

HANGER OPTIONS GENERAL NOTES

This information applies only to the hangers manufactured by Simpson Strong-Tie and installed per our instructions. Some combinations of these options on a single hanger have not been evaluated. In some cases, combinations of these options cannot be manufactured. A qualified designer must always evaluate each connection, including header and joist limitations, before specifying the product.

Testing is performed using a standardized hanger test method. The joist in the test setup may include the minimum amount of structural stability where appropriate. For example, the sloped down hanger tests are assembled with a joist cut on the lower end to lie flush with a wood member attached with three 8d common toenails. Header and other attached structural members are assumed fixed in actual installations. Horizontal loads induced by sloped joists must be resisted by other members in the structural system.

MATERIAL: Gauge may vary from that specified depending on the manufacturing process used. U, HU, HUTF, W and B hangers normally have single-piece stirrups; occasionally, the seat may be welded. Hanger configurations, height and fastener schedules may vary from the tables depending on the joist size, skew and slope.

FINISH: See specific hanger tables. Welded specials: Simpson gray paint. Specials that are not galvanized before fabrication can be hot-dip galvanized after fabrication; specify HDG.

CODES: Modified hangers, due to their numerous variations, are not on code reports, except U/HU (NER-499).

LOADS: For multiple options on the same connector, use the smallest reduction factor to give the lowest design loads.

TO ORDER: Use the abbreviations below to order specials. The example shows a W410 hanger and illustrates most available options; most special hangers have only a few of these features. For assistance, contact Simpson.

INSTALLATION: • Fastener quantities may be increased beyond the amount specified in the standard hanger table.

- Fill all holes with the table-specified fastener types.
- N54A fasteners are supplied with hangers.
- B, W and GLT hangers for sloped seat installations are assumed backed. To order a custom, non-backed hanger, contact Simpson Strong-Tie.
- Bevel-cut the wood member's end for skewed type A hangers; butt-cut wood members for skewed type B hangers.

W410	X	SLD30	SKL20	TFDL20	TFO20	OSR
Base Model		Seat Sloped Down (30°)	Skewed Left (20°) (SKR = Skewed Right)	Top Flange Down Left (20°) (TFDR = Top Flange Down Right)	Top Flange Open (20°) (TFC = Top Flange Closed)	Offset Top Flange Right (OSL = Offset Top Flange Left)
	X = Modification	(SLU = Seat Up)				

U/HU

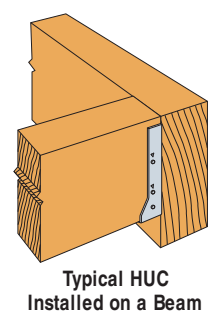
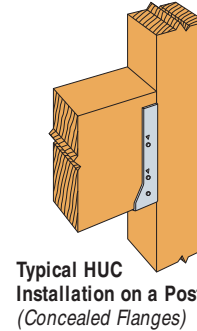
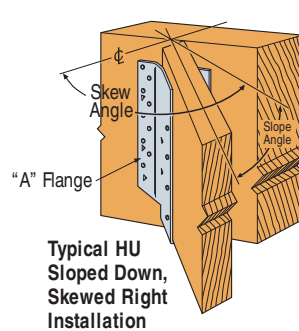
See Hanger Options General Notes.
Not all Slope and Skew Combinations are available.

SLOPED AND/OR SKEWED

- For low-cost, code-reported 45° skews, see SUR/SUL and HSUR/HSUL. See also LSU/LSSU connectors.
- **U/HU may be skewed to a maximum of 45° and sloped to a maximum of 45°. Hangers 5½" or less in width may be skewed to 67½°. Hangers skewed 51°-67½° require a square cut.**
- For all options, uplift loads are 0.75 of table loads.
- For combined slopes and skews, the maximum allowable download is 0.80 of the table load.
- **For skewed hangers 3¾" and less in width, the allowable download is 100% of the table load. For skewed hangers over 3¾" in width the allowable download is 80% of the table load. For slope only, the allowable download is 100% of the table load.**

STRAIGHT OR CONCEALED FLANGE

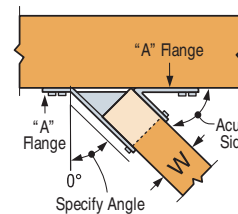
- HU is available with the A flanges straight at 100% of the table loads if $W \geq 3\frac{1}{2}"$.
- If $W < 3"$, use N10 nails at 0.64 of the table load.
- If $W \geq 3"$, use 10d nails at 0.84 of the table load.
- HU is available with A flanges concealed, provided the W dimension is $2\frac{5}{16}"$ or greater, at 100% of the table load. Specify HUC.
- HU is available with one flange concealed when the W dimension is less than $2\frac{5}{16}"$ at 100% of the table load.
- For skewed only HUC hangers, the flange on the acute side can be concealed at 100% of the table load. See table for skew limitations.
- For sloped only hangers, flanges can be concealed at 100% of the table load.
- For sloped and skewed hangers, the flange on the acute side can be concealed at 0.80 of the table load. Contact Simpson Strong-Tie for skew limitations.
- When nailing into the carrying member's end grain, the allowable load is 0.67 of the table load.
- For welding see technical bulletin T-HUHUC-W (see page 187 for details).



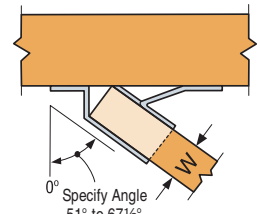
Maximum Skew Degree for Skewed HUC Hangers

Hanger Width	Maximum Skew
2⅝"	26°
2¾"	26°
2⅞"	29°
2¾"	29°
3⅛"	37°
3¼"	38°
3⅝"	39°
3⅞"	42°

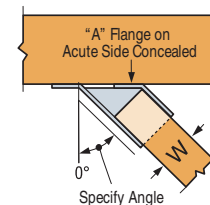
1. Widths greater than 3⅞" maximum skew is 45°.



Top View U Hanger Skewed Right < 51° (Square Cut)



Top View U Hanger Skewed Right ≥ 51° (Square Cut)



Top View HUC Concealed Hanger Skewed Right (Square Cut)

LGU/M GU/HGU/HHGU

See Hanger Options General Notes.

CONCEALED FLANGE

LGU, MGU, HGU and HHGU hangers are available with one flange concealed. Order as an "X" version and specify flange to conceal. Example: LGU3.25X, Right flange concealed.

Allowable Loads for One Flange Concealed Option:

- LGU Series = 1.00 of table load
- HGU Series = 0.75 of table load
- MGU Series = 0.88 of table load
- HHGU Series = 0.75 of table load

Note: MGU3.63, MGU5.25 and HGU5.25 can not be concealed.

Typical GU Installation with Right Flange Concealed

