

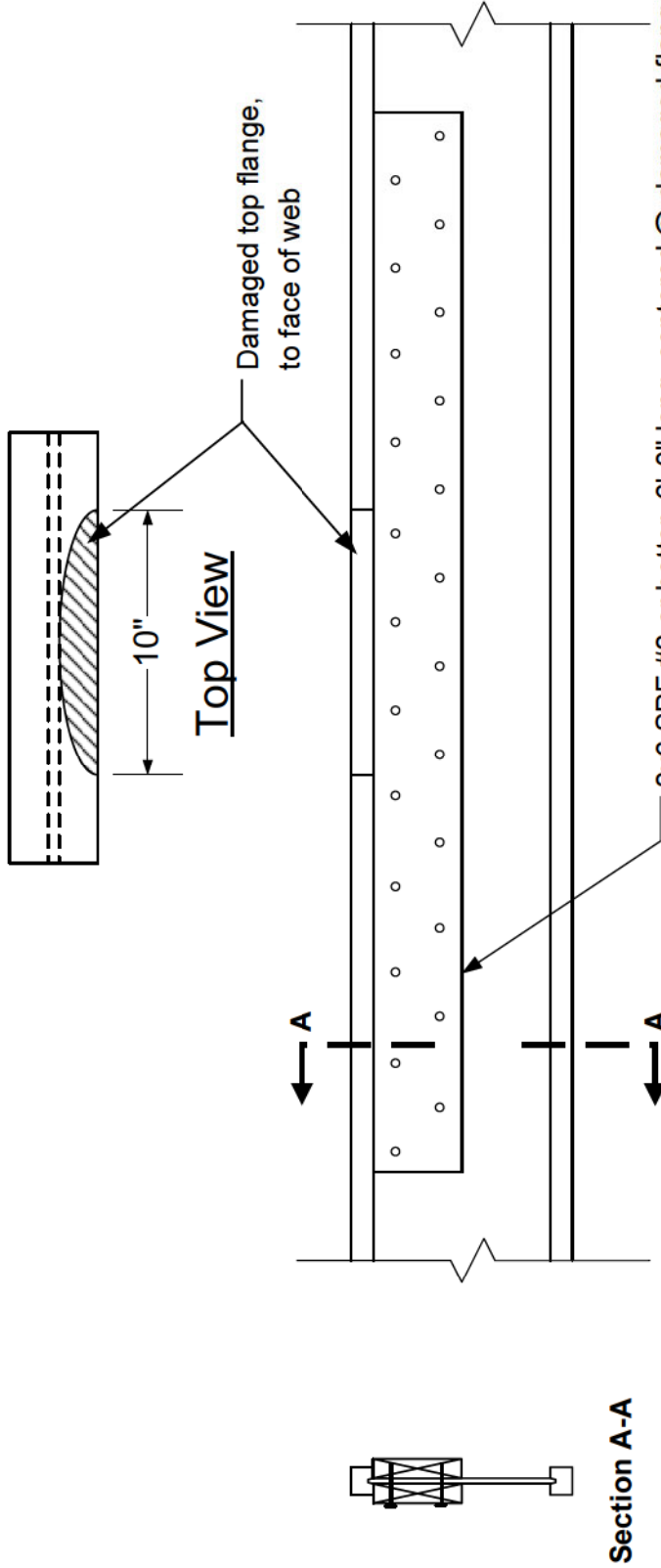


Boise Cascade
 Engineered Wood Products
Eastern Region Office
 3465 Lawrenceville-Suwanee Road, Suite A
 Suwanee, Georgia 30024-2410
 770-614-4010 1-800-524-7209 toll free



November 9, 2022

Description: Joist 6(19637)
 Loading: See attached BC Calc® Design Report
 Address: 291 Saint Clair Drive
 City, St: Fuquay-Varina, NC
 Retailer: 84 Lumber
 Date: 11/9/22



Note:

- 8d nail = 0.113" x 2 1/2" min
- 10d nail = 0.128" x 3" min
- 16d nail = 0.135" x 3 1/2" min

Not to Scale

This certification is for repair of a Boise Cascade individual building component only and not for the component design or the building system as a whole. The component design attached to this report was provided by others. The building designer of record is responsible for determining that the dimensions and loads for each component match those required by the plans and by the actual end use of the component. Verification of framing methods, bracing design, support conditions, connections, etc. is the responsibility of the building designer of record.

Second Floor Elev A\Floor Joists\6(i9637) (Joist)

Dry | 1 span | No cant. | 19.2" OCS | Repetitive | Glued & nailed

November 9, 2022 08:03:54

BC CALC® Member Report

Build 8435

Job name:

File name: 70 Birchwood

Address: 70 Birchwood Grove

Description: Second Floor Elev A\Floor Joists\6(i9637)

City, State, Zip: Southeast

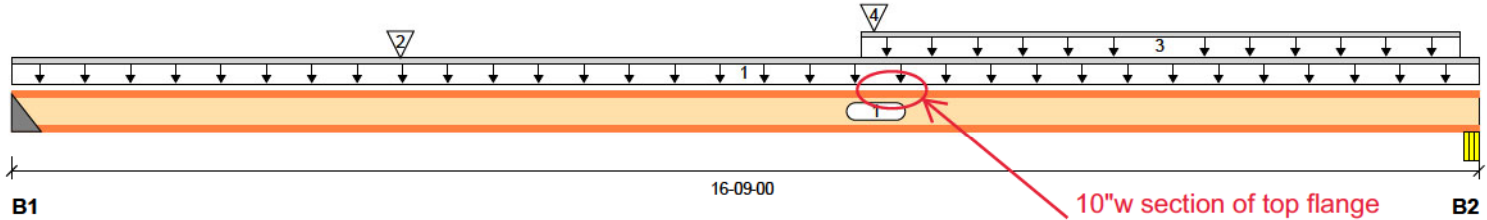
Specifier: 05/27/2022

Customer: KB Homes

Designer:

Code reports: ESR-1336

Company: 84 Lumber EWP



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 2"	535 / 0	268 / 0			
B2, 2-1/2"	537 / 0	320 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	100% Live	90% Dead	115% Snow	160% Wind	125% Roof Live	OCS
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	16-09-00	Top	64	16				n/a
2	28(i5495)	Conc. Pt. (lbs)	L	04-05-04	04-05-04	Top		91				n/a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	09-08-08	16-06-08	Top		19				n/a
4	29(i5496)	Conc. Pt. (lbs)	L	09-10-04	09-10-04	Top		97				n/a

Hole Summary

Description	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	09-10-08	5.5"	L	6"	8"	Oround	Horizontal

Controls Summary

Value	% Allowable	Duration	Case	Location
Pos. Moment	3489 ft-lbs	84.5%	100%	1 08-10-14
End Reaction	803 lbs	74.3%	100%	1 00-00-00
End Shear	841 lbs	46.1%	100%	1 16-06-08
Hole #1 Shear	269 lbs	42.6%	100%	2 09-11-08
Total Load Deflection	L/562 (0.352")	64.1%	n/a	1 08-05-02
Live Load Deflection	L/899 (0.22")	53.4%	n/a	4 08-04-02
Max Defl.	0.352"	56.4%	n/a	1 08-05-02
Span / Depth	14.1			
Hole Location	Valid			

Bearing Supports

Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1 Hanger 2" x 2"	803 lbs	56.2%	74.3%	IUS 2.06/14
B2 Beam 2-1/2" x 2"	857 lbs	22.9%	70.7%	Unspecified

BC FloorValue® Summary

BC FloorValue®: Subfloor: 3/4" OSB, Glue + Nail
 Minimum Enhanced Premium Subfloor Rating: Enhanced

Controlling Location: 08-04-04



Cautions

Hanger IUS 2.06/14 requires (12) 10d face nails, (2) Strong-Grip joist nails.
 Header for the hanger IUS 2.06/14 is a Double 1-3/4" x 14" LVL beam.



Single 14" BCI® 5000s-1.8

PASSED

Second Floor Elev A\Floor Joists\6(i9637) (Joist)

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Build 8435

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File name: 70 Birchwood

Address: 70 Birchwood Grove

Description: Second Floor Elev A\Floor Joists\6(i9637)

City, State, Zip: Southeast

Specifier: 05/27/2022

Customer: KB Homes

Designer:

Code reports: ESR-1336

Company: 84 Lumber EWP

Notes

Design meets User specified (L/360) Total load deflection criteria.

Design meets User specified (L/480) Live load deflection criteria.

Design meets arbitrary (0.625") Maximum Total load deflection criteria.

Hanger Manufacturer: Simpson Strong-Tie, Inc.

Composite EI value based on 3/4" thick OSB sheathing glued and nailed to member.

Design based on Dry Service Condition.

BC CALC® analysis is based on IBC 2012.

Calculations assume member is fully braced.

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™, BCI®, BOISE GLULAM™, BC FloorValue®, VERSA-LAM®, VERSA-RIM PLUS®,



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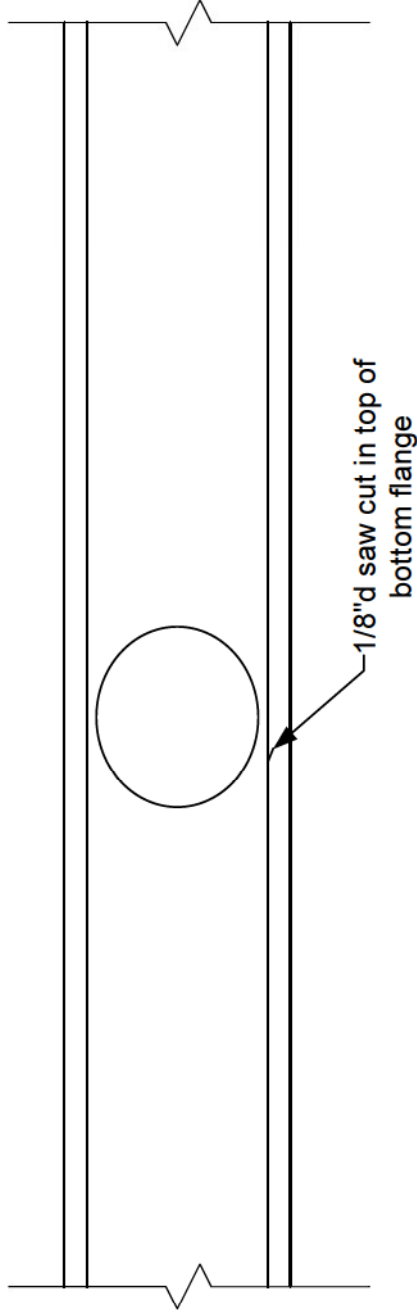
No repair required for
saw cut in top of
bottom flange



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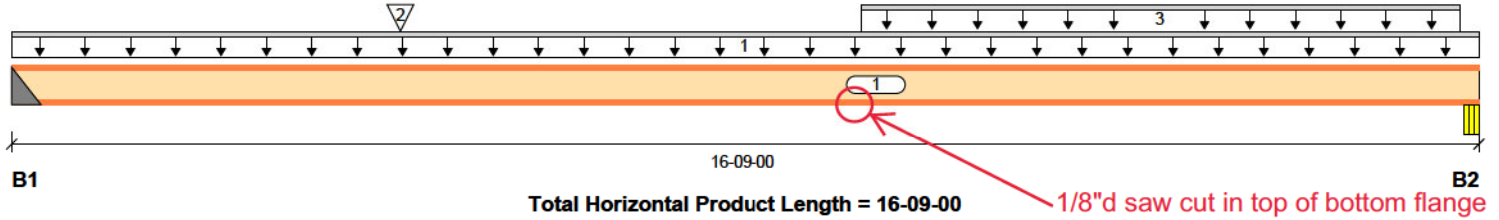
Specifier: 05/27/2022

Customer: KB Homes

Designer:

Code reports: ESR-1336

Company: 84 Lumber EWP



Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 2"	535 / 0	255 / 0			
B2, 2-1/2"	537 / 0	360 / 0			

Load Summary

Tag	Description	Load Type	Ref.	Start	End	Loc.	Live	Dead	Snow	Wind	Roof Live	OCS
1	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	00-00-00	16-09-00	Top	64	16				n/a
2	28(i5495)	Conc. Pt. (lbs)	L	04-05-04	04-05-04	Top		91				n/a
3	FC2 Floor Decking (Plan View Fill)	Unf. Lin. (lb/ft)	L	09-08-08	16-06-08	Top		37				n/a

Hole Summary

Description	Center	Elevation	Ref.	Height	Width	Shape	Orientation
H01	09-10-08	5.5"	L	6"	8"	Obround	Horizontal

Controls Summary

Value	% Allowable	Duration	Case	Location
Pos. Moment	3370 ft-lbs	81.6%	100%	1 08-08-15
End Reaction	897 lbs	74.0%	100%	1 16-09-00
End Shear	880 lbs	48.2%	100%	1 16-06-08
Hole #1 Shear	190 lbs	30.1%	100%	2 09-11-08
Total Load Deflection	L/575 (0.344")	62.6%	n/a	1 08-05-02
Live Load Deflection	L/899 (0.22")	53.4%	n/a	4 08-04-02
Max Defl.	0.344"	55.1%	n/a	1 08-05-02
Span / Depth	14.1			
Hole Location	Valid			

Bearing Supports

Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1 Hanger 2" x 2"	789 lbs	55.2%	73.0%	IUS 2.06/14
B2 Beam 2-1/2" x 2"	897 lbs	23.9%	74.0%	Unspecified

BC FloorValue® Summary

BC FloorValue®: Subfloor: 3/4" OSB, Glue + Nail
Minimum Enhanced Premium Subfloor Rating: Enhanced

Controlling Location: 08-04-04



Cautions

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