

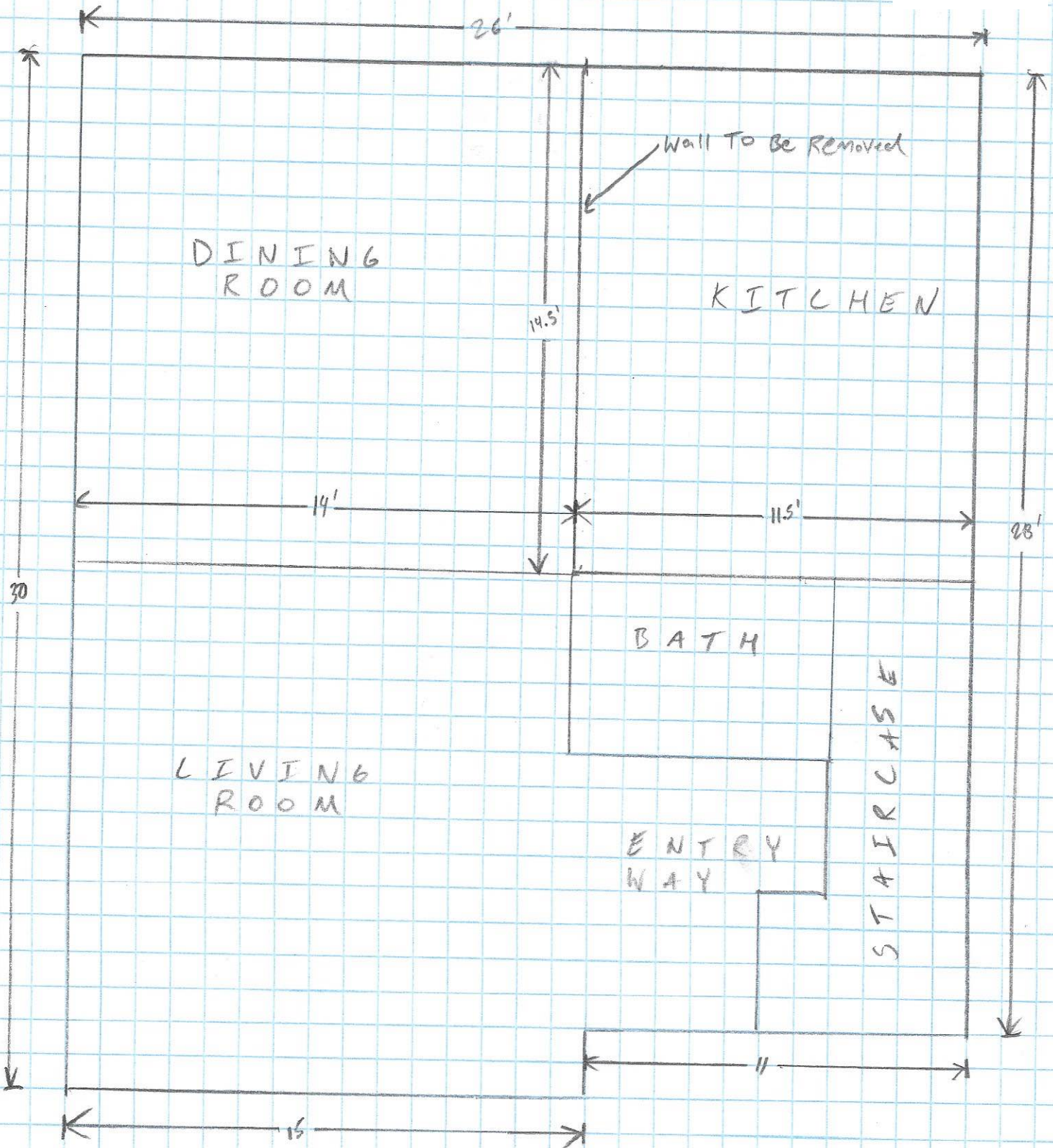
29 POWSLAND ST

EXISTING FLOOR PLAN



Permitting and Inspections Department  
Approved with Conditions

03/07/2019



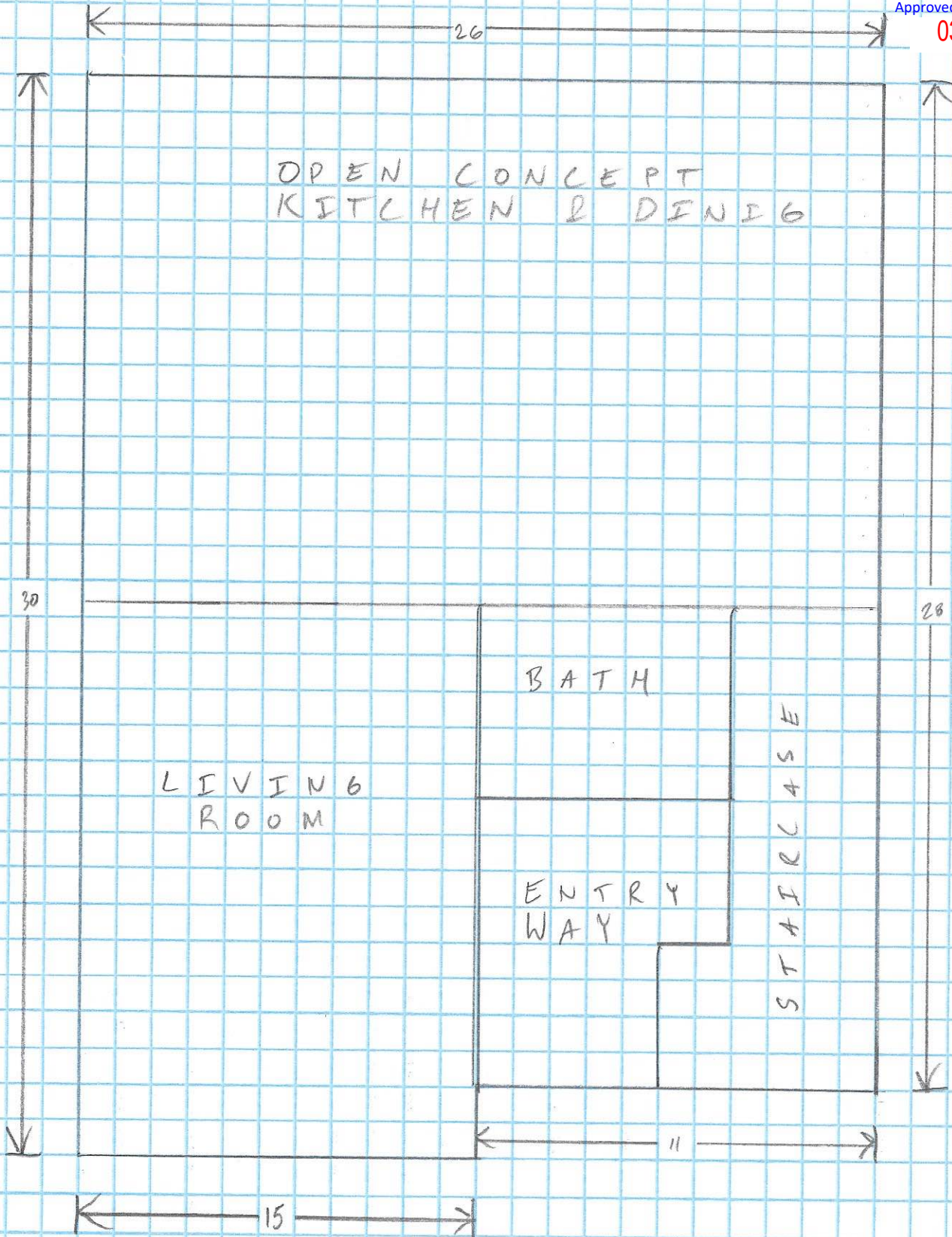


29 POWSLAND ST  
PROPOSED FLOOR PLAN



Permitting and Inspections Department  
Approved with Conditions

03/07/2019

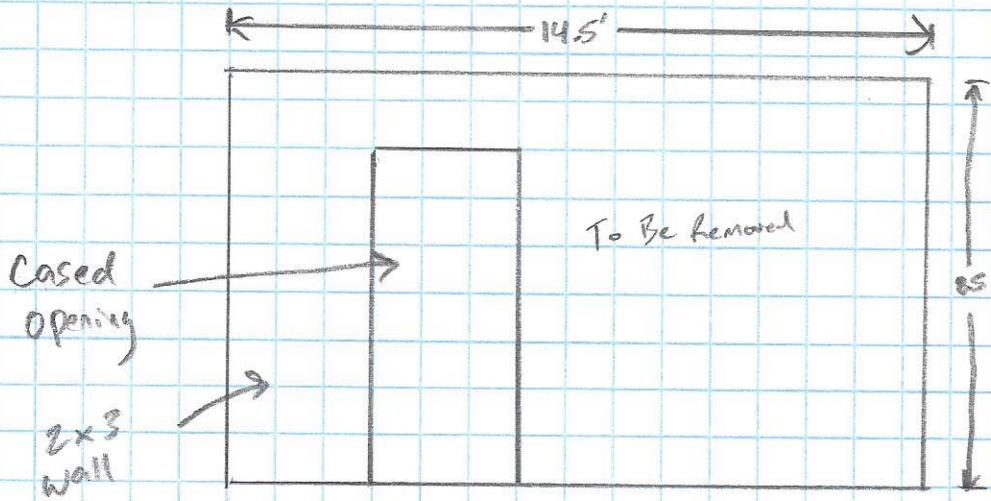






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CURRENT VIEW  
FROM DINING RM  
INTO KITCHEN



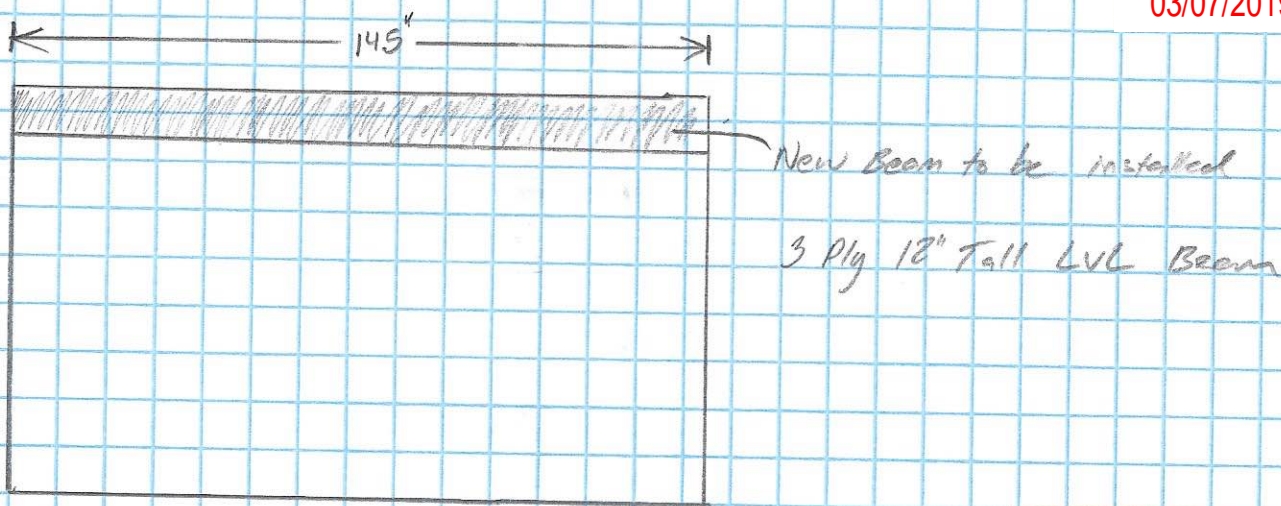




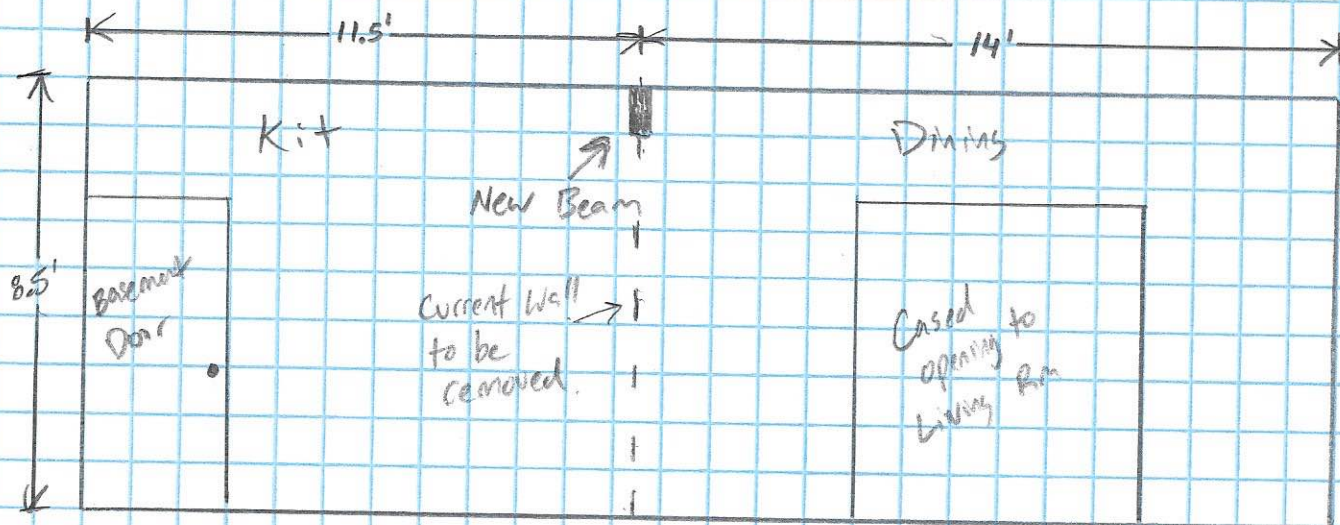
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# PROPOSED VIEW INTO KITCHEN



# CROSS SECTION





Client: Hillside Lumber  
 Project:  
 Address: 29 Powsland St.  
 Portland, ME

Date: 3/7/2019  
 Designer: ML  
 Job Name: 29 Powsland  
 Project #:

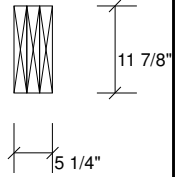
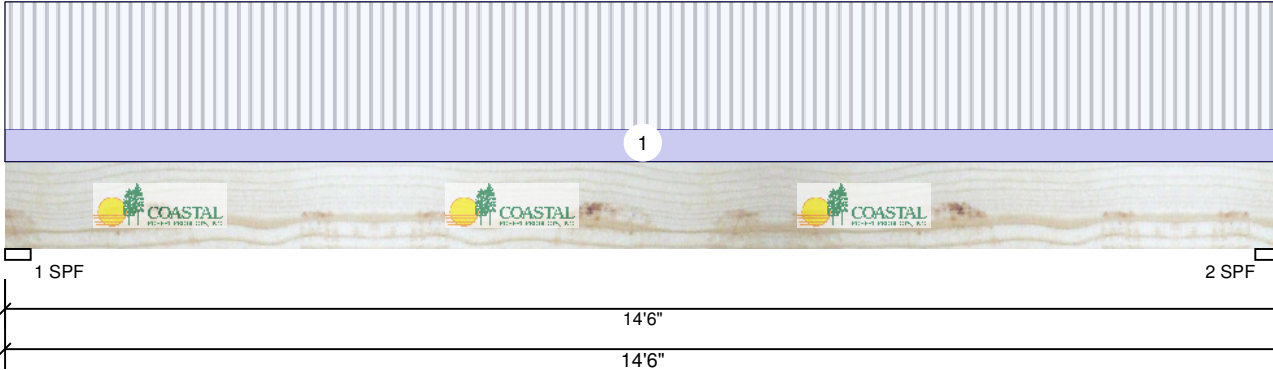


**2nd Floor Support Beam 2.0E CP-LAM 1.750" X 11.875" 3-Ply - PASSED**

Level: Level

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03/07/2019



**Member Information**

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	240
Importance:	Normal
Temperature:	Temp <= 100°F
General Load	
Floor Live:	40 PSF
Dead:	10 PSF

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	Yes
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	3770	1060	0	0	0
2	3770	1060	0	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	62%	1060 / 3770	4830	L	D+L
2 - SPF	3.500"	62%	1060 / 3770	4830	L	D+L

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	16811 ft-lb	7'3"	33220 ft-lb	0.506 (51%)	D+L	L
Unbraced	16811 ft-lb	7'3"	16821 ft-lb	0.999 (100%)	D+L	L
Shear	4073 lb	13'4 3/8"	11845 lb	0.344 (34%)	D+L	L
LL Defl inch	0.325 (L/524)	7'3 1/16"	0.355 (L/480)	0.920 (92%)	L	L
TL Defl inch	0.417 (L/409)	7'3 1/16"	0.710 (L/240)	0.590 (59%)	D+L	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 7'9" 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		13-0-0	Top	10 PSF	40 PSF	0 PSF	0 PSF	0 PSF	
	Self Weight				16 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

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

This design is valid until 7/10/2021

**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

