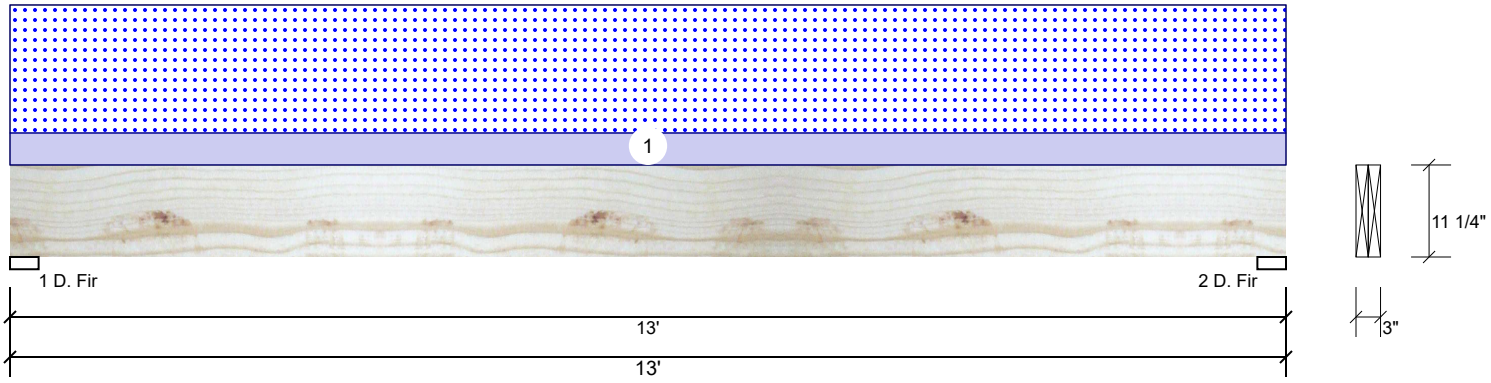
Client:		Date:	3/9/2023
Project:		Input by:	Kevin Johnson
Address:		Job Name:	Sam Gallaher - Ridge Beam
		Project #:	

B1 D FIR-L SS 2.000" X 12.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	2	Slope:	0/12
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	520	2080	0	0
2	Vertical	0	520	2080	0	0

Bearings

Bearing	Length	Dir.	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - D. Fir	3.500"	Vert	40%	520 / 2080	2600	L	D+S
2 - D. Fir	3.500"	Vert	40%	520 / 2080	2600	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	7865 ft-lb	6'6"	9097 ft-lb	0.865 (86%)	D+S	L
Unbraced	7865 ft-lb	6'6"	7872 ft-lb	0.999 (100%)	D+S	L
Shear	2108 lb	11'9 1/4"	4658 lb	0.453 (45%)	D+S	L
LL Defl inch	0.263 (L/571)	6'6"	0.314 (L/480)	0.840 (84%)	S	L
TL Defl inch	0.329 (L/457)	6'6"	0.627 (L/240)	0.525 (53%)	D+S	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 4'9" 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		8-0-0	Top	10 PSF	0 PSF	40 PSF	0 PSF	0 PSF	

Manufacturer Info

This design is valid until 5/30/2024