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## The 'Sika Solution'

Aluminium Jointing Chamber and  
Security Access Cover Set Package

**700 x 600 x 700H / 900H**

Class D

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## **Assembly Basic Tool Kit**

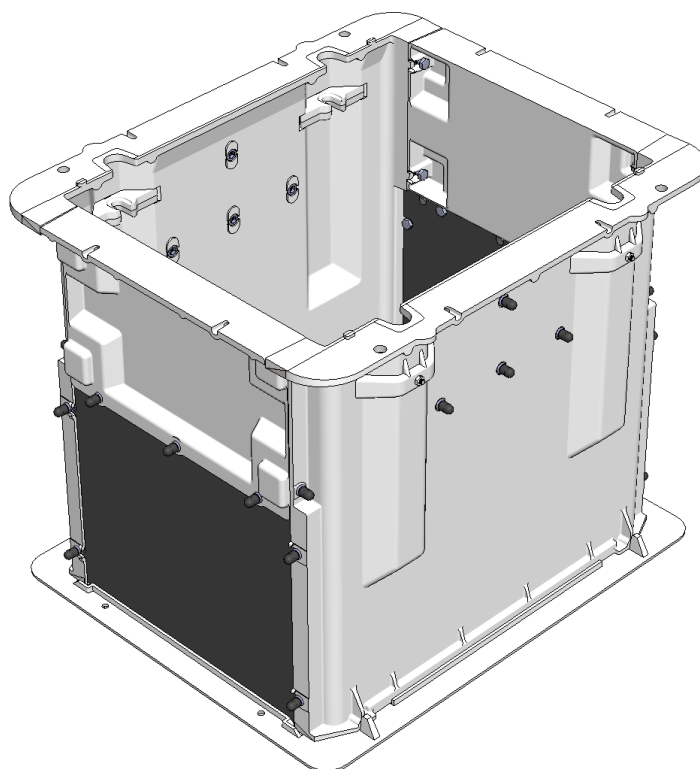
**24mm Open End Spanner  
17mm Ratchet Spanner  
17 mm Tube Socket  
10 mm Allen Key  
6 mm Allen Key  
½" Drive Torque Wrench**



## Aluminium Jointing Chamber 700 x 600 x 700 / 900H

### ASSEMBLY INSTRUCTIONS

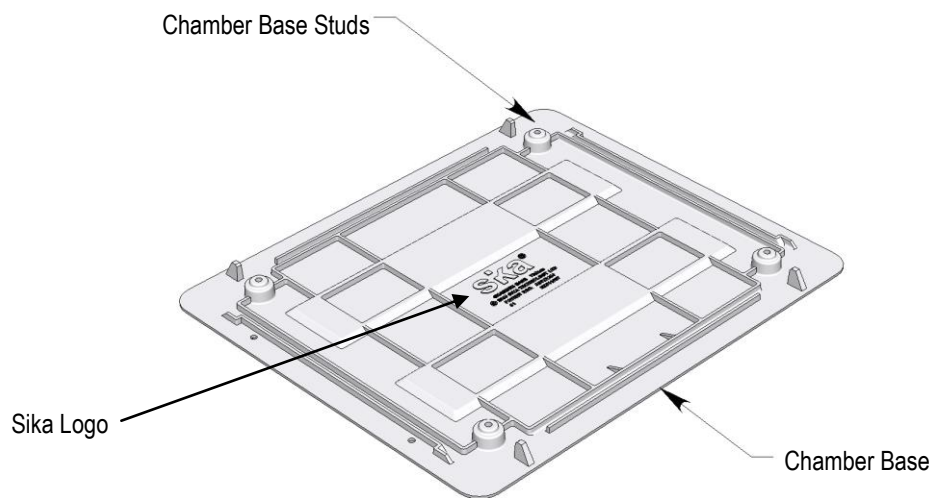
**Chamber Rating: CLASS D - 210kN - AS3996:2006**  
**Sika 'Chambers' are used for both Pathway & Roadway Installations**



Chamber 700 x 600 x 700H

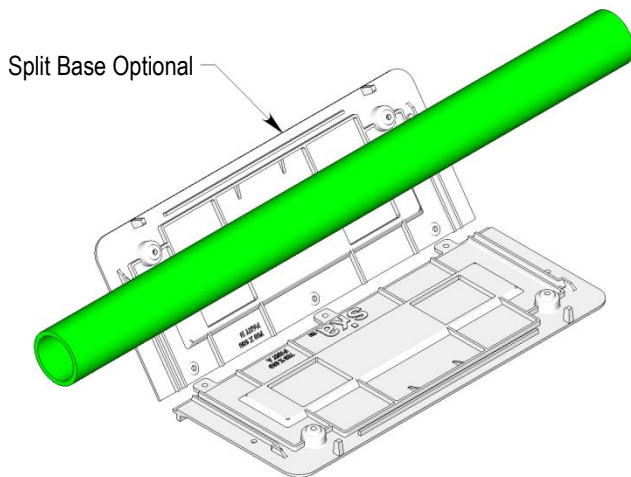


1. Place the **chamber base** on a flat area adjoining the pit or on a prepared bed of imported material in the excavated pit. Note the Sika logo will be face up.



**Fig 1**

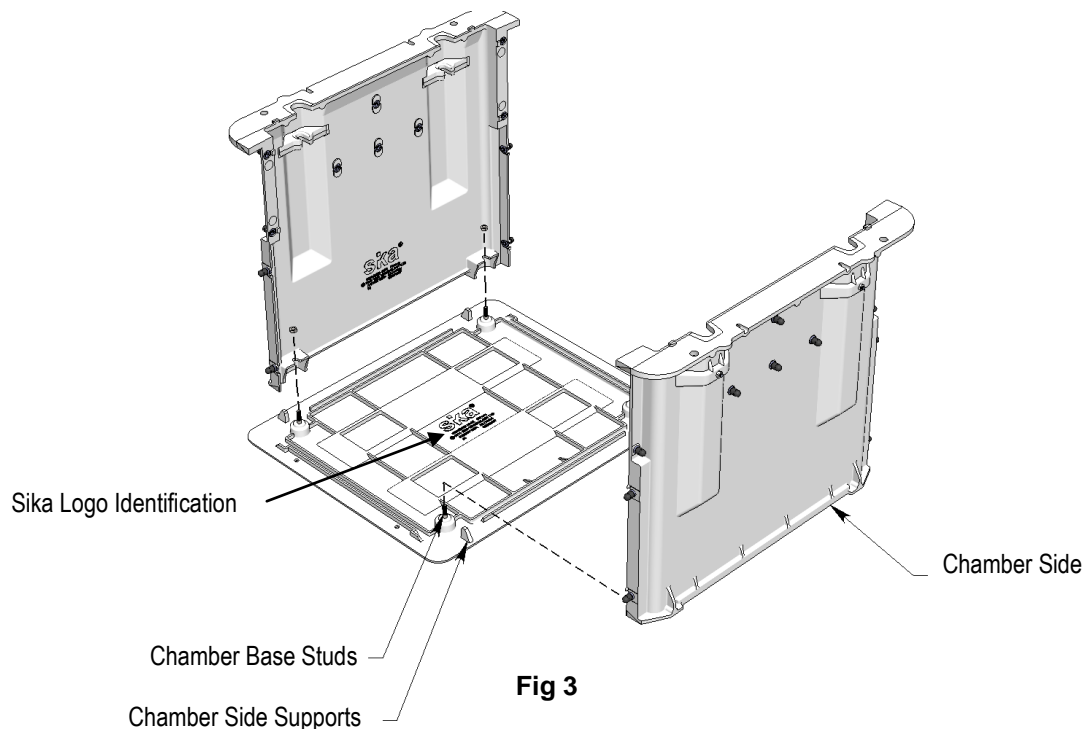
2. Where there is existing ducting and minimal side excavation is required use a **split base**. Ref Fig 2



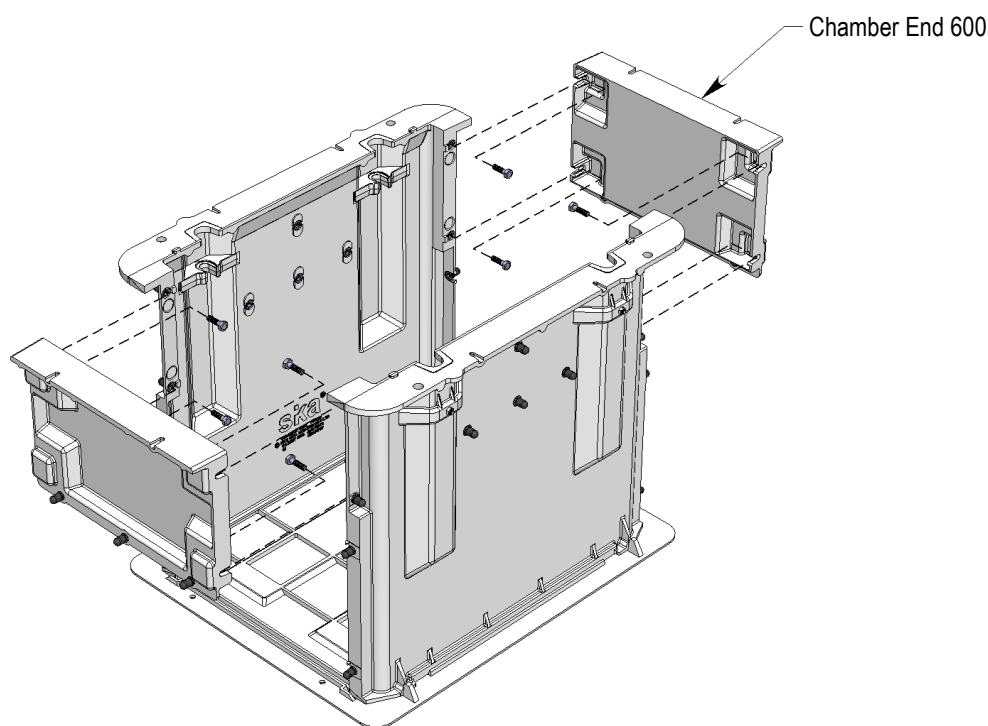
**Fig 2**

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.)*

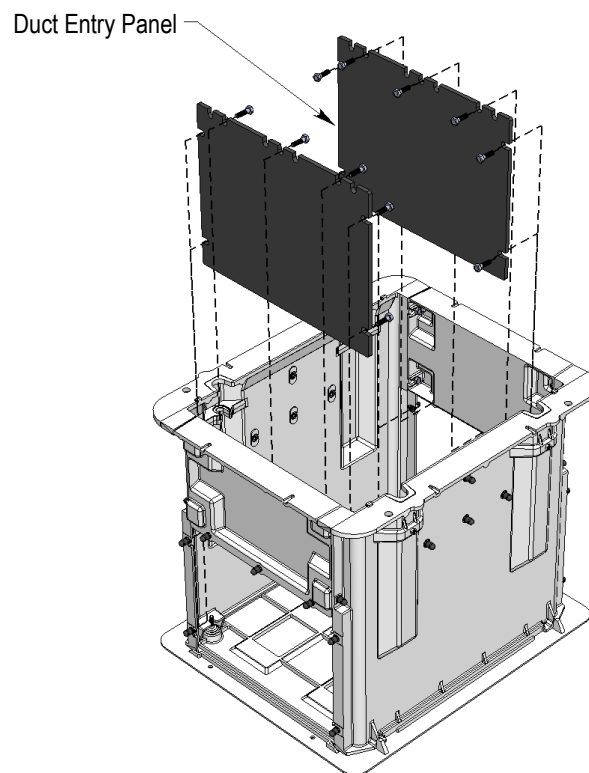


4. Add the two **chamber ends 600** and secure them with the 8 – M10 x 30 bolts and washers. *(Now tighten all the aforementioned fixings.)*

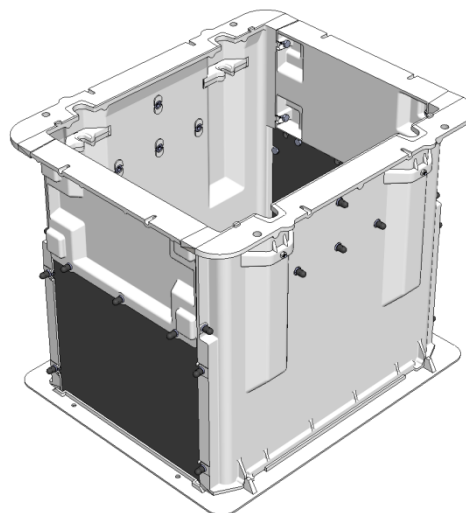


**Fig 4**

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

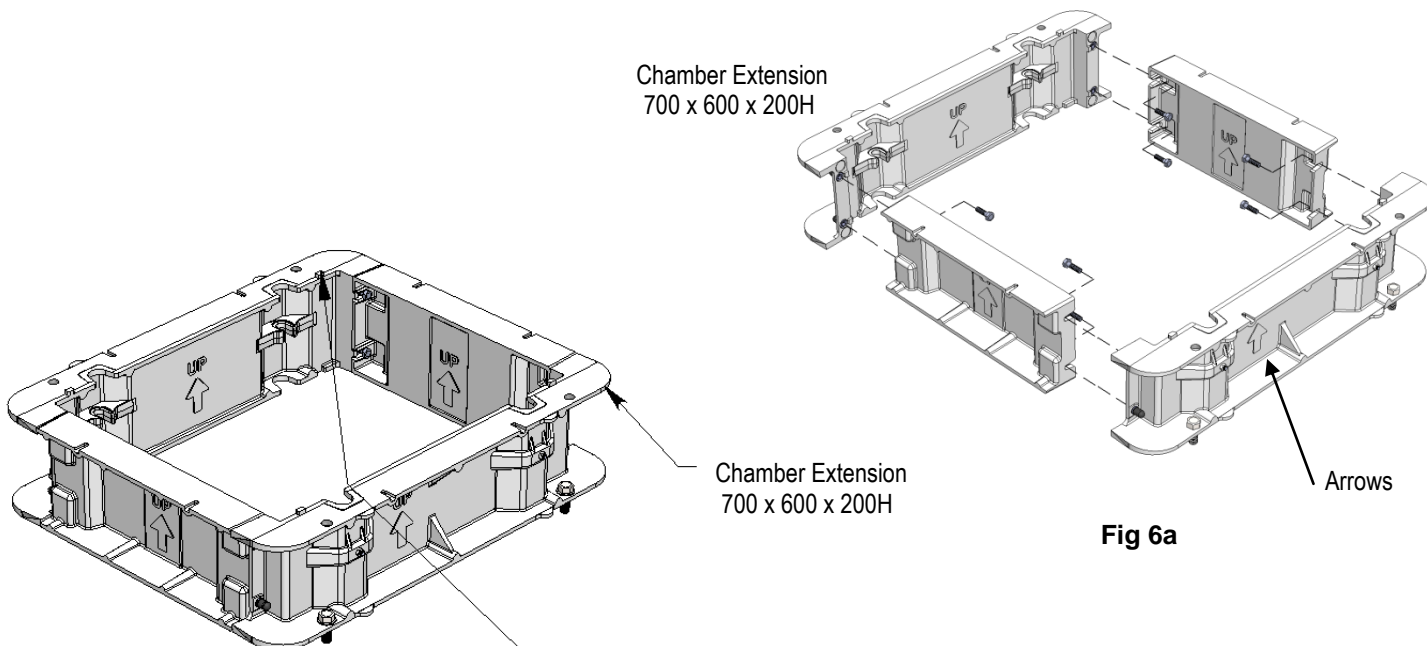


Fig 6a

Locator Lug will Self Align Extension

Chamber 700 x 600 x 700H

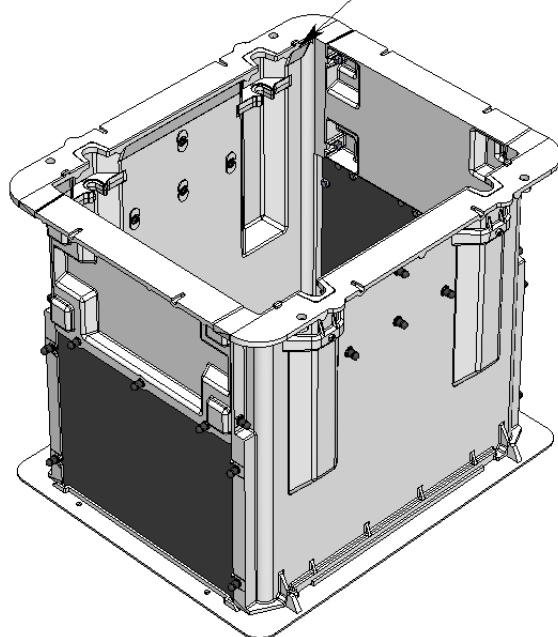


Fig 6b

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**

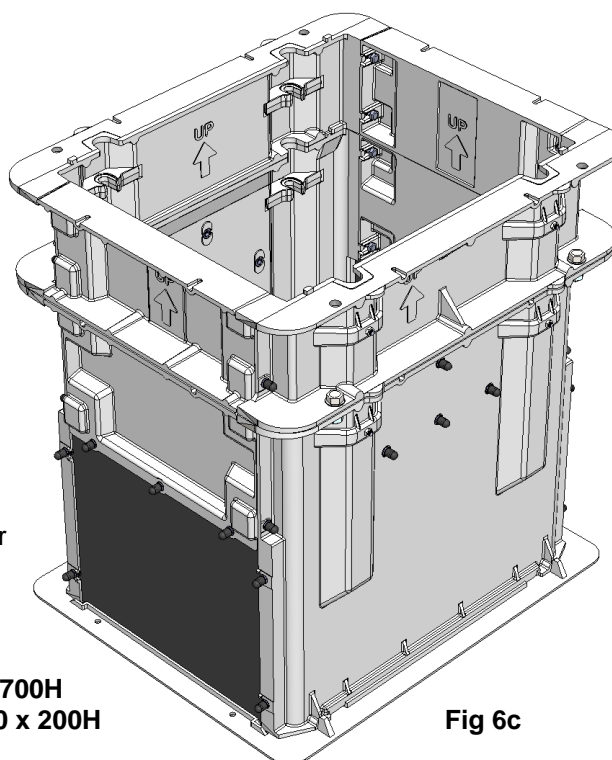
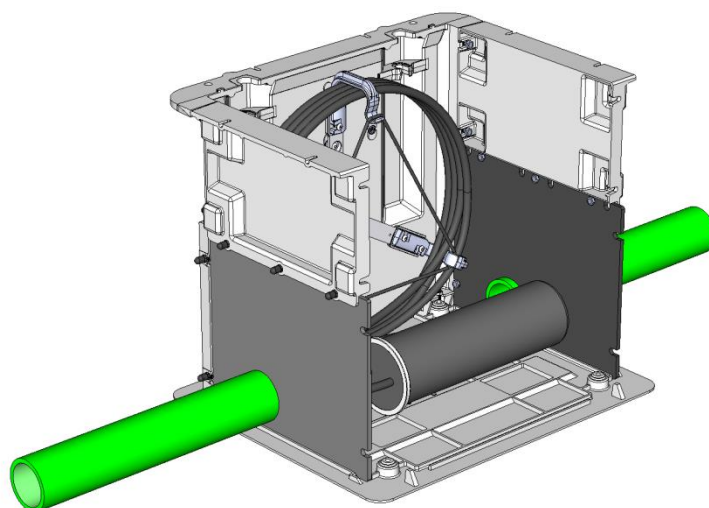


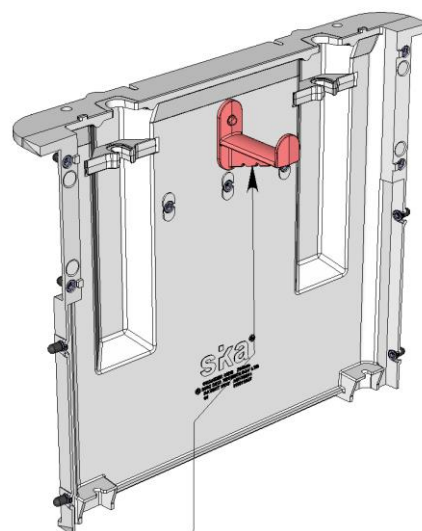
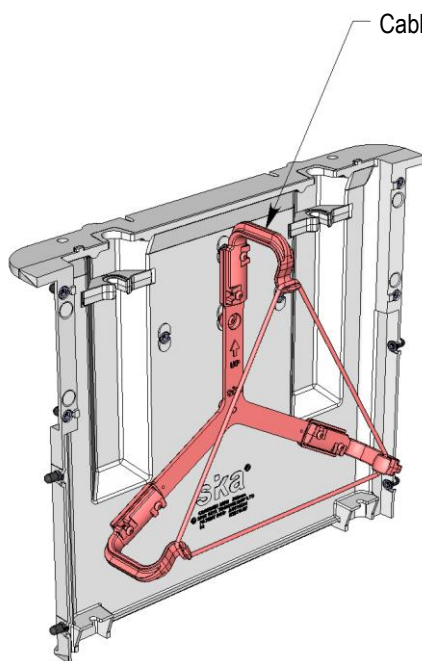
Fig 6c

## Chamber Accessories

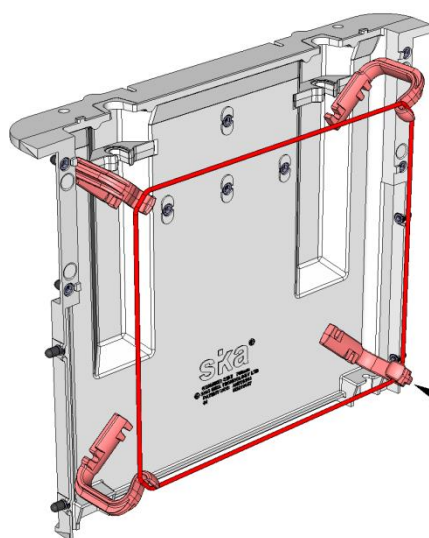
### Cable Support Options



Cable Management Bracket



Cable Stirrup Bracket  
Option 145 mm Long  
Option 250 mm Long



'J' Brackets





## Aluminium Jointing Chamber & Access Cover 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:

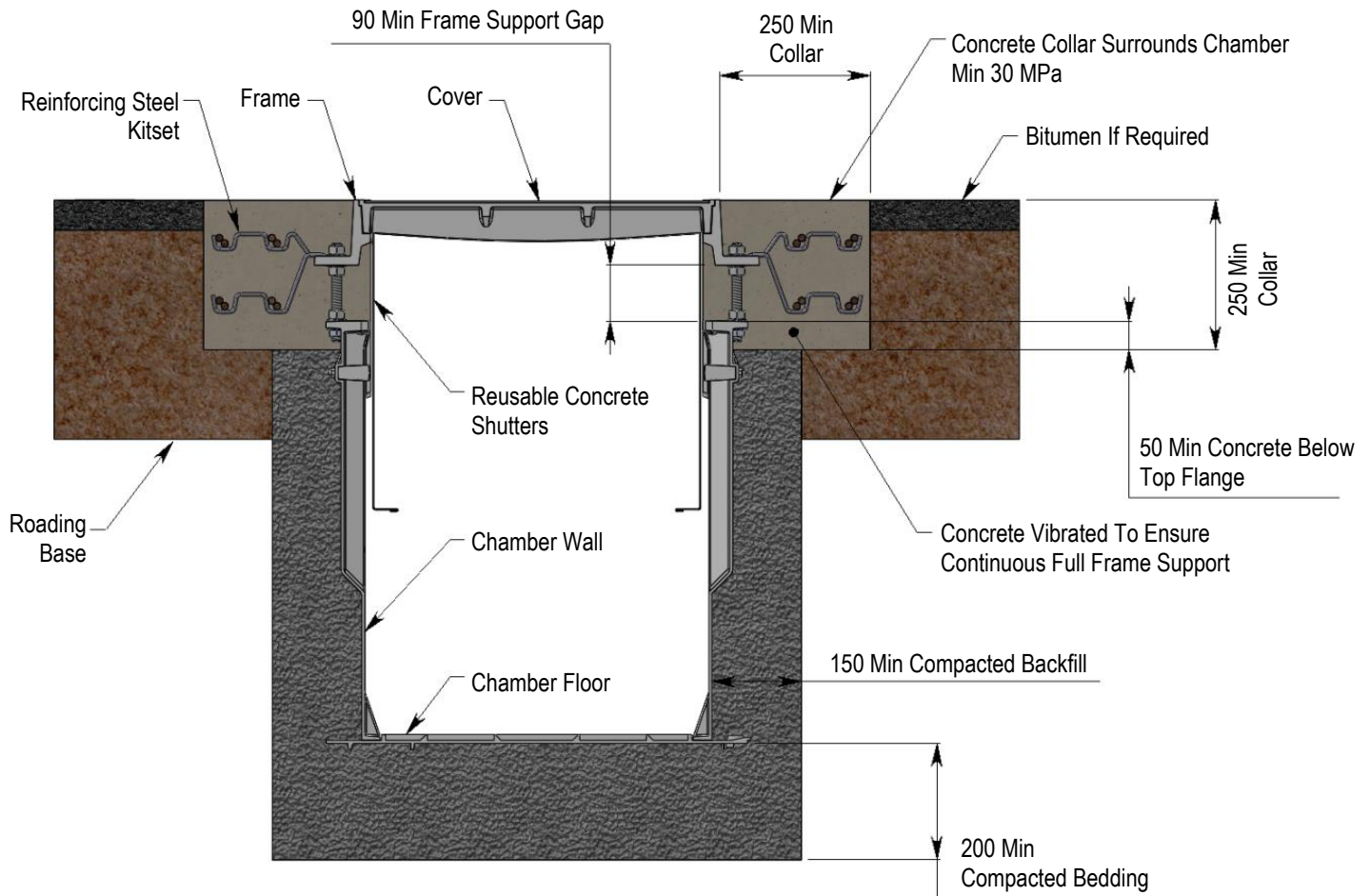
Use minimum concrete strength 30 MPa at 28 Days complete with Sika Reinforcing Steel Kit Set. The minimum concrete support collar is 250 x 250 mm.

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.



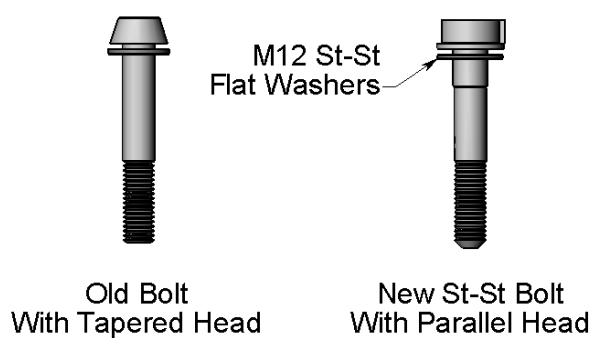
**Fig 1**

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

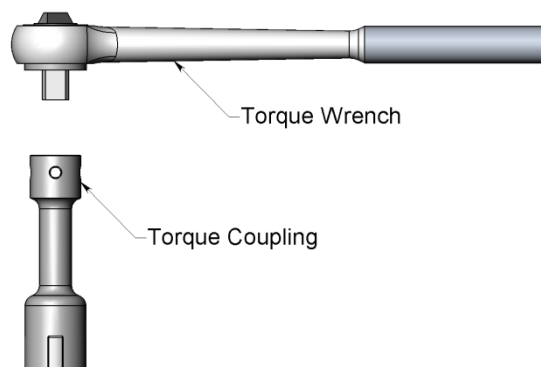
Replace dust cover.

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**