







Foundation Plan







		Products		
PlotID	Length	Product	Plies	Net Qty
B1	12-00-00	1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP	2	2
B2	20-00-00	1-3/4" x 16" VERSA-LAM® 2.0 3100 SP	2	2
GDH	18-00-00	1-3/4" x 18" VERSA-LAM® 2.0 3100 SP	2	2

Truss Connector Total List							
Manuf	Product	Qty					
Simpson	MUS26	28					
Non-Proprietary	NAILED	46					





1-09-00

+ +

8

00



BC CALC® Design Report

Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

Dry | 1 span | No cantilevers | 0/12 slope

December 29, 2018 17:59:45

Roof Beam\B1

Build 6536	
Job Name:	23 LEIGH LAUREL
Address:	221 WILLOWCROFT CT.
City, State, Zip	: DUNN, NC
Customer:	STURTZ HOMES
Code reports:	ESR-1040

File Name: 1625532 BC CALC Project.bcc Description: Designs\B1 Specifier: SCOTT GUTSHALL Designer: Company: BUILDERS FIRSTSOURCE Misc:

0 12

+ $+$			+ + + + +				\downarrow \downarrow ,			+ $+$ $+$ $+$		
		12-00-00										
B0												
Reac	tion Summary (E	Down / Uplift) (os)	_	_		_					
Bearin	g	Live	Dead	4	Snow	Wind	F	Roof Liv	e			
B0, 3-	1/2"		1,66	62/0	1,590 / 0							
B1, 3-	1/2"		1,66	62/0	1,590 / 0							
					Live	Dead	Snow	Wind	Roof Live	Trib.		
Load	Summary											
Tag De	escription	Load Type	Ref. Sta	art En	nd 100%	6 90 %	115%	160%	125%			
1 R	OOF LOAD	Unf. Lin. (lb/ft)	L 00-0	00-00 12	2-00-00	265	265			n/a		
Contr	ols Summary	Value	% Allow	able Duratio	on Case	e Location						
Pos. N	<i>l</i> oment	9,026 ft-lbs	36.9%	115%	4	06-00-00						
End S	hear	2,558 lbs	28.2%	115%	4	01-03-06						
Total I	_oad Defl.	L/625 (0.222")	38.4%	n/a	4	06-00-00						
Live L	oad Defl.	L/999 (0.108")	n/a	n/a	5	06-00-00						
Max D)efl.	0.222"	22.2%	n/a	4	06-00-00						
Span /	/ Depth	11.7	n/a	n/a	0	00-00-00						
				% Allow	% Allow							
Bearing Supports Dim. (L x W) Value		Value	Support	Member	Material							
B0	Post	3-1/2" x 3-1/2"	3,252 lbs	36.6%	35.4%	Spruce Pine Fi	r					
B1	Post	3-1/2" x 3-1/2"	3,252 lbs	36.6%	35.4%	Spruce Pine Fi	r					

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 (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.



Double 1-3/4" x 11-7/8" VERSA-LAM® 2.0 3100 SP

Dry | 1 span | No cantilevers | 0/12 slope

December 29, 2018 17:59:45

Roof Beam\B1

BC CALC® Design Report

Build 6536Job Name:23 LEIGH LAURELAddress:221 WILLOWCROFT CT.City, State, Zip: DUNN, NCCustomer:STURTZ HOMESCode reports:ESR-1040

Connection Diagram



a minimum = 2" c = 7-7/8" b minimum = 3" d = 24"

Member has no side loads. Connectors are: 16d Sinker Nails File Name: 1625532 BC CALC Project.bcc Description: Designs\B1 Specifier: Designer: SCOTT GUTSHALL Company: BUILDERS FIRSTSOURCE Misc:

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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™, BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.



Design meets User specified (L/240) Total load deflection criteria. Design meets User specified (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.



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

Dry | 1 span | No cantilevers | 0/12 slope

December 29, 2018 18:05:04

Roof Beam\B2

BC CALC® Design Report

Build 6536 Job Name: 23 LEIGH LAUREL Address: 221 WILLOWCROFT CT. City, State, Zip: DUNN, NC STURTZ HOMES Customer: Code reports: ESR-1040

Connection Diagram



a minimum = 2" c = 6" b minimum = 3" d = 24"

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record. Member has no side loads.

Connectors are: 16d Sinker Nails

File Name: 1625532 BC CALC Project.bcc Description: Designs\B2 Specifier: SCOTT GUTSHALL Designer: BUILDERS FIRSTSOURCE Company: Misc:

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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™, BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.



BC CALC® Design Report

Double 1-3/4" x 18" VERSA-LAM® 2.0 3100 SP

Dry | 1 span | No cantilevers | 0/12 slope

Floor Beam\GDH

December 29, 2018 18:05:43

Build 6536 Job Name: 23 LEIGH LAUREL Address: 221 WILLOWCROFT CT. City, State, Zip: DUNN, NC Customer: STURTZ HOMES Code reports: ESR-1040 File Name: 1625532 BC CALC Project.bcc Description: Designs\GDH Specifier: Designer: SCOTT GUTSHALL Company: BUILDERS FIRSTSOURCE Misc:

3							4					
Ý Ý Ý Ž Í Í Í Í									•		5 4 4	
				\downarrow \downarrow \downarrow \downarrow	1 + +			+ +	\downarrow \downarrow	+ $+$ $+$ $+$		
B0				1	6-09-00						B1	
20	Total Horizontal Product Length = 16-09-00											
Rea	action Summary (I	Down / Uplift) (Ir))									
Bea	ring	Live	De	ad	Snow		Wind	R	oof Liv	е		
B0,	4-1/2"		4,	104 / 0	3,281	/ 0						
B1,	4-1/2"		4,	108 / 0	3,285	/ 0						
						Live	Deed	Crow	Win d	Deefline	Trib	
ما	ad Summarv					Live	Dead	Snow	wina	ROOI LIVE	IND.	
Tag	Description	Load Type	Ref.	Start	End	100%	90%	115%	160%	125%		
1	BRICK	Unf. Lin. (lb/ft)	L 00	0-00-00	16-09-00		80				n/a	
2	ATTIC LOAD	Unf. Lin. (lb/ft)	L 00	0-00-00	03-00-00		375	375			n/a	
3	ATTIC GIRDER	Conc. Pt. (lbs)	L 03	3-11-08	03-11-08		2,330	2,330			n/a	
4	ATTIC GIRDER	Conc. Pt. (lbs)	L 13	3-08-00	13-08-00		2,330	2,330			n/a	
5	ATTIC LOAD	Unf. Lin. (lb/ft)	L 14	1-08-00	16-09-00		375	375			n/a	
Со	ntrols Summarv	Value	% All	owable Dur	ation	Case	Location					
Pos	s. Moment	20.700 ft-lbs	38.6	% 115	5%	1	04-10-07					
Enc	Shear	5,802 lbs	42.2	% 115	5%	1	14-10-08					
Tota	al Load Defl.	L/627 (0.309")	57.4	% I	n/a	1	08-02-08					
Live	e Load Defl.	L/1,462 (0.132	') 32.8'	% I	n/a	2	08-02-08					
Max	x Defl.	0.309"	ُ 30.9	% I	n/a	1	08-02-08					
Spa	an / Depth	10.7	n,	/a ı	n/a	0	00-00-00					
				% Allow	% 4110							
Bea	aring Supports	Dim. (L x W)	Value	Support	Memb	er	Material					
B0	Post	4-1/2" x 3-1/2"	7,385 lbs	64.79	% 62.	5%	Spruce Pine Fir					
B1	Post	4-1/2" x 3-1/2"	7,393 lbs	64.7%	% 62.	6%	Spruce Pine Fir					

Notes

Design meets User specified (L/360) 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.



Double 1-3/4" x 18" VERSA-LAM® 2.0 3100 SP

Dry | 1 span | No cantilevers | 0/12 slope

Floor Beam\GDH December 29, 2018 18:05:43

BC CALC® Design Report

Build 6536 Job Name: 23 LEIGH LAUREL Address: 221 WILLOWCROFT CT. City, State, Zip: DUNN, NC STURTZ HOMES Customer: Code reports: ESR-1040

Connection Diagram



a minimum = 2" c = 7" b minimum = 3" d = 24"

Connection design assumes point load is top-loaded. For connection design of side-loaded point loads, please consult a technical representative or professional of Record. Member has no side loads.

Connectors are: 16d Sinker Nails

File Name: 1625532 BC CALC Project.bcc Description: Designs\GDH Specifier: SCOTT GUTSHALL Designer: BUILDERS FIRSTSOURCE Company: Misc:

Disclosure

Completeness and accuracy of input must be verified by anyone who would rely on output as evidence of suitability for particular application. Output here 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™, BCI®, BOISE GLULAM™, SIMPLE FRAMING SYSTEM®, VERSA-LAM®, VERSA-RIM PLUS®, VERSA-RIM®, VERSA-STRAND®, VERSA-STUD® are trademarks of Boise Cascade Wood Products L.L.C.