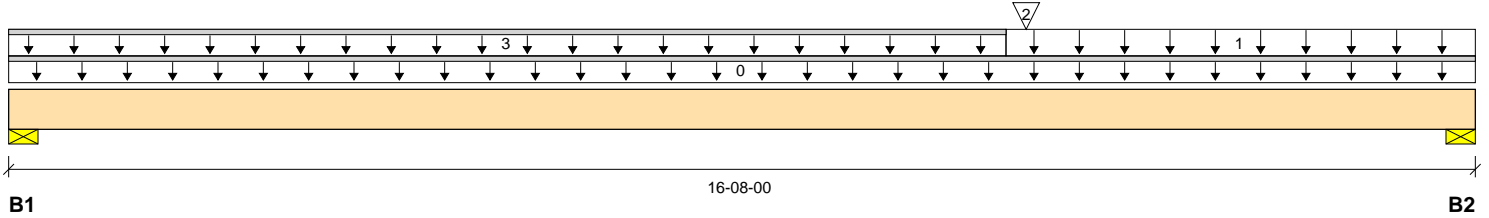


BC CALC® Member Report
 Build 7295
 Job name:
 Address:
 City, State, Zip:
 Builder:
 Code reports: ESR-1040

Dry | 1 span | No cant.

January 31, 2020 10:00:20

File name: P19-07024FFP_BEAMS
 Description:
 Specifier:
 Designer: Choua Vang
 Company: Longleaf Truss Co



Total Horizontal Product Length = 16-08-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	334 / 0	2956 / 0	2281 / 0		
B2, 8"	1751 / 0	4488 / 0	2776 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	Tributary
							100%	90%	115%	160%	125%	
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	16-08-00	Top		27				00-00-00
1	FLOOR	Unf. Area (lb/ft ²)	L	11-04-00	16-08-00	Top	40	15				08-00-00
2	Reaction from FB04 at bearing B2	Conc. Pt. (lbs)	L	11-06-12	11-06-12	Top	379	4081	2791			n/a
3	ROOF	Unf. Lin. (lb/ft)	L	00-00-00	11-04-00	Back		200	200			n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	30806 ft-lbs	38.3%	115%	2	11-06-12
End Shear	7045 lbs	34.1%	115%	3	14-06-00
Total Load Deflection	L/760 (0.25")	31.6%	n/a	2	08-07-13
Live Load Deflection	L/999 (0.104")	n/a	n/a	5	08-06-00
Max Defl.	0.25"	25.0%	n/a	2	08-07-13
Span / Depth	10.6				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 5-1/4"	5237 lbs	50.4%	38.0%	Southern Pine
B2	Wall/Plate 8" x 5-1/4"	7884 lbs	33.2%	25.0%	Southern Pine

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets Code minimum (L/360) Live load deflection criteria.
 Design meets arbitrary (1") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2009.
 Design based on Dry Service Condition.

DB05 (Floor Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

Specifier:

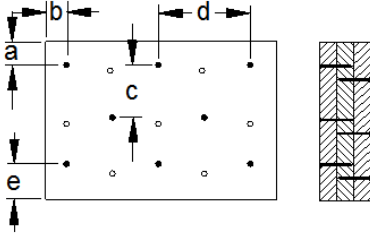
Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co

Connection Diagram: Full Length of Member



a minimum = 2"

c = 7"

b minimum = 3"

d = 6"

e minimum = 3"

Calculated Side Load = 400.0 lb/ft

Nailing applies to both sides of the member

Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

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FB01 (Floor Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

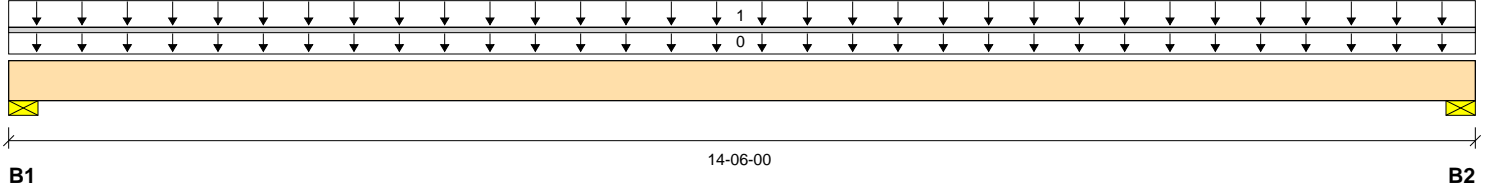
Specifier:

Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co



Total Horizontal Product Length = 14-06-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	1305 / 0	429 / 0			
B2, 3-1/2"	1305 / 0	429 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100% Live	90% Dead	115% Snow	160% Wind	125% Roof Live	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	14-06-00	Top		14				00-00-00
1		Unf. Area (lb/ft²)	L	00-00-00	14-06-00	Back	60	15				03-00-00

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	5895 ft-lbs	20.3%	100%	1	07-03-00
End Shear	1385 lbs	14.9%	100%	1	01-05-08
Total Load Deflection	L/1289 (0.131")	18.6%	n/a	1	07-03-00
Live Load Deflection	L/999 (0.098")	n/a	n/a	2	07-03-00
Max Defl.	0.131"	17.4%	n/a	1	07-03-00
Span / Depth	12.0				

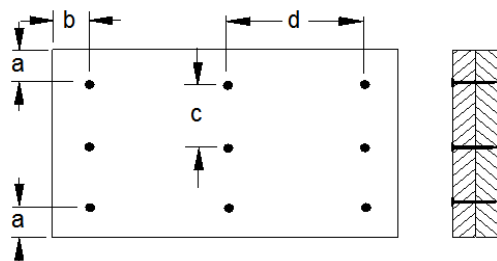
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	1734 lbs	33.3%	18.9%	Spruce-Pine-Fir
B2	Wall/Plate 3-1/2" x 3-1/2"	1734 lbs	33.3%	18.9%	Spruce-Pine-Fir

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (0.75") Maximum Total load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2009.
- Design based on Dry Service Condition.

Connection Diagram: Full Length of Member



BC CALC® Member Report
Build 7295
Job name:
Address:
City, State, Zip:
Builder:
Code reports: ESR-1040

FB01 (Floor Beam)
Dry | 1 span | No cant.

January 31, 2020 10:00:20

File name: P19-07024FFP_BEAMS
Description:
Specifier:
Designer: Choua Vang
Company: Longleaf Truss Co

Connection Diagram: Full Length of Member

a minimum = 2" c = 5"
b minimum = 3" d = 12"

Calculated Side Load = 225.0 lb/ft
Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

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FB02 (Floor Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

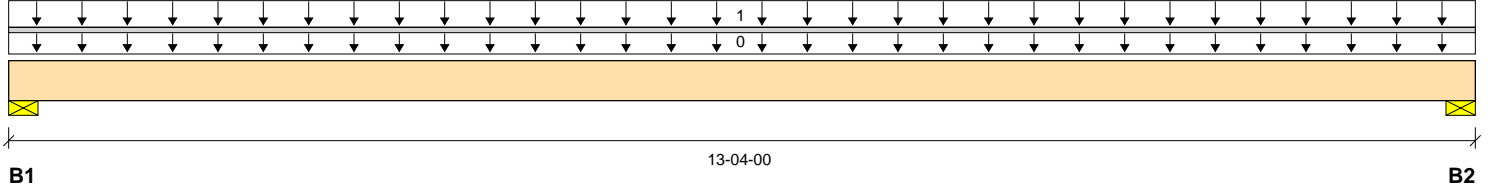
Specifier:

Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co



Total Horizontal Product Length = 13-04-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	1200 / 0	395 / 0			
B2, 3-1/2"	1200 / 0	395 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100% Live	90% Dead	115% Snow	160% Wind	125% Roof Live	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	13-04-00	Top		14				00-00-00
1		Unf. Area (lb/ft²)	L	00-00-00	13-04-00	Back	60	15				03-00-00

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	4956 ft-lbs	17.1%	100%	1	06-08-00
End Shear	1246 lbs	13.4%	100%	1	01-05-08
Total Load Deflection	L/999 (0.092")	n/a	n/a	1	06-08-00
Live Load Deflection	L/999 (0.07")	n/a	n/a	2	06-08-00
Max Defl.	0.092"	n/a	n/a	1	06-08-00
Span / Depth	11.0				

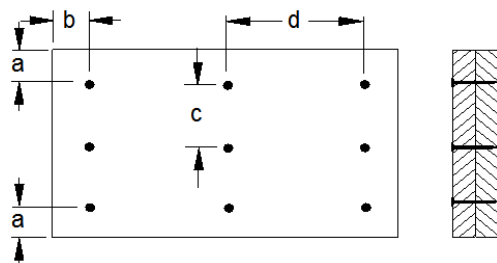
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	1595 lbs	30.6%	17.4%	Spruce-Pine-Fir
B2	Wall/Plate 3-1/2" x 3-1/2"	1595 lbs	30.6%	17.4%	Spruce-Pine-Fir

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (0.75") Maximum Total load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2009.
- Design based on Dry Service Condition.

Connection Diagram: Full Length of Member



BC CALC® Member Report
Build 7295
Job name:
Address:
City, State, Zip:
Builder:
Code reports: ESR-1040

FB02 (Floor Beam)
Dry | 1 span | No cant.

January 31, 2020 10:00:20

File name: P19-07024FFP_BEAMS
Description:
Specifier:
Designer: Choua Vang
Company: Longleaf Truss Co

Connection Diagram: Full Length of Member

a minimum = 2" c = 5"
b minimum = 3" d = 12"

Calculated Side Load = 225.0 lb/ft
Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

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FB03 (Floor Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

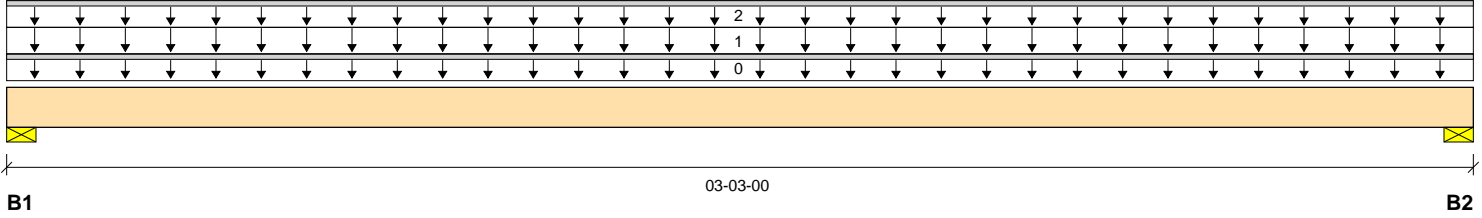
Specifier:

Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co



Total Horizontal Product Length = 03-03-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	163 / 0	246 / 0			
B2, 3-1/2"	162 / 0	246 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	03-03-00	Top		14				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	03-03-00	Back	40	15				02-06-00
2	WALL	Unf. Lin. (lb/ft)	L	00-00-00	03-03-00	Top		100				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	245 ft-lbs	0.8%	100%	1	01-07-08
End Shear	42 lbs	0.5%	100%	1	01-05-08
Total Load Deflection	L/999 (0")	n/a	n/a	1	01-07-08
Live Load Deflection	L/999 (0")	n/a	n/a	2	01-07-08
Max Defl.	0"	n/a	n/a	1	01-07-08
Span / Depth	2.4				

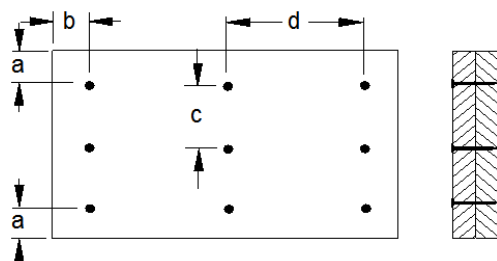
Bearing Supports

Bearing	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	409 lbs	7.9%	4.5%	Spruce-Pine-Fir
B2	Wall/Plate 3-1/2" x 3-1/2"	409 lbs	7.9%	4.5%	Spruce-Pine-Fir

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (1") Maximum Total load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2009.
- Design based on Dry Service Condition.

Connection Diagram: Full Length of Member



BC CALC® Member Report
Build 7295
Job name:
Address:
City, State, Zip:
Builder:
Code reports: ESR-1040

FB03 (Floor Beam)
Dry | 1 span | No cant.

January 31, 2020 10:00:20

File name: P19-07024FFP_BEAMS
Description:
Specifier:
Designer: Choua Vang
Company: Longleaf Truss Co

Connection Diagram: Full Length of Member

a minimum = 2" c = 5"
b minimum = 3" d = 12"

Calculated Side Load = 137.5 lb/ft
Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

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FB04 (Floor Beam)

Dry | 2 spans | L cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

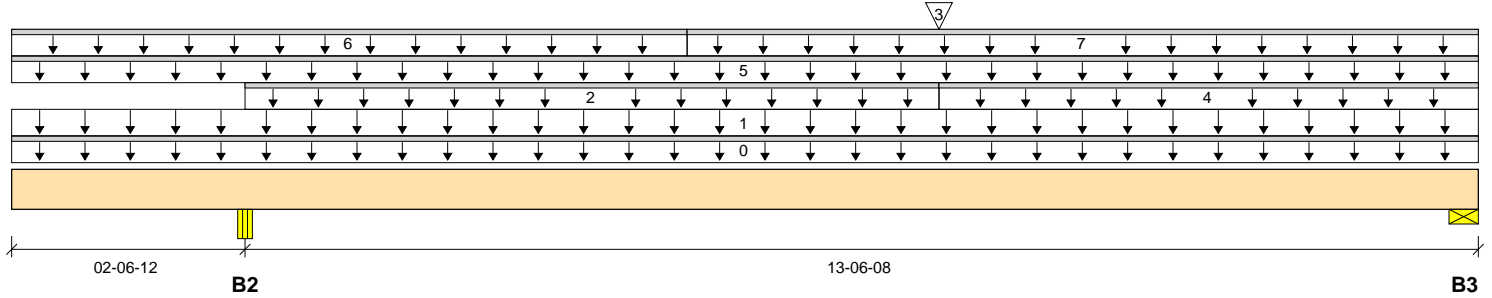
Specifier:

Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co



Total Horizontal Product Length = 16-01-04

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B2, 5-1/4"	379 / 0	4081 / 0	2791 / 0		
B3, 3-1/2"	275 / 10	3399 / 0	2513 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	16-01-04	Top		21				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	16-01-04	Top	40	15				01-00-00
2	roof from rear	Unf. Lin. (lb/ft)	L	02-06-12	10-02-03	Back		150	150			n/a
3	T11 GIRDER	Conc. Pt. (lbs)	L	10-02-03	10-02-03	Back		700	700			n/a
4	REAR ROOF	Unf. Lin. (lb/ft)	L	10-02-03	16-01-04	Back		100	100			n/a
5	WALL ABOVE	Unf. Lin. (lb/ft)	L	00-00-00	16-01-04	Top		100				n/a
6	ROOF ABOVE	Unf. Lin. (lb/ft)	L	00-00-00	07-05-00	Top		150	150			n/a
7	ROOF ABOVE	Unf. Lin. (lb/ft)	L	07-05-00	16-01-04	Top		200	200			n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	20774 ft-lbs	41.5%	115%	5	10-00-02
Neg. Moment	-1432 ft-lbs	2.9%	115%	6	02-06-12
End Shear	4838 lbs	30.1%	115%	5	14-07-12
Cont. Shear	4734 lbs	29.5%	115%	6	03-11-06
Total Load Deflection	L/603 (0.265")	39.8%	n/a	5	09-03-13
Live Load Deflection	L/999 (0.115")	n/a	n/a	20	09-03-13
Total Neg. Defl.	2xL/398 (-0.155")	60.4%	n/a	5	00-00-00
Max Defl.	0.265"	26.5%	n/a	5	09-03-13
Cant. Max Defl.	-0.155"	15.5%	n/a	5	00-00-00
Span / Depth	11.4				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B2	Beam 5-1/4" x 5-1/4"	6872 lbs	33.2%	33.2%	Versa-Lam 2.0
B3	Wall/Plate 3-1/2" x 5-1/4"	5912 lbs	75.7%	42.9%	Spruce-Pine-Fir

FB04 (Floor Beam)

Dry | 2 spans | L cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

Specifier:

Builder:

Designer: Choua Vang

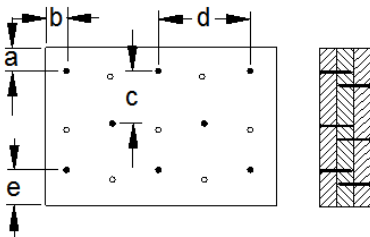
Code reports: ESR-1040

Company: Longleaf Truss Co

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets Code minimum (L/360) Live load deflection criteria.
- Design meets arbitrary (1") Maximum Total load deflection criteria.
- Design meets arbitrary (1") Cantilever Maximum Total load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2009.
- Design based on Dry Service Condition.
- Cantilevers require sheathed bottom flanges, blocking at cantilever support and closure at ends.

Connection Diagram: Full Length of Member



- a minimum = 2" c = 5"
- b minimum = 3" d = 6"
- e minimum = 3"

Calculated Side Load = 300.0 lb/ft
 Nailing applies to both sides of the member
 Connectors are: 3-1/4 in. Pneumatic Gun Nails

Disclosure

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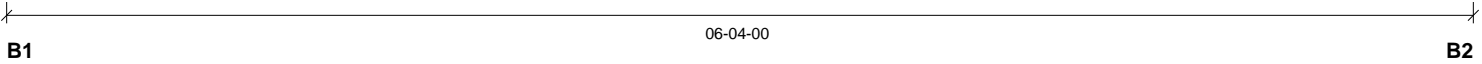
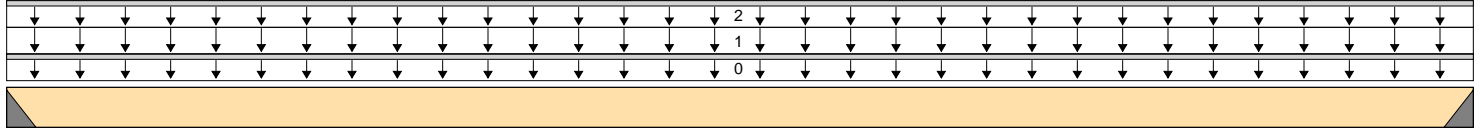
FB06 (Floor Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report
 Build 7295
 Job name:
 Address:
 City, State, Zip:
 Builder:
 Code reports: ESR-1040

File name: P19-07024FFP_BEAMS
 Description:
 Specifier:
 Designer: Choua Vang
 Company: Longleaf Truss Co



Total Horizontal Product Length = 06-04-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 2-1/2"	127 / 0	567 / 0	475 / 0		
B2, 2-1/2"	127 / 0	567 / 0	475 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	06-04-00	Top		14				00-00-00
1	Standard Load	Unf. Area (lb/ft ²)	L	00-00-00	06-04-00	Top	40	15				01-00-00
2	ROOF	Unf. Lin. (lb/ft)	L	00-00-00	06-04-00	Back		150	150			n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1502 ft-lbs	4.5%	115%	2	03-02-00
End Shear	590 lbs	5.5%	115%	2	01-04-08
Total Load Deflection	L/999 (0.006")	n/a	n/a	2	03-02-00
Live Load Deflection	L/999 (0.003")	n/a	n/a	5	03-02-00
Max Defl.	0.006"	n/a	n/a	2	03-02-00
Span / Depth	5.2				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Hanger 2-1/2" x 3-1/2"	1042 lbs	52.3%	15.9%	HU410
B2	Hanger 2-1/2" x 3-1/2"	1042 lbs	52.3%	15.9%	HU410

Cautions

Hanger HU410 requires (14) 10d face nails, (6) 10d joist nails.
 Header for the hanger HU410 is a Double 1-3/4" x 14" LVL beam
 Header for the hanger HU410 is a Double 1-3/4" x 14" LVL beam

Notes

Design meets User specified (L/360) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Design meets arbitrary (0.75") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 Hanger Manufacturer: Simpson Strong-Tie, Inc.
 BC CALC® analysis is based on IBC 2009.
 Design based on Dry Service Condition.

FB06 (Floor Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

Specifier:

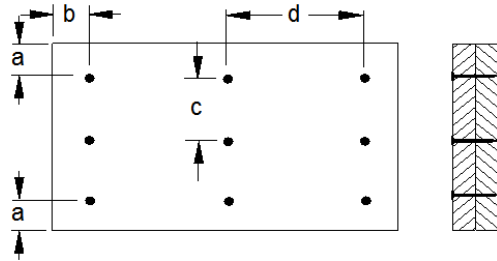
Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co

Connection Diagram: Full Length of Member



a minimum = 2" c = 5"
 b minimum = 3" d = 12"

Calculated Side Load = 300.0 lb/ft
 Connectors are: 3-1/4 in. Pneumatic Gun Nails

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FB07 (Floor Beam)

Dry | 2 spans | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

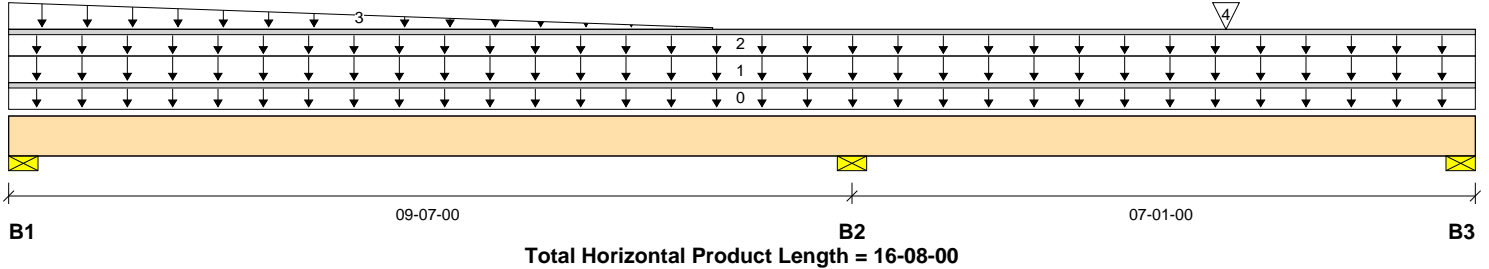
Specifier:

Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	1354 / 91	1799 / 0	0 / 23		
B2, 5-1/2"	3367 / 0	3273 / 0	232 / 0		
B3, 3-1/2"	1122 / 295	748 / 0	257 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	16-08-00	Top		14				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	16-08-00	Back	40	15				08-00-00
2	WALL	Unf. Lin. (lb/ft)	L	00-00-00	16-08-00	Top		100				n\la
3	BRICK	Trapezoidal (lb/ft)	L	00-00-00	08-00-00	Top		320				n\la
4	Reaction from FB06 at bearing B2	Conc. Pt. (lbs)	L	13-10-00	13-10-00	Back	124	556	466			n\la

Controls Summary

Controls Summary	Value	% Allowable	Duration	Case	Location
Pos. Moment	5319 ft-lbs	18.3%	100%	2	03-10-15
Neg. Moment	-5980 ft-lbs	20.6%	100%	1	09-07-00
End Shear	2253 lbs	24.2%	100%	2	01-05-08
Cont. Shear	2836 lbs	30.5%	100%	1	08-02-04
Total Load Deflection	L/999 (0.045")	n\la	n\la	2	04-05-01
Live Load Deflection	L/999 (0.023")	n\la	n\la	9	04-07-08
Total Neg. Defl.	L/999 (-0.007")	n\la	n\la	2	11-07-04
Max Defl.	0.045"	n\la	n\la	2	04-05-01
Span / Depth	8.0				

Bearing Supports

Bearing Supports	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	3153 lbs	60.6%	34.3%	Spruce-Pine-Fir
B2	Wall/Plate 5-1/2" x 3-1/2"	6640 lbs	81.2%	46.0%	Spruce-Pine-Fir
B3	Wall/Plate 3-1/2" x 3-1/2"	1870 lbs	35.9%	20.4%	Spruce-Pine-Fir

Notes

Design meets Code minimum (L/240) Total load deflection criteria.
 Design meets User specified (L/480) Live load deflection criteria.
 Design meets arbitrary (1") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2009.
 Design based on Dry Service Condition.

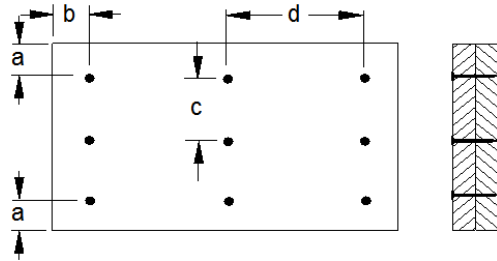
BC CALC® Member Report
 Build 7295
 Job name:
 Address:
 City, State, Zip:
 Builder:
 Code reports: ESR-1040

FB07 (Floor Beam)
 Dry | 2 spans | No cant.

January 31, 2020 10:00:20

File name: P19-07024FFP_BEAMS
 Description:
 Specifier:
 Designer: Choua Vang
 Company: Longleaf Truss Co

Connection Diagram: Full Length of Member



a minimum = 2" c = 5"
 b minimum = 3" d = 6"

Calculated Side Load = 510.9 lb/ft
 Connectors are: 3-1/4 in. Pneumatic Gun Nails

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RB01 (Roof Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

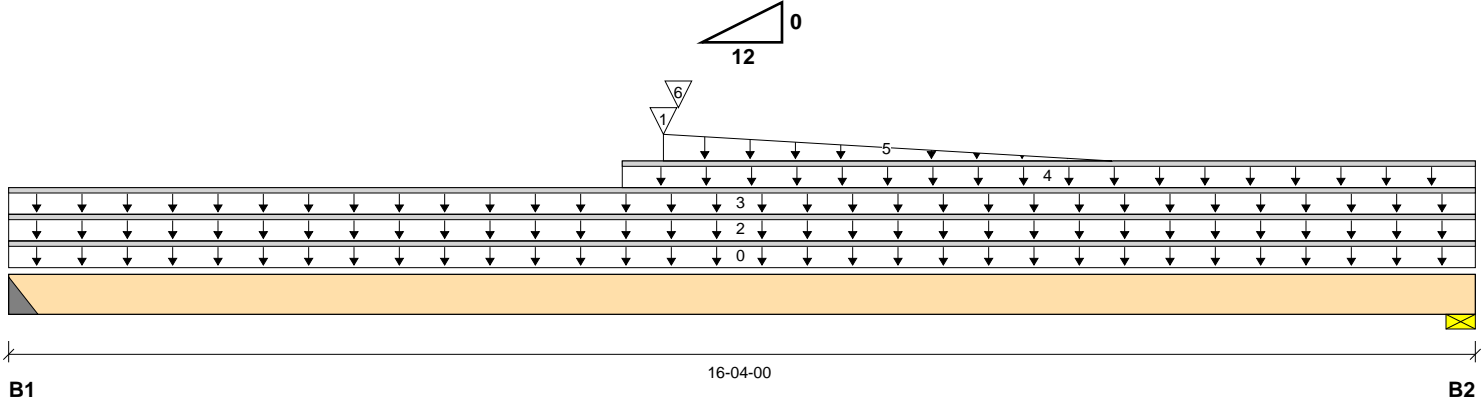
Specifier:

Builder:

Designer: Choua Vang

Code reports: ESR-1040

Company: Longleaf Truss Co



Total Horizontal Product Length = 16-04-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 6"		3796 / 0	2262 / 0		
B2, 5-1/2"		3957 / 0	2459 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100%	90%	115%	160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	16-04-00	Top		18				00-00-00
1	BRICK	Conc. Pt. (lbs)	L	07-03-08	07-03-08	Back		200				n/a
2	ROOF	Unf. Lin. (lb/ft)	L	00-00-00	16-04-00	Back		260	260			n/a
3	WALL	Unf. Lin. (lb/ft)	L	00-00-00	16-04-00	Top		100				n/a
4	ROOF ABOVE	Unf. Lin. (lb/ft)	L	06-10-00	16-04-00	Top		50	50			n/a
5	BRICK	Trapezoidal (lb/ft)	L	07-03-08		Top		160				n/a
					12-03-08			0				
6	BRICK AND WALL	Conc. Pt. (lbs)	L	07-05-08	07-05-08	Back		500				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	24931 ft-lbs	46.4%	115%	4	07-11-06
End Shear	4971 lbs	36.1%	115%	4	14-04-08
Total Load Deflection	L/600 (0.31")	60.0%	n/a	4	08-02-05
Live Load Deflection	L/999 (0.111")	n/a	n/a	5	08-02-05
Max Defl.	0.31"	41.4%	n/a	4	08-02-05
Span / Depth	10.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Hanger 6" x 3-1/2"	6058 lbs	57.2%	38.5%	HGLTV3.518
B2	Wall/Plate 5-1/2" x 3-1/2"	6417 lbs	59.0%	44.4%	Southern Pine

Cautions

Hanger HGLTV3.518 requires (12) 16d face nails, (6) 16d TF nails, (6) 16d joist nails.
 For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.
 For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.
 Header for the hanger HGLTV3.518 is a Double 1-3/4" x 18" LVL beam

RB01 (Roof Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:20

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

Specifier:

Builder:

Designer: Choua Vang

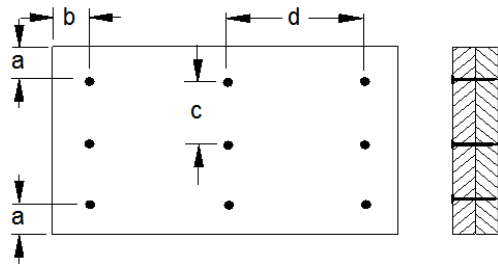
Code reports: ESR-1040

Company: Longleaf Truss Co

Notes

- Design meets User specified (L/360) Total load deflection criteria.
- Design meets User specified (L/480) Live load deflection criteria.
- Design meets arbitrary (0.75") Maximum Total load deflection criteria.
- Calculations assume member is fully braced.
- Hanger Manufacturer: Simpson Strong-Tie, Inc.
- BC CALC® analysis is based on IBC 2009.
- Design based on Dry Service Condition.

Connection Diagram: Full Length of Member



a minimum = 2" c = 7"
 b minimum = 3" d = 6"

Calculated Side Load = 520.0 lb/ft
 Connectors are: 3-1/4 in. Pneumatic Gun Nails

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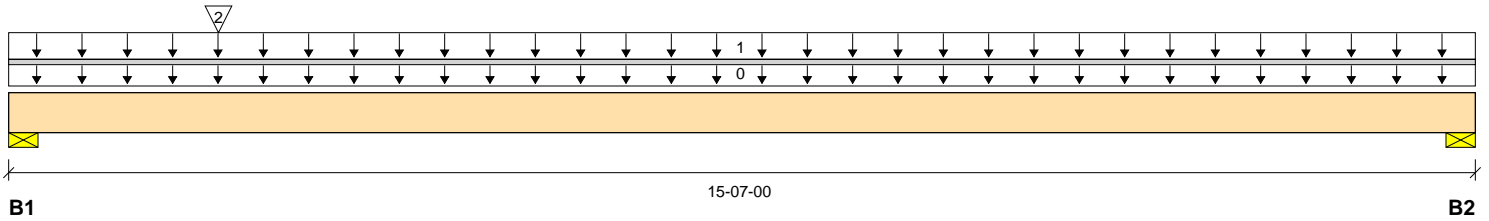
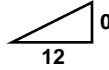
RB02 (Roof Beam)

BC CALC® Member Report
 Build 7295
 Job name:
 Address:
 City, State, Zip:
 Builder:
 Code reports: ESR-1040

Dry | 1 span | No cant.

January 31, 2020 10:00:19

File name: P19-07024FFP_BEAMS
 Description:
 Specifier:
 Designer: Choua Vang
 Company: Longleaf Truss Co



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"		4753 / 0	3210 / 0		
B2, 3-1/2"		1962 / 0	1546 / 0		

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live 100%	Dead 90%	Snow 115%	Wind 160%	Roof Live 125%	Tributary
0	Self-Weight	Unf. Lin. (lb/ft)	L	00-00-00	15-07-00	Top		27				00-00-00
1	Standard Load	Unf. Area (lb/ft²)	L	00-00-00	15-07-00	Back		20	20			08-00-00
2	Reaction from RB01 at bearing B1	Conc. Pt. (lbs)	L	02-02-12	02-02-12	Top		3796	2262			n\ a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	16918 ft-lbs	21.0%	115%	4	05-04-07
End Shear	7862 lbs	38.3%	115%	4	00-03-08
Total Load Deflection	L/1315 (0.138")	27.4%	n\ a	4	07-04-00
Live Load Deflection	L/999 (0.058")	n\ a	n\ a	5	07-04-00
Max Defl.	0.138"	18.4%	n\ a	4	07-04-00
Span / Depth	10.1				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 5-1/4"	7963 lbs	76.7%	57.8%	Southern Pine
B2	Wall/Plate 3-1/2" x 5-1/4"	3508 lbs	33.8%	25.5%	Southern Pine

Cautions

For roof members with slope (1/4)/12 or less final design must ensure that ponding instability will not occur.
 For roof members with slope (1/2)/12 or less final design must account for Rain-on-Snow surcharge load.

Notes

Design meets User specified (L/360) Total load deflection criteria.
 Design meets User specified (L/600) Live load deflection criteria.
 Design meets arbitrary (0.75") Maximum Total load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2009.
 Design based on Dry Service Condition.

RB02 (Roof Beam)

Dry | 1 span | No cant.

January 31, 2020 10:00:19

BC CALC® Member Report

Build 7295

Job name:

File name: P19-07024FFP_BEAMS

Address:

Description:

City, State, Zip:

Specifier:

Builder:

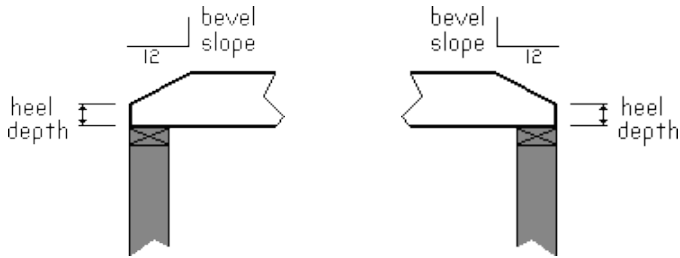
Designer: Choua Vang

Code reports: ESR-1040

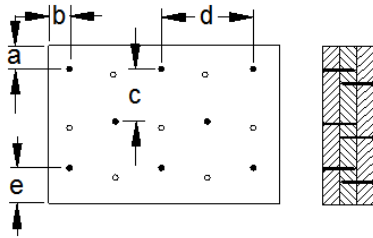
Company: Longleaf Truss Co

Notch/Bevel Cut Details

Location	Type	Dimensions	Design Depth
00-02-00	Bevel - Top	Heel Depth: 16", Bevel Slope: 12/12	18"
15-05-00	Bevel - Top	Heel Depth: 16", Bevel Slope: 12/12	18"



Connection Diagram: Full Length of Member



- a minimum = 2" c = 7"
- b minimum = 3" d = 6"
- e minimum = 3"

Calculated Side Load = 320.0 lb/ft

Nailing applies to both sides of the member

Connectors are: 3-1/4 in. Pneumatic Gun Nails

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