

2.0E CP-LAM

Client:

Project:

Address: Portland Maine

1.750" X 16.000"

4/3/2017

Designer: PD Job Name: BRALEY/THEALL

Project #:

Level: Level

04/04/17

1 COASTAL SOASTAL COASTAL 2 SPF 1 SPF 20' 20'

3-Ply - PASSED

Member Info	Member Information					Reactions lb (Uplift)							
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	Wind	Const				
Plies:	3	Design Method:	ASD	1	0	2018	7200	0	0				
Moisture Condition	on: 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	gs								
				Bearing	g Length	Cap. Rea	ct D/L lb	Total Ld. Ca	ase Ld. Comb.				
				1 - SPF	5.500"	75% 20	18 / 7200	9218 L	D+S				
				2 - SPF	5.500"	75% 20	18 / 7200	9218 L	D+S				

## **Analysis Results**

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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

# **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 DI E					

Notice:

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

Handling & Installation
 I. IVI beams must not be cut or drilled
 Refer to manufacturer's product information regarding installation requirements, multi-ply fastering 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** 

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







Floor A

2.0E CP-LAM

Client:

Project:

Address: Portland Maine

4/3/2017 Designer:

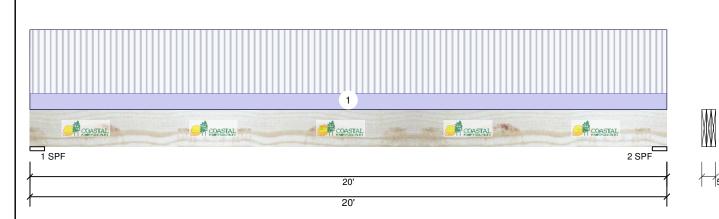
Project #:

1.750" X 14.000" 3-Ply - PASSED

Job Name: BRALEY/THEALL Level: Level



04/04/17



Member Info	mation			Reactions lb (Uplift)						
Type:	Girder	Application:	Floor	Brg	Live	Dead	Snow	١	Vind	Const
Plies:	3	Design Method:	ASD	1	4800	1391	0		0	0
Moisture Condition	n: Dry	Building Code:	IBC 2012	2	4800	1391	0		0	0
Deflection LL:	360	Load Sharing:	Yes							
Deflection TL:	240	Deck:	Not Checked							
Importance:	Normal									
Temperature:	Temp <= 100°F									
	The state of the s		Bearing	S						
				Bearing	Length	Cap. Rea	ct D/L lb	Total	Ld. Case	Ld. Comb.
				1 - SPF	5.500"	50% 139	91 / 4800	6191	L	D+L

2 - SPF 5.500"

50%

1391 / 4800

6191 L

## **Analysis Results**

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	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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# Handling & Installation

LVL beams must not be cut or drilled
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D+L

