HDU — Heavy Duty Holdown

Material:

HDU8 - Carbon Steel 3.5mm thick

HDU14 - Carbon Steel 4.5mm thick

Finish:

Z275 Galvanised

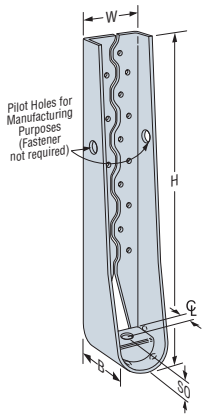
Corrosion Resistance Level
LOW

Size:

See illustration on the right

HDU8-SDS2.5 includes 20 – SDS 6.4mm x 64mm screws

HDU14-SDS2.5 includes 36 – SDS 6.4mm x 64mm screws



Features & Benefits

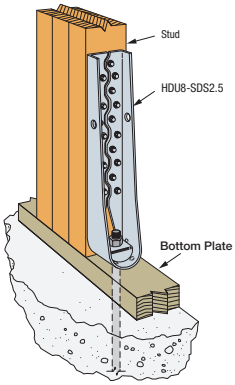
- Pre-deflected body virtually eliminates deflection due to material stretch.
- Uses Strong-Drive® SDS Heavy-Duty Connector screws which install easily, reduce fastener slip and provide a greater net section area of the post compared to bolts.
- Strong-Drive SDS Heavy-Duty Connector screws are supplied with the holdowns to ensure tested fasteners are used
- Easy to install.

Features & Benefits

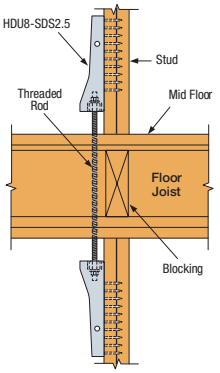
- Use all specified fasteners
- The HDU is supplied with a crescent washer and requires no additional washer
- Strong-Drive SDS Heavy-Duty Connector screws install best with a low speed high torque drill with a 3/8" hex head driver

Construction Details

See illustrations on the right



HDU8-SDS2.5 Holddown



HDU8-SDS2.5 Mid Floor Holddown Installation

Technical Data

Model No.	Dimensions (mm)					Fasteners		Wall Framing Stud(s) (mm)	Country	Design Tension Capacity (kN)
	Strap Thickness	W	H	B	CL	Anchor Hole Diameter (mm)	Post (Nails: No. - Length x Dia., Screws: No. - Dia. x Length, mm)			
HDU8-SDS2.5 (Available in AU & NZ)	3.5	75	420	90	35	23	20 – SDS6.4 x 64	(90 or 2/45)[7] x 90	AU	k1 = 1.14 **36.2**
									NZ	k1 = 1.0 **29.8**
HDU14-SDS2.5 (Available only in NZ)	4.5	79	653	93	41	26	36 – SDS6.4 x 64	(90 or 2/45)[7] x 140	AU	**k1=1.14 68.6**
									NZ	**k1=1.0 56.6**

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Capacity Factor, and applicable 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 holdown deformation. Design Capacity is the minimum of test data and structural joint calculation.
2. The Capacity Factor (ϕ) for AU is 0.85 for nails and screws for structural joints in a Category 1 application, and for NZ is 0.8. Reduce tabulated values where other Category applications govern.
3. Duration of Load Factor (k1) 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 1/3 to ½ turn with a hand wrench. Care should be taken not to over-tighten the nut.
7. Minimum 90mm or 2/45mm thick post or studs required. Number of total studs or post size to meet axial load demand, to be determined by designer. Multiple studs connected independently of 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 – values in the table reflect installation into the wide face.
9. Holdowns 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.

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