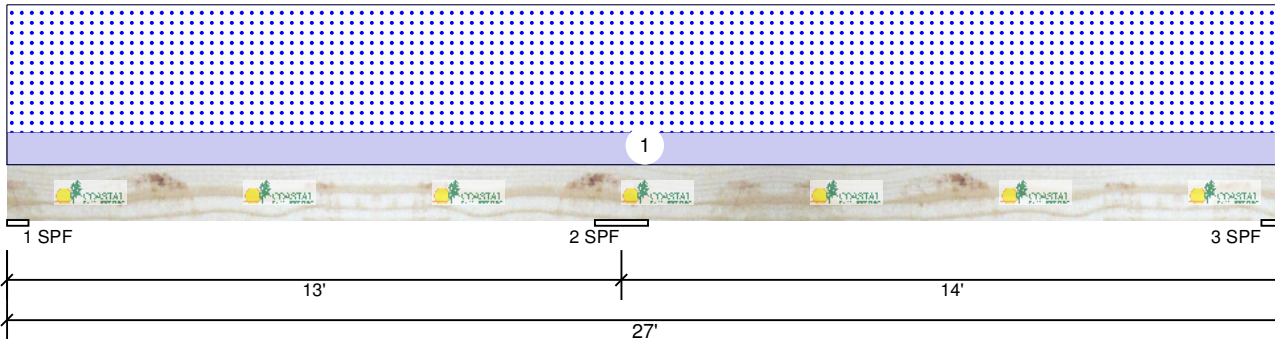


**Ridge 2.0E CP-LAM 1.750" X 14.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

**Reactions lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1247	4738	0	0
2	0	4171	15843	0	0
3	0	1405	5339	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	5.500"	79%	1247 / 5198	6445	L_	D+S
2 - SPF	13.500"	100%	4171 / 15843	20014	LL	D+S
3 - SPF	5.500"	87%	1405 / 5678	7084	_L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-26477 ft-lb	13'	32935 ft-lb	0.804 (80%)	D+S	LL
Unbraced	-26477 ft-lb	13'	26508 ft-lb	0.999 (100%)	D+S	LL
Pos Moment	18534 ft-lb	21'1 15/16"	32935 ft-lb	0.563 (56%)	D+S	_L
Unbraced	18534 ft-lb	21'1 15/16"	18553 ft-lb	0.999 (100%)	D+S	_L
Shear	8819 lb	14'2"	10707 lb	0.824 (82%)	D+S	LL
LL Defl inch	0.271 (L/607)	20'5 13/16"	0.456 (L/360)	0.590 (59%)	S	_L
TL Defl inch	0.327 (L/502)	20'6 7/16"	0.684 (L/240)	0.480 (48%)	D+S	_L

**Design Notes**

- Girders are designed to be supported on the bottom edge only.
- Multiple plies must be fastened together as per manufacturer's details.
- Top loads must be supported equally by all plies.
- Compression edge bracing required at 3'3" o.c. or less.
- 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 Self Weight		16-0-0	Top	15 PSF 13 PLF	0 PSF	60 PSF	0 PSF	0 PSF	

**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 chemicals

**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

6. For flat roofs provide proper drainage to prevent ponding

**Manufacturer Info**

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