

Maximum Point Load Applied to Either Member of 2-Ply TJI® Joists

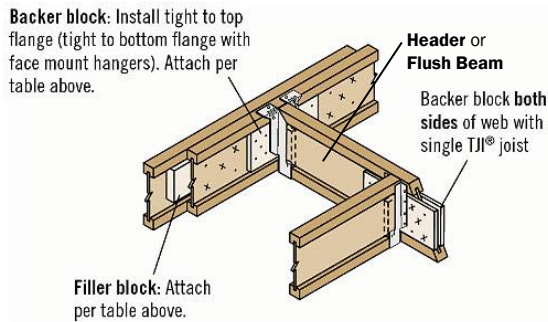
For floor and roof applications where TJI® joists are supporting concentrated loads from the side, *Trus Joist® TJI® Joist Specifier's Guide* (TJ-4000) provides details H2 and H6 in which a header or flush beam may be supported by a 2-ply TJI® joist.

The table below provides filler and backer block sizes for details H2 and H6. It includes values for maximum point load applied to either member of a 2-ply TJI® joist (i.e., maximum allowed member reaction of the header or flush beam). Note that other connections may be specified by an engineer of record (EOR).

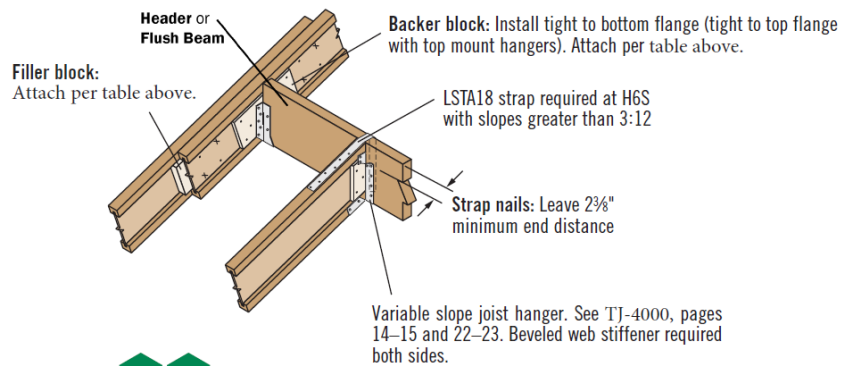
FILLER AND BACKER BLOCK SIZES (MAXIMUM POINT LOAD APPLIED TO EITHER MEMBER OF 2-PLY TJI® JOISTS)

TJI®		110		210		230 or 360		360	560			560D
Depth		9½" - 11⅞"	14" - 16"	9½" - 11⅞"	14" - 16"	9½" - 11⅞"	14" - 16"	18" - 20"	11⅞"	14" - 16"	18" - 20"	22" - 24"
Filler Block ^[1] (Detail H2 or H6)		2x6	2x8	2x6 + ⅜" sheathing	2x8 + ⅜" sheathing	2x6 + ½" sheathing	2x8 + ½" sheathing	2x12 + ½" sheathing	Two 2x6	Two 2x8	Two 2x12	Four ¾" x 15" sheathing
Backer Block ^[1] (Detail H2 or H6)		⅝" or ¾"		¾" or ⅞"		⅞" or 1" net			2x6	2x8	2x12	Two ¾" x 15" sheathing
Nail Size	Filler	(0.131" x 3")							(0.131" x 3½")			
	Backer								(0.131" x 3")			
Nail Quantity ^[2]	Filler ^[3]	15							32		50	
	Backer								15		15	
Maximum Point Load ^{[4][5]} (Detail H2 or H6)		1,440 lb							2,130 lb			

- [1] If necessary, increase filler and backer block height for face mount hangers and maintain ⅛" gap at top of joist. See detail W in TJ-4000. Filler and backer block dimensions should accommodate required nailing without splitting. The suggested minimum length is 24" for filler and 12" for backer blocks.
- [2] Clinch nails when possible.
- [3] For filler block connection, nails shall be driven from alternating sides.
- [4] Maximum point load applies only to filler block connection. Additional verification of the 2-ply TJI® joist capacity is required.
- [5] Values listed are for 100% stress level. Increase 15% for snow-loaded roof conditions or 25% for non-snow roof conditions, where code allows.



H2 With top mount hangers, backer block required only for downward loads exceeding 250 lbs or for uplift conditions



H6 H6S Detail H6S is allowed only with joist depths ≤ 16".

Figure 1: Header or flush beam assemblies as shown in published literature.

If you have any questions, please contact your Weyerhaeuser representative.