

5 Carpenter Road East Tamaki PO Box 58-491, Botany Manukau 2163, New Zealand Telephone 064 09 274 5929 Facsimile 064 09 273 9509 Email info@sikatech.co.nz Website www.sikatech.co.nz

# The 'Sika Solution'

Aluminium Jointing Chamber and Security Access Cover Set Package

1200 x 1200 x 700H / 900H

Class D

Contents:

**Assembly Instructions** p 2 - 8

Roadway Installation Guidelines p 9 -11





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

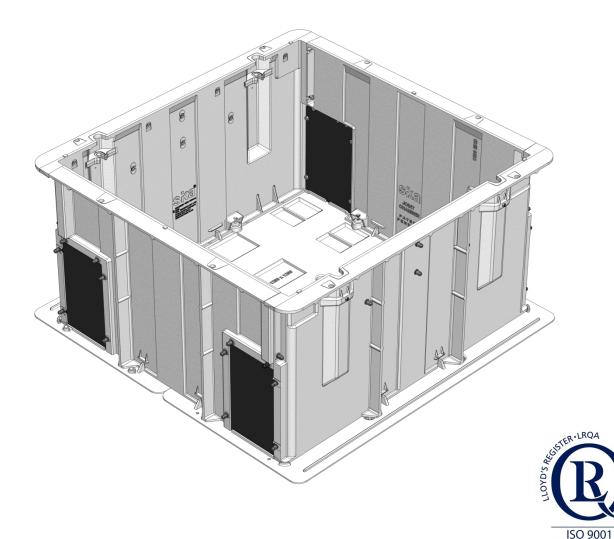


5 Carpenter Road
East Tamaki
PO Box 58-491, Botany
Manukau 2163, New Zealand
Telephone 064 09 274 5929
Facsimile 064 09 273 9509
Email info@sikatech.co.nz
Website www.sikatech.co.nz

### Aluminium Jointing Chamber 1200 x 1200 x 700 / 900H

## **ASSEMBLY INSTRUCTIONS**

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



1. Place 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" script will be face up.

Join the two **chamber bases** with the four **base joiner tabs** and apply 8 - M10 bolts and washers, and tighten.

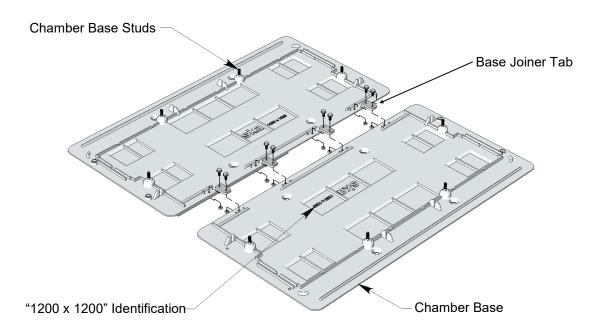


Fig 1

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

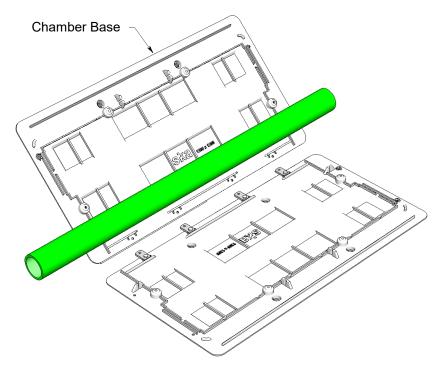


Fig 2

3. Remove the plastic tubes protecting the 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.*)

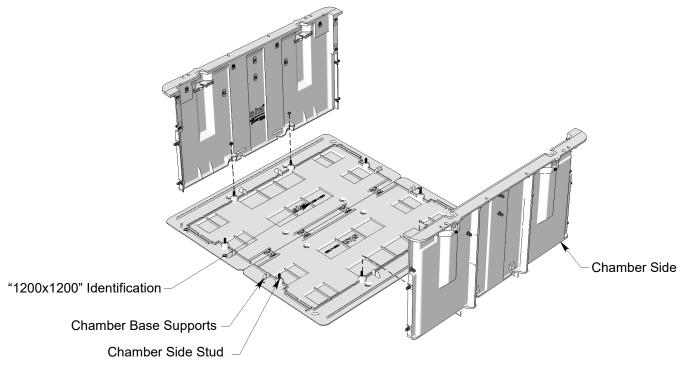
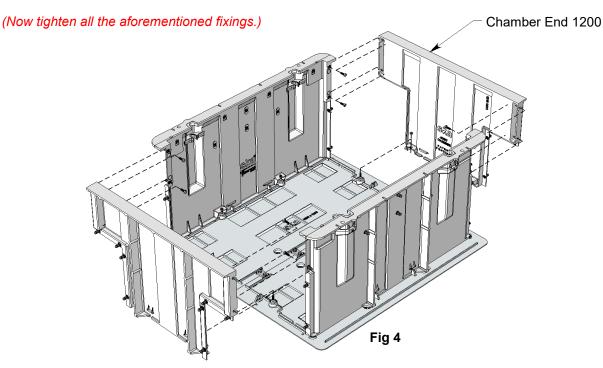


Fig 3

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  $12 - M10 \times 30$  bolts and washers



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

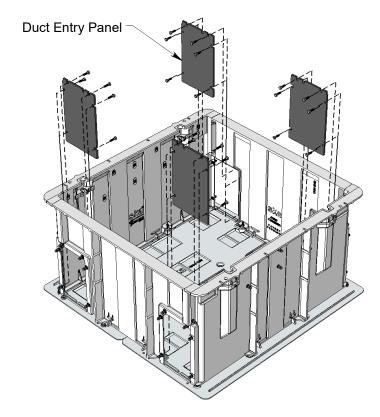


Fig 5a

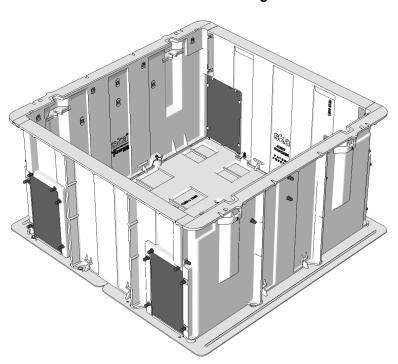


Fig 5b

Chamber 1200 x 1200 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.

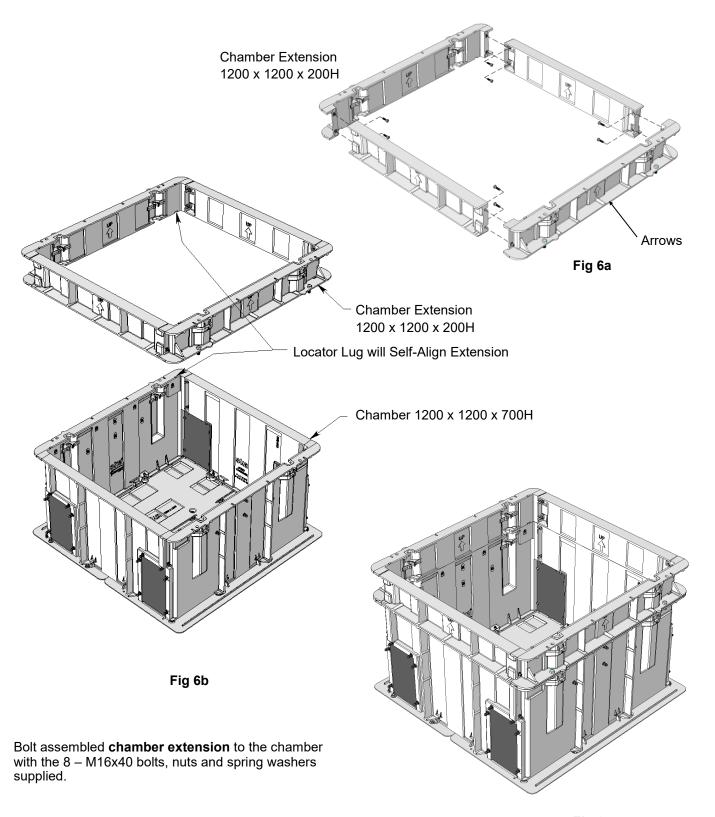
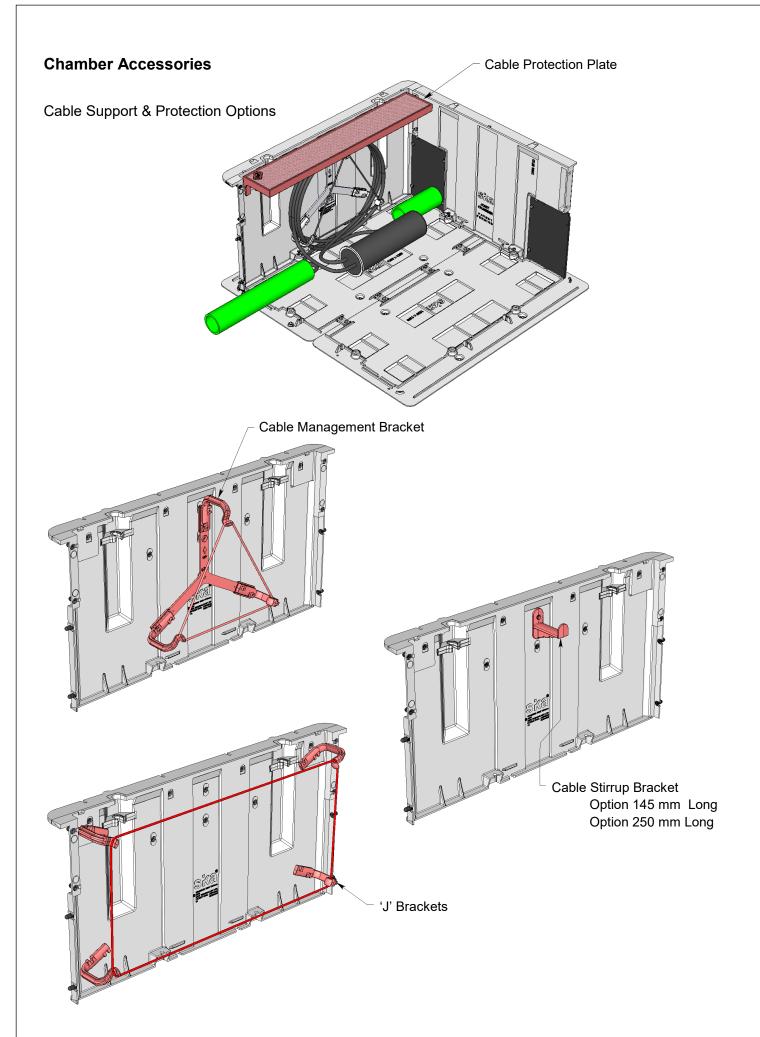


Fig 6c

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





5 Carpenter Road
East Tamaki
PO Box 58-491, Botany
Manukau 2163, New Zealand
Telephone 064 09 274 5929
Facsimile 064 09 273 9509
Email info@sikatech.co.nz
Website www.sikatech.co.nz

### **Aluminium Jointing Chamber & Access Cover Sets**

### GUIDELINES for ROADWAY INSTALLATION

Standards: Access Cover Set: Complies with AS 3996

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

Installation: Complies with NZTA Bridge Manual HN-HO-72 for a 0.85 HN Load element and

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 150 mm is to be used.

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

Roadway excavation material must be removed from the site. Backfill chambers with mechanically compacted layers of hard fill (GAP 40). The maximum backfill level for jointing chambers is 100 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 25 MPa at 28 Days complete with Sika Reinforcing Steel Kit Set. The minimum concrete support collar is 300 x 300 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.

Set the cover set frames flush with the road surface.

Colour and broom finish the concrete collar if required.

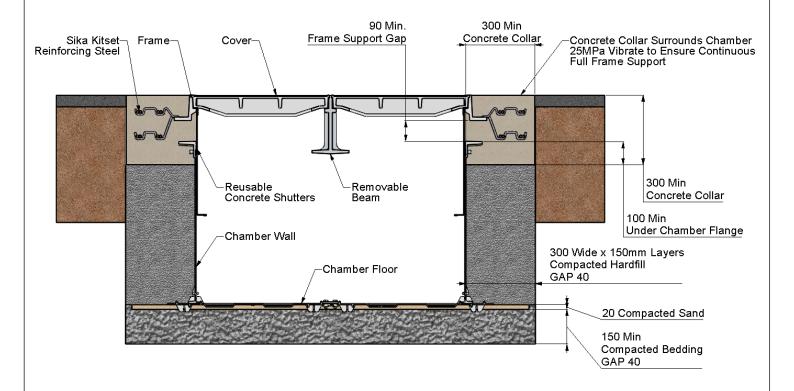


Fig 1

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

Replace dust cover.

Bolts must have an M16 Nordlock washer fitted under the serrated heads. All bolts are to be tightened to the correct torque of 75 ft lbs (100 Nm) with a torque wrench and torque coupling. *Ref Fig 2*.

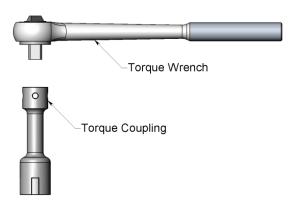


Fig 2