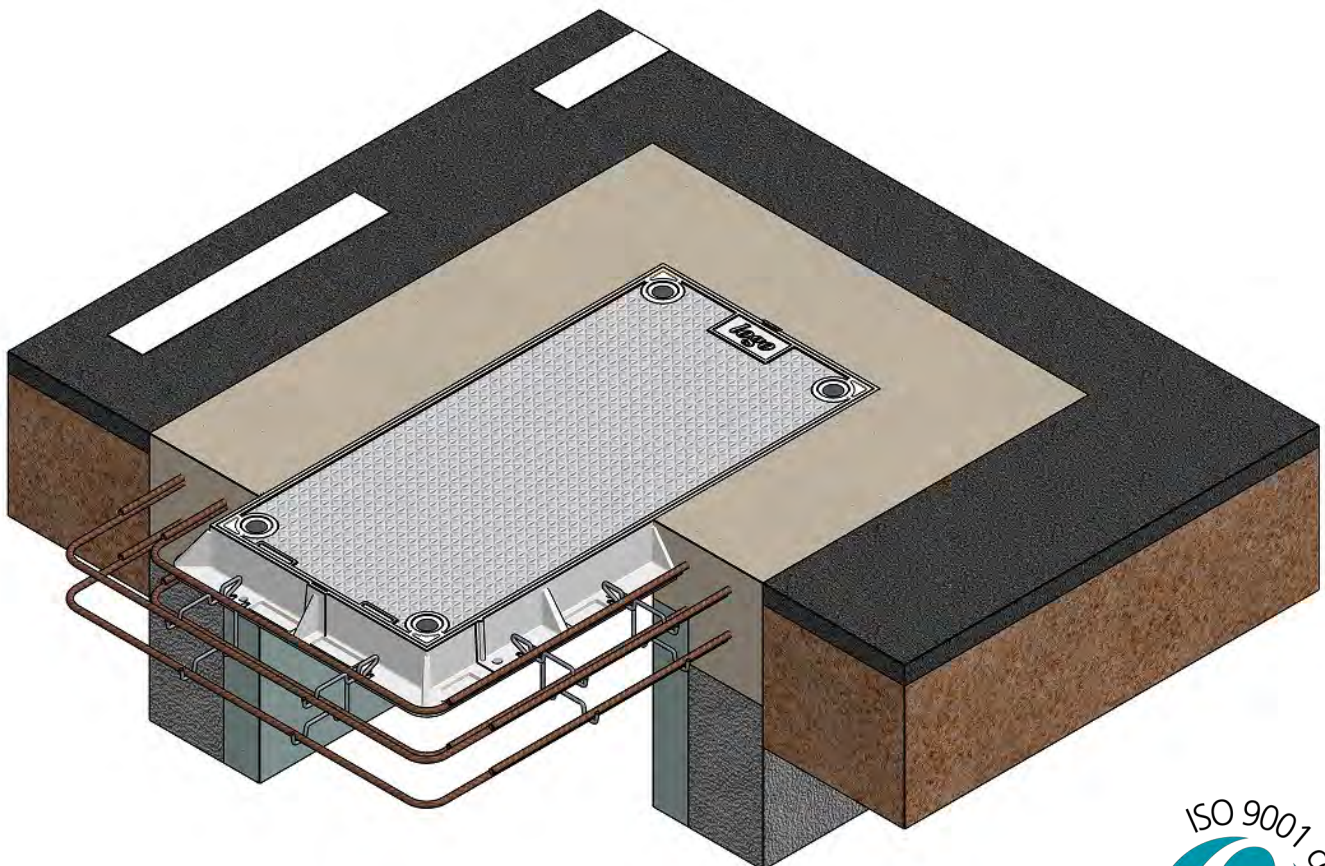


Aluminium Access Cover Sets—Solid Top

GUIDELINES for ROADWAY INSTALLATION

Standards: Access Cover Set: Complies with AS 3996 Class D

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. Place the frame at the required height so that the cover set will be flush with the finished ground level. Sika bolted Roadway cover sets can be set at any angle to the traffic direction.

Reinforcing Steel

Sika kitset reinforcing steel is supplied together with Sika Roadway cover sets. Hang the rebar from the Roadway aluminium frame using the supplied hangers, and tie the rebar to the hangers. *Ref Fig 1*

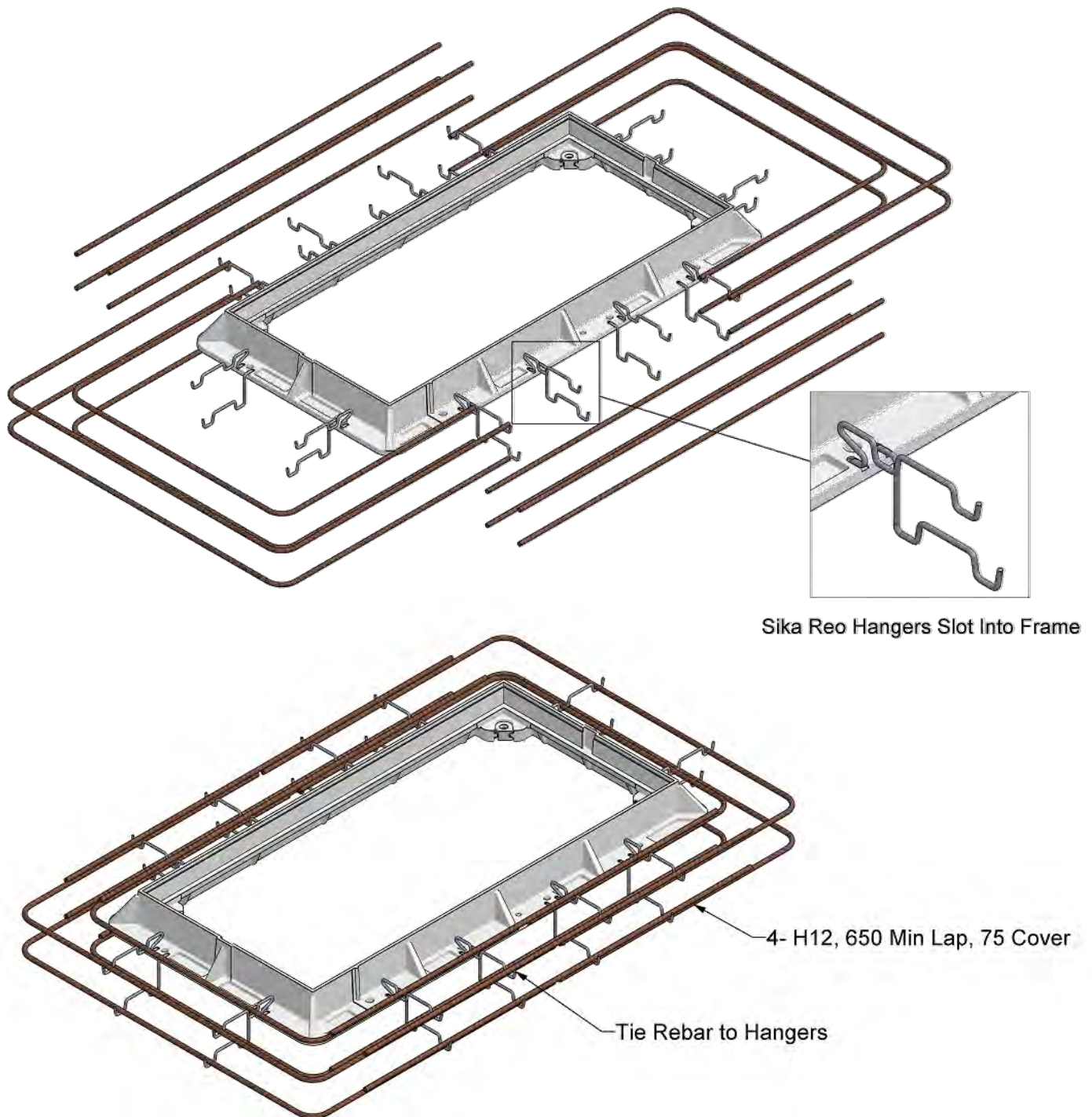


Fig 1

Roadway Installation (contd.)

- Roadway excavation material must be removed from the site. Backfill chambers with mechanically compacted hard fill (GAP 40).
- The minimum concrete support collar is 300 x 300 mm. Use minimum concrete strength 30 MPa at 28 Days complete with Sika Reinforcing Steel Kit Set. *Ref Fig 2*

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.

Colour and broom finish the concrete collar if required.

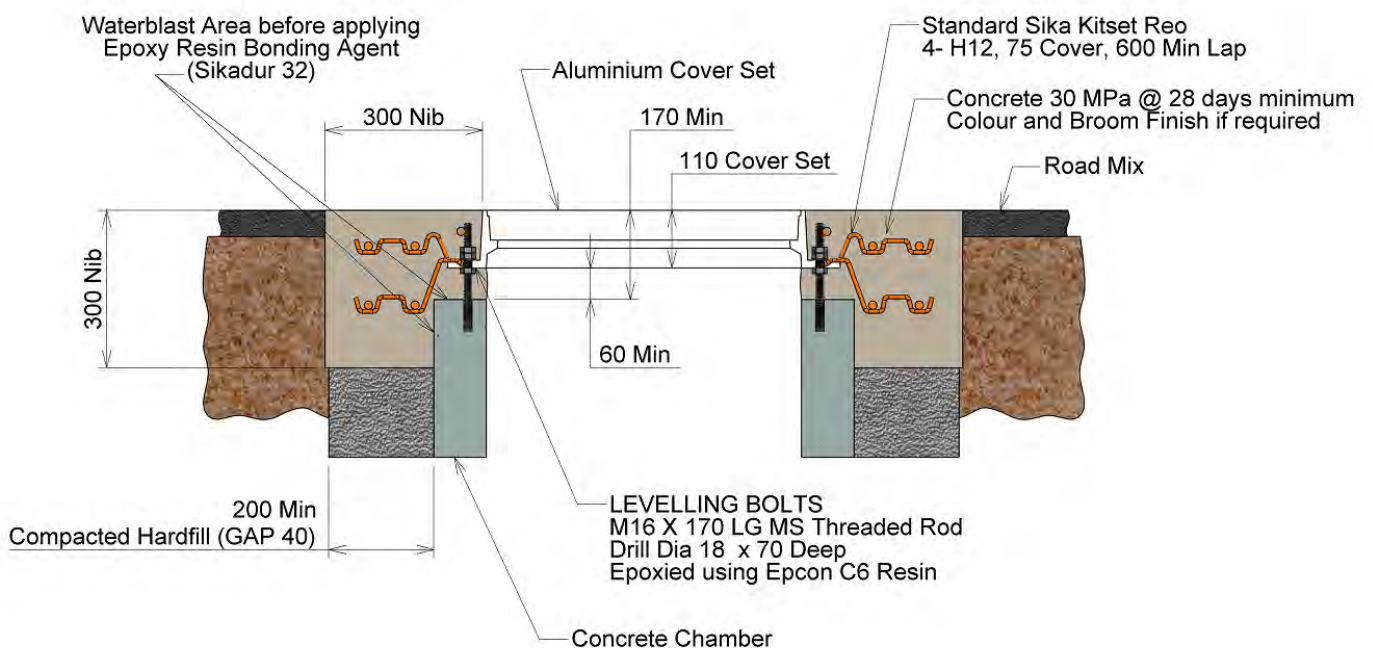


Fig 2– Typical Concrete Chamber Installation

Roadway Installation on Concrete Chambers

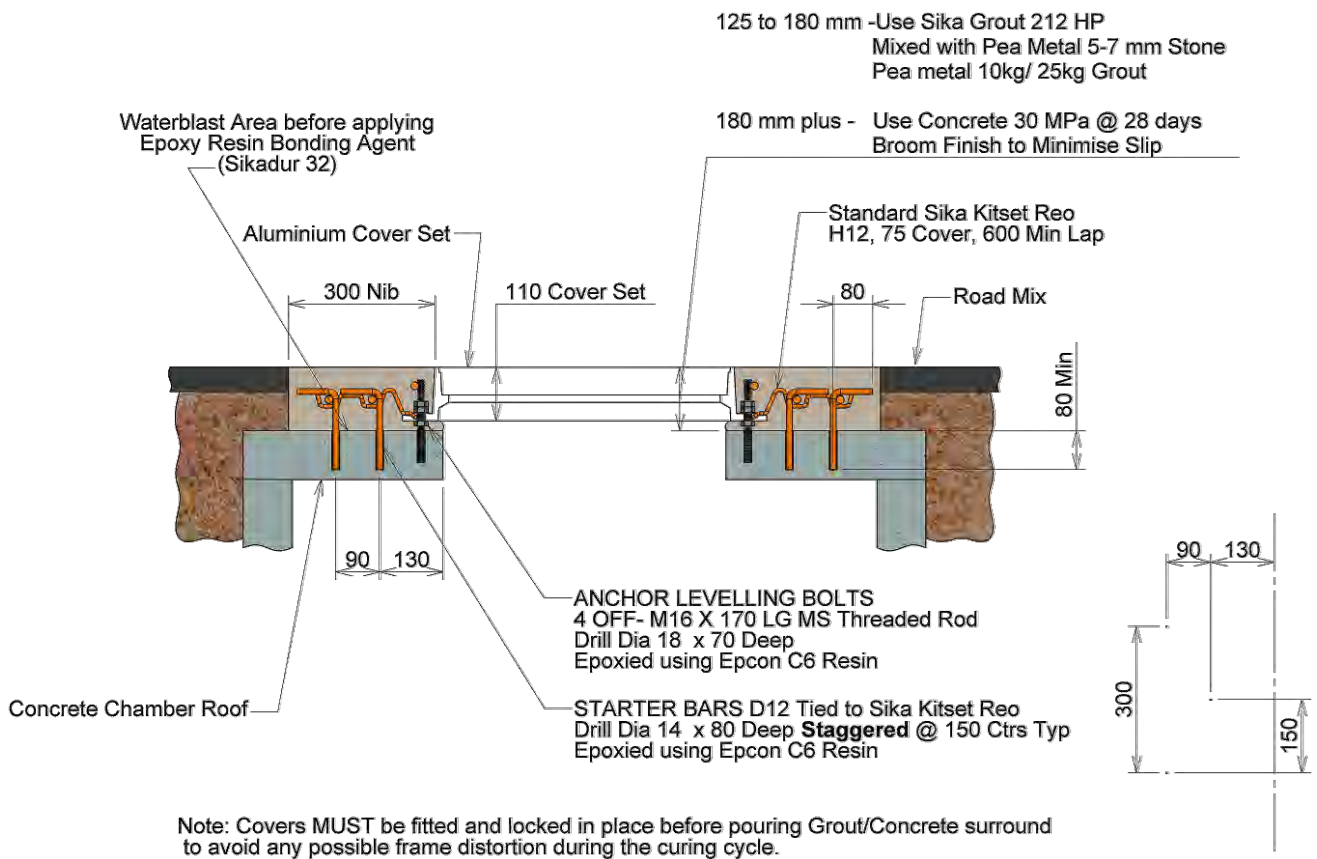


Fig 3– Typical Concrete Roof Installation

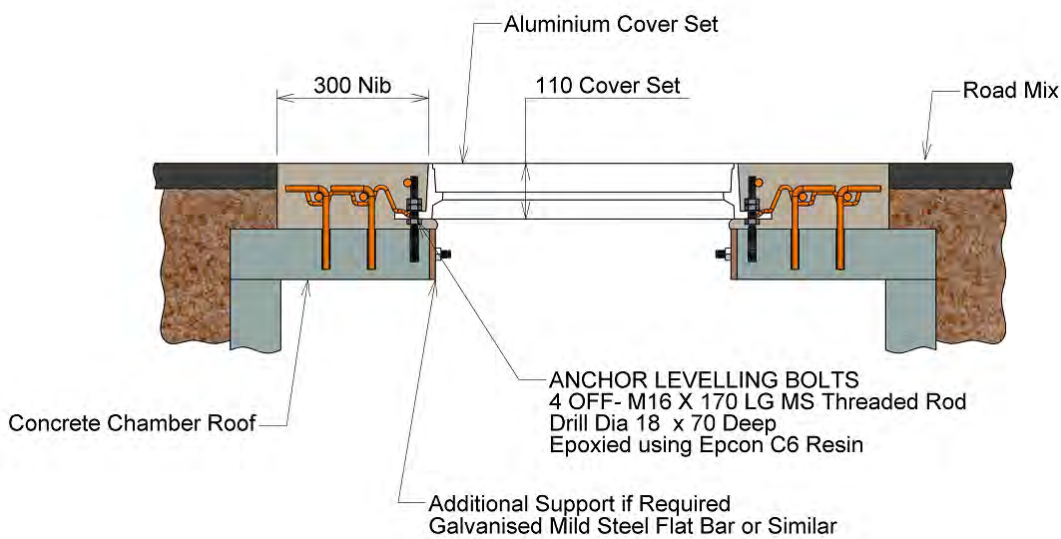


Fig 4– Retrofit Frame Installation on Concrete Roof
Refer Fig 3 for Additional Details

Cover and Beam Installation

1. Where a cover set has multiple covers, support beams provide the required load support. The covers cannot comply with the 210 kN loading required by AS:3996 Standards without the beams in place.

Class D **1200-series beams** are used with 1200mm wide cover sets. Fit the beam into the frame over the **stud inserts**. Ensure the frame is clean and clear of any debris and the beam sits flat in the frame. Fasten the beam to the frame with the 4– M12 hex nuts and Nordlock washers supplied. The Nordlock washers must be fitted under the nuts. Tighten the nuts to the correct torque of 70 ft lbs (95 Nm). *Ref Fig 5*

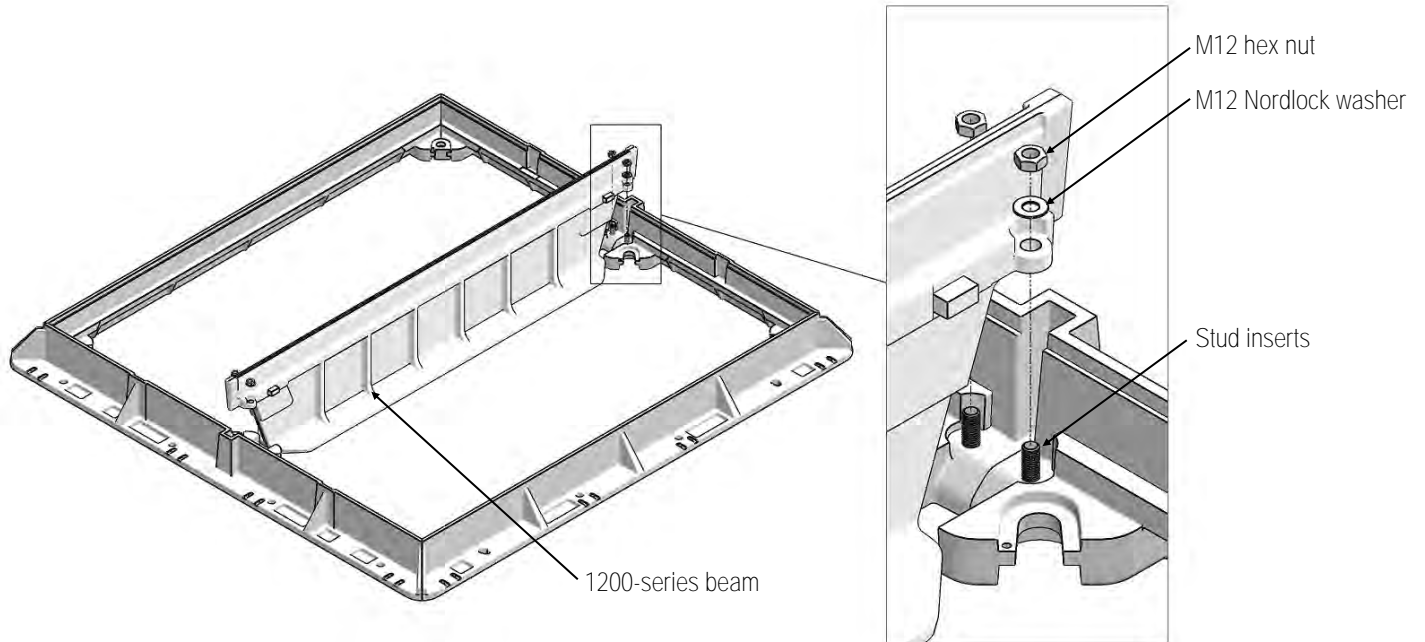


Fig 5– 1200-Series Beam Installation

Class D **600-series beams** are used with 600mm wide cover sets. Fit the beam into the frame, ensuring the frame is clean and clear of any debris and the beam sits flat in the frame. Fasten the beam to the frame with the 2– M10 countersunk screws. *Ref Fig 6*

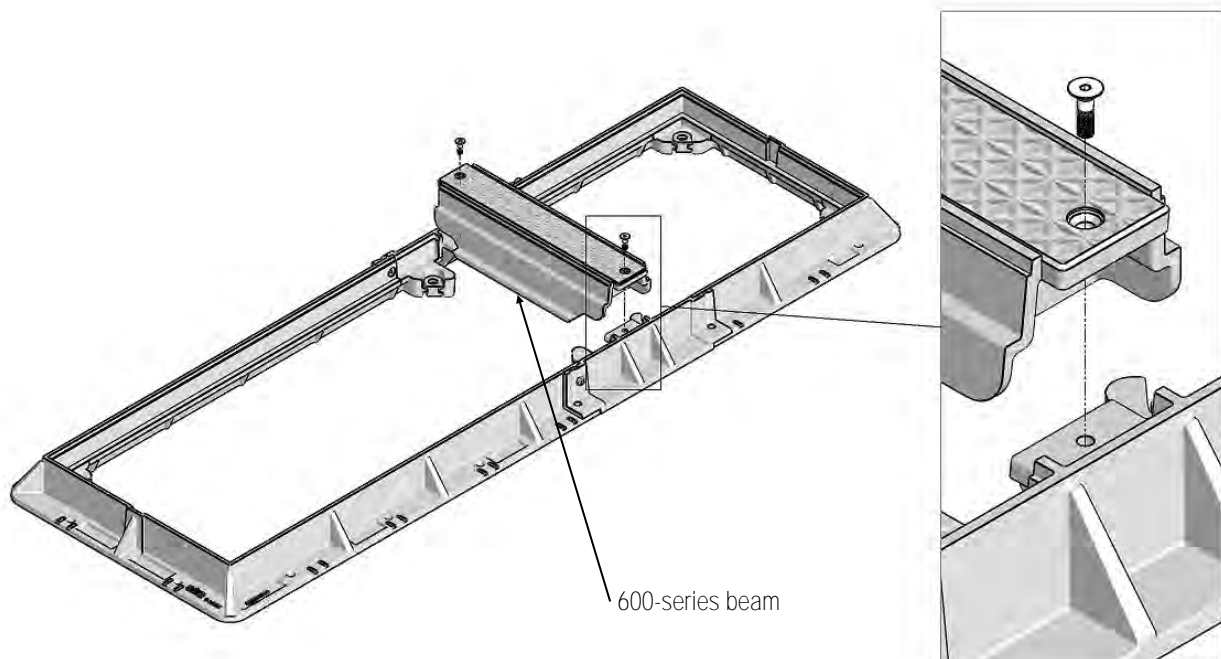


Fig 6– 600-Series Beam Installation

Cover and Beam Installation (contd.)

TOOL LIST

Quantity	Description	Supplier
4	B000-11-KL-12 Standard Key Lifter	Sika Technology Ltd
1	D000-311-TC Security Torque Coupling	Sika Technology Ltd
1	Torque wrench	Local hardware store

2. Ensure the inside surfaces of the frame are clean and clear of dirt and debris.
3. Lower each cover into the frame using the 4x **B000-11-KL-12 Standard Key Lifters** at the lifting points on each cover. The lifting points are found in the bolt pockets in each corner. No heavy lifting equipment is required. *Refer Fig 7.*
4. Bolts must have an **M16 Nordlock washer** fitted under the serrated heads. The washers are supplied together with the **security bolts**.
5. Insert the security bolts into the pockets in each corner of the cover and use the torque wrench and **torque coupling** to tighten them to 70 ft lbs (95 Nm) of torque. *Refer Fig 7.*
6. Replace dust covers.

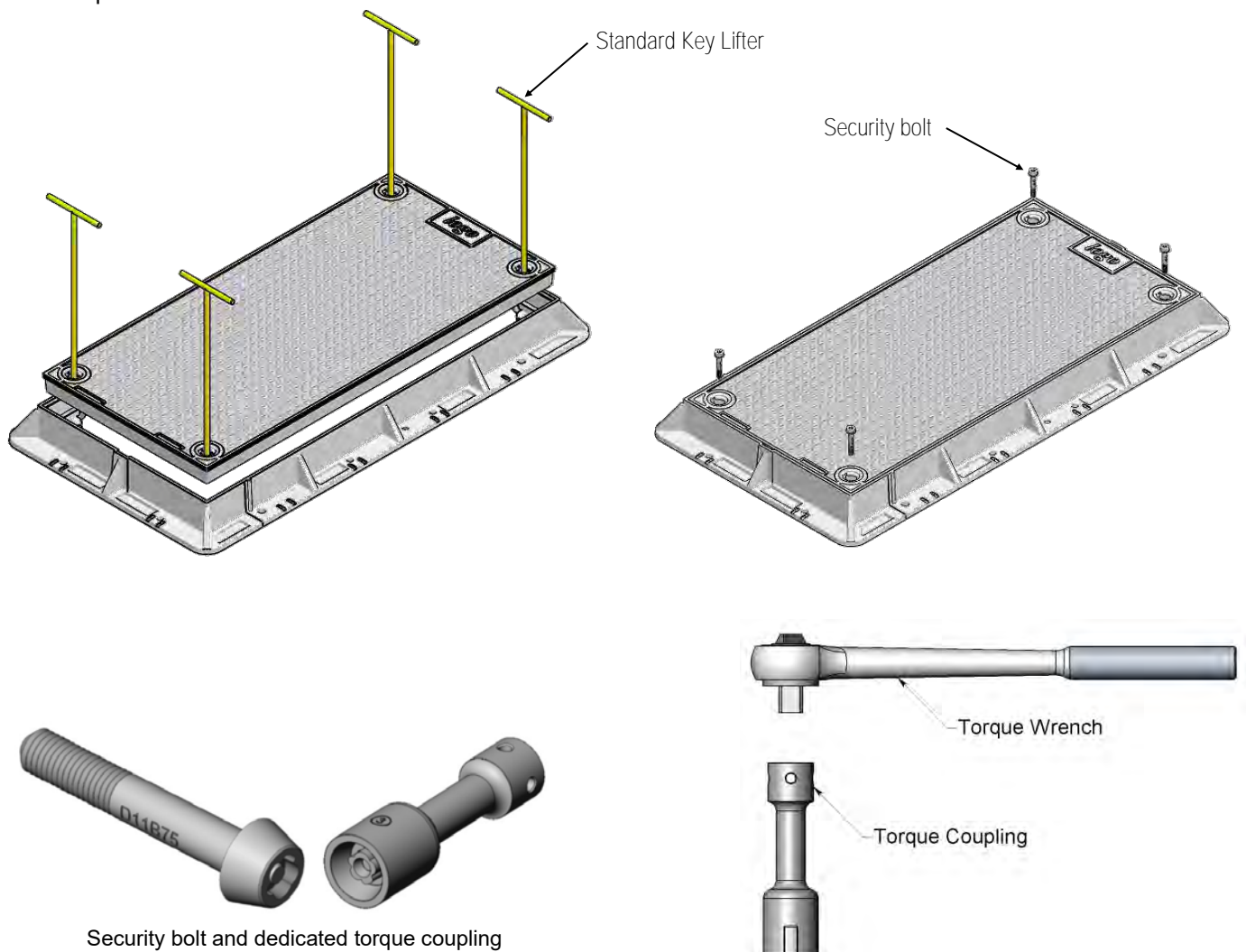


Fig 7