

# DTT – Tension Tie & Holddown

**Material:** Carbon Steel and 316 Stainless Steel 2mm thick

**Finish:**

ZMAX® Galvanised: DTT2Z



**Size:** See illustration on the right.

DTT2Z includes washer and 8 – SDS 6.4mm x 38 mm screws

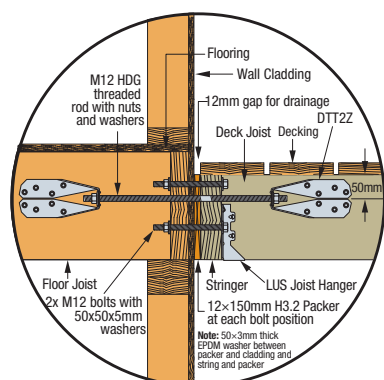
**Features & Benefits**

- Stronger and safer than typical through-bolt installations for deck post connections
- Engineered swages for extra strength and to minimise deflections
- Suitable for lighter duty holddown applications on single or double studs
- Ties the guardrail post into deck framing for a stronger, safer connection
- The DTT2 is ideal for lateral-load connections between the deck and house
- Helps prevent a common type of deck failure
- 15mm diameter anchor hole can accommodate Simpson Strong-Tie M12 Titen HD Screw Anchor or any M14 threaded rods
- Installs easily with Strong-Drive® SDS screws (included)

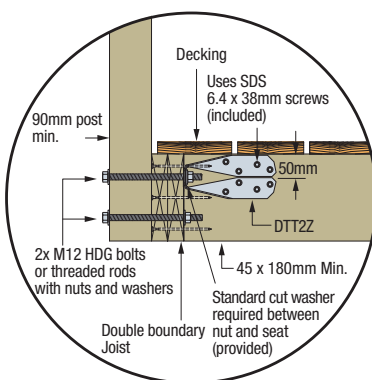
**Installation**

- Use all specified fasteners
- The DTT requires a standard cut washer be installed between the nut and the seat

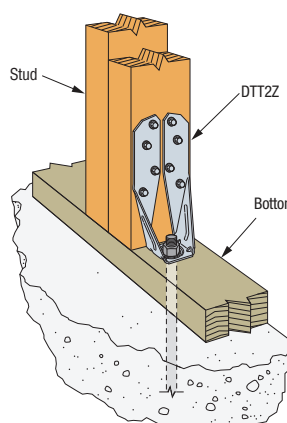
**Construction Details**



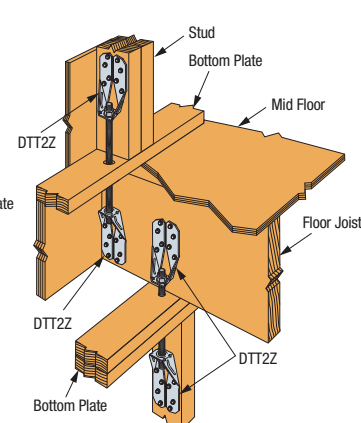
**DTT2Z Deck-to-House Lateral Load Connection**



**DTT2Z Deck Post Connection**



**DTT2Z Holddown**



**DTT2Z Installation - Vertical Floor**

**DTT Technical Data**

Model No.	Strap Thickness	Dimensions (mm)				Fasteners		Minimum Timber Member Size (Depth x Breadth, mm)	Design Tension Capacity (kN) k <sub>t</sub> = 1.14
		W	H	B	CL	Anchor Bolt Dia (mm)	Post (Nails: No. - Length x Dia., Screws: No. - Dia. x Length, mm)		
DTT2Z	2	85	175	40	21	12	8 – SDS6.4 x 38	90 x 38	<b>9.37</b>

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, and applicable the k modification factors following AS 1720.1 and (2) the Serviceability Capacity which is the load at 6.4mm joint slip, which includes fastener slip, anchor elongation and holddown deformation. Design Capacity is the minimum of test data and structural joint calculation.
2. The Capacity Factor (ϕ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern
3. Duration of Load Factor (K<sub>t</sub>) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
4. Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4.
5. The Designer must specify anchor bolt type, length and embedment.
6. Anchor bolt nut should be finger tight plus 1/2 to 1/2 turn with a hand wrench. Care should be taken not to over-tighten the nut.
7. Post or beam design by Designer. Posts may consist of multiple members provided they are connected independently of the holddown fasteners.
8. Structural composite timber columns have sides that either show the wide face or the edges of the timber strands/veneers, known as the narrow face.
9. Simpson Strong-Tie stainless-steel connectors require stainless-steel fasteners.
10. Values in the table reflect installation into the wide face.
11. Holddowns and tension ties are for use in vertical or horizontal applications.
12. Holddowns and tension ties may be installed raised up to 460mm above the top of the concrete with no load reduction, provided that additional elongation of the anchor rod is taken into account.