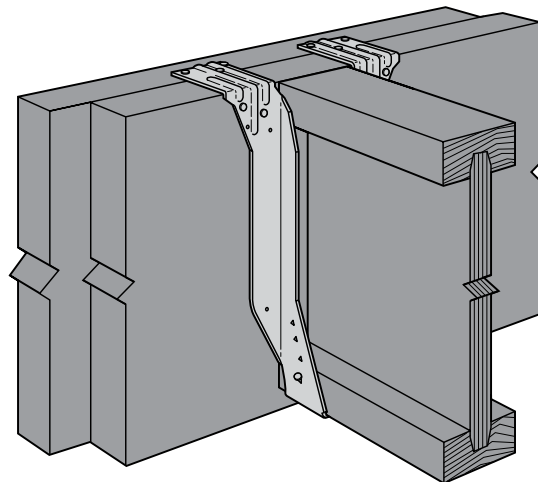


## TOP-FLANGE HANGER REDUCTIONS FOR MULTIPLE PLY HEADERS

Standard testing of top-flange joist hangers is typically performed with a solid header. When using a header composed of multiple plies of dimensional lumber or structural composite lumber (SCL), fastener issues may arise. The nails in the top-flange may end up close to a joint between the plies. Due to the proximity of some nails to the joint, reductions in hanger capacity can occur.

In order to address this issue, Simpson Strong-Tie® has evaluated various header/hanger conditions involving top-flange hangers supported by multi-ply headers. When using catalog loads, reduction factors from the table below shall be applied. These reductions are in addition to all other applicable reductions for top flange hangers.



### Reduction Factors for Top Flange Hangers Installed on Multi-Ply Headers<sup>1,2,3</sup>

Hanger Series	Multi-Ply Header Type			
	2x SPF	2x DF/SP 1½ SCL <sup>6</sup>	1¾ SCL <sup>6</sup>	I-Joist All Widths <sup>7</sup>
ITS, ITT, JB, PF, LB, LBV, BA	1.00	1.00	1.00	1.00
B, HB, HUTF, HUSTF	1.00	1.00	1.00	—
MIT, HIT	1.00	0.88	1.00	— <sup>4</sup>
HHB, GB, HGB	1.00	0.71	1.00	—
WP, WPU, W, WNP, WNPU	1.00	1.00 <sup>5</sup>	1.00 <sup>5</sup>	— <sup>4</sup>
GLT, GLTV, HW, HWU	1.00	0.90	1.00	—
EGQ	—	—	1.00	—

1. Compute the allowable load by multiplying the catalog load by the reduction factor. All other catalog instructions apply.
2. The header plies must be fastened together to act as one unit to resist the applied load independently of the connector fasteners. This must be determined by the Designer/Engineer of Record.
3. Hangers not shown in table have not been evaluated for use on multi-ply headers.
4. A reduction factor of 1.00 shall apply for MIT and WP hangers installed on multi-ply I-joist headers.
5. A reduction factor of 0.90 shall apply for W, WP, WPU, WNP and WNPU hangers installed on multi-ply LSL headers.
6. Structural Composite Lumber (SCL) refers to LVL or LSL.
7. “—” denotes not applicable or not evaluated unless otherwise noted.