

## 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 <sup>[1]</sup> (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 <sup>[1]</sup> (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 <sup>[2]</sup>	Filler <sup>[3]</sup>	15							32		50	
	Backer								15		15	
Maximum Point Load <sup>[4][5]</sup> (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.

**Backer block:** Install tight to top flange (tight to bottom flange with face mount hangers). Attach per table above.

**Header or Flush Beam**

Backer block both sides of web with single TJI® joist

**Filler block:** Attach per table above.

Filler block: Attach per table above.

H2

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

**Header or Flush Beam**

**Backer block:** Install tight to bottom flange (tight to top flange with top mount hangers). Attach per table above.

LSTA18 strap required at H6S

Strap nails: Leave 2⅜" minimum end distance

Variable slope joist hanger. See TJ-4000, pages 15-16 and 24-25. Beveled web stiffener required both sides.

H6

H6S

H6S is required for slopes greater than 3:12.

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

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