

Top Loaded Connection Table <i>*Applied loads are to be framed in a manner to ensure the loading is distributed equally to each LVL ply</i>			
Depths	2ply LVL	3ply LVL	- 1 1/4" x 6 3/4" SDW or FlatLok Screws from One Side
5 1/2" - 11 7/8"	2 Rows From one side 3 1/2" (16d) nails @ 12" o.c	2 Rows from both sides 3 1/2" (16d) nails @ 12" o.c	2 Rows from one side 1/4" x 6 3/4" @ 24" o.c
14" - 24"	3 Rows From one side 3 1/2" (16d) nails @ 12" o.c	3 Rows from both sides 3 1/2" (16d) nails @ 12" o.c	3 Rows from one side 1/4" x 6 3/4" @ 24" o.c

- Lateral support of beam compression edges is required at intervals of 24" o/c or closer
- Lateral support of beams is required at bearing locations.

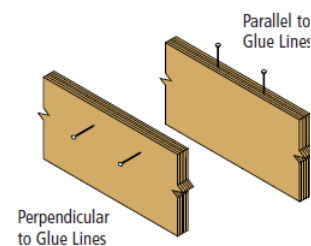
Side Loaded Connection Table						
Maximum Factored ** Uniform Load (PLF)** Applied to Either Outside Member <i>Please Refer to individual Beam Calculation sheets for concentrated load connection requirements</i>						
Connector	Nail Spacing	Rows	2ply LVL -Nails From One Side - 1 1/4" x 3 1/2" SDW or FlatLok Screws from One Side West Fraser 1 3/4 2.0E 3100Fb West Fraser 1 3/4 1.8E 3000Fb	3ply LVL - Nails From Both Sides - 1 1/4" x 5 1/4" SDW or FlatLok Screws from One Side West Fraser 1 3/4 2.0E 3100Fb West Fraser 1 3/4 1.8E 3000Fb	4 ply LVL - 1 1/4" x 6 3/4" SDW or FlatLok Screws from One Side West Fraser 1 3/4 2.0E 3100Fb	
3 1/2" Common Wire Nails (16d) Min Ø = .160 (mm)	12"	2 Rows	885	827	663	620
		3 Rows	1327	1241	995	930
		4 Rows	1770	1654	1326	1240
	6"	2 Rows	2654	2482	1990	1860
		3 Rows	2655	2481	1989	1860
		4 Rows	3981	3723	2985	2790
SDW or FlatLok SCREW	24"	2 Rows	570	547	487	487
		3 Rows	855	821	730	730
		4 Rows	855	821	730	730
	16"	2 Rows	1283	1231	1,095	973
		3 Rows	1140	1094	973	973
		4 Rows	1710	1642	1,460	1,460

- Lateral support of beam compression edges is required at intervals of 24" o/c or closer
- Lateral support of beams is required at bearing locations.
- 4ply beams should only be side loaded when loads are applied to both sides of the member
- Values listed are for standard term loading
- SDW as per Simpson F-F- SDWCan13
- Each ply is assumed to carry same proportion of load
- Hangers face fasteners must be a minimum 3" long

MINIMUM NAIL SPACING

Connector	Nailing Parallel to Glue Line	Nailing Perpendicular to Glue Line
8d Box	3"	2"
8d Common	3"	2"
10d and 12d Box	4"	2"
10d and 12d Common	4"	3"
16d Common	8"	3"

* Not allowed on product thickness less than 1 1/2"



3ply LVL

Required Connectors for Hanger load transfer into 3rd ply of LVL beam

Nails to be applied from opposite side of hanger

Nail Size	Total # Nails	Total # Nails Per Zone A	Maximum Factored Hanger Load (lbs)
3 1/2" common (16d)	18	9	11,900
3 1/2" common (16d)	12	6	7,900
3 1/2" common (16d)	6	3	3,900

- Actual Hanger Capacity to be verified by others
- Lateral support of beam compression edges is required at intervals of 24" o/c or closer
- Lateral support of beams is required at bearing locations.
- Values listed are for standard term loading
- Hangers face fasteners must be a minimum 3" long
- Only valid for Depths between 9 1/2" to 18 3/4"

3ply and 4ply LVL Hanger Load Transfer

SDW and FlatLok Screws (Load transfer into 3rd and 4th ply)

# LVL Ply's	Total # SDW or FlatLok screws	Total # SDW or FlatLok Screws Per Zone A	SDW or FlatLok Screw Size	Maximum Factored Hanger Load (lbs)
3	10	5	1/4" x 5"	10,950
4	10	5	1/4" x 6 3/4"	10,950

- Actual Hanger Capacity to be verified by others
- Lateral support of beam compression edges is required at intervals of 24" o/c or closer
- Lateral support of beams is required at bearing locations.
- Values listed are for standard term loading
- SDW values as per Simpson F-F- SDWCan13
- Hangers face fasteners must be a minimum 3" long
- Only valid for Depths between 9 1/2" to 18 3/4"

ALLOWABLE HOLES

GENERAL NOTES

- The Allowed Hole Zone in this chart is suitable for Uniformly loaded beams using maximum loads for any tables listed. For other load conditions or hole configurations, please contact West Fraser.
- If more than one hole is to be cut in the beam, the length of the uncut beam between holes must be a minimum of twice the diameter of the largest hole.
- Rectangular holes are not allowed.
- Holes in cantilevers require additional analysis.
- For beam depths of 3 1/2", 5 1/2" and 7 1/4", the maximum hole diameter is 3/4", 1 1/4" and 1 1/2" respectively. For deeper beams, the maximum hole diameter is 2". The maximum number of holes for each span is limited to 3.

Do not cut, notch or drill holes in West Fraser™ LVL except as indicated in illustration for allowable holes

Do not overhang seat cuts on West Fraser™ LVL beams from inside face of support member

Do not notch underside of beam at bearing location

Do not bevel-cut beam past inside face of support

B1 BEARING AT WALL

Engineered wood rim board for lateral support

Built-up wood column

B2 BEARING FOR DOOR OR WINDOW HEADER

Strap per code if top plate is not continuous over headers

Trimmers (see minimum bearing lengths from uniform load tables)

B4 BEARING AT CONCRETE WALL

Protect wood from direct contact with concrete

B5 BEARING AT WOOD OR STEEL COLUMN

Verify column capacity and bearing length.

Wood column with column cap

Steel column with column cap

B3 BEAM-TO-BEAM CONNECTION

Face-mount hanger

Top-mount hanger

BEARING LENGTH IS EXTREMELY CRITICAL AND MUST BE CONSIDERED FOR EACH APPLICATION.

Multiple pieces of West Fraser™ LVL can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 5 inches for 1 1/4" wide pieces and 7 inches for 1 3/4" wide pieces. See pages 9, 15, 21 and 25 for details.