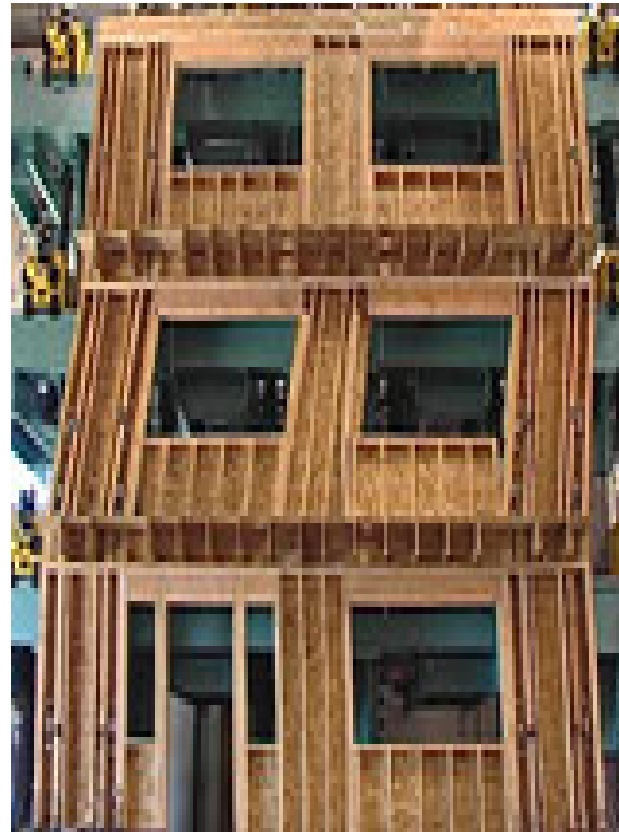


Welcome



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50 years!



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People



- Rick Ward, C.E.T,
BCIN Qualified / Structural
- Genady Lubarsky, E.I.T
- Brent Bunting, P.Eng.
BCIN Qualified / Structural



Quality



We help people build safer structures economically. We do this by designing, engineering and manufacturing "No Equal" structural connectors and other related products that meet or exceed our customers' needs and expectations.

Everyone is responsible for product quality and is committed to ensuring the effectiveness of the Quality Management System.

Tom Fitzmyers
CEO

Steve Lamson
President

Simpson Strong-Tie is an ISO 9001-2000 registered company. ISO 9001-2000 is an internationally-recognized quality assurance system which lets our domestic and international customers know that they can count on the consistent quality of Simpson Strong-Tie's products and services.



Information Sources



- Downloads & Tech Resources
 - > C-2006 Mainline Catalog
 - > Catalogs & CD-ROMs
 - > Code Reports by Agency
 - > Code Reports by Product
 - > Installation Videos
 - > Drawing Details (DWGs)
 - > Technical Bulletins
 - > Material Safety Data Sheets
 - > Fliers
 - > Software
- Builder/Contractor Training Kits
- FAQs
- Careers
- Ask Simpson
- Product Use Information
- Newsletters
- Contact Webmaster
- Customer Survey
- New Product Request
- France
- Germany
- Ireland
- Poland
- United Kingdom
- Our History
- Tye Gilb Research Lab
- Scholarships
- Parent Company
- Locations
- Other Simpson Sites
- Builder Locator
- Buying a Home
- Connector Basics
 - > Product Updates
 - > Literature Updates
 - > Upcoming Shows & Events
- Simpson News
 - > Partners of Choice Award
 - > New Builder Training Kit
 - > All Simpson News
- Industry News
 - > Understanding Wall Bracing Solutions
- Our 50th Anniversary!
 - Wood to Concrete
 - Wood to Masonry
 - Cold-Formed Steel
 - Specialty Connectors
 - Connector Selector Software
 - Steel Strong-Wall Shearwall
 - Anchor Tiedown System
 - Truss Bracing
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 - Software
 - Corrosion-Resistant Products
 - High Wind-Resistant Connectors
 - Home Projects Connectors (DIY)
 - Discontinued Products
 - Miscellaneous Connectors
 - Corrosion-Resistant Products
 - High Wind-Resistant Connectors
 - Home Projects Connectors (DIY)

- www.strongtie.com

- ASD – Kent Trusses

- Simpson Strong-Tie Representative



Training



- Workshops – Specifier
- Workshops – Dealer
- Dealer Visits / Phone calls
- Contractor Events
- Contractor Training - Site



Product



THIS YEAR, STEEL IS GOLDEN.

**WOOD
CONSTRUCTION
CONNECTORS**

**CANADIAN
LIMIT STATES
DESIGN
C-CAN06**

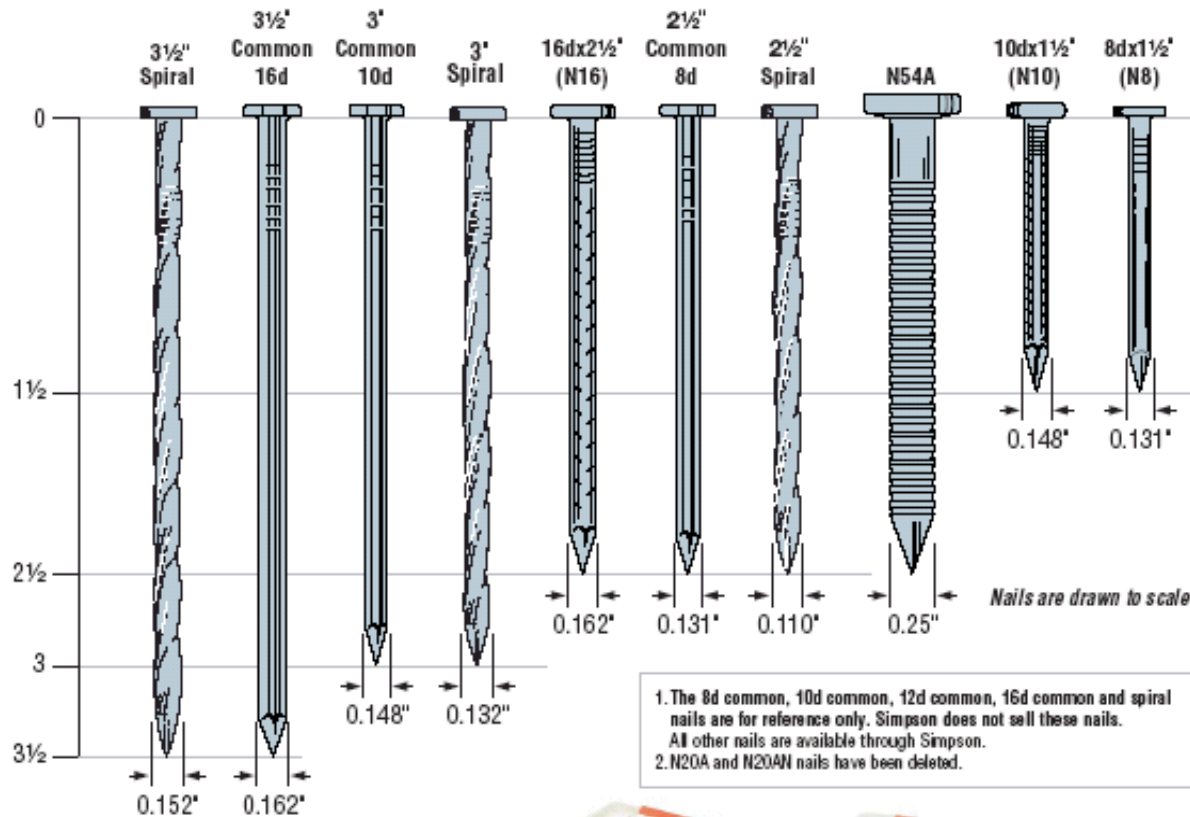


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NAILS



- 10** Nail info on N8HDG, N10HDG and N16 similar nail heads
- On all stainless steel nail heads



The Hot Dipped Galvanized nails are now packed in 1 lb. and 5 lb. plastic tubs for easy handling.

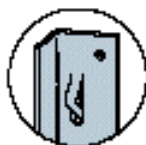


**Resistance adjustment factors for optional nails
used with face mount hangers and straight straps**

Catalogue Nail	Replacement Nail	Adjustment Factor
16d common (0.162 x 3½")	10d x 1½" (0.148 x 1½")	0.64
16d common (0.162 x 3½")	10d common (0.148 x 3") 12d common (0.148 x 3¼")	0.82
16d common (0.162 x 3½")	16d x 2½" (N16) (0.162 x 2½")	1.00
16d common (0.162 x 3½")	spiral 10d x 3" (0.132 x 3")	0.54
16d common (0.162 x 3½")	spiral 16d x 3½" (0.152 x 3½")	0.92
10d common (0.148 x 3") 12d common (0.148 x 3¼")	10d x 1½" (0.148 x 1½")	0.77
10d common (0.148 x 3")	8d common (0.131 x 2½")	0.77
10d common (0.148 x 3")	spiral 8d x 2½" (0.110 x 2½")	0.51
10d common (0.148 x 3")	spiral 10d x 3" (0.132 x 3")	0.66
8d common (0.131 x 2½")	8d x 1½" (0.131 x 1½")	0.86
8d common (0.131 x 2½")	spiral 8d x 2½" (0.110 x 2½")	0.65

1. 10d x 1½" or 16d x 2½" nails may not be substituted for joist nails in double shear hangers (i.e. LUS, MUS, HUS, HHUS, HGUS). Contact factory for exceptions.
2. Do not substitute 10d x 1½" nails for face nails on slope and skew combinations or skewed only LSU and LSSU.
3. This table does not apply to specials (see Hanger Options). Face mount hangers and straight straps may be installed with alternate nails. Use this table to determine the load adjustment factor.
4. All nails shall have a minimum length of penetration of 8 nail diameters into the main member.

FASTENING IDENTIFICATION



Speed Prongs
Used to temporarily position and secure the connector for easier and faster installation.



Positive Angle Nailing (PAN)
Provided when wood splitting may occur, and to speed installation.



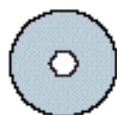
Dome Nailing
This feature guides the nail into the joist and header at a 45° angle.
U.S. Patent 5,603,580



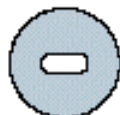
Double Shear Nailing
The nail is installed into the joist and header, distributing the load through two points on each joist nail for greater strength.



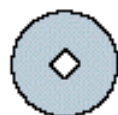
IJS Snap Detail
The "Snap-In" teardrops and Strong-Grips allow the I-joist to "snap" in securely without the need for joist nails.



Hexagonal Holes
Used for concrete or masonry screw applications.



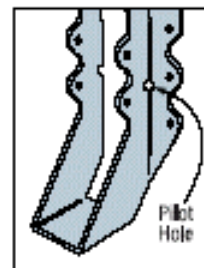
Obround Holes
Used to provide easier nailing access in tight locations. Fasteners may be installed at an angle. Holes must be filled.



Diamond Holes
Optional holes to temporarily secure connectors to the member during installation.



Triangle Holes
Provided on some products in addition to round holes. Round and triangle holes must be filled to achieve the published maximum load value.



Pilot Holes
Tooling holes for manufacturing purpose. No fasteners required.

Product



Engineered Wood & Structural Composite Lumber Connectors

IUS/LF/MIU I-Joint Hangers

The IUS product is available in single-connector (IUS) or dual-connector (IUS-2) configurations. All IUS models are made of galvanized steel, or a combination of these materials.

The improved IUS is now fully compatible with skidder Range I-Joints. I-joints with Range I dimensions between 110° and 130° address the full tabulated factored resistance and uplift values and joint width are not required. The IUS is a hybrid hanger that incorporates the advantages of the face mount and top mount hanger. Installation is fast with the Strong-Grip and Skap-to-Joint features along with easy-to-reach face nail locations and self-aligning locator tabs.

The MIU series hangers are designed for commercial and high load I-joint applications without requiring web stiffeners. The MIU features Positive Angle Milling (PAM), which minimizes splitting of the flanges while permitting time-saving nailing from a better angle. The LF series is ideal for applications not requiring web stiffeners. The economical LF series comes with a hanger designed to support the top chord of the I-Joint. This feature reduces installation time as well as material costs.

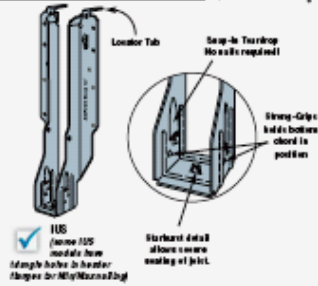
MATERIAL: See table pages 70-72.
FINISH: Galvanized.

UPLIFT RESISTANCE: Models have optional triangle joint nail holes for additional uplift. Properly attached web stiffeners are required.

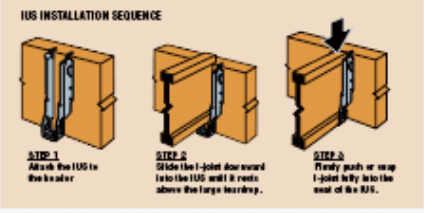
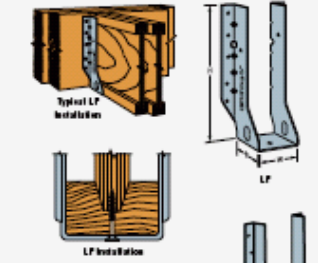
• LF—add two additional 10d@12" joint nails for a total factored uplift resistance of 540 lbs (2 Pk-L) and 300 lbs (2 P-P) (Pg. 1, 10).
• MIU—add four additional 10d@12" joint nails for a total factored uplift resistance of 1080 lbs (2 Pk-L) and 720 lbs (2 P-P) (Pg. 1, 10).

INSTALLATION: Use all specified fasteners. Verify that the header can take the required fasteners specified in the table. See pages 71-72 for more installation information.
• IUS—Mount hanger to header. Position I-joint into hanger and snap into place. No joint nailing required. Some IUS models have triangle and round header nail holes. To achieve Max. download, fill both round and triangle holes.
• IUS—Locator tabs are not structural. They may be bent back to adjust for hanger placement.
• Web stiffeners are not required with I-joints when the joint top flange is laterally supported by the side of the hanger. I-joint manufacturers may require web stiffeners.

OPTIONS: These hangers cannot be modified. However, these models will normally accommodate a skew of up to 5°. For a sloping joint to 10-12 feet show a 10% reduction in ultimate hanger strength. Local crushing of the bottom flange or a excessive deflection may be limiting; check with joint manufacturer for specific limitations on skewing of the type.



IUS (IUS models have Skap-to-Joint feature) S. Patent 6,523,324



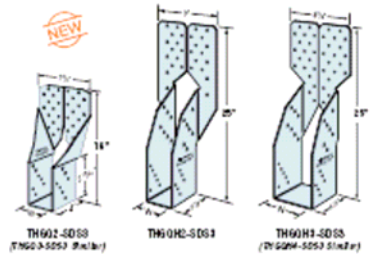
Steel Joist Connectors

THGO/THGQH Head-Clamp Hangers

NEW! The THGO and THGQH hangers for multi-bay girders feature an SDS screw to provide high load capacities and allow installation completed in both. Both models offer maximum and maximum deflection capacities to accommodate varying design needs.

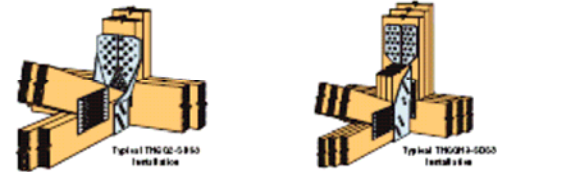
MATERIAL: THGO - 2 gauge THGQH - 3 gauge
FINISH: Galvanized

- INSTALLATION:**
- Use all specified fasteners. See General Notes.
 - Can be installed filling round hole only, or filling round and triangle hole for maximum values.
 - SDS screws must be used for all round and triangle holes. Installation may not require use of all SDS screws.
 - All multiple members must be fastened together to act as a single unit.
 - Girders must be adequately laterally braced to prevent excessive displacement due to secondary torsional stresses.
 - SDS screws driven through truss plates must be approved by the truss designer. Pre-drilling is required.



Model No.	Height (in)	Max. Depth (in)	Min. Part Size (in)	Series	Header	Joint	Factored Resistance							
							Uplift				Download			
							Min. Uplift (k)	Max. Uplift (k)	Min. Download (k)	Max. Download (k)	Min. Uplift (k)	Max. Uplift (k)	Min. Download (k)	Max. Download (k)
THGO-SDS (Min)	2 1/4	2 1/8	2x6	22-5021(a)	10-5021(a)	4350	11440	3300	10110	1920	10750	1720	4870	
THGO-SDS (Max)	2 1/4	2 1/8	2x6	28-5021(a)	14-5021(a)	5230	15070	3420	10700	2320	12100	2420	5300	
THGO-SDS (Min)	2 1/4	2x10	2x6	18-5021(a)	14-5021(a)	5070	14700	4440	11910	2220	11670	2420	5300	
THGO-SDS (Max)	2 1/4	2x10	2x6	28-5021(a)	26-5021(a)	12740	15670	10760	14100	5400	10740	4700	5800	
THGO-SDS (Min)	4 1/4	2 1/8	2x6	22-5021(a)	10-5021(a)	4350	11440	3300	10110	1920	10750	1720	4870	
THGO-SDS (Max)	4 1/4	2 1/8	2x6	28-5021(a)	14-5021(a)	5230	15070	3420	10700	2320	12100	2420	5300	
THGO-SDS (Min)	4 1/4	2x10	2x6	18-5021(a)	14-5021(a)	5070	14700	4440	11910	2220	11670	2420	5300	
THGO-SDS (Max)	4 1/4	2x10	2x6	28-5021(a)	26-5021(a)	12740	15670	10760	14100	5400	10740	4700	5800	
THGO-SDS (Min)	2 1/4	2x12	2x6	34-5021(a)	14-5021(a)	5230	15070	3420	10700	2320	12100	2420	5300	
THGO-SDS (Max)	2 1/4	2x12	2x6	40-5021(a)	26-5021(a)	12740	15670	10760	14100	5400	10740	4700	5800	

1. Tabular resistance has been reduced 15% for vertical or end loads in order to increase allowed loads when other loads govern.
2. Max. min. 2x6 girth required for 100-103 series.
3. Connector must be installed centered on joint vertical axis.



Engineered Wood & Structural Composite Lumber Connectors

GENERAL CONNECTOR INSTALLATION

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Custom Parts



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MISINSTALLATIONS



CORROSION INFORMATION



Guidelines for Selecting the Proper Connector

1 Evaluate the Application.

Consider the type of structure and how it will be used. These recommendations may not apply to non-structural applications such as fences.

2 Evaluate the Environment.

Testing and experience indicate that indoor dry environments are less corrosive than outdoor environments. Determining the type of environment where a connector or fastener will be used is an important factor in selecting the most appropriate material and finish for use on the connectors and fasteners. To help in your decision making, consider the following general exposure information:

Interior Dry Use: Includes wall and ceiling cavities, and raised floor applications of enclosed buildings that have been designed to ensure that condensation and other sources of moisture do not develop.

Exterior – Dry: Includes outdoor installations in low rainfall environments and no regular exposure to moisture.

Exterior – Wet: Includes outdoor installations in higher moisture and rainfall environments.

Higher Exposure Use: Includes exposure to ocean salt air, fire retardants, large bodies of water, fumes, fertilizers, soil, some preservative treated woods, industrial zones, acid rain, and other corrosive elements.

3 Evaluate and select a suitable pressure-treated wood for the intended application and environment.

The treated wood supplier should provide all the information needed regarding the wood being used. This information should include: the specific type of wood treatment used, if ammonia was used in the treatment, and the chemical retention level. If the needed information is not provided then Simpson would recommend the use of Stainless Steel connectors and fasteners. You should also ask the treated wood supplier for a connector coating or material recommendation.

4 Use the chart on the right, which was created based on Simpson's testing and experience to select the connector finish or material.

If a pressure treated wood product is not identified on the chart, Simpson has not evaluated test results regarding such product and therefore cannot make any recommendation other than the use of Stainless Steel with that product. Manufacturers may independently provide test results or other product use information; Simpson expresses no opinion regarding any such information.

5 Compare the treated wood supplier's recommendation with the Simpson recommendation.

If these recommendations are different, Simpson recommends that the most conservative recommendation be followed.

Low – Use Simpson standard painted and G90 galvanized connectors as a minimum.

Med – Use ZMAX/HDG galvanized connectors as a minimum.
Use fasteners galvanized per ASTM A153.

High – Use Type 304 or 316 Stainless Steel connectors and fasteners.

Connector Coating Recommendation - Structural Applications

Environment	Untreated Wood	SBX/DOZ & Zinc Borate	ACQ-C, ACQ-D (Carbonate), CA-B & CBA-A			ACZA	Other or Uncertain
			No Ammonia	With Ammonia	Higher Chemical Content ¹		
Interior Dry	Low	Low	Med	Med	High	High	High
Exterior - Dry	Low	N/A ²	Med	High	High	High	High
Exterior - Wet	Med	N/A ²	Med ^{2,4}	High	High	High	High
Higher Exposure	High	N/A ²	High	High	High	High	High
Uncertain	High	N/A ²	High	High	High	High	High

1. Woods with actual retention levels greater than 0.40 pcf for ACQ, 0.41 pcf for CBA-A, or 0.21 pcf for CA-B (Ground Contact level).

2. Borate treated woods are not appropriate for outdoor use.

3. Test results indicate that ZMAX/HDG will perform adequately, subject to regular maintenance and periodic inspection. However, the nationally-approved test method used, AWWPA E12-94, is an accelerated test, so data over an extended period of time is not available. If uncertain, use Stainless Steel.

4. Some treated wood may have excess surface chemicals making it potentially more corrosive. If you suspect this or are uncertain, use Stainless Steel.

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