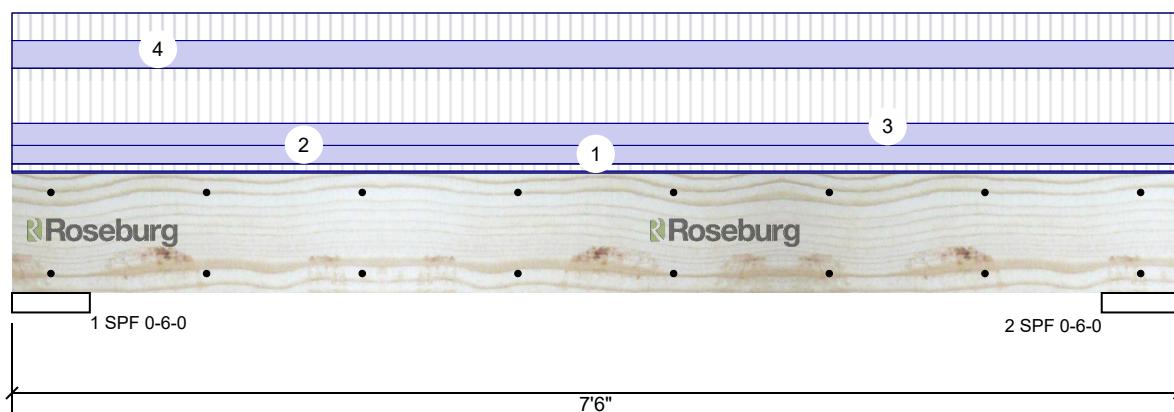




2-3068 header 2.1E RigidLam LVL DF or SP 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

Reactions UNPATTERED lb (Uplift)

Type: Girder	Application: Floor	Brg	Direction	Live	Dead	Snow	Wind	Const
Plies: 2	Design Method: ASD	1	Vertical	1838	1460	0	0	0
Moisture Condition: Dry	Building Code: IBC/IRC 2015	2	Vertical	1838	1460	0	0	0
Deflection LL: 480	Load Sharing: No							
Deflection TL: 240	Deck: Not Checked							
Importance: Normal - II								
Temperature: Temp <= 100°F								

Bearings

Bearing	Length	Dir.	Cap.	React	D/L lb	Total	Ld.	Case	Ld. Comb.
1 - SPF	6.000"	Vert	37%	1460 / 1838		3298	L		D+L
2 - SPF	6.000"	Vert	37%	1460 / 1838		3298	L		D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4825 ft-lb	3'9"	13320 ft-lb	36%	D+L	L
Unbraced	4825 ft-lb	3'9"	9762 ft-lb	49%	D+L	L
Shear	2180 lb	6'2 3/4"	6259 lb	35%	D+L	L
LL Defl inch	0.053 (L/1502)	3'9"	0.166 (L/480)	32%	L	L
TL Defl inch	0.095 (L/837)	3'9"	0.331 (L/240)	29%	D+L	L

Design Notes

- Provide support to prevent lateral movement and rotation at the end bearings.
- Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- Refer to last page of calculations for fasteners required for specified loads.
- Girders are designed to be supported on bottom edge only and across their full width.
- 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.
- Lateral slenderness ratio based on single ply width.

Loads

ID	Load Type	Trib	Side	units	Dead	0.9	Live	1	Comments
1	Uniform	1-0-0	Top	PSF	10	+	40	+	
2	Uniform		Top	PLF	100				wall above
3	Uniform		Top	PLF	120		300		floor framing
4	Uniform		Top	PLF	150		150		roof framing
	Self Weight			PLF	9				

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

- Dry service conditions, unless noted otherwise
- LVL not to be treated with fire retardant or corrosive

Handling & Installation

- LVL beams must not be cut or drilled
- Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals.
- Damaged Beams must not be used
- Design assumes top edge is laterally restrained
- Provide lateral support at bearing points to avoid lateral displacement and rotation

This design is valid until 8/24/2028

Manufacturer Info

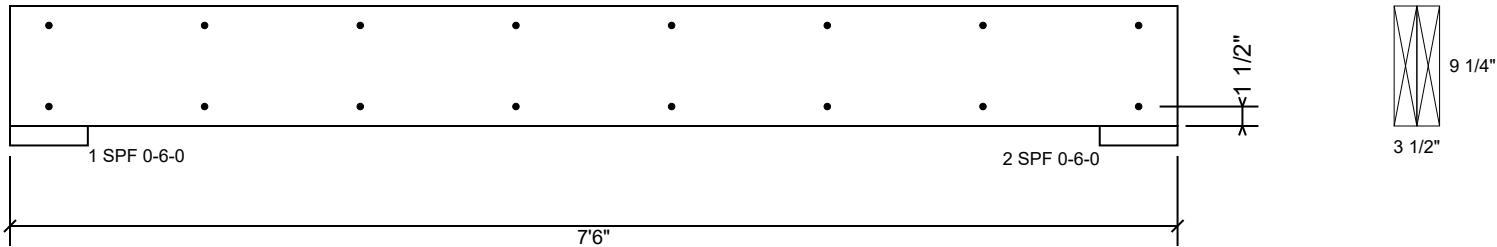
Roseburg Forest Products
3661 Gateway Street
Springfield, OR 97477
(541) 679-3311
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APA: PR-L289, PR-L270, ICC-ES: ESR-1210

Carter Lumber Co
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USA
27332
919-775-1450



2-3068 header 2.1E RigidLam LVL DF or SP 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6".

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	181.1 PLF
Yield Limit per Fastener	90.5 lb.
CM	1
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes	Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.	chemicals	6. For flat roofs provide proper drainage to prevent ponding
Handling & Installation			
<ol style="list-style-type: none"> 1. LVL beams must not be cut or drilled 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals. 3. Damaged Beams must not be used 4. Design assumes top edge is laterally restrained 5. Provide lateral support at bearing points to avoid lateral displacement and rotation 			

This design is valid until 8/24/2028

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Roseburg Forest Products 3661 Gateway Street Springfield, OR 97477 (541) 679-3311 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210	