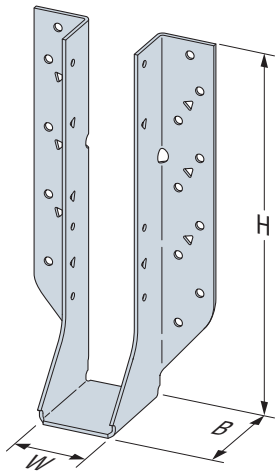
HU — Heavy Duty Face Fix Joist Hanger

Material: Carbon Steel 2mm thick

Finish: Z275 Galvanised

Corrosion Resistance Level
LOW

Size: See illustration on the right and table below



HU

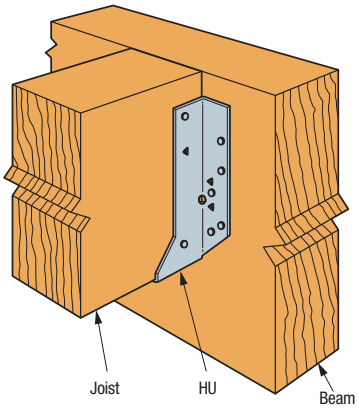
Features & Benefits

- Quick and easy installation using either nails or screws
- Triangular holes (on most models) are for increased load capacity
- Manufactured in heavier gauge steel for a stronger load capacity
- Large seat for joists provides greater strength and support
- Can be installed on solid timber header, or concrete/masonry wall
- Installation to the header material can be done with Strong-Drive® connector nails, Strong-Drive® SD connector screws (for timber attachment) or Titen Turbo™ Concrete and Masonry Screw Anchors (for concrete and masonry attachment). (Please refer to technical sheet for installation and load requirements)

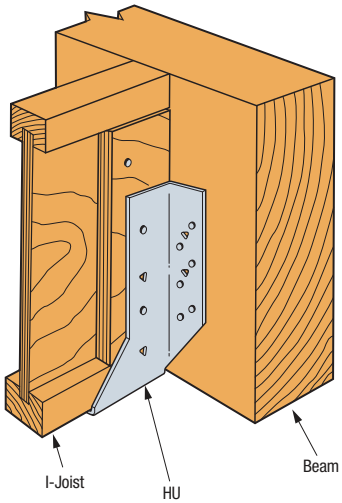
Installation

- Use all specified fasteners (Refer to table below). Fasteners sold separately
- Suitable for use with CCN64 connector nail gun (for timber attachment only)
- Verify that the header can take the fasteners specified in the table
- HU hangers must be installed by filling all round and triangular holes, with the specified fasteners
- Web stiffeners are required for all I-joists used with these hangers
- The hanger depth is to be at least 60% of the carried member depth to prevent rotation, unless additional lateral restraint is added to the top of the carried member
- When nailing into solid sawn carrying member's end grain, the allowable load should be adjusted by a factor of 0.67
- Recommended screw anchors for concrete core filled block work and solid concrete are the Titen Turbo™ 6.5mm x 70mm Hex Head - Model TNT25234H (Please refer to the technical data sheet for installation using TNT screw anchors to concrete and masonry walls)
- Drill and prep the holes according to the installation instructions provided with Titen Turbo screw anchors

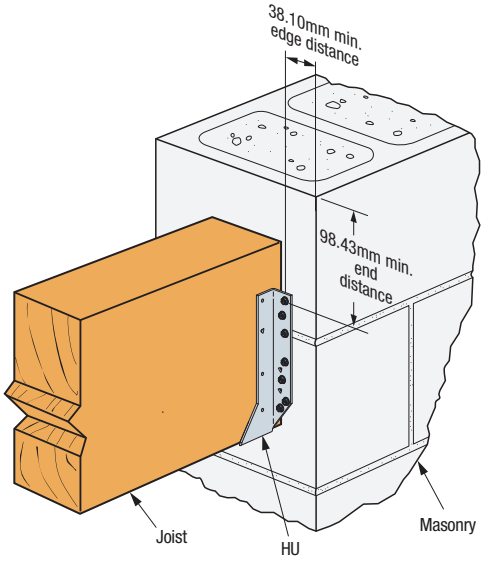
Construction Details



HU Typical Installation



HU I-Joist Installation



HU Fix on Masonry Installation

Simpson Strong-Tie® Australia Pty Ltd
Call **1300 STRONGTIE** (1300 787664)
www.strongtie.com.au

HU — Heavy Duty Face Fix Joist Hanger

HU Technical Data

Model No.	Markings on Hangers	Joist Size (mm)		Dimensions (mm)				Fasteners (No. – Length x Dia., mm)			Design Capacity (kN)		
		Width	Height	W	H	B	Thickness	Timber Header	Concrete/ Core Filled Blockwork Header	Joist	Uplift $k_1 = 1.14$	Download	
												Floor $k_1 = 0.69$	Roof $k_1 = 0.77$
HU140/45	**HU1.81/5**	45	140-205	46	137	64	2	16 - 38 x 3.75	16 - TNT6.4x70	6 - 38 x 3.75	7.16	10.94	10.94
HU170/45	**HU7**		170-255		170			16 - 38 x 3.75	16 - TNT6.4x70	8 - 38 x 3.75	8.03	10.94	10.94
HU240/45	**HU9**		240-355		237			24 - 38 x 3.75	24 - TNT6.4x70	10 - 38 x 3.75	8.03	13.8	13.8
HU285/45	**HU11**		285-420		281			30 - 38 x 3.75	30 - TNT6.4x70	10 - 38 x 3.75	8.03	13.8	13.8
HU135/63	**HU36**	63	135-190	65	133	67		8 - 38 x 3.75	8 - TNT6.4x70	4 - 38 x 3.75	5.16	6.25	6.97
HU170/63	**HU38**		170-250		167			10 - 38 x 3.75	10 - TNT6.4x70	4 - 38 x 3.75	5.16	7.34	8.2
HU225/63	**HU310**		225-335		225			14 - 38 x 3.75	14 - TNT6.4x70	6 - 38 x 3.75	7.16	10.11	10.31
HU275/63	**HU312**		275-410		275			16 - 38 x 3.75	16 - TNT6.4x70	6 - 38 x 3.75	7.16	10.31	10.31
HU120/90	**HU46**	90	120-180	90	120	67		12 - 38 x 3.75	12 - TNT6.4x70	6 - 38 x 3.75	5.16	8.46	8.46
HU155/90	**HU48**		160-235		155			14 - 38 x 3.75	14 - TNT6.4x70	6 - 38 x 3.75	5.16	9.26	9.26
HU215/90	**HU410**		215-315		213			18 - 38 x 3.75	18 - TNT6.4x70	10 - 38 x 3.75	7.55	10.94	10.94
HU265/90	**HU412**		265-390		263			22 - 38 x 3.75	22 - TNT6.4x70	10 - 38 x 3.75	7.55	12.58	12.58
HU305/90	**HU414**		305-450		302			24 - 38 x 3.75	24 - TNT6.4x70	12 - 38 x 3.75	7.55	13.8	13.8

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, and applicable the k modification factors following AS1720.1 and (2) the Serviceability Capacity which is the load at 3.2mm joint slip. Design Capacity is the minimum of test data and structural joint calculation.
2. For Australia, 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 (k1) is as shown. Reduce Duration of Load Factor (k1) 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. For maximum nailing quantity and load values, fill all round and trianglular holes.
6. Concrete shall have a minimum compressive strength of f'c = 18 MPa and concrete core filled blockwork/masonry shall have a minimum compressive strength of f'm =10 MPa.
7. Products shall be installed such that Titen Turbo screws are not exposed to the weather.
8. Fasteners: Nail dimensions are listed diameter by length. Titen Turbo screws are Simpson Strong-Tie concrete and masonry screws (hex-head model required).

Titen Turbo Installation Data		
Drill Bit Diameter	d (mm)	4.76
Clearance Hole Diameter in Fixture	d_c (mm)	7.94
Min Hole Depth	h_{hole} (mm)	57.15
Nominal Embedment Depth	h_{nom} (mm)	44.45
Effective Embedment Depth	h_{ef} (mm)	31.75
Minimum Yeild Strength	f_{ya} (MPa)	689
Minimum Ultimate Tensile Strength	f_{uta} (MPa)	861
Min. Tensile and Shear Stress Area	A_{se} (mm^2)	13.61

• The information presented in this table is to be used in conjunction with the design criteria of ACI 318-14 Chapter 17 or ACI 318-11 Appendix D.

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