H Hurricane Tie

Hurricane ties provide a positive connection between the truss/rafter and the wall of the structure to resist wind and seismic forces.

- The H2.5A connects the truss/rafter to the top plate and is available in galvanised and stainless steel for extra corrosion protection.
- The H3 connects the truss/rafter to the top plate and is available in galvanised and stainless steel for extra corrosion protection.
- The H6 wraps from the stud up and over the top plate for a high-strength connection. It can also be used as a stud-to-band-joist connection.

Material: See table on next page.

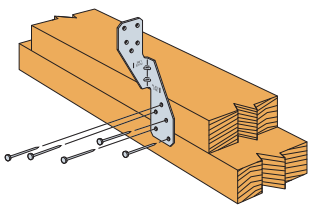
Finish: Galvanised, Some products available in stainless steel. See Corrosion Information.

Installation

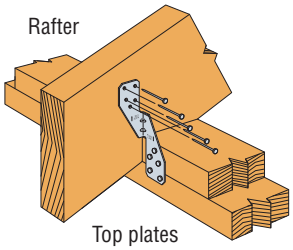
- Use all specified fasteners. See General Notes.
- H3 and H6 ties are shipped in equal quantities of right and left versions *(right versions shown)*.
- Hurricane ties do not replace solid blocking.
- When installing ties on plated trusses *(on the side opposite the truss plate)* do not fasten through the truss plate from behind. This can force the truss plate off of the truss and compromise truss performance.

H2.5A Typical Installation

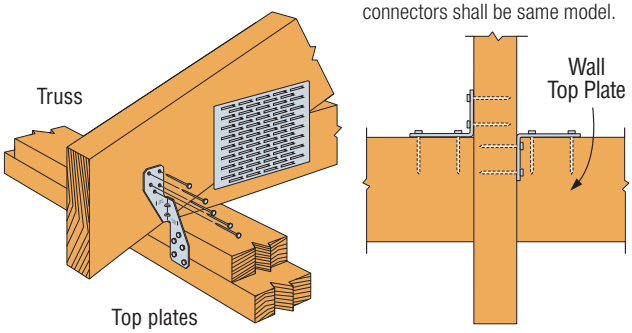
STEP 1: Install specified fasteners into the top plates.

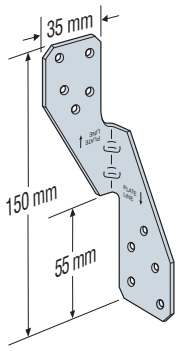


STEP 2: Install specified fasteners into the truss or rafter.

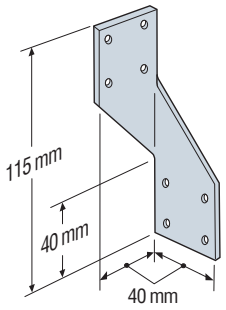


STEP 3: Install diagonally across from each other, as shown. Both connectors shall be same model.

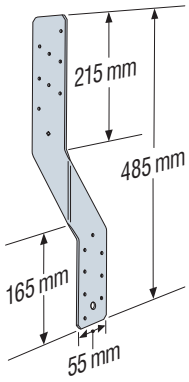




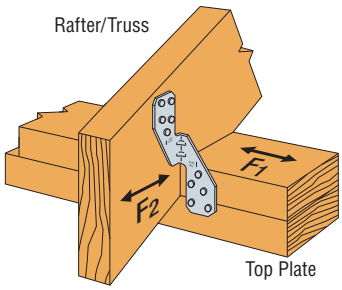
H2.5A
(H2.5SS similar)



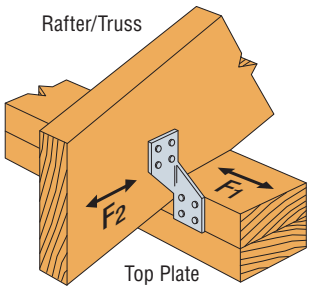
H3
(H3SS similar)



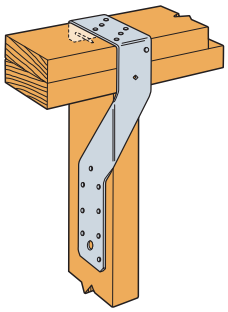
H6



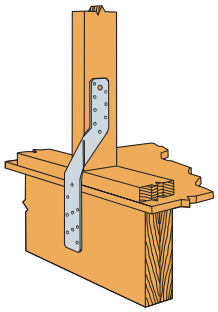
Typical H2.5A installation



Typical H3 installation



Stud to top plate installation



Stud to band joist

Typical H6 installation

H Technical Data

Model No.	Thickness (mm)	Fasteners (No. – Length x Dia., mm)			Country	Design Capacity (kN)		
		To Rafter/Truss	To Plates	To Studs		Uplift	Lateral F1	Lateral F2
H2.5A	1.3	5 – 30 x 2.8	5 – 30 x 2.8	—	AU	k_1 = 1.14	k_1 = 1.14	k_1 = 1.14
						2.35	0.49	0.48
					NZ	k_1 = 1.0	k_1 = 1.0	k_1 = 1.0
						2.32	0.49	0.48
H2.5ASS	1.3	5 – 30 x 2.8	5 – 30 x 2.8	—	AU	k_1 = 1.14	k_1 = 1.14	k_1 = 1.14
						1.88	0.34	0.34
					NZ	k_1 = 1.0	k_1 = 1.0	k_1 = 1.0
						1.85	0.34	0.34
H3	1.3	4 – 30 x 2.8	4 – 30 x 2.8	—	AU	k_1 = 1.14	k_1 = 1.14	k_1 = 1.14
						1.98	0.31	0.76
					NZ	k_1 = 1.0	k_1 = 1.0	k_1 = 1.0
						1.86	0.29	0.76
H3SS	1.3	4 – 30 x 2.8	4 – 30 x 2.8	—	AU	k_1 = 1.14	k_1 = 1.14	k_1 = 1.14
						1.34	0.31	0.76
					NZ	k_1 = 1.0	k_1 = 1.0	k_1 = 1.0
						1.26	0.29	0.76
H6	1.6	—	8 – 30 x 2.8	8 – 30 x 2.8	AU	k_1 = 1.14	k_1 = 1.14	k_1 = 1.14
						3.47	—	—
					NZ	k_1 = 1.0	k_1 = 1.0	k_1 = 1.0
						3.47	—	—

1. Design Capacity is the lesser of (1) the Characteristic Capacity multiplied by the Australian Capacity Factor, or the NZ Strength Reduction Factor (ϕ), and applicable the k modification factors following AS 1720.1 and NZS 3603 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. For NZ, the Strength Reduction Factor (ϕ) is 0.80 for nails in lateral loading.
3. Duration of Load Factor (k_1) 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 and New Zealand Joint Group J5 per NZS 3603 Table 4.1.
5. Design capacities are for one cyclone tie.
6. Design capacities in the F1 direction are not intended to replace diaphragm boundry members or resist cross-grain bending of the truss or rafter members.
7. When cross-grain bending or cross-grain tension cannot be avoided in the members, mechanical reinforcement to resist such forces may be considered.
8. Cyclone ties installed on the outside of the wall assume a minimum 90mm overhang of the rafter/truss member.
9. Simpson Strong-Tie stainless-steel connectors require stainless-steel fasteners.
10. For continuous load path, hurricane ties and stud to plate ties (reference page 73) must be on the same side of the wall.