CATALOG No. 78H-1

6.6/Sim

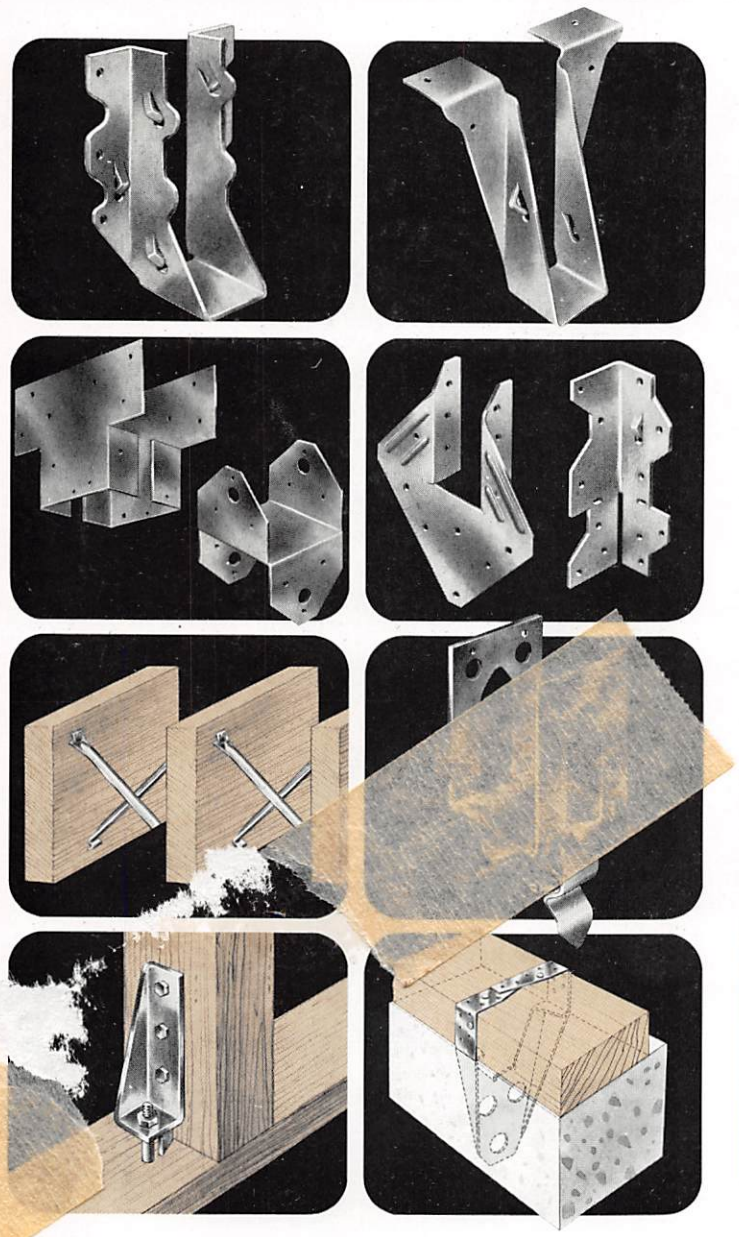
'78

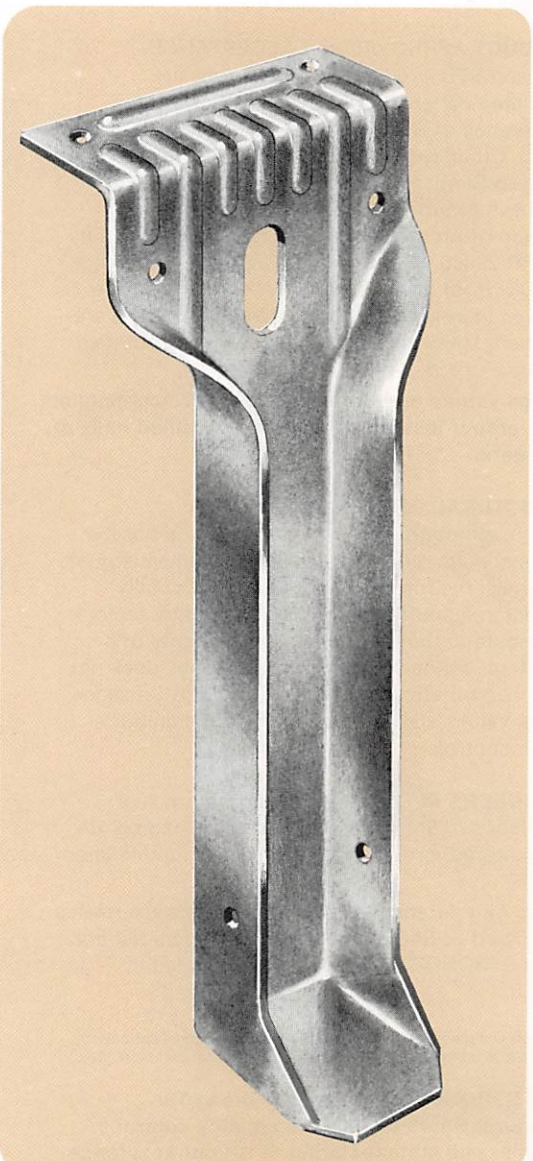
Strong-Tie® CONNECTORS

SIMPSON COMPANY

Structural Designs & Load Values

CODE APPROVED — INDUSTRY PREFERRED





SIMPSON CO. 6 ROUGH CARPENTRY

September, 1977 wood framing systems

Strong-Tie® CONNECTORS

SIMPSON COMPANY

Members of the construction industry, code officials, architects and engineers have all contributed measurably to the Strong-Tie offering by submitting ideas and suggestions to the factory design staff. At Simpson, excellence in tool design, manufacturing, quality control and material procurement insures product integrity and from the economic viewpoint, the maximum possible unit value. You have selected the industry's finest product when specifying Strong-Tie and a company that is dedicated to remaining the leader by performance.

PP

PRODUCT APPROVAL and ACCEPTANCE
Simpson STRONG-TIE code approvals are circulated nationally by the International Conference of Building Officials (Uniform Building Code). Other special control agencies have received Simpson STRONG-TIE design criterion and have awarded product acceptability (e.g., Division of Architecture — F.H.A. Los Angeles City No. RR 22086. Dade County, Florida.) ROOF LOADS: Roof loads in tables incorporate a 25% allowed increase when code design criterions are satisfied. Many geographical areas limit roof load increase to 15%.

Design values and Code Approvals are contingent upon proper installation with the specified nails or fasteners.

STRUCTURAL INTEGRITY:
Design, although extremely important, is not the whole consideration. The quality and chemistry of materials, the forming techniques, the quality control in manufacturing, and many other factors contribute to the load values and integrity of a structural connector. Simpson Company does not authorize others to produce STRONG-TIE designs, as the values are contingent on rigid manufacturing controls.

ENGINEERS PLEASE NOTE: Where unusual conditions of shrinkage, corrosion or loading are encountered, provide the factory with modification details.

Note: All reference to nominal lumber sizes relates to dressed or S4S dimensions. Nails included only when STRONG-TIE nail designation noted in TABLE.

Simpson Company reserves the right to change specifications, designs and models without notice and liability for such changes.

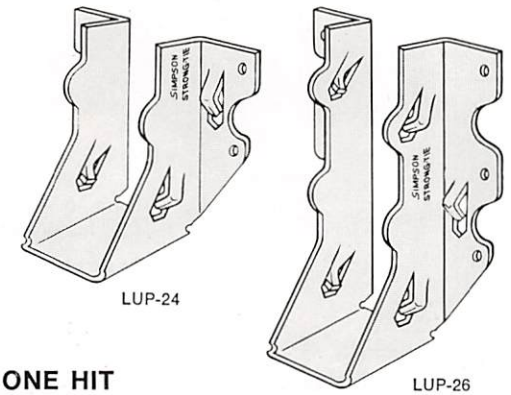
The "STRONG-TIE" stamp on Strong-Tie Structural Hardware signifies quality control in material and manufacturing. It is your assurance of product integrity and high structural strength.

INDEX

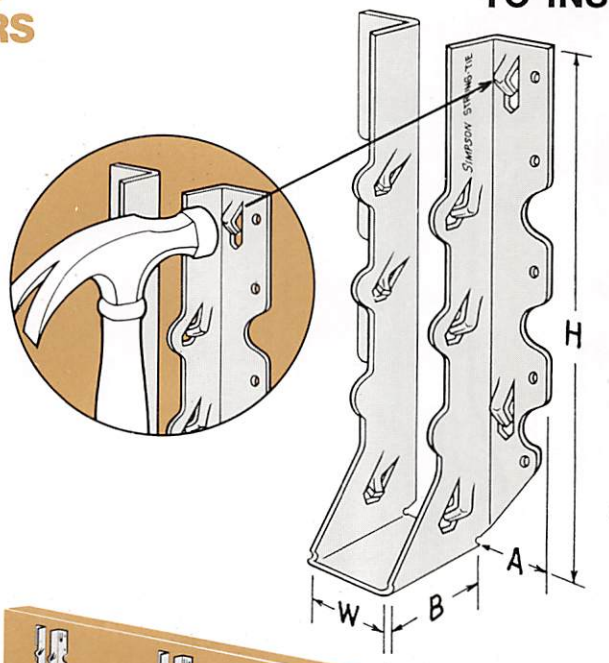
lup SPEED PRONG JOIST HANGERS

FRAMERS CLAIM 33⅓% FASTER TO INSTALL!

6.6/Sim



LUP-24 LUP-26



LUP-210

FIELD COMMENTS:

Less Nails to Drop
•
Fewer Sore Thumbs
•
Easier and Faster

Pat. No. 3601428

ONE HIT AND THE HANGER IS POSITIONED FOR HEADER NAILING.

Joist Nailing Eliminated. Special Short Nails Are Not Needed. **Speed Prongs** provide both instantaneous location of the hanger onto the carrying beam and "nailless" securing of the joist into the hanger. One blow drives a **Speed Prong** home. Additional economies may be achieved from the bonus load values of the LUP. The smaller hanger may provide the load value required.

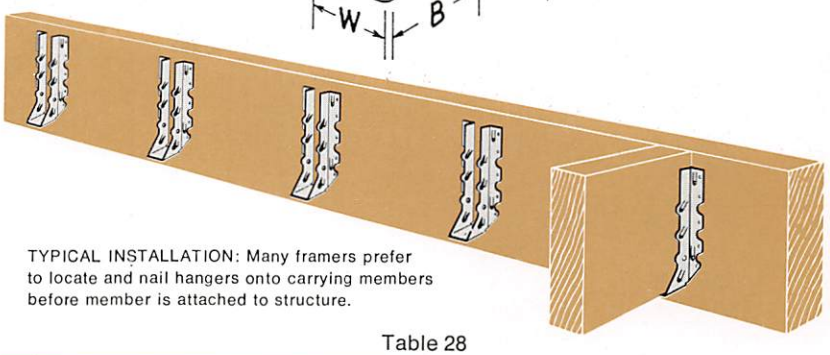
- Precision formed—engineered for the fastest installation and maximum load value.
- Proven design—years of high volume field experience with this new **Speed Prong** feature. Positive acceptance.
- **Speed Prongs** are curved steel for extra strength.
- Packed: 100 per box LUP 24 and LUP 26; 50 per box LUP 210.

* I.C.B.O. DESIGN LOADS — Determined from independent laboratory tests with a minimum safety factor of three.

NAILING—16d x 2½ or 16d common. Nails are not furnished.

MATERIAL—18 ga. galvanized steel.

INSTALLATION—Prongs are simpler and faster than nails. If deflected and bent on a knot, simply nail a 10d short or equal in the given slot. Cantilevered joists—in addition to joist prongs, add N10 nails at each prong.



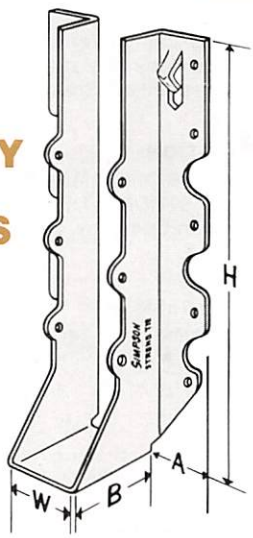
TYPICAL INSTALLATION: Many framers prefer to locate and nail hangers onto carrying members before member is attached to structure.

Table 28

MODEL NO.	JOIST SIZE (in inches)	DIMENSIONS				TOTAL NUMBER OF NAILS AND PRONGS		I.C.B.O. LOADS*	
		A	B	H	W	HEADER	JOIST	Normal	Maximum
LUP-24	2 x 4 2 x 6	7/8"	1½"	3 1/16"	1 5/16"	4-16d & 2-prongs	2-prongs	755	755
LUP-26	2 x 6 2 x 8 2 x 10	7/8"	2"	4 3/4"	1 5/16"	6-16d & 2-prongs	4-prongs	1160	1160
LUP-210	2 x 10 2 x 12 2 x 14 2 x 16	7/8"	2"	7 13/16"	1 5/16"	10-16d & 4-prongs	6-prongs	1270	1420

APPROVED—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

lu ECONOMY JOIST HANGERS



DESIGNED FOR CONSTRUCTION ECONOMY WITH HIGH STRENGTH VALUES!

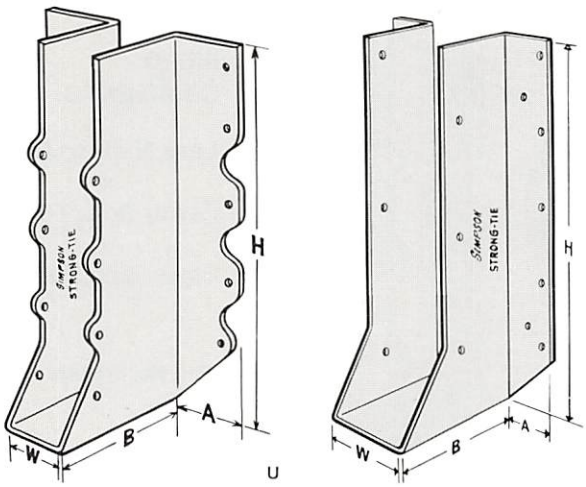
- ***Speed-Prongs***—just a tap of a hammer at each prong secures the LU for easy nailing.
- Precision formed—engineered for installation ease and design value.
- Packed with joist nails included: LU24, LU26, 100 per carton; LU210, 50 per carton.

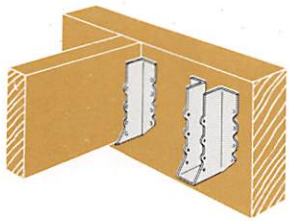
Table 5

MODEL NO.	JOIST SIZE	MATERIAL	DIMENSIONS				NAILING		AVER. ULT.	I.C.B.O. LOADS *	
			A	B	H	W	HEADER	JOIST		Normal	Max
LU24	2x4	18 ga. galv.	7/8"	1½"	3 1/16"	1 5/16"	4-10d	2-N10	1,800	425	530
LU26	2x6, 2x8	18 ga. galv.	7/8"	2"	4 3/4"	1 5/16"	6-10d	4-N10	3,600	635	800
LU210	2x10, 2x12, 2x14	18 ga. galv.	7/8"	2"	7 13/16"	1 5/16"	10-10d	6-N10	6,200	1060	1330

APPROVED—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

U STANDARD JOIST HANGERS





- **Complete selection available nationally**
- **Precision manufactured of top quality steels**
- **Laboratory Tested—Code Approved**

ONE-PIECE SKEWED "U" HANGER **

Top View Skewed Left

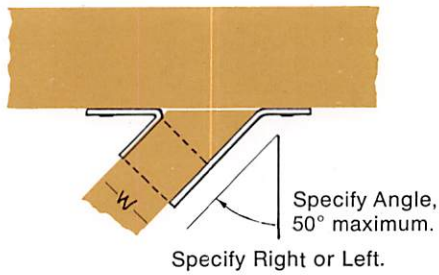


Table 4

MODEL NO.	JOIST SIZE	MATERIAL	DIMENSIONS				NAILING		AVER. ULT.	I.C.B.O. LOADS*	
			A	B	H	W	HEADER	JOIST		Normal	Maximum
U24	2x4	16 ga. galv.	1¼"	1½"	3⅛"	1⁹⁄₁₆"	4-10d	4-N10	2,575	435	540
U25	2x6, 2x8	16 ga. galv.	1¼"	2"	5"	1⁹⁄₁₆"	6-10d	6-N10	3,680	650	815
U29	2x10, 2x12, 2x14	16 ga. galv.	1¼"	2"	8⅛"	1⁹⁄₁₆"	10-10d	8-N10	6,200	1085	1355
U215	2x14, 2x16	16 ga. galv.	1¼"	2"	10"	1⁹⁄₁₆"	12-10d	10-N10	7,200	1300	1630
U34	3x4	16 ga. galv.	⅞"	2"	3⅜"	2⁹⁄₁₆"	4-16d	2-10d	2,600	535	670
U36	3x6, 3x8	16 ga. galv.	⅞"	2"	5⅜"	2⁹⁄₁₆"	8-16d	4-10d	5,000	1070	1345
U310	3x10, 3x12	16 ga. galv.	⅞"	2"	8⅞"	2⁹⁄₁₆"	14-16d	6-10d	9,800	1875	2350
U314	3x14, 3x16	16 ga. galv.	⅞"	2"	10⅜"	2⁹⁄₁₆"	16-16d	6-10d	11,000	2145	2690
U44	4x4	16 ga. galv.	⅞"	2"	2⅞"	3⁹⁄₁₆"	4-16d	2-10d	2,600	535	670
U46	4x6, 4x8	16 ga. galv.	⅞"	2"	4⅞"	3⁹⁄₁₆"	8-16d	4-10d	5,000	1070	1345
U410	4x10, 4x12	16 ga. galv.	⅞"	2"	8⅜"	3⁹⁄₁₆"	14-16d	6-10d	9,800	1875	2350
U414	4x14, 4x16	16 ga. galv.	⅞"	2"	10"	3⁹⁄₁₆"	16-16d	6-10d	11,000	2145	2690
U24-2	2x4 LAM.	16 ga. galv.	⅞"	2"	3"	3⅛"	4-16d	2-10d	2,600	535	670
U26-2	2x6 and 2x8 LAMINATED	16 ga. galv.	⅞"	2"	5"	3⅛"	8-16d	4-10d	5,000	1070	1345
U210-2	2x10, 2x12, 2x14 LAM.	16 ga. galv.	⅞"	2"	8½"	3⅛"	14-16d	6-10d	9,800	1875	2350
U66	6x6, 6x8	16 ga. galv.	1¼"	2"	5"	5½"	8-16d	4-10d	5,000	1070	1345
U610	6x10	16 ga. galv.	1¼"	2"	8½"	5½"	14-16d	6-10d	9,800	1875	2350

*APPROVED—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

SPECIFICATIONS:

Extra nail spacing from end butt speeds installation—eliminates splitting; joist nails included: N10, 9 ga. x 1-½" included with U24, U25, U29 and U215; available for other sizes. Packed: 100 per box for U24 and U25; all others 50 per box (except U66 and U610, 25 per box). The U66 and U610 design shape is the same as the HU Hangers.

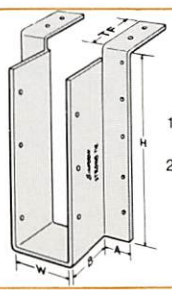
ROUGH BEAM SIZES MADE TO ORDER.

** **Skewed Hangers** are made to order. Their infinite variety precludes code approval. The tabular values for the nearest equivalent hanger is therefore to be used only as a general guide, subject to specific engineering design. Specify degree of angle and whether right or left. Also "W" and "H" dimensions. The "A" flange sizes vary and are determined by Simpson Company unless specified. Specify HU design for 4 by and larger.

ARCHITECT'S SPECIFICATION:

Joist Hangers shall have I.C.B.O. (Uniform Building Code) approval and be SIMPSON STRONG-TIE "U" Series Hangers as manufactured by Simpson Company, San Leandro, Calif.

utf JOIST HANGERS



1. Ideal for truss applications.
2. †Made to order for other sizes. See Table 7 as a guide to available sizes.

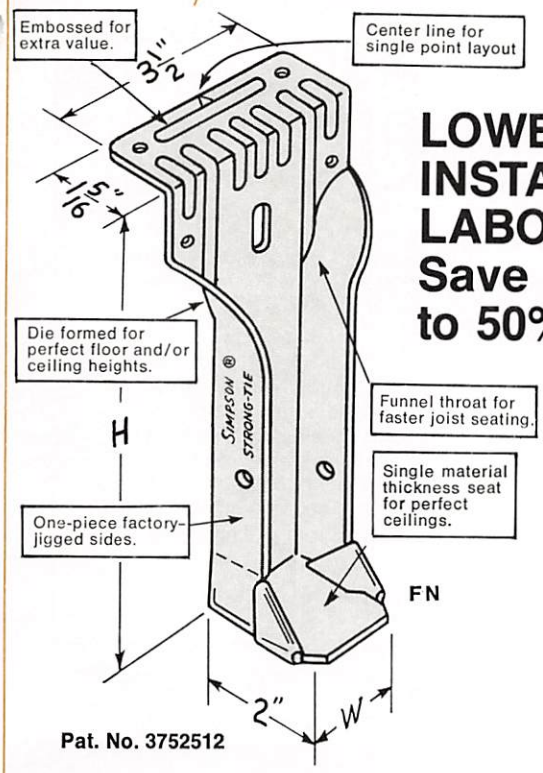
Table 4A

MODEL NO. †	JOIST SIZE	MATERIAL	DIMENSIONS					NAIL SCHEDULE		AVER. ULT.	I.C.B.O. LOADS*	
			A	B	H	W	TF	Header	Joist		Normal	Maximum
UTF24	2 x 4	18 ga. galv.	1¼"	2"	3⁹⁄₁₆"	1⁹⁄₁₆"	2½"	8-16d	2-10d	5,930	1370	1715
UTF26	2 x 6	18 ga. galv.	1¼"	2"	5½"	1⁹⁄₁₆"	2½"	10-16d	2-10d	6,175	1590	1985

*APPROVED—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

INSTALLATION: Install with 16d x 2½" Joist Hanger nails or 16d common. Nails are not furnished.

fn/f FORMED SEAT JOIST HANGERS



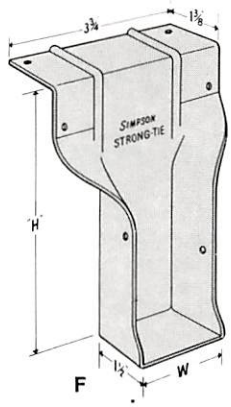
Pat. No. 3752512

LOWEST INSTALLATION LABOR Save 25% to 50%

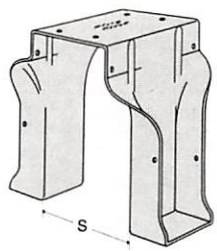
BOTH FRAMING LAYOUT AND INSTALLATION ARE FASTER!
Every hanger is **true die formed** for consistent dimensional accuracy—assures rapid framing, proper alignment and correct load-bearing timber seating.

SPECIFICATIONS:
MATERIAL: 18-gauge heavily coated galvanized steel, ASTM No. A-93.

INSTALLATION:
1. "W" dimensions are sized for finished lumber.
2. Install FN with four 16d x 2½" nails into carrying beam and two 10d x 1½" nails into joist. Nails not included.
3. F and FD can be installed with all 10d nails.
4. F and FD Models have approximately 3/16" material thickness in seat reinforcement area. Use where special "H" saddle design is required.

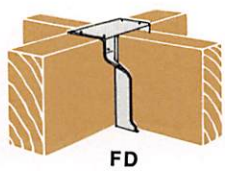


F



FD

Double Style (Saddle Type)



FD

Table 2

MODEL NO.	JOIST SIZE	W	H	AVER. ULT.	I.C.B.O. LOADS* Normal	Maximum
FN26	2x 6	1 5/16"	5 3/8"	5840	1370	1510
FN28	2x 8	1 5/16"	7 5/16"	5840	1370	1510
FN210	2x10	1 5/16"	9 5/16"	5840	1370	1510
FN212	2x12	1 5/16"	11¼"	5840	1370	1510
FN214	2x14	1 5/16"	13⅛"	5840	1370	1510
F26	2x 6	1 21/32"	5 3/8"	3585	1080	1210
F28	2x 8	1 21/32"	7¼"	3585	1080	1210
F210	2x10	1 21/32"	9¼"	3585	1080	1210
F212	2x12	1 21/32"	11¼"	3585	1080	1210
F214	2x14	1 21/32"	13¼"	4290	1080	1210

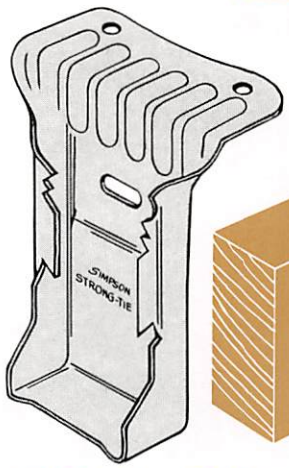
APPROVED—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

Ordering details: Unless otherwise noted, all "H" dimensions will be as listed in Table 2. Specify F Hanger when special "H" dimensions or doubles are required. Specify "S" dimensions in inches and fractions.

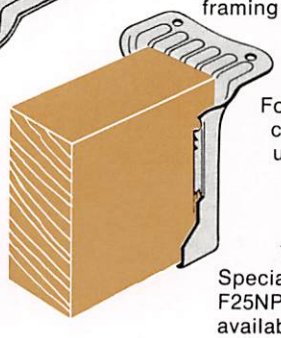
ARCHITECT'S SPECIFICATION: Joist Hangers shall have I.C.B.O. (Uniform Building Code) approval and be SIMPSON STRONG-TIE F and/or FD Hangers as manufactured by Simpson Company, San Leandro, California.

PANELIZED CONSTRUCTION

f24n GRIP-GROOVE PANEL HANGER



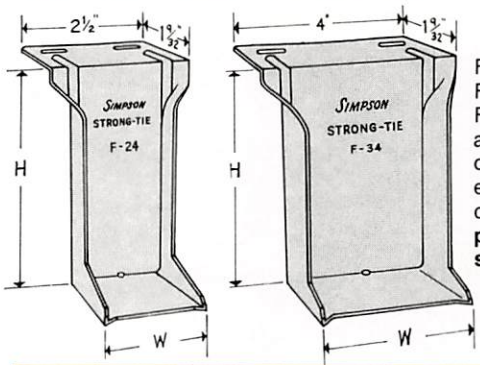
Provides positive lock into the 2 x 4—**without nailing.** "Saves at least $275 per day in assembly costs . . ." says major roof framing contractor.



Patent No. 3633950
For panels or components utilizing jigs or similar devices for precision fabrication.

Special:
F25NP seat prong available on order.

f24 f24-2 f26p f26-2 f34



F24, F24-2, F26P, F26-2 and F34 Hangers are specifically designed and engineered as components of **panelized construction.**

Table 3

MODEL NO.	JOIST SIZE	W	H	AVER. ULT.	I.C.B.O. LOADS* Normal	Maximum
F24	2x4	1 21/32"	3 15/32"	1607	510	510
F24N	2x4	1 9/16"	3 7/16"	1800	510	570
F24-2	2 – 2x4	3¼"	3 15/32"	1766	580	580
F26P	2x6	1 21/32"	5⅜"	1950	650	650
F26-2	2 – 2x6	3¼"	5⅜"	1950	650	650
F34	3x4	2⅝"	3 15/32"	1766	580	580

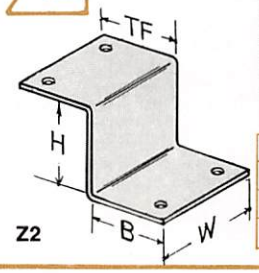
***APPROVED**—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

***I.C.B.O. DESIGN LOADS** — Determined from independent laboratory tests with a minimum safety factor of three.

INSTALLATION: Install F24 and F24N with 2-8d through top flanges. Install F24-2, F26P, F26-2 and F34 with 2-10d through top flanges. Seat nail is non-structural and does not contribute load value. In panelized construction, common practice is to nail through the sheathing and then through the hanger top flange.

Z CLIPS

Z2 Clips are used for securing 2 x 4 flat blocking between joists or trusses to support sheathing. Z4 and Z6 Clips are commonly used to support fit in joists when they are skewed. Minimum nailing is (1) 10d roofing nail into each member.



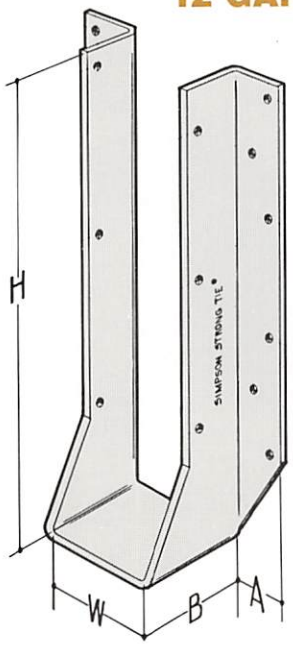
Z2

Table 46

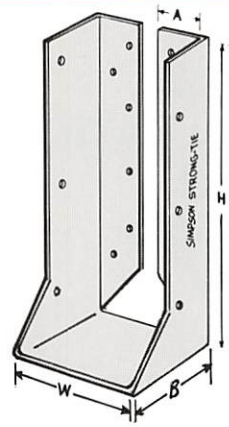
MODEL	MATERIAL	H	B	W	TF
Z2	20 ga.	1 9/16"	1⅜"	2 5/16"	1⅜"
Z4	12 ga.	3 7/16"	2"	1½"	1⅜"
Z6	12 ga.	5⅜"	2"	1½"	1⅜"

hu HEAVY DUTY JOIST HANGERS 12 GA. GALVANIZED

hhu EXTRA HEAVY DUTY JOIST HANGERS



Projection seat
for maximum bearing and section economy



huc

HUC—Same as HU except "A" flanges are turned in. Applies only to sizes 3 by and larger.

Custom HU Variations
Other HU variations—modified HU hangers can be obtained with one "A" flange turned inside, with both "A" elements in the same plane as the "B" elements (unbent), or with one "A" element bent and one unbent. For asymmetrical designs, specify rights and lefts.

ONE-PIECE SKEWED "HU" HANGERS **

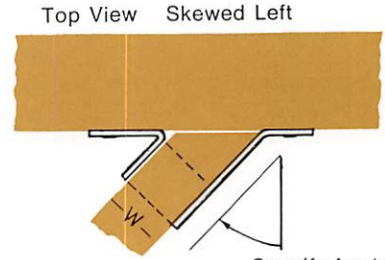
EXTRA-SAFETY FACTOR!

Strong-Tie "HU" and "HHU" Joist Hangers are heavy-duty connectors designed for schools and other structures requiring additional strength and safety factors. HU and HHU are identical except for nail schedule and load values. The heavy section offers longer life where corrosive conditions exist.

ROUGH BEAM SIZES MADE TO ORDER.

****Skewed Hangers** are made to order. Their infinite variety precludes code approval. The tabular values for the nearest equivalent hanger is therefore to be used only as a general guide, subject to specific engineering design. Specify degree of angle and whether right or left. Also "W" and "H" dimensions. The "A" flange sizes vary and are determined by Simpson Company unless specified. Specify HU design for 4 by and larger.

Top View Skewed Left



Specify Right or Left. Specify Angle, 50° Maximum.

Table 6

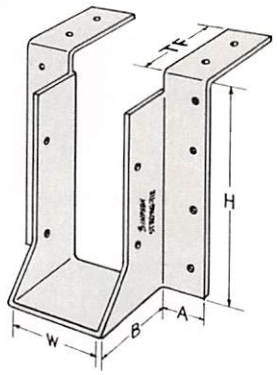
Model No.	Joist Size	Dimensions A	B	H	W	Nail Schedule Header	Joist	Aver. Ult.	I.C.B.O. Loads* Uplift	Normal	Max
HU26	2x 4 2x 6	1"	2"	3 1/16"	1 5/16"	4-16d	2-10d	2,600	110	535	670
HU28	2x 8	1"	2"	5 1/4"	1 5/16"	6-16d	4-10d	3,700	420	805	1010
HU210	2x10	1"	2"	7 1/8"	1 5/16"	8-16d	4-10d	4,900	420	1070	1345
HU212	2x12	1"	2"	9"	1 5/16"	10-16d	6-10d	6,200	630	1340	1680
HU214	2x14	1"	2 1/2"	10 1/8"	1 5/16"	12-16d	6-10d	8,500	630	1610	2015
HU34	3x 4	1 1/4"	2"	3 3/8"	2 5/16"	4-16d	2-10d	2,600	210	535	670
HU36	3x 6	1 1/4"	2"	5 3/8"	2 5/16"	8-16d	4-10d	5,020	420	1070	1345
HU38	3x 8	1 1/4"	2"	7 1/8"	2 5/16"	10-16d	4-10d	7,430	420	1340	1680
HU310	3x10	1 1/4"	2"	8 7/8"	2 5/16"	14-16d	6-10d	9,850	630	1875	2350
HU312	3x12	1 1/4"	2 1/2"	10 5/8"	2 5/16"	16-16d	6-10d	11,700	630	2145	2690
HU314	3x14	1 1/4"	2 1/2"	12 3/8"	2 5/16"	18-16d	8-10d	13,560	840	2410	3010
HU316	3x16	1 1/4"	2 1/2"	14 1/8"	2 5/16"	20-16d	8-10d	15,420	840	2680	3360
HU44	4x 4	1 1/4"	2"	2 7/8"	3 5/16"	4-16d	2-10d	2,600	210	535	670
HU46	4x 6	1 1/4"	2"	4 7/8"	3 5/16"	8-16d	4-10d	5,020	420	1070	1345
HHU46	4x 6	1 1/4"	2 1/2"	4 7/8"	3 5/16"	8-N20A	4-N20A	5,020	695	1390	1738
HU48	4x 8	1 1/4"	2"	6 5/8"	3 5/16"	10-16d	4-10d	7,430	420	1340	1680
HHU48	4x 8	1 1/4"	2 1/2"	6 5/8"	3 5/16"	10-N20A	4-N20A	7,430	695	1738	2170
HU410	4x10	1 1/4"	2"	8 3/8"	3 5/16"	14-16d	6-10d	9,850	630	1875	2350
HHU410	4x10	1 1/4"	2 1/2"	8 3/8"	3 5/16"	14-N20A	6-N20A	9,850	1043	2433	3040
HU412	4x12	1 1/4"	2 1/2"	10 1/8"	3 5/16"	16-16d	6-10d	11,700	630	2145	2690
HHU412	4x12	1 1/4"	2 1/2"	10 1/8"	3 5/16"	16-N20A	6-N20A	11,700	1043	2780	3475
HU414	4x14	1 1/4"	2 1/2"	11 7/8"	3 5/16"	18-16d	8-10d	13,560	840	2410	3010
HHU414	4x14	1 1/4"	2 1/2"	11 7/8"	3 5/16"	18-N20A	8-N20A	13,560	1390	3128	3909
HU416	4x16	1 1/4"	2 1/2"	13 5/8"	3 5/16"	20-16d	8-10d	15,420	840	2680	3360
HHU416	4x16	1 1/4"	2 1/2"	13 5/8"	3 5/16"	20-N20A	8-N20A	15,420	1390	3475	4344
HU66	6x 6	1 1/4"	2"	5"	5 1/2"	8-16d	4-16d	5,020	420	1070	1345
HHU66	6x 6	1 1/4"	2"	5"	5 1/2"	8-N20A	4-N20A	5,020	695	1390	1738
HU68	6x 8	1 1/4"	2"	6 5/8"	5 1/2"	10-16d	4-16d	7,430	420	1340	1680
HHU68	6x 8	1 1/4"	2"	6 5/8"	5 1/2"	10-N20A	4-N20A	7,430	695	1738	2170
HU610	6x10	1 1/4"	2"	8 3/8"	5 1/2"	14-16d	6-16d	9,850	630	1875	2350
HHU610	6x10	1 1/4"	2"	8 3/8"	5 1/2"	14-N20A	6-N20A	9,850	1043	2433	3040
HU612	6x12	1 1/4"	2 1/2"	10 1/8"	5 1/2"	16-16d	6-16d	11,700	630	2145	2690
HHU612	6x12	1 1/4"	2 1/2"	10 1/8"	5 1/2"	16-N20A	6-N20A	11,700	1043	2780	3475
HU614	6x14	1 1/4"	2 1/2"	11 7/8"	5 1/2"	18-16d	8-16d	13,560	840	2410	3010
HHU614	6x14	1 1/4"	2 1/2"	11 7/8"	5 1/2"	18-N20A	8-N20A	13,560	1390	3128	3909
HU616	6x16	1 1/4"	2 1/2"	13 5/8"	5 1/2"	20-16d	8-16d	15,420	840	2680	3360
HHU616	6x16	1 1/4"	2 1/2"	13 5/8"	5 1/2"	20-N20A	8-N20A	15,420	1390	3475	4344
HU24-2	2x 4	1 1/4"	2"	3 1/16"	3 1/8"	4-16d	2-10d	2,600	210	535	670
HU26-2	2x 6	1 1/4"	2"	5 1/16"	3 1/8"	8-16d	4-10d	5,020	420	1070	1345
HHU26-2	2x 6	1 1/4"	2 1/2"	5 1/16"	3 1/8"	8-N20A	4-N20A	5,020	695	1390	1738
HU28-2	2x 8	1 1/4"	2"	6 13/16"	3 1/8"	10-16d	4-10d	7,430	420	1340	1680
HHU28-2	2x 8	1 1/4"	2 1/2"	6 13/16"	3 1/8"	10-N20A	4-N20A	7,430	695	1738	2170
HU210-2	2x10	1 1/4"	2"	8 9/16"	3 1/8"	14-16d	6-10d	9,850	630	1875	2350
HHU210-2	2x10	1 1/4"	2 1/2"	8 9/16"	3 1/8"	14-N20A	6-N20A	9,850	1043	2433	3040
HU212-2	2x12	1 1/4"	2 1/2"	10 5/16"	3 1/8"	16-16d	6-10d	11,700	630	2145	2690
HHU212-2	2x12	1 1/4"	2 1/2"	10 5/16"	3 1/8"	16-N20A	6-N20A	11,700	1043	2780	3475
HU214-2	2x14	1 1/4"	2 1/2"	12 1/16"	3 1/8"	18-16d	8-10d	13,530	840	2410	3010
HHU214-2	2x14	1 1/4"	2 1/2"	12 1/16"	3 1/8"	18-N20A	8-N20A	13,530	1390	3128	3909
GLULAM SIZES											
HHU3.125/12	3 1/8	1 1/4"	2 1/2"	12"	3 1/8"	16-N20A	6-N20A	9,850	1043	2780	3475
HHU3.125/16	3 1/8	1 1/4"	2 1/2"	16"	3 1/8"	20-N20A	8-N20A	11,700	1390	3475	4344
HHU5.125/12	5 1/8	1 1/4"	2 1/2"	12"	5 1/4"	14-N20A	6-N20A	9,850	1043	2780	3475
HHU5.125/16	5 1/8	1 1/4"	2 1/2"	16"	5 1/4"	20-N20A	8-N20A	11,700	1390	3475	4344

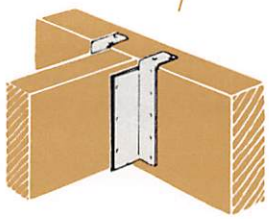
GLULAM SIZES

*APPROVED—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

See bottom of Page 7 for further details.

hutf HEAVY DUTY JOIST HANGERS / hhutf EXTRA HEAVY DUTY JOIST HANGERS





MAXIMUM STRENGTH AND SAFETY!

High load values in vertical, lateral, uplift, and withdrawal account for the preference of this design. The two-plane nailing schedule also offers extra design value when mechanical vibration conditions exist. The HUTF and HHUTF are identical except for nail schedule and load values.

huctf

HUCTF—Same as HUTF except "A" flanges are turned in. Applies only to sizes 3 by and larger.

Table 7

Model No.	Joist Size	Dimensions A	B	H	W	TF	Nail Schedule Header	Joist	Aver. Ult.	I.C.B.O. Loads* Uplift	Norm	Max
HU26TF	2x 6	1¼"	2"	5⅜"	1⅜16"	2"	10-16d	4-10d	4,800	420	1620	2030
HU28TF	2x 8	1¼"	2"	7¼"	1⅜16"	2½"	10-16d	4-10d	6,000	420	1620	2030
HU210TF	2x10	1¼"	2"	9¼"	1⅜16"	2½"	12-16d	4-10d	7,200	420	1620	2030
HU212TF	2x12	1¼"	2"	11⅞"	1⅜16"	2½"	14-16d	6-10d	8,400	630	1860	2320
HU214TF	2x14	1¼"	2½"	13⅛"	1⅜16"	2½"	16-16d	6-10d	9,600	630	1860	2330
HU216TF	2x16	1¼"	2½"	15⅛"	1⅜16"	2½"	18-16d	8-10d	10,800	840	2070	2580
HU34TF	3x 4	1¼"	2"	3½"	2⅜16"	2½"	8-16d	2-10d	8,270	210	2160	2600
HU36TF	3x 6	1¼"	2"	5⅜"	2⅜16"	2½"	10-16d	4-10d	9,830	420	2390	2990
HU38TF	3x 8	1¼"	2"	7¼"	2⅜16"	2½"	12-16d	4-10d	11,390	420	2390	2990
HU310TF	3x10	1¼"	2"	9¼"	2⅜16"	2½"	14-16d	6-10d	12,950	630	2630	3320
HU312TF	3x12	1¼"	2½"	11⅞"	2⅜16"	2½"	16-16d	6-10d	13,760	630	2630	3320
HU314TF	3x14	1¼"	2½"	13⅛"	2⅜16"	2½"	18-16d	8-10d	14,580	840	3350	4180
HU316TF	3x16	1¼"	2½"	15⅛"	2⅜16"	2½"	20-16d	8-10d	15,400	840	3350	4180
HU44TF	4x 4	1¼"	2"	3½"	3⅜16"	2½"	8-16d	2-10d	8,270	210	2600	2600
HU46TF	4x 6	1¼"	2"	5⅜"	3⅜16"	2½"	10-16d	4-10d	9,830	420	3160	3210
HHU46TF	4x 6	1¼"	2½"	5⅜"	3⅜16"	2½"	10-N20A	4-N20A	11,425	695	3390	3425
HU48TF	4x 8	1¼"	2"	7¼"	3⅜16"	2½"	12-16d	4-10d	11,390	420	3160	3600
HHU48TF	4x 8	1¼"	2½"	7¼"	3⅜16"	2½"	12-N20A	4-N20A	11,600	695	3390	4130
HU410TF	4x10	1¼"	2"	9¼"	3⅜16"	2½"	14-16d	6-10d	12,950	630	3400	4130
HHU410TF	4x10	1¼"	2½"	9¼"	3⅜16"	2½"	14-N20A	6-N20A	11,875	1043	3740	4675
HU412TF	4x12	1¼"	2½"	11⅞"	3⅜16"	2½"	16-16d	6-10d	13,760	630	4070	4400
HHU412TF	4x12	1¼"	2½"	11⅞"	3⅜16"	2½"	16-N20A	6-N20A	14,000	1043	4410	5515
HU414TF	4x14	1¼"	2½"	13⅛"	3⅜16"	2½"	18-16d	8-10d	14,580	840	4310	4710
HHU414TF	4x14	1¼"	2½"	13⅛"	3⅜16"	2½"	18-N20A	8-N20A	15,000	1390	4760	5950
HU416TF	4x16	1¼"	2½"	15⅛"	3⅜16"	2½"	20-16d	8-10d	15,400	840	4310	4710
HHU416TF	4x16	1¼"	2½"	15⅛"	3⅜16"	2½"	20-N20A	8-N20A	15,000	1390	4760	5950
HU66TF	6x 6	1¼"	2"	5⅜"	5½"	2½"	10-16d	4-16d	9,830	210	3210	3210
HHU66TF	6x 6	1¼"	2"	5⅜"	5½"	2½"	10-N20A	4-N20A	11,425	695	3425	3425
HU68TF	6x 8	1¼"	2"	7¼"	5½"	2½"	12-16d	4-16d	11,390	420	3600	3600
HHU68TF	6x 8	1¼"	2"	7¼"	5½"	2½"	12-N20A	4-N20A	12,800	695	3525	4130
HU610TF	6x10	1¼"	2"	9¼"	5½"	2½"	14-16d	6-16d	12,950	630	4130	4130
HHU610TF	6x10	1¼"	2"	9¼"	5½"	2½"	14-N20A	6-N20A	15,000	1043	4835	4835
HU612TF	6x12	1¼"	2½"	11⅞"	5½"	2½"	16-16d	6-16d	13,760	630	4400	4400
HHU612TF	6x12	1¼"	2½"	11⅞"	5½"	2½"	16-N20A	6-N20A	17,650	1043	5765	5765
HU614TF	6x14	1¼"	2½"	13⅛"	5½"	2½"	18-16d	8-16d	14,580	840	4710	4710
HHU614TF	6x14	1¼"	2½"	13⅛"	5½"	2½"	18-N20A	8-N20A	20,500	1390	6685	6700
HU616TF	6x16	1¼"	2½"	15⅛"	5½"	2½"	20-16d	8-16d	15,400	840	4710	4710
HHU616TF	6x16	1¼"	2½"	15⅛"	5½"	2½"	20-N20A	8-N20A	20,500	1390	6685	6700
HU24-2TF	(2)2x 4	1¼"	2"	3½"	3⅛"	2½"	8-16d	2-10d	8,270	210	2540	2600
HU26-2TF	(2)2x 6	1¼"	2"	5⅜"	3⅛"	2½"	10-16d	4-10d	9,830	420	2780	3210
HHU26-2TF	(2)2x 6	1¼"	2½"	5⅜"	3⅛"	2½"	10-N20A	4-N20A	11,000	695	3005	3425
HU28-2TF	(2)2x 8	1¼"	2"	7¼"	3⅛"	2½"	12-16d	4-10d	11,390	420	2780	3470
HHU28-2TF	(2)2x 8	1¼"	2½"	7¼"	3⅛"	2½"	12-N20A	4-N20A	11,000	695	3005	3755
HU210-2TF	(2)2x10	1¼"	2"	9¼"	3⅛"	2½"	14-16d	6-10d	12,950	630	3010	3770
HHU210-2TF	(2)2x10	1¼"	2½"	9¼"	3⅛"	2½"	14-N20A	6-N20A	11,625	1043	3350	4190
HU212-2TF	(2)2x12	1¼"	2½"	11⅞"	3⅛"	2½"	16-16d	6-10d	13,760	630	3590	4400
HHU212-2TF	(2)2x12	1¼"	2½"	11⅞"	3⅛"	2½"	16-N20A	6-N20A	13,000	1043	3930	4915
HU214-2TF	(2)2x14	1¼"	2½"	13⅛"	3⅛"	2½"	18-16d	8-10d	14,580	840	3830	4710
HHU214-2TF	(2)2x14	1¼"	2½"	13⅛"	3⅛"	2½"	18-N20A	8-N20A	14,000	1390	4280	5350
HU216-2TF	(2)2x16	1¼"	2½"	15⅛"	3⅛"	2½"	20-16d	8-10d	15,400	840	3830	4710
HHU216-2TF	(2)2x16	1¼"	2½"	15⅛"	3⅛"	2½"	20-N20A	8-N20A	14,000	1390	4280	5350
HU210-3TF	(3)2x10	1¼"	2"	9¼"	4¹³16"	2½"	14-16d	6-16d	12,950	630	4130	4130
HHU210-3TF	(3)2x10	1¼"	2"	9¼"	4¹³16"	2½"	14-N20A	6-N20A	15,000	1043	4510	4835
HU212-3TF	(3)2x12	1¼"	2½"	11⅞"	4¹³16"	2½"	16-16d	6-16d	13,760	630	4400	4400
HHU212-3TF	(3)2x12	1¼"	2½"	11⅞"	4¹³16"	2½"	16-N20A	6-N20A	17,650	1043	5375	5765
HU214-3TF	(3)2x14	1¼"	2½"	13⅛"	4¹³16"	2½"	18-16d	8-16d	14,580	840	4710	4710
HHU214-3TF	(3)2x14	1¼"	2½"	13⅛"	4¹³16"	2½"	18-N20A	8-N20A	19,000	1390	5720	6700
HU216-3TF	(3)2x16	1¼"	2½"	15⅛"	4¹³16"	2½"	20-16d	8-16d	15,400	840	4710	4710
HHU216-3TF	(3)2x16	1¼"	2½"	15⅛"	4¹³16"	2½"	20-N20A	8-N20A	19,000	1390	5720	6700
GLULAM SIZES												
HHU3.125/12TF	3⅛	1¼"	2½"	12"	3⅛"	2½"	16-N20A	6-N20A	14,400	1043	4055	5070
HHU3.125/16TF	3⅛	1¼"	2½"	16"	3⅛"	2½"	20-N20A	8-N20A	15,450	1390	4400	5500
HHU5.125/12TF	5⅛	1¼"	2½"	12"	5¼"	2½"	16-N20A	6-N20A	17,650	1043	5765	6700
HHU5.125/16TF	5⅛	1¼"	2½"	16"	5¼"	2½"	20-N20A	8-N20A	20,500	1390	6325	6700

SPECIFICATIONS: (For HU, HHU, HUC, HUTF and HHUTF hangers)

FABRICATION: Precision fabrication provides dimensional accuracy and controlled angles to insure proper joist bearing and connection.

MATERIAL: 12 gauge galvanized prime quality steel.

DIMENSIONS: For special dimensions, utilize detail designations, e.g., W=4", B=2⅛", H=17".

GLULAMINATED and ROUGH BEAM SIZES: Made to order.

***APPROVED**—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

NAILING SCHEDULES: Table nail schedules are consistent with those employed in product testing and evaluation.

N20A are 20d (.192 x 1¾" annular ring); N16 are 16d (8 ga. x 2½"); N10 are 10d (9 ga. x 1½").

N20A nails are furnished with HHU and HHUTF.

ARCHITECT'S SPECIFICATION: Joist Hangers shall have I.C.B.O. (Uniform Building Code) approval and be SIMPSON STRONG-TIE HUTF (or HU, HHU, HUC, HUCTF, or HHUTF) Series Hangers as manufactured by Simpson Company, San Leandro, California.

SSU STAINLESS STEEL JOIST HANGERS

FOR HOSTILE ENVIRONMENTS

Dimensional characteristics similar to HU Hanger, Table 6, page 6.

SPECIFICATIONS

FABRICATION: Precision fabrication provides dimensional accuracy and controlled angles to insure proper joist bearing and connections.

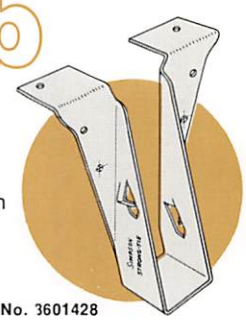
MATERIAL: 16-gauge austenitic nickel-chromium stainless steel—type 304.

NAILS: Stainless steel type 304 nails (16d x 1¾" annular ring) are furnished with the hangers to insure complete corrosion protection.

DIMENSIONS: For special dimensions, designate by code letters e.g., W=4", B=2⅛", H=17").

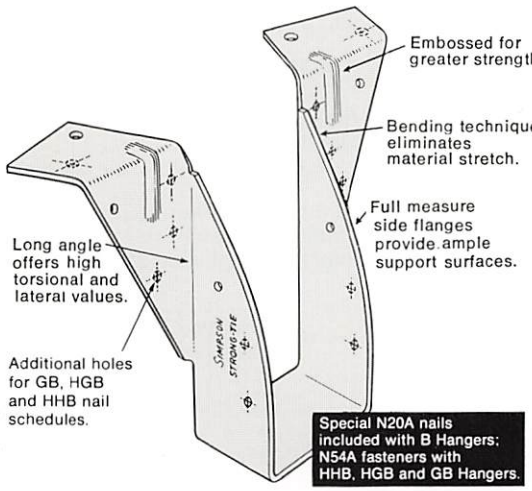
jb/lb/b/hb/hhb/gb/hgb

JOIST AND PURLIN HANGERS

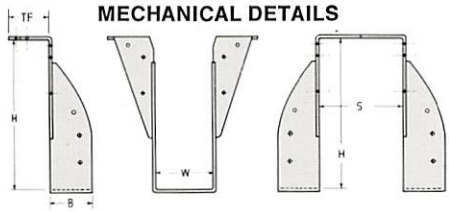


Pat. No. 3601428

FEATURE • **Greater Load Capacities** Vertical • Torsional • Lateral • Uplift • **Increased Bearing Area** One-piece design • **Added Economy** • **Building Code Approved**



MECHANICAL DETAILS

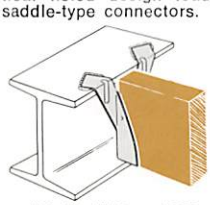


DESIGN NOTE

This Simpson design configuration has the material section where it counts—the nailing schedule where it counts! Provides maximum load values in vertical, torsional, lateral and uplift. Shown at right, typical configuration of LBD, BD, HHBD, GBD Saddle Hangers.

CUSTOM SPECIFICATIONS (do not apply to JB Hangers)

1. Laminated or other special hangers are made to order Designate "W" dimension.
2. Saddle hangers are available and made to engineer's specifications. They may be used for most conditions except at end wall and are especially recommended for Nailer (Sleeper) applications. Specify "S" dimension as well as "W" and "H" dimensions. Saddle hangers are welded by certified welders.
3. Special "H" dimensions are available to accommodate your framing requirements. The standard "H" dimension found in the adjoining tables have an allowance to compensate for common shrinkage conditions.
4. HHB values do not apply when installation is over 2 by or 3 by nailers (on top of steel beams)—to maintain vertical listed design loads for this application specify saddle-type connectors.



LB, B, HHB and GB are CODE-APPROVED for weld-on applications. Optional installation with code-approved powder-actuated systems.

Typical LBD, BD, HHBD or GBD Saddle Hanger Made to order

Table 8

Model No.	Joist or Purlin Size	Material Thickness	Dimensions B	H	W	TF	Fastener Schedule Header	Joist	Uplift Design Load	Vertical Av. Ult.	I.C.B.O. Loads* Normal	Maximum
JB26	2x 6	18 ga.	1½"	5⅜"	1 9/16"	1 5/16"	4-10d	2 prongs	—	3,807	1010	1260
JB28	2x 8	18 ga.	1¾"	7 5/16"	1 9/16"	1 5/16"	4-10d	2 prongs	—	3,807	1010	1260
JB210	2x10	18 ga.	2"	9 5/16"	1 9/16"	1 5/16"	4-16d	2 prongs	—	4,120	1155	1445
JB212	2x12	18 ga.	2⅛"	11¼"	1 9/16"	1 5/16"	6-16d	2 prongs	—	5,840	1225	1490
LB26	2x 6	14 ga.	1½"	5⅜"	1 9/16"	1½"	4-16d	2-10d	267	4,803	1085	1355
LB28	2x 8	14 ga.	1½"	7¼"	1 9/16"	1½"	4-16d	2-10d	267	4,803	1085	1355
LB210	2x10	14 ga.	2"	9¼"	1 9/16"	1½"	4-16d	2-10d	267	4,803	1370	1550
LB212	2x12	14 ga.	2"	11⅞"	1 9/16"	1½"	4-16d	2-10d	267	4,803	1370	1550
LB214	2x14	14 ga.	2"	13⅞"	1 9/16"	1½"	4-16d	2-10d	267	4,803	1370	1550
LB216	2x16	14 ga.	2"	15⅞"	1 9/16"	1½"	4-16d	2-10d	267	4,803	1370	1550
B38	3x 8	12 ga.	2"	7¼"	2 9/16"	)½"	4-N20A	2-10d	267	7,076	1925	2050
B310	3x10	12 ga.	2"	9¼"	2 9/16"	2½"	4-N20A	2-10d	267	7,076	1925	2050
B312	3x12	12 ga.	2⅜"	11⅞"	2 9/16"	2½"	4-N20A	2-10d	267	9,585	2285	2430
B314	3x14	12 ga.	3"	13⅞"	2 9/16"	2½"	4-N20A	2-10d	267	9,585	2560	2560
B316	3x16	12 ga.	3"	15⅞"	2 9/16"	2½"	4-N20A	2-10d	267	9,585	2560	2560
B48	4x 8	12 ga.	2"	7¼"	3 9/16"	2½"	4-N20A	2-10d	267	7,076	2560	2560
B410	4x10	12 ga.	2"	9¼"	3 9/16"	2½"	4-N20A	2-10d	267	7,076	2560	2560
B412	4x12	12 ga.	2⅜"	11⅞"	3 9/16"	2½"	4-N20A	2-10d	267	9,585	3155	3155
HB412	4x12	12 ga.	3"	11⅞"	3 9/16"	2½"	10-N20A	4-N20A	695	12,350	4000	4000
B414	4x14	12 ga.	2⅜"	13⅞"	3 9/16"	2½"	4-N20A	2-10d	267	9,585	3155	3155
HB414	4x14	12 ga.	3"	13⅞"	3 9/16"	2½"	10-N20A	4-N20A	695	12,350	4000	4000
B416	4x16	12 ga.	2⅜"	15⅞"	3 9/16"	2½"	4-N20A	2-10d	267	9,585	3155	3155
HB416	4x16	12 ga.	3"	15⅞"	3 9/16"	2½"	10-N20A	4-N20A	695	12,350	4000	4000
B610	6x10	12 ga.	2⅜"	9¼"	5½"	2½"	10-N20A	2-10d	267	12,350	4000	4000
B612	6x12	12 ga.	2⅜"	11⅞"	5½"	2½"	10-N20A	2-10d	267	12,350	4000	4000
B614	6x14	12 ga.	2⅜"	13⅞"	5½"	2½"	10-N20A	2-10d	267	12,350	4000	4000
B616	6x16	12 ga.	2⅜"	15⅞"	5½"	2½"	10-N20A	2-10d	267	12,350	4000	4000
HHB412	4x12	7 ga.	3"	11⅞"	3 9/16"	2½"	4-N54A	2-N54A	686	12,900	3940	4180
HHB414	4x14	7 ga.	3"	13⅞"	3 9/16"	2½"	6-N54A	4-N54A	1,370	15,000	4045	5055
HHB416	4x16	7 ga.	3"	15⅞"	3 9/16"	2½"	6-N54A	4-N54A	1,370	15,000	4045	5055
HHB68	6x 8	7 ga.	2"	7¼"	5¼"	2½"	4-N54A	2-N54A	686	12,900	3940	4180
HHB610	6x10	7 ga.	2"	9¼"	5½"	2½"	4-N54A	2-N54A	686	12,900	3940	4180
HHB612	6x12	7 ga.	3"	11⅞"	5½"	2½"	10-N54A	6-N54A	2,058	19,100	5920	6230
HHB614	6x14	7 ga.	3"	13⅞"	5½"	2½"	10-N54A	6-N54A	2,058	19,100	5920	6230
HHB616	6x16	7 ga.	3"	15⅞"	5½"	2½"	10-N54A	6-N54A	2,058	19,100	5920	6230
HHB812	8x12	7 ga.	3"	11⅞"	7½"	2½"	10-N54A	6-N54A	2,058	19,100	6230	6230
HHB814	8x14	7 ga.	3"	13⅞"	7½"	2½"	10-N54A	6-N54A	2,058	19,100	6230	6230
HHB816	8x16	7 ga.	3"	15⅞"	7½"	2½"	10-N54A	6-N54A	2,058	19,100	6230	6230
GLULAM SIZES										**GLULAM SIZES**		
HHB3	3⅛"x	7 ga.	3"	Specify	3¼"	2½"	10-N54A	6-N54A	2,058	19,100	3610	4515
HHB5	5⅛"x	7 ga.	3"	Specify	5¼"	2½"	10-N54A	6-N54A	2,058	19,100	5920	6230
HHB7	6¾"x	7 ga.	3"	Specify	6⅞"	2½"	10-N54A	6-N54A	2,058	19,100	6230	6230
GB3	3⅛"	7 ga.	3½"	Specify	3¼"	2½"	14-N54A	6-N54A	2,060	26,800	4920	6150
GB5	5⅛"	7 ga.	3½"	Specify	5¼"	2½"	14-N54A	6-N54A	2,060	26,800	6910	8350
GB7	6¾"	7 ga.	3½"	Specify	6⅞"	2½"	14-N54A	6-N54A	2,060	26,800	8350	8350
HGB5	5⅛"	7 ga.	3½"	Specify	5¼"	2½"	15-N54A	6-N54A	2,060	30,300	9440	9800
HGB7	6¾"	7 ga.	3½"	Specify	6⅞"	2½"	15-N54A	6-N54A	2,060	30,300	9800	9800

SPECIFICATIONS:

MATERIALS: All hangers are manufactured of prime quality steel. JB, LB and B Series are manufactured of galvanized steel with a coating specification.

FABRICATION: Precision forming with manufacturing quality control provides dimensional accuracy and insures proper joist bearing and connection. An embossed section is formed into the design of the top angles on B412 and B414 for extra strength. **FINISH:** Hangers that are not of galvanized steel have special corrosion protection with a linear polymer formula–attractive gray color.

FASTENER SCHEDULES: (a) N20A is a .192 x 1¾" annular ring and is **included** with all **B** type hangers. This nail has excellent resistance to withdrawal and to lateral loads. (b) N16 is a 16d x 2½" joist hanger nail. (c) N10 is a 10d x 1½" joist hanger nail. (d) N54A is .250" in diameter by 2½" in length with spaced "fiber lock" deformations on the shank. N54A fasteners are **included** with all HHB and GB hangers.

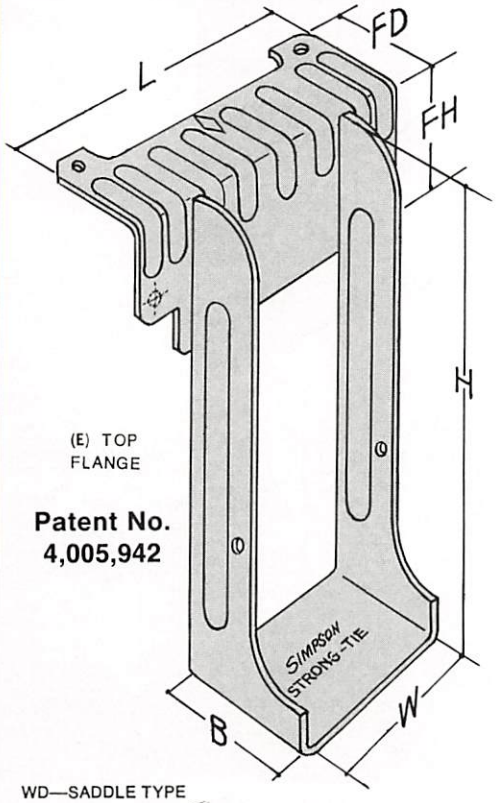
*APPROVED–See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

DESIGN DIMENSIONS: "H" dimensions are sized to account for normal joist shrinkage. Specify if special "H" dimensions are required. "W" dimensions listed are for dressed timber widths, as noted. Specify if special "W" dimensions are required.

ARCHITECT'S SPECIFICATION: Joist Hangers shall have I.C.B.O. (Uniform Building Code) approval and be SIMPSON STRONG-TIE B, JB, LB, HHB, HGB and/or GB Series Hangers as manufactured by Simpson Company, San Leandro, CA.

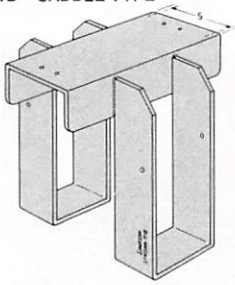
W PURLIN HANGERS

EXCEPTIONAL INSTALLATION FLEXIBILITY!

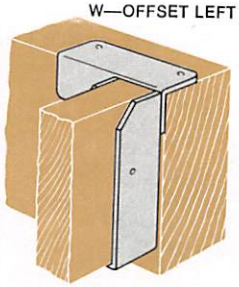


Patent No. 4,005,942

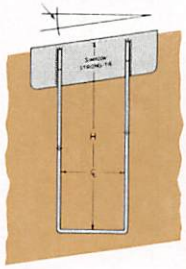
WD—SADDLE TYPE



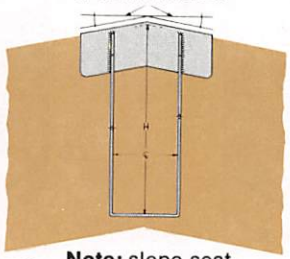
W—OFFSET LEFT



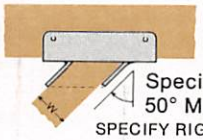
W—SLOPED PROVIDE ANGLE



W—RIDGE SPECIFY ANGLES



TOP VIEW - SKEWED LEFT



Specify Angle, 50° Maximum.
SPECIFY RIGHT OR LEFT

Note: slope seat hangers on request.

Table 30A

	DIMENSIONS								Standard Nailing			I.C.B.O. Loads*	
	Stirrup				Formed (F) or Embossed (E) Angles								
Model No.& Joist Size	H	W	B	MAT.	L	FD	FH	Mat. (E) (F)	Header	Joist	Aver. Ult.	Normal	Maximum
W26	5⅜	1 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	1445	1790
W28	7¼	1 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	1445	1790
W210	9¼	1 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	1445	1790
W212	11⅛	1 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	1445	1790
W214	13⅛	1 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	1445	1790
W216	15⅛	1 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	1445	1790
W36	5⅜	2 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2130	2130
W38	7¼	2 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2130	2130
W310	9¼	2 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2130	2130
W312	11⅛	2 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2130	2130
W314	13⅛	2 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2130	2130
W316	15⅛	2 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2130	2130
WNP312	11⅛	2 2/16	3	12 ga.	7	2	2½	7 ga. (F)	2-10d	2-10d	11233	3255	3255
WNP314	13⅛	2 9/16	3	12 ga.	7	2	2½	7 ga. (F)	2-10d	2-10d	11233	3255	3255
WNP316	15⅛	2 9/16	3	12 ga.	7	2	2½	7 ga. (F)	2-10d	2-10d	11233	3255	3255
W46	5⅜	3 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2200	2200
W48	7¼	3 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2200	2200
W410	9¼	3 9/16	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-10d	2-10d	8000	2200	2200
WNP412	11⅛	3 9/16	3	12 ga.	7	2	2½	7 ga (F)	2-10d	2-10d	11233	3255	3255
WNP414	13⅛	3 9/16	3	12 ga.	7	2	2½	7 ga (F)	2-10d	2-10d	11233	3255	3255
WNP416	15⅛	3 9/16	2½	12 ga.	7	2	2½	7 ga (F)	2-10d	2-10d	11233	3255	3255
HW46	5⅜	3 9/16	3	12 ga.	6½	2½	2¼	12 ga (E)	4-N54A	2-10d	11725	3800	3800
HW48	7¼	3 9/16	3	12 ga.	6½	2½	2¼	12 ga (E)	4-N54A	2-10d	11725	3800	3800
HW410	9¼	3 9/16	3	12 ga.	6½	2½	2¼	12 ga (E)	4-N54A	2-10d	11725	3800	3800
HW412	11⅛	3 9/16	3	12 ga.	6½	2½	2¼	¼ (F)	4-N20A	2-10d	16700	3465	4620
HW414	13⅛	3 9/16	3	12 ga.	6½	2½	2¼	¼ (F)	4-N20A	2-10d	16700	3465	4620
HW416	15⅛	3 9/16	3	12 ga.	6½	2½	2¼	¼ (F)	4-N20A	2-10d	16700	3465	4620
WNP66	5⅜	5½	2½	12 ga.	7	2	2½	7 ga. (F)	2-10d	2-10d	11233	3255	3255
WNP68	7¼	5½	2½	12 ga.	7	2	2½	7 ga. (F)	2-10d	2-10d	11233	3255	3255
WNP610	9¼	5½	2½	12 ga.	7	2	2½	7 ga. (F)	2-10d	2-10d	11233	3255	3255
HW66	5⅜	5½	2½	11 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW68	7¼	5½	2½	11 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW610	9¼	5½	2½	11 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW612	11⅛	5½	2½	11 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW614	13⅛	5½	2½	11 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW616	15⅛	5½	2½	11 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW810	9¼	7½	2½	7 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW812	11⅛	7½	2½	7 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW814	13⅛	7½	2½	7 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
HW816	15⅛	7½	2½	7 ga.	10	2¾	2¾	¼ (F)	4-N20A	2-10d	16700	5283	5283
WN26-2	5⅜	3⅛	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-N54A	2-10d	11233	3180	3245
WN28-2	7¼	3⅛	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-N54A	2-10d	11233	3180	3245
WN210-2	9¼	3⅛	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-N54A	2-10d	11233	3180	3245
WN212-2	11⅛	3⅛	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-N54A	2-10d	11233	3180	3245
WN214-2	13⅛	3⅛	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-N54A	2-10d	11233	3180	3245
WN216-2	15⅛	3⅛	2½	12 ga.	6½	2½	2¼	12 ga (E)	2-N54A	2-10d	11233	3180	3245
GLULAM SIZES									**GLULAM SIZES**				
HW3.125	Spec	3⅛	3¾	11ga/7ga	10	2¾	2¾	¼ (F)	4-N54A	2-10d	16700	5280	5280
HW5.125	Spec	5⅛	2½	11ga/7ga	10	2¾	2¾	¼ (F)	4-N54A	2-10d	16700	5280	5280

***APPROVED**—See Research Recommendation No. 1258 of the International Conference of Building Officials (Uniform Building Code).

APPLICATION: The W series hangers are especially versatile and offer numerous design modifications as noted above. A large segment of the offering requires only top nailing into the header to accommodate panelized construction practices.

FABRICATION: Precision forming with manufacturing quality control provides dimensional accuracy and insures proper joist bearing and connection.

Contoured stirrups noted in major detail above are offered on the WN412, WN414, HWN412, HWN414, WNP412 and WNP414. Top angles are furnished as noted in Table 30A as either formed angles (F) or embossed angles (E).

WELDING: All Simpson Company welders are certified.

FINISH: Finish is a special corrosion formula (linear polymer) grey color. Galvanized finish available on special orders.

NAILING SCHEDULES: 10d are 10d roofer nails. N20A are annular ring .192" x 1¾", and N54A are annular ring .250" dia. x 2½" structural fasteners.

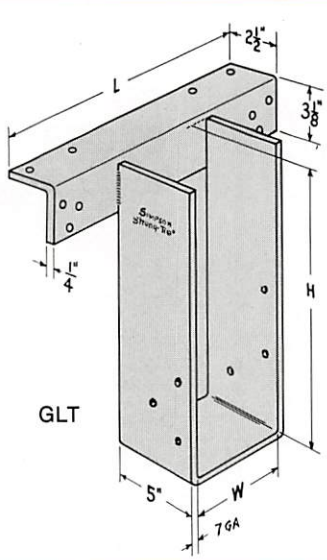
DESIGN DIMENSIONS: (See Table 30A): "H" dimensions are sized to account for normal joist shrinkage. Specify if special "H" dimensions are required. "W" dimensions listed are for dressed timber widths, as noted. Specify if special "W" dimensions are required.

ARCHITECTS SPECIFICATIONS: Joist Hangers shall have I.C.B.O. (Uniform Building Code) approvals and be SIMPSON STRONG-TIE W Series Hangers as manufactured by SIMPSON COMPANY, San Leandro, California.

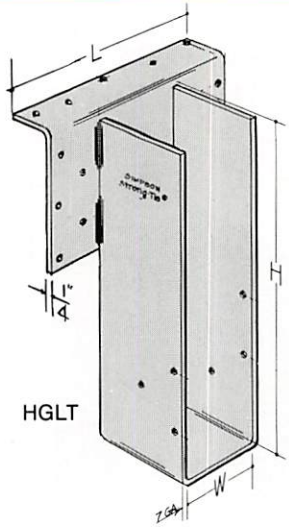
glt/hglt

BEAM HANGERS

Fasteners Included!



GLT



HGLT

Designed to accommodate typical structural requirements for timbers* and Glulam beams. Top flange depth allows for installation on 3" wide ledger (2½" net).

DESIGN DATA

1. High strength value structural N54A fasteners are furnished.
2. Special corrosion protection is provided with Linear Polymer Formula — Simpson Gray.
3. Fasteners provide 2060 pounds of uplift resistance.
4. All welding is by certified welders.

ORDERING DETAILS: Provide model number and "H" dimension. For dimensional requirements other than detailed, provide letter designation and sizes.

Hot dipped galvanized available when specified.

*All GLT models using sawn timbers shall use 12" L dimension.

Table 21

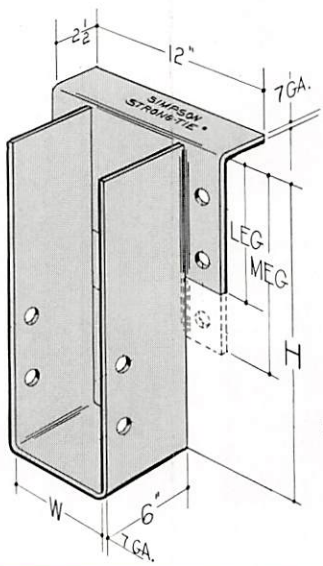
MODEL NO.	DIMENSIONS W	H	L	FASTENER SCHEDULE Carrying Beam	Supported Beam	Tested Average Ultimate	ALLOWABLE LOADS* Uplift	Normal	Maximum
GLT 3	3¼"	Specify	10"	10-N54A	6-N54A	21400	2060	7000	7000
GLT 5	5¼"	Specify	10"	10-N54A	6-N54A	21400	2060	7000	7000
GLT 5.5	5½"	Specify	12"	10-N54A	6-N54A	21400	2060	7000	7000
GLT 7	6⅞"	Specify	12"	10-N54A	6-N54A	21400	2060	7000	7000
GLT 7.5	7½"	Specify	12"	10-N54A	6-N54A	21400	2060	7000	7000
HGLT 3	3¼"	Specify	12"	15-N54A	6-N54A	39080	2060	8760	11680
HGLT 5	5¼"	Specify	12"	15-N54A	6-N54A	39080	2060	10200	12750
HGLT 7	6⅞"	Specify	12"	15-N54A	6-N54A	39080	2060	10200	12750
HGLT 9	8⅞"	Specify	12"	15-N54A	6-N54A	39080	2060	10200	12750

*Models HGLT are I.C.B.O. test values, with formal Research Report No. 1258 approval pending at time of catalog publication.

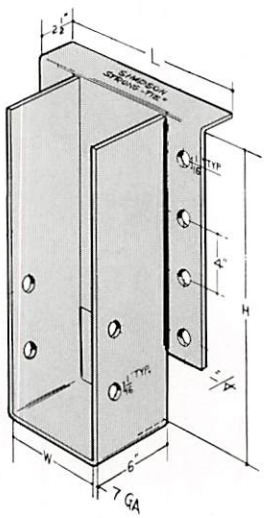
Where "H" exceeds 22", the LEG, MEG, HEG, or HGLT hangers are recommended.

leg/meg/eg

BEAM HANGERS



LEG / MEG



EG

Special Models are available without top flanges. Load values for this design are equal to number and size of bolts, bearing wood thickness, etc., in accordance with Table 25-F, Uniform Building Code.

DESIGN DATA

1. Precision fabrication offers dimensional accuracy and aids installation.
2. All welding is by certified welders.
3. Special corrosion protection is provided with Linear Polymer Formula — Simpson Gray.

ORDERING DETAILS:

Hot-dip galvanized available when specified.

Load values allowed assume a bearing of not less than a 3" Nominal Ledger, with bolts in single shear. "Saddle" types are available with values on each side as given, with total load subject to supporting member analysis.

Table 30

MODEL NO.	DIMENSIONS W	H	L	MATERIAL T.F.	ST.	BOLTS MB's Carrying Member	Carried Member	Tested Average Ultimate	ALLOWABLE LOADS* Uplift	Normal	Maximum
LEG 3	3¼"	Specify	12"	7 ga.	7 ga.	4 – ¾"	2 – ¾"	51000	3000	9470	12810
LEG 5	5¼"	Specify	12"	7 ga.	7 ga.	4 – ¾"	2 – ¾"	51000	4700	15110	16290
LEG 7	6⅞"	Specify	12"	7 ga.	7 ga.	6 – ¾"	2 – ¾"	51000	4910	15110	16290
MEG 5	5¼"	Specify	12"	7 ga.	7 ga.	6 – ¾"	2 – ¾"	61540	4700	15370	19710
MEG 7	6⅞"	Specify	12"	7 ga.	7 ga.	6 – ¾"	2 – ¾"	61540	4910	19280	19710
EG 5	5¼"	Specify	11¾"	3 ga.	7 ga.	8 – 1"	2 – 1"	82830	5920	16280	21710
EG 7	6⅞"	Specify	13½"	3 ga.	7 ga.	8 – 1"	2 – 1"	82830	7430	21170	25830
EG 9	8⅞"	Specify	15½"	3 ga.	7 ga.	8 – 1"	2 – 1"	82830	7960	23560	25830

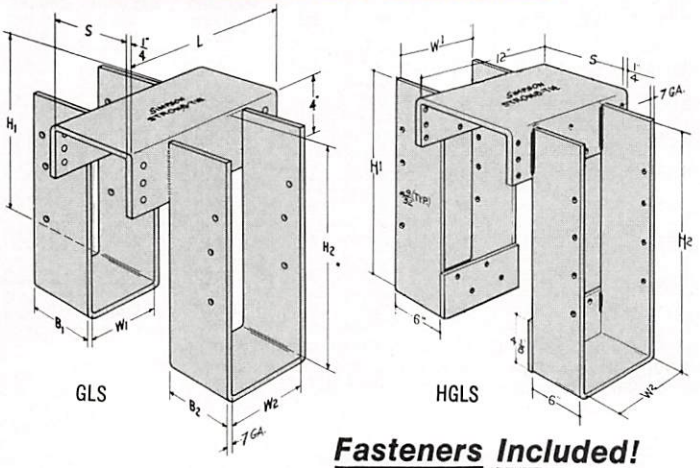
*EG Series load values are based on I.C.B.O. test values, with formal Research Report No. 1258 approval pending at time of catalog publication.

ENGINEERS PLEASE NOTE: Where unusual conditions of shrinkage, corrosion or loading are encountered, provide the factory with modification details.

gls/hgls

GLULAM SADDLE HANGER

Table 22



MODEL NO.	W¹ W²	S	L	B¹ B²	H¹ H²	UPLIFT LOADS EACH SIDE	I.C.B.O. DESIGN LOADS-EACH SIDE NORMAL	MAX
GLS 3. — 5.	3¼"	5¼"	6"	7 ga x 5"	SPECIFY	2060	6015	7520
GLS 3. — 7.	3¼"	6⅞"	6"	7 ga x 5"	SPECIFY	2060	6015	7520
GLS 3. — 9.	3¼"	8⅞"	6"	7 ga x 5"	SPECIFY	2060	6015	7520
GLS 5. — 5.	5¼"	5¼"	12"	7 ga x 5"	SPECIFY	2060	9865	12330
GLS 5. — 7.	5¼"	6⅞"	9"	7 ga x 5"	SPECIFY	2060	9865	12330
GLS 7. — 7.	6⅞"	6⅞"	12"	7 ga x 5"	SPECIFY	2060	12995	14680
GLS 7. — 9.	6⅞"	8⅞"	12"	7 ga x 5"	SPECIFY	2060	12995	14680
HGLS 5.	5¼"	SPECIFY	12"	7 ga x 6"	SPECIFY	2725	11840	14800
HGLS 7.	6⅞"	SPECIFY	12"	7 ga x 6"	SPECIFY	2725	15590	16835
HGLS 9.	8⅞"	SPECIFY	12"	7 ga x 6"	SPECIFY	2725	16835	16835

APPROVED — See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

DESIGN DATA

1. High strength value structural fasteners are furnished.
2. Special corrosion protection is provided with Linear Polymer Formula — Simpson Gray.
3. All welding is by certified welders.

ORDERING DETAILS: Select model as listed in Table 22, specifying the required H¹ and H² dimensions. For size requirements not listed, note GLS or HGLS model and give size requirements, utilizing letter designations found on detail.

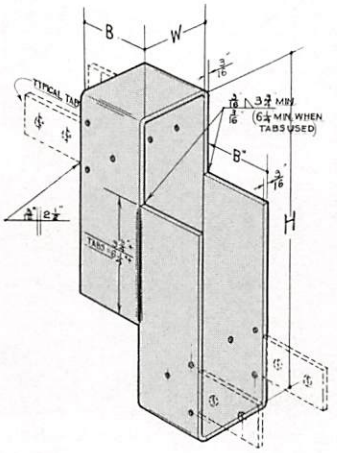
Where "H" dimensions exceed 30", Model HGLS is recommended. "H" dimensions are measured from underside of top channel to top of seat.

Fasteners Included!

mhc

HINGE CONNECTOR

For medium load requirements



DESIGN DATA

FINISH: Special corrosion protection Linear Polymer Formula—Simpson Gray. **DIMENSIONS:** For special dimensions, utilize detail designations as noted on drawings (e.g., W=4", H=17"). **INSTALLATION:** Dimensional provision of one eighth of an inch in the "W" dimension to facilitate field erection—this is noted in Table 40. **OPTIONAL DESIGN:** Specify if optional tabs are required, each tab provides for 2 - ¾" MB's.

Table 40

MODEL	W*	B	TABS	FASTENERS (not included)	ALLOWABLE LOADS** GLULAM 450 psi Min. Depth—17⅞"	GLULAM 450 psi Min. Depth—29"
MHC 3	3¼"	5"	No	12 N54A	3,840	6,260
MHC 3T	3¼"	5"	Yes	4—¾" MB	7,310	7,310
MHC 5	5¼"	5"	No	12 N54A	3,840	7,330
MHC 5T	5¼"	5"	Yes	4—¾" MB	9,950	11,810
MHC 6T	5¼"	6"	Yes	4—¾" MB	10,520	14,180

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

*W dimension includes ⅛" field erection tolerance.

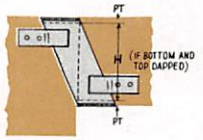
**Allowable loads for N54A Fasteners shall also apply when 385 P.S.I. GLULAM grade is used. For minimum depths of GLULAM smaller than tabulated, allowable loads are to be decreased in direct proportion to the two depths.

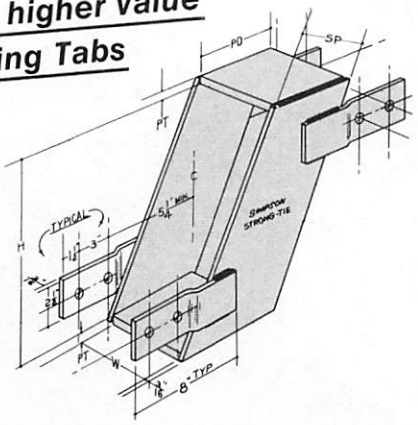
hc

HINGE CONNECTOR

New higher value Bolting Tabs

Table 26





MODEL	MINIMUM "H" DIMENSION*	PT	PD	W	SP	I.C.B.O. Normal *1 (at 385 psi)	Maximum *2 (with 450 psi G +25% S.T.L.)
HC5-5	14"	¾"	5"	5¼"	6"	9860	14400
HC5-6	18"	¾"	6"	5¼"	6"	11840	17300
HC5-7	22"	¾"	7"	5¼"	6"	13810	20180
HC5-9	32"	¾"	9"	5¼"	6"	17760	25940
HC7-5	18"	1"	5"	6⅞"	6"	12990	18980
HC7-6	22"	1"	6"	6⅞"	6"	15590	22780
HC7-7	28"	1"	7"	6⅞"	7"	18190	26580
HC7-9	42"	1"	9"	6⅞"	7"	23390	34170
HC9-5	20"	1¼"	5"	8⅞"	6"	16840	24610
HC9-6	26"	1¼"	6"	8⅞"	6"	20210	29530
HC9-7	34"	1¼"	7"	8⅞"	7"	23580	34450
HC9-9	50"	1¼"	9"	8⅞"	8"	30320	44000

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

This table of values is based on I.C.B.O. approved element values and design criteria. Added seat value and/or "H" minimums have been established when such elements are limiting in approval tabulations.

Note: Values are the lesser of seat values, or resistance to rotation provided by the tabbed ¾" bolts. No value is allowed for heel resistance of the plates if dapped.

*For the rare cases of the particular sizes requiring a lesser "H" dimension than given as minimum, allowable values decrease as a straight-line function. In such cases, include required end-reaction with order for factory sizing of appropriate elements.

*1 Basic I.C.B.O. values at 385 psi, for sizes "H" minimums or larger.

*2 When "H" is equal to or greater than the minimums, the short-term loading increase for roof is allowable.

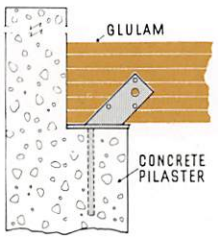
DESIGN DATA

FINISH: Special corrosion protection Linear Polymer Formula—Simpson Gray. **DIMENSIONS:** For special dimensions, utilize detail designations as noted on drawings (e.g., W=4", H=17"). Additional designs of tabs are available at engineer's request. **INSTALLATION:** Dimensional provision of one eighth of an inch in the "W" dimension to facilitate field erection.

ENGINEERS PLEASE NOTE: Where unusual conditions of shrinkage, corrosion or loading are encountered, provide the factory with modification details.

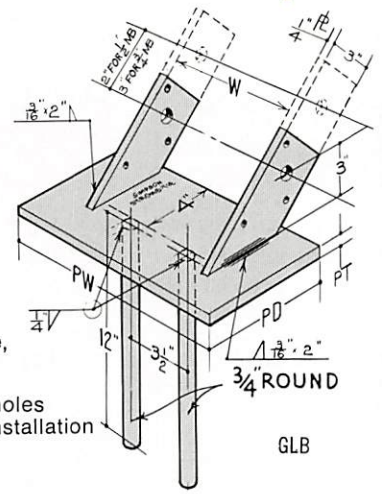
glb/hglb/glbt

BEAM SEAT



Optional designs available, specify dimensions.

INSTALLATION: Optional holes are provided to allow for installation with N54A fasteners.



GLB

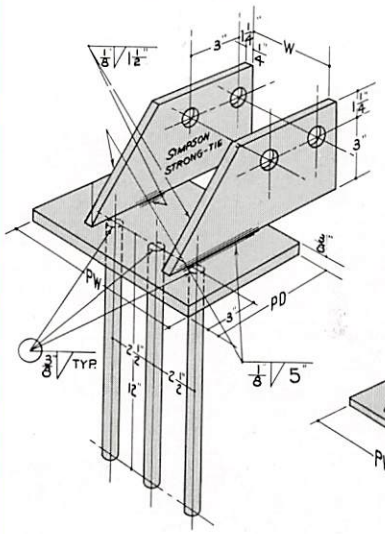
FINISH: Special corrosion protection Linear Polymer Formula – Simpson Gray. **ORDERING INFORMATION:** Specify special dimensions by using letter designations shown on GLB detail. Specify if two bolt model is desired.

Table 25

MODEL NO.	BASE PLATE			BEAM		BEARING VALUES		
	PD	PW	PT	W	MB	MASONRY @ 170 # PSI	MASONRY @ 340 # PSI	CONCRETE @ MIN. VALUE*
GLB5A	5"	7"	¼"	5⅛"	½"	4450	8900	11530
GLB5B	6"	7"	⅜"	5⅛"	½"	5350	10700	13840
GLB5C	7"	7"	⅜"	5⅛"	½"	6250	12500	16140
GLB5D	8"	7"	⅜"	5⅛"	½"	7140	14280	18450
GLB7A	5"	9"	¼"	6⅞"	¾"	5950	11900	15460
GLB7B	6"	9"	⅜"	6⅞"	¾"	7140	14280	18660
GLB7C	7"	9"	⅜"	6⅞"	¾"	8330	16660	21650
GLB7D	8"	9"	⅜"	6⅞"	¾"	9520	19040	24750

*As further limited by W x PD x 450 psi for Glulam bearing on plate.

APPROVED (Model GLB)—See Research Recommendation No. 1211 of the International Conference of Building (Uniform Building Code).



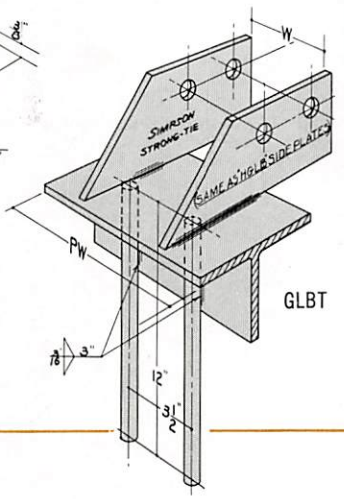


Table 25A

MODEL NO.	BASE PLATE[1] OR SPLIT-TEE[2]			BEAM		BEAM-TIE VALUES			BASIC BEARING[4]	
	PD	PW	PT	W	MB	Basic to Beam[4]	Concrete Inspected[3]	Masonry Inspected[3]	Concrete	Masonry
HGLB-A	5"	10"	¼"	Specify	2-¾"	7325	10680	6600	19970	8500
HGLB-B	6"	10"	⅜"	Specify	2-¾"	7325	10680	6600	23960	10200
HGLB-C	7"	10"	⅜"	Specify	2-¾"	7325	10680	6600	28400	11900
HGLB-D	8"	10"	⅜"	Specify	2-¾"	7325	10680	6600	31950	13600
GLBT512	5¼"	12"	5/16"	Specify	2-¾"	7325	Not Limiting	Not Limiting	12400	11800
GLBT612	6½"	12"	⅜"	Specify	2-¾"	7325	Not Limiting	Not Limiting	15400	14600
GLBT516	5¼"	16"	5/16"	Specify	2-¾"	7325	Not Limiting	Not Limiting	16500	15700
GLBT616	6½"	16"	⅜"	Specify	2-¾"	7325	Not Limiting	Not Limiting	20500	19400
GLBT520	5¼"	20"	5/16"	Specify	2-¾"	7325	Not Limiting	Not Limiting	21300	19600
GLBT620	6½"	20"	⅜"	Specify	2-¾"	7325	Not Limiting	Not Limiting	26300	24300

1. The HGLB Models may be ordered to sizes shown in Table 25 having lesser bearing dimensions and bearing values, but providing these Beam-Tie Values.
2. The GLBT-5¼ is a WT4 WF 8.5 Split-Tee. The GLBT-6½ is a WT4 WF 12.0 Split-Tee.
3. These values must be reduced 50% for uninspected installations.
4. Values may be increased for short-term, except where otherwise limited.

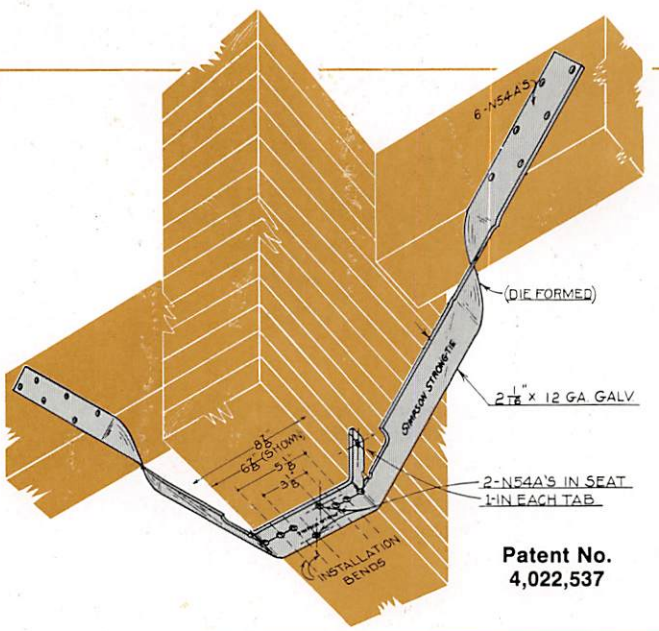
vb KNEE BRACE

VB Knee Braces are designed to provide lateral resistance force at the bottom of beams. Install with braces at approx. 45° to the vertical plane of the beam. Values shown are for tension only, for either leg, when installed with N54A fasteners.

Table 46

Model No.	H (BEAM DEPTH)	L	DESIGN LOADS, 45°	
			Normal	Short Term
VB-7	15" — 22½"	7'	1570	2050
VB-8	22½" — 28½"	8'	1570	2050
VB-10	28½" — 36"	10'	1570	2050

Approved—See Research Recommendation No. 1746 of the International Conference of Building Officials (Uniform Building Code).



Patent No. 4,022,537

pa/pam/pat/par

PURLIN ANCHORS

PATENT PENDING

MASONRY SPECIALS — PAM25 AND PATM25 added to line — allows full-block penetration.

This Purlin Anchor line provides a tested 11,500 lbs. of pull value in 2000 psi concrete. The new, heavily embossed hook is embedded 4" into concrete or masonry. (Tabular values given are as limited by allowable code values for bolts or nails.)

PAM and PATM Anchors are especially suitable for use with concrete block construction. PAR Anchors are hinged to allow for irregularities found in construction.

Specifically designed for the new seismic load requirements as well as general tie use between concrete and wood structures.

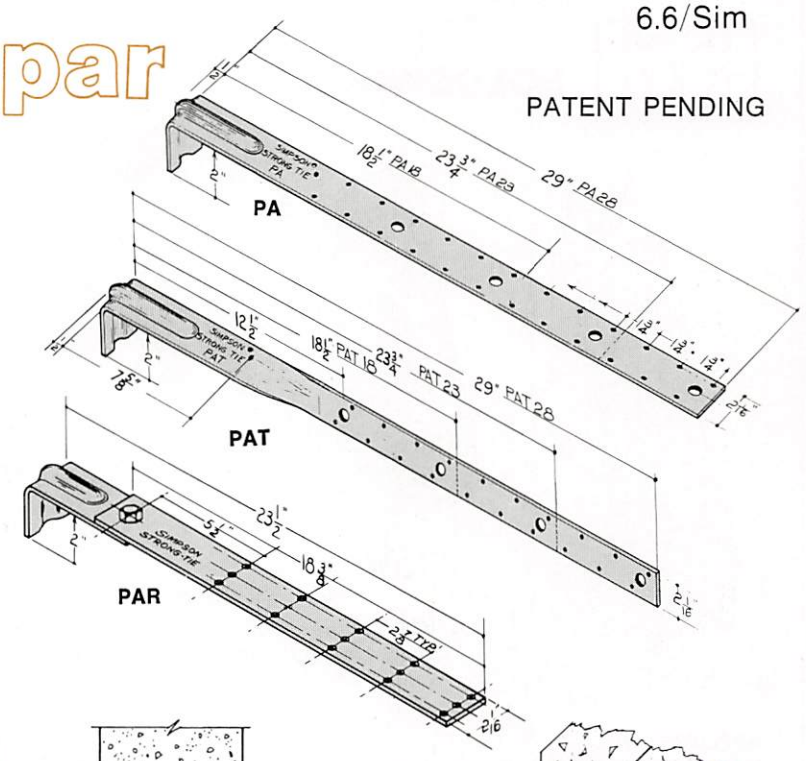
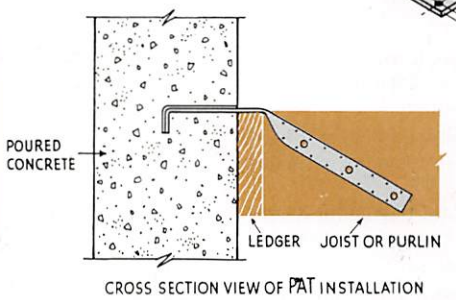


Table 39

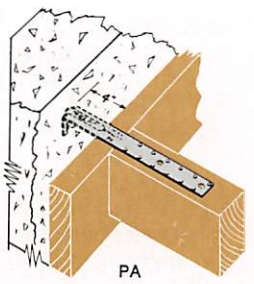
MODEL NO.	MATERIAL GALV.	LENGTH	CONNECTORS TO PURLINS	DESIGN LOADS* NORMAL	DESIGN LOADS* MAXIMUM
PA 18	12 ga. x 2 1/16"	18 1/2"	12-16d	1.6 Kips	2.1 Kips
PA 23	12 ga. x 2 1/16"	23 3/4"	18-16d	2.4 Kips	3.2 Kips
PAM 25	12 ga. x 2 1/16"	25 3/8"	18-16d	2.4 Kips	3.2 Kips
PA 28	12 ga. x 2 1/16"	29"	24-16d	3.1 Kips	4.1 Kips
PAT 18	12 ga. x 2 1/16"	18 1/2"	2-1/2" MB	1.6 Kips	2.0 Kips
			7-16d	940 lbs.	1175 lbs.
PAT 23	12 ga. x 2 1/16"	23 3/4"	3-1/2" MB	2.4 Kips	3.0 Kips
			13-16d	1740 lbs.	2175 lbs.
PATM 25	12 ga. x 2 1/16"	25 3/8"	13-16d	1740 lbs.	2175 lbs.
PAT 28	12 ga. x 2 1/16"	29"	4-1/2" MB	3.1 Kips	3.9 Kips
			19-16d	2550 lbs.	3190 lbs.
PAR	12 ga. x 2 1/16"	22 1/2"	3-N54A	1035 lbs.	1035 lbs.
			5-N54A	1725 lbs.	1725 lbs.

*Design load increases of 1/3 allowed for seismic.

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).



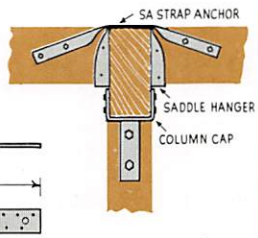
CROSS SECTION VIEW OF PAT INSTALLATION

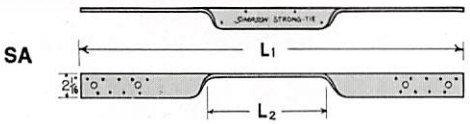


Provides 4" of embedment into poured concrete.

sa/hsa

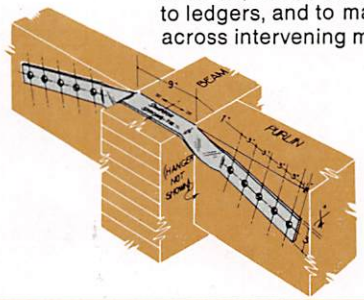
STRAP CONNECTORS





Used to provide anchoring of purlins to ledgers, and to make horizontal ties across intervening members.

SAL



HSA

A High Value cross member Seismic Tie.

Table 18

Model No.	Strap Section	DIMENSIONS L1	DIMENSIONS L2	ALTERNATE CONNECTIONS Bolts ea. side	ALTERNATE CONNECTIONS Nails ea. side	DESIGN LOADS* Bolts only	DESIGN LOADS* Nails only
SA 34	7 ga x 2 1/16"	34"	9"	2 3/4"	—	2930	—
SA 45	7 ga x 2 1/16"	45"	19 1/2"	2 3/4"	—	2930	—
SA 36	12 ga x 2 1/16"	36"	9"	2 1/2"	11 – 16d	2183	1962
SA 47	12 ga x 2 1/16"	47"	19 1/2"	2 1/2"	11 – 16d	2183	1962
SAL 36[1]	12 ga x 2 1/16"	36"	9"	2 1/2"	11 – 16d	4367	3924
SAL 47[1]	12 ga x 2 1/16"	47"	19 1/2"	2 1/2"	11 – 16d	4367	3924
HSA 1	1/4"	26"	9"	1 3/4"	—	1800	—
HSA 2	1/4"	32"	9"	2 3/4"	—	3600	—
HSA 3	1/4"	38"	9"	3 3/4"	—	5400	—
HSA 4	1/4"	44"	9"	4 3/4"	—	7200	—
HSA 5	1/4"	50"	9"	5 3/4"	—	9000	—

APPROVED—See Research Recommendation No. 1746 of the International Conference of Building Officials (Uniform Building Code).

*Design loads include metal sideplate and 1/3 short-term allowances. Bolted values are in single shear and assume a restrained member of 3 1/2" minimum thickness with loads parallel to grain. All calculated values shown have been verified by tests with a safety factor of over 3. Bolts and nails values may not be combined.

[1]The SAL ledger-to-purlin anchors assume a ledger of 2" x 6" or larger. Values given are for between purlin and ledger only. Ledger-to-wall values must be separately investigated. Use SAL 47 for all ledger sizes over 6" width. SAL identical to SA.

ag

ANGLE GUSSETS

Response to Engineers' requests!

Exceptionally versatile Angle Gusset with 3-way connection feature.

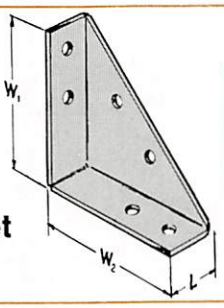
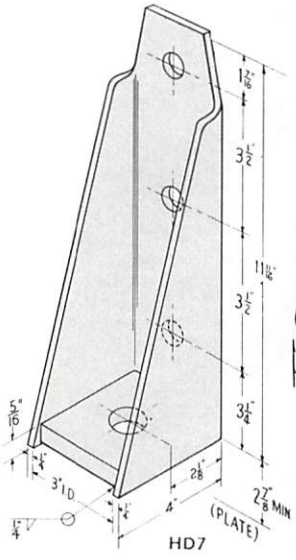


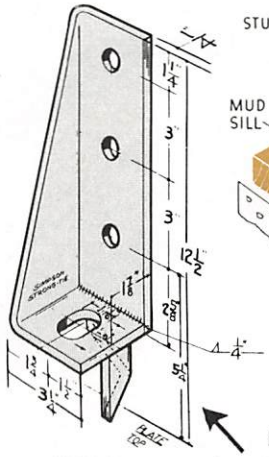
Table 34

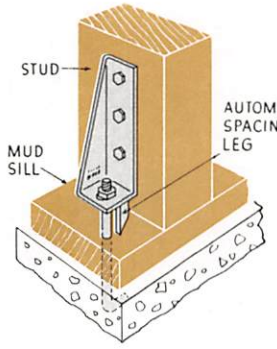
MODEL NO	DIMENSIONS MAT.	DIMENSIONS W1 & W2	DIMENSIONS L	BOLTS	BOLT LOAD VALUES PARALLEL TO GRAIN	BOLT LOAD VALUES PERPEND. TO GRAIN
AG8	3/16"	8 1/8"	2 3/4"	(4) 5/8" M.B.	2512#	1450#
AG9	1/4"	9 3/4"	3 1/4"	(4) 3/4" M.B.	3612#	1940#

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

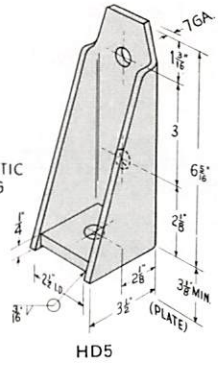
hd HOLDOWN

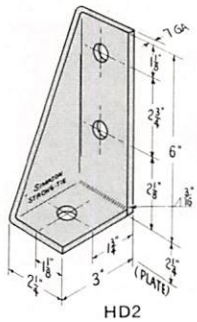


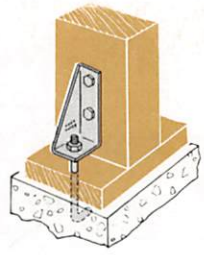




Typical installation for HD6



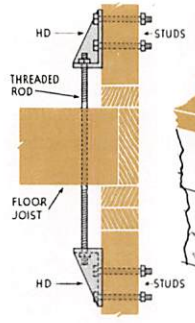




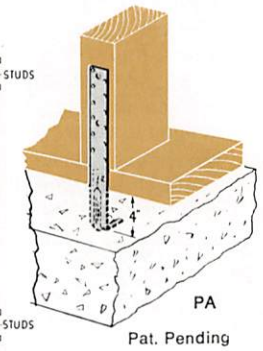
Typical installation for HD2, HD5, HD7

HD6 (Des. Pat. No. 224083)

HD6 features slotted base for easier installation. Ledger support design of base offers greater values and automatic jigging.



TYPICAL TIE BETWEEN FLOORS



Pat. Pending

See page 20.

Table 20A

MODEL NO.	AVERAGE ULTIMATE VALUES	BOLTS OR NAILS		† DESIGN LOAD VALUES WHEN INSTALLED ON STUDS WITH THICKNESS OF:				
		BASE	STUD	1⅜"	2"	2½"	3"	3⅜"
PA-18	11,460*	Bossed Hook	(2) ½" MB or 12-16d	—	—	—	1600	1600
PA-23	11,460*	Bossed Hook	(3) ½" MB or 18-16d	—	—	—	2400	2400
PA-28	11,460*	Bossed Hook	(4) ½" MB or 24-16d	—	—	—	3150	3150
HD2	13,200	⅝" Bolt	(2) ⅝"	2450	2520	2520	2520	2520
HD5	19,000	¾" Bolt	(2) ¾"	3375	3610	3610	3610	3610
HD6	21,900	1" Bolt	(3) ¾"	5060	5410	5410	5410	5410
HD7	28,600	1" Bolt	(3) ⅞"	6350	6500	6500	6500	6500
HD7	28,600	1⅛" Bolt	(3) ⅞"	6350	7100	7380	7380	7380

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

*Pull-tests values of embossed hook, embedded 4" into 2,000 psi concrete. See PA-PAT Series for added short-term values. Mat'l: 12 gauge. galv. × 2⅛".

†Design load increases of ⅓ allowed for seismic.

The anchor bolt shall have the minimum embedment to resist the design load, with a hook return 7 times the diameter.

APPLICATION:
HD7, HD6, HD5 and HD2 for structural tie-down and overturn requirements; PA-18, PA-23 and PA-28 for general tie-down requirements.

Locate on stud, maintaining the minimum distances of 7 dias. of the stud bolts above plate, as indicated by drawings.

The HD2 also makes an excellent device for tying wood wall sections to vertical concrete or masonry.

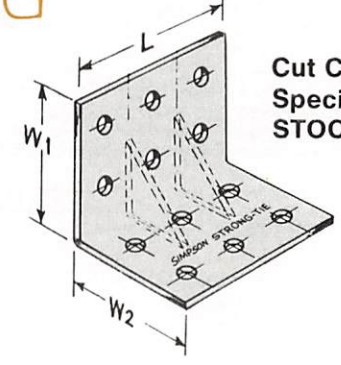
ARCHITECT'S SPECIFICATION

HD Holdowns shall be used where indicated and shall be equal in design and quality to SIMPSON STRONG-TIE HD type as manufactured by Simpson Company, San Leandro, California. Embedment of base bolt to be specified by engineer.

FINISH: Special corrosion protection Linear Polymer Formula – Simpson Gray.

WELDING: by certified welders.

hl HEAVY ANGLES



Cut Costs! Specify STOCK ANGLES.

The Heavy Angles are offered to promote further standardization and construction economies, and to provide compatibility with the STRONG-TIE structural hardware line.

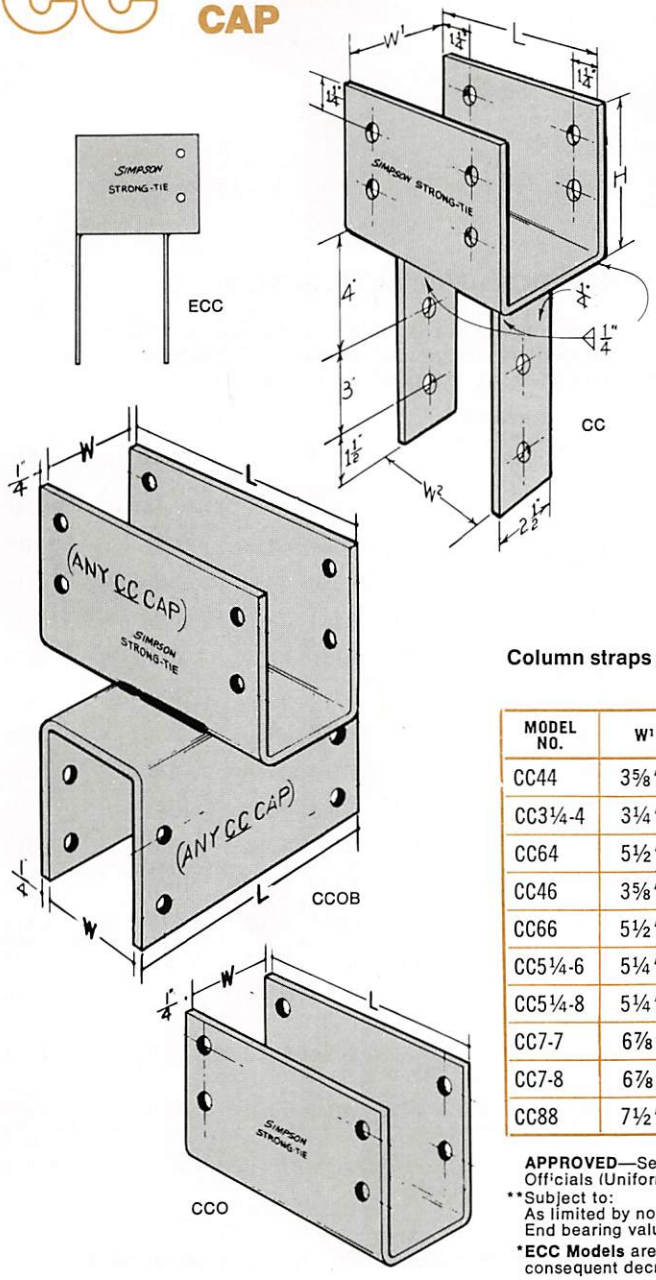
FINISH: Special corrosion protection Linear Polymer Formula–Simpson Gray.

Table 33

MODEL NO.	DIMENSIONS			BOLTS (total)	GUSSETS	BOLT LOAD VALUES	
	MAT.	W1 & W2	L			PARALLEL TO GRAIN	PERPEND. TO GRAIN
HL33	3/16"	3¼"	2½"	(2) ⅝" M.B.	None	1255	725
HL35	3/16"	3¼"	5"	(4) ⅝" M.B.	None	2510	1450
HL35G	3/16"	3¼"	5"	(4) ⅝" M.B.	One	2510	1450
HL37	3/16"	3¼"	7½"	(6) ⅝" M.B.	None	3765	2175
HL37G	3/16"	3¼"	7½"	(6) ⅝" M.B.	Two	3765	2175
HL53	3/16"	5¾"	2½"	(4) ⅝" M.B.	None	2510	1450
HL55	3/16"	5¾"	5"	(8) ⅝" M.B.	None	5025	2900
HL55G	3/16"	5¾"	5"	(8) ⅝" M.B.	One	5025	2900
HL57	3/16"	5¾"	7½"	(12) ⅝" M.B.	None	7535	4250
HL57G	3/16"	5¾"	7½"	(12) ⅝" M.B.	Two	7535	4250
HL43	¼"	4¼"	3"	(2) ¾" M.B.	None	1805	970
HL46	¼"	4¼"	6"	(4) ¾" M.B.	None	3610	1940
HL46G	¼"	4¼"	6"	(4) ¾" M.B.	One	3610	1940
HL49	¼"	4¼"	9"	(6) ¾" M.B.	None	5435	2910
HL49G	¼"	4¼"	9"	(6) ¾" M.B.	Two	5435	2910
HL73	¼"	7¼"	3"	(4) ¾" M.B.	None	3610	1940
HL76	¼"	7¼"	6"	(8) ¾" M.B.	None	7225	3880
HL76G	¼"	7¼"	6"	(8) ¾" M.B.	One	7225	3880
HL79	¼"	7¼"	9"	(12) ¾" M.B.	None	10,875	5820
HL79G	¼"	7¼"	9"	(12) ¾" M.B.	Two	10,875	5820

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

CC COLUMN CAP



FACTORY VALUES!

Precision factory gang-punched holes speed installation and insure full bolt values.

SPECIFICATIONS

1. Special corrosion protection Linear Polymer Formula (Simpson Gray).
2. Straps are fillet-welded both sides to bottom of cap. Welding is by certified welders.
3. Straps are center-positioned both ways upon the cap unless otherwise specified.
4. For complete CC values consult Approval No. 1211.
5. For CCOB beam column cap values, utilize Table 14A or consult Approval No. 1211, applying values no greater than the lesser element employed.

For special, custom or rough lumber sizes, provide dimensions.

*Note: Any W^2 dimension may be specified in combination with any column cap size given. For example, specify as "CC65" for a 5" column and 6" (nominal) beam width requirement. **COLUMN CAP ONLY** may be specified for field-welding to pipe or other column condition by specifying as "CCO—". **SPECIAL COLUMN CAPS** with W^1, "L", "H", and hole schedules different from above may be special ordered. CCOB—Any two CCO's may be specified for back-to-back welding to create the CCOB cross beam connector. For end conditions specify ECC column caps and provide dimensions in accordance with Table 14A.

Column straps may be rotated 90° on special orders where W^1 is greater than W^2.

Table 14A

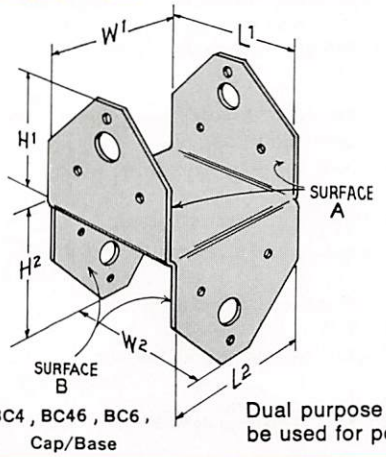
MODEL NO.	W^1	W^{2}**	L*	H	MATERIAL	HOLES FOR CAP BOLT	HOLES FOR STRAP BOLT	BOLT VALUES	SEAT LOAD VERTICAL**
CC44	3⅝"	3⅝"	7"	4"	¼" PL	(2) ⅝ MB	(2) ⅝ MB	3024	9430
CC3¼-4	3¼"	3⅝"	11"	6½"	¼" PL	(4) ⅝ MB	(2) ⅝ MB	6050	15470
CC64	5½"	3⅝"	11"	6½"	¼" PL	(4) ⅝ MB	(2) ⅝ MB	6050	23290
CC46	3⅝"	5½"	11"	6½"	¼" PL	(4) ⅝ MB	(2) ⅝ MB	6050	14820
CC66	5½"	5½"	11"	6½"	¼" PL	(4) ⅝ MB	(2) ⅝ MB	6050	23290
CC5¼-6	5¼"	5½"	13"	8"	¼" PL	(4) ¾ MB	(2) ¾ MB	9310	29980
CC5¼-8	5¼"	7½"	13"	8"	¼" PL	(4) ¾ MB	(2) ¾ MB	9310	29980
CC7-7	6⅞"	6⅞"	13"	8"	¼" PL	(4) ¾ MB	(2) ¾ MB	9625	40220
CC7-8	6⅞"	7½"	13"	8"	¼" PL	(4) ¾ MB	(2) ¾ MB	9625	40220
CC88	7½"	7½"	13"	8"	¼" PL	(4) ¾ MB	(2) ¾ MB	9400	37540

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

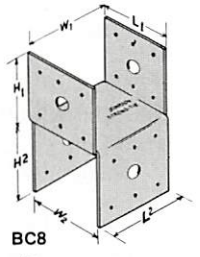
**Subject to:
As limited by nominal beam sizes @ 385 psi or normal Glulam sizes @ 450 psi of seat area.
End bearing value of post, L/R of post, or other values to be deducted.

***ECC Models** are approximately 4" shorter than the "L" dimension given in Table 14A, with consequent decrease in bolt and seat load values.

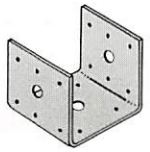
bc POST CAP/BASE



BC4, BC46, BC6, Cap/Base



BC8 Cap/Base



BC40, BC60, BC80 Half Base

Dual purpose BC Post Cap/Base Combination can be used for post cap or post base connections.

Table 15

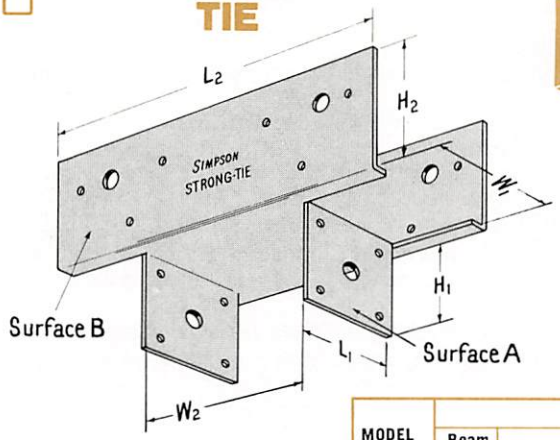
MODEL NO.	DIMENSIONS						NAIL SCHEDULE (EACH SIDE)	
	W^1	W^2	L^1	L^2	H^1	H^2	SURFACE A	SURFACE B
BC4	3⁹⁄₁₆"	3⁹⁄₁₆"	3⅜"	3⅜"	3½"	2¾"	3-16d	3-16d
BC46	3⁹⁄₁₆"	5½"	3⅜"	3½"	3½"	3½"	3-16d	6-16d
BC6	5½"	5½"	5½"	5½"	3"	3"	6-16d	6-16d
BC8	7½"	7½"	7½"	7½"	4"	4"	6-16d	6-16d

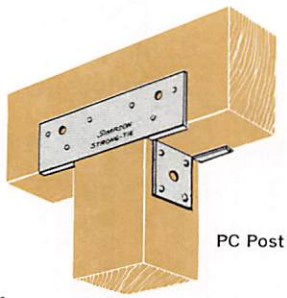
APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

SPECIFICATIONS

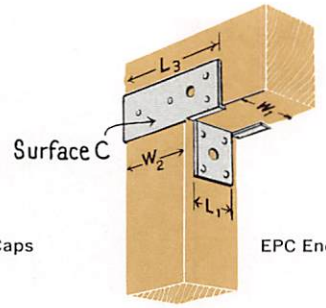
MATERIAL: 18 gauge galvanized steel, ASTM Specification A-93. **INSTALLATION:** (1) Install with 16d x 2½" Joist Hanger nails. (2) ⁹⁄₁₆" diameter holes may be used for passage of reinforcing steel, when used as a base.

pc POST CAP TIE





PC Post Caps



EPC End Post Caps

NEW! HEAVY-SECTION GALVANIZED STEEL

PC and EPC Post Caps provide a custom connection for post-beam combinations in the medium design-load category. The extension beam side plates also function as tie straps where splices occur.

Table 13

MODEL NO.	DIMENSIONS								NAILS			I.C.B.O. LOAD VALUES†	
	Beam Width W_1	Post Size (Nominal)	W_2	L_1	L_2	L_3	H_1	H_2	Surface A	Surface B	Surface C	Post Uplift or Lateral Shear	Beam Uplift or Long Shear*
PC44	3⁹⁄₁₆"	4 x 4	3⁹⁄₁₆"	2¹¹⁄₁₆"	11"	7⅜"	3¹¹⁄₁₆"	3½"	4-16d	6-16d	4-16d	1070	1610
PC46	3⁹⁄₁₆"	4 x 6	5½"	2¹¹⁄₁₆"	13"	9¼"	3¾"	3½"	4-16d	6-16d	4-16d	1070	1610
PC48	3⁹⁄₁₆"	4 x 8	7½"	2¹¹⁄₁₆"	15"	11¼"	3¾"	3½"	4-16d	8-16d	6-16d	1070	2145
PC64	5½"	4 x 6	3⁹⁄₁₆"	4⁹⁄₁₆"	11"	7⅜"	3¾"	3½"	4-16d	6-16d	4-16d	1070	1610
PC66	5½"	6 x 6	5½"	4⁹⁄₁₆"	13"	9¼"	3¾"	3½"	4-16d	6-16d	6-16d	1070	2145
PC68	5½"	6 x 8	7½"	4⁹⁄₁₆"	15"	11¼"	3¾"	3½"	4-16d	8-16d	6-16d	1070	2145
PC610	5½"	6 x 10	9½"	4⁹⁄₁₆"	17"	13¼"	3¾"	3½"	4-16d	8-16d	6-16d	1070	2145
PC84	7½"	4 x 8	3⁹⁄₁₆"	6½"	11"	7⅜"	3¾"	3¾"	4-16d	6-16d	6-16d	1070	1610
PC86	7½"	6 x 8	5½"	6½"	13"	9¼"	3¾"	3¾"	4-16d	6-16d	6-16d	1070	1610
PC88	7½"	8 x 8	7½"	6½"	15"	11¼"	3¾"	3¾"	4-16d	8-16d	6-16d	1070	2145
PC810	7½"	8 x 10	9½"	6½"	17"	13¼"	3¾"	3¾"	4-16d	8-16d	6-16d	1070	2145
PC106	9½"	6 x 10	5½"	8½"	13"	9¼"	3¾"	3¾"	4-16d	8-16d	6-16d	1070	2145
PC108	9½"	10 x 8	7½"	8½"	15"	11¼"	3¾"	3¾"	4-16d	8-16d	6-16d	1070	2145
PC1010	9½"	8 x 10 10 x 10	9½"	8½"	17"	13¼"	3¾"	3¾"	4-16d	8-16d	6-16d	1070	2145
PC1012	9½"	10 x 12	11½"	8½"	19"	15¼"	3¾"	3¾"	4-16d	8-16d	6-16d	1070	2145

*APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

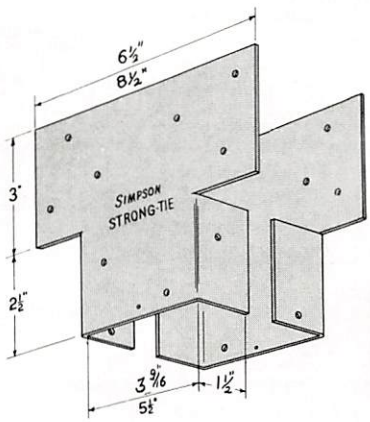
† See Approval No. 1211 for detailed bolt values.

SPECIFICATIONS

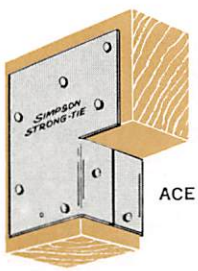
MATERIAL: Manufactured of 12 gauge galvanized steel. Note: This design is available in 16 gauge galvanized steel. To obtain 16 gauge galvanized steel, simply add -16 to the model numbers in Table 13. Example: PC44-16.

INSTALLATION: Install with Joist Hanger nails 16d x 2½". 9/16" holes provided for optional bolting.

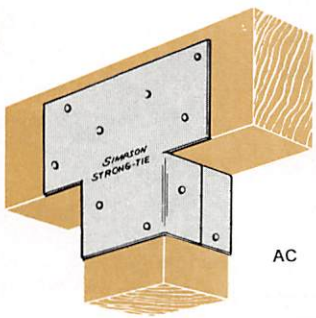
ac TWIN POST CAP



Allows for all post depths 4 x and greater.



ACE



AC

. . . enhances appearance . . . adds structural value

Twin design permits easy installation before, during, or after post and beam erection. Two models for a variety of timber sizes. All corners are enclosed for trim appearance and functional strength. Centerline hole provided for easy alignment of post base.

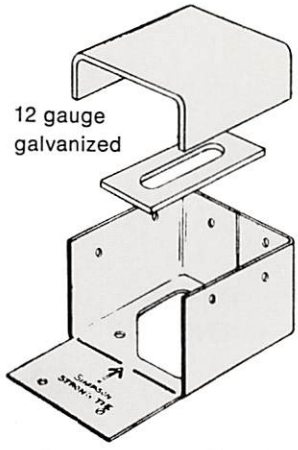
DESIGN DATA: (a) Nail hole pattern provides UBC safe load **uplift** resistance of 1070 lbs. (b) Nail hole pattern provides UBC rating of 805 lbs. **horizontally** as a beam splice plate.

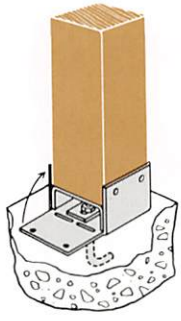
SPECIFICATIONS

1. Specify as SIMPSON STRONG-TIE AC4 (for 4X dimension post), or AC6 (for 6X dimension post).
2. Specify as ACE4, or ACE6, for post caps to be used at end of beam runs.
3. Material and finish: 18 gauge, galvanized steel.
4. Hole locations are staggered and sized for 16d nails. Use 8 ga. x 2½" nails.
5. Design conforms to criteria of UBC #2506 and #2507 ("Columns & Posts").
6. ROUGH LUMBER: Specify ACR44 and ACR66 for rough lumber models.

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code) for the AC approval.

ab ADJUSTABLE POST BASE





CAN INSTALL ON EXISTING SLAB

AB44 available in attractive retail carton.

AVAILABLE IN 3 SIZES: **AB44** (4x4 posts) • **AB46** (4x6 posts) • **AB66** (6x6 posts). Fully adjustable post base offers moisture protection, structural value, ease of installation, and finish hardware appearance.

Rough lumber sizes: AB44R • AB46R • AB66R.

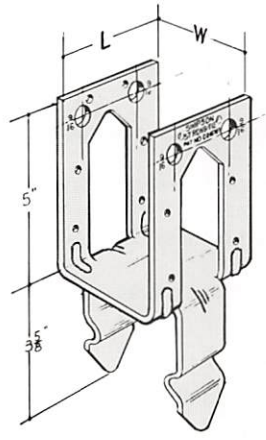
STAND-OFF PLATE provides **flat-end** bearing area for post; keeps post end 1 3/16" above surface moisture. **RECTANGULAR ADJUSTMENT PLATE** is secured by base cover to prevent rotation or slippage; provides maximum adjustability to a previously set concrete bolt. **HOLES FOR OPTIONAL NAIL HOLDOWN** in a concrete or timber base, or powder actuated fasteners, are provided in the heavy base cover for non-bolt, adjustable installations.

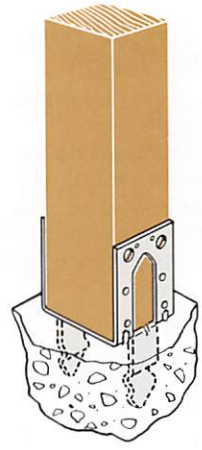
SPECIFICATIONS

1. Specify as SIMPSON STRONG-TIE AB44 (for 4x4 posts); AB66 (for 6x6 posts) or AB46 (for 4x6 posts).
2. Material and finish: 12 gauge, galvanized steel rectangular adjustment plate and stand-off plate; 16 gauge, galvanized base cover.
3. Nail holes are sized for 10d (9 gauge) galvanized nails. The two optional cement nail tie-down holes are sized for up to 3/16" cement nails or "gun" inserts. Rectangular adjustment plate assumes use of 1/2" bolt (or drilled 1/2" insert).
4. Supplied as shown: bend up the one base side after positioning and easy-access nut has been secured.

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

pb POST BASE





Pat. No. 215727

Heavy section galvanized steel

Provision for optional installation with 1/2" bolts.

Locking prongs eliminate bolts or inserts in concrete; one-piece design assures maximum strength development.

SPECIFICATIONS

Specify as SIMPSON STRONG-TIE PB44 (for 4x4 posts); PB66 (for 6x6 posts); PB46 (for 4x6 posts); or PB44R (for 4x4 rough posts).

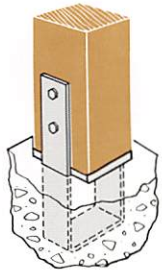
Table 37

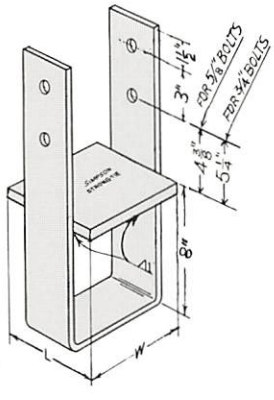
MODEL	MATERIAL	W	L	I.C.B.O. LOADS (12-16d NAILS)		U.B.C. CALC 2-1/2" MB's
				VERT. UP	LATERAL	VERT. UP
PB44	12 ga. galv.	3 3/16"	3 3/8"	1320	1320	—
PB46	12 ga. galv.	5 1/2"	3 3/8"	1320	1320	—
PB66	12 ga. galv.	5 1/2"	5 3/8"	1610	1610	3225
PB44R	12 ga. galv.	4"	3 3/8"	1540	1540	—
PB46R	12 ga. galv.	6"	3 3/8"	1320	1320	3225
PB66R	12 ga. galv.	6"	5 3/8"	1610	1610	3225

APPROVED—See Research Recommendaton No. 1211 of the International Conference of Building Officials (Uniform Building Code).

See CB series for standard fence applications,

cb COLUMN BASE





. . . for heavy-duty sawn and glulam column installations

SPECIFICATIONS

1. Special corrosion protection Linear Polymer Formula (Simpson Gray).
2. Specify as "Simpson Column Base Model CB66" (or CB810, etc.) giving dimensions W and L.
3. Available in Glulam column sizes and **rough lumber** sizes—provide W and L dimensions.
4. Assembly accurately fabricated to allow installation without temporary spacer blocks and duplicate bolting.

APPLICATIONS

1. All post and column conditions requiring large structural values and rugged performance characteristics.
2. Heavy-duty fence post installations.

Table 19

MODEL NO.	W	L	MATERIAL		BOLTS	UPLIFT DESIGN LOADS
			STIRRUPS	BASE		
CB44	3 3/16"	3 5/8"	3/16" x 2"	3/16"	(2) 5/8"	5030
CB46	3 3/16"	5 1/2"	3/16" x 2"	3/16"	(2) 5/8"	5030
CB48	3 3/16"	7 1/2"	3/16" x 2"	3/16"	(2) 5/8"	5030
CB5.	5 1/4"	Specify	3/16" x 3"	3/16"	(2) 5/8"	5030
CB66	5 1/2"	5 1/2"	3/16" x 3"	3/16"	(2) 5/8"	5030
CB68	5 1/2"	7 1/2"	3/16" x 3"	3/16"	(2) 5/8"	5030
CB610	5 1/2"	9 1/2"	3/16" x 3"	3/16"	(2) 5/8"	5030
CB612	5 1/2"	11 1/2"	3/16" x 3"	3/16"	(2) 5/8"	5030
CB7	7"	Specify	1/4" x 3"	3/16"	(2) 3/4"	7230
CB88	7 1/2"	7 1/2"	1/4" x 3"	3/16"	(2) 3/4"	7230
CB810	7 1/2"	9 1/2"	1/4" x 3"	3/16"	(2) 3/4"	7230
CB812	7 1/2"	11 1/2"	1/4" x 3"	3/16"	(2) 3/4"	7230
CB9	9"	Specify	1/4" x 3"	3/16"	(2) 3/4"	7230
CB1010	9 1/2"	9 1/2"	1/4" x 3"	1/4"	(2) 3/4"	7230
CB1012	9 1/2"	11 1/2"	1/4" x 3"	1/4"	(2) 3/4"	7230
CB1212	11 1/2"	11 1/2"	1/4" x 3"	1/4"	(2) 3/4"	7230

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

apb ARCHITECTURAL POST BASES

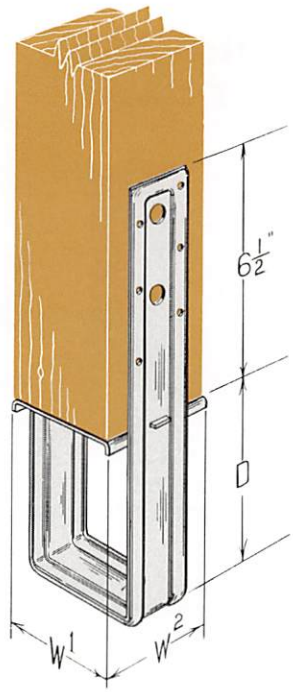
New, low-cost post base with aesthetically superior design.

Recommended for patios, carports, breezeways, porches and similar applications.

Double-embossed design offers special section strength. Forming provides smooth, corrosion-free contact surfaces.

Installation: May be installed with bolts or nails. Available with or without moisture-barrier seat.

Material: 16 gauge, corrosion-resistant galvanized steel.

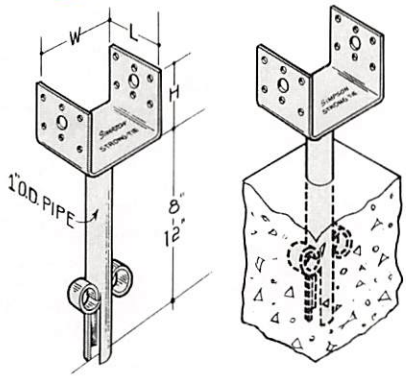


PATENT PENDING

Table 48

Model No	NOMINAL POST SIZE	GA. & TYPE 2½" STIRRUP	DIMENSIONS W1	DIMENSIONS W2	DIMENSIONS D	FASTENERS 16d's or ½" MB's	
APB44	4 x 4	16 G. BOSS	3½"	3½"	5"	12	2
APB46	4 x 6	16 G. BOSS	3½"	5½"	5"	12	2
APB66	6 x 6	16 G. BOSS	5½"	5½"	4"	12	2

epb ELEVATED POST BASE



For carport posts • deck posts • porch posts — wherever moisture, sanitary, or other conditions make it advisable to elevate wood posts

Allows 1" to 3" clearance above concrete

Table 24

MODEL NO.	W	L	H	UPLIFT	LATERAL
EPB 44	3 3/16"	3⅜	2⅝	1,070 lbs	1,070 lbs
EPB 46	5½"	3⅜	2⅝	1,070 lbs	1,070 lbs
EPB 66	5½"	5	3¼	1,610 lbs	1,610 lbs

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

INSTALLATION: Insert EPB into concrete after screeding—if uniform heights are desired, mark **all** pipe supports with the common dimension. Holes are sized for 16d nails.

SPECIFICATIONS

EPB bases are made for 4 x 4, 4 x 6, and 6 x 6 posts. Base material is 12 gauge steel. The heavy-duty pipe support is provided with anti-rotation and withdrawal lock at the base. 8" is standard, specify if 12" pipe length is required.

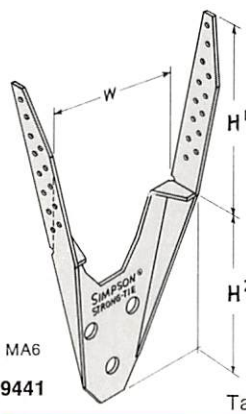
FINISH: Simpson Linear Polymer Gray.

ma MUD SILL ANCHORS

THE NEW LOW-LABOR, HIGH-VALUE METHOD TO SECURE MUD SILLS

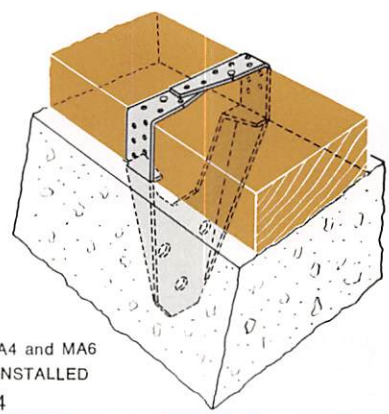
NO MORE "FLOATING" MUD SILLS

- Replaces the anchor bolt and washer
- Eliminates drilling of sill
- Features include depth gauges for easy, yet perfect installation
- No special tools required
- Can be installed before sill placement or attached to sill
- Arrowhead design, ideal for inserting into screeded surface
- Manufactured of 16 ga. galvanized steel for permanence



MA4 and MA6

Pat. No. 3889441



MA4 and MA6 INSTALLED

Table 44

MODEL	DIMENSIONS W	DIMENSIONS H1	DIMENSIONS H2	SILL SIZE	NAILING SCHEDULE SIDE	NAILING SCHEDULE TOP	(UPLIFT) AVERAGE ULTIMATE	I.C.B.O. LOAD VALUES* UPLIFT	I.C.B.O. LOAD VALUES* PARALLEL TO PLATE	I.C.B.O. LOAD VALUES* PERPENDICULAR TO PLATE
MA4	3⅝"	4½"	4⅝"	2 x 4	2 - 10d x 1½	2 - 10d x 1½	2,655#	830#	550#	1,180#
				3 x 4	4 - 10d x 1½	2 - 10d x 1½	—	1,060#	830#	1,180#
MA6	5⅝"	4½"	4⅝"	2 x 6	2 - 10d x 1½	4 - 10d x 1½	4,020#	1,060#	830#	1,180#
				3 x 6	4 - 10d x 1½	4 - 10d x 1½	—	1,290#	830#	1,180#

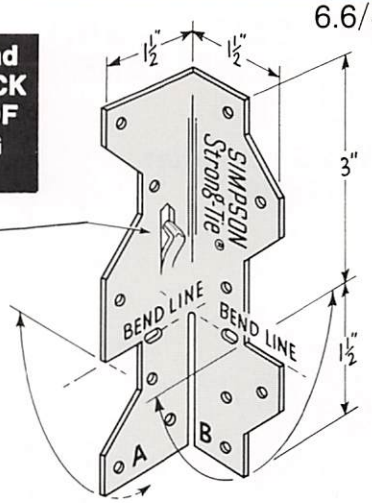
APPROVED: See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

*I.C.B.O. Values shown are for Douglas Fir, Larch, or Southern Pine. For other species, adjust on the basis of relative group classification in accordance with U.B.C. Standard No. 25-17.

a35 FRAMING ANCHORS

EVERY HOME and EVERY JOB SHACK NEEDS A BOX OF 6-way FRAMING ANCHORS

Speed Prong Added for Easier and Faster Installation



Laboratory tests—and installations—prove it's a better anchor! Approved by the International Conference of Building Officials—Uniform Building Code—and most state, county and city building departments.

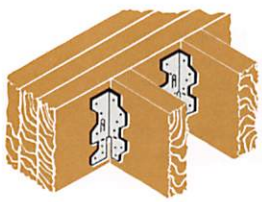
One anchor—6 combinations. Exclusive bending slots let you make instant, accurate bends for all two- and three-way ties . . . right on the job! Balanced, reversible design permits the #A35 framing anchor to secure a greater variety of connections.

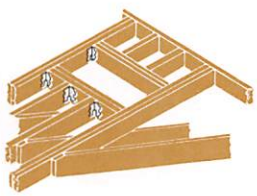
One Framing Anchor Fills Dozens of Needs . . . TYPICAL INSTALLATIONS:


Studs to plate "B" leg outside


Joists to beams


Joists to plate "A" leg inside


Ceiling joists to beam


Chimney framing


Beams to posts "A" and "B" legs outside

DESIGN: Completely reversible; balanced sides for 2- or 3-way anchoring.
MATERIALS: 18 gauge heavily coated galvanized steel. **SIZE:** 4½" high with 1½" sides.
NAILS: Included with each anchor. 11 ga. (approx. 8d) dia. x 1¼".
PACKED: 100 per carton w/N8 nails. **WEIGHT:** 21 lbs.

ARCHITECT'S SPECIFICATION: Framing anchors shall have I.C.B.O. (Uniform Building Code) approval and be SIMPSON STRONG-TIE A35 (A34) as manufactured by Simpson Company, San Leandro, California.

Long term load values are for one anchor in pounds. Values are based upon laboratory tests.

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

RECOMMENDED SAFE WORKING VALUES FOR A35 FRAMING ANCHOR

Table 1

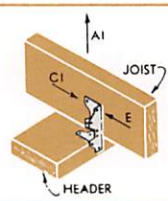
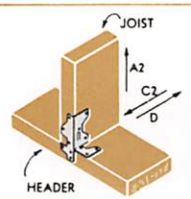
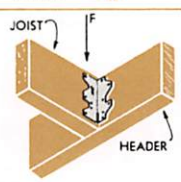
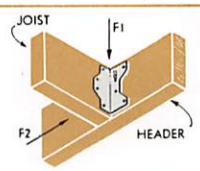
TYPE OF CONNECTION	DIRECTION OF LOAD	ALLOWABLE LOAD (In Pounds) Max.	Norm.
	A_1	290	235
	C_1		
	E		
	A2	370	300
	C2	330	300
	D	200	200
	F	590	470

Table 1B

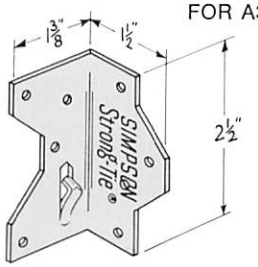
TYPE OF CONNECTION	DIRECTION OF LOAD	ALLOWABLE LOAD (In Pounds) Max.	Norm.
	F_1	390	310
	F_2		

APPROVED — See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

a34

Specially designed for use on 2x3 and 2x4 framing.

NOW FITS 2 x 3's!



RECOMMENDED SAFE WORKING VALUES FOR A34 FRAMING ANCHOR

SPECIFICATIONS:
SIZE: 1½" x 1½" x 2½" high.
MATERIAL: 18 gauge steel, heavily galvanized.
NAILS: N8 (11 ga. x 1¼") nails included with hanger.
PACKED: 100 per carton w/N8 nails.
WEIGHT: 16 lbs.

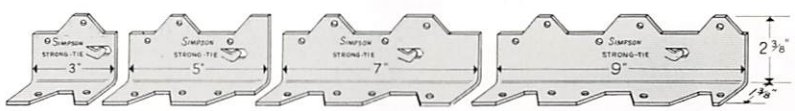
L REINFORCING ANGLES

Table 9

MODEL NO.	MATERIAL	SIZE	NAILING SCHEDULE	I.C.B.O. LOADS Norm.	Max.
L30	16 ga. galv.	2⅜" x 1⅜" x 0'3"	4 – 10d	210	260
L50	16 ga. galv.	2⅜" x 1⅜" x 0'5"	6 – 10d	310	390
L70	16 ga. galv.	2⅜" x 1⅜" x 0'7"	8 – 10d	420	520
L90	16 ga. galv.	2⅜" x 1⅜" x 0'9"	10 – 10d	520	650

APPROVED — See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code).

General utility reinforcing angles with hundreds of uses—reduce labor and overall construction costs.



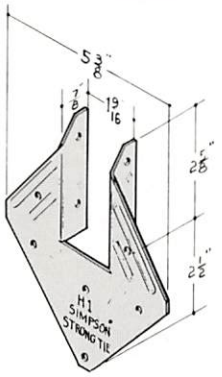
SPEED PRONG CONVENIENCE!

SPECIFICATIONS
Where indicated, install Strong-Tile Type L Angles — sizes as noted on drawings.

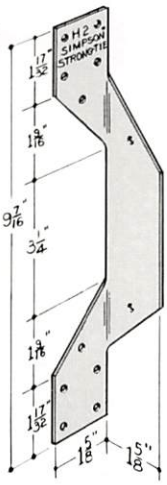
DESIGN: Nailing pattern is staggered to eliminate splitting and allow installation on both sides of a member. **PACKED:** L30, L50, 100 per carton; L70, L90, 50 per carton.

h SEISMIC AND HURRICANE TIES

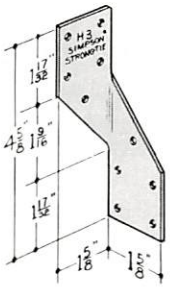
NEW 2.5 ties rafter to two plates



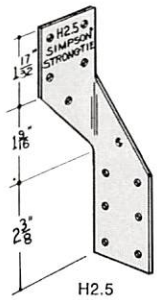
H1



H2

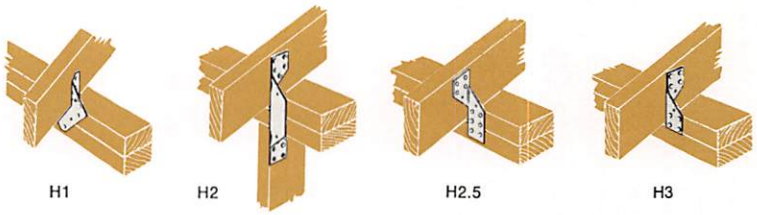


H3



H2.5

***Can eliminate RAFTER NOTCHING!**



H1 H2 H2.5 H3

for Trusses and Rafters

Designed to provide wind and seismic ties for trusses and rafters. This versatile line is also used for general tie purposes, strongback attachments, and as all-purpose tie where one member crosses another. H3 ties are packed with equal quantity of rights and lefts.

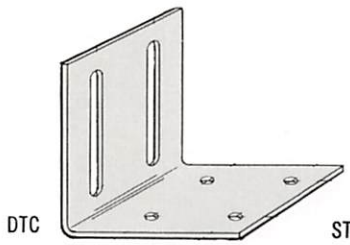
Table 41

MODEL NO.	MAT. GALV.	FASTENER SCHEDULE			I.C.B.O. LOADS MAXIMUM UPLIFT
		To Rafter	To Plates	To Studs	
*H1	18 ga.	4-8d	4-8d	—	520
H2	18 ga.	5-8d	—	5-8d	370
H2.5	18 ga.	5-8d	4 to 6-8d	4 to 6-8d	370
H3	18 ga.	4-8d	4-8d	—	305

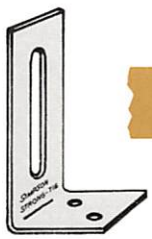
APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

***H1** has the same lateral value as the given uplift value. It may also be used for a non-notched rafter installation up to a combined dead and live load of 390 lbs.

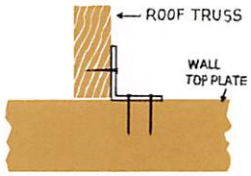
tc ROOF TRUSS CLIPS



DTC



STC

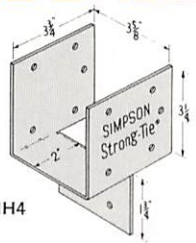


Designed for tying roof truss to non-load bearing wall with slot to allow for seating of truss when full dead load is applied. DTC has two vertical slots and four nails in base. Slots allow truss to settle without a callback to adjust wall connection.

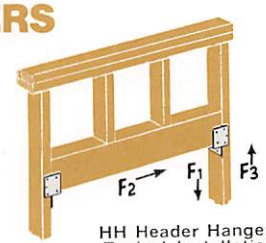
Table 42

MODEL	SIZE	MATERIAL
STC	2" x 3½"	16 ga. galv. x 1¼"
DTC	3" x 3"	16 ga. galv. x 2½"

hh HEADER HANGERS



HH4



HH Header Hangers Typical Installation

Fast, accurate installation of door and window headers, other cross member details. Speeds up the job . . . strengthens the frame. . . . eliminates need for cripples.

ARCHITECT'S SPECIFICATION: Header Hangers shall be used where indicated and shall be SIMPSON STRONG-TIE HH Series Header Hangers as manufactured by Simpson Company, San Leandro, California.

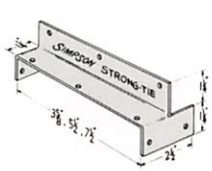
Table 16A

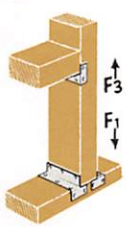
Model No.	for Post-Mullion Width	Material	Hole Sched. (for 8d to 16d)		I.C.B.O. LOADS†		
			Stud-Mullion	Header	F1	F2	F3
HH4	3⁹⁄₁₆"	16 ga. galv.	9	4	1205	535	535
HH6	5½"	16 ga. galv.	12	6	1610	805	805
HH8	7½"	16 ga. galv.	13	6	1740	805	805

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

†**INSTALLATION:** Values based on installation with N 16 nails (16d x 2½"). Short term value increase may be added.

fc FRAMING CLIPS





For fast, accurate framing. Three dimensional nailing pattern develops high strength joint values.

ARCHITECT'S SPECIFICATION: Framing Clips shall be used where indicated and shall be SIMPSON STRONG-TIE FC Series Framing Clips as manufactured by Simpson Company, San Leandro, California. **Note:** FC Framing Clips are ideal for fence construction as well as general framing applications.

Table 17A

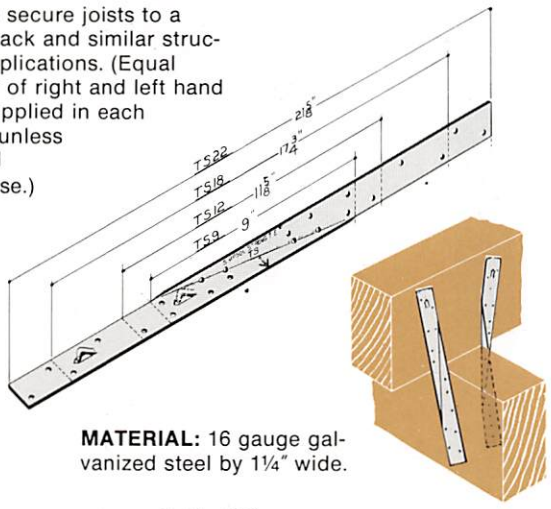
Model No.	for Post-Mullions Width	Material	Total Holes in All 3 Shear Planes	I.C.B.O. LOADS†	
				Upward	Downward
FC4	3⁹⁄₁₆"	16 ga. galv.	8 (for 8-16d)	270	805
FC6	5½"	16 ga. galv.	10 (for 8-16d)	400	920
FC8	7½"	16 ga. galv.	12 (for 8-16d)	535	920

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

†**INSTALLATION:** Values based on installation with N 16 nails (16d x 2½"). Short term value increase may be added.

ts TWIST STRAPS

Used to secure joists to a strongback and similar structural applications. (Equal number of right and left hand units supplied in each carton unless ordered otherwise.)



MATERIAL: 16 gauge galvanized steel by 1¼" wide.

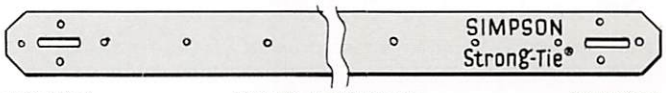
Table 29A

MODEL NO.	TOTAL NUMBER 16d NAILS*	LENGTH	DESIGN LOADS**
TS9	8	9"	535 each
TS12	10	11⅝"	670 each
TS18	14	17¾"	935 each
TS22	18	21⅝"	1205 each

*Half of the total number of nails are assumed effective at each end of the load.

**Values may be increased for seismic and other short term loading in accordance with applicable code allowances.

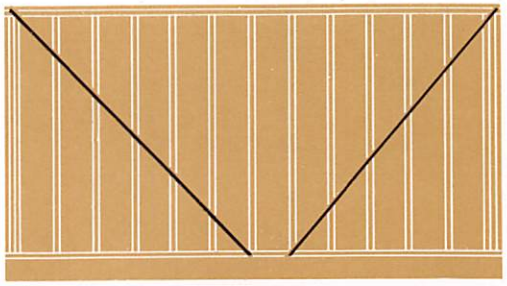
wb WALL BRACING



ends mitred @ 45° — holes @ 1.4" oc for 8d nails — install 3-16d each end

FRAMERS SAY:
up to 75% **faster** to install than let-in!

Cost-saving method to prevent racking. Functional, faster to install, economical. Installs in pairs in opposing V-fashion—prevents racking of interior and exterior walls.



WB Wall Bracing

Table 13B

TYPE	MATERIAL	SIZE
WB106	16-ga. (galv.)	1¼" x 9'5⅝" long
WB126	16-ga. (galv.)	1¼" x 11'4⅜" long

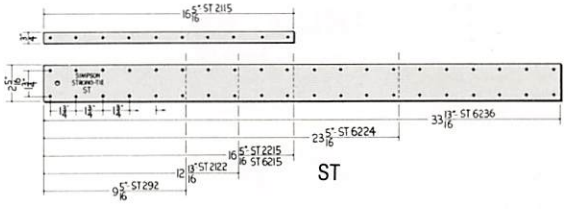
APPROVED — See Research Recommendation No. 1746 of the International Conference of Building Officials (Uniform Building Code).

Code-approved for value in tension equal to 1" x 4" let-in bracing.

st/mst/hst

STRAP TIES

APPLICATIONS: Where plates or soles are cut, ridge ties, wall intersections, truss plates. Specials made to order.



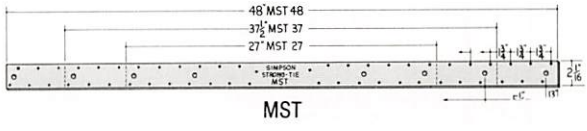
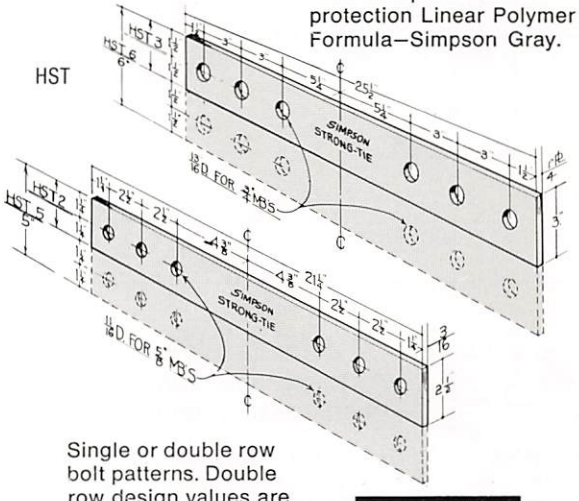


Table 11C

MODEL NO.	MATERIAL	WIDTH	LENGTH	NAILS	BOLTS	DESIGN LOADS NAILS	SINGLE SHEAR	DOUBLE SHEAR
				FASTENER SCHEDULE				
ST292	20 ga. galv.	2 5/16"	9 5/16"	12 – 16d	—	805	—	—
ST2122	20 ga. galv.	2 5/16"	12 13/16"	16 – 16d	—	1170	—	—
ST2115	20 ga. galv.	¾"	16 5/16"	10 – 16d	—	670	—	—
ST2215	20 ga. galv.	2 5/16"	16 5/16"	20 – 16d	—	1340	—	—
ST6215	16 ga. galv.	2 5/16"	16 5/16	20 – 16d	—	1340	—	—
ST6224	16 ga. galv.	2 5/16"	23 5/16"	28 – 16d	—	1875	—	—
ST6236	16 ga. galv.	2 5/16"	33 13/16"	40 – 16d	—	2680	—	—
ST9*	16 ga. galv.	1¼"	9"	8 – 16d	—	535	—	—
ST12*	16 ga. galv.	1¼"	11⅝"	10 – 16d	—	670	—	—
ST18*	16 ga. galv.	1¼"	17¾"	14 – 16d	—	935	—	—
ST22*	16 ga. galv.	1¼"	21⅝"	18 – 16d	—	1205	—	—
MST27	12 ga. galv.	2 1/16"	27"	15 – 16d ea. end	2 – ½" ea. end	2006	1612	3225
MST37	12 ga. galv.	2 1/16"	37½"	21 – 16d ea. end	3 – ½" ea. end	2808	2418	4840
MST48	12 ga. galv.	2 1/16"	48"	25 – 16d ea. end	4 – ½" ea. end	3345	3224	6450
HST12	3/16"	2½"	21¼"	—	6 – ⅝"	—	3765	7530
HST5	3/16"	5"	21¼"	—	12 – ⅝"	—	7537	15075
HST3	¼"	3"	25½"	—	6 – ¾"	—	5435	10875
HST6	¼"	6"	25½"	—	12 – ¾"	—	10875	21750

APPROVED—See Research Recommendation No. 1746 of the International Conference of Building Code Officials (Uniform Building Code).

FINISH: Special corrosion protection Linear Polymer Formula—Simpson Gray.



Single or double row bolt patterns. Double row design values are for glulam beam applications.

Special Sizes to Order

os/ol/ot

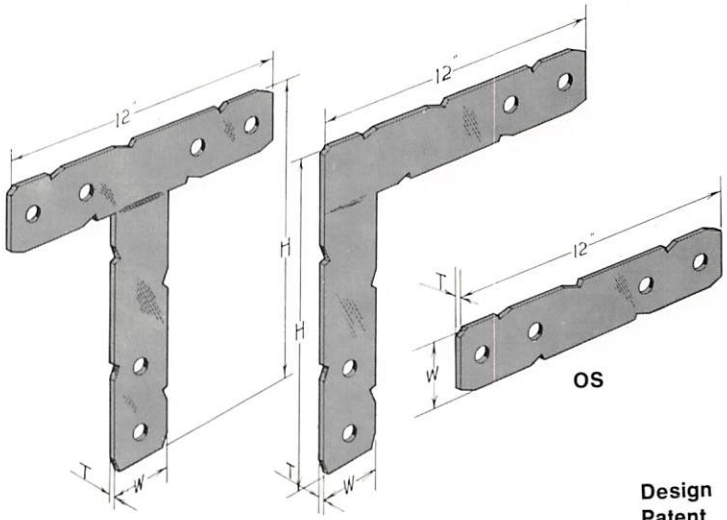
ORNAMENTAL TIE STRAPS

Notched, black-plated tie straps provide a finish-hardware appearance that is both ornamental and highly functional. Holes are sized and located to develop full allowable bolt code values. Attractive satin black-plate finish is applied after fabrication. May be installed individually or in pairs.

Special Note: Compatible designs of Ornamental Hangers are available on special order.

Table 47

MODEL NO	TYPE	MAT. (T)	DIMENSIONS W	H	L	BOLTS
OS	TIE STRAP	12 GA	2″	—	12″	4 – ½″
OHS	TIE STRAP	7 GA	2½″	—	12″	4 – ⅝″
OL	L ANGLE	12 GA	2″	12″	12″	4 – ½″
OHL	L ANGLE	7 GA	2½″	12½″	12″	4 – ⅝″
OT	TEE	12 GA	2″	12″	12″	6 – ½″
OHT	TEE	7 GA	2½″	12½″	12″	6 – ⅝″



Design Patent Pending

t AND l STRAPS

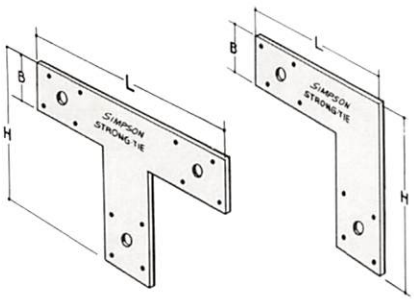


Table 38

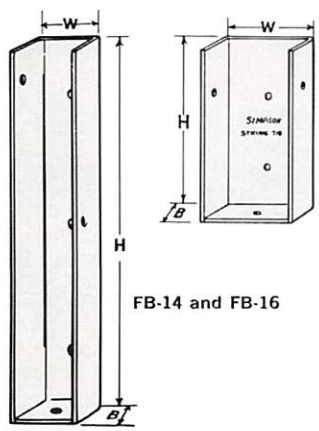
Model No.	L	H	B	MAT.	16d NAILS HOR.	VERT.	BOLTS
66T	6″	5″	1½″	12 ga. galv.	8	4	3—⅜″
128T	12″	8″	2″	12 ga. galv.	8	4	2—½″
66L	6″	6″	1½″	12 ga. galv.	4	4	2—⅜″
88L	8″	8″	2″	12 ga. galv.	4	4	2—½″
1212T	12″	12″	2″	12 ga. galv.	8	4	3—½″
1212L	12″	12″	2″	12 ga. galv.	8	4	2—½″
1212HT	12″	12″	2½″	7 ga. ptd.	—	—	6—⅝″
1212HL	12″	12″	2½″	7 ga. ptd.	—	—	4—⅝″
1616HT	16″	16″	2½″	7 ga. ptd.	—	—	6—⅝″
1616HL	16″	16″	2½″	7 ga. ptd.	—	—	4—⅝″

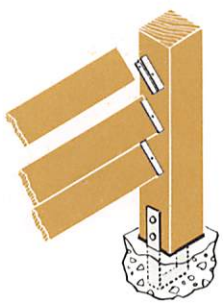
MATERIAL: 12-gauge galvanized or 7-gauge painted steel.

fb PORCH/PATIO/FENCE & LOUVER HARDWARE

For Professionals and Do-it Yourselfers

Versatile STRONG-TIE Fence Applications:





Horizontal Louver application (Illus. with CB Post Base)

STRONG-TIE FB Fence Brackets provide quick–sure–strong connections, easier to plan and build.

STRONG-TIE POST BASES as illustrated offer strong fence foundations that eliminate deep-burying of posts.

SPECIFICATIONS

Manufactured of 18 ga. galvanized steel. Precision formed for snug, sure fit Holes are sized for 8d nails or #6 wood screws into supporting member.

Table 17

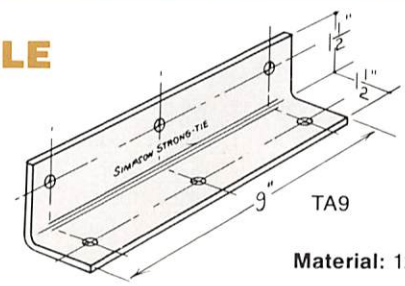
MODEL NO.	MEMBER SIZE	DIMENSIONS H	W	B
FB-14	1 x 4	3½″	¾″	¾″
FB-16	1 x 6	5⅜″	¾″	¾″
FB-23	2 x 3	2½″	1⅝″	¾″
FB-24	2 x 4	3½″	1⅝″	¾″

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

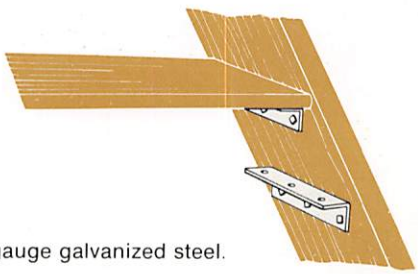
ta STAIRCASE ANGLE

A structurally sound method of staircase framing.

TA9 and TA10 are heavy-duty angles that eliminate the costly conventional notched supports. Holes are sized for ¼″ fasteners. TA10 is identical to TA9 except 10″ long, provides for 8 fasteners, and has embossed stiffeners.

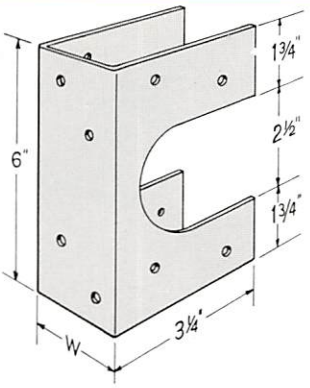


TA9



Material: 12 gauge galvanized steel.

SS STUD SHOE

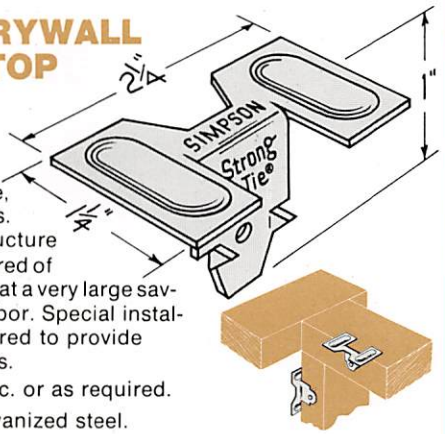


APPLICATION:
Reinforces joists, studs and rafters notched during construction, especially where a large percent of member has been removed.

ORDERING DETAILS:
SS1 "W" dimension 1½"; SS3 "W" dimension 3⅛". Packed 25 per ctn.

MATERIAL:
18 gauge galvanized steel.

ds DRYWALL STOP



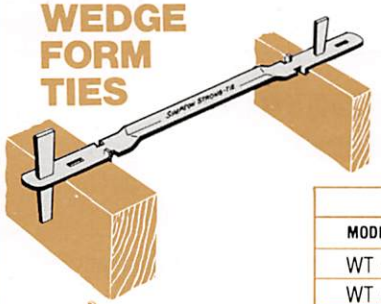
Patent Pending

Eliminates costly blocking at the top plate, end walls and at corners. A typical residential structure will utilize several hundred of these inexpensive clips at a very large savings in blocking and labor. Special installation prongs are featured to provide maximum labor savings.

INSTALLATION: 16" o.c. or as required.

MATERIAL: 20 ga. galvanized steel.

wt WEDGE FORM TIES



Rigid "V" design allows accurate form spacing and firm support.

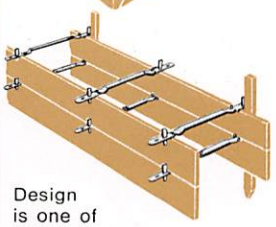
- Fits 1" or 2" form lumber.
- Lengths from 6" to 16"

SPECIFICATIONS:
WT wedge form ties are 18 ga. steel, ⅝" wide, cast in a "V" form for added structural strength. Wedges are 12 or 14 gauge steel.

Table 27

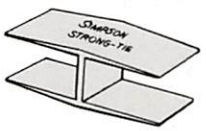
FORM TIE STOCK SIZES		
MODEL NO.	SIZE	WT. CTN. (lbs)
WT 6	6"	22 lbs.
WT 6½	6½"	23
WT 7½	7½"	26
WT 8	8"	27
WT 9	9"	30
WT 10	10"	33
WT 12	12"	36
WT 16	16"	42

WEDGES				
MODEL NO.	L	MAT.	QTN.	WT. CTN. (lbs)
W1	3.5"	14 ga	1000	30



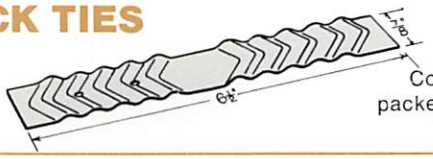
Design is one of historic development and not that of SIMPSON COMPANY.

PLYWOOD SHEATHING CLIPS



Extruded aluminum-tapered edges for fast installation between plywood panels. Packed 500 per ctn. Sizes: ⅜", ½", ⅝", ¾".

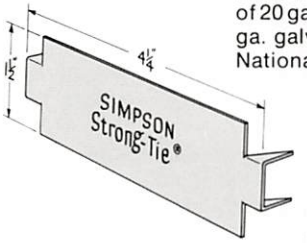
BRICK TIES



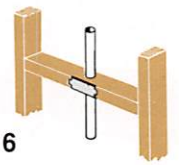
MATERIAL:
Corrugated steel; packed 500 per ctn.; weight, 24 lbs.

ns NAIL STOPPER

Prong plate to provide protection to utilities and water lines that penetrate the framing members. Prongs eliminate need for nailing. NS-1 is manufactured of 20 ga. galvanized steel and NS-16 is 16 ga. galvanized steel to conform to the National Electric Code.



Patent Pending



NS-1 and NS-16 Nail Stopper

gh GIRDER HANGERS

For girder to foundation wall connection.

GH46-6 and GH46-8

FHA Accepted

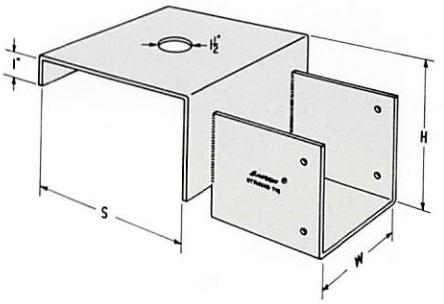


Table 45

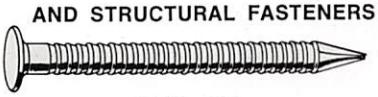
MODEL	GIRDER	W	S	H	MATERIAL
GH46-6	4x6	3⅜"	6"	4"	12 ga.
GH46-8	4x6	3⅜"	8"	4"	12 ga.

APPROVED—See Research Recommendation No. 1211 of the International Conference of Building Officials (Uniform Building Code.)

All dimensions may be varied to meet construction requirements. Double or saddle designs available.

n SPECIAL JOIST HANGER NAILS

AND STRUCTURAL FASTENERS



DISPLAY PACKAGES

N10D

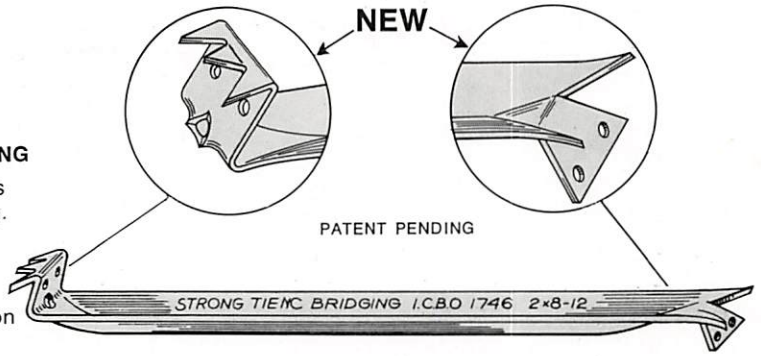
N10D5

Table 12A

MODEL	SIZE	NAILS PER CWT.
N8	(8d) 11 ga. x 1¼" smooth shank	22,400
N10	(10d) 9 ga. x 1½" smooth shank	12,800
N10D	N10 Display package 150 Nails per box	12,800
N10DB	Master Carton of 50 — N10D's	12,800
N10D5	N10 Display package 600 nails per box	12,800
N10D5B	Master Carton of 12 — N10D5's	12,800
N16	(16d) 8 ga. x 2½" smooth shank	6,300
N16H	(16d) black finish w/hammered head, 8 ga. x 2½"	6,000
N20A	(20d) .192" x 1¾" annular ring	6,300
SSN10A	(10d) 9 ga. x 2⅛" annular thread Type 304 stainless steel	10,000
SSN16A	(16d) stainless steel annular thread .165" (16d) x 1¾" long Type 304 stainless steel	9,300
N54A	Annular thread .250" diameter x 2½" long structural fastener	2,700

These nails and structural fasteners have been developed and tested by SIMPSON COMPANY as the optimum attachment means for connector products. If wood penetration depth permits, 8d, 10d, and 16d common nails may be substituted for N8, N10, and N16 nails, respectively, for equal value. The N20A's and N54A's, as annular ringed fasteners of steel harder than common wire nails, should be used where specified.

nc NAILESS COMBINATION METAL BRIDGING

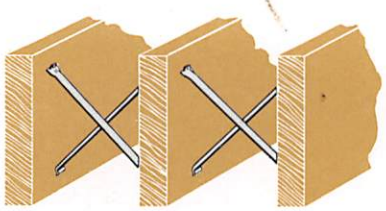


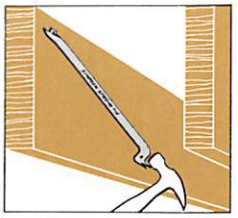
APPROVED • INSTALLS FAST • ECONOMICAL • STRONG

Code approvals and acceptance of Nailess bridging testify to its merits. May be installed before or after installation of sheathing. Nailess installation eliminates "callbacks" for "nail squeaks"!

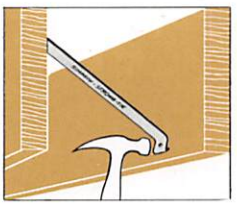
Design features for greater positional positive grip during installation prior to the drive-home blow. Deeper prong penetration into wood. "Spread-grab" grip prong penetration.

2 to 3 times faster than wood bridging





Drive upper end into joist ¾" to 1" from top.



Raise lower end into position and secure by driving prongs into joist.

Installation may be from below, as shown, or from above.

INSTALLATION:
—the bridging may be installed either from the top or bottom by locating the bend line approximately 1" from the joist corner and before or after the sheathing is installed.

SPACE BRIDGING TO AVOID CONTACT NOISES

Table 10

	MODEL NO.	JOIST SIZE	SPACING
	NC 2 x 8-12	2 x 8	12" oc
	NC 2 x 10-12	2 x 10	12" oc
	NC 2 x 12-12	2 x 12	12" oc
†	NC 2 x 14-12	2 x 14	12" oc
††	NC 2 x 16-12	2 x 16	12" oc
†	NC 2 x 8-16	2 x 8	16" oc
††	NC 2 x 10-16	2 x 10	16" oc
	NC 2 x 12-16	2 x 12	16" oc

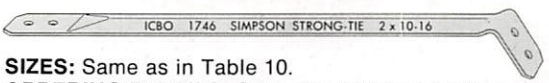
†Interchangeable
††Interchangeable

MODEL NO.	JOIST SIZE	SPACING
NC 2 x 14-16	2 x 14	16" oc
NC 2 x 16-16	2 x 16	16" oc
NC 2 x 8-24	2 x 8	24" oc
NC 2 x 10-24	2 x 10	24" oc
NC 2 x 12-24	2 x 12	24" oc
NC 2 x 14-24	2 x 14	24" oc
* NC 2 x 16-24	2 x 16	24" oc

APPROVED — See Research Recommendation No. 1746 of the International Conference of Building Officials (Uniform Building Code). *NC 2 x 16 – 24 excepted.

SPECIFICATIONS
MATERIAL: NOW! — 16 ga. galvanized steel.
DESIGN: Nailess; precision formed into a rigid "V" section with engineered prongs at each end. All bridging is die stamped with manufacturer and size identification.
ARCHITECT'S SPECIFICATION: Metal bridging shall be used where indicated and shall be SIMPSON STRONG-TIE Nailess Metal Bridging as manufactured by Simpson Company, San Leandro, California.
PACKED: 50 sets per box — 100 pieces.

NAIL BRIDGING



SIZES: Same as in Table 10.
ORDERING DETAILS: State size followed by "N", e.g., 2 x 10 – 16N.
INSTALLATION: Install with 2 – 10d short nails each end.

WHEN YOU SPECIFY SIMPSON STRONG-TIE

. . . you have selected the nation's largest and most comprehensive supplier of wood connector products. Simpson's leadership is due to superior engineering and design resources, advanced manufacturing capability, and responsiveness to professional and field requirements. Extensive code approvals and acceptances facilitate usage and document the design and values. Simpson's quantity production assures your clients and contractors of low, competitive prices, and inventories for fast delivery.

Note: All reference to nominal lumber sizes relates to dressed or S4S dimensions.

Simpson Company reserves the right to change specifications, designs and models without notice and liability for such changes.

AC

SIMPSON COMPANY

General Offices and Factory:
1450 Doolittle Drive, P.O. Box 1568
San Leandro, Calif. 94577 — Phone (415) 562-7775
Southern California Factory & Warehouse:
220 North Palm Street, Brea, Calif. 92621
Phones (213) 694-5775 • (714) 871-8373
Sales and Warehouse: 4110 Dumbarton Road, Houston, Texas 77025—Phone (713) 668-8554
Manufacturers of
Structural Connectors • Trusses • Louvers and Ventilators
Distributed nationally by leading wholesalers
Phone: 800-255-6880 NEAREST STOCKING DISTRIBUTOR

DISTRIBUTED BY

  Litho in U.S.A.