

2nd LEVEL\Dropped Beams\BM2-2(i683)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Dropped Beams\BM2-2(i683)

City, State, Zip: NC

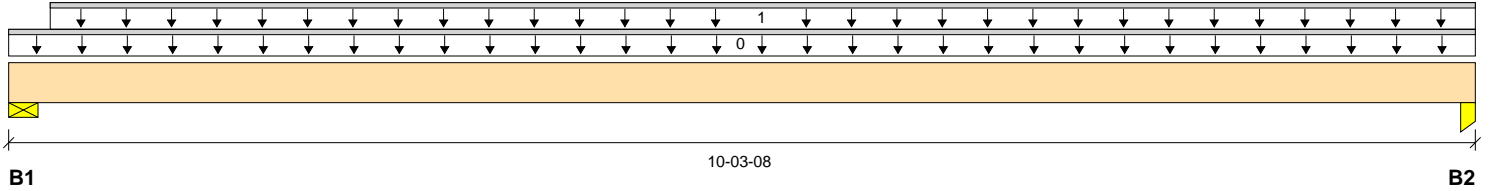
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 10-03-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"		620 / 0			573 / 0
B2, 5-1/2"		677 / 0			627 / 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	10-03-08	Top		9				00-00-00
1	User Load	Unf. Lin. (lb/ft)	L	00-03-08	10-03-08	Top		120			120	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2,913 ft-lbs	28.2%	125%	1	05-00-12
End Shear	998 lbs	13.0%	125%	1	01-00-12
Total Load Deflection	L/999 (0.106")	n/a	n/a	1	05-00-12
Live Load Deflection	L/999 (0.051")	n/a	n/a	2	05-00-12
Max Defl.	0.106"	n/a	n/a	1	05-00-12
Span / Depth	12.5				

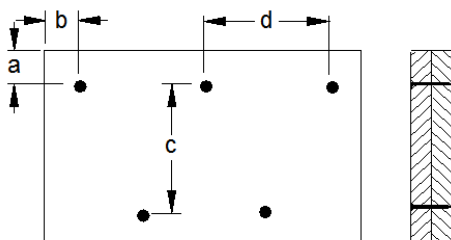
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	1,193 lbs	13.4%	13.0%	Unspecified
B2	Column 5-1/2" x 3-1/2"	1,304 lbs	9.3%	9.0%	Unspecified

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 (0.75") Maximum live load deflection criteria.
- Calculations assume unbraced length of Top: 10-00-00, Bottom: 10-00-00.
- BC CALC® analysis is based on IBC 2012.
- Design based on Dry Service Condition.
- Member has no side loads.

Connection Diagram: Full Length of Member



Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Dropped Beams\BM2-2(i683)

City, State, Zip: NC

Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land

Connection Diagram: Full Length of Member

a minimum = 2" c = 5-1/4"
b minimum = 3" d = 24"

Member has no side loads.
Connectors are: 16d Sinker Nails

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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Build 6621

Job name:

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Address:

Description: 2nd LEVEL\Dropped Beams\BM2-2(i683)

City, State, Zip: NC

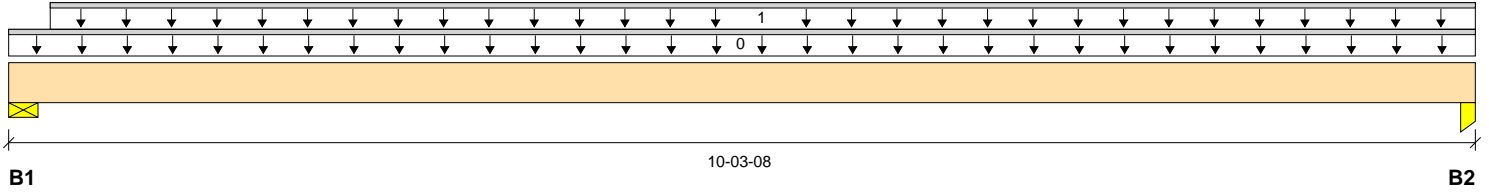
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 10-03-08

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"		620 / 0			573 / 0
B2, 5-1/2"		677 / 0			627 / 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	10-03-08	Top		9				00-00-00
1	Roof Truss	Unf. Lin. (lb/ft)	L	00-03-08	10-03-08	Top		120			120	n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	2,913 ft-lbs	28.2%	125%	1	05-00-12
End Shear	997 lbs	13.0%	125%	1	01-00-12
Total Load Deflection	L/999 (0.106")	n/a	n/a	1	05-00-12
Live Load Deflection	L/999 (0.051")	n/a	n/a	2	05-00-12
Max Defl.	0.106"	n/a	n/a	1	05-00-12
Span / Depth	12.5				

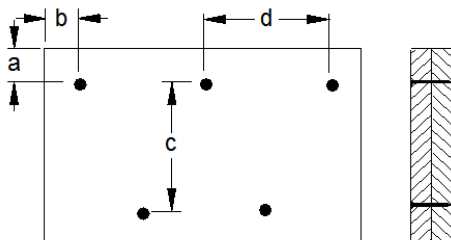
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	1,193 lbs	13.4%	13.0%	Unspecified
B2	Column 5-1/2" x 3-1/2"	1,304 lbs	9.3%	9.0%	Unspecified

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 (0.75") Maximum live load deflection criteria.
- Calculations assume unbraced length of Top: 10-00-00, Bottom: 10-00-00.
- BC CALC® analysis is based on IBC 2012.
- Design based on Dry Service Condition.
- Member has no side loads.

Connection Diagram: Full Length of Member



BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Dropped Beams\BM2-2(i683)

City, State, Zip: NC

Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land

Connection Diagram: Full Length of Member

a minimum = 2" c = 5-1/4"
b minimum = 3" d = 24"

Member has no side loads.
Connectors are: 16d Sinker Nails

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2nd LEVEL\Dropped Beams\BM3-2(i696)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Dropped Beams\BM3-2(i696)

City, State, Zip: NC

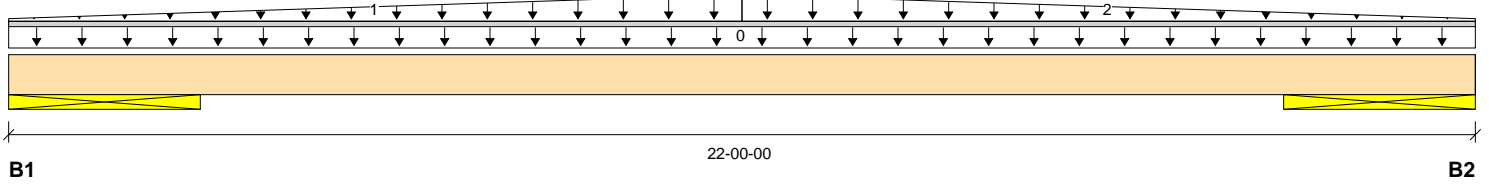
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 22-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 34-1/2"		737 / 0			
B2, 34-1/2"		737 / 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	22-00-00	Top		12				00-00-00
1	Gable Wall	Trapezoidal (lb/ft)	L	00-00-00	11-00-00	Top		10				n\la
2	Gable Wall	Trapezoidal (lb/ft)	L	11-00-00	22-00-00	Top		100				n\la

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	3,007 ft-lbs	47.5%	90%	0	11-00-00
End Shear	628 lbs	8.8%	90%	0	03-10-06
Total Load Deflection	L/1,349 (0.146")	17.8%	n\la	0	11-00-00
Max Defl.	0.146"	14.6%	n\la	0	11-00-00
Span / Depth	16.5				
Dist. Load (B1)	33.52 lb/ft	0.1%	90%		
Dist. Load (B2)	33.52 lb/ft	0.1%	90%		

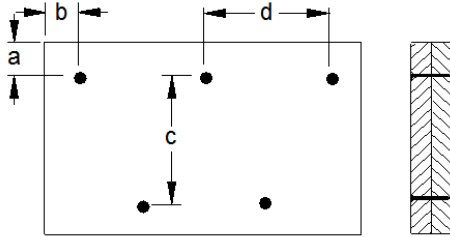
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 34-1/2" x 3-1/2"	737 lbs	0.8%	0.8%	Unspecified
B2	Wall/Plate 34-1/2" x 3-1/2"	737 lbs	0.8%	0.8%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets arbitrary (1") Maximum Total load deflection criteria.
- Design meets arbitrary (0.75") Maximum live load deflection criteria.
- Calculations assume unbraced length of Top: 16-03-00, Bottom: 16-03-00.
- BC CALC® analysis is based on IBC 2012.
- Design based on Dry Service Condition.
- Member has no side loads.

Connection Diagram: Full Length of Member



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

Member has no side loads.
 Connectors are: 16d Sinker Nails

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2nd LEVEL\Dropped Beams\BM4-2(i691)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Dropped Beams\BM4-2(i691)

City, State, Zip: NC

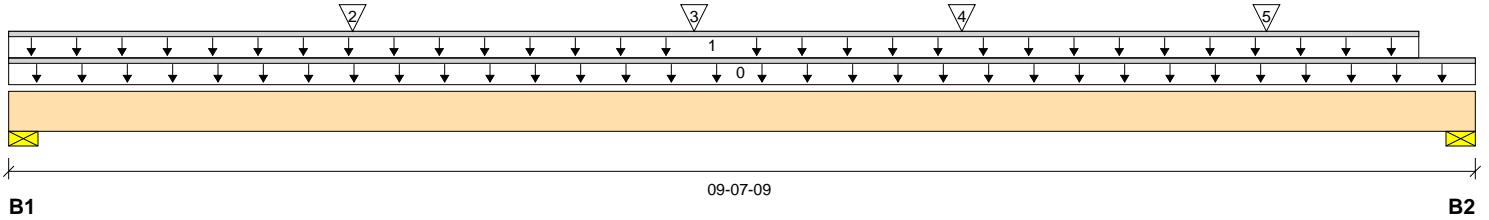
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 09-07-09

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	2,407 / 0	659 / 0			
B2, 3-1/2"	2,071 / 0	576 / 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	09-07-09	Top		12				00-00-00
1	Smoothed Load	Unf. Lin. (lb/ft)	L	00-00-00	09-03-02	Top	370	92				n/a
2	J14(i633)	Conc. Pt. (lbs)	L	02-03-02	02-03-02	Top	158	39				n/a
3	-	Conc. Pt. (lbs)	L	04-06-00	04-06-00	Top	307	76				n/a
4	J13(i626)	Conc. Pt. (lbs)	L	06-03-02	06-03-02	Top	282	71				n/a
5	J13(i588)	Conc. Pt. (lbs)	L	08-03-02	08-03-02	Top	307	77				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	6,198 ft-lbs	29.2%	100%	1	04-07-04
End Shear	2,631 lbs	33.3%	100%	1	08-04-03
Total Load Deflection	L/999 (0.095")	n/a	n/a	1	04-09-12
Live Load Deflection	L/999 (0.074")	n/a	n/a	2	04-09-12
Max Defl.	0.095"	n/a	n/a	1	04-09-12
Span / Depth	9.3				

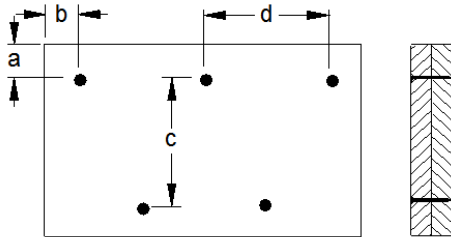
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 3-1/2"	3,067 lbs	34.5%	33.4%	Unspecified
B2	Wall/Plate 3-1/2" x 3-1/2"	2,646 lbs	29.8%	28.8%	Unspecified

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 (0.75") Maximum live load deflection criteria.
 Calculations assume unbraced length of Top: 00-03-04, Bottom: 00-03-04.
 BC CALC® analysis is based on IBC 2012.
 Design based on Dry Service Condition.
 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.

Connection Diagram: Full Length of Member



a minimum = 2" c = 7-7/8"
 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

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2nd LEVEL\Flush Beams\BM5-2(i679)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Flush Beams\BM5-2(i679)

City, State, Zip: NC

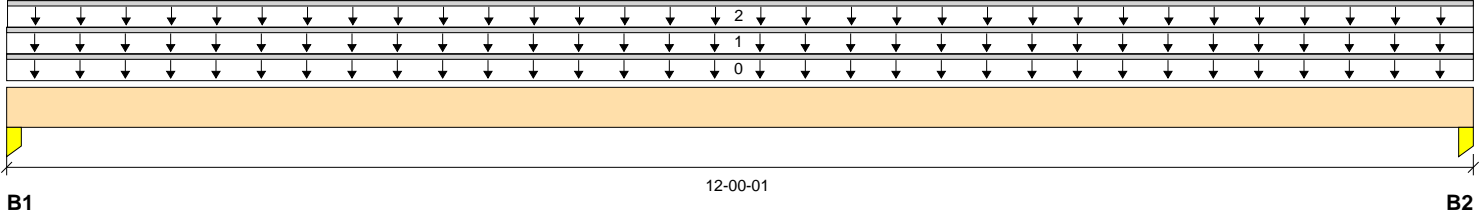
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 12-00-01

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	2,013 / 0	3,470 / 0	2,881 / 0		
B2, 3-1/2"	2,032 / 0	3,474 / 0	2,881 / 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	12-00-01	Top		14				00-00-00
1	Roof Truss	Unf. Lin. (lb/ft)	L	00-00-00	12-00-01	Top		480	480			n/a
2	Smoothed Load	Unf. Lin. (lb/ft)	L	00-00-01	12-00-01	Top	337	84				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	19,821 ft-lbs	59.4%	115%	7	06-00-01
End Shear	5,635 lbs	52.6%	115%	7	01-05-08
Total Load Deflection	L/465 (0.298")	51.6%	n/a	7	06-00-01
Live Load Deflection	L/903 (0.153")	39.9%	n/a	18	06-00-01
Max Defl.	0.298"	29.8%	n/a	7	06-00-01
Span / Depth	9.9				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Column 3-1/2" x 3-1/2"	7,141 lbs	80.4%	77.7%	Unspecified
B2	Column 3-1/2" x 3-1/2"	7,159 lbs	80.6%	77.9%	Unspecified

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 (0.75") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Unbalanced snow loads determined from building geometry were used in selected product's verification.
 Design based on Dry Service Condition.
 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.

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Flush Beams\BM5-2(i679)

City, State, Zip: NC

Specifier:

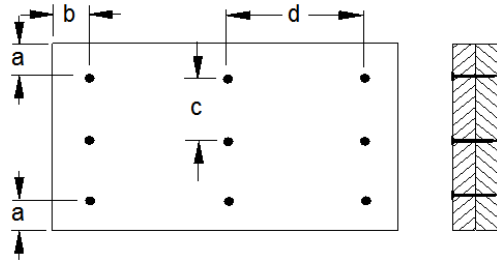
Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land

Connection Diagram: Full Length of Member



a minimum = 2" c = 5"
 b minimum = 3" d = 24"

Calculated Side Load = 421.1 lb/ft

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.

Connectors are: 16d Common Nails

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2nd LEVEL\Flush Beams\BM6(i714)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Flush Beams\BM6(i714)

City, State, Zip: NC

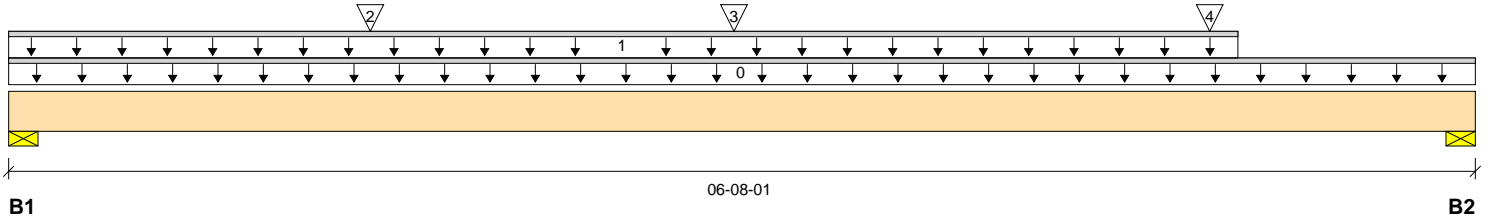
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 06-08-01

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	542 / 0	162 / 0			
B2, 3-1/2"	1,218 / 0	344 / 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	06-08-01	Top		7				00-00-00
1	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	05-07-01	Top	17	4				n/a
2	J13(i622)	Conc. Pt. (lbs)	L	01-07-12	01-07-12	Top	208	52				n/a
3	J13(i626)	Conc. Pt. (lbs)	L	03-03-09	03-03-09	Top	279	70				n/a
4	-	Conc. Pt. (lbs)	L	05-05-09	05-05-09	Top	1,180	314				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1,581 ft-lbs	10.9%	100%	1	03-05-00
End Shear	1,231 lbs	26.4%	100%	1	05-02-09
Total Load Deflection	L/999 (0.014")	n/a	n/a	1	03-05-12
Live Load Deflection	L/999 (0.011")	n/a	n/a	2	03-05-12
Max Defl.	0.014"	n/a	n/a	1	03-05-12
Span / Depth	5.3				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 3-1/2" x 1-3/4"	704 lbs	27.1%	15.3%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	1,562 lbs	60.0%	34.0%	Unspecified

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 (0.75") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Design based on Dry Service Condition.

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2nd LEVEL\Flush Beams\BM7(i711)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Flush Beams\BM7(i711)

City, State, Zip: NC

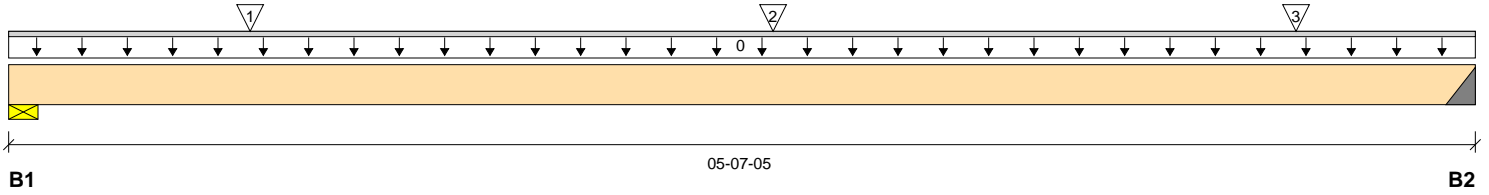
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 05-07-05

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 2-1/2"	974 / 0	264 / 0			
B2, 2"	892 / 0	243 / 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	05-07-05	Top		7				00-00-00
1	J1(i719)	Conc. Pt. (lbs)	L	00-11-01	00-11-01	Top	683	171				n/a
2	J1(i447)	Conc. Pt. (lbs)	L	02-11-01	02-11-01	Top	689	172				n/a
3	J1(i494)	Conc. Pt. (lbs)	L	04-11-01	04-11-01	Top	488	122				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	1,682 ft-lbs	11.6%	100%	1	02-11-01
End Shear	896 lbs	19.2%	100%	1	01-04-08
Total Load Deflection	L/999 (0.01")	n/a	n/a	1	02-09-15
Live Load Deflection	L/999 (0.008")	n/a	n/a	2	02-09-15
Max Defl.	0.01"	n/a	n/a	1	02-09-15
Span / Depth	4.6				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 2-1/2" x 1-3/4"	1,237 lbs	66.5%	37.7%	Unspecified
B2	Hanger 2" x 1-3/4"	1,134 lbs	n/a	43.2%	Hanger

Cautions

Hanger model Hanger was not found. Hanger has not been analyzed for adequate capacity.

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 (0.75") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 Hanger Manufacturer: Unassigned
 BC CALC® analysis is based on IBC 2012.
 Design based on Dry Service Condition.

Disclosure

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2nd LEVEL\Flush Beams\BM8(i678)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Flush Beams\BM8(i678)

City, State, Zip: NC

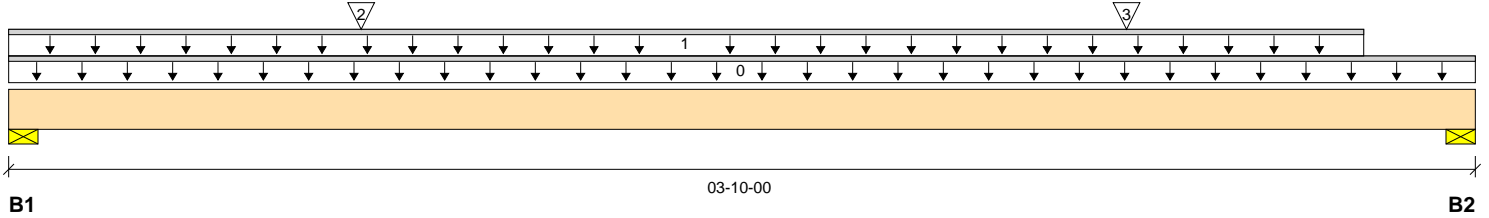
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



Total Horizontal Product Length = 03-10-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 2-1/2"	520 / 0	143 / 0			
B2, 3-1/2"	645 / 0	175 / 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	03-10-00	Top		7				00-00-00
1	FC2 Floor Material	Unf. Lin. (lb/ft)	L	00-00-00	03-06-08	Top		1				n/a
2	J3(i677)	Conc. Pt. (lbs)	L	00-11-01	00-11-01	Top	496	124				n/a
3	J6(i676)	Conc. Pt. (lbs)	L	02-11-01	02-11-01	Top	657	164				n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	554 ft-lbs	3.8%	100%	1	02-11-01
End Shear	416 lbs	8.9%	100%	1	02-04-08
Total Load Deflection	L/999 (0.002")	n/a	n/a	1	01-10-14
Live Load Deflection	L/999 (0.001")	n/a	n/a	2	01-10-14
Max Defl.	0.002"	n/a	n/a	1	01-10-14
Span / Depth	3.0				

Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Wall/Plate 2-1/2" x 1-3/4"	663 lbs	35.7%	20.2%	Unspecified
B2	Wall/Plate 3-1/2" x 1-3/4"	820 lbs	31.5%	17.9%	Unspecified

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 (0.75") Maximum live load deflection criteria.
 Calculations assume member is fully braced.
 BC CALC® analysis is based on IBC 2012.
 Design based on Dry Service Condition.

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2nd LEVEL\Flush Beams\BM9-4(i739)

BC CALC® Member Report

Dry | 1 span | No cant.

August 15, 2018 15:27:49

Build 6621

Job name:

File name: Lot 307 Forest Oaks.mmdl

Address:

Description: 2nd LEVEL\Flush Beams\BM9-4(i739)

City, State, Zip: NC

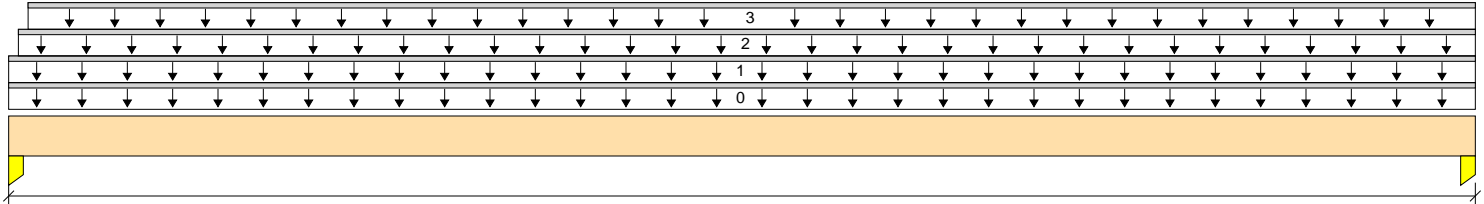
Specifier:

Customer: Caviness Land Development

Designer:

Code reports: ESR-1040

Company: Cav Land



B1 22-00-00 **B2**
Total Horizontal Product Length = 22-00-00

Reaction Summary (Down / Uplift) (lbs)

Bearing	Live	Dead	Snow	Wind	Roof Live
B1, 3-1/2"	302 / 0	4,612 / 0			4,180 / 0
B2, 3-1/2"	307 / 0	4,614 / 0			4,180 / 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	22-00-00	Top	32					00-00-00
1	Roof Truss	Unf. Lin. (lb/ft)	L	00-00-00	22-00-00	Top		380			380	n/a
2	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-01-12	22-00-00	Top	16	4				n/a
3	FC1 Floor Material	Unf. Lin. (lb/ft)	L	00-03-08	22-00-00	Top	12					n/a

Controls Summary

	Value	% Allowable	Duration	Case	Location
Pos. Moment	46,371 ft-lbs	49.6%	125%	2	11-00-00
End Shear	7,493 lbs	28.2%	125%	2	01-07-08
Total Load Deflection	L/319 (0.811")	75.3%	n/a	2	11-00-00
Live Load Deflection	L/671 (0.385")	53.7%	n/a	5	11-00-00
Max Defl.	0.811"	64.8%	n/a	2	11-00-00
Span / Depth	16.2				

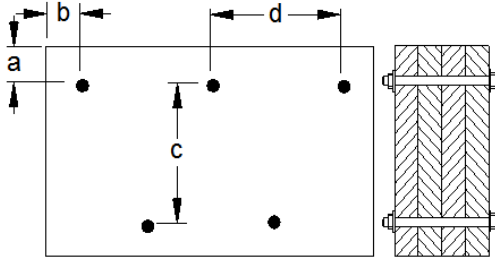
Bearing Supports

	Dim. (LxW)	Value	% Allow Support	% Allow Member	Material
B1	Column 3-1/2" x 7"	8,792 lbs	49.5%	47.8%	Unspecified
B2	Column 3-1/2" x 7"	8,794 lbs	49.5%	47.9%	Unspecified

Notes

- Design meets Code minimum (L/240) Total load deflection criteria.
- Design meets Code minimum (L/360) Live load deflection criteria.
- Design meets arbitrary (1.25") Maximum Total load deflection criteria.
- Design meets arbitrary (0.75") Maximum live load deflection criteria.
- Calculations assume member is fully braced.
- BC CALC® analysis is based on IBC 2012.
- Design based on Dry Service Condition.
- Beams 7 inches wide will be assumed to be either top-loaded only, or equally loaded from each side.
- Bolts are assumed to be Grade A307 or Grade 2 or higher.
- Member has no side loads.

Connection Diagram: Full Length of Member



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

Beams 7 inches wide will be assumed to be either top-loaded only, or equally loaded from each side.
 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

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