HANGER OPTIONS

B/LBV/HB/HHB/GB/HGB

See Hanger Options General Notes.

MATERIAL:

- Gauge may vary from that specified depending on the manufacturing process used. Hanger configurations, height and fastener schedules may vary from the tables depending on the joist size, skew and slope.

CODES:

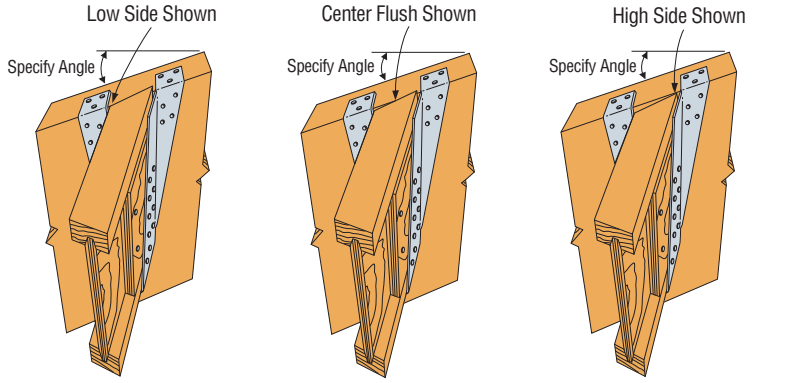
- Modified hangers, due to their numerous variations, are not in code reports.

LOADS:

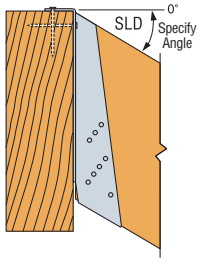
- For multiple modifications on the same connector, use the single multiplier factor that yields the lowest design loads.

INSTALLATION:

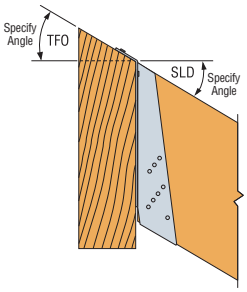
- Fastener quantities will typically increase beyond the amount specified in the standard hanger tables.
- Web stiffeners are required for I-joists.
- Fill all holes with the table-specified fastener types.
- Bevel cut the carried member for skewed applications.
- Sloped B, HB and LBV hangers less than 14" are assumed backed. For non-backed installations, contact Simpson Strong-Tie.



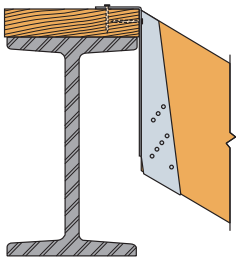
B Hanger Sloped Down and Skewed Left with Sloped Top Flange Installation
When ordering, specify Low Side Flush, Center Flush or High Side Flush



Typical LBV Sloped Down Installation with Full Backing



Typical LBV Sloped Down with Top Flange Open

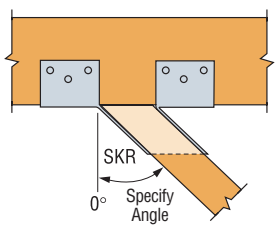


Typical LBV Sloped Down on Nailer Non-Backed

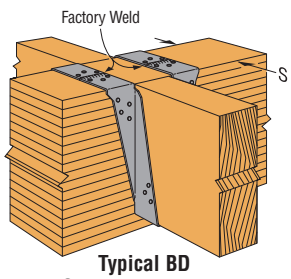
Allowable Load Reduction Factors for Modified Hangers[1,2]

Hanger Series			Sloped Down	Sloped Up	Skewed only	Sloped Down & Skewed		Sloped Up & Skewed		TF Down		TF Open / Closed	
LBV	Angle Limit		45	45	45	45		45		35		30	
	Minimum Height (in.)		6	6	6	9¼	14	9¼	14	9¼	14	9¼	14[3]
	All Widths	Download	1.00	0.91[8]	1.00	0.56	1.00	0.45[8]	0.91[8]	(90-x)/115	(90-x)/90	(90-x)/115	(90-x)/90
		Uplift	1.00	1.00	1.00	—[4]	1.00	—[4]	1.00	—[5]	1.00	—[5]	1.00
B	Angle Limit		45	45	45	45		45		35		30	30
	Minimum Height (in.)		6	6	6	9¼	14	9¼	14	9¼	14	9¼	14[3]
	Less than 2½" Wide	Download	0.82	0.66[8]	0.95	—[10]	0.82	—[10]	0.64[8]	(90-x)/140	(90-x)/90	(90-x)/140	(90-x)/90
		Uplift	1.00	1.00	1.00	—[6]	1.00	—[6]	1.00	—[6]	1.00	—[6]	1.00
	2½" and Wider	Download	1.00	0.80[8]	0.95	0.46	1.00	0.37[8]	0.80[8]	(90-x)/140	(90-x)/90	(90-x)/140	(90-x)/90
		Uplift	1.00	1.00	1.00	—[6]	1.00	—[6]	1.00	—[6]	1.00	—[6]	1.00
HB	Angle Limit		45	45	45	45		45		35		30	30
	Minimum Height (in.)		8	8	8	11¼	14	11¼	14	11¼	14	11¼	14[3]
	Less than 2½" Wide	Download	0.84	0.70	1.00	—[10]	0.84	—[10]	0.70[8]	(90-x)/140	(90-x)/90	(90-x)/140	(90-x)/90
		Uplift	1.00	1.00	0.71[9]	—[6]	0.71[9]	—[6]	0.71[9]	—[6]	1.00	—[6]	1.00
	2½" and Wider	Download	0.87	0.70[8]	0.96	0.38	0.87	0.38	0.70[8]	(90-x)/140	(90-x)/90	(90-x)/140	(90-x)/90
		Uplift	1.00	1.00	1.00	—[7]	1.00	—[7]	1.00	—[7]	1.00	—[7]	1.00
HHB, GB, HGB	Angle Limit		45	—	—	—	—	—	—	—	—	—	—
	Minimum Height (in.)		9¼	—	—	—	—	—	—	—	—	—	—
	Download		0.70	—	—	—	—	—	—	—	—	—	—
	Uplift		1.00	—	—	—	—	—	—	—	—	—	—

1. Use this table to calculate allowable loads for modified hangers. Apply reduction factor to the appropriate allowable load for the header condition, including nailers.
2. HB Hangers less than 2½' wide are assumed to use 10dx1½" joist nails. HB Hangers 2½" and wider are assumed to use 16dx2½" joist nails.
3. Minimum height for TF Opened/Closed is 14" when combined with any skew. Minimum height for TF Opened/Closed combined with slope only is the same as listed for slope only.
4. For sloped and skewed LBV hangers less than 14" allowable uplift shall be limited to 190 lbs.
5. For LBV Hangers with a modified top flange allowable uplift shall be limited to 240 lbs. when using 2-10dx1½" joist nails.
6. For B and HB hangers less than 14" allowable uplift shall be limited to 480 lbs.
7. For HB hangers less than 14" use 4-16d or 16dx2½" joist nails. Allowable uplift shall be limited to 615 lbs.
8. These hangers may deflect an additional 1/32" at design load.
9. For HB hangers on nailers, 100% of allowable nailer uplift value may be used. *(See nailer table)*
10. For hangers with slope and skew less than 14" use 1150 lbs. for B hangers and 1430 lbs. for HB hangers.
11. In the table the term "x" refers to the angle of the modification.



Top View B Hanger Skewed Right



Typical BD Saddle Installation

SADDLE HANGER

Saddle hangers are made to order; add "D" to model *(e.g. BD412)*; specify S *(for saddle)* dimension. They may be used for most conditions except at end wall locations and are preferred for nailer applications. Minimum S dimension *(saddle width)* is 3 9/16". Minimum supporting member width is 3½". Minimum nailer thickness apply *(see page 69 and 92)*. Saddle hangers achieve catalog load listed. Saddle hangers on stud walls do not achieve catalog loads.