IMS-P: 7.4.59 Issue: 1 Date: 03/31/25

IG | Masonry Support

TITAN MAX

Installation Guide (Fixing to Cast-In Anchor Channel)

Tools required

- **Pocket Level**
- **Chalk line / Laser**
- **Tape Measure**
- **Hammer Drill**
  with Masonry Drill Bit
- **Lump Hammer**
- **Torque Wrench**
- **Spanner**
- **Pencil**

Introduction

TITAN MAX comprises a shelf angle, brackets, lock washers, shims and t-head bolts. Hilti Cast-In Anchor Channel Inserts are supplied as per project requirements.

Brackets, shelf angle and lock washers are manufactured from 304 Austenitic Stainless Steel (ASTM 304/EN 1.4301).

Brackets are available to suit cavity widths ranging from 2-1/2" (64mm) up to 8" (203mm) with 1/2" (12.7mm) increments. Non-standard brackets can be manufactured to suit cavities up to 8" (203mm) and can also facilitate extended droppers that allow the shelf angle to be positioned below the underside of the concrete/steel backing structure.

Please contact our technical team for more information
inquiries@igmasonrysupport.com

Safety

While TITAN MAX units are easy to handle, components are produced from steel plates and may have sharp edges. Care should be taken when handling components and suitable protective equipment should be worn at all times.

Do not install damaged TITAN MAX units.

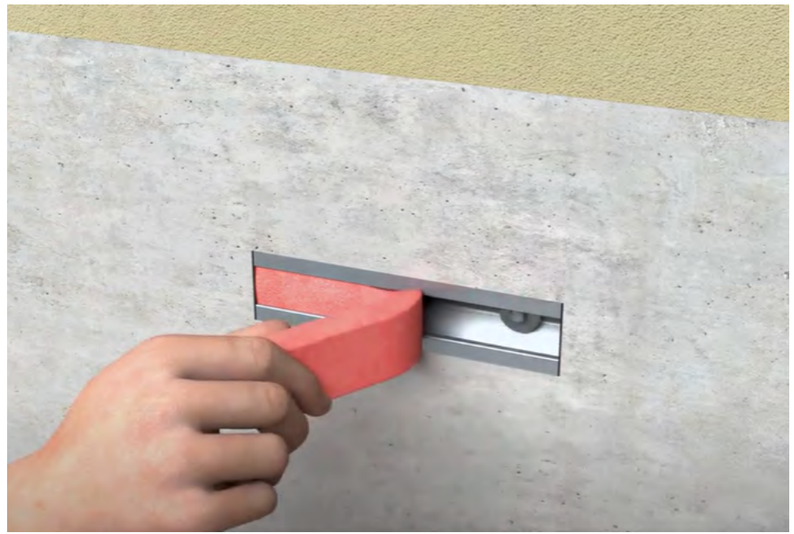
Storage

All factory-wrapped goods received must be stored on a level and cordoned off area so they are clearly visible. Care must be taken when opening the wrapping on the delivered product. All goods must be opened and inspected immediately after delivery. Any irregularities must be reported in writing to IG Masonry Support within 5 days of delivery.

Disposal

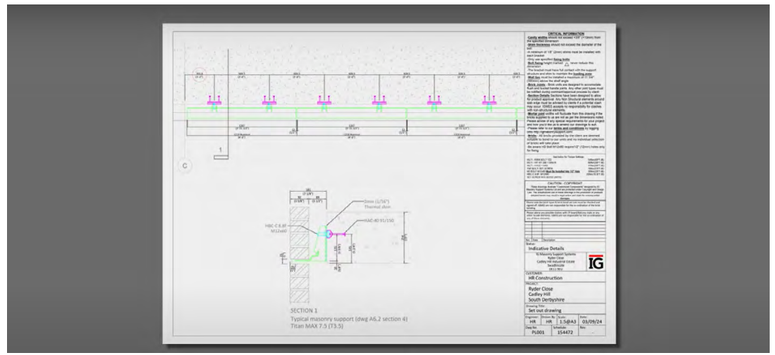
The TITAN MAX system's stainless steel components are fully recyclable, minimizing waste and reducing its carbon footprint at the end of its service life. Thermal Shims should be safely disposed of in landfill.

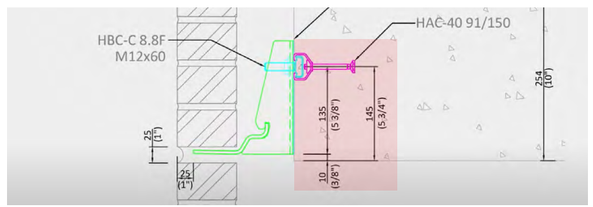
To achieve the design capacity of TITAN MAX, the system must be installed in the correct manner.



Identify pre-installed Cast-In Anchor Channel locations and remove foam filler from each Channel.

2 Review Set Out Drawings





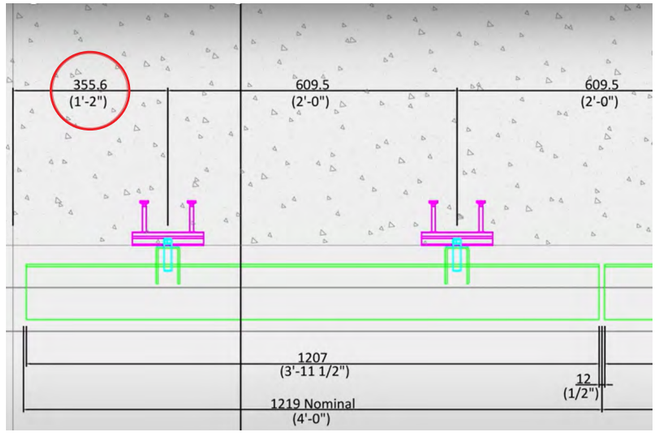
Review Set Out Drawings provided and use sections to aid the installation of TITAN MAX.

Check the installation height of the Cast-In Anchor Channels, ensuring they have been set to the required level.

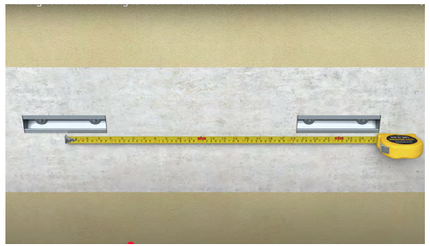
3 Check alignment and level

Check the substructure for alignment and level at the Channel locations.

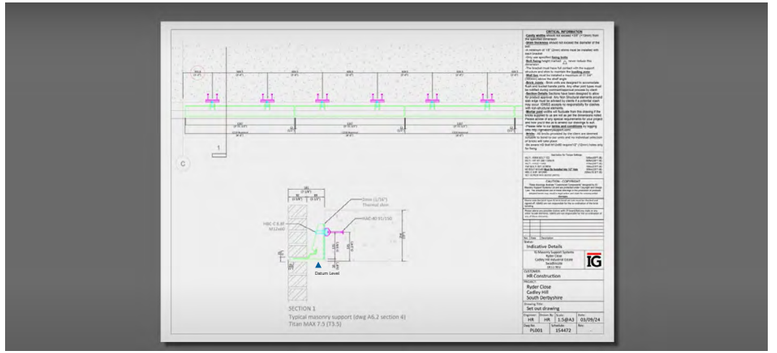
4 Confirm bracket centres

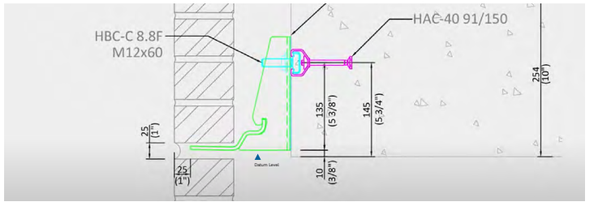


Review Set Out Drawings confirming the centre of all brackets, with the first bracket normally dimensioned off axis line or a slab edge corner.



5 Determine Datum Level

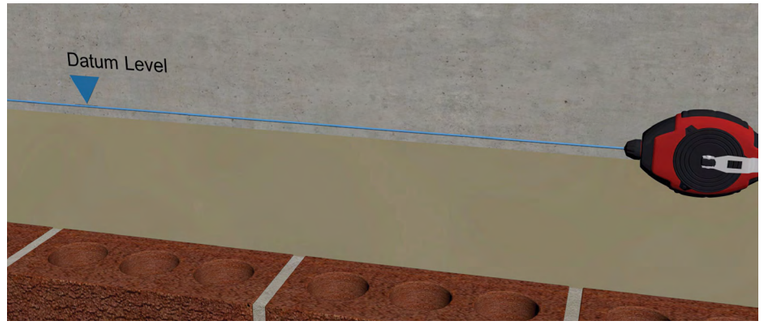




The Datum Level (underside of the bracket) should be determined by reviewing the brickwork constructed onsite and transferring the coursing level onto the slab edge.

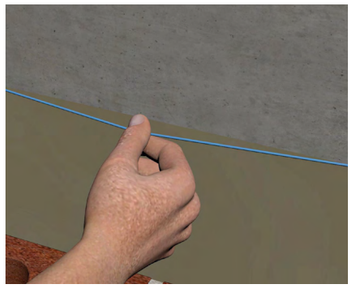
Levels of the shelf may differ if you are using a lipped brick.

6 Transfer to slab edge



Transfer the Datum Level to the slab edge and mark with a pencil.

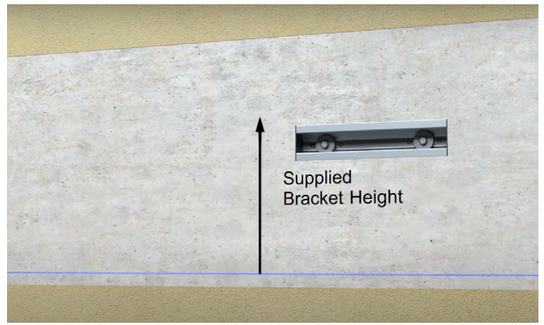
Pull a chalk line through or use a laser level.

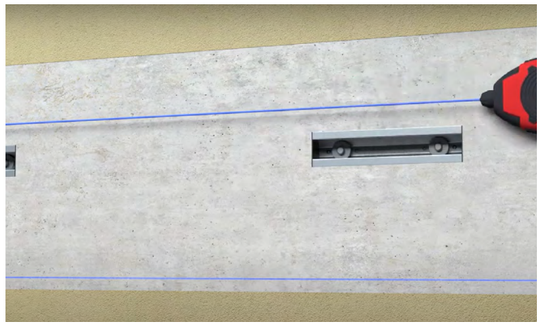


7 Measure bracket height

Confirm that the measurement of the supplied bracket matches the height in Set Out Drawings.

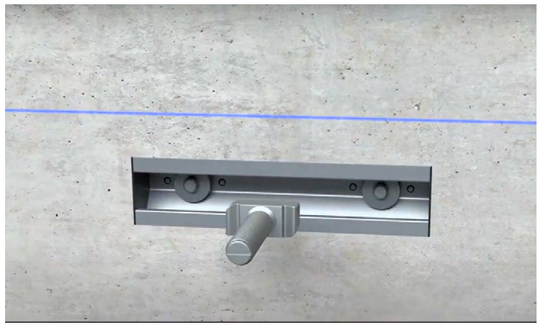
8 Mark bracket height

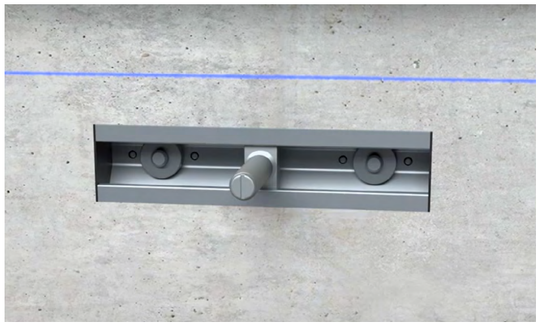




Measure up from the Datum Level and mark bracket height with a pencil on the slab face. Pull a chalk line through at this level or laser level.

9 Insert T-head Bolt

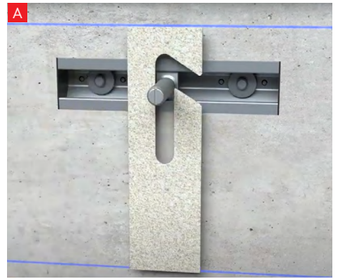




Insert the T-head Bolt into the channel opening and rotate through 90° until it is locked into position.
Move the T-head Bolt horizontally to the required position ensuring that the slot on the end of the anchor is running vertically to the axis of the channel.

You should always ensure the T-head Bolt is only installed within the area between the studs.

10 Offer up further components



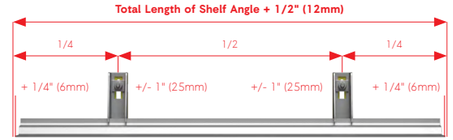
Offer up the shim, bracket, lock washer, washer and nut, and finger tighten. (Use a spanner if required)

- A Shim
- B Bracket
- C Lock Washer
- D Washer & Nut

11 Front-load shelf angles

Front-load all shelf angles checking that the alignment is correct and ensure that the shelf is positioned correctly on the brackets.

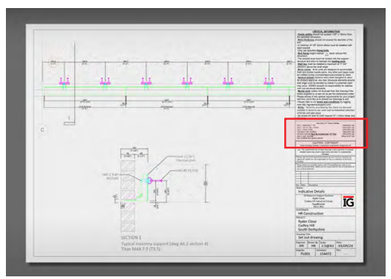
Use the 1/4 - 1/2 - 1/4 rule as specified in our Product Guide.



12 Adjust torque wrench

ANCHOR TYPE	FIXING TO	HOLE DIAMETER		TORQUE	
HILTI - KWIK BOLT TZ2 1/2" x 4-1/2"	Concrete*	1/2 in	12.7 mm	40 lb/ft	54 Nm
HILTI - HY 200-R V3 + HAS-E-55 1/2" x 8"	Concrete*	9/16 in	14.28 mm	30 lb/ft	40 Nm
HILTI - HY 200-R V3 + HAS-E-55 1/2" x 8"	Grout-filled CMU**	9/16 in	14.28 mm	30 lb/ft	40 Nm
HBC-C-N M12 8.8F	HILTI HAC-V-35 Channel	—	—	55 lb/ft	75 Nm
Set Screw	Steel - Wing Plates	9/16 in	14 mm	54 lb/ft	73 Nm
Blindbolt - HD Bolt	Steel - Box Section	1/2 in	12.7 mm	22 lb/ft	30 Nm

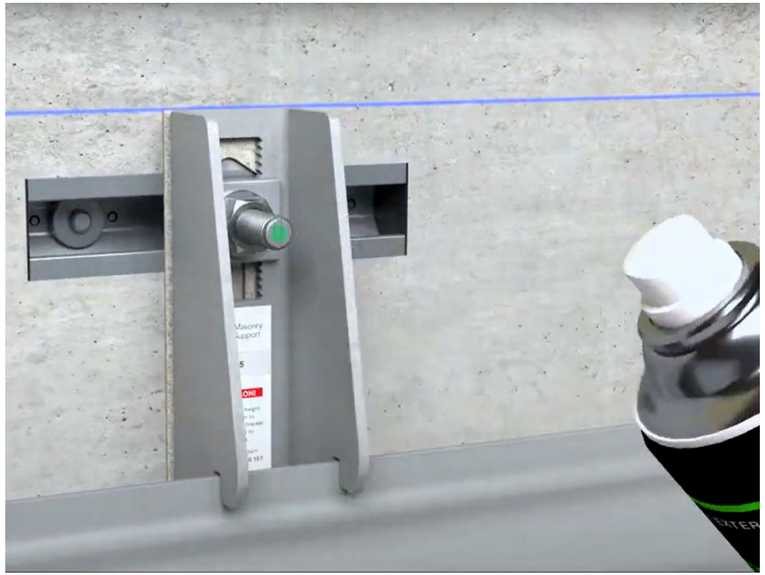
Refer to Set Out Drawings or anchor box for the correct torque settings and adjust torque wrench to suit.



13 Torque anchors

Torque the full run of anchors using a calibrated torque wrench set to the correct torque settings.

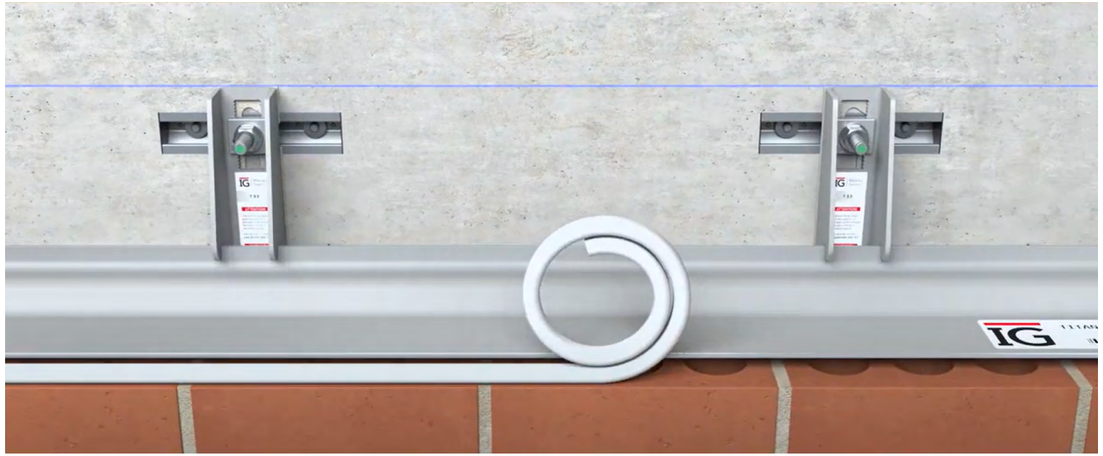
14 Torque confirmation



Spray the head of the anchor as you go along, confirming they have been tightened to required torque setting and installation of component is complete.

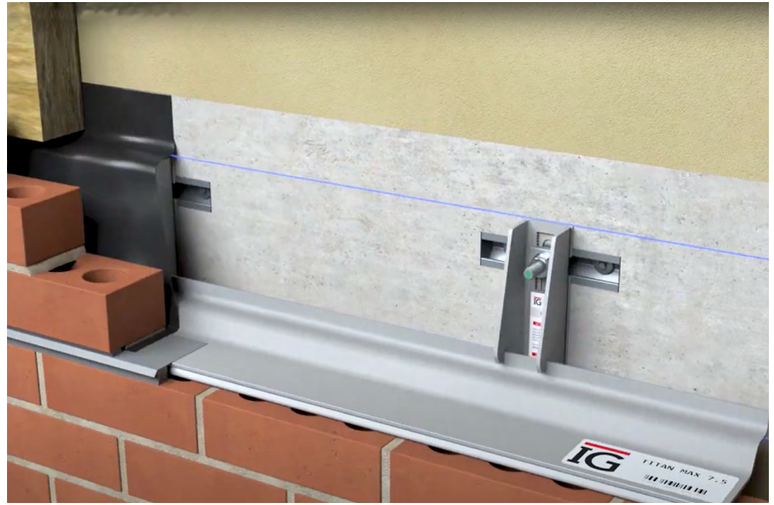
Once torqued,
you must not re-torque.

15 Insert foam rod



Insert foam rod to the underside of the masonry support shelf to allow thermal expansion and movement of the brickwork. A lipped brick may be installed to reduce the overall height of this caulk joint.

16 Continue higher-level brickwork



This concludes the installation of TITAN MAX (fixing to Cast-In Anchor Channel).

Continuation of higher-level brickwork can commence. Please refer to TITAN MAX Product Guide for 'Required Building Method'.

The IG Masonry Support Technical Team is on hand to provide assistance during the installation of TITAN MAX. To receive support, please call T +1 302 303 5410 or email inquiries@igmasonrysupport.com

Additional installation materials

For a video Installation Guide, please visit **igmasonrysupport.com** or scan the QR code. Alternatively please refer to the supporting documentation supplied with this guide.

IG | Masonry Support

North America
108 Lakeland Avenue
Dover, Delaware
United States
DE 19901

T +1 302 303 5410
inquiries@igmasonrysupport.com