MULTIPLE MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS: 3100Fb - 2.0E

Verify adequacy of beam in uniform load tables prior to using values listed below.

3100F_b-2.0E 1¾″ WEST FRASER[™] LVL

Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			2" 2" 2" 2-PLY LVL	2" 2" 3-PLY LVL	2" 2" 4-PLY LVL*
Connector	Spacing	Rows	Nails On One Side or Through Bolts	Nails Both Sides or Through Bolts	Through Bolts Only
16d (3½") Common Wire Nails	12″ o.c.	2 Rows	885	663	Not Applicable
		3 Rows	1327	995	
	6″ o.c.	2 Rows	1770	1326	Not Applicable
		3 Rows	2654	1990	
	4″ o.c.	2 Rows	2655	1989	Not Applicable
		3 Rows	3981	2985	
½" A307 Through Bolts	24″ o.c.	2 Rows	671	503	448
	12″ o.c.	2 Rows	1342	1006	895
	6″ o.c.	2 Rows	2684	2012	1790

 * 4-ply beams should only be side-loaded when loads are applied to both sides of the member.

 Nails to be located a minimum of 2" from the top and bottom of the member. Start all nails a minimum of 2½" in from ends. Bolts are to be material conforming to ASTM Standard A307. Bolt holes are to be the same diameter as the bolt, and located 2" from the top and bottom of the member. Washers should be used under head and nut. Start all bolts a minimum of 21/2" in from ends.

3. Values listed are for standard term loading.

EXAMPLE (All loads shown are total factored)

First, convert joist reactions to plf load on each side of the beam by taking the joist reaction (lbs.) divided by the joist spacing (ft.). 400 lbs/(16/12) = 300 plf and 533 lbs/(16/12) = 400 plf. Check factored resistance tables to verify that 3 plys can carry the total factored load of 700 plf. The maximum load applied to either outside member is 400 plf. Use 2 rows of 16d $(31/2^{"})$ common wire nails at 12" o.c. (good for 663 plf).



CONNECTION OF MULTIPLE PIECES FOR TOP-LOADED BEAMS

2.0E (1³/₄" wide pieces)

- Minimum of 2 rows of 16d (31/2") nails at 12" o.c. for 51/2" through 117/8" beams
- Minimum of 3 rows of 16d (31/2") nails at 12" o.c. for 14" through 24" beams

