



Client Rufus Deering Co.

Shipping 116 Hicks Street, Portland 04143

Project Name: David Grondin

Job#:

Quantity 1 (2pcs.)

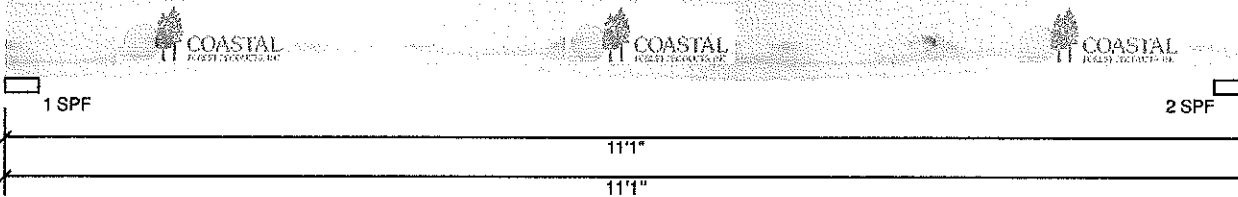
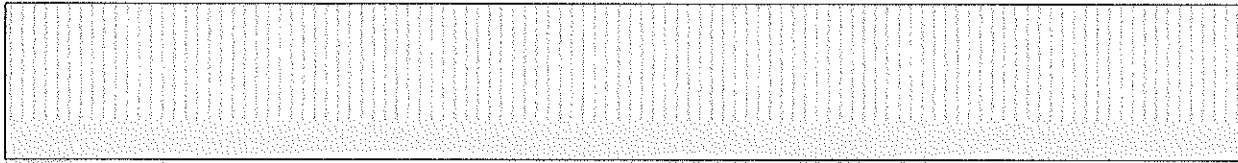
Description: Holding up 2nd floor joists

**Center LVL beam in house 2.0E CP-LAM 1.750" X 9.500" 2-Ply - PASSED**

9/29/2016 10:49 AM

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Designer: Bill Sweeney



Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	23/32" OSB Nailed and Glued
Importance:	Normal	Vibration:	Not Checked
Temperature:	Temp <= 100°F		
General Load			
Floor Live:	40 PSF		
Dead:	15 PSF		

Reactions						
Brg	Live	Dead	Snow	Wind	Const	Total
1	1995	711	0	0	0	2706
2	1995	711	0	0	0	2706

Bearings						
Bearing	Input Length	In Analysis	Cap. React	D/L lb	Total	Ld. Case Ld. Comb.
1 - SPF 3.500"	2.000"	91%	711 / 1995	2706	L	D+L
2 - SPF 3.500"	2.000"	91%	711 / 1995	2706	L	D+L

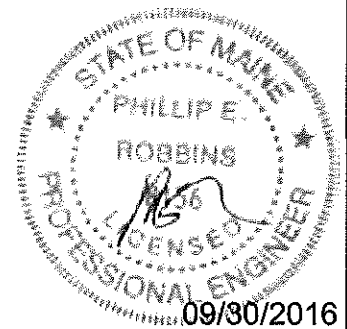
Analysis	Actual	Location	Allowed	Capacity	Load Comb.	Ld. Case
Moment	6949 ft-lb	5'6 1/2"	14251 ft-lb	0.488 (49%)	D+L	L
Shear	2219 lb	1'	6318 lb	0.351 (35%)	D+L	L
LL Defl inch	0.182 (L/702)	5'6 1/2"	0.356 (L/360)	0.510 (51%)	L	L
TL Defl inch	0.248 (L/517)	5'6 1/2"	0.533 (L/240)	0.460 (46%)	D+L	L

Design OK.

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.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform		12-0-0	Top	10 PSF	30 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				9 PLF					



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, multiply 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

- For flat roofs provide proper drainage to prevent ponding

Job# PER161339

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