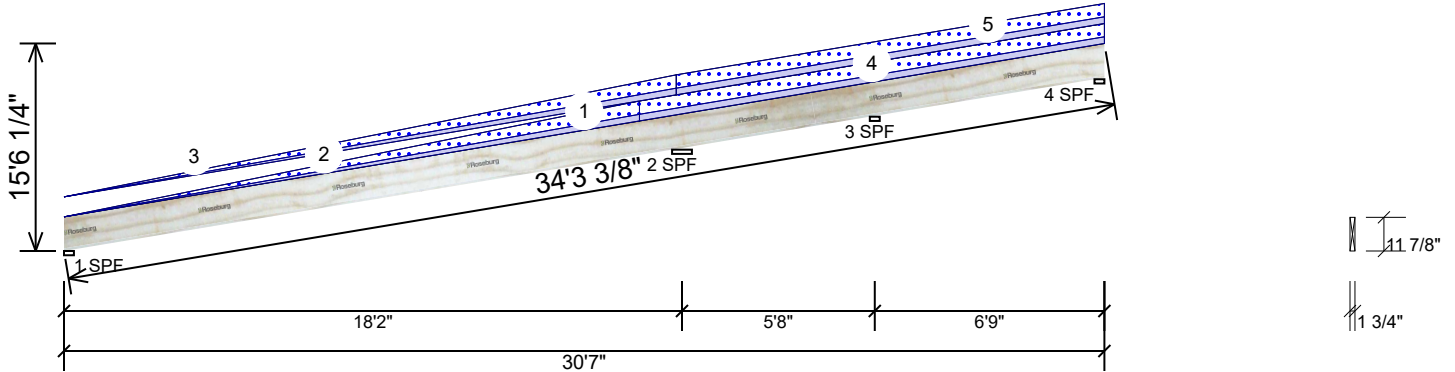


B13 2.0E Rigidlam LVL 1.750" X 11.875" - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	1	Slope:	5.66/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	480	Building Code:	IBC/IRC 2015
Deflection TL:	240	Load Sharing:	No
Importance:	Normal - II	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Direction	Live	Dead	Snow	Wind	Const
1	Vertical	0	387	616	0	0
2	Vertical	0	1898	3233	0	0
3	Vertical	0	526	942	0	0
4	Vertical	0	512	891	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	Vert	39%	387 / 621	1008	L_L	D+S
2 - SPF	7.000"	Vert	100%	1898 / 3297	5194	LL_	D+S
3 - SPF	3.500"	Vert	75%	526 / 1418	1943	_LL	D+S
4 - SPF	3.500"	Vert	55%	512 / 918	1430	L_L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-7531 ft-lb	18'2"	12235 ft-lb	0.616 (62%)	D+S	LL_
Unbraced	-7531 ft-lb	18'2"	7555 ft-lb	0.997 (100%)	D+S	LL_
Pos Moment	5136 ft-lb	8'8 11/16"	12235 ft-lb	0.420 (42%)	D+S	L_L
Unbraced	5136 ft-lb	8'8 11/16"	5139 ft-lb	0.999 (100%)	D+S	L_L
Shear	2290 lb	18'9 3/8"	4620 lb	0.496 (50%)	D+S	LL_
LL Defl inch	0.401 (L/594)	8'8 9/16"	0.496 (L/480)	0.809 (81%)	S	L_L
TL Defl inch	0.637 (L/374)	8'8 1/4"	0.992 (L/240)	0.642 (64%)	D+S	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 Refer to manufacturer's literature for sloped bearing detail.
- 3 Attach with enough nails to prevent sliding between the joist and the sloped bearing wedge at each support.
- 4 Girders are designed to be supported on the bottom edge only.
- 5 Top must be laterally braced at a maximum of 8'11 5/16" o.c. along the slope.
- 6 Bottom must be laterally braced at a maximum of 5'6 5/8" o.c.

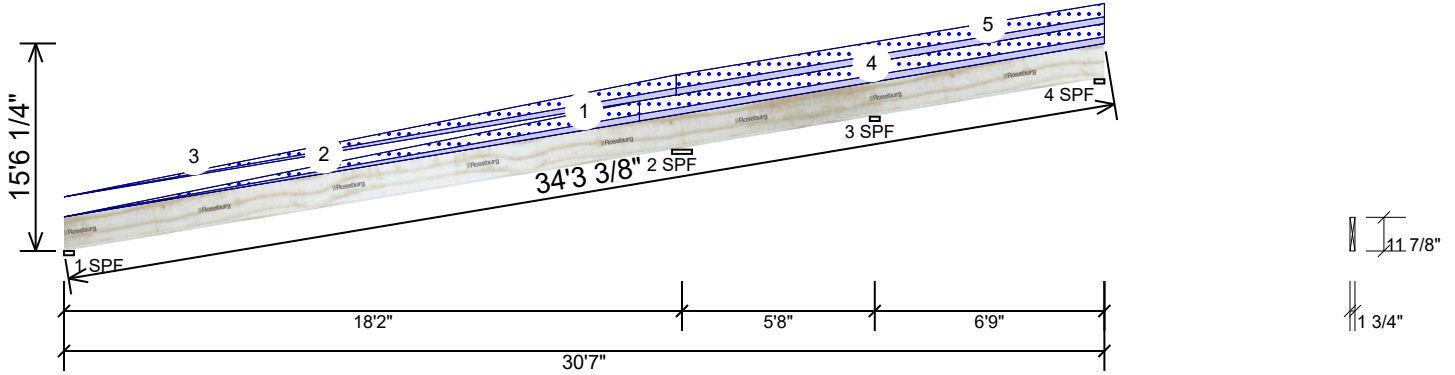
ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
2	Tapered Start	0-0-0		Top	0 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rf Load
	End	16-11-0			65 PLF	0 PLF	130 PLF	0 PLF	0 PLF	
3	Tapered Start	0-0-0		Top	0 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Rf Load

Continued on page 2...

<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>4. 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>	

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...Continued from page 1

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
	End	18-0-0			65 PLF	0 PLF	130 PLF	0 PLF	0 PLF	
4	Tapered Start	16-11-0		Top	65 PLF	0 PLF	130 PLF	0 PLF	0 PLF	Rf Load
	End	30-7-0			65 PLF	0 PLF	130 PLF	0 PLF	0 PLF	
5	Tapered Start	18-0-0		Top	65 PLF	0 PLF	130 PLF	0 PLF	0 PLF	Rf Load
	End	30-7-0			65 PLF	0 PLF	130 PLF	0 PLF	0 PLF	
	Self Weight				5 PLF					

Notes

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Lumber

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Manufacturer Info

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