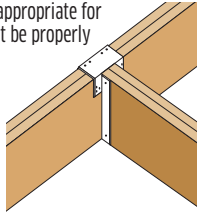
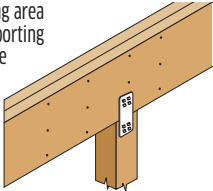
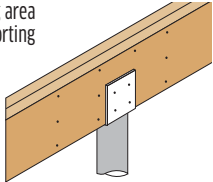
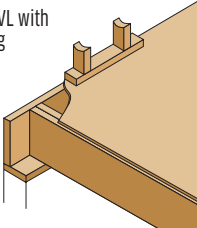

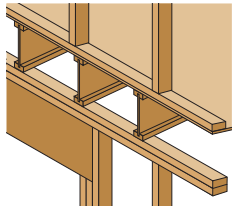


# Bearing Details

For multiple-ply PWLVL beam assembly conditions and fastening recommendations, see next page.

<p><b>B1 BEAM-TO-BEAM CONNECTION</b></p> <p>Make sure hanger capacity is appropriate for each application. Hangers must be properly installed to accommodate full capacity.</p> 	<p><b>B2 BEARING ON WOOD COLUMN</b></p> <p>Verify the required bearing area and the ability of the supporting column member to provide adequate strength.</p> 	<p><b>B3 BEARING ON STEEL COLUMN</b></p> <p>Verify the required bearing area and the ability of the supporting column member to provide adequate strength.</p> 
<p><b>B4 BEARING ON EXTERIOR WALL</b></p> <p>Prevent direct contact of PWLVL with concrete. Consult local building code for requirements.</p> 	<p><b>B5 BEARING FOR DOOR OR WINDOW HEADER-1-STORY TYPICAL</b></p> <p>See "Bearing Length Requirements" below.</p> 	<p><b>B6 WINDOW/DOOR HEADER-2-STORY TYPICAL</b></p> <p>See "Bearing Length Requirements" below.</p> 

# Bearing Length Requirements

PACIFIC WOODTECH LVL BEARING LENGTH REQUIREMENTS (1, 2, 3, 4, 5, 6, 7)

Support Material	Hem-Fir <sup>(6)</sup>		Southern Pine <sup>(6)</sup>		DF-L <sup>(6)</sup>		1.6E PWLVL <sup>(7)</sup>		1.9E or 2.1E PWLVL <sup>(6)</sup>	
F <sub>cL</sub> (psi)	405 psi		565 psi		625 psi		750 psi		850 psi	
LVL Beam Width	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"
Reaction [lb]	1000	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
	2000	3"	1 1/2"	2 1/4"	1 1/2"	2"	1 1/2"	1 3/4"	1 1/2"	1 1/2"
	3000	4 1/4"	2 1/4"	3 1/4"	1 3/4"	2 3/4"	1 1/2"	2 1/2"	1 1/2"	2 1/4"
	4000	5 3/4"	3"	4 1/4"	2 1/4"	3 3/4"	2"	3 3/4"	1 3/4"	2 3/4"
	5000	7 1/4"	3 3/4"	5 1/4"	2 3/4"	4 3/4"	2 1/2"	4"	2"	3 1/2"
	6000	8 1/2"	4 1/4"	6 1/4"	3 1/4"	5 1/2"	2 3/4"	4 3/4"	2 1/2"	4 1/4"
	7000	10"	5"	7 1/4"	3 3/4"	6 1/2"	3 1/4"	5 1/2"	2 3/4"	4 3/4"
	8000		5 3/4"	8 1/4"	4 1/4"	7 1/2"	3 3/4"	6 1/4"	3 1/4"	5 1/2"
	9000		6 1/2"	9 1/4"	4 3/4"	8 1/4"	4 1/4"	7"	3 1/2"	6 1/4"
	10000		7 1/4"	10 1/4"	5 1/4"	9 1/4"	4 3/4"	7 3/4"	4"	6 3/4"
11000		8"	11 1/4"	5 3/4"	10 1/4"	5 1/4"	8 1/2"	4 1/4"	7 1/2"	

Notes:

- The minimum required bearing length is 1 1/2".
- Duration of load factors may not be applied to bearing length requirements.
- All PWLVL beams require support across their full width.
- All PWLVL beams require lateral support at bearing points.

Continued in next column

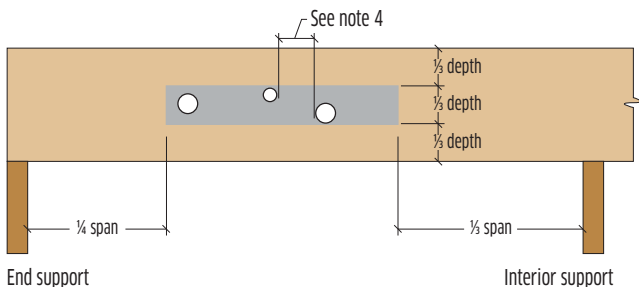
PACIFIC WOODTECH LVL BEARING LENGTH REQUIREMENTS (1, 2, 3, 4, 5, 6, 7)

Support Material	Hem-Fir <sup>(6)</sup>		Southern Pine <sup>(6)</sup>		DF-L <sup>(6)</sup>		1.6E PWLVL <sup>(7)</sup>		1.9E or 2.1E PWLVL <sup>(6)</sup>	
F <sub>cL</sub> (psi)	405 psi		565 psi		625 psi		750 psi		850 psi	
LVL Beam Width	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"	1 3/4"	3 1/2"
Reaction [lb]	12000		8 1/2"		6 1/4"	11"	5 1/2"	9 1/4"	4 3/4"	8 1/4"
	13000		9 1/4"		6 3/4"	6"	10"	5"	8 3/4"	
	14000		10"		7 1/4"	6 1/2"	10 3/4"	5 1/2"	9 1/2"	
	15000		10 3/4"		7 3/4"	7"	11 1/2"	5 3/4"	10 1/4"	
	16000				8 1/4"	7 1/2"	12 1/4"	6 1/4"	11"	
	17000				8 3/4"	8"	13"	6 1/2"	11 1/2"	
	18000				9 1/4"	8 1/4"	7"	12 1/4"	6 1/4"	
	19000				9 3/4"	8 3/4"	7 1/4"	13"	6 1/2"	
	20000				10 1/4"	9 1/4"	7 3/4"		6 3/4"	
	21000				10 3/4"	9 3/4"	8"		7 1/4"	
22000				11 1/4"	10 1/4"	8 1/2"		7 1/2"		

- The support member must be sized to carry the load from the PWLVL beam.
- Use these values when the PWLVL beam is supported by a wall plate, sill plate, timber or built-up girder.
- Use these values when the PWLVL beam is supported by the end of a column or connection hardware.

# Hole Details

## HOLES IN PWLVL BEAMS



Notes:

- This detail applies only to uniformly loaded, simple and multiple span beams. Cantilevered beams and beams that carry concentrated loads are outside the scope of this detail.
- Square and rectangular holes are not permitted.
- Round holes may be drilled or cut with a hole saw anywhere within the shaded area of the beam.
- The horizontal distance between adjacent holes must be at least two times the size of the larger hole. This restriction also applies to the location of access holes relative to bolt holes in multi-ply beams.
- Do not drill more than three access holes in any four foot long section of beam.
- The maximum round hole diameter permitted is:
 

PWLVL Beam Depth	5 1/2"	7 1/4"	9 1/2" to 24"
Maximum Hole Diameter	1 1/8"	1 1/2"	2"
- These limitations apply to holes drilled for plumbing or wiring access only. The size and location of holes drilled for fasteners are governed by the provisions of the *National Design Specification for Wood Construction*.
- Beams deflect under load. Size holes to provide clearance where required.