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The 'Sika Solution'

Aluminium Jointing Chamber and
Security Access Cover Set Package

700 x 600 x 700H / 900H

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Assembly Basic Tool Kit

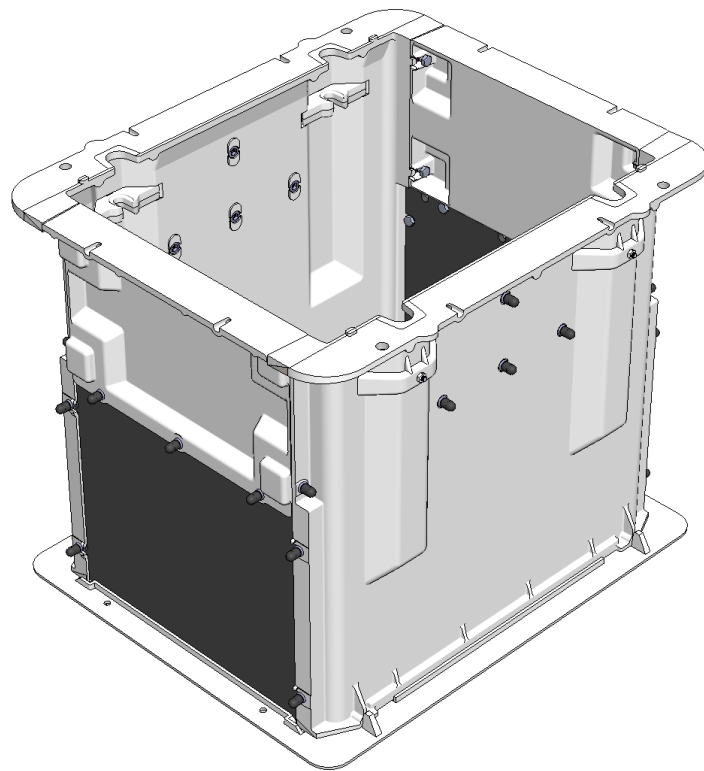
24mm Open End Spanner
17mm Ratchet Spanner
17 mm Tube Socket
10 mm Allen Key
6 mm Allen Key



Aluminium Jointing Chamber 700 x 600 x 700 / 900H

ASSEMBLY INSTRUCTIONS

Chamber Rating: CLASS D - 210kN - AS3996:2006
Sika 'Chambers' are used for both Pathway & Roadway Installations



Chamber 700 x 600 x 700H



1. Place the **chamber base** on a flat area adjoining the pit or on a prepared bed of imported material in the excavated pit. Note the Sika logo will be face up.

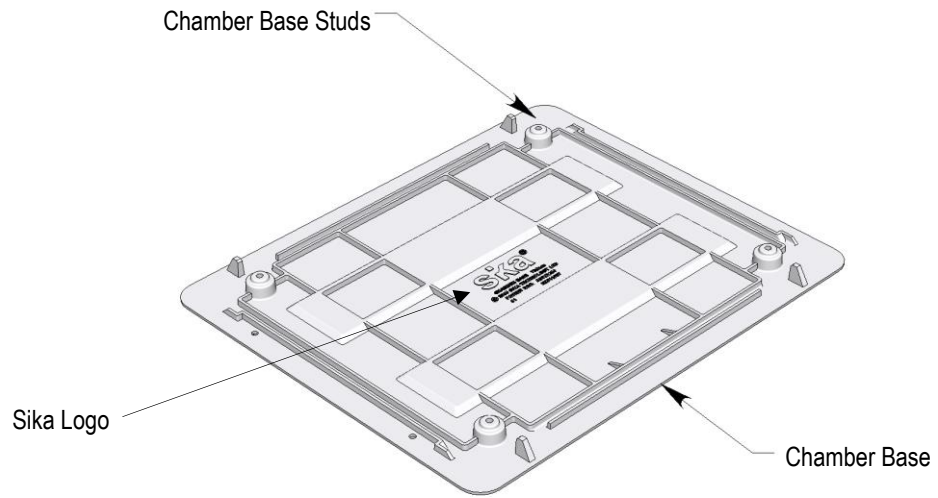


Fig 1

2. Where there is existing ducting and minimal side excavation is required use a **split base**. Ref Fig 2

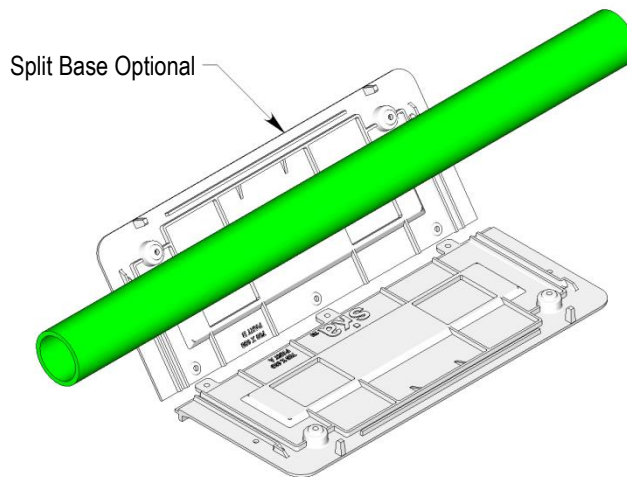
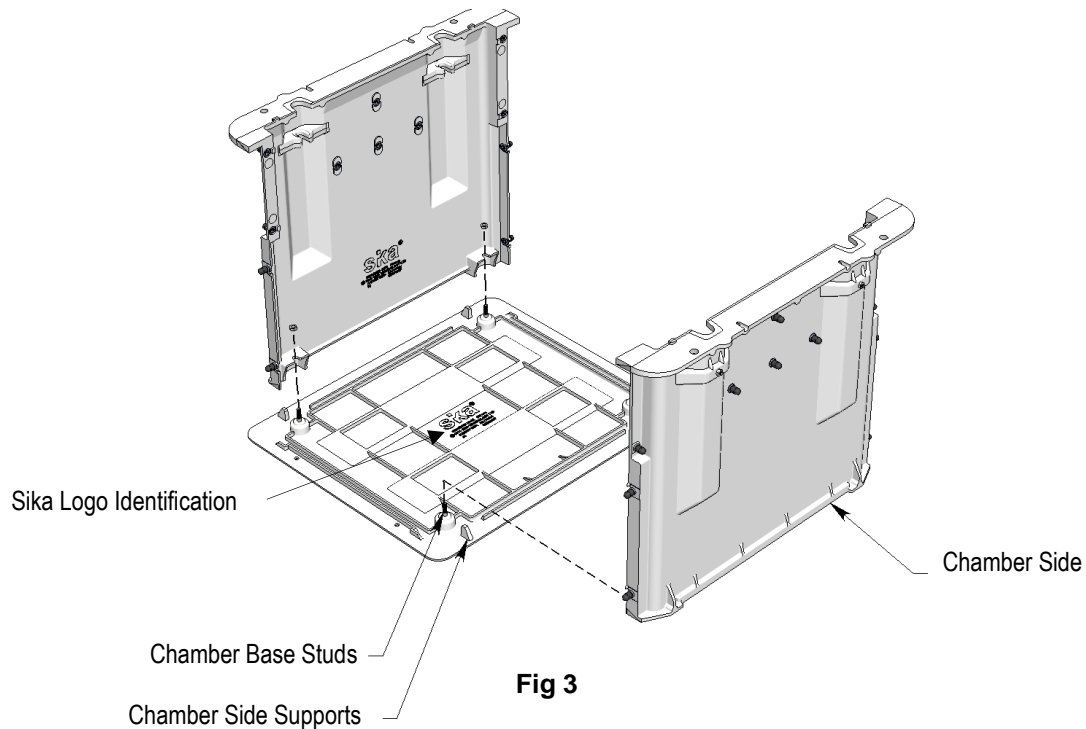


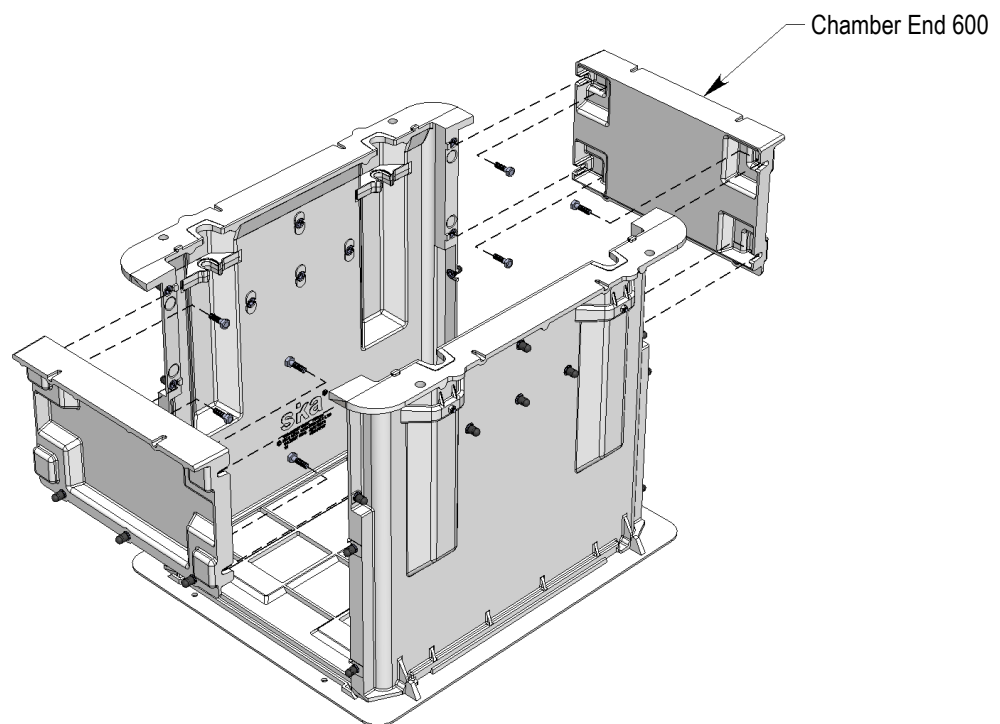
Fig 2

3. Remove the plastic tubes protecting the 4 – M10 studs protruding from the **chamber base** and place the two **chamber sides** into place.

Insert the two **chamber sides** into the appropriately marked positions on the **chamber base**. **Chamber side supports** cast into the **chamber base** will hold the **chamber sides** vertical until the 4 – M10 nuts and washers are applied to hold them down. *(Do not tighten these yet.)*



4. Add the two **chamber ends 600** and secure them with the 8 – M10 x 30 bolts and washers. *(Now tighten all the aforementioned fixings.)*



5. Apply the two polypropylene **duct entry panels** to each end recess and secure each one with 7 - M10 x 30 bolts and washers supplied.

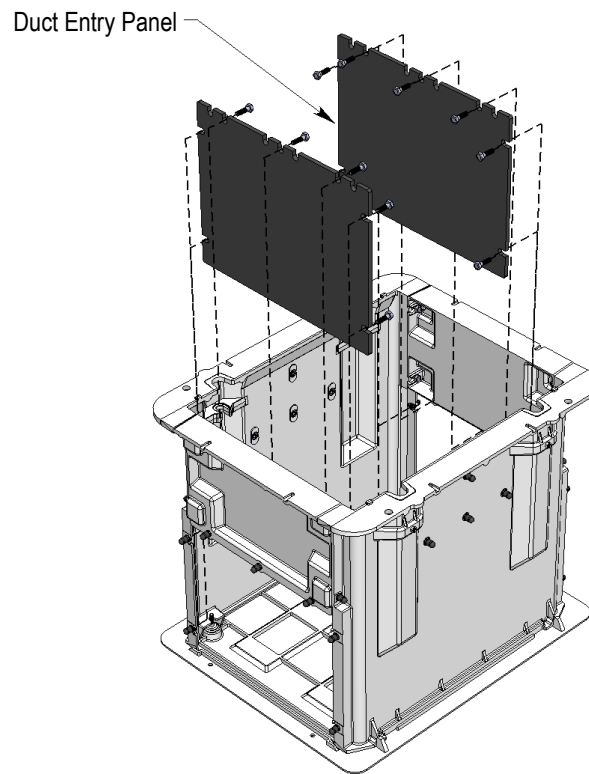


Fig 5a

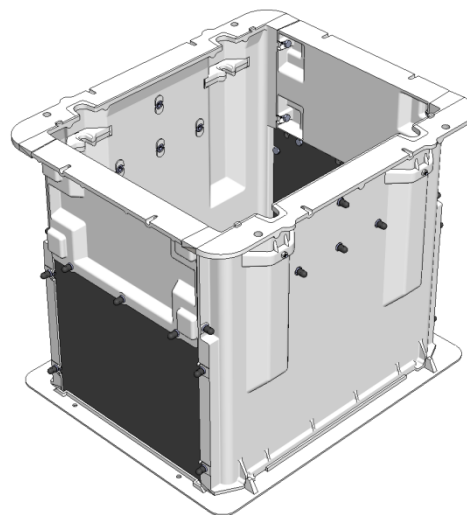


Fig 5b

Chamber 700 x 600 x 700H

Chamber Extension 200mm

6. Assemble **chamber extension** as per Fig. 6a using 8 - M10 x 30 bolts and washers supplied. Place on top of chamber flange. See arrows for right way up.

Chamber Extension
700 x 600 x 200H

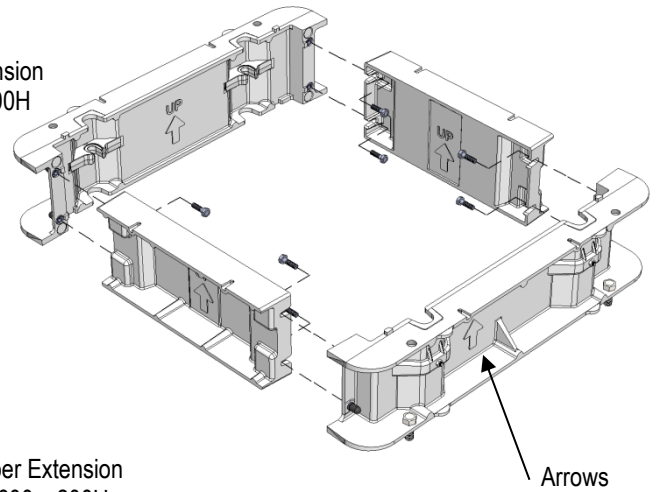
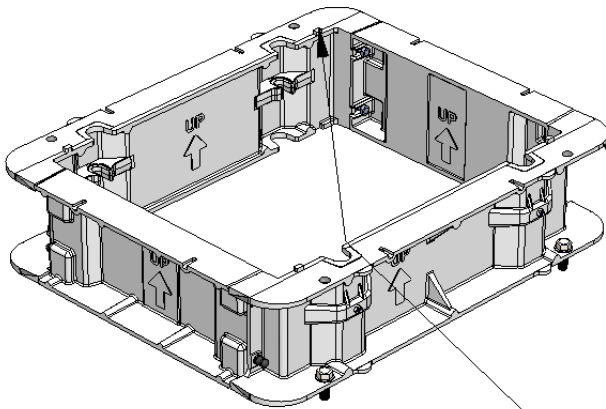


Fig 6a

Chamber Extension
700 x 600 x 200H



Locator Lug will Self Align Extension

Chamber 700 x 600 x 700H

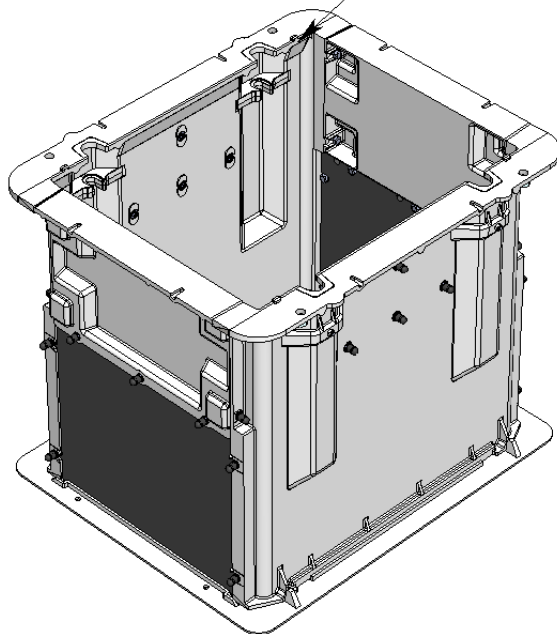


Fig 6b

Bolt assembled **chamber extension** to the chamber with the 4 - M16x40 bolts, nuts and spring washers supplied.

Chamber 700 x 600 x 700H
& Extension 700 x 600 x 200H

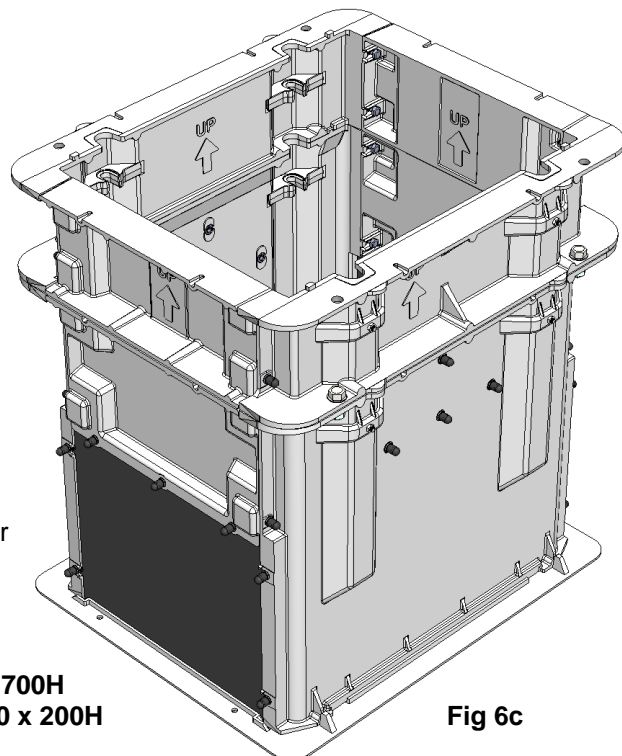
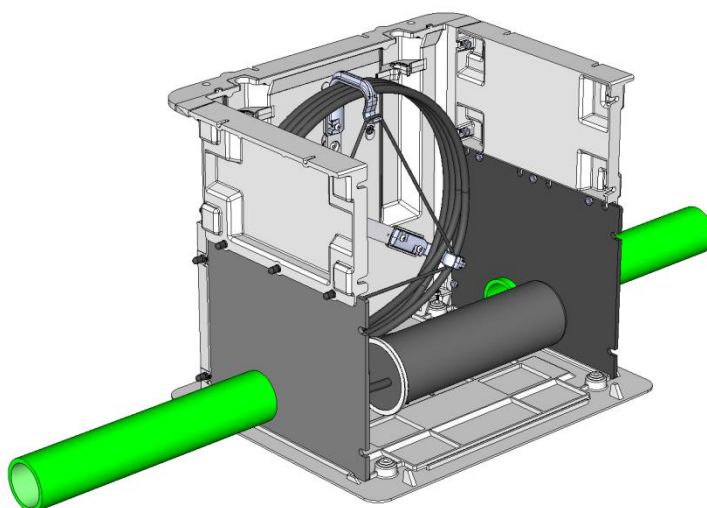


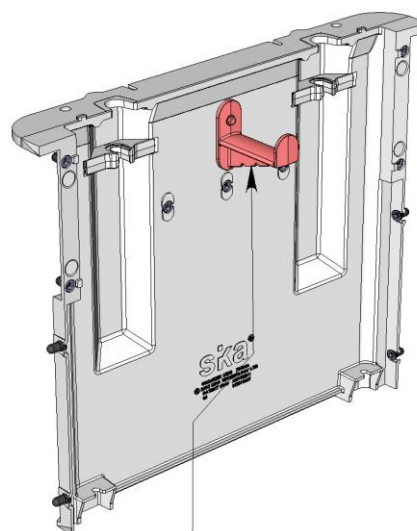
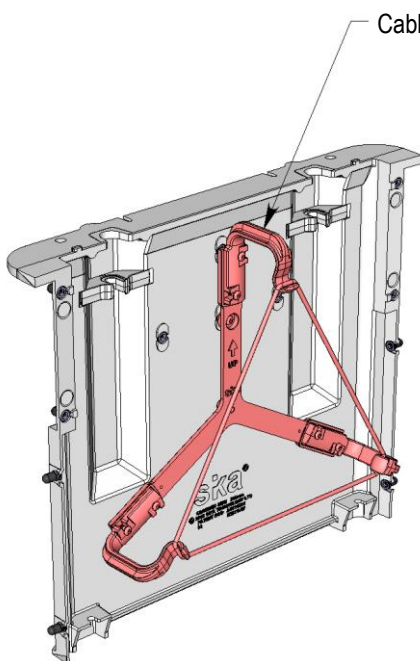
Fig 6c

Chamber Accessories

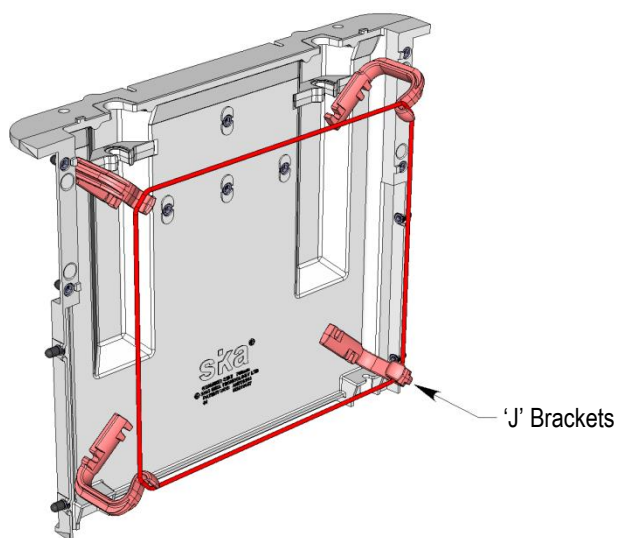
Cable Support Options



Cable Management Bracket



Cable Stirrup Bracket
Option 145 mm Long
Option 250 mm Long

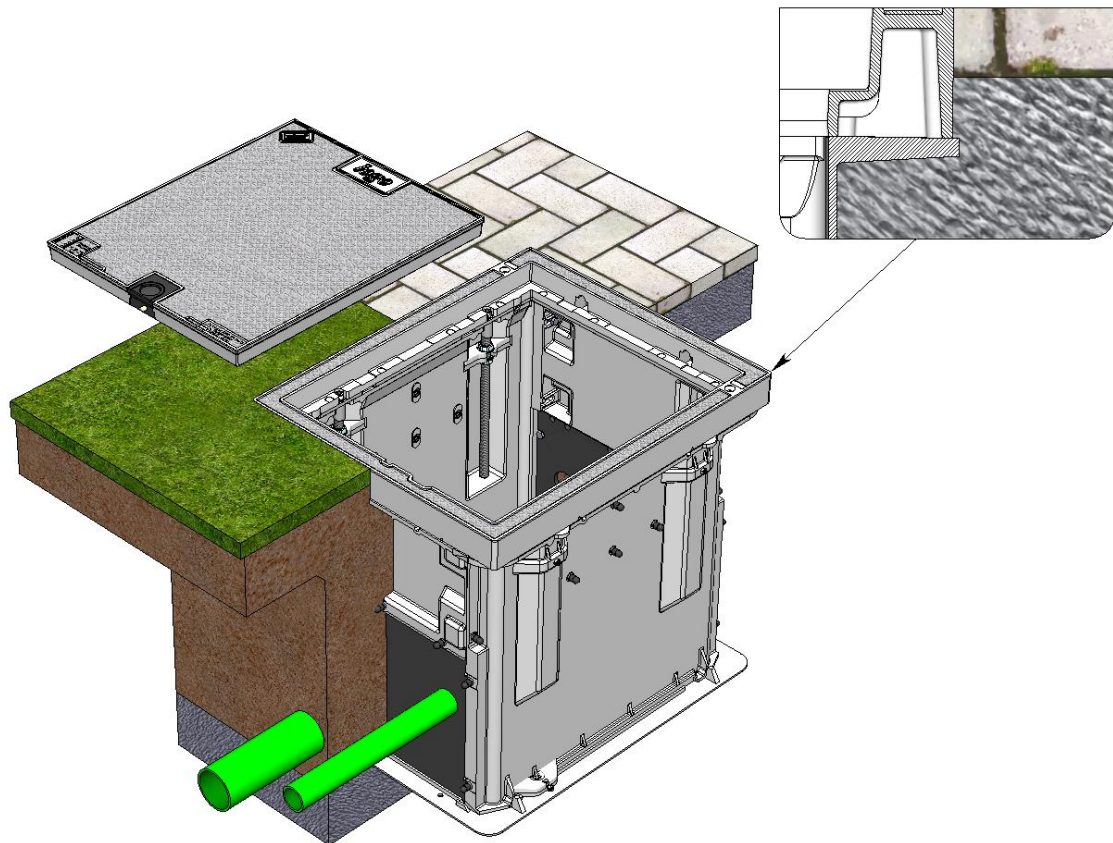


'J' Brackets



Aluminium Jointing Chamber & Access Cover Set GUIDELINES FOR PATHWAY INSTALLATION

COVER SET RATING: CLASS B - 80 kN - AS3996:2006



Chamber & Cover Set 700 x 600 x 700H



Pathway Class B 80kN Cover Set Frame Attachment

1. Clamp the **cover set channel frame** down using 4 – M16 adjustable raiser rods supplied.

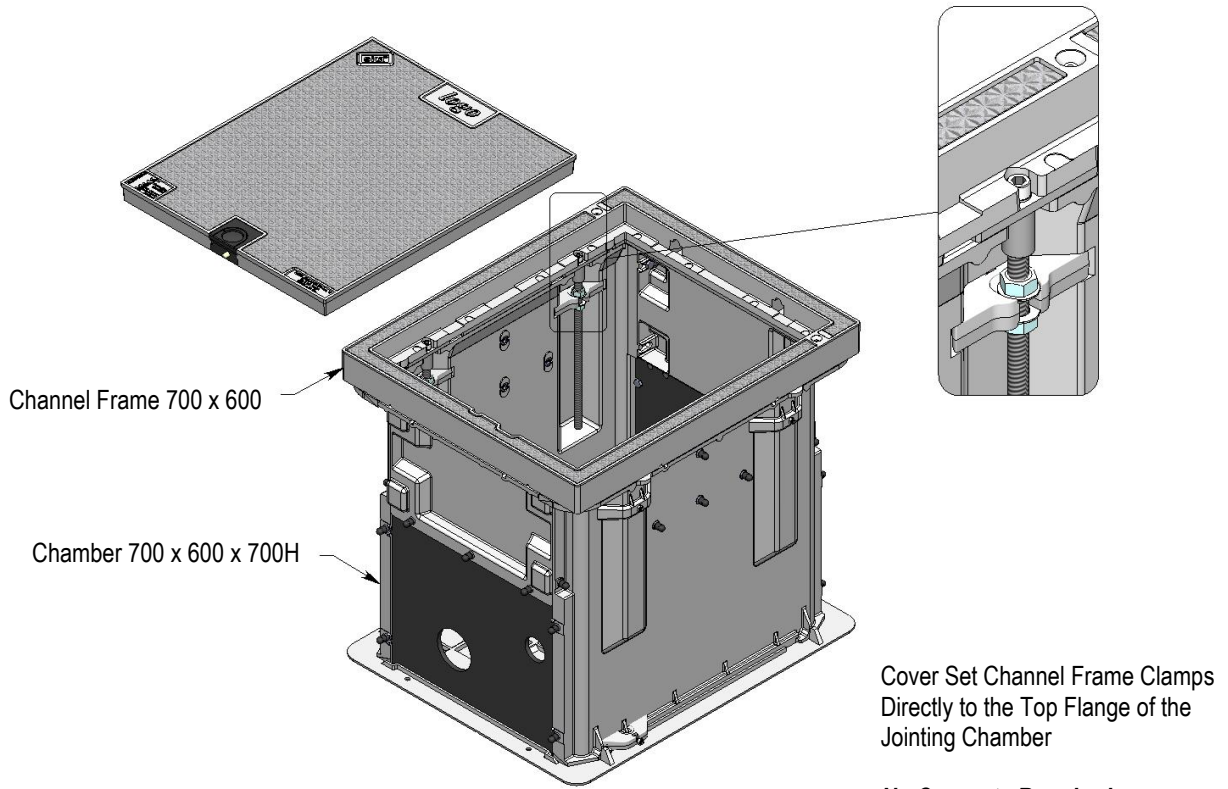


Fig 1a

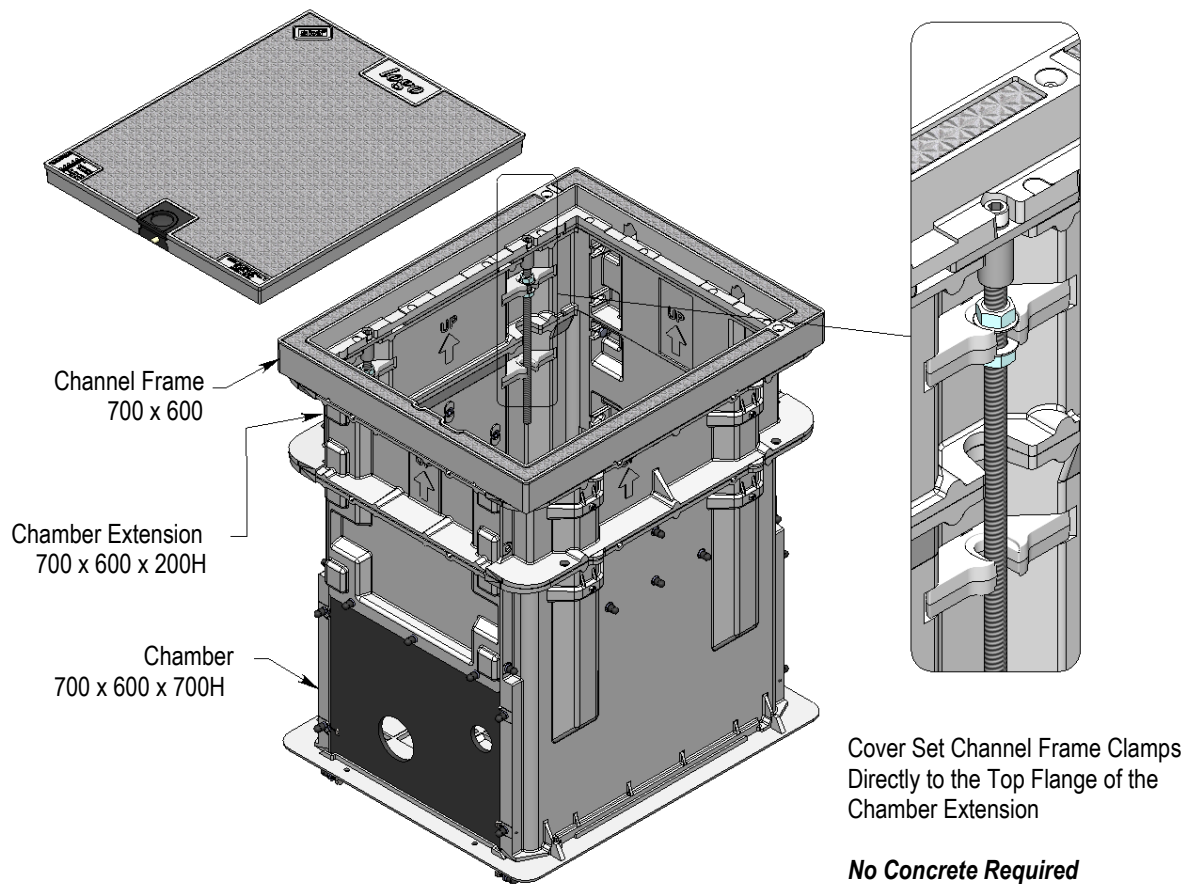


Fig 1b

Pathway Typical Installation - *No concrete collar required*

2. Sika Pathway Cover Sets can be **clamped directly onto either the top flange of the chamber or extension.**

Compacted bedding of nominal depth **200mm** is to be Sand, Blue Chip, etc

Place the assembled **chamber and cover set channel frame** into the prepared pit, or assemble the chamber in the pit, particularly if over existing duct work. Make level on compacted bedding to accommodate the chamber base at the required height so that the **cover set matches the finished ground level.** Ref Fig 2c

Backfill chambers with mechanically compacted layers of evacuated material if the material is of a suitable type. The compaction shall be of a standard equivalent or more than that of the surrounding ground. **If the evacuated earth is unsuitable imported hard fill shall be utilised.** Ref Fig 2c

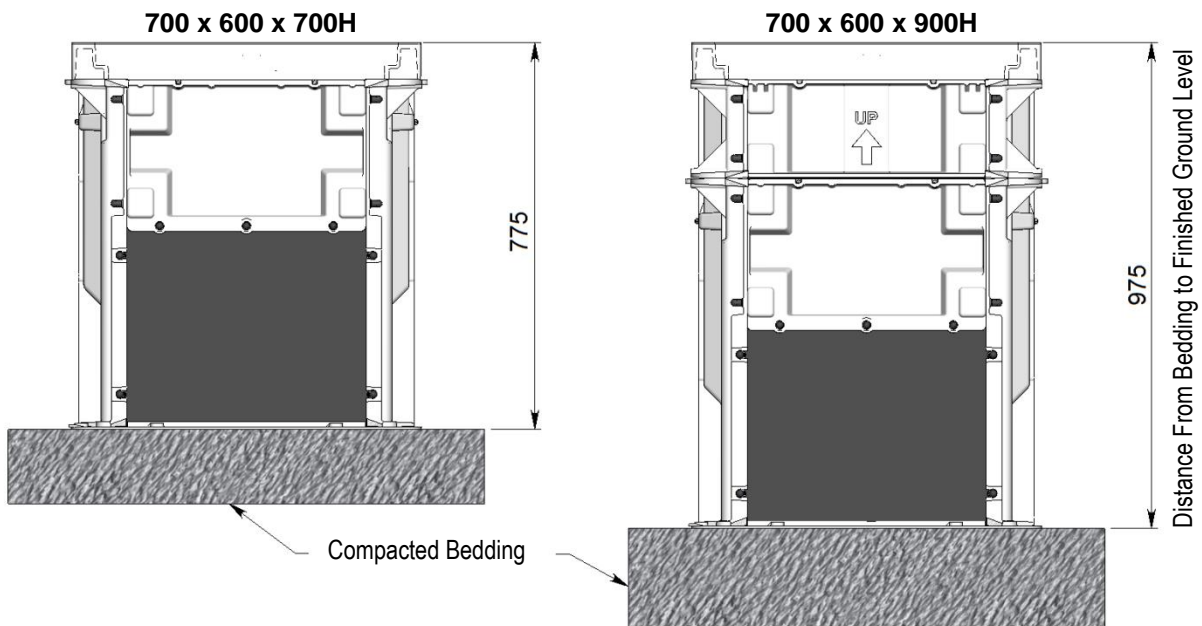


Fig 2a

Fig 2b

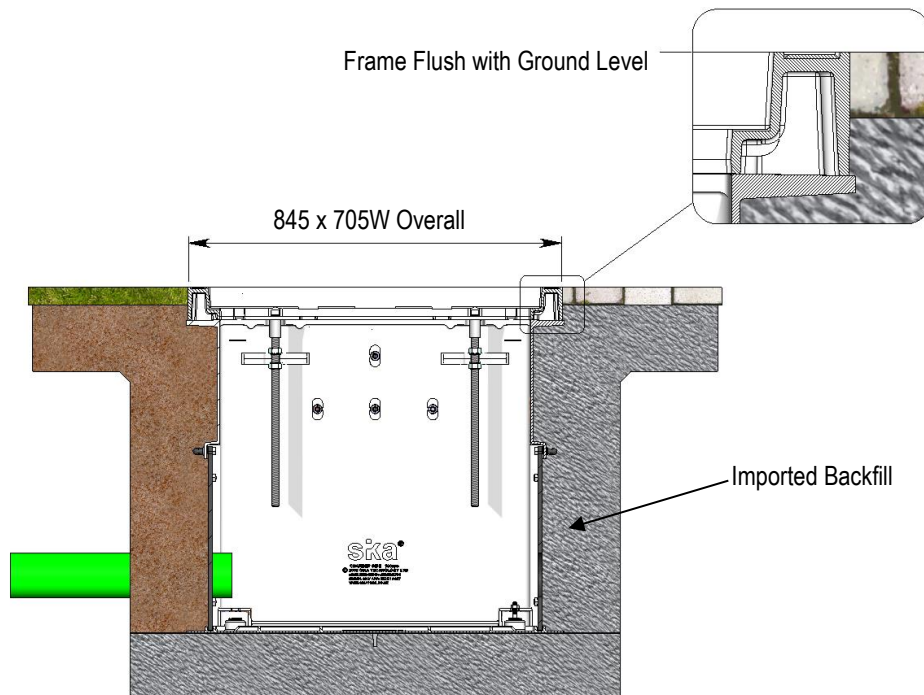


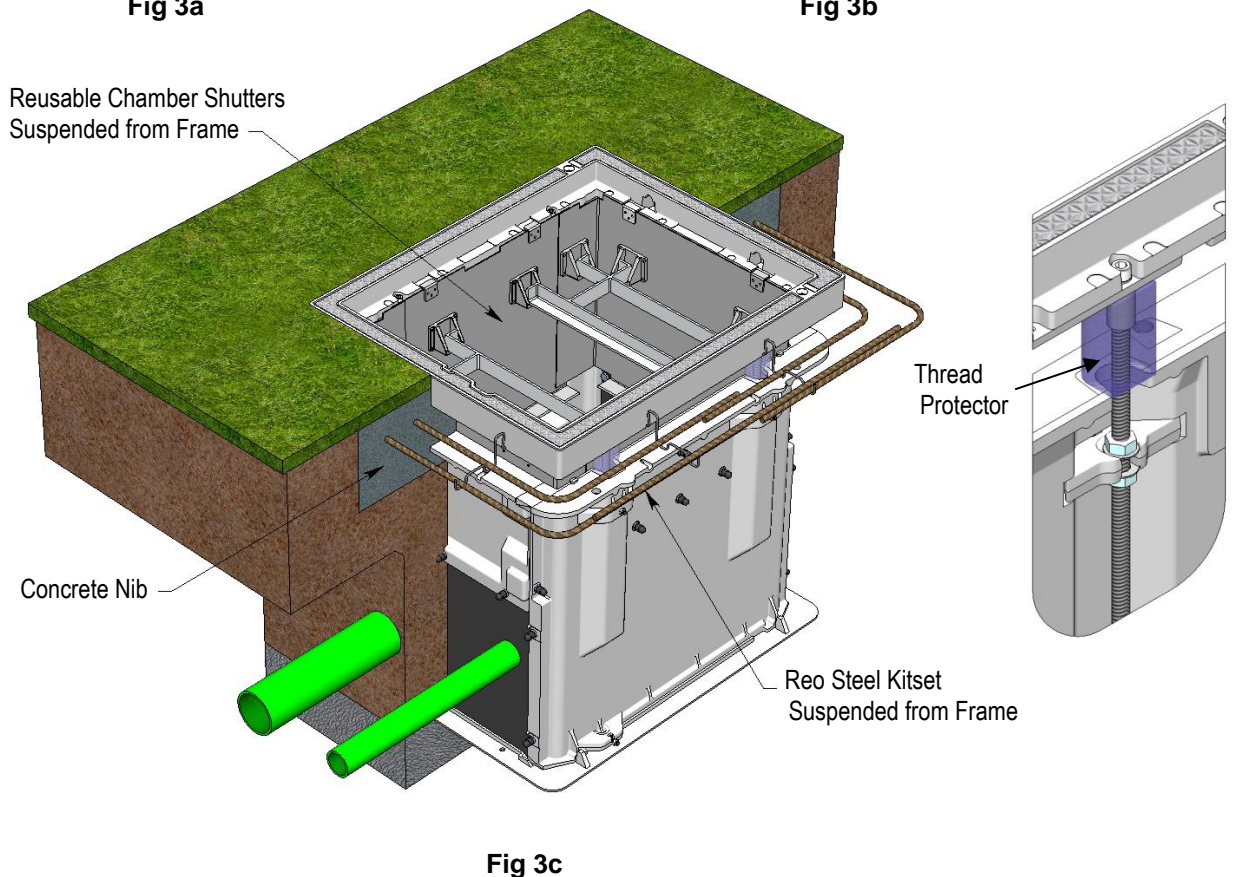
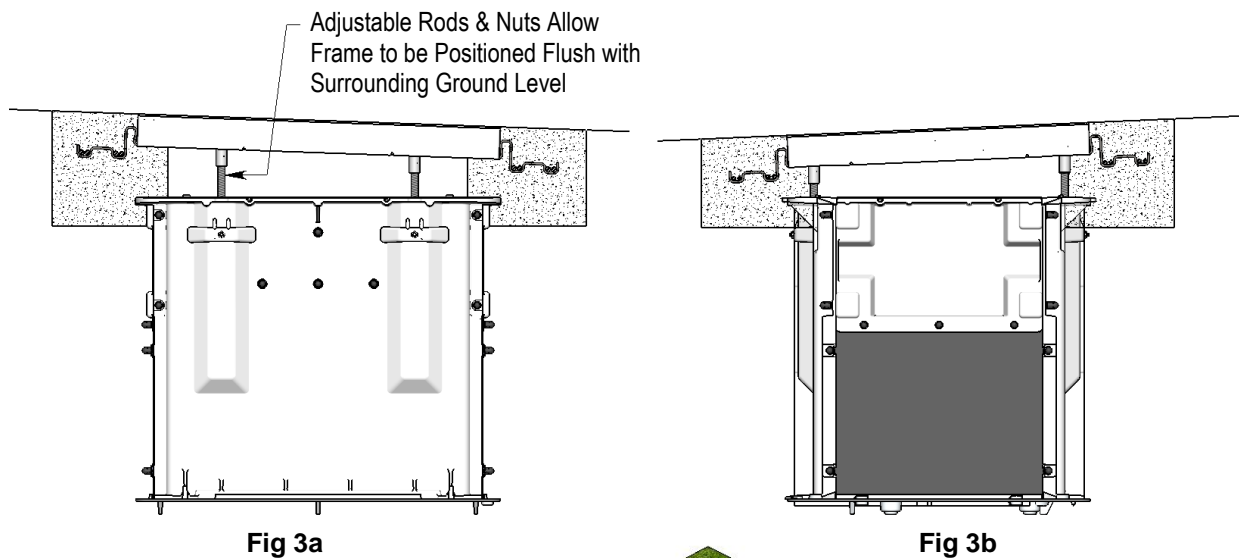
Fig 2c

Pathway Concrete Installation - *Concrete collar is required*

3. Sika Pathway Cover Sets can be **positioned at a required height and ground slope** where difficult ground slope conditions exist.

In this case adjust the 4- M16 S/S rods and nuts provided to locate frame in place, then use Sika **reusable chamber shutters** between the suspended access cover set frame and the chamber top flange to facilitate pouring the concrete support nib. Also available from Sika is a complete **reinforcing steel kitset** and **thread protector**. *Refer Individual Instructions*

The cover can be locked down on top of the concrete shutters to provide chamber security until the concreting detail has been completed.



NOTE: A concrete collar must be poured if the cover set frame is raised more than 30 mm away from the support offered by the chamber top flange (refer "Frame Support Gap" notes on page 13 for details). The threaded raiser rods alone NOT constitute a support structure.

Pathway Concrete Installation & Backfill Details

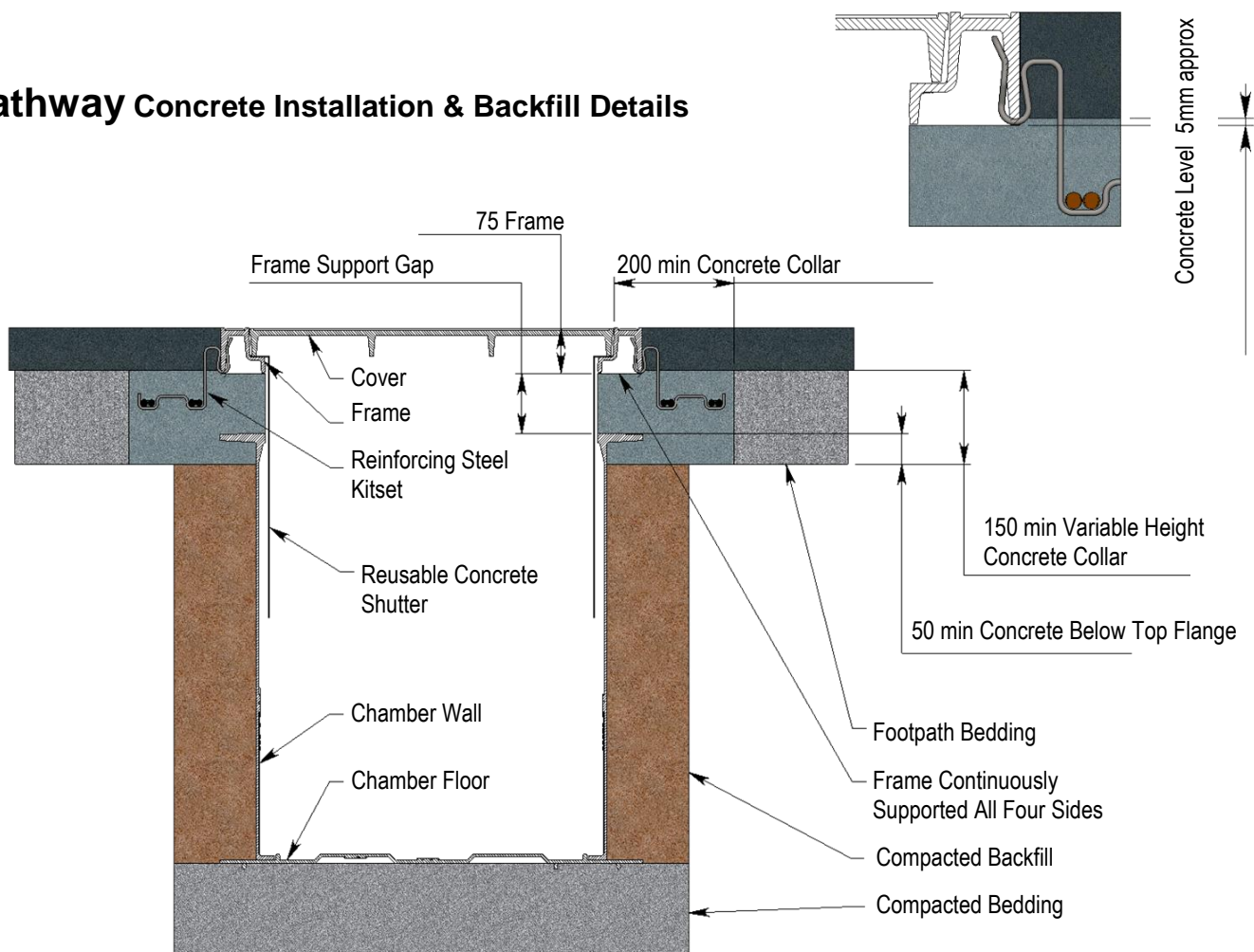


Fig 4

4. **Backfill** chambers with mechanically compacted layers of evacuated material if the material is of a suitable type. The compaction shall be of a standard equivalent or more than that of the surrounding ground. If the evacuated ground is unsuitable imported hard fill shall be utilised.

The maximum **backfill** level for jointing chambers will be **50mm below the chamber top flange**. This means the concrete support collar will always envelop the chamber flange. See Fig 4.

The cover set cannot comply with the 80kN loading required by AS:3996 Standards without the correct Continuous Frame Support as follows:

Frame Support Gap >30mm Use minimum concrete strength 25 MPa at 28 Days complete with Reinforcing Steel Kitset. The minimum support collar is 200 x 150mm.

Frame Support Gap <30mm Use High Strength Grout directly supported by the top flange of the chamber or the extension. No concrete collar required.

The distribution of concrete / grout under the load bearing face of the aluminium frame must be complete (**no voids**). Use a portable concrete vibrator.

Fit the cover into the frame and lock it into place **before pouring the concrete collar** to avoid any possible *frame distortion during the curing cycle*.

Remove all debris from the frame seating area before installing the cover and locking it into place.

Replace dust covers.

Ducting

5. Mark and cut the polypropylene duct entry panel to suit duct work. Cut the duct entry holes through the polypropylene panels using a jig saw or hole saw approximately 5mm larger than the duct. Seal the duct to the polypropylene panels using Wurth MS1 epoxy mortar. Ref Fig 5a (*refer Price List for Epoxy Mortar*).

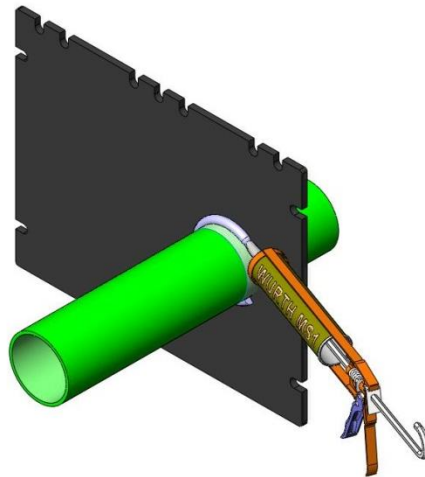


Fig 5a

If a chamber has been assembled over the existing ducts mark the position of the duct entry hole on the polypropylene panel and cut it out using a jig saw and split the poly panel horizontally through the centre of the hole. Refer Fig 5b.

Reassemble the polypropylene panel around the duct using H section extrusion to help stiffen the panel against back fill pressures. H section extrusion is available from Sika (*refer Price List*)

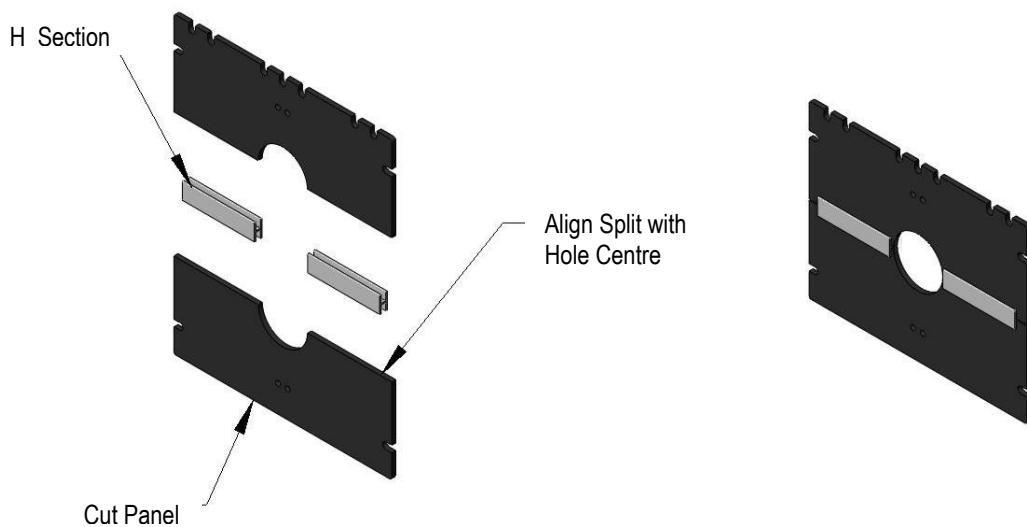


Fig 5b

Pathway Concrete Installation Accessories

Reinforcing Steel Kitset

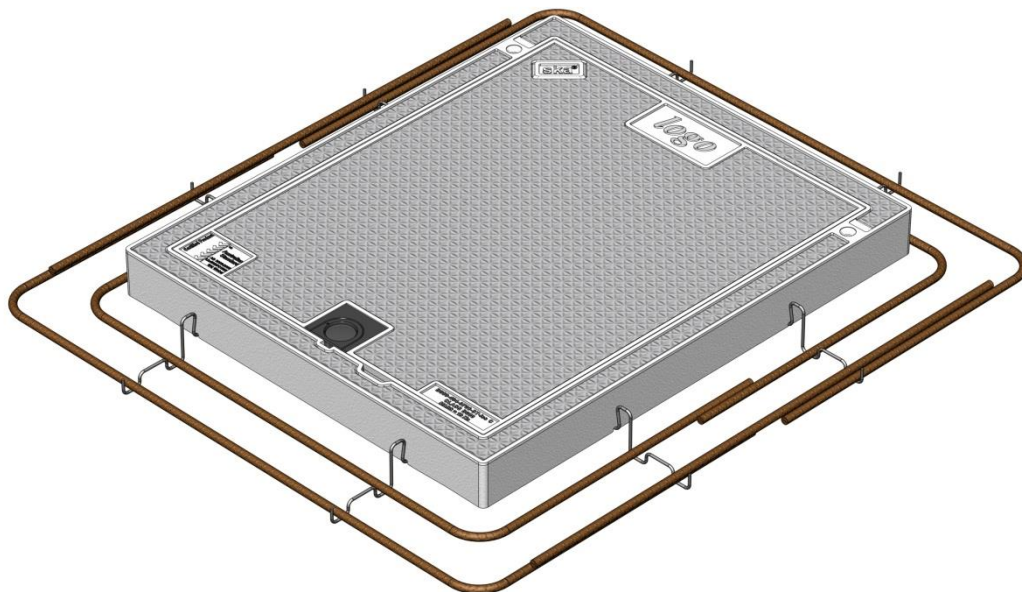


Fig 6

Thread Protector

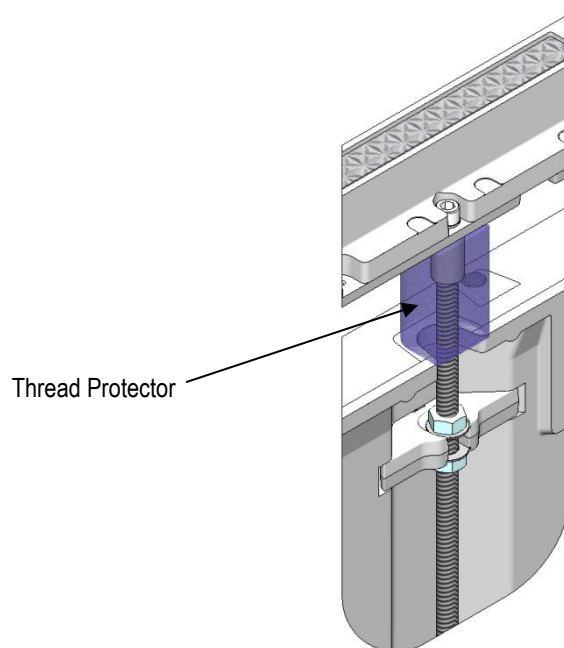


Fig 7

Fit the **thread protector** when the frame is raised and concrete is required.

The **thread protector** will both protect the thread and seal the chamber cavity to prevent any concrete entering the chamber.

The **thread protector** polyethylene foam tubing can be cut to length with a sharp knife if required.

Reusable Chamber Shutters

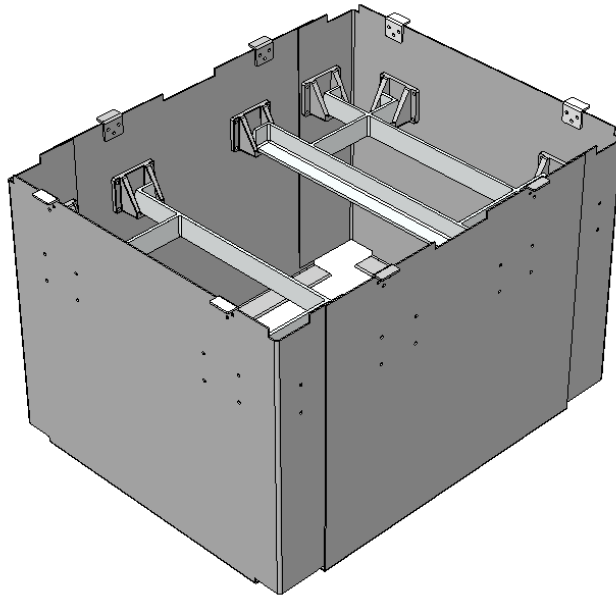


Fig 8a

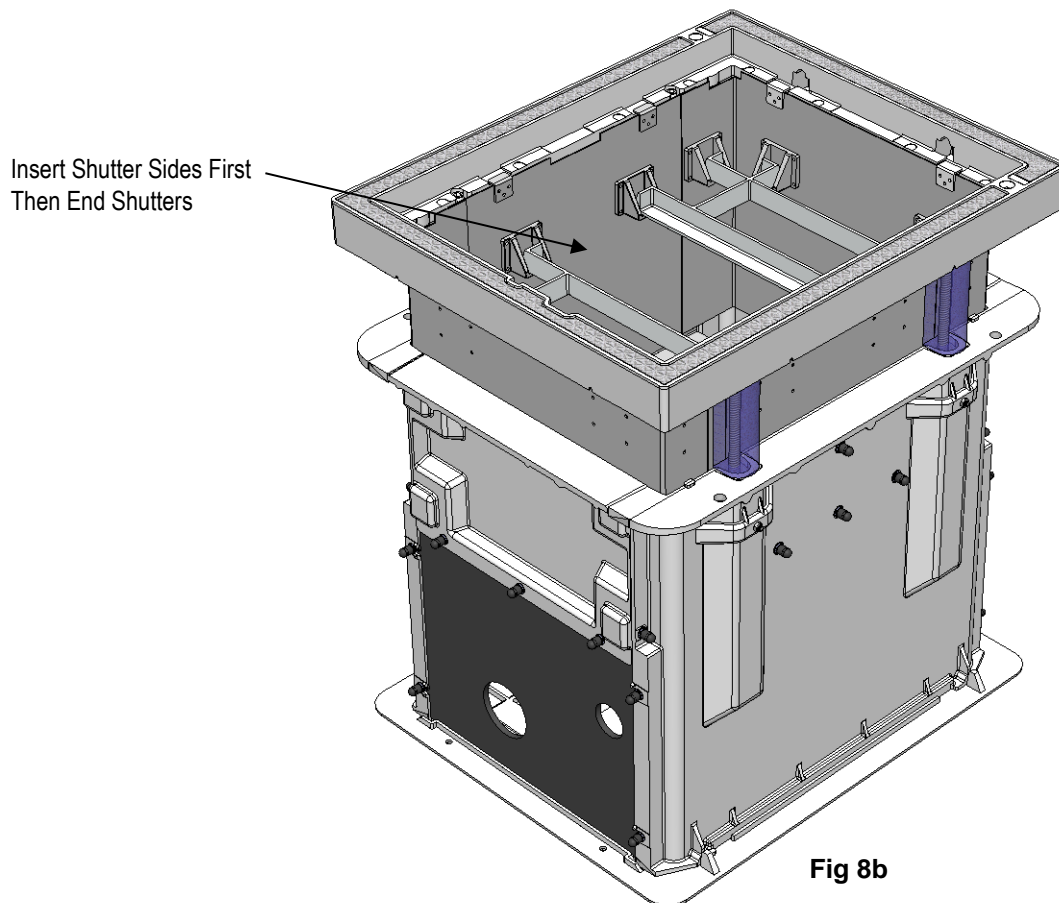


Fig 8b

Class B- Shutters Installed