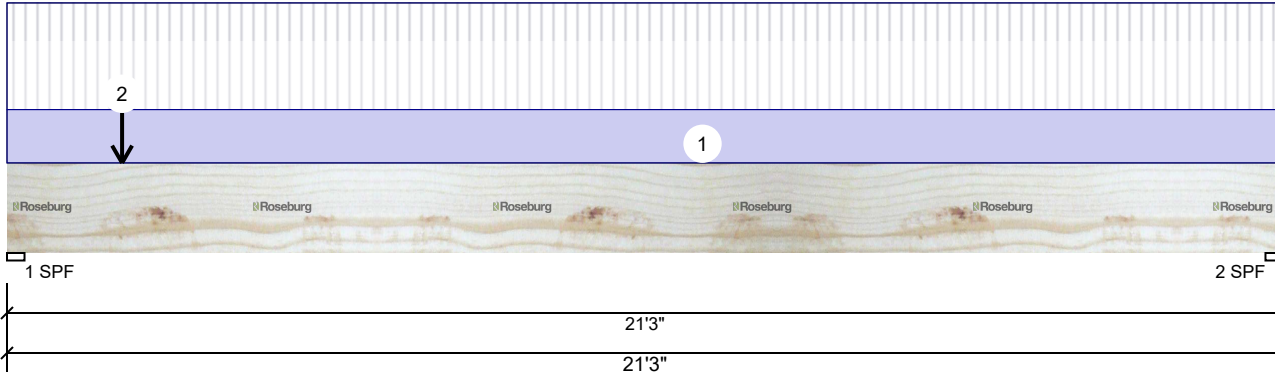


B5 2.0E Rigidlam LVL 1.750" X 18.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal - II		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	3681	2164	0	0	0
2	Vertical	3328	1934	0	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	75%	2164 / 3681	5844	L	D+L
2 - SPF	3.500"	Vert	67%	1934 / 3328	5262	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	27064 ft-lb	10'6 1/8"	72403 ft-lb	0.374 (37%)	D+L	L
Unbraced	27064 ft-lb	10'6 1/8"	27154 ft-lb	0.997 (100%)	D+L	L
Shear	5004 lb	1'9 1/2"	18270 lb	0.274 (27%)	D+L	L
LL Defl inch	0.262 (L/953)	10'7 1/16"	0.520 (L/480)	0.504 (50%)	L	L
TL Defl inch	0.414 (L/602)	10'7 1/16"	1.040 (L/240)	0.399 (40%)	D+L	L

Design Notes

- 1 Provide support to prevent lateral movement and rotation at the end bearings. Lateral support may also be required at the interior bearings by the building code.
- 2 Girders are designed to be supported on the bottom edge only.
- 3 Multiple plies must be fastened together as per manufacturer's details.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 7'4 11/16" o.c.
- 6 Bottom must be laterally braced at end bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	155 PLF	310 PLF	0 PLF	0 PLF	0 PLF	C.J. Load
2	Point	1-11-0		Top	274 lb	421 lb	0 lb	0 lb	0 lb	LVL Pt Load
	Bearing Length	0-3-8								
	Self Weight				25 PLF					

<p>Notes</p> <p>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.</p> <p>Lumber</p> <ol style="list-style-type: none"> 1. Dry service conditions, unless noted otherwise 2. LVL not to be treated with fire retardant or corrosive chemicals 	<p>Handling & Installation</p> <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 	<p>6. For flat roofs provide proper drainage to prevent ponding</p>	<p>Manufacturer Info</p> <p>Roseburg Forest Products 4500 Riddle By-pass Rd Riddle, OR 97469 (541) 784-4005 www.roseburg.com APA: PR-L289, PR-L270, ICC-ES: ESR-1210</p>	<p>Kempville Building Material 298 Harvey Faulk Road, N.C. U.S.A 27332 919.775.1450</p>
				<p>This design is valid until 5/24/2024</p>