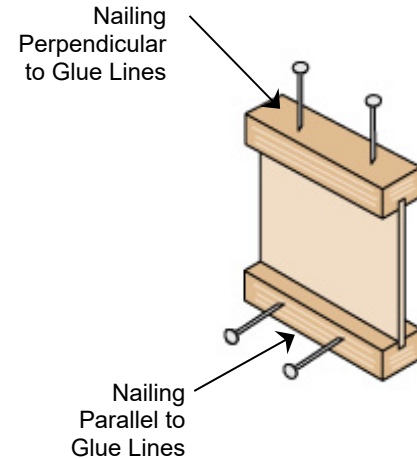




Allowable Nail Spacing & Design for BCI® Joists and Versa-Lam® LVL

BCI® Joists and Blocking

Nail Size	Nails Parallel to Glue Lines (into the side of flange)		Nails Perpendicular to Glue Lines (through top of flange)	
	On-Center [in]	End of Joist [in]	On-Center [in]	End of Joist [in]
8d Box (0.113"Ø x 2.5")	4	1.5	2	1.5
8d Common (0.131"Ø x 2.5")	4	3	2	1.5
10d & 12d Box (0.128"Ø x 3", 3.25")	4	3	2	1.5
16d Box (0.135"Ø x 3.5")	4	3	2	1.5
10d & 12d Common (0.148"Ø x 3", 3.25")	6	4	3	2
16d Sinkers (0.148"Ø x 3.25")	6	4	3	2
16d Common (0.162"Ø x 3.5")	6	4	3	2

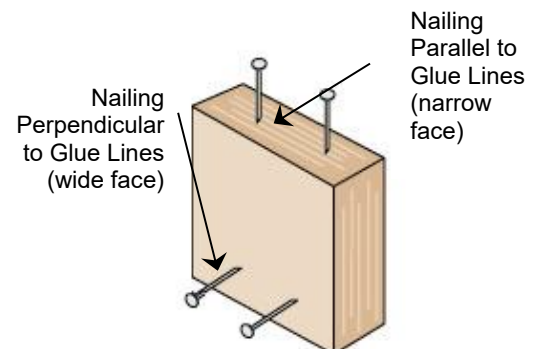


Versa-Lam® LVL

Nail Size	Nails Perpendicular to Glue Lines [in]		Nails Parallel to Glue Lines ^{(1), (2)} [in]							
			Versa-Lam 1.5E ⁽³⁾ 1 5/16"		Versa-Lam 1 1/2"		Versa-Lam ⁽⁴⁾ 1 3/4"		Versa-Lam ⁽⁴⁾ 3 1/2" & greater	
	O.C.	End	O.C.	End	O.C.	End	O.C.	End	O.C.	End
8d Box (0.113"Ø x 2.5")	2	1	3	1.5	3	1.5	2	1	2	0.5
8d Common (0.131"Ø x 2.5")	2	1	3	2	3	2	3	2	2	1
10d & 12d Box (0.128"Ø x 3", 3.25")	2	1	3	2	3	2	3	2	2	1
16d Box (0.135"Ø x 3.5")	2	2	3	2	3 (5) ⁵	2 (2.5) ⁵	3 (5) ⁵	2 (2.5) ⁵	2 (3) ⁵	1 (2.5) ⁵
10d & 12d Common (0.148"Ø x 3", 3.25")	2	2	4	3	4 (5) ⁵	3	4 (5) ⁵	3	2 (3) ⁵	2 (3) ⁵
16d Sinkers (0.148"Ø x 3.25")	2	2	4	3	4 (6) ⁵	3	4 (6) ⁵	3	2 (4) ⁵	2 (3) ⁵
16d Common (0.162"Ø x 3.5")	2 (3) ⁴	2 (2.5) ⁴	6	4	6 (8) ⁵	4	6 (8) ⁵	3 (4) ⁵	2 (4) ⁵	2 (3) ⁵

Notes

- When used as wall studs, spacing requirements and maximum nail size for panel edge nailing of wall sheathing at adjoining panels must be also in accordance of ICC-ES®/APA® ESR-1040 Section 4.6.
 - Edge distances must be sufficient to prevent splitting.
 - Versa-Lam 1.5E 1 5/16" is only produced from APA Mill Number 1110 White City, OR.
 - For 1 3/4" thickness and greater, 2 rows of nails (such as for a metal strap) are allowed (use 1/2" minimum offset between rows and stagger nails).
 - Nail spacings in parentheses only apply to Versa-Lam® LVL produced from APA Mill Number 1086 Thorsby, AL.
- When used as rim board, offset and stagger nail rows from floor sheathing and wall sole plate.



Notes cont.

- Simpson Strong-Tie A35 and LTP4 and MiTek MPA1 and MP4F connectors may be attached to the face (nailing perpendicular to glue lines) of Versa-Lam® LVL. Use fasteners as specified by connector manufacturer.

Versa-Lam® LVL Equivalent Specific Gravity for Connector Design

All Versa-Lam® LVL 1.5E grade and higher product has an equivalent specific gravity (ESG) of 0.50 for fasteners in all orientations, except for the following Versa-Lam® LVL:

- Nails - Withdrawal Parallel to Glue Lines
 - Produced from APA Mill Number 1086 (Thorsby, AL): ESG = 0.43