BOTTOM PLATE FIXING SOLUTION

ICCONS

ICCONS® THRU-BOLT (STUD ANCHOR) FORMED CONCRETE SOLUTION 7kN Tension 2kN in Plane Shear **3kN** Out of **Plane Shear** 50mm edge distance 12mm drill hole 20MPa TB12135G 10mm Galvanised







The ICCONS® THRU-BOLT stud anchor is a pre-assembled torque controlled mechanical stud anchor which when tightened draws the tapered end of the bolt into the clip expanding it to create expansion forces against the wall of the drilled hole.

Features of THRU-BOLT stud anchor include:

- Heavy duty Class 5.8 Carbon steel material
- Thru fixing for fast installation
- Anchor Diameter = Hole Diameter (e.g. M12 anchor = 12mm drill hole)
- Engineered Clip designed for high loads preventing anchor rotation

The ICCONS® THRU-BOLT stud anchor is designed for use as a bottom plate fixing in timber frame construction. The ICCONS® TB12135G has been tested and complies with the requirements set out in NZS 3604-2011, clause 7.5.12.3 & 4 (for external and internal walls).



NZS 3604-2011 CLAUSE 7.5.12.3 BOTTOM PLATE IN 20MPa CONCRETE SLAB Minimum Design Capacities (kN) Edge distance In-plane shear loading Tension Ioading (kN) Bottom Fixing plate type Anchor size (mm) Fixing type centres (mm) (mm) (mm)**Thru-Bolt Stud Anchor** 900 50 12 x 135 45 x 90 2.0 3.0 7.0

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CCONS Serious Connections

ICCONS® THRU-BOLT (STUD ANCHOR)

ANCHOR INSTALLATION INSTRUCTIONS

ICCONS® THRU-BOLT stud anchor TB12135G must be installed in accordance with ICCONS® published installation instructions in order to comply with the requirements stipulated in NZS 3604-2011, clause 7.5.12.3 & 4.





Using a 12mm drill bit, drill a hole to the correct depth.

Clean dust and other material from the hole.



Insert anchor into position. Note: When using shims/packers with fixture, ensure nut is correctly positioned on the anchor thread prior to installation to accommodate embedment depth + total fixture thickness.



With correct size socket or spanner tighten anchor to specified torque. Installation complete!

SPECIFICATION DATA

GA	EXTERNAL				2ª			5	I	
Part	lo.	Description	External Thread	Anchor Size mm	mm	mm	mm	torque Nm	qty	
TB1	2135G	with standard round washer Ø24							25	
ITB	2135GBSQ	with galvanised square 50 x 50 x 3mm Washer	M12	12 x 135	12	65	60	45	100	
ITB12135GSQ		with galvanised square 50 x 50 x 3mm Washer	1,1175	TC X T22	12	20	00	40	25	
ITB	2135GTSQ	with galvanised square 50 x 50 x 3mm Washer							50 (tub)	

DURABILITY

The TB12135G stud anchor for use as a bottom plate fixing solution is coated with a galvanised coating of 45 microns thickness. The life expectancy of the TB12135G stud anchor will depend on the environment where the product is installed. For internal dry environments, the TB12135G stud anchor has a life expectancy of 50 years (minimum). The TB12135G also complies with durability requirements for all zones in a closed environment as stipulated in NZS 3604-2011, table 4.1.

WARRANTY

This Technical document has been prepared to provide guidance for design professionals and trades people in the correct selection and use of proprietary bottom plate fixings designed to comply with requirements stipulated in NZS 3604-2011, clause 7.5.12.3 & 4. ICCONS® and SESTO Fasteners shall not be held liable for any claim, damage, demand expense, injury or loss, direct, incidental or consequential, based on product misuse and factors outside the control of both ICCONS® and SESTO Fasteners.



MATERIAL SPECIFICATIONS

Anchor Part	Galvanised
Expander Clip	400 series S/S
Washer	AISI1010
Nut	AISI1010
Anchor bolt	Class 5.8
Plating	Galvanised Coating thickness 45 microns (min.)

Contact Sesto Fasteners for full independent report details on bottom plate testing conducted using the ICCONS® TB12135G Thru-Bolt Stud Anchor (REPORT: SSL-10010).