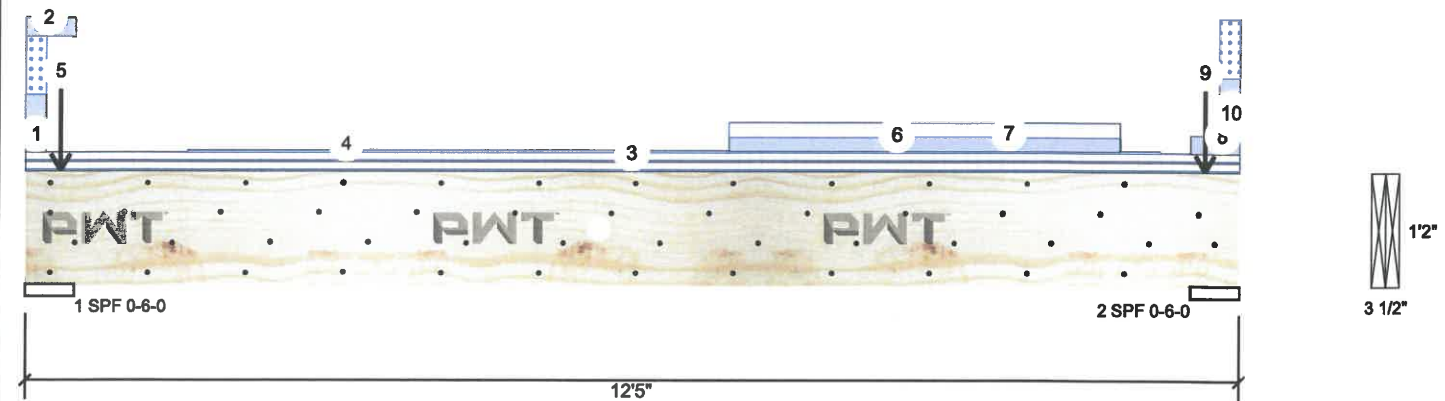


FB3 2.0E 2900Fb PWT LVL 1.750" X 14.000" 2-Ply - PASSED

Level: 2ND FLR

Ticket: INC0033514



Member Information

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	360
Deflection TL:	240
Importance:	Normal - II
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IRC 2021
Load Sharing:	No
Deck:	Not Checked

Reactions PATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	2992 (-42)	2866	1835	0	0
2	Vertical	3152 (-48)	3022	1835	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	Vert	73%	2866 / 3620	6486	L	D+0.75(L+S)
2 - SPF	6.000"	Vert	76%	3022 / 3740	6762	L	D+0.75(L+S)

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	10876 ft-lb	6'5 7/16"	26792 ft-lb	41%	D+L	L
Shear	3810 lb	10'9"	9310 lb	41%	D+L	L
LL Defl inch	0.149 (L/932)	6'3 1/16"	0.385 (L/360)	39%	L	L
TL Defl inch	0.196 (L/708)	6'3 3/8"	0.577 (L/240)	34%	D+L	L

Hole Analysis

Holes	Location	Size	Capacity	Actual	Allowed
Shear	H5'10 1/2" C	3"	17%	948 lb	5748 lb D+L
Moment	D+L		43%	10777 ft-lb	25202 ft-lb

Horizontal location H = Horiz to center, Vertical location T = top to top edge, B = bottom to bottom edge, BC = bottom to center, C = centered.

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings.
- Provide restraint at Bearing 1 to prevent buckling or transfer 464 lbs of unfactored applied load around member to support below. Connection to the king stud/post, full-depth blocking, column caps that extend to mid-height, or other devices that prevent buckling can be used to provide restraint at the bearing. Rim board, squash blocks, or other devices can be used to transfer the load. Provide restraint at Bearing 2 to prevent buckling or transfer 464 lbs of unfactored applied load around member to support below. Connection to the king stud/post, full-depth blocking, column caps that extend to mid-height, or other devices that prevent buckling can be used to provide restraint at the bearing. Rim board, squash blocks, or other devices can be used to transfer the load.
- Dead Load Deflection: Instant = 0.047", Long Term = 0.071".
- Fasten all plies using 4 rows of 12d Box nails (.128x3.25") at 12" o.c. Maximum end distance not to exceed 6". Clinch Nails where possible.
- Refer to last page of calculations for fasteners required for specified loads.
- Holes in LVL/LSL are in accordance with APA Form No. V900.
- Girders are designed to be supported on the bottom edge only.
- Top loads must be supported equally by all plies.
- Top must be laterally braced at end bearings.
- Bottom must be laterally braced at end bearings.

The signature has been electronically transmitted



Notes

This component analysis is based on the loads, geometry and other conditions as entered by the user and listed in this report. The user is responsible to ensure the accuracy of the input and the applicability to the actual conditions of the structure for which this component is intended. This analysis is valid only for the product listed.
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Manufacturer Info

Pacific Woodtech Corp
1850 Park Lane
Burlington, WA 98233
(800) 515-7570
www.pwtewp.com
ICC-ES: ESR-2909 ESR-2403 APA:
PR-L233 PR-L280

U.S. Lumber
2160 Satellite Blvd., Suite 450, GA
U.S.A
30097
888-613-5078



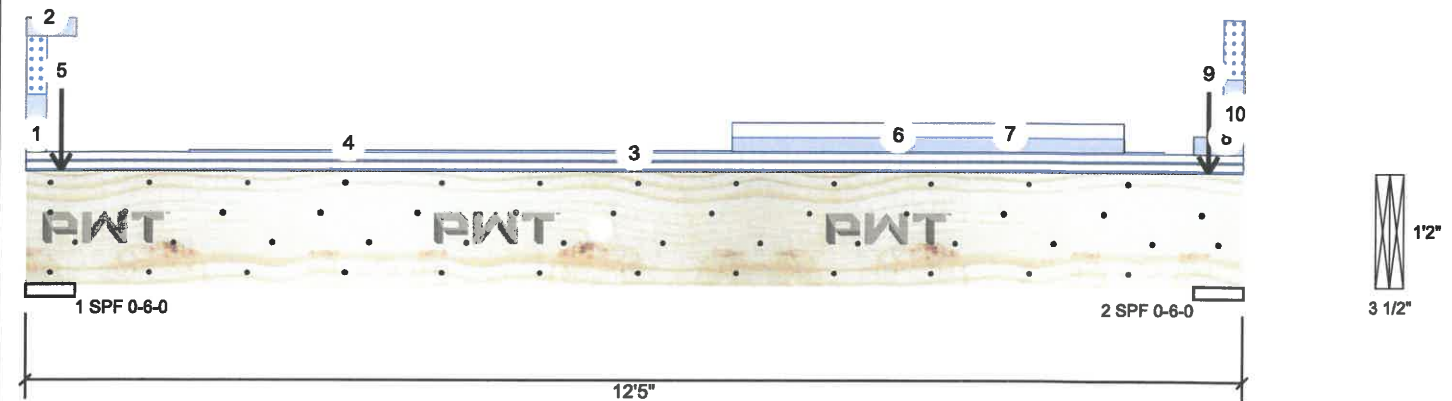
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Level: 2ND FLR

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ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Part. Uniform	0-0-0 to 0-2-8		Top	310 PLF	0 PLF	310 PLF	0 PLF	0 PLF	
2	Part. Uniform	0-0-0 to 0-6-0		Top	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
3	Uniform		2-0-0	Near Face	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor Joists.
4	Uniform		9-9-0	Far Face	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	Floor Joists.
5	Point	0-4-4		Top	1865 lb	0 lb	1770 lb	0 lb	0 lb	
	Bearing Length	0-3-8								
6	Part. Uniform	1-7-14 to 11-7-6		Near Face	0 PLF	-9 PLF	0 PLF	0 PLF	0 PLF	
7	Part. Uniform	7-2-8 to 11-2-8		Far Face	75 PLF	77 PLF	0 PLF	0 PLF	0 PLF	
8	Part. Uniform	11-11-0 to 12-5-0		Top	96 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Self Weight
9	Point	12-0-12		Top	1865 lb	0 lb	1770 lb	0 lb	0 lb	
	Bearing Length	0-3-8								
10	Part. Uniform	12-2-8 to 12-5-0		Top	310 PLF	0 PLF	310 PLF	0 PLF	0 PLF	
	Self Weight				14 PLF					

Notes

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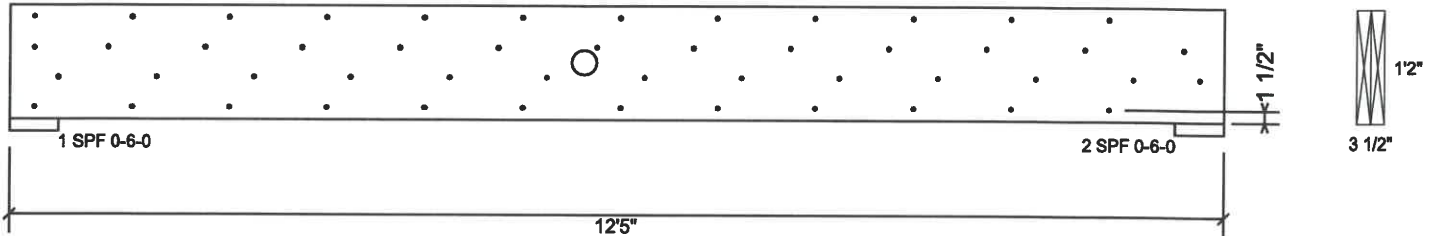
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Level: 2ND FLR

Ticket: INC0033514



Multi-Ply Analysis

Fasten all plies using 4 rows of 12d Box nails (.128x3.25") at 12" o.c.. Maximum end distance not to exceed 6". Clinch Nails where possible.

Capacity	86.2 %
Load	319.8 PLF
Yield Limit per Foot	370.9 PLF
Yield Limit per Fastener	92.7 lb.
C _M	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

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PR-L233 PR-L260

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