



The 'Sika Solution'

Aluminium Jointing Chamber and
Security Access Cover Set Package

2100 x 1200 x 700H / 900H
Partial Access

Class D

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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
½” Drive Torque Wrench**

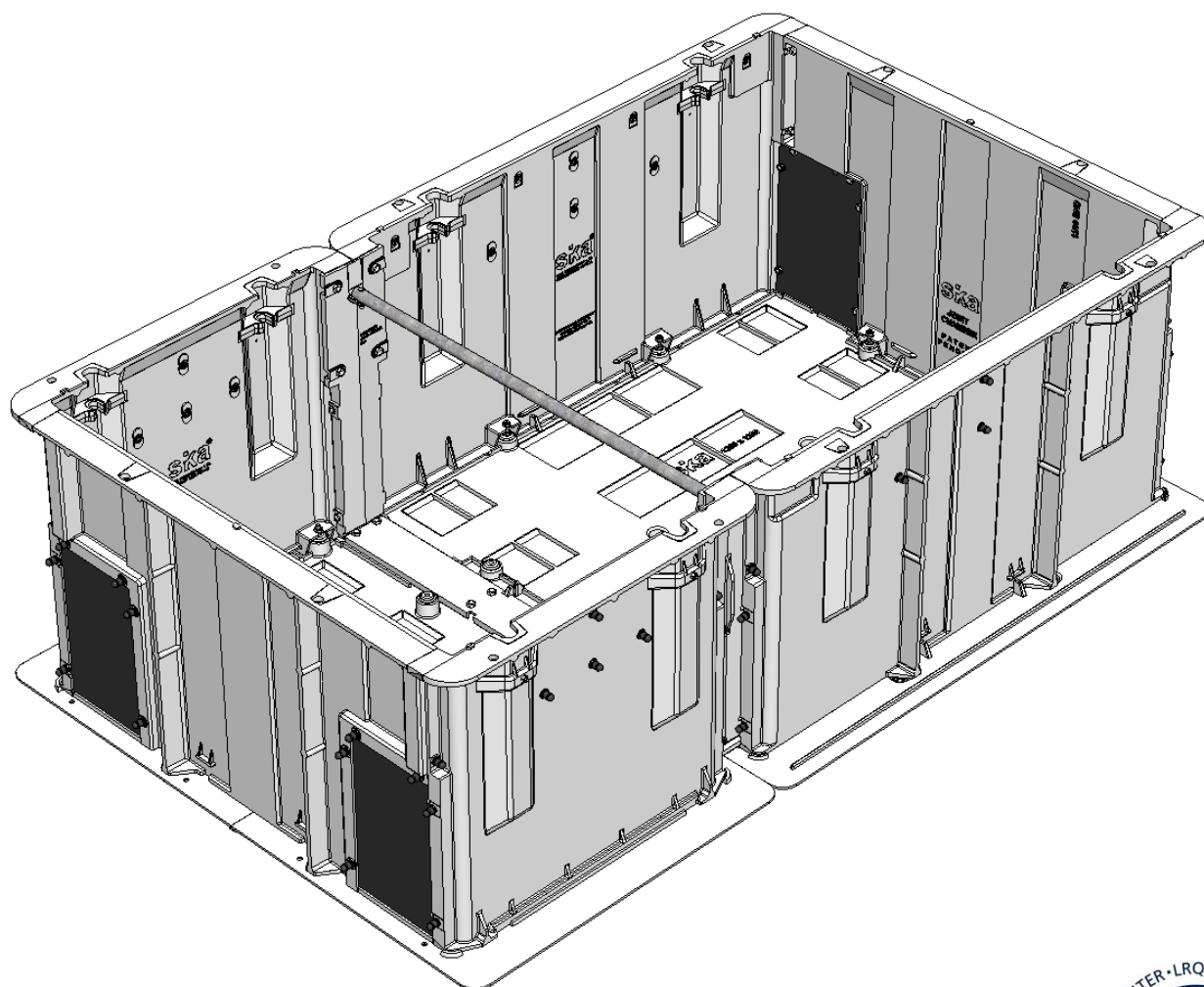


Aluminium Jointing Chamber 2100 x 1200 x 700 / 900H

ASSEMBLY INSTRUCTIONS

Chamber Rating: CLASS D - 210kN - AS3996:2006

Sika 'Chambers' are used for both Pathway & Roadway Installations



Chamber 2100 x 1200 x 700H



1. Place the two 700mm and the two 1200mm **chamber bases** side to side on a flat area adjoining the pit or on a prepared bed of imported material in the excavated pit. Note the “1200 x 1200” scripts and “2100 x 1200” scripts will be face up.

Join the two 700mm **chamber bases** with two **base joiner tabs** and apply 4 – M10 bolts and washers, and tighten. Then join the two 1200mm **chamber bases** with the remaining four **base joiner tabs** and apply 8 – M10 bolts and washers, and tighten.

Place the joined 700mm **chamber bases** and the joined 1200mm **chamber bases** end to end, then join the two sets of **chamber bases** using the **base joiner 1200** and apply 8 – M10 x 40 bolts and washers, and tighten. Note the ends to be joined by the **base joiner 1200** do not have any **chamber base studs** protruding.

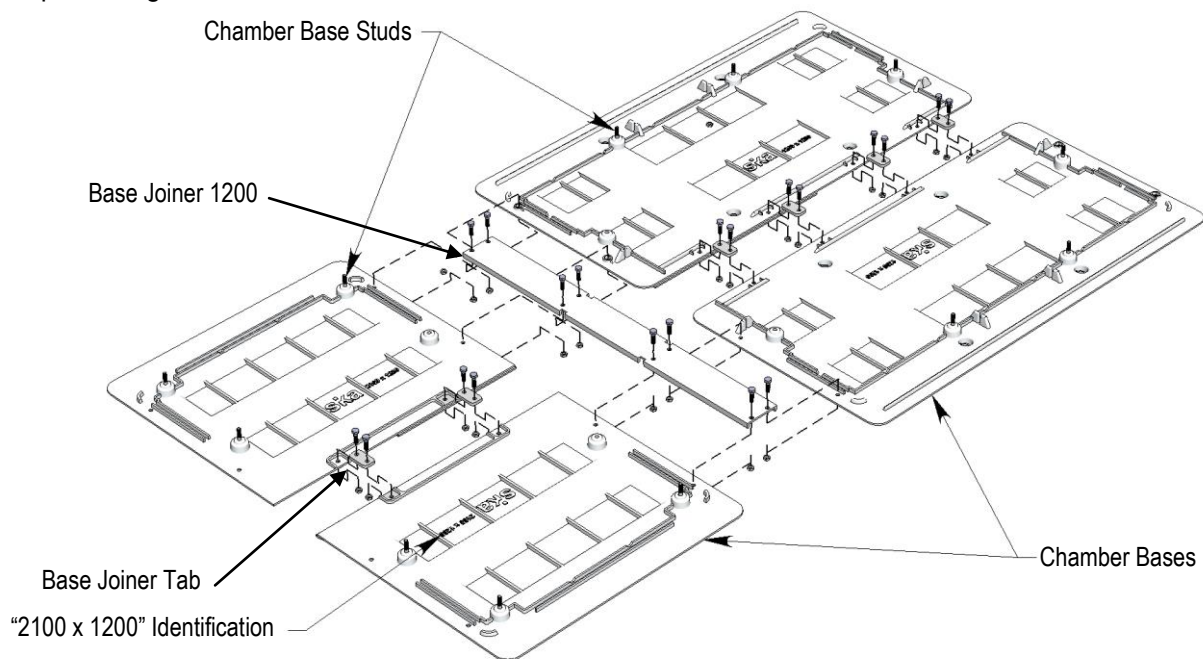


Fig 1

2. The **chamber base** may be assembled around existing duct work. Ref Fig 2

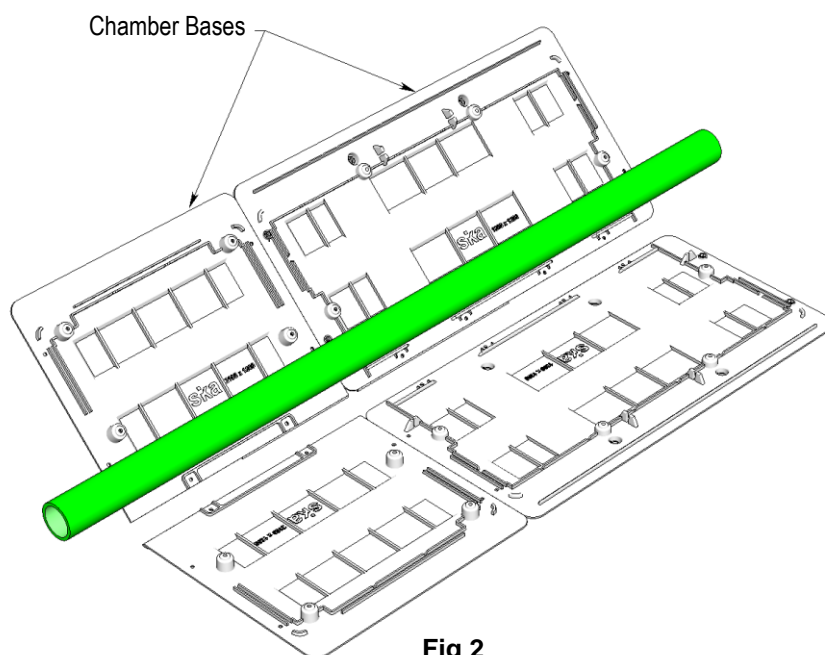
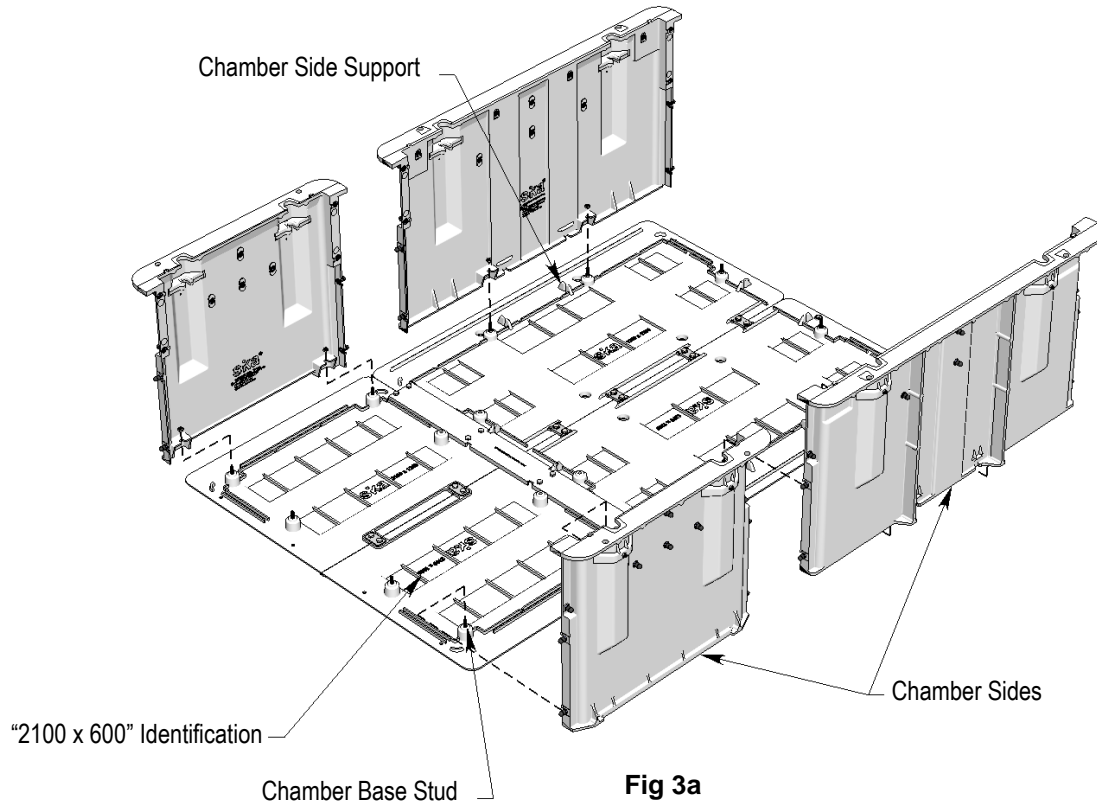


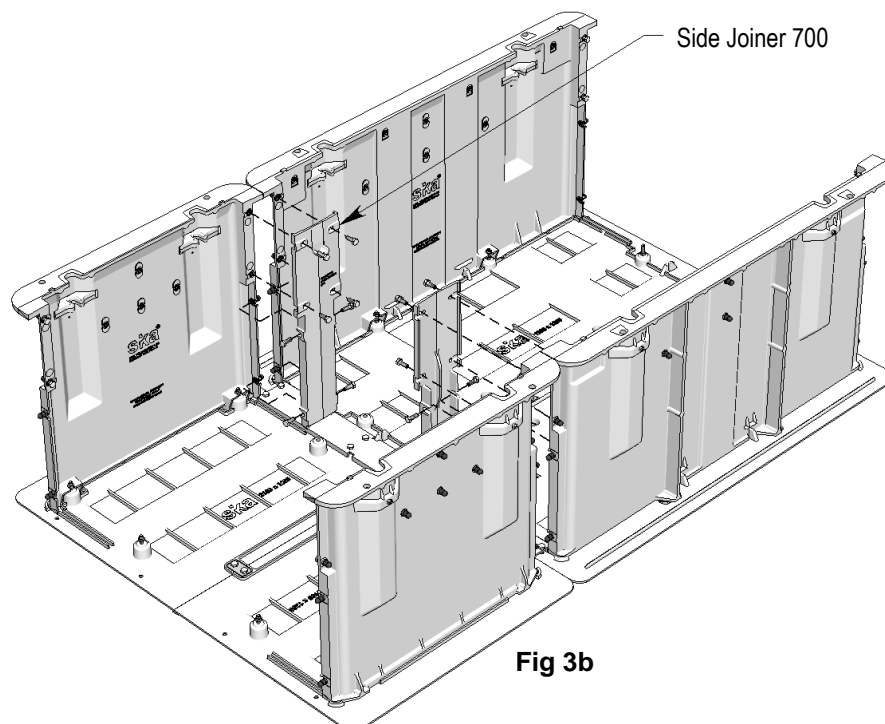
Fig 2

3. Remove the plastic tubes protecting the 8 – M10 studs protruding from the **chamber base** and place the 2 – 1200 and 2 – 700 **chamber sides** into place.

Insert the four **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 8 – M10 nuts and washers are applied to hold them down. *(Do not tighten these yet.)*



Add the two **side joiners 700** adjacent to the **base joiner 1200** using 16 – M10 x 30 bolts and washers.



4. Remove the plastic tubes protecting the 4 – M10 studs protruding from the **chamber base** and place the two **chamber ends 1200** into place.

Insert the two **chamber ends** into the appropriately marked positions on the **chamber base** and secure them to the **chamber base** and **chamber sides** with the 12 – M10 x 30 bolts and washers.

(Now tighten all the aforementioned fixings)

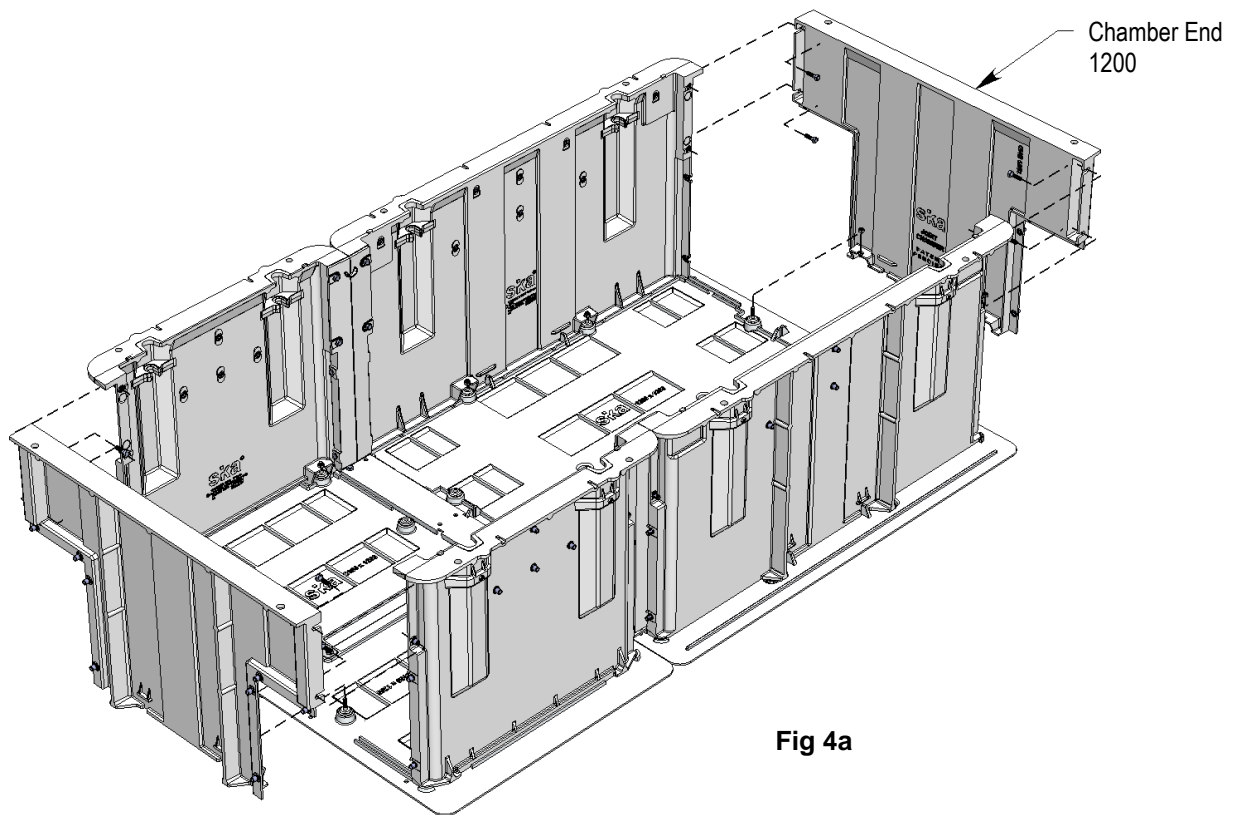


Fig 4a

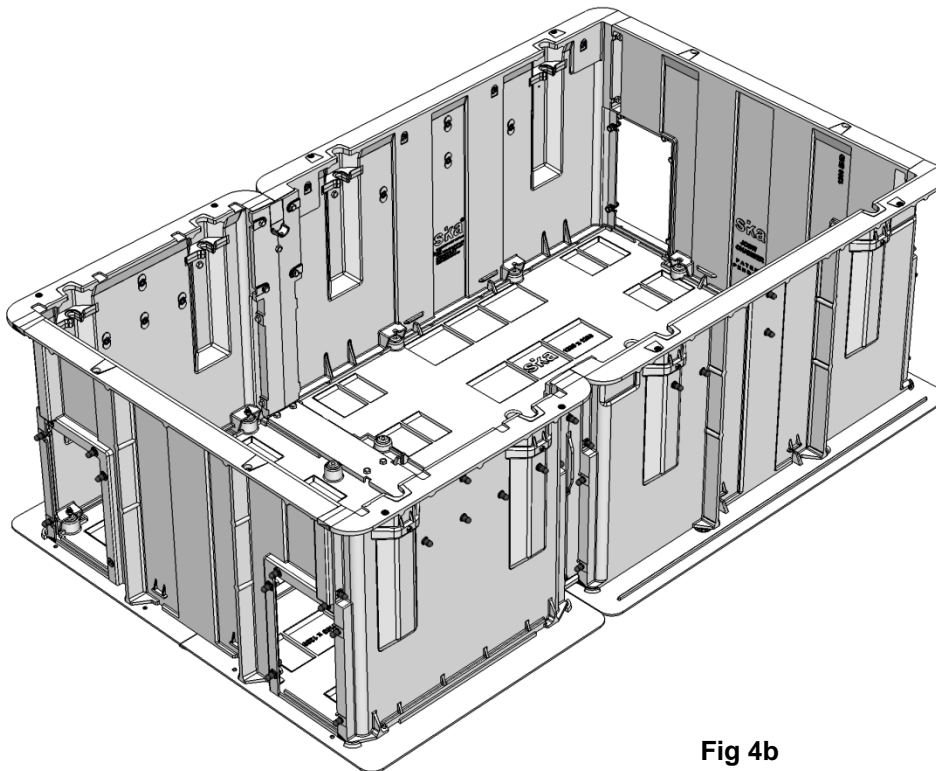


Fig 4b

5. Apply the four polypropylene **duct entry panels** to each end recess and secure each one with 6 - M10 x 30 bolts and washers supplied.

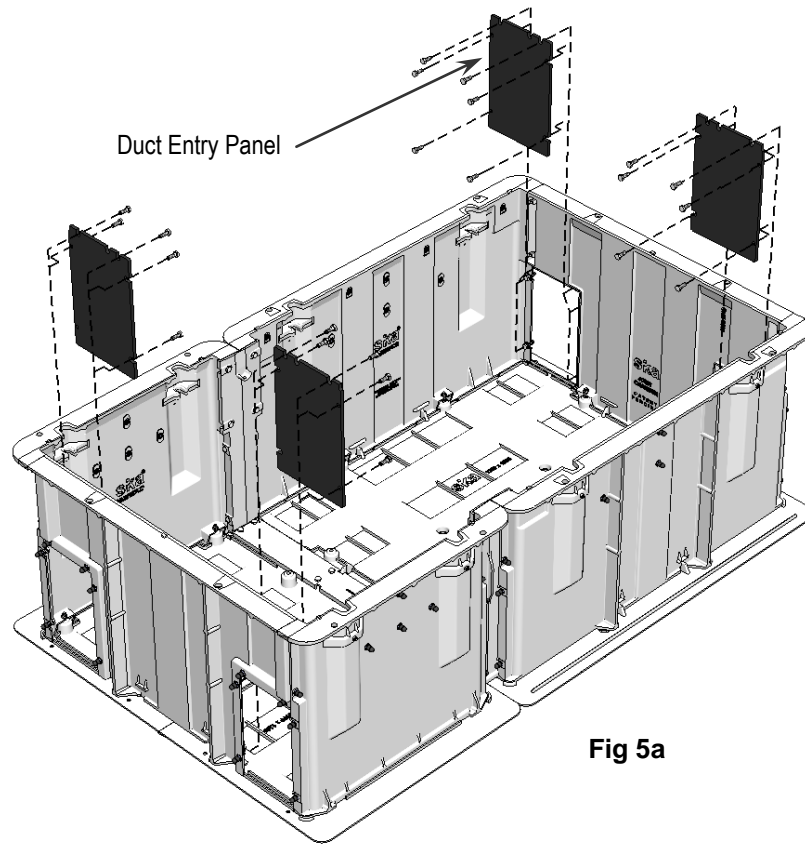


Fig 5a

Align and fit the **chamber spreader 1200** in place between the two **side joiners 700**. Ref Fig 5b

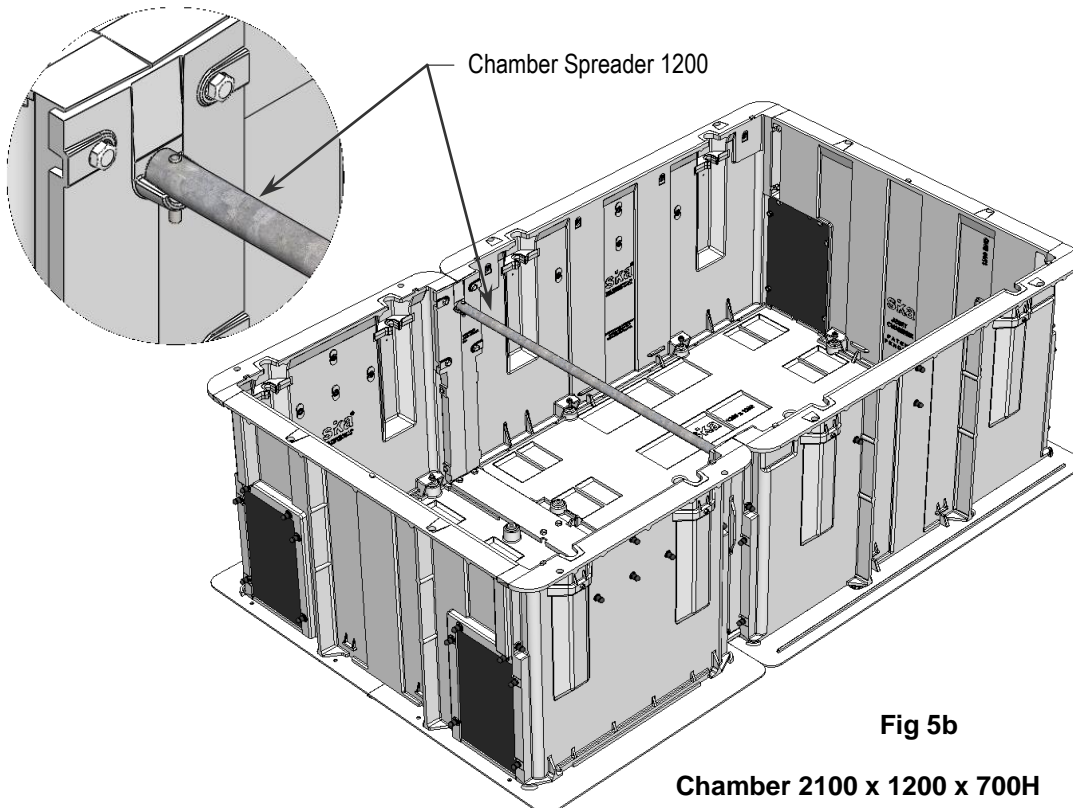
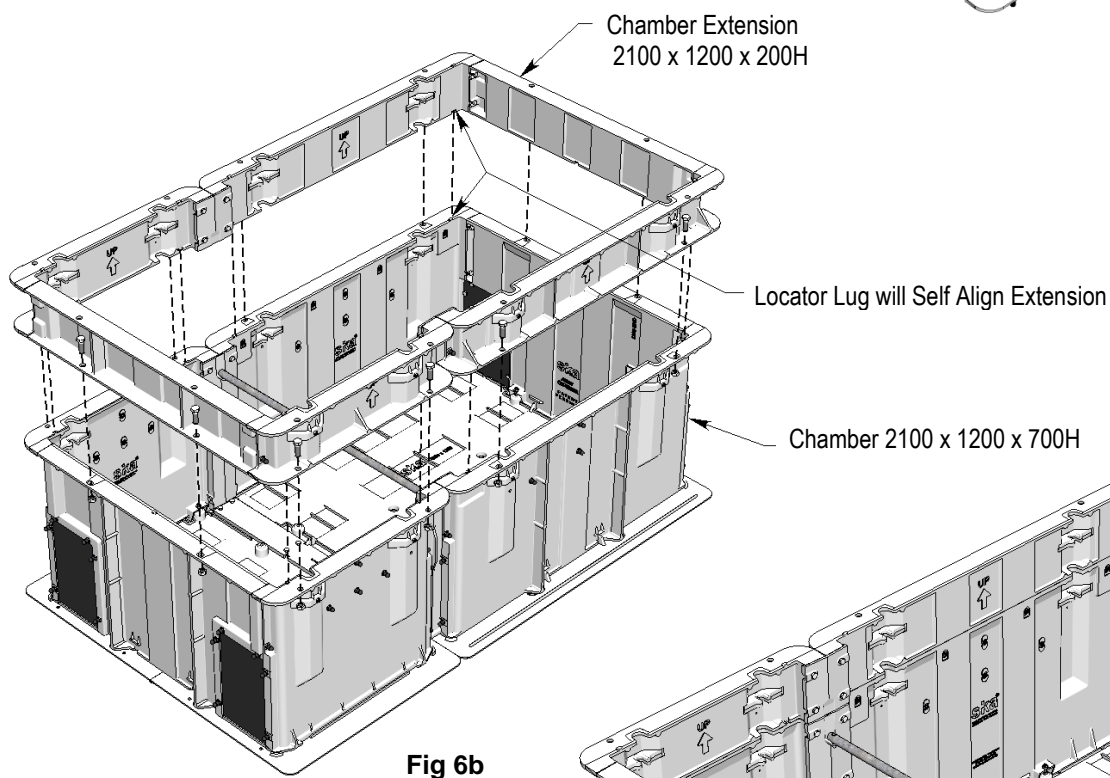
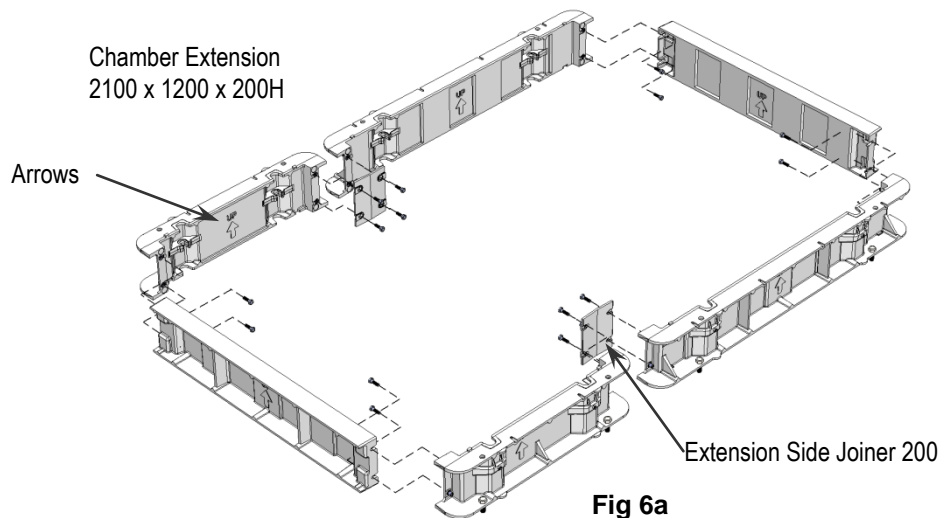


Fig 5b

Chamber 2100 x 1200 x 700H

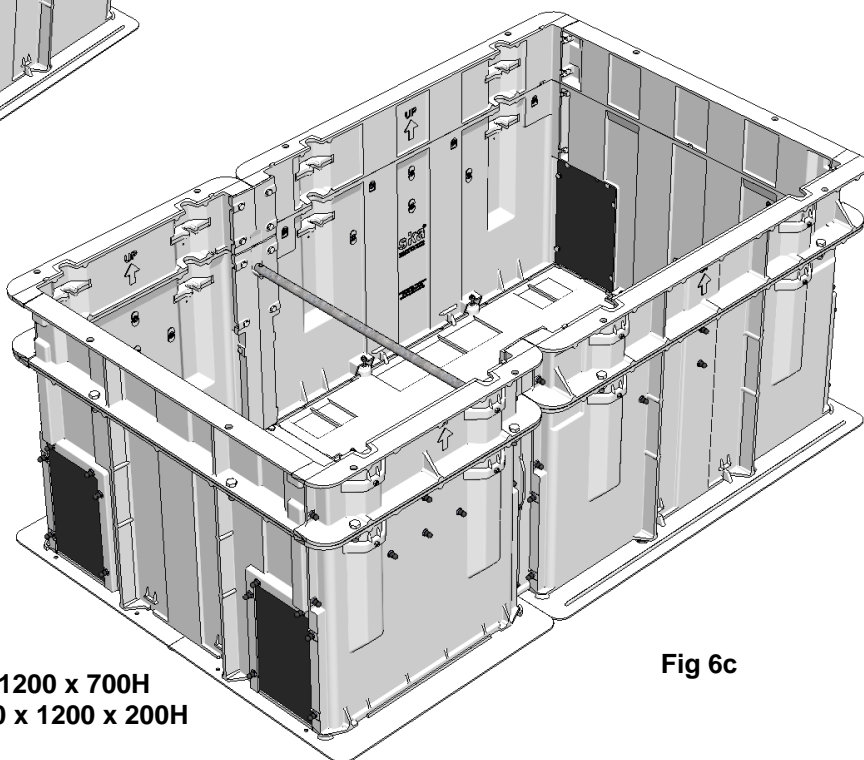
Chamber Extension 200mm

6. Assemble **chamber extension** as per Fig 6a using the **extension side joiners 200** and 16 – M10 x 30 bolts and washers supplied. Place on top of chamber flange. See arrows for right way up.



Bolt assembled **chamber extension** to the chamber with the 12 – M16x40 bolts, nuts and spring washers supplied.

**Chamber 2100 x 1200 x 700H
& Extension 2100 x 1200 x 200H**



Chamber Roof Set 2100 x 1200mm

7. Assemble **chamber roof extension side** and **chamber roof 400** as per Fig 7a using the 8 – M10 x 30 bolts and washers supplied. Place on top of chamber flange. See arrows for right way up.

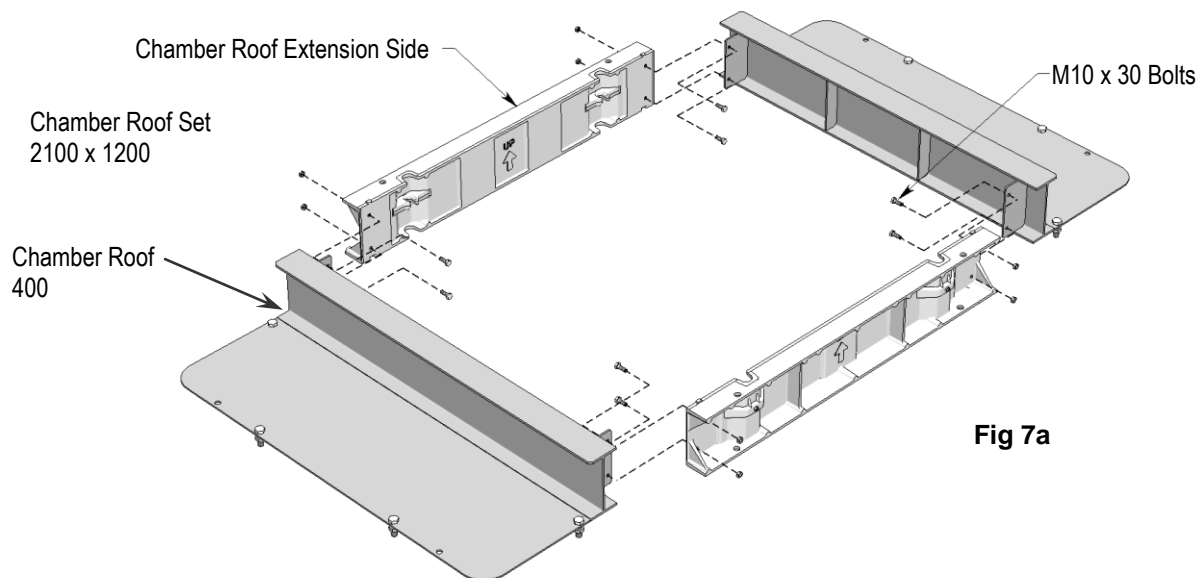


Fig 7a

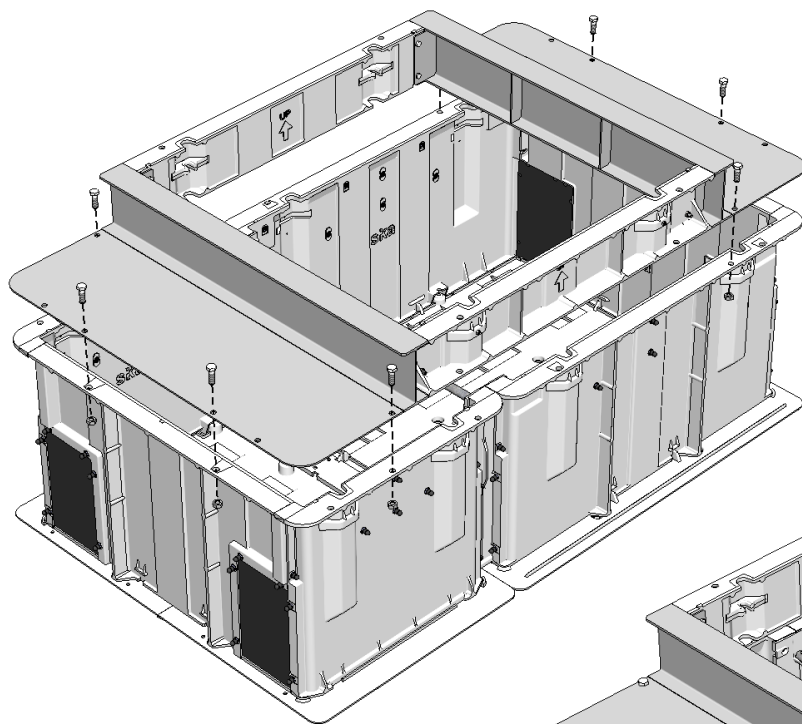


Fig 7b

Bolt **chamber roof set** to the chamber flange using 8 – M16 x 40 bolts, nuts and washers supplied.

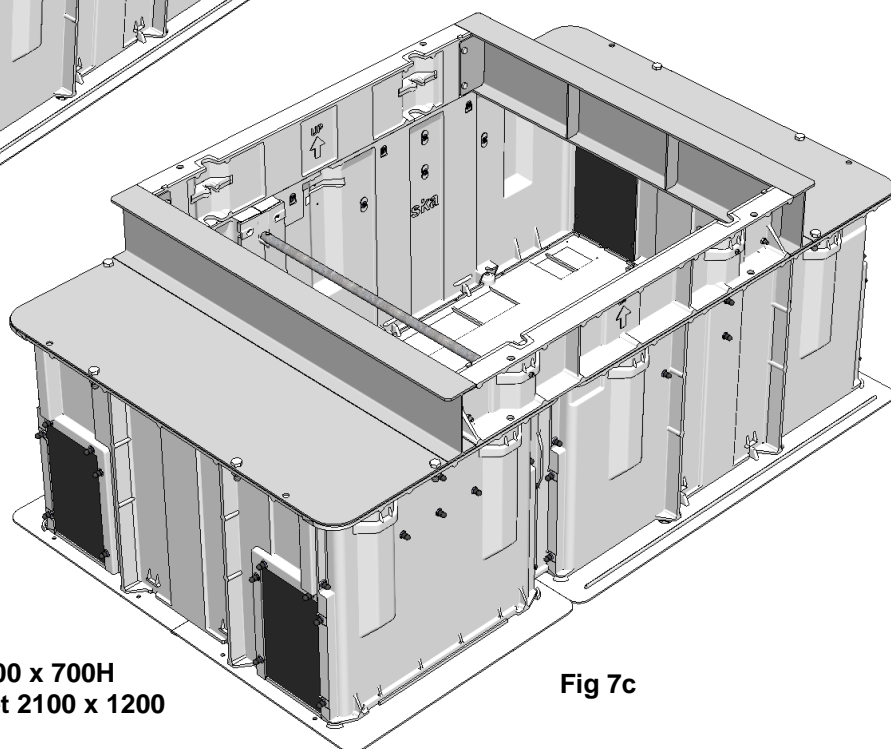
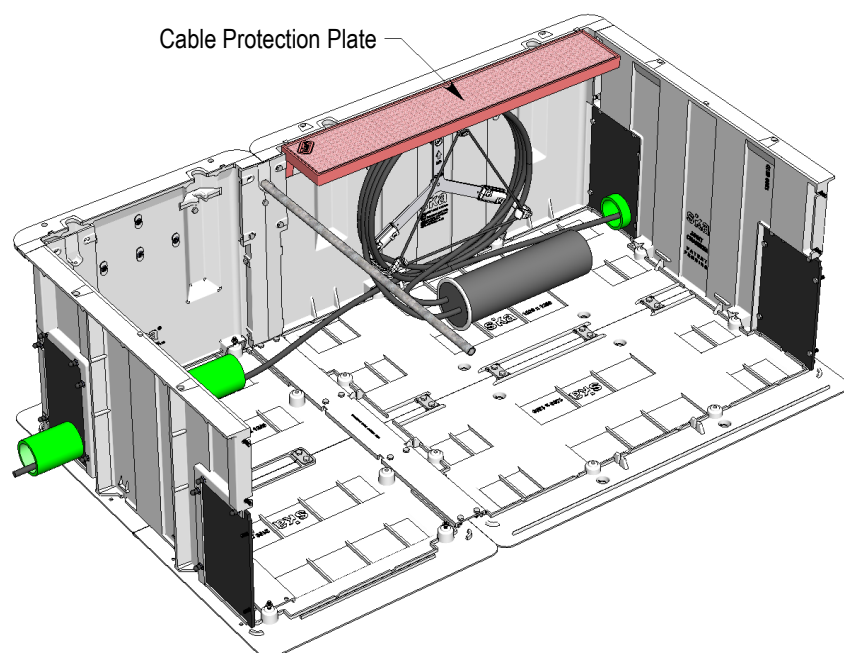


Fig 7c

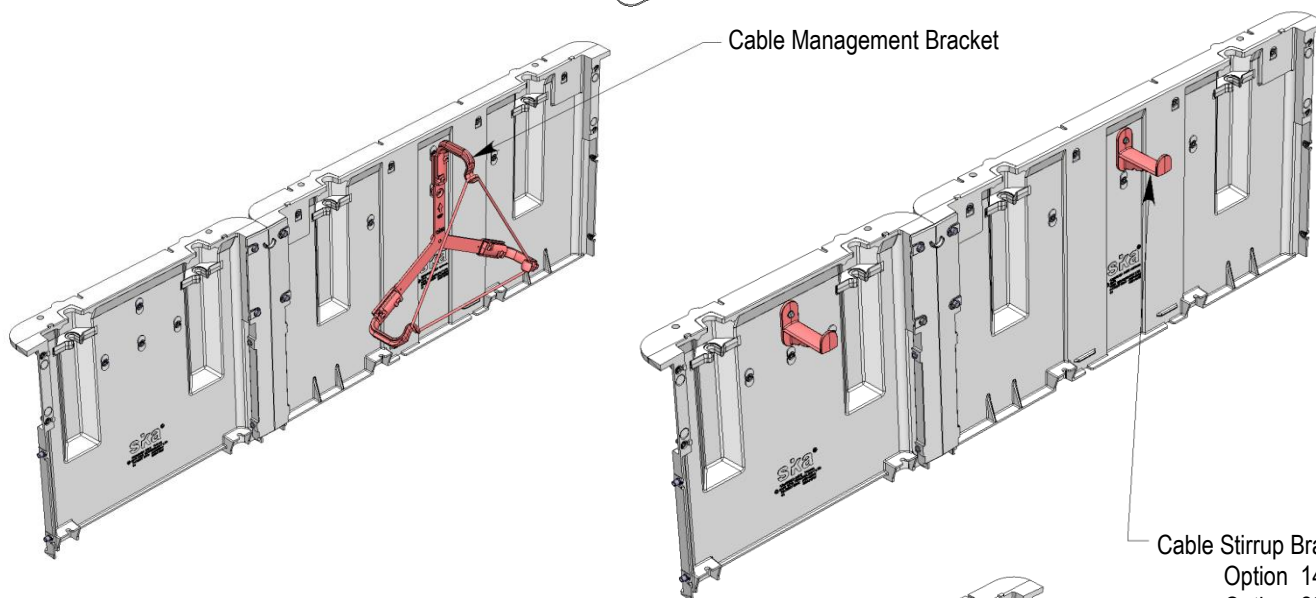
**Chamber 2100 x 1200 x 700H
& Chamber Roof Set 2100 x 1200**

Chamber Accessories

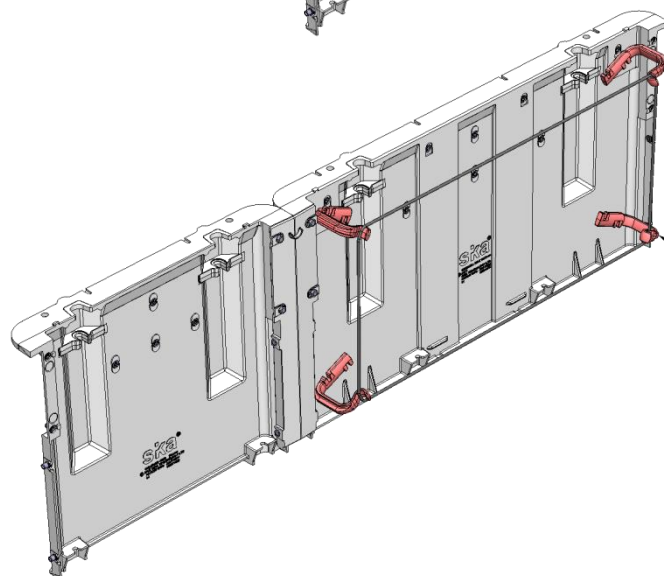
Cable Support & Protection Options



Cable Protection Plate



Cable Management Bracket



Cable Stirrup Bracket
Option 145 mm Long
Option 250 mm Long

'J' Brackets



Aluminium Jointing Chamber & Access Cover Sets

GUIDELINES for ROADWAY INSTALLATION

Note: All Aluminium Chambers are rated to Class D (Roadway) Load Strength

Standards: Access Cover Sets: AS 3996:2006
Chambers: Telecom NZ Ltd Specification 11644 (VER2 Feb 2004)

Roadway Installation

1. Assemble jointing chamber (see Assembly Instructions)
2. Bolt the cover set frame down using the adjustable M16 S/S threaded rods supplied. Sika Roadway Cover Sets can be positioned at a required height and ground slope to match the finished roadway gradient.

To achieve this, adjust the threaded rods to locate the frame in place, then use Sika reusable chamber shutters between the suspended access cover set frame and the chamber top flange to seal the chamber for pouring the concrete support collar. External shuttering will be supplied by the contractor.

3. Place the chamber into the prepared pit, or assemble the chamber in the pit, particularly if over existing duct work, and make level on compacted hard fill to accommodate the chamber base at the required height so that the cover set frame sits flush with the finished ground level. Sika Roadway cover sets can be set at any angle to the traffic direction.

Compacted bedding of nominal depth 200 mm is to be used.

4. Mark and cut the polypropylene duct entry panel to suit ductwork. (See Assembly Instructions)
5. Backfill:

Roadway excavation material must be removed from the site. Backfill chambers with mechanically compacted layers of hard fill. The maximum backfill level for jointing chambers is 50 mm below the chamber top flange. This means the concrete support collar will always envelop the chamber flange. Ref Fig 1

6. Concrete Collar:

Use minimum concrete strength 30 MPa at 28 Days complete with Sika Reinforcing Steel Kit Set. The minimum concrete support collar is 250 x 250 mm.

The cover set cannot comply with the 210 kN loading required by AS:3996 Standards without the correct concrete support. The distribution of concrete under the load bearing face of the frame must be complete (no voids). Use a portable concrete vibrator.

Fit the covers into the frames and lock them into place with the security bolts before pouring the concrete surrounds to avoid any possible frame distortion during the curing cycle. The covers can be locked down on top of the concrete shutters to provide chamber security until the concreting detail has been completed. The security bolts are to be torqued to 68 Nm (50 ft lbs).

Set the cover set frames flush with the road surface.

Colour and broom finish the concrete collar if required.

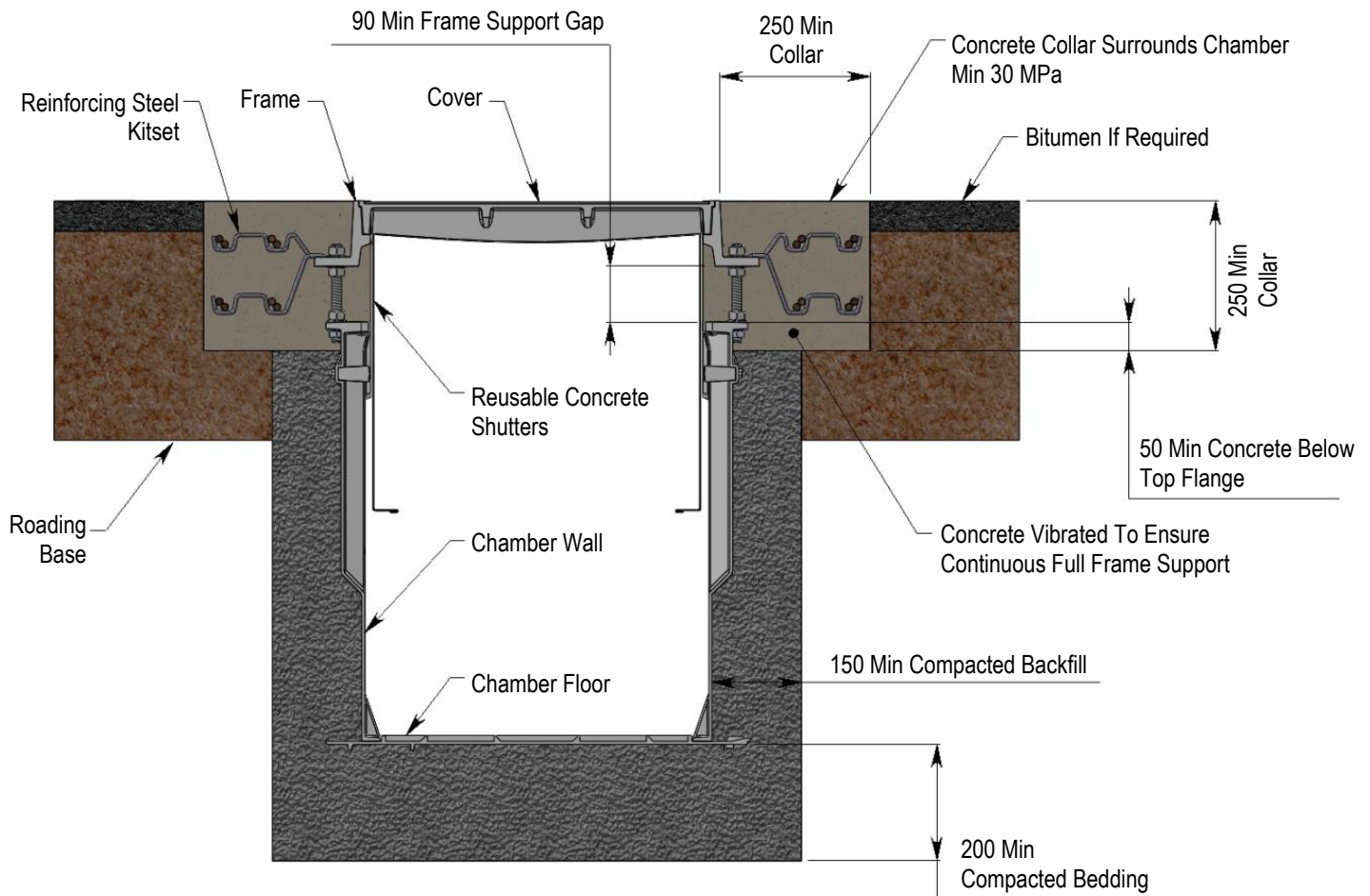


Fig 1

Remove all debris from the frame seating area before installing the cover(s) and any support beams.

Replace dust cover.

Security bolts must have the modified parallel heads to allow the correct tension of 68 Nm to be applied. Ref Fig 2.

Bolts must also have an M12 flat washer fitted under the serrated heads. All bolts are to be tightened to the correct torque of 68 Nm (50 ft lbs) with a torque wrench and torque coupling. Ref Fig3.

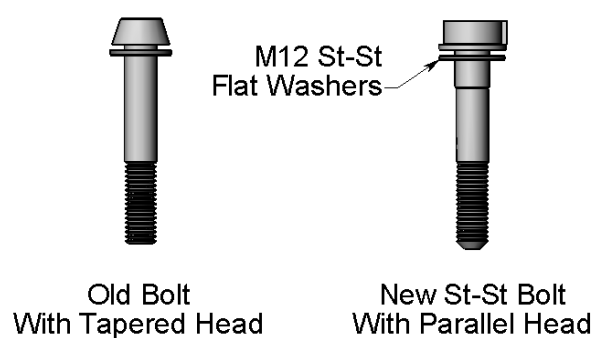


Fig 2

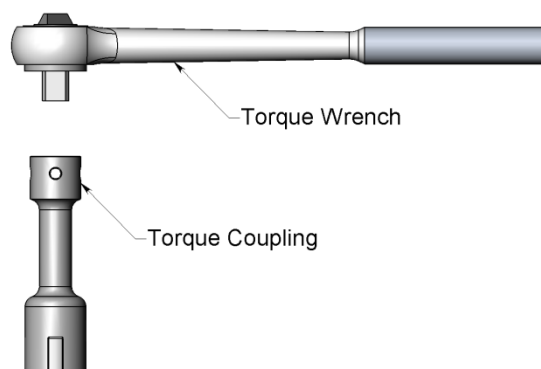


Fig 3