HGLT/HGLTV/HGLS/GLS

Heavy-Duty Top-Flange Hangers

HGLTV hangers are designed for structural composite lumber header applications that require high loads. The top-flange nails are sized and specifically located to prevent degradation of the header due to splitting of laminations.

HGLT accommodate typical structural requirements for timber and glulam beams. Not acceptable for nailer applications. The Funnel Flange™ design allows easy installation of beams.

GLS and HGLS are heavy glulam beam saddle hangers.

For heavy loads with a face-mount application, see the HGUS and GU series.

Material: 3 gauge top flange; 7 gauge stirrup

Finish: Simpson Strong-Tie gray paint. Hot-dip galvanized is available; specify HDG.

Installation:

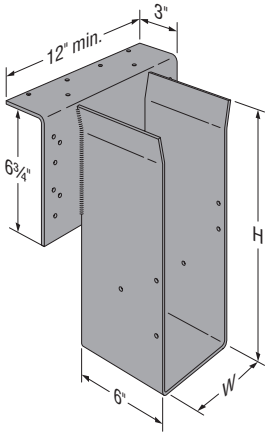
- Use all specified fasteners. Verify that the header can take the required fasteners specified in the table.
- For attaching to multi-ply headers, refer to technical bulletin T-C-MPLYHEADR at **strongtie.com**.
- Flatten edge of header to match top flange radius.
- Bevel cut the carried beam for skewed hangers.
- For hangers exceeding the joist height by more than ½", allowable load is 50% of the table load.
- This series may be used for weld-on applications. Minimum required weld is a ¼" x 2½" fillet weld at each end of the top flange; see p. 20, note k for weld information. Weld-on applications produce maximum loads listed. For uplift loads, refer to technical bulletin T-C-WELDUPLFT at **strongtie.com**.
- HGLTV hangers may be installed on ledgers provided the ledgers are made of 4x solid sawn or 3½" SCL shown in the table below. Thinner ledgers must be evaluated by the building designer.
- N54A nails are included with HGLT, HGLS and GLS hangers. N54A nails should only be used with solid sawn, timber, or glulam headers. For HGLS or GLS with SCL members, ¼" x 2½" Strong-Drive® SDS Heavy-Duty Connector screws may be used in place of N54A nails. For HGLT, consider HGLTV as an alternative when used with SCL.
- For HGLS and GLS, loads shown are per side.
- To order GLS and HGLS, specify H_1, H_2, W_1, W_2 and S dimensions (see illustration).

Options:

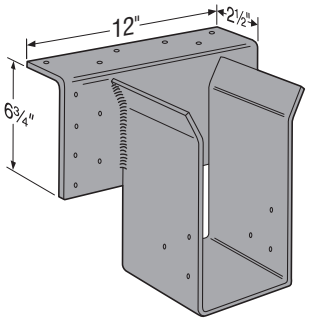
- Hot-dip galvanized; specify HDG.
- HGLT/HGLTV, GLS and HGLS series seats may be skewed to a maximum of 50° and/or sloped to a maximum of 45°.
- For sloped seat, the maximum allowable load for the HGLT/HGLS/HGLTV is 9,165 lb. The maximum allowable load for the GLS is 6,550 lb.
- For skewed seat, the maximum allowable load for the HGLT/HGLS/HGLTV is 7,980 lb. The maximum allowable load for the GLS is 6,500 lb. The deflection at full loading may reach ¼". For skews greater than 15°, multiply the table uplift load by 0.50.
- For slope and skewed seat, the maximum allowable load is 9,650 lb. for the HGLT/HGLS and 7,695 lb. for the HGLTV. For GLS sloped and skewed seat combinations, the maximum download is 5,500 lb. per supported member. The deflection at full loading may reach ¼". For skews greater than 15°, multiply the table uplift load by 0.50.
- Sloped or skewed seat hangers may not be installed in non-backed header installations.
- Top flange may be sloped down to the left or right up to 30°. Reduce allowable loads using the following reduction factor based on linear interpolation $(90-\alpha)/90$; where α is the angle measure from the horizontal. This reduction is not cumulative with other load reductions.
- Top flange may be offset left or right for placement at the end of a header. Minimum seat width 3¼". The maximum allowable load is 0.45 for the HGLT/HGLS/HGLTV and 0.50 for the GLS. No uplift load is available. Offset top flange and sloped seat is allowed with 0.45 load factor.
- For skewed and offset or skewed only top-flange HGLS/HGLT/HGLTV hangers with inward or outward configuration, the maximum allowable load is the lesser of a) 45% of the catalog load or b) 4,300 lb. for HGLS/HGLT/HGLTV and 3,500 lb. for GLS.

Codes: See p. 13 for Code Reference Key Chart

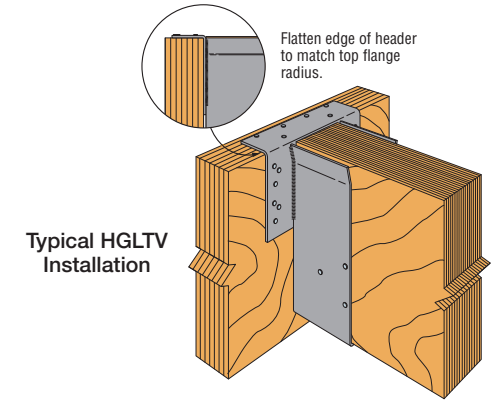
Web Applications: Visit **app.strongtie.com/hs** to access our Hanger Selector web application.



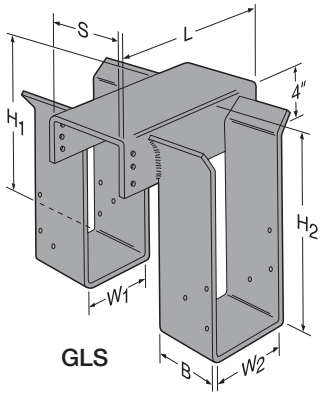
HGLTV



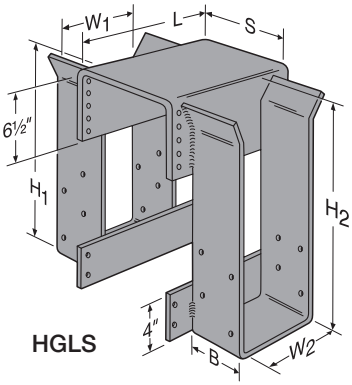
HGLT
(fasteners included)



Typical HGLTV Installation



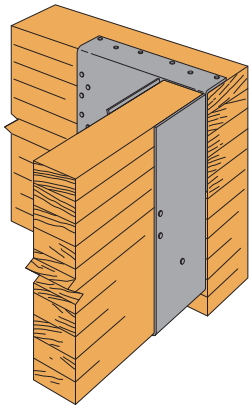
GLS



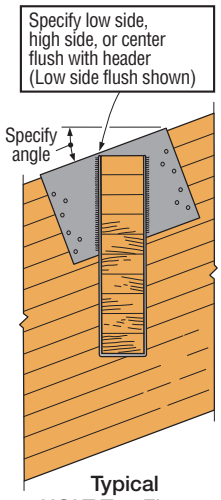
HGLS

HGLT/HGLTV/HGLS/GLS

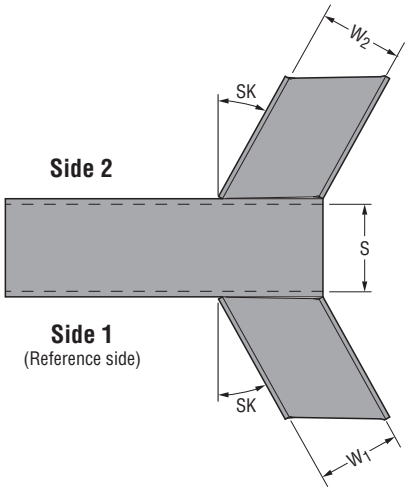
Heavy-Duty Top-Flange Hangers (cont.)



Typical HGLT
Top Flange Offset Left



Typical
HGLT Top Flange
Sloped Down Left
with Low Side Flush



HGLS (Skewed Outward)
Skewed Right, Offset Left
(Top View)

Model No.		Hanger Dimensions (in.)			
		W_1, W_2	L		S
GLS	HGLS		GLS	HGLS	
3–5	—	3¼	9	—	5¼
3–7*	—	3¼	9	—	6⅞
5–5	5–5	5¼	9	9	5¼
5–7	5–7	5¼	9	9	6⅞
5–9	5–9	5¼	9	9	8⅞
5–11	5–11	5¼	9	9	10⅞
7–7	7–7	6⅞	12	12	6⅞
7–9	7–9	6⅞	12	12	8⅞
7–11	7–11	6⅞	12	12	10⅞
—	9–9	8⅞	—	12	8⅞
3.6–3.6–SDS	—	3⅝	9	9	3⅝
3.6–5.3–SDS	—	3⅝	9	9	5⅜
5.3–5.3–SDS*	5.3–5.3–SDS	5⅜	9	12	5⅜
5.3–7.1–SDS	—	5⅜	9	12	7⅛
7.1–7.1–SDS	7.1–7.1–SDS	7⅛	12	12	7⅛

*Slope, skew and offset top flange not available.

These products are available with additional corrosion protection. For more information, see p. 16.

Model No.	Joist (in.)		Fasteners (in.)			Allowable Loads Header Type						Code Ref.
	Width	Height	Top	Face	Joist	Uplift (160)	LVL	PSL	LSL	DF/SP	SPF/HF	
HGLTV series	2 11/16 – 8¾	7½ – 33	(6) 0.162 x 3½	(12) 0.162 x 3½	(6) 0.162 x 3½	1,120	10,585	9,485	9,500	7,805	6,770	IBC®, FL, LA
HGLT Series	3⅛ – 8¾	7½ – 33	(6) N54A	(12) N54A	(6) N54A	2,450	—	—	—	10,720	—	
HGLS Series	5⅛ – 8¾	10½ – 33	—	(28) N54A	(16) N54A	2,265	—	—	—	13,850	—	
GLS Series	3¼ – 7⅛	8½ – 28	—	(12) N54A	(12) N54A	2,265	—	—	—	8,620	—	

1. Uplift loads have been increased for earthquake or wind loading with no further increase allowed. Reduce where other loads govern.
2. Uplift loads apply only when "H" is 28" or less.
3. For hanger heights exceeding the joist height, the allowable load is 0.50 of the table load.
4. LVL headers are assumed to be made primarily from Douglas fir or southern pine.
   For LVL made from spruce-pine-fir or similar less-dense veneers, use the values found in the SPF/HF column.
5. For SCL products made primarily from Douglas Fir or Southern Pine, use 1,640 lb. for uplift. For SPF members, use 1,115 lb. for uplift.
6. GLS and HGLS saddle hanger allowable loads are for each stirrup. Fasteners listed are total fasteners required.
7. **Fasteners:** Nail dimensions are listed diameter by length. See pp. 23–24 for fastener information.