



Seismic And Hurricane Ties



The H8 allows rafter to top plate and stud to sill plate installation.
 The H9 is designed to retrofit roof truss/rafters for wood construction.
 The H9 hurricane tie provides high uplift and lateral capacity using Simpson wood fasteners.
 The presloped 5/12 seat of the H16 provides for a tight fit and reduced deflection. The strap length provides for various truss height up to a maximum of 13-1/2". Minimum heel height for H16 and H16S is 4".

The HGA10 attaches to gable trusses and provides good lateral wind resistance. The HS24 attaches the bottom chord of a truss or rafter at pitches from 0:12 to 4:12 to double 2x4 top plates. Double shear nailing allows for higher lateral resistance.

The H connector series provides wind and seismic ties for trusses and rafters. H10 and H10R optional positive angle nailing connects shear blocking to rafter - use 8d common nails. Slot allows field-bending up to 27° at 0.73 of the table uplift load; bend one time only.

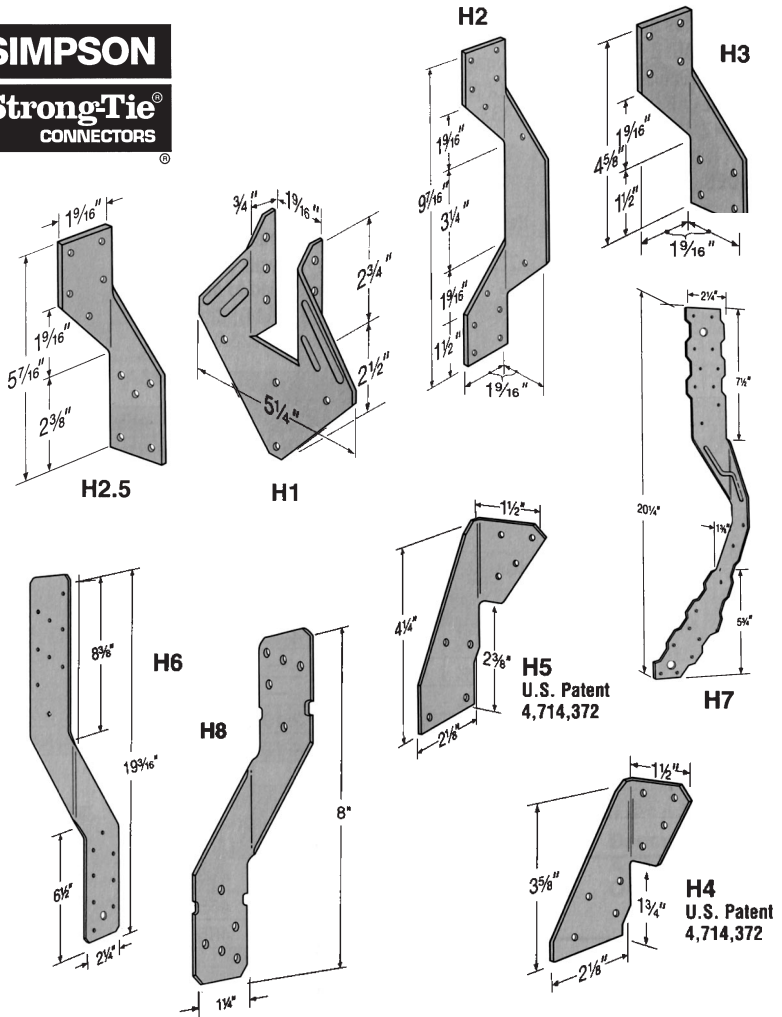
MATERIAL: See table

FINISH: Galvanized; H10-2, H11Z-ZMAX. Other models available in stainless steel or Z-MAX; see Corrosion-Resistance.

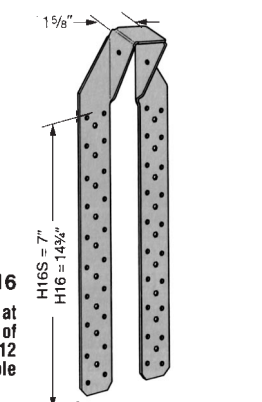
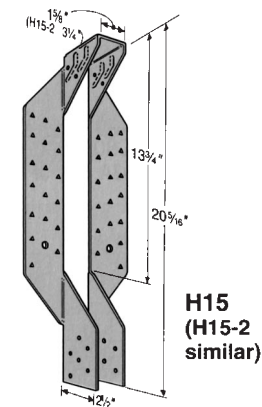
INSTALLATION:

- Use all specified fasteners. See General Notes.
- The HGA10 can be installed into wood. Screws are provided.
- HS24 requires slant nailing only when bottom chord of truss or rafter has no slope.
- H1 can be installed with flanges facing outwards (reverse of drawing number 1). When installed inside a wall, a birdsmouth cut is required.
- H2.5, H3, H4, H5 and H6 ties are shipped in equal quantities of separate rights and lefts.
- Bend the H7 over the top of the truss. Install a minimum of four 8d nails into the truss, including two into the truss side.
- Hurricane Ties do not replace solid blocking.

CODES: BOCA, ICBO, SBCCI NER-422, NER-393, NER-432; NER-499; Dade Co, FL 97-0107.05; City of L.A. RR 24818.



Model No.	Ga	Fasteners			Uplift Avg Ult	Doug-Fir Larch/So Pine Allowable Loads ^{1,2}				Uplift Load with 8dx1-1/2" Nails (133 & 160)	Spruce-Pine-Fir Allowable Loads ^{1,2}				Uplift Load with 8dx1-1/2" Nails (133 & 160)
		To Rafters/Truss	To Plates	To Studs		Uplift		Lateral (133/160)			Uplift		Lateral (133/160)		
						(133)	(160)	F ₁	F ₂		(133)	(160)	F ₁	F ₂	
HGA10	14	4-SDS1/4x1-1/2	4-SDS1/4x3	-	1523	435	435	1165	940	-	375	375	870	815	-
HS24	18	8-8dx1-1/2 & 2-8d slant	8-8d	-	2205	605 ⁶	605 ⁶	645 ⁶	1025 ⁶	-	520	520	555	880	-
H1	18	6-8dx1-1/2	4-8d	-	1958	490	585	485	165	455	400	400	415	140	370
H2	18	5-8d	-	5-8d	1040	335	335	-	-	335	230	230	-	-	230
H2.5	18	5-8d	5-8d	-	1300	415	415	150	150	415	365	365	130	130	365
H3	18	4-8d	4-8d	-	1433	455	455	125	160	415	320	320	105	140	290
H4	20	4-8d	4-8d	-	1144	360	360	165	160	360	235	235	140	135	235
H5	18	4-8d	4-8d	-	1485	455	465	115	200	455	265	265	100	170	265
H6	16	-	8-8d	8-8d	3983	915	950	650	-	-	785	820	560	-	-
H7	16	4-8d	2-8d	8-8d	2991	930	985	400	-	-	800	845	345	-	-
H8	18	5-10dx1-1/2	5-10dx1-1/2	-	2422	620	745	-	-	-	530	565	-	-	-
H9	18	4-SDS1/4x1-1/2	5-SDS1/4x1-1/2	-	2812	875	875	680	125	-	755	755	680	125	-
H10	18	8-8d-1-1/2	8-8dx1-1/2	-	3135	905	990	585	525	-	780	850	505	450	-
H10R	18	8-8dx1-1/2	8-8dx1-1/2	-	3135	905	990	585	525	-	780	850	505	450	-
H10-2	18	6-10d	6-10d	-	2447	760	760	455	395	-	655	655	390	340	-
H11Z	18	6-16dx2-1/2	6-16dx2-1/2	-	5097	830	830	525	760	-	715	715	450	655	-
H15	16	4-10dx1-1/2	4-10dx1-1/2	12-10dx1-1/2	6070	1300	1300	480	-	-	1120	1120	410	-	-
H15-2	16	4-10dx1-1/2	4-10dx1-1/2	12-10dx1-1/2	6070	1300	1300	480	-	-	1120	1120	410	-	-
H16	18	2-10dx1-1/2	10-10dx1-1/2	-	-	1600	1600	-	-	-	1300	1300	-	-	-
H16S	18	2-10dx1-1/2	10-10dx1-1/2	-	-	1600	1600	-	-	-	1300	1300	-	-	-



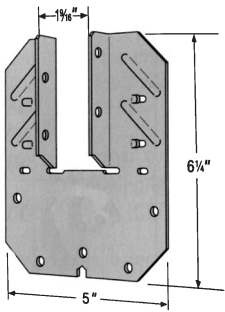
1. Loads have been increased 33% and 60% for earthquake or wind loading with no further increase allowed.
2. Allowable loads are for one anchor. A minimum rafter thickness of 2-1/2" must be used when framing anchors are installed on each side of the joist and on the same side of the plate.
3. Allowable uplift load for stud to bottom plate installation is 360 lbs (H4); 400 lbs (H2.5); 310 lbs (H8).
4. H8 - install 4-8d nails into the bottom plate and 5-8d nails into the stud.
5. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
6. HS24 allowable loads without slant nailing are 625 lbs (uplift), 590 lbs (F1), 640 lbs (F2).
7. Hurricane Ties are shown installed on the outside of the wall for clarity. Installation on the inside of the wall is acceptable. For a Continuous Load Path, connections must be on same side of the wall.

H16
 Presloped at 5:12. Pitch of 3:12 to 7:12 is acceptable

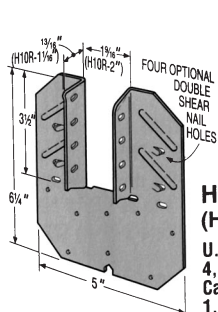


SIMPSON

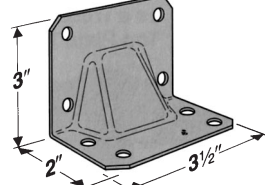
Strong-Tie[®] CONNECTORS



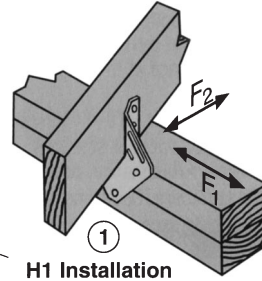
H9



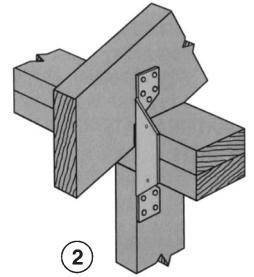
H10 (H10R similar)
U.S. Patents 4,480,941; Canada Patent 1,193,418



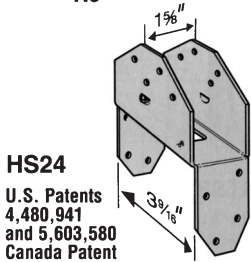
HGA10



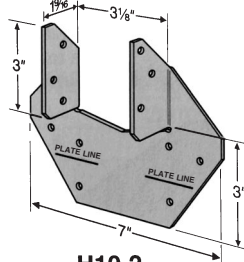
H1 Installation
(can eliminate costly rafter notching)



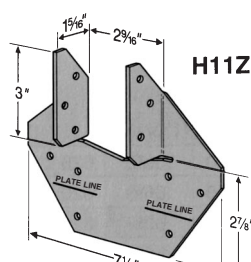
H2 Installation



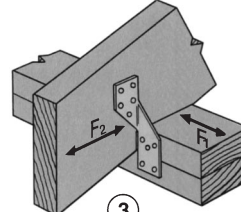
HS24
U.S. Patents 4,480,941 and 5,603,580
Canada Patent 1,193,418



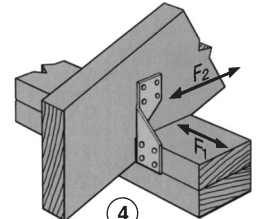
H10-2



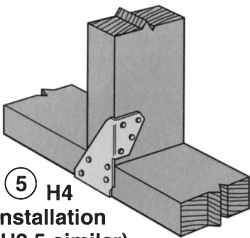
H11Z



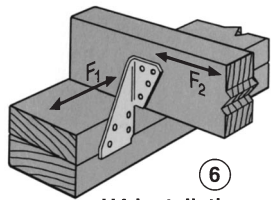
H2.5 Installation
(Nails into both top plates)



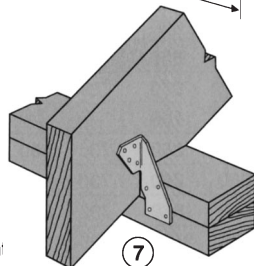
H3 Installation



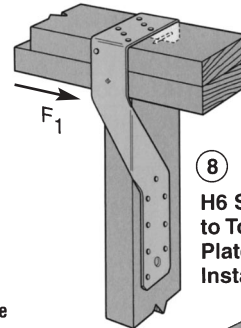
H4 Installation
(H2.5 similar)
(see footnote 3)



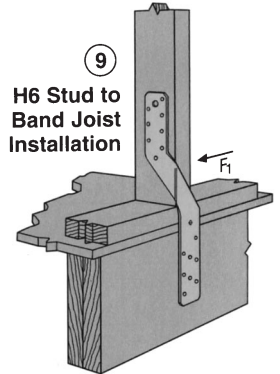
H4 Installation
(Nails into upper top plate)



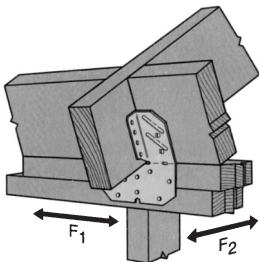
H5 Installation
(Nails into both top plate)



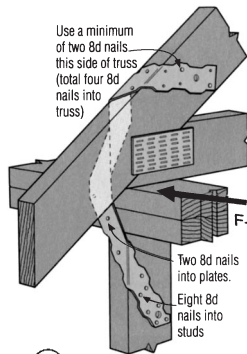
H6 Stud to Top Plate Installation



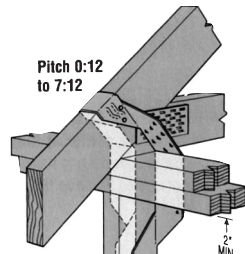
H6 Stud to Band Joist Installation



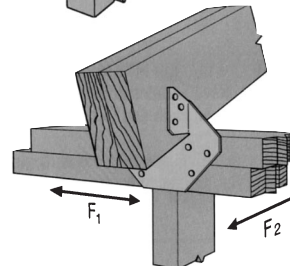
H10 Installation



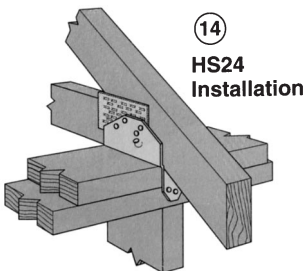
H7 Installation



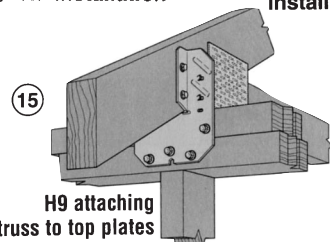
H15 Installation



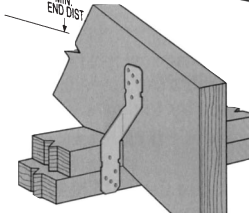
H10-2 Installation
(H11Z similar)



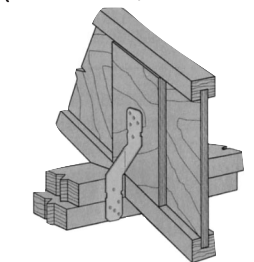
HS24 Installation



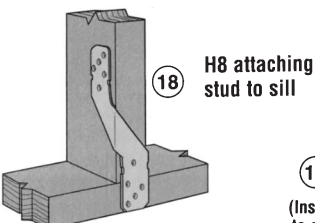
H9 attaching truss to top plates



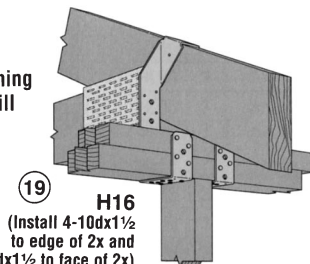
H8 attaching rafter to double top plates



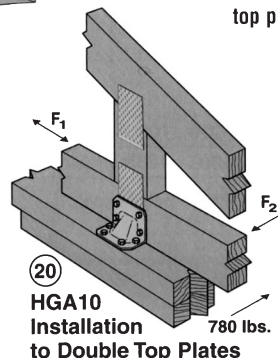
H8 attaching I-joist to double top plates



H8 attaching stud to sill

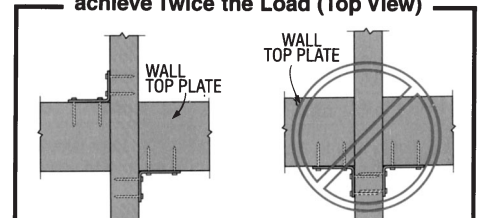


H16
(Install 4-10dx1 1/2 to edge of 2x and 6-10dx1 1/2 to face of 2x)



HGA10 Installation to Double Top Plates
780 lbs.

Hurricane Tie Installations to achieve Twice the Load (Top View)



Install diagonally across from each other for minimum 1 1/2" truss.

Nailing into both sides of a single ply 2x truss may cause the wood to split.