isDesign™

Client:

Project:

Address: Portland Maine Date: 4/3/2017

Designer: PD

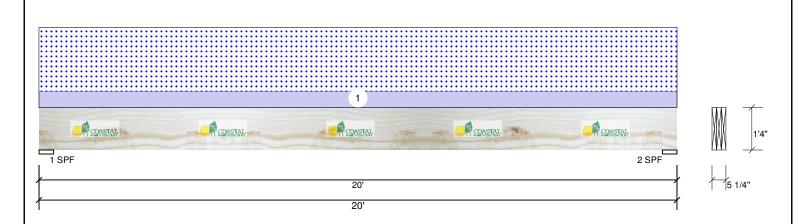
Job Name: BRALEY/THEALL

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Project #:

1.750" X 16.000" 3-Ply - PASSED 2.0E CP-LAM

Level: Level



Member Information			Reaction	Reactions Ib (Uplift)					
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const
Plies:	3	Design Method:	ASD	1	0	2018	7200	0	0
Moisture Condition	n: Dry	Building Code:	IBC 2012	2	0	2018	7200	0	0
Deflection LL:	360	Load Sharing:	Yes						
Deflection TL:	240	Deck:	Not Checked						
Importance:	Normal								
Temperature:	Temp <= 100°F								
				Bearing	js				
				Bearing	Length	Cap. Rea	ct D/L lb	Total Ld. Case	Ld. Comb.
				1 - SPF	5.500"	75% 20	18 / 7200	9218 L	D+S
A l				2 - SPF	5.500"	75% 20°	18 / 7200	9218 L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	42606 ft-lb	10'	65339 ft-lb	0.652 (65%)	D+S	L
Unbraced	42606 ft-lb	10'	42748 ft-lb	0.997 (100%)	D+S	L
Shear	8834 lb	18'3 3/8"	18354 lb	0.481 (48%)	D+S	L
LL Defl inch	0.618 (L/373)	10' 1/16"	0.641 (L/360)	0.960 (96%)	S	L
TL Defl inch	0.791 (L/292)	10' 1/16"	0.961 (L/240)	0.820 (82%)	D+S	L
	Moment Unbraced Shear LL Defl inch	Moment 42606 ft-lb Unbraced 42606 ft-lb	Moment 42606 ft-lb 10' Unbraced 42606 ft-lb 10' Shear 8834 lb 18'3 3/8" LL Defl inch 0.618 (L/373) 10' 1/16"	Moment 42606 ft-lb 10' 65339 ft-lb Unbraced 42606 ft-lb 10' 42748 ft-lb Shear 8834 lb 18'3 3/8" 18354 lb LL Defl inch 0.618 (L/373) 10' 1/16" 0.641 (L/360)	Moment 42606 ft-lb 10' 65339 ft-lb 0.652 (65%) Unbraced 42606 ft-lb 10' 42748 ft-lb 0.997 (100%) Shear 8834 lb 18'3 3/8" 18354 lb 0.481 (48%) LL Defl inch 0.618 (L/373) 10' 1/16" 0.641 (L/360) 0.960 (96%)	Moment 42606 ft-lb 10' 65339 ft-lb 0.652 (65%) D+S Unbraced 42606 ft-lb 10' 42748 ft-lb 0.997 (100%) D+S Shear 8834 lb 18'3 3/8" 18354 lb 0.481 (48%) D+S LL Defl inch 0.618 (L/373) 10' 1/16" 0.641 (L/360) 0.960 (96%) S

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Compression edge bracing required at 3'10" o.c. or less.
- 4 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		12-0-0	Near Face	15 PSF	0 PSF	60 PSF	0 PSF	0 PSF	
	Self Weight				22 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.

Dry service conditions, unless noted otherwise
 LVL not to be treated with fire retardant or corrosive

Handling & Installation

- Handling & Installation

 1. UVI 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

For flat roofs provide proper drainage to prevent ponding

Manufacturer Info Pacific Woodtech Corp

1850 Park Lane Burlington, WA 98233 (888) 707-2285 www.pacificwoodtech.com APA: PR-L233, ICC-ES: ESR-2909 Coastal Forest Products 451 South River Rd, NH USA 03110





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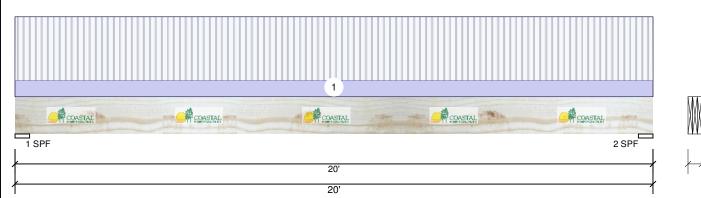
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	Type:	Girder
	Plies:	3
	Moisture Condition:	Dry
	Deflection LL:	360
	Deflection TL:	240
	Importance:	Normal
	Temperature:	Temp <= 100°F

Member Information

Application: Floor Design Method: ASD Building Code: IBC 2012

Load Sharing: Yes

Deck:

Not Checked

Reactions Ib (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	4800	1391	0	0	0
2	4800	1391	0	0	0

Bearings

Bearing Length	Cap. I	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF 5.500"	50%	1391 / 4800	6191	L	D+L
2 - SPF 5.500"	50%	1391 / 4800	6191	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	28552 ft-lb	10'	44677 ft-lb	0.639 (64%)	D+L	L
Unbraced	28552 ft-lb	10'	28557 ft-lb	1.000 (100%)	D+L	L
Shear	5924 lb	1'6 3/4"	13965 lb	0.424 (42%)	D+L	L
LL Defl inch	0.612 (L/376)	10' 1/16"	0.640 (L/360)	0.960 (96%)	L	L
TL Defl inch	0.790 (L/292)	10' 1/16"	0.960 (L/240)	0.820 (82%)	D+L	L

Design Notes

- 1 Girders are designed to be supported on the bottom edge only.
- 2 Multiple plies must be fastened together as per manufacturer's details.
- 3 Compression edge bracing required at 5'1" o.c. or less.
- 4 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		12-0-0	Near Face	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				19 PLF					

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