. The extension increases the chamber height by 300mm. When using an extension material **must not** be removed from the chamber, any necessary trimming must occur at the extension. Proceed as point 2.
2. Abrade and wipe with a degreasing solvent the chamber top edge/wall and the extension groove.
3. To permanently fix the extensions, invert the extensions and apply a bead of adhesive sealant to the extension groove filling approxiamatley half the groove depth.
4. Position the extension(s) onto the chamber ensuring the extension is horizontal and press down uniformly.
5. Apply a fillet of adhesive sealant to both the internal and external chamber/extension joint.

Stage 4

Bond Corbel

1. Abrade and wipe with a degreasing solvent the chamber or extension top edge/wall and the corbel groove.
2. To permanently fix the corbel. invert and apply a bead of adhesive sealant to the corbel groove filling approximately half the groove depth.
3. Position the corbel onto the chamber ensuring the corbel is horizontal and press down firmly.
4. Apply a fillet of adhesive sealant to the external horizontal joint to create the primary seal. Apply a secondary fillet of adhesive sealant to the internal horizontal joint.

NB: A minimum of 24 hrs must be allowed for the adhesive sealant to cure before any testing or backfilling can occur.



Stage 5

Pipework and Testing

1. Complete the pipework, (See separate instructions on pipe seals).

SHERLOCK 2 undertake the second chamber test. The second test must only be performed at a vacuum module depth setting of 0.6 metres.

UNDERTAKE THE SECOND sherlock® 2 CHAMBER TEST.

Stage 6

Backfilling

It is recommended that backfilling be carried out to the corbel/chamber joint. care is to be exercised when backfilling the area adjacent to the chamber. Over compaction can cause deformation of the unit. The laying of hardcore should be carried out in 300mm layers in accordance with standard building practice. If hardcore and not pea gravel is likely to come into contact with the chamber. a layer of pressure absorbent material such as polystyrene or fibre board should be used to protect the walls.

Stage 7

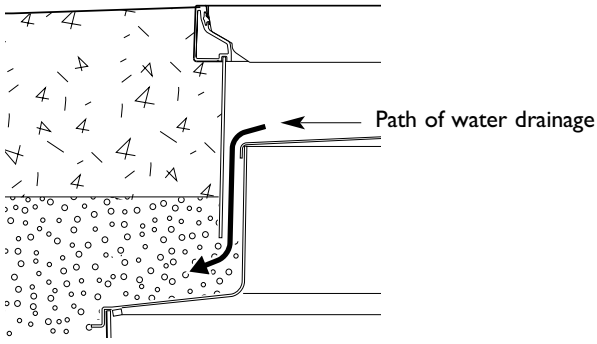
Fitting of Frame/Skirt

1. Locate the groove in the four hanger bodies onto the rim of the corbel, at equal distances apart with the handsrcew on the inside of the corbel.
2. lower the frame/skirt assembly until the edge of the skirt locates on the leg of the hanger rods.
3. Adjust the bodies of the hanger rods until the appropriate edge of the frame is 10mm above forecourt level (refer to the appropriate Frame Installation Instructions). Firmly clamp each hanger body onto the hanger rods using the hand screws. Using the spacers provided equalize the gap between the corbel and the skirt.
4. If the frame is too high, the appropriate amount of material must be trimmed from the skirt. the exact same amount of material must also be removed from the corbel, so as to maintain the correct amount of cover to internal lid clearance. The clearance dimension between the top of the frame and top of the internal lid must be maintained (Refer to "Dimensions" on page 5). Repeat operation 3. The skirt must be trimmed so that it overlaps the corbel unit by a minimum of 40mm.

Stage 8

Completing

NB. You must ensure that there is a layer of pea gravel or equivalent extending from just above the bottom edge of the skirt out across the top of the corbel into the main body of the backfill.



1. Complete the backfilling to the appropriate level so as to provide the correct thickness of concrete slab.
2. Complete installation of any third party equipment.
3. Complete the concreting of the forecourt level slab.
4. After the minimum cure time the hanger rods must be removed.
5. If required, complete visigauge installation. Refer to Visigauge Installation instructions, stages 3 to 6.

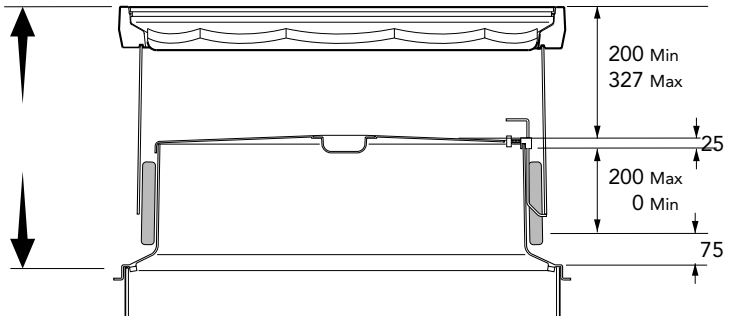
Dimensions

Use the dimensions below to acheive the correct fitting height and procedure.

S5390

627mm Maximum

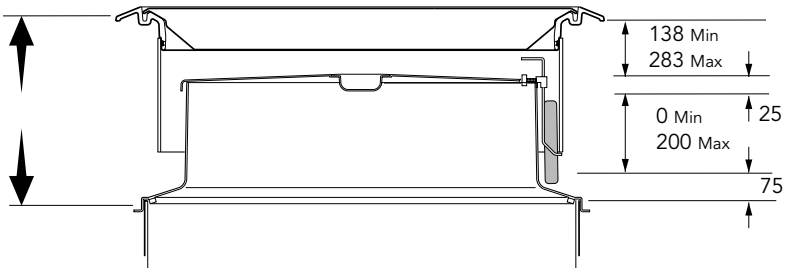
300mm Minimum



S5336

583mm Maximum

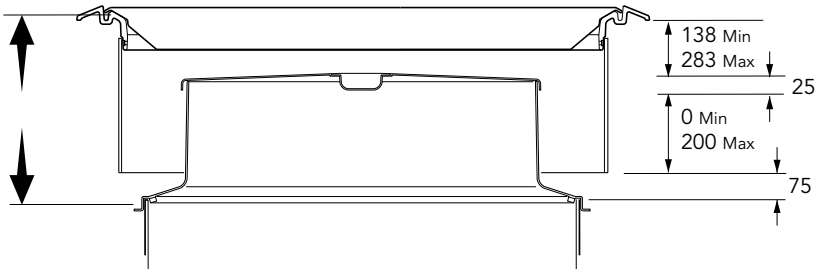
238mm Minimum



S5342

583mm Maximum

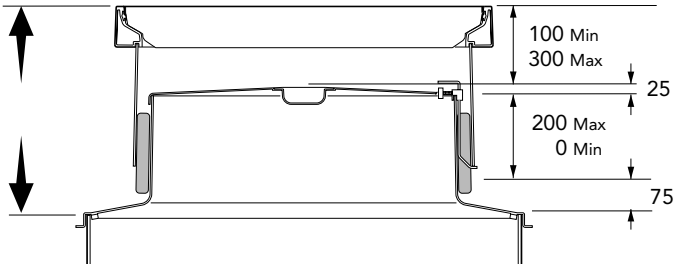
238mm Minimum



S5376

600mm Maximum

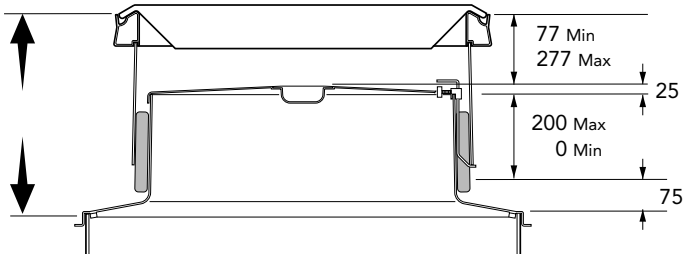
200mm Minimum



S5310

577mm Maximum

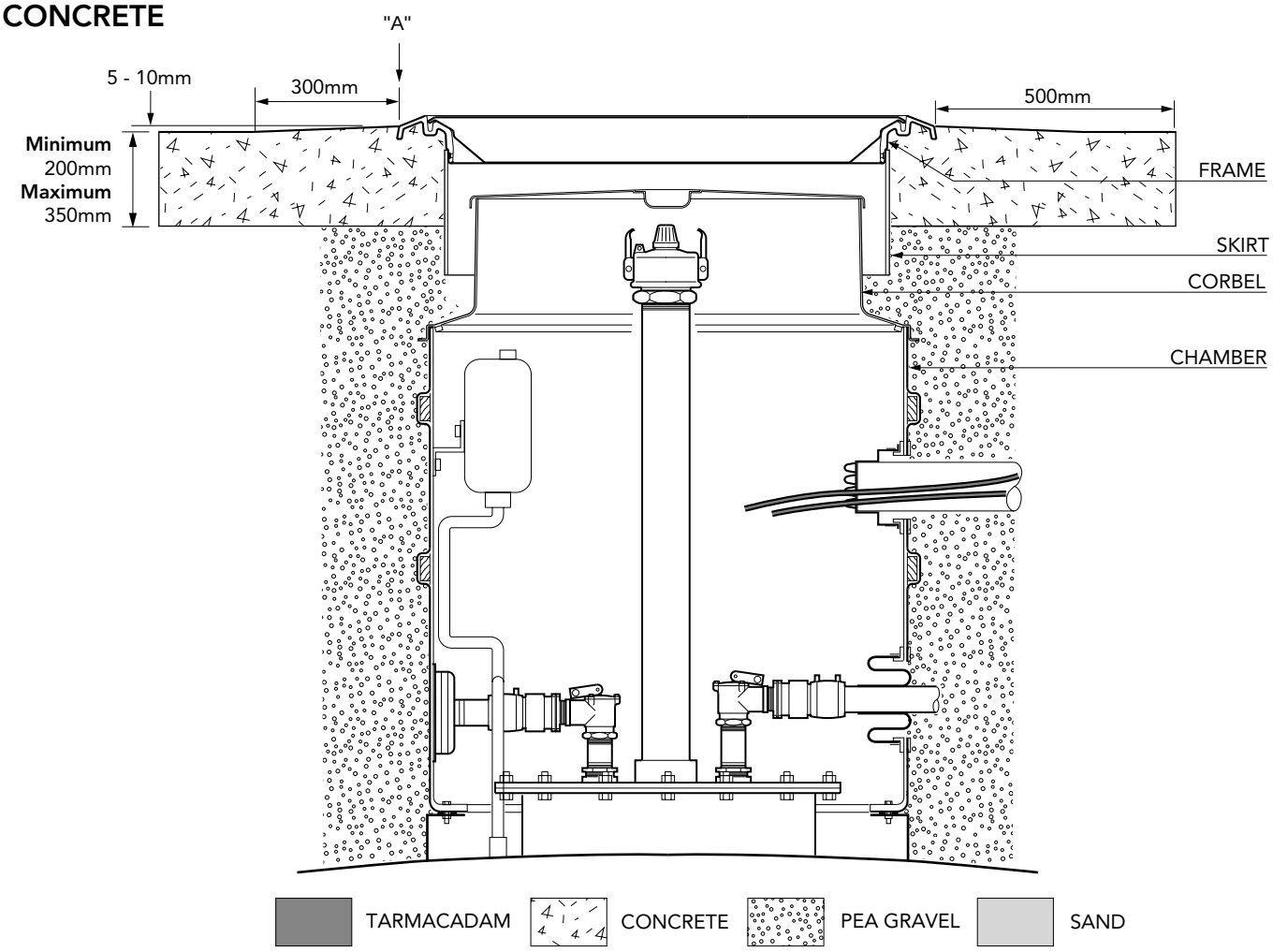
177mm Minimum



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

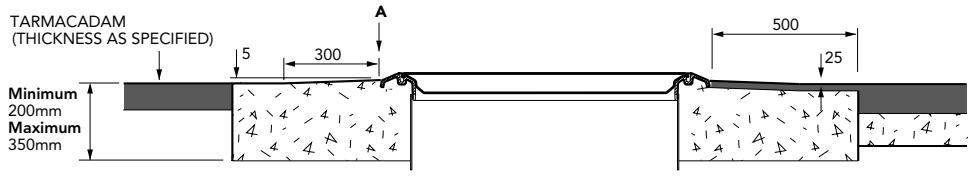
TYPICAL INSTALLATION

CONCRETE

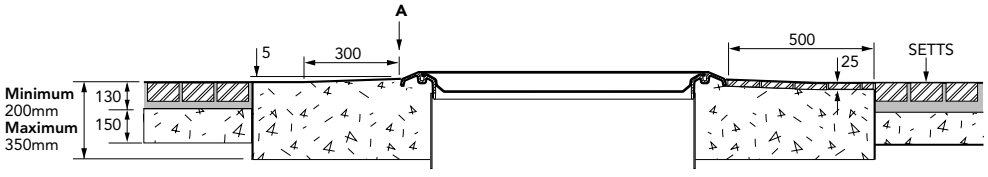


ALTERNATIVE INSTALLATION ADVICE

TARMACADAM



SETTS



Components list

BOLTED CONNECTION KIT

1x 1.2m Square base chamber with Flange Seal.
24x M10 x 50 zinc plated (HT) Hex. Head Set Screw
24x M10 zinc plated nut
24x 11I/D x 35O/D x 3mm thick zinc plated plate washer

CORBEL FRAME UNIT

1x Frame with attached skirt
1x Corbel unit

INSTALLATION KIT

4x J Hanger Rods with attached bodies
4x Handscrew Zinc Plated
4x Foam spacers
} Not supplied with S7342 System

2x Tube of Detaflex 400

INTERNAL KIT

1x Internal Lid non structural.

FIBRELITE

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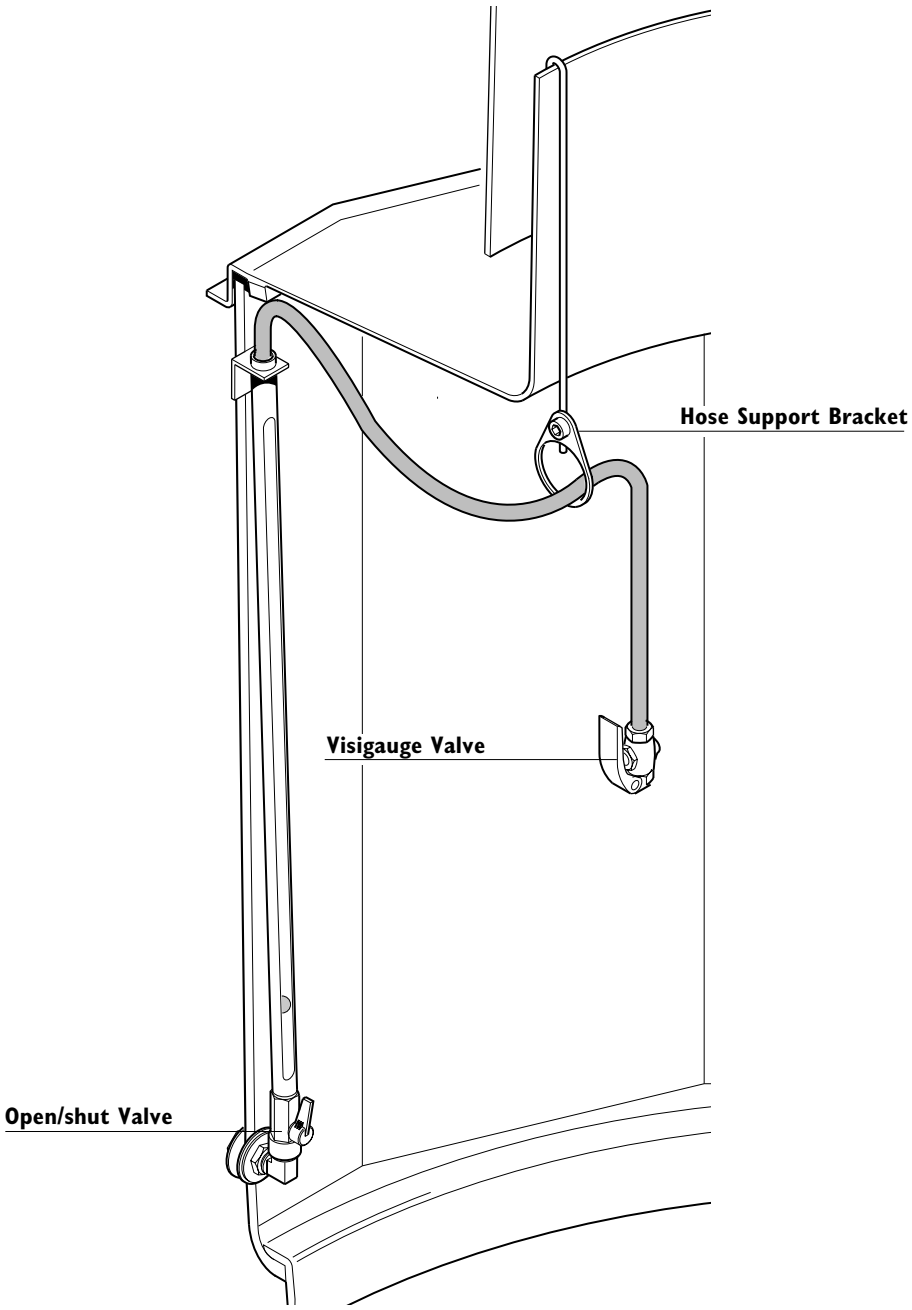
VISIGAUGE INSTALLATION INSTRUCTIONS



Designed to show level of ground water on the outside of the chamber.

Patent Pending

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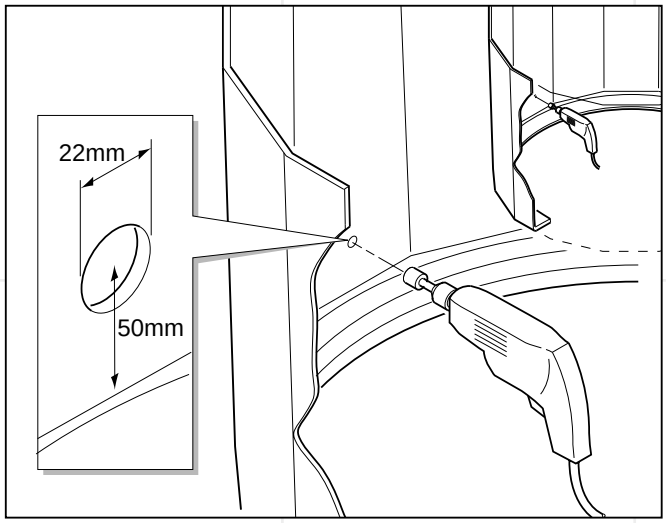
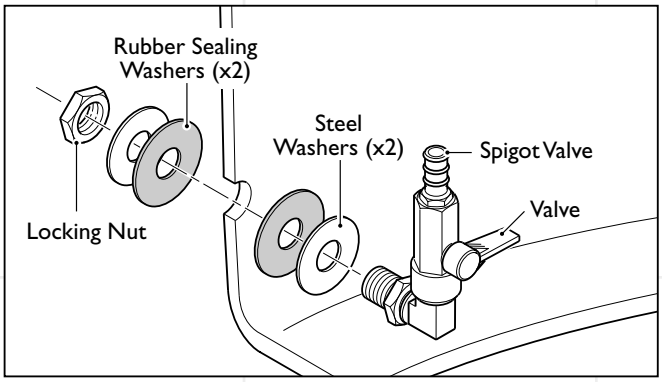
NOTE: The Visigauge must be vertically positioned.

Stage 1



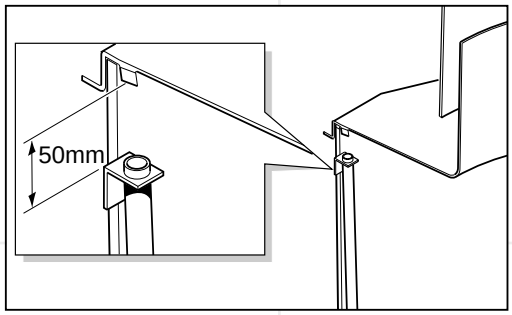
Drill a 22mm hole in the center of a chamber flat 50mm up from the internal flange.

Stage 2



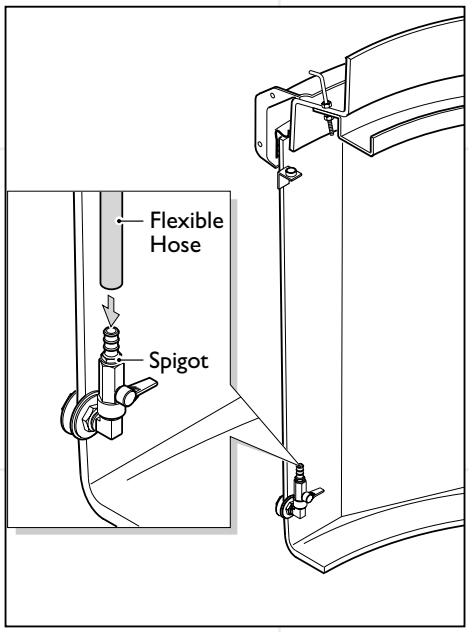
Secure the bulkhead fitting into position using the internal and external rubber sealing washer's, steel washer's and locking nut.

Stage 3



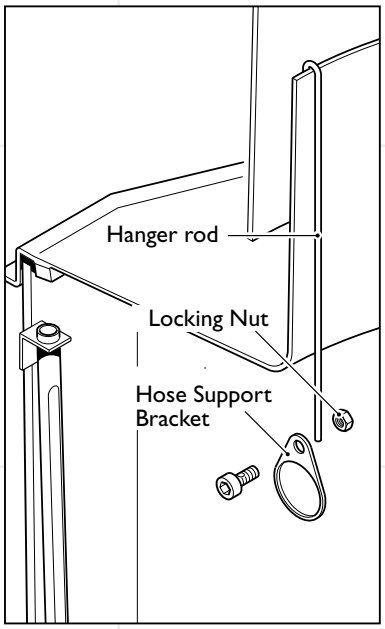
If necessary, cut the aluminium support tube to length from bulk head valve spigot to within 50mm of the Corbel

Stage 4



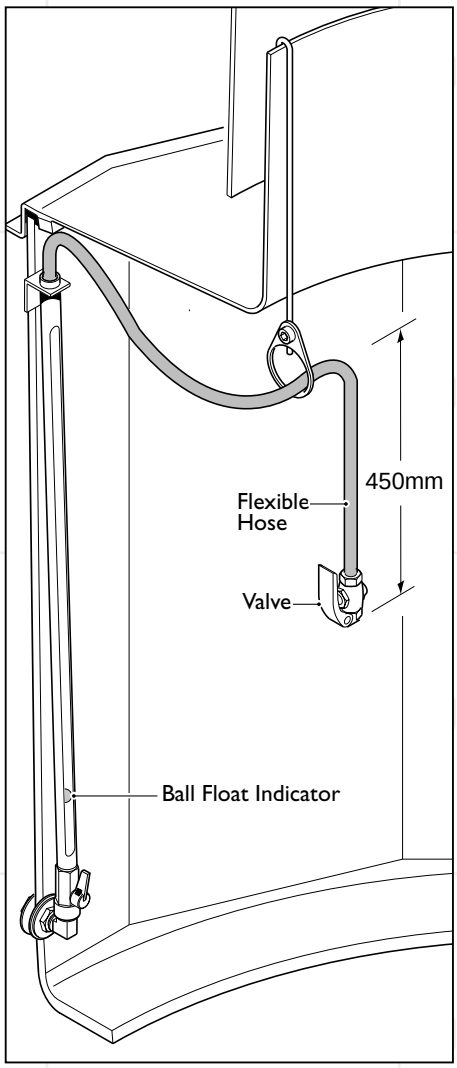
NB:- If the visigauge bulkhead is factory fitted make sure the ball float indicator is placed inside the bulkhead spigot before attaching the flexible hose.
If necessary, attach the flexible hose to the bulkhead valve spigot and encase in the aluminium support tube. Secure the support tube vertically with the self-adhesive support bracket below the highest point.

Stage 5



Hook the supplied hanger rod onto the corbel unit. Then secure the hose support bracket in position with slotted bolt and nut at desired length. Trim excess rod length.

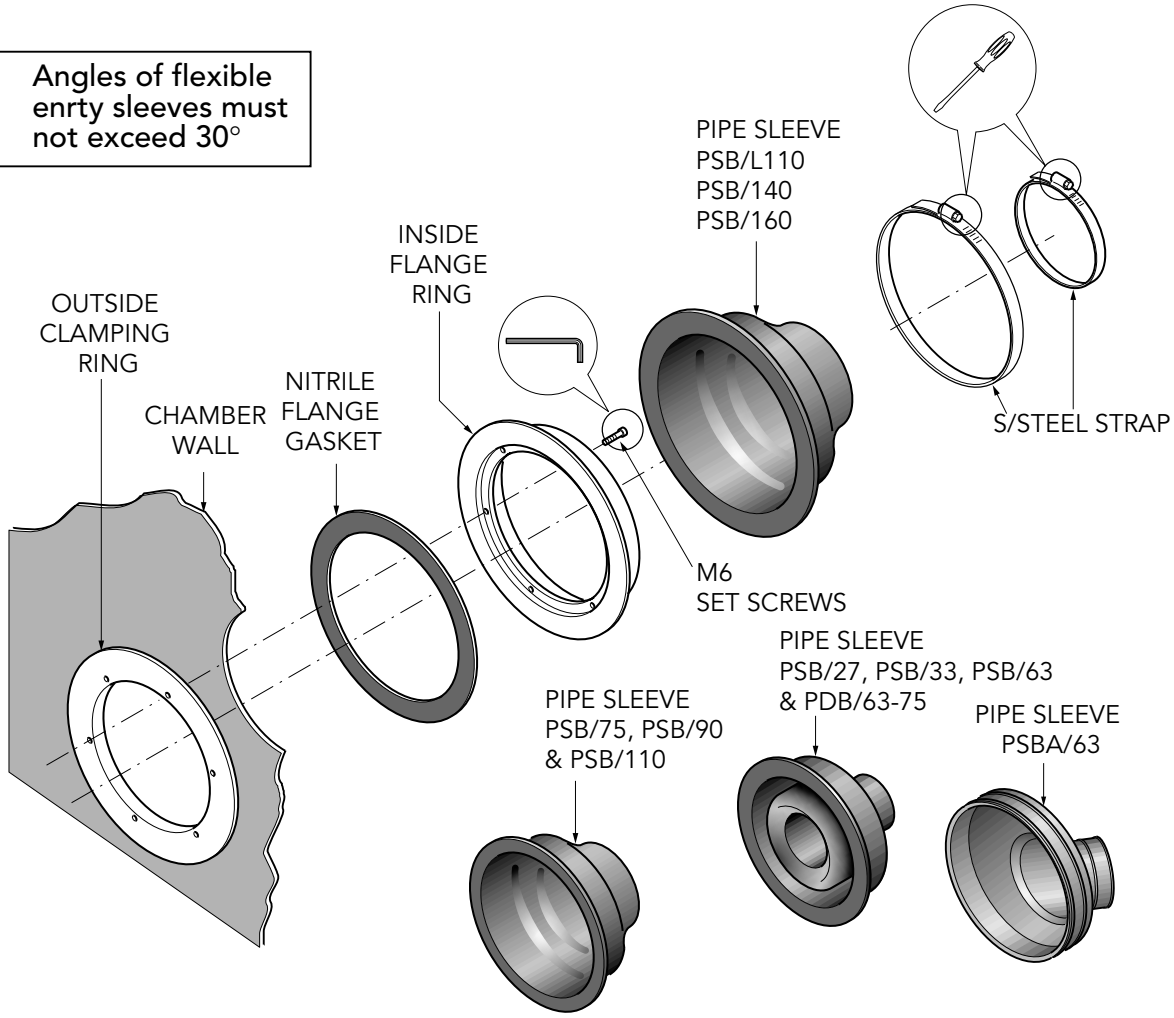
Stage 6

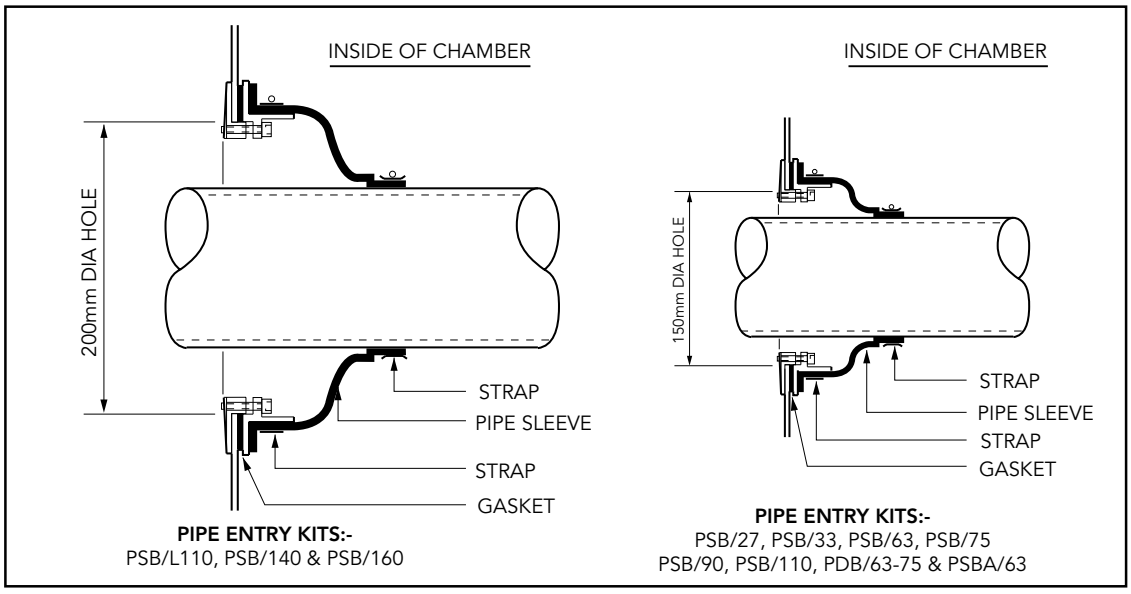


Pass the flexible hose through the hose support bracket and cut to length by leaving 450mm of hose passed through the support.
Attach the hand operated valve to the flexible hose and vent the system.
Affix "Visigauge fitted" label to the lid

PIPE SEAL KITS
FITTING INSTRUCTIONS

Note: Angles of flexible enrty sleeves must not exceed 30°

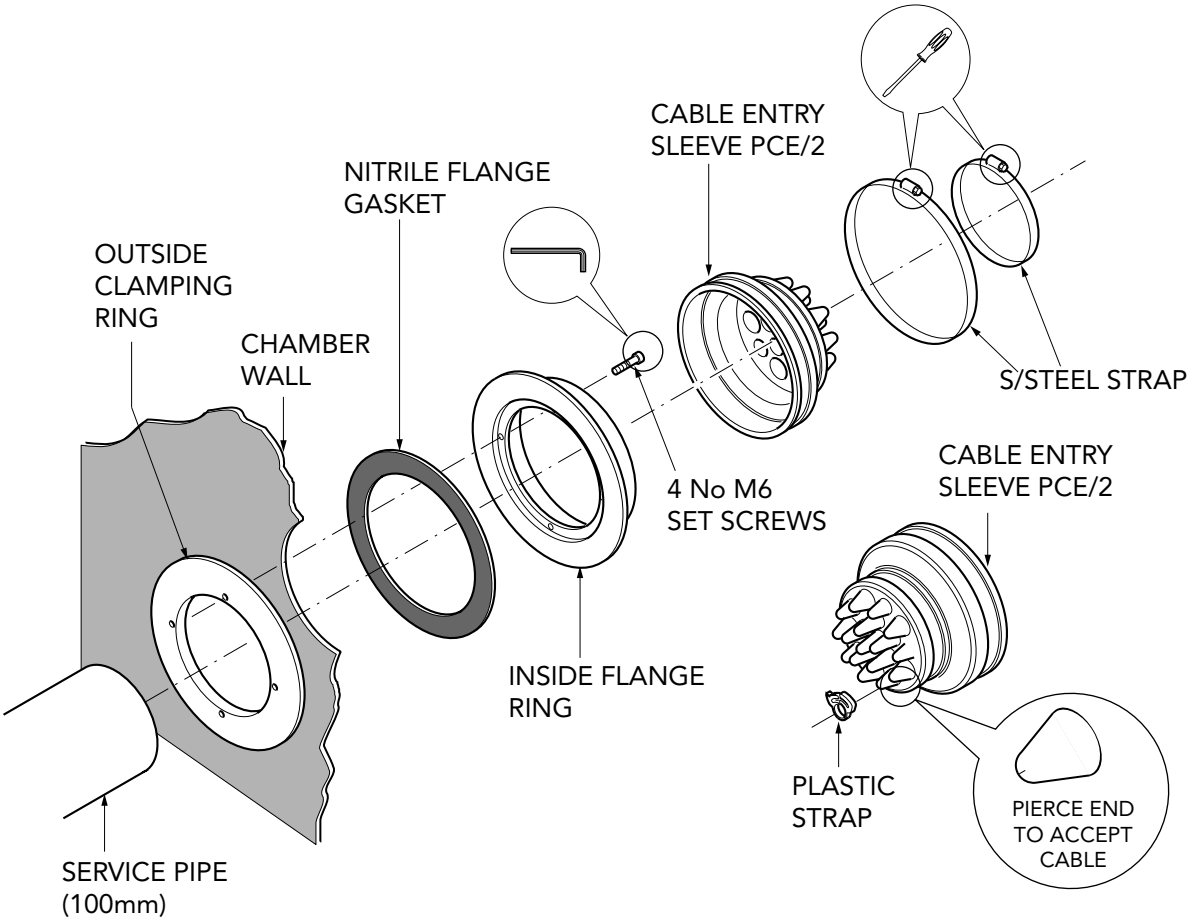


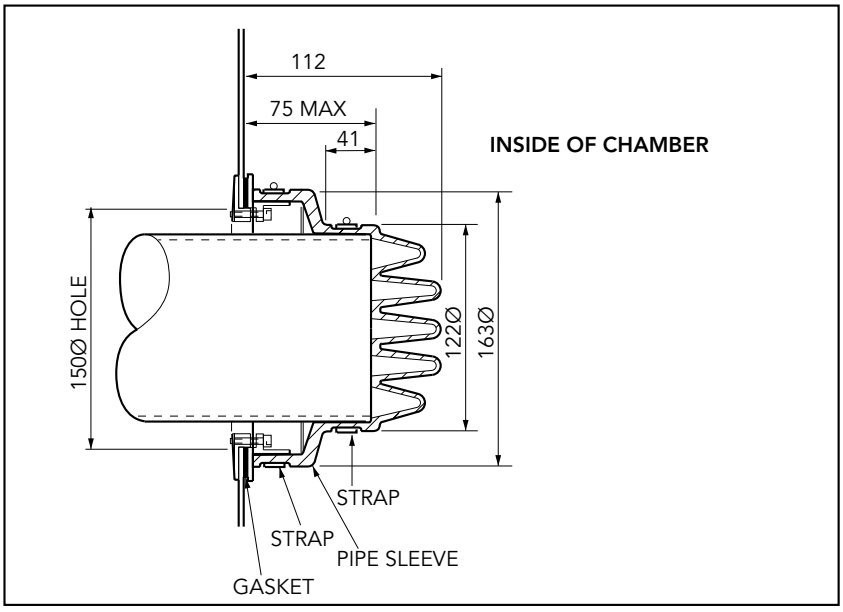


NB. Where appropiate, it is recommended that a drill piloted hole saw be used to cut the pipe/cable seal entry hole in the chamber.

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.

CABLE ENTRY SEAL KIT FITTING INSTRUCTIONS





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