

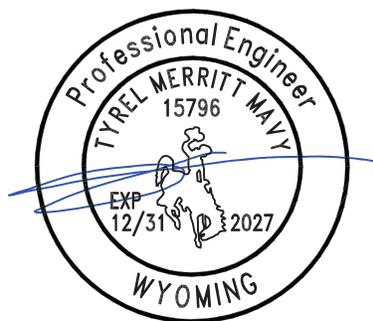
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# STRUCTURAL CALCULATIONS

## FOR

# Tienda La Mexicana Tenant Improvements Alpine, WY



**Job #P24014**  
**February 26, 2026**

2024 International Building Code  
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# SUMMARY

## SUMMARY

This minor set of structural calculations is being provided in support of the structural changes associated with the proposed change of use of the upper floor to dining in conjunction with the kitchen/food preparation service on the main floor of the 2-story structure recognized and functioning as La Tienda Mexicana. The following items are noteworthy to mention in regards to the structure and related changes:

- The proposed changes do not affect the existing Lateral Force Resisting System. Accordingly, code does not require evaluation of the same.
- The new and rebuilt stairway stringers have been checked for 100 psf access/stairway tributary loading.
- The floor live loading due to the upstairs change in use has been designated as 50 psf in accordance with the IBC occupancy use, to more closely match the live loading limitations imposed by the limited occupancy.
- All framing modified by the new stairs and the dumbwaiter has been prescriptively doubled up or sistered with a 2.0E LVL member to carry the new loading configuration.

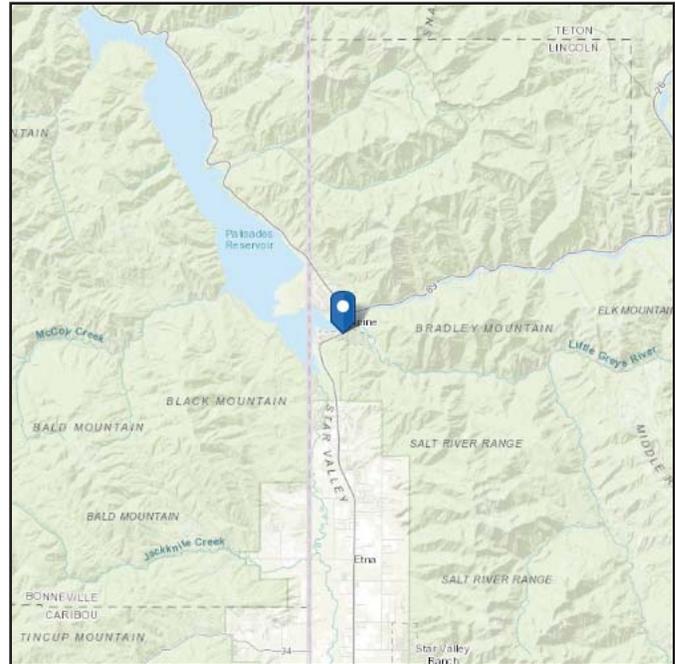
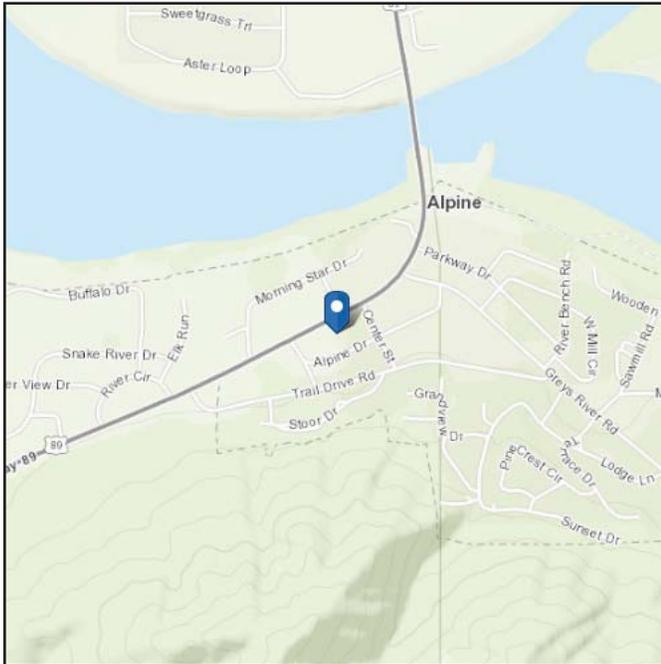
Based on the noted conditions, the structural changes as contained in the accompanying structural plans appear sufficient to adequately support and accommodate the proposed change of use and related modifications. Due to the limited size of this calculation package (10 total pages), an index was deemed unnecessary.

# ASCE Hazards Report

**Address:**  
No Address at This Location

**Standard:** ASCE/SEI 7-16  
**Risk Category:** II  
**Soil Class:** D - Default (see Section 11.4.3)

**Latitude:** 43.162023  
**Longitude:** -111.020334  
**Elevation:** 5664.862065606289 ft (NAVD 88)



## Wind

### Results:

Wind Speed	105 Vmph
10-year MRI	75 Vmph
25-year MRI	81 Vmph
50-year MRI	86 Vmph
100-year MRI	91 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2

Date Accessed: Mon Feb 02 2026

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is not in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2.

**Site Soil Class:** D - Default (see Section 11.4.3)

**Results:**

$S_s$ :	1.105	$S_{D1}$ :	N/A
$S_1$ :	0.34	$T_L$ :	6
$F_a$ :	1.2	$PGA$ :	0.475
$F_v$ :	N/A	$PGA_M$ :	0.57
$S_{MS}$ :	1.326	$F_{PGA}$ :	1.2
$S_{M1}$ :	N/A	$I_e$ :	1
$S_{DS}$ :	0.884	$C_v$ :	1.321

Ground motion hazard analysis may be required. See ASCE/SEI 7-16 Section 11.4.8.

**Data Accessed:** Mon Feb 02 2026

**Date Source:** [USGS Seismic Design Maps](#)

**Results:**

Mapped Elevation: 5664.9 ft  
Data Source: ASCE/SEI 7-16, Table 7.2-8  
Date Accessed: Mon Feb 02 2026

In "Case Study" areas, site-specific case studies are required to establish ground snow loads. Extreme local variations in ground snow loads in these areas preclude mapping at this scale.

Ground snow load determination for such sites shall be based on an extreme value statistical analysis of data available in the vicinity of the site using a value with a 2 percent annual probability of being exceeded (50-year mean recurrence interval).

Values provided are ground snow loads. In areas designated "case study required," extreme local variations in ground snow loads preclude mapping at this scale. Site-specific case studies are required to establish ground snow loads at elevations not covered.

Snow load values are mapped to a 0.5 mile resolution. This resolution can create a mismatch between the mapped elevation and the site-specific elevation in topographically complex areas. Engineers should consult the local authority having jurisdiction in locations where the reported 'elevation' and 'mapped elevation' differ significantly from each other.

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The ASCE Hazard Tool is provided for your convenience, for informational purposes only, and is provided "as is" and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

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Date: 2/25/2026

Engineer: TMM

Project #: P24014

Project Name: Tienda La Mexicana

**Dead Loads for: (E) 2-Story Structure o/Bsmt**

<u>Roof Dead Load</u>	<u>psf</u>	<u>Floor Dead Load</u>	<u>psf</u>	<u>Ext Wall Dead Load</u>	<u>psf</u>
Roofing	4.0	Flr Finish	2.0	Siding	4.0
Shtg	1.9	Shtg	2.3	Sht'g	1.5
Mfr Trusses @ 24"	2.5	Frmg	3.0	Studs	1.6
Gyp Board	2.2	Clng	2.8	Gyp Board	2.8
Misc	1.4	Misc	1.9	Misc	2.1
	12.0		12.0		12.0
				<u>Interior Wall Dead Load</u>	<u>psf</u>
				Framing	1.0
				Gyp Board x 2	5.6
				Misc	3.4
					10.0

**Other**

<b>Roof Live, 4.00:12</b>	20.0	<b>Stair Live</b>	100.0
<b>Floor Live</b>	50.0 (IBC Occup Live Load)	<b>Kitchen Hood (Approx Total 1000.0)</b> (Use 250 lbs Max Rxn for FJ Check)	

**Seismic Mass**

n/a, no change to LFRS

**Wood Beam Calculations for: (E) Flr Jsts**

Material: **DF-L No. 1**

Section: **2x10**

# Lams: **1**

Duration: **Live**

Fix: **None**

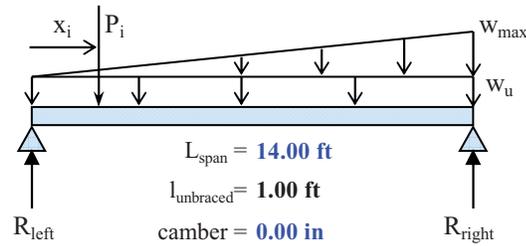
Form: **Standard**

- Incl. Self-Wt?
- Repetitive?
- Weak Axis?
- Rev. Bending?
- Wet Service?
- Incised?
- Visually Graded?
- Cont. Compr. Support?

Section Properties:

b = 1.5 in  
d = 9.25 in  
 $A_s = 13.875 \text{ in}^2$   
S = 21.39 in<sup>3</sup>  
I = 98.93 in<sup>4</sup>

Load	Dead	Live	Trib/ $x_i$ (ft)
$w_{self}$ (plf):	<b>0.00</b>	n/a	n/a
$w_u$ (plf):	<b>16.00</b>	<b>67.00</b>	n/a
$w_{max}$ (plf):	<b>0.00</b>	<b>0.00</b>	n/a
$P_1$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_2$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_3$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_4$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_5$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_6$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_7$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



$R_D = 112\#$       Defl. Limits:       $R_D = 112\#$   
 $R_L = 469\#$        $\Delta_L$ : L/ **360**       $R_L = 469\#$   
 $R_{Tot} = 581\#$        $\Delta_{Tot}$ : L/ **240**       $R_{Tot} = 581\#$   
 $l_{bmg} = 0.62 \text{ in}$             $l_{bmg} = 0.62 \text{ in}$

**DESIGN CHECKS**

Adjust. Factors:

$C_D = 1.00$   
 $C_r = 1.15$   
 $C_f = 1.00$   
 $C_F = 1.10$   
 $C_{fu} = 1.00$   
 $C_V = 1.00$   
 $C_L = 0.98$   
 $C_T = 1.04$   
 $K_{cr} = 1.5$

Design Values:

$F_b = 1000 \text{ psi}$   
 $F_v = 180 \text{ psi}$   
 $F_{c\perp} = 625 \text{ psi}$   
 $E = 1.7E+06 \text{ psi}$   
 $E_{min} = 6.2E+05 \text{ psi}$   
 $F_{c\perp}' = 625 \text{ psi}$   
 $E' = 1.7E+06 \text{ psi}$   
 $E_{min}' = 6.5E+05 \text{ psi}$   
 $E*I = 1.68E+08$

Shear	dead	live	total
V (#)	112	469	581
$f_v$ (psi)	12	51	63
$F_v'$ (psi)	162	180	180
$f_v/F_v'$	<b>0.07</b>	<b>0.28</b>	<b>0.35</b> $\leq 1.0$ , ok

Moment	dead	live	total
M (#-ft)	392	1642	2034
$f_b$ (psi)	220	921	1141
$F_b'$ (psi)	1120	1245	1245
$f_b/F_b'$	<b>0.20</b>	<b>0.74</b>	<b>0.92</b> $\leq 1.0$ , ok

Wet Service ( $C_M$ ):

$F_b = 1.000$   
 $F_v = 1.000$   
 $F_{c\perp} = 1.000$   
 $E, E_{min} = 1.000$

Slenderness/Stability:

$R_B = 10.1 < 50$  **OK**  
 $F_{bE} = 7.65E+03 \text{ psi}$   
 $F_b^* = 1.90E+03 \text{ psi}$

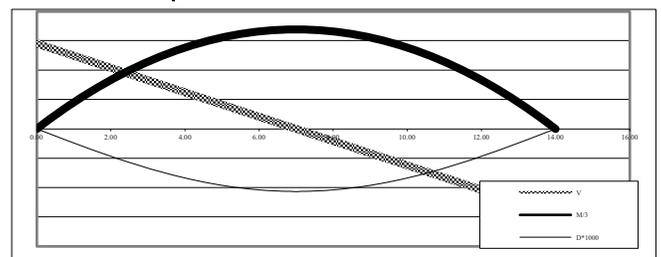
Deflection	dead	live	total
$\Delta_{allow}$ (in)	0.700	0.467	0.700
$\Delta_{actual}$ (in)	<b>0.123</b>	<b>0.344</b>	<b>0.468</b> $<$ allowed, ok

Incising ( $C_i$ ):

$F_{b,v} = 1.00$   
 $F_{c\perp} = 1.00$   
 $E, E_{min} = 1.00$

Design Equations:

$F_b' = F_b C_D C_M C_L C_{fu} C_F C_i C_r C_V C_c$   
 $F_v' = F_v C_D C_M (C_i \text{ or } 1.0)$   
 $E' = E C_M C_i$   
 $E_{min}' = E_{min} C_M C_i C_T$



**Wood Beam Calculations for: (E) Flr Jsts w/Kitchen Hood**

Material: **DF-L No. 1**

Section: **2x10**

# Lams: **1**

Duration: **Live**

Fix: **None**

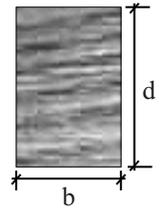
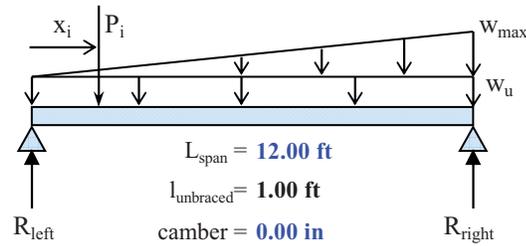
Form: **Standard**

- Incl. Self-Wt?
- Repetitive?
- Weak Axis?
- Rev. Bending?
- Wet Service?
- Incised?
- Visually Graded?
- Cont. Compr. Support?

Section Properties:

b = 1.5 in  
d = 9.25 in  
 $A_s = 13.875 \text{ in}^2$   
S = 21.39 in<sup>3</sup>  
I = 98.93 in<sup>4</sup>

Load	Dead	Live	Trib/x <sub>i</sub> (ft)
w <sub>self</sub> (plf):	<b>0.00</b>	n/a	n/a
w <sub>u</sub> (plf):	<b>16.00</b>	<b>67.00</b>	n/a
w <sub>max</sub> (plf):	<b>0.00</b>	<b>0.00</b>	n/a
P <sub>1</sub> (#):	<b>250.00</b>	<b>0.00</b>	<b>0.42</b>
P <sub>2</sub> (#):	<b>250.00</b>	<b>0.00</b>	<b>4.33</b>
P <sub>3</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>4</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>5</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>6</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>7</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



R<sub>D</sub> = 497#      Defl. Limits:      R<sub>D</sub> = 195#  
R<sub>L</sub> = 402#      Δ<sub>L</sub>: L/ 360      R<sub>L</sub> = 402#  
R<sub>Tot</sub> = 899#      Δ<sub>Tot</sub>: L/ 240      R<sub>Tot</sub> = 597#  
l<sub>bmg</sub> = 0.96 in      l<sub>bmg</sub> = 0.64 in

**DESIGN CHECKS**

Adjust. Factors:

C<sub>D</sub> = 1.00  
C<sub>r</sub> = 1.15  
C<sub>f</sub> = 1.00  
C<sub>F</sub> = 1.10  
C<sub>fu</sub> = 1.00  
C<sub>V</sub> = 1.00  
C<sub>L</sub> = 0.99  
C<sub>T</sub> = 1.04  
K<sub>cr</sub>: 1.5

Design Values:

F<sub>b</sub> = 1000 psi  
F<sub>v</sub> = 180 psi  
F<sub>c⊥</sub> = 625 psi  
E = 1.7E+06 psi  
E<sub>min</sub> = 6.2E+05 psi  
F<sub>c⊥</sub>' = 625 psi  
E' = 1.7E+06 psi  
E<sub>min</sub>' = 6.4E+05 psi  
E\*I = 1.68E+08

Shear	dead	live	total	
V (#)	497	402	899	
f <sub>v</sub> (psi)	54	43	97	
F <sub>v</sub> ' (psi)	162	180	180	
f <sub>v</sub> /F <sub>v</sub> '	0.33	0.24	0.54	≤1.0, ok

Moment	dead	live	total	
M (#-ft)	1038	1206	2168	
f <sub>b</sub> (psi)	582	677	1216	
F <sub>b</sub> ' (psi)	1123	1247	1247	
f <sub>b</sub> /F <sub>b</sub> '	0.52	0.54	0.97	≤1.0, ok

Wet Service (C<sub>M</sub>):

F<sub>b</sub>: 1.000  
F<sub>v</sub>: 1.000  
F<sub>c⊥</sub>: 1.000  
E, E<sub>min</sub>: 1.000

Slenderness/Stability:

R<sub>B</sub> = 9.5 < 50      **OK**  
F<sub>bE</sub> = 8.52E+03 psi  
F<sub>b</sub>\* = 1.90E+03 psi

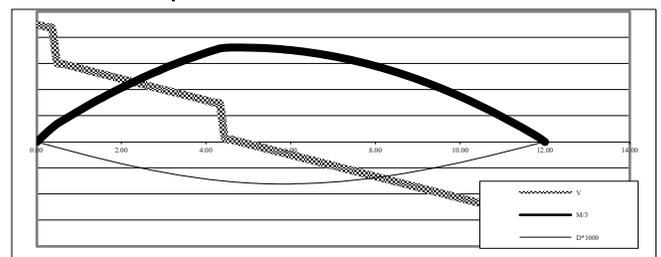
Deflection	dead	live	total	
Δ <sub>allow</sub> (in)	0.600	0.400	0.600	
Δ <sub>actual</sub> (in)	0.206	0.186	0.392	< allowed, ok

Incising (C<sub>i</sub>):

F<sub>b,v</sub>: 1.00  
F<sub>c⊥</sub>: 1.00  
E, E<sub>min</sub>: 1.00

Design Equations:

F<sub>b</sub>' = F<sub>b</sub>C<sub>D</sub>C<sub>M</sub>C<sub>L</sub>C<sub>fu</sub>C<sub>F</sub>C<sub>i</sub>C<sub>r</sub>C<sub>V</sub>C<sub>c</sub>  
F<sub>v</sub>' = F<sub>v</sub>C<sub>D</sub>C<sub>M</sub>(C<sub>i</sub> or 1.0)  
E' = EC<sub>M</sub>C<sub>i</sub>  
E<sub>min</sub>' = E<sub>min</sub>C<sub>M</sub>C<sub>i</sub>C<sub>T</sub>



**Wood Beam Calculations for: (N) Stair Stringer**

Material: **2.0E LVL**

Section: **LVL 1.75x11.25**

# Lams: **1**

Duration: **Live**

Fix: **None**

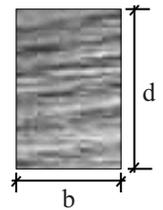
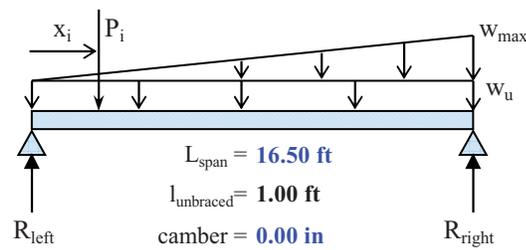
Form: **Standard**

- Incl. Self-Wt?
- Repetitive?
- Weak Axis?
- Rev. Bending?
- Wet Service?
- Incised?
- Visually Graded?
- Cont. Compr. Support?

Section Properties:

b = 1.75 in  
d = 11.25 in  
A<sub>s</sub> = 19.688 in<sup>2</sup>  
S = 36.91 in<sup>3</sup>  
I = 207.6 in<sup>4</sup>

Load	Dead	Live	Trib/x <sub>i</sub> (ft)
w <sub>self</sub> (plf):	<b>4.96</b>	n/a	n/a
w <sub>u</sub> (plf):	<b>10.00</b>	<b>100.00</b>	n/a
w <sub>max</sub> (plf):	<b>0.00</b>	<b>0.00</b>	n/a
P <sub>1</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>2</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>3</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>4</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>5</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>6</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
P <sub>7</sub> (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



R<sub>D</sub> = 123#      Defl. Limits:      R<sub>D</sub> = 123#  
R<sub>L</sub> = 825#      Δ<sub>L</sub>: L/ **360**      R<sub>L</sub> = 825#  
R<sub>Tot</sub> = 948#      Δ<sub>Tot</sub>: L/ **240**      R<sub>Tot</sub> = 948#  
l<sub>bmg</sub> = 0.72 in      l<sub>bmg</sub> = 0.72 in

**DESIGN CHECKS**

Adjust. Factors:

C<sub>D</sub> = 1.00  
C<sub>r</sub> = 1.00  
C<sub>f</sub> = 1.00  
C<sub>F</sub> = 1.00  
C<sub>fu</sub> = 1.00  
C<sub>V</sub> = 1.01  
C<sub>L</sub> = 0.98  
C<sub>T</sub> = 1.00  
K<sub>cr</sub>: 1.5

Design Values:

F<sub>b</sub> = 2600 psi  
F<sub>v</sub> = 285 psi  
F<sub>c⊥</sub> = 750 psi  
E = 2.0E+06 psi  
E<sub>min</sub> = 1.0E+06 psi  
F<sub>c⊥</sub>' = 750 psi  
E' = 2.0E+06 psi  
E<sub>min</sub>' = 1.0E+06 psi  
E\*I 4.15E+08

Shear	dead	live	total
V (#)	123	825	948
f <sub>v</sub> (psi)	9	63	72
F <sub>v</sub> ' (psi)	257	285	285
f <sub>v</sub> /F <sub>v</sub> '	<b>0.04</b>	<b>0.22</b>	<b>0.25</b> ≤1.0, ok

Moment	dead	live	total
M (#-ft)	509	3403	3912
f <sub>b</sub> (psi)	166	1106	1272
F <sub>b</sub> ' (psi)	2284	2537	2537
f <sub>b</sub> /F <sub>b</sub> '	<b>0.07</b>	<b>0.44</b>	<b>0.50</b> ≤1.0, ok

Wet Service (C<sub>M</sub>):

F<sub>b</sub>: 1.000  
F<sub>v</sub>: 1.000  
F<sub>c⊥</sub>: 1.000  
E, E<sub>min</sub>: 1.000

Slenderness/Stability:

R<sub>B</sub> = 9.5 < 50 **OK**  
F<sub>bE</sub> = 1.34E+04 psi  
F<sub>b</sub>\* = 4.55E+03 psi

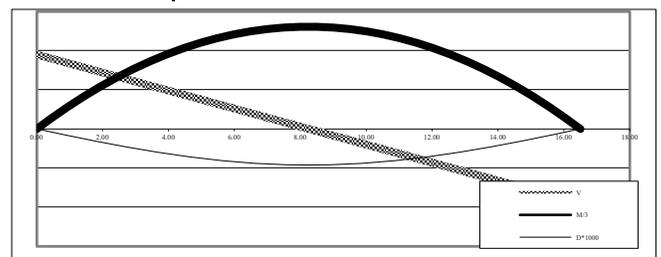
Deflection	dead	live	total
Δ <sub>allow</sub> (in)	0.825	0.550	0.825
Δ <sub>actual</sub> (in)	<b>0.090</b>	<b>0.402</b>	<b>0.492</b> < allowed, ok

Incising (C<sub>i</sub>):

F<sub>b,v</sub>: 1.00  
F<sub>c⊥</sub>: 1.00  
E, E<sub>min</sub>: 1.00

Design Equations:

F<sub>b</sub>' = F<sub>b</sub>C<sub>D</sub>C<sub>M</sub>C<sub>L</sub>C<sub>fu</sub>C<sub>F</sub>C<sub>i</sub>C<sub>r</sub>C<sub>V</sub>C<sub>c</sub>  
F<sub>v</sub>' = F<sub>v</sub>C<sub>D</sub>C<sub>M</sub>(C<sub>i</sub> or 1.0)  
E' = EC<sub>M</sub>C<sub>i</sub>  
E<sub>min</sub>' = E<sub>min</sub>C<sub>M</sub>C<sub>i</sub>C<sub>T</sub>



**Wood Beam Calculations for: Rebuilt Stair Stringer**

Material: **2.0E LVL**

Section: **LVL 1.75x11.25**

# Lams: **1**

Duration: **Live**

Fix: **None**

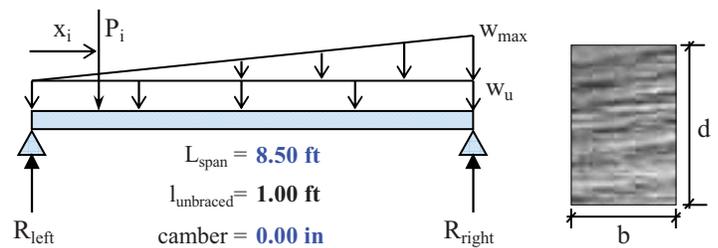
Form: **Standard**

- Incl. Self-Wt?
- Repetitive?
- Weak Axis?
- Rev. Bending?
- Wet Service?
- Incised?
- Visually Graded?
- Cont. Compr. Support?

Section Properties:

b = 1.75 in  
d = 11.25 in  
 $A_s = 19.688 \text{ in}^2$   
 $S = 36.91 \text{ in}^3$   
 $I = 207.6 \text{ in}^4$

Load	Dead	Live	Trib/ $x_i$ (ft)
$w_{self}$ (plf):	<b>4.96</b>	n/a	n/a
$w_u$ (plf):	<b>15.00</b>	<b>150.00</b>	n/a
$w_{max}$ (plf):	<b>0.00</b>	<b>0.00</b>	n/a
$P_1$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_2$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_3$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_4$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_5$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_6$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
$P_7$ (#):	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>



$R_D = 85\#$       Defl. Limits:       $R_D = 85\#$   
 $R_L = 638\#$        $\Delta_L: L/ 360$        $R_L = 638\#$   
 $R_{Tot} = 722\#$        $\Delta_{Tot}: L/ 240$        $R_{Tot} = 722\#$   
 $l_{bmg} = 0.55 \text{ in}$        $l_{bmg} = 0.55 \text{ in}$

**DESIGN CHECKS**

Adjust. Factors:

$C_D = 1.00$   
 $C_r = 1.00$   
 $C_f = 1.00$   
 $C_F = 1.00$   
 $C_{fu} = 1.00$   
 $C_V = 1.01$   
 $C_L = 0.98$   
 $C_T = 1.00$   
 $K_{cr} = 1.5$

Design Values:

$F_b = 2600 \text{ psi}$   
 $F_v = 285 \text{ psi}$   
 $F_{c\perp} = 750 \text{ psi}$   
 $E = 2.0E+06 \text{ psi}$   
 $E_{min} = 1.0E+06 \text{ psi}$   
 $F_{c\perp}' = 750 \text{ psi}$   
 $E' = 2.0E+06 \text{ psi}$   
 $E_{min}' = 1.0E+06 \text{ psi}$   
 $E*I = 4.15E+08$

Shear	dead	live	total
V (#)	85	638	722
$f_v$ (psi)	6	49	55
$F_v'$ (psi)	257	285	285
$f_v/F_v'$	<b>0.03</b>	<b>0.17</b>	<b>0.19</b> $\leq 1.0, \text{ok}$

Moment	dead	live	total
M (#-ft)	180	1355	1535
$f_b$ (psi)	59	440	499
$F_b'$ (psi)	2284	2537	2537
$f_b/F_b'$	<b>0.03</b>	<b>0.17</b>	<b>0.20</b> $\leq 1.0, \text{ok}$

Wet Service ( $C_M$ ):

$F_b: 1.000$   
 $F_v: 1.000$   
 $F_{c\perp}: 1.000$   
 $E, E_{min}: 1.000$

Slenderness/Stability:

$R_B = 9.5 < 50$  **OK**  
 $F_{bE} = 1.34E+04 \text{ psi}$   
 $F_b^* = 4.55E+03 \text{ psi}$

Deflection	dead	live	total
$\Delta_{allow}$ (in)	0.425	0.283	0.425
$\Delta_{actual}$ (in)	<b>0.008</b>	<b>0.042</b>	<b>0.051</b> $< \text{allowed, ok}$

Incising ( $C_i$ ):

$F_{b,v}: 1.00$   
 $F_{c\perp}: 1.00$   
 $E, E_{min}: 1.00$

Design Equations:

$F_b' = F_b C_D C_M C_L C_{fu} C_F C_i C_r C_V C_c$   
 $F_v' = F_v C_D C_M (C_i \text{ or } 1.0)$   
 $E' = E C_M C_i$   
 $E_{min}' = E_{min} C_M C_i C_T$

