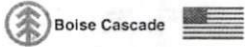


SFD 7904 -6620



**Triple 1-3/4" x 24" VERSA-LAM® 2.0 3100 SP**

**PASSED**

**RB01 (Roof Beam)**

BC CALC® Member Report

Dry | 1 span | No cant.

April 16, 2019 10:58:30

Build 7192

Job name:

File name:

Address: *224 Captain Harbor*

Description:

City, State, Zip:

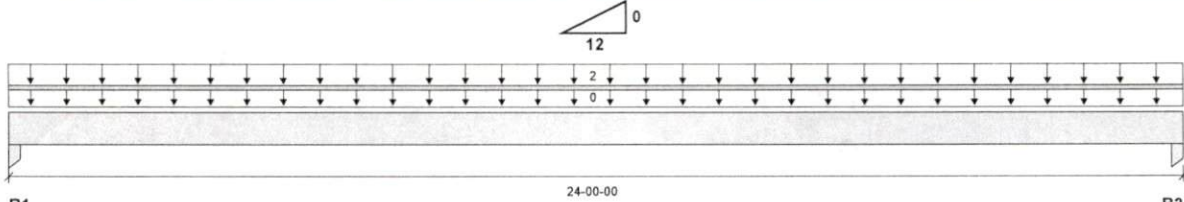
Specifier:

Customer:

Designer: TOM WALKER

Code reports: ESR-1040

Company: LONGLEAF TRUSS COMPANY



Total Horizontal Product Length = 24-00-00

**Reaction Summary (Down / Uplift) (lbs)**

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 5-1/2"	7680 / 0	2358 / 0	3840 / 0		3840 / 0
B2, 5-1/2"	7680 / 0	2358 / 0	3840 / 0		3840 / 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	24-00-00	Top		36				00-00-00
2		Unf. Area (lb/ft²)	L	00-00-00	24-00-00	Top	40	10	20		20	16-00-00

**Controls Summary**

	Value	% Allowable	Duration	Case	Location
Pos. Moment	56319 ft-lbs	46.7%	100%	1	12-00-00
End Shear	7981 lbs	33.3%	100%	1	02-05-08
Total Load Deflection	L/563 (0.495")	42.6%	n/a	7	12-00-00
Live Load Deflection	L/717 (0.389")	50.2%	n/a	15	12-00-00
Max Defl.	0.495"	98.9%	n/a	7	12-00-00
Span / Depth	11.6				

**Bearing Supports**

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Column 5-1/2" x 5-1/4"	10998 lbs	46.2%	50.8%	Southern Pine
B2	Column 5-1/2" x 5-1/4"	10998 lbs	46.2%	50.8%	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/240) Total load deflection criteria.
- Design meets User specified (L/360) Live load deflection criteria.
- Design meets arbitrary (0.5") 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.
- Bolts are assumed to be Grade A307 or Grade 2 or higher.
- Member has no side loads.



# Triple 1-3/4" x 24" VERSA-LAM® 2.0 3100 SP

**PASSED**

## RB01 (Roof Beam)

Dry | 1 span | No cant.

April 16, 2019 10:58:30

BC CALC® Member Report

Build 7192

Job name:

Address:

City, State, Zip:

Customer:

Code reports: ESR-1040

File name:

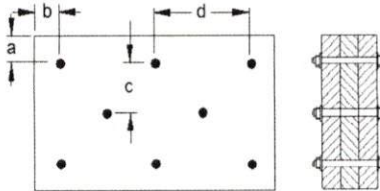
Description:

Specifier:

Designer: TOM WALKER

Company: LONGLEAF TRUSS COMPANY

### Connection Diagram: Full Length of Member



a minimum = 2"      c = 10"  
b minimum = 2-1/2"      d = 24"

Bolts are assumed to be Grade A307 or Grade 2 or higher.  
Member has no side loads.  
Connectors are: 1/2 in. Staggered Through Bolt

### Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

BC CALC®, BC FRAMER®, AJS™, ALLJOIST®, BC RIM BOARD™, BC®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®

SFD -1904-0020



**Double 1-3/4" x 16" VERSA-LAM® 2.0 3100 SP**

**PASSED**

**RB02 (Roof Beam)**

BC CALC® Member Report

Dry | 1 span | No cant.

April 16, 2019 11:01:59

Build 7192

Job name:

File name:

Address: *224 Captain Huber*

Description:

City, State, Zip:

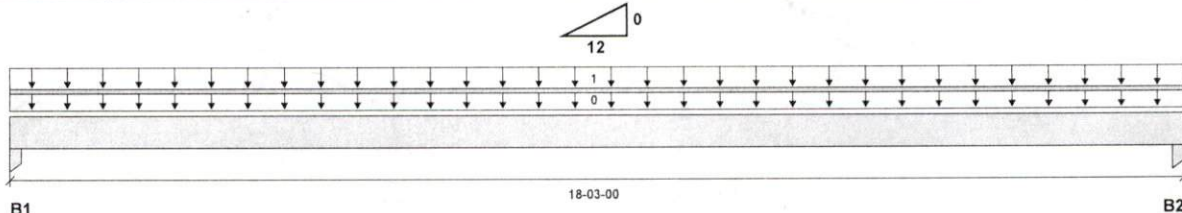
Specifier:

Customer:

Designer: TOM WALKER

Code reports: ESR-1040

Company: LONGLEAF TRUSS COMPANY



**Reaction Summary (Down / Uplift) (lbs)**

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 5-1/2"	3650 / 0	1060 / 0	1825 / 0		1825 / 0
B2, 5-1/2"	3650 / 0	1060 / 0	1825 / 0		1825 / 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	18-03-00	Top		16				00-00-00
1		Unf. Area (lb/ft²)	L	00-00-00	18-03-00	Top	40	10	20		20	10-00-00

**Controls Summary**

	Value	% Allowable	Duration	Case	Location
Pos. Moment	19667 ft-lbs	52.6%	100%	1	09-01-08
End Shear	3786 lbs	35.6%	100%	1	01-09-08
Total Load Deflection	L/423 (0.495")	56.7%	n/a	7	09-01-08
Live Load Deflection	L/532 (0.394")	67.6%	n/a	15	09-01-08
Max Defl.	0.495"	99.1%	n/a	7	09-01-08
Span / Depth	13.1				

**Bearing Supports**

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Column 5-1/2" x 3-1/2"	5167 lbs	32.5%	35.8%	Southern Pine
B2	Column 5-1/2" x 3-1/2"	5167 lbs	32.5%	35.8%	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/240) Total load deflection criteria.
- Design meets User specified (L/360) Live load deflection criteria.
- Design meets arbitrary (0.5") 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.
- Bolts are assumed to be Grade A307 or Grade 2 or higher.
- Member has no side loads.



## Double 1-3/4" x 16" VERSA-LAM® 2.0 3100 SP

**PASSED**

### RB02 (Roof Beam)

Dry | 1 span | No cant.

April 16, 2019 11:01:59

BC CALC® Member Report

Build 7192

Job name:

Address:

City, State, Zip:

Customer:

Code reports: ESR-1040

File name:

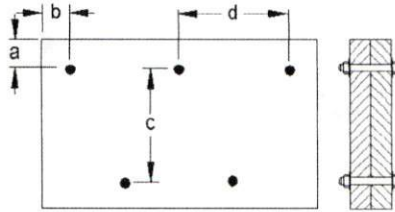
Description:

Specifier:

Designer: TOM WALKER

Company: LONGLEAF TRUSS COMPANY

### Connection Diagram: Full Length of Member



a minimum = 2"      c = 12"  
b minimum = 2-1/2"      d = 24"

Bolts are assumed to be Grade A307 or Grade 2 or higher.

Member has no side loads.

Connectors are: 1/2 in. Staggered Through Bolt

### Disclosure

Use of the Boise Cascade Software is subject to the terms of the End User License Agreement (EULA). Completeness and accuracy of input must be reviewed and verified by a qualified engineer or other appropriate expert to assure its adequacy, prior to anyone relying on such output as evidence of suitability for a particular application. The output here is based on building code-accepted design properties and analysis methods. Installation of Boise Cascade engineered wood products must be in accordance with current Installation Guide and applicable building codes. To obtain Installation Guide or ask questions, please call (800)232-0788 before installation.

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