

Graphical Illustration - Not To Scale  
Member Cut Length - 11-07-00  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-00	Bottom:	1-08-04		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	7-01-05	8328.20 lb ft	28945.56 lb ft	Passed - 29%	1.00	D + L	
Critical Moment (Neg)	8-08	-250.91 lb ft	28945.56 lb ft	Passed - 1%	1.00	D + L	
Critical Shear	10-01-08	3609.82 lb	9310.00 lb	Passed - 39%	1.00	D + L	
Live Load Deflection	6-02-03	0-01	0-12 (L/360)	Passed - L/999	-	L	
Total Load Deflection	6-02-03	0-02	1-00 (L/240)	Passed - L/999	-	D + L	
Max. Reaction			Supported Mtl	Supporting Mtl			
	8-08	3466.16 lb	24937.62 lb	29093.89 lb	Passed - 14%	1.00	D + L
	11-04-08	3652.68 lb	9187.48 lb	10718.73 lb	Passed - 40%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

**Loading:**

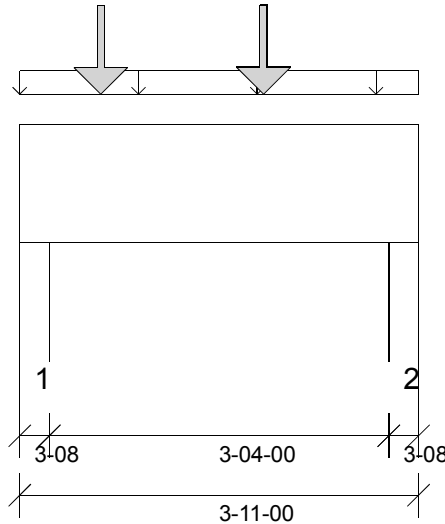
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	11-07-00	Self Weight	14 lb/ft	-	-	-
Uniform	0-00	6-11-06	FC1 Floor Decking	18 lb/ft	72 lb/ft	-	-
Uniform	3-01-06	11-01-05	Smoothed Load	77 lb/ft	308 lb/ft	-	-
Uniform	6-11-06	9-06-04	FC1 Floor Decking	8 lb/ft	32 lb/ft	-	-
Point	9-06-04	9-06-04	1BM3-2(i1115)	338.00 lb	1267.00/-55.00 lb	-	-
Point	5-00	5-00	FJ16(i998)	154.00 lb	616.00 lb	-	-
Point	2-05-00	2-05-00	FJ16(i999)	135.00 lb	538.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	9-08	W35(i37)	763.00 lb	2691.00/-10.00 lb	-	-
2	11-03-08	11-07-00	W40(i40)	810.00 lb	2854.00/-45.00 lb	-	-

**Errors, Warnings & Notes:**

- \* The dead loads used in the design of this member were applied to the structure as projected dead loads.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.



Graphical Illustration - Not To Scale  
Member Cut Length - 3-11-00  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-00	Bottom:	1-05-00		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination			
Critical Moment (Pos)	2-04-12	769.78 lb ft	28945.56 lb ft	Passed - 3%	1.00	D + L			
Critical Shear	1-05-08	855.61 lb	9310.00 lb	Passed - 9%	1.00	D + L			
Live Load Deflection	1-11-10	0-00	0-12 (L/360)	Passed - L/999	-	L			
Total Load Deflection	1-11-10	0-00	1-00 (L/240)	Passed - L/999	-	D + L			
Max. Reaction	2-08	898.47 lb	Supported Mt	9187.52 lb	Supporting Mt	10718.78 lb	Passed - 10%	1.00	D + L
	3-08-08	614.22 lb	9187.63 lb	10718.90 lb	Passed - 7%	1.00	D + L		

**Design Notes:**

\* Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

**Loading:**

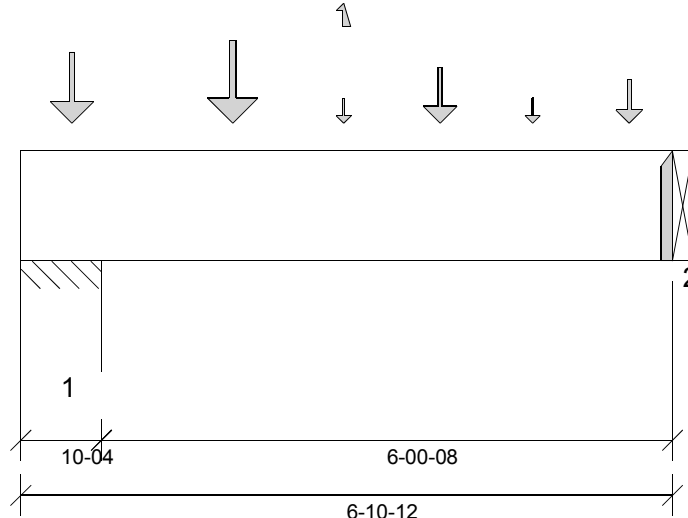
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	3-11-00	Self Weight	14 lb/ft	-	-	-
Uniform	-0-00	3-11-00	FC1 Floor Decking	3 lb/ft	12 lb/ft	-	-
Point	9-09	9-09	FJ18(i1030)	139.00 lb	556.00 lb	-	-
Point	2-04-12	2-04-12	FJ18(i1031)	140.00 lb	561.00 lb	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	3-08	W40(i40)	202.00 lb	696.00 lb	-	-
2	3-07-08	3-11-00	W41(i41)	145.00 lb	469.00 lb	-	-

**Errors, Warnings & Notes:**

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Graphical Illustration - Not To Scale  
Member Cut Length - 6-10-12  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-00	Bottom:	1-01-08		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	4-05-04	2640.55 lb ft	28945.56 lb ft	Passed - 9%	1.00	D + L
Critical Moment (Neg)	9-04	-292.35 lb ft	28945.56 lb ft	Passed - 1%	1.00	D + L
Critical Shear	2-00-04	1078.97 lb	9310.00 lb	Passed - 12%	1.00	D + L
Live Load Deflection	3-09-04	0-00	0-12 (L/360)	Passed - L/999	-	L
Total Load Deflection	3-09-05	0-00	1-00 (L/240)	Passed - L/999	-	D + L
Max. Reaction	9-04	3030.81 lb	Supported Mtl: 26840.36 lb Supporting Mtl: 31313.75 lb	Passed - 11%	1.00	D + L
	6-10-12	1609.32 lb	1609.32 lb 0.00 lb	Passed - 100%	1.00	D + L

**Design Notes:**

\* Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.  
\*

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	6-10-12	Self Weight	14 lb/ft	-	-	-
Point	6-08	6-08	-	253.00 lb	1010.00 lb	-	-
Point	2-02-14	2-02-14	-	309.00 lb	1238.00 lb	-	-
Point	4-05-04	4-05-04	FJ18(i1057)	177.00 lb	710.00 lb	-	-
Point	6-05-04	6-05-04	FJ18(i1058)	116.00 lb	462.00 lb	-	-
Point	3-05-00	3-05-00	FJ20(i1121)	-	103.00/-75.00 lb	-	-
Point	5-05-00	5-05-00	FJ4(i1048)	24.00 lb	95.00 lb	-	-

**Support Information:**

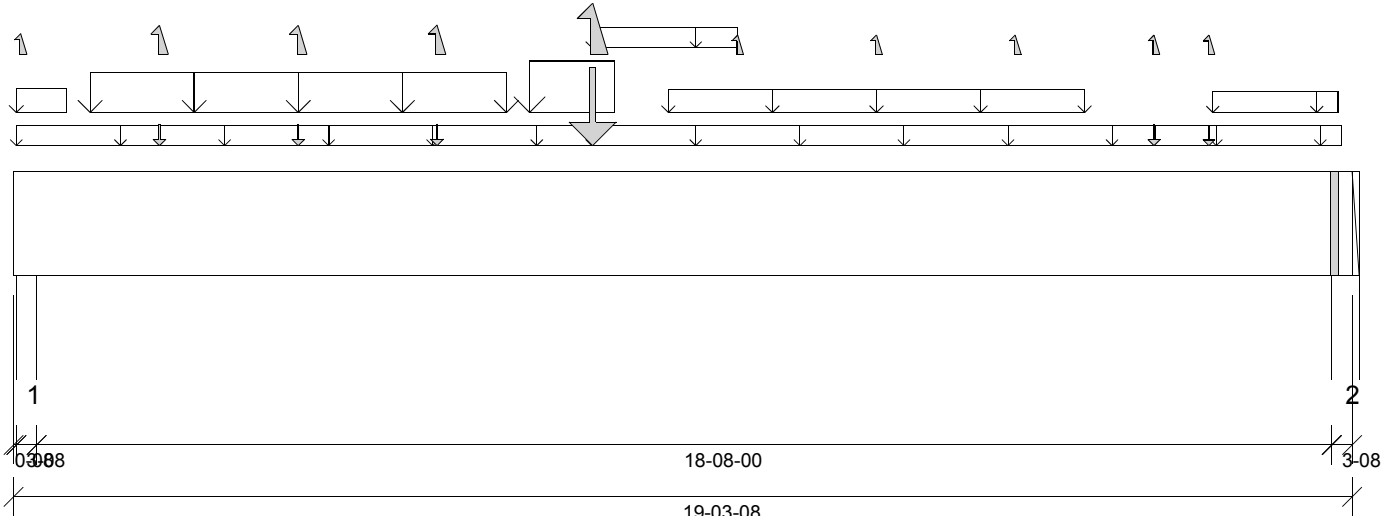
Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	10-04	W39(i39)	646.00 lb	2406.00/-43.00 lb	-	-
2	6-10-12	6-10-12	1BM1-2(i1089)	338.00 lb	1267.00/-55.00 lb	-	-

**Connector Information:**

Support	Manufacturer	Model	Nailing Requirements			Mill Seal Length	Other Information
			Top	Face	Member		
2	Simpson	HHUS410	-	-	-	N/A	Connector manually specified by the user.

**Errors, Warnings & Notes:**

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19-03-08  
Graphical Illustration - Not To Scale  
Member Cut Length - 19-03-08  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-08	Bottom:	1-10-08		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	8-04-14	49324.99 lb ft	79170.20 lb ft	Passed - 62%	1.15	D + Lr
Critical Moment (Neg)	8-01-04	-8633.11 lb ft	110149.85 lb ft	Passed - 8%	1.60	0.6D + 0.6W
Critical Shear	1-10-00	8218.91 lb	20648.25 lb	Passed - 40%	1.15	D + Lr
Live Load Deflection	9-03-01	0-04	0-12 (L/360)	Passed - L/826	-	0.75(L + Lr + 0.6W)
Total Load Deflection	9-02-10	0-09	1-00 (L/240)	Passed - L/402	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction			Supported Mt   Supporting Mt			
	3-00	8992.38 lb	13781.29 lb   16078.17 lb	Passed - 65%	1.60	D + 0.75(L + Lr + 0.6W)
	3-00	-2027.68 lb	0.00 lb   -		1.60	0.6D + 0.6W
	19-01-00	5303.71 lb	13781.40 lb   16078.30 lb	Passed - 38%	1.15	D + 0.75(L + Lr)
	19-01-00	-591.56 lb	0.00 lb   -		1.60	0.6D + 0.6W

**Design Notes:**

\* Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	19-03-08	Self Weight	28 lb/ft	-	-	-
Uniform	0-08	8-04-00	FC1 Floor Decking	-	29 lb/ft	-	-
Uniform	0-08	9-04	W61(i338)	-	-	134 lb/ft	47 lb/ft
Uniform	1-01-04	7-01-04	W61(i338)	348 lb/ft	-	360 lb/ft	151 lb/ft
Uniform	7-05-04	8-08-00	W61(i338)	552 lb/ft	-	557 lb/ft	234 lb/ft
Uniform	8-04-00	19-01-12	FC1 Floor Decking	-	24 lb/ft	-	-
Uniform	8-04-00	10-05-04	FC1 Floor Decking	-	9 lb/ft	-	-
Uniform	9-05-04	15-05-04	Smoothed Load	30 lb/ft	124 lb/ft	-	-
Uniform	17-03-06	19-01-02	FC1 Floor Decking	-	83 lb/ft	-	-
Point	2-01-04	2-01-04	-	98.00 lb	-	86.00/-4.00 lb	82.00 lb
Point	4-01-04	4-01-04	-	98.00 lb	-	86.00/-4.00 lb	82.00 lb
Point	6-01-04	6-01-04	-	105.00 lb	-	102.00/-5.00 lb	97.00 lb
Point	8-04-03	8-04-03	-	3318.00 lb	122.00 lb	3250.00/-3.70 lb	1261.00 lb
Point	10-05-04	10-05-04	FJ8(i1122)	-	-5.00 lb	-	-
Point	12-05-04	12-05-04	FJ8(i1092)	-	-9.00 lb	-	-
Point	14-05-04	14-05-04	FJ8(i1078)	-	-9.00 lb	-	-
Point	16-05-04	16-05-04	FJ8(i1079)	-	174.00/-6.00 lb	-	-
Point	17-02-12	17-02-12	FJ8(i1080)	-	111.00/-2.00 lb	-	-
Point	1-04	1-04	W61(i338)	-	-	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-08	4-00	W23(i25)	4677.00 lb	648.00/-9.00 lb	4292.00/-12.00 lb	1848.00 lb
2	19-00-00	19-03-08	W39(i39)	2762.00 lb	1179.00/-22.00 lb	2181.00/-4.00 lb	901.00 lb

**Errors, Warnings & Notes:**

- \* CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
- \* The dead loads used in the design of this member were applied to the structure as projected dead loads.
- \* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.

- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.

- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.



**Job: 21-5293 PARKS BUILDING SUPPLY JSJ-GAVIN II B-LOT #30 WFS**

Member Type: Beam | Level: 2nd Floor

Designed by Single Member Design Engine

**Member: 3 - 1 3/4" x 18" (2.0E 3100) LVL**

**Label: 1BM4-3-i978**

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Date: 08/17/2021 08:36:35

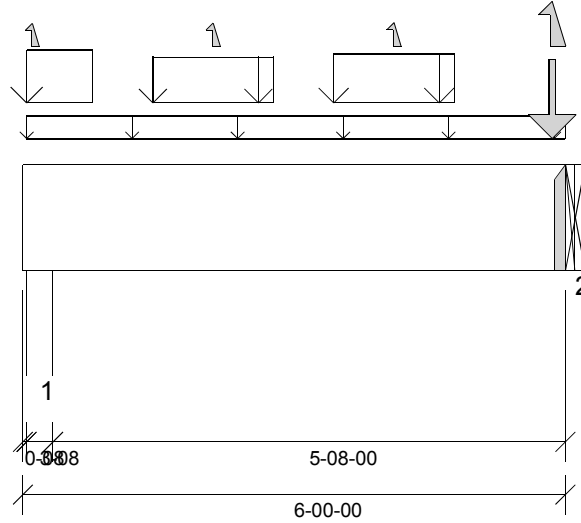
**Status: Design Passed**

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\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.

- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.



Graphical Illustration - Not To Scale  
Member Cut Length - 6-00-00  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-08	Bottom:	5-08-00		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	3-09-06	1610.33 lb ft	16643.70 lb ft	Passed - 10%	1.15	D + Lr
Critical Moment (Neg)	4-01-04	-423.90 lb ft	23156.44 lb ft	Passed - 2%	1.60	0.6D + 0.6W
Critical Shear	4-10-00	1169.18 lb	5353.25 lb	Passed - 22%	1.15	D + Lr
Live Load Deflection	3-02-10	0-00	0-12 (L/360)	Passed - L/999	-	0.6W
Total Load Deflection	3-02-04	0-00	1-00 (L/240)	Passed - L/999	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction			Supported Mt/ Supporting Mt/			
	2-04	1133.99 lb	4593.73 lb 5359.36 lb	Passed - 25%	1.60	D + 0.75(L + Lr + 0.6W)
	2-04	-375.32 lb	0.00 lb -		1.60	0.6D + 0.6W
	6-00-00	6418.81 lb	6418.81 lb 0.00 lb	Passed - 100%	1.15	D + Lr
	6-00-00	-780.29 lb	0.00 lb -		1.60	0.6D + 0.6W

**Design Notes:**

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	6-00-00	Self Weight	7 lb/ft	-	-	-
Uniform	0-08	6-00-00	FC1 Floor Decking	11 lb/ft	42 lb/ft	-	-
Uniform	0-08	9-04	W60(i340)	217 lb/ft	-	258 lb/ft	90 lb/ft
Uniform	1-05-04	2-09-04	W60(i340)	176 lb/ft	-	194 lb/ft	67 lb/ft
Uniform	3-05-04	4-09-04	W60(i340)	194 lb/ft	-	213 lb/ft	74 lb/ft
Point	1-04	1-04	W60(i340)	-	-	-	-
Point	2-01-04	2-01-04	W60(i340)	-	-	-	-
Point	4-01-04	4-01-04	W60(i340)	-	-	-	-
Point	5-10-04	5-10-04	W60(i340)	3010.00 lb	-	2967.00/-3.00 lb	1163.00 lb

**Support Information:**

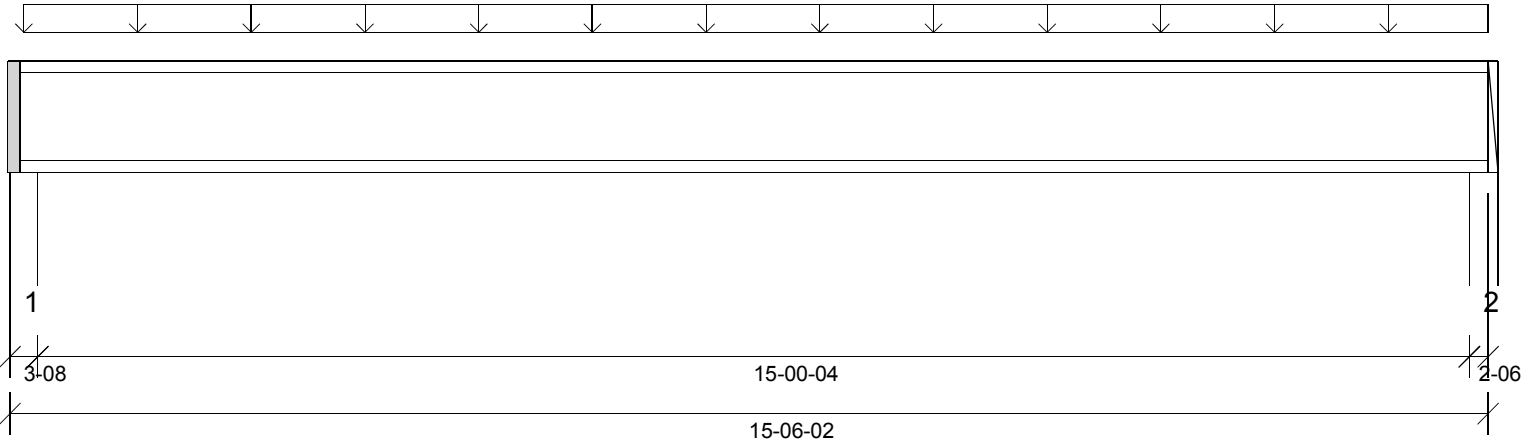
Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-08	4-00	W34(i26)	447.00 lb	129.00 lb	447.00 lb	155.00 lb
2	6-00-00	6-00-00	1BM4-3(i978)	3318.00 lb	122.00 lb	3250.00/-3.00 lb	1261.00 lb

**Connector Information:**

Support	Manufacturer	Model	Nailing Requirements			W/Slit Seal Length	Other Information
			Top	Face	Member		
2		IUS1.81/14	-	-	-	N/A	Connector manually specified by the user.

**Errors, Warnings & Notes:**

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Graphical Illustration - Not To Scale  
Member Cut Length - 15-06-02  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-00	Bottom:	15-00-04		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	7-09-10	2882.31 lb ft	4530.03 lb ft	Passed - 64%	1.00	D + L	
Critical Shear	15-03-11	750.62 lb	1730.00 lb	Passed - 43%	1.00	D + L	
Live Load Deflection	7-09-10	0-03	0-12 (L/480)	Passed - L/999	-	L	
Total Load Deflection	7-09-10	0-03	1-00 (L/240)	Passed - L/851	-	D + L	
Max. Reaction			Supported Mt	Supporting Mt			
	2-08	765.52 lb	1500.00 lb	7656.23 lb	Passed - 51%	1.00	D + L
	15-04-12	780.31 lb	1387.50 lb	5195.35 lb	Passed - 56%	1.00	D + L

**Design Notes:**

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**Loading:**

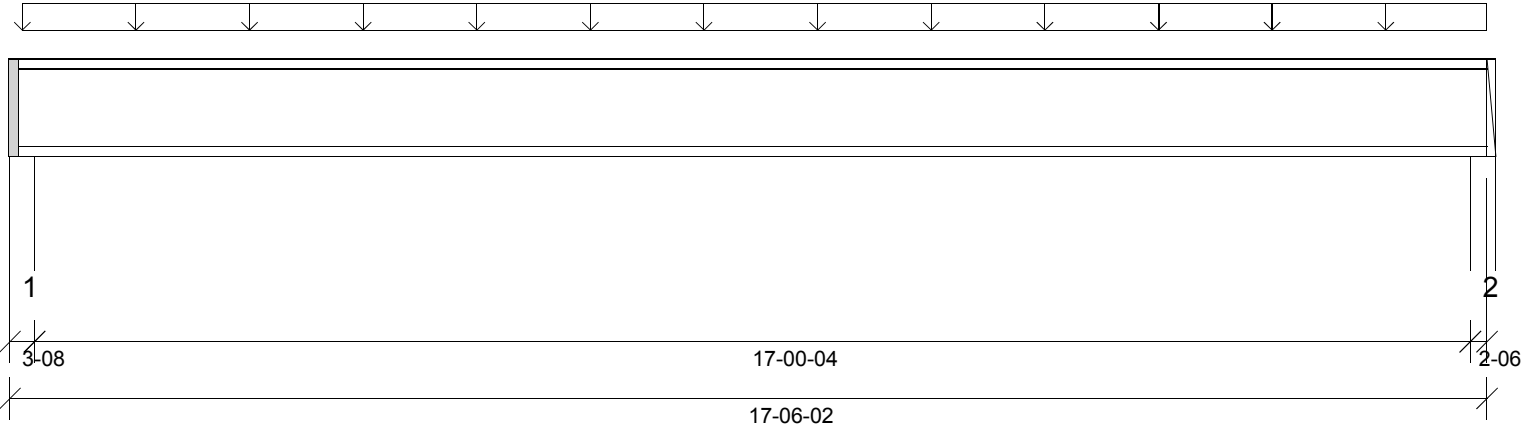
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Uniform	1-12	15-06-02	FC1 Floor Decking	20 lb/ft	80 lb/ft	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	3-08	W35(i37)	152.00 lb	610.00 lb	-	-
2	15-03-12	15-06-02	W24(i27)	157.00 lb	627.00 lb	-	-

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- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* A load bearing wall is supported by the I-joist at a location where the I-joist is supported by a member below. Please see manufacturer installation guidelines for requirements of blocking/squash blocks.



Graphical Illustration - Not To Scale  
Member Cut Length - 17-06-02  
MemberPitch - 0/12

**Design Information:**

Building Code: IRC2015	Floor Dead Load: 10.0 lb/ft <sup>2</sup>	Roof Dead Load: 10.0 lb/ft <sup>2</sup>	Ground Snow Load: 20.0 lb/ft <sup>2</sup>
Design Methodology: ASD	Floor Live Load: 40.0 lb/ft <sup>2</sup>	Roof Live Load: 20.0 lb/ft <sup>2</sup>	
	Unbraced Length Top: 0-00	Bottom: 17-00-04	

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	8-09-10	2951.43 lb ft	4530.03 lb ft	Passed - 65%	1.00	D + L	
Critical Shear	17-03-11	680.05 lb	1730.00 lb	Passed - 39%	1.00	D + L	
Live Load Deflection	8-09-10	0-04	0-12 (L/480)	Passed - L/931	-	L	
Total Load Deflection	8-09-10	0-04	1-00 (L/240)	Passed - L/745	-	D + L	
Max. Reaction	2-08	691.98 lb	Supported Mt 1500.00 lb	7656.30 lb	Passed - 46%	1.00	D + L
	17-04-12	703.78 lb	1387.50 lb	5195.35 lb	Passed - 51%	1.00	D + L

**Design Notes:**

\*

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Uniform	1-12	17-06-02	FC1 Floor Decking	16 lb/ft	64 lb/ft	-	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	3-08	W40(i40)	138.00 lb	552.00 lb	-	-
2	17-03-12	17-06-02	W26(i33)	141.00 lb	565.00 lb	-	-

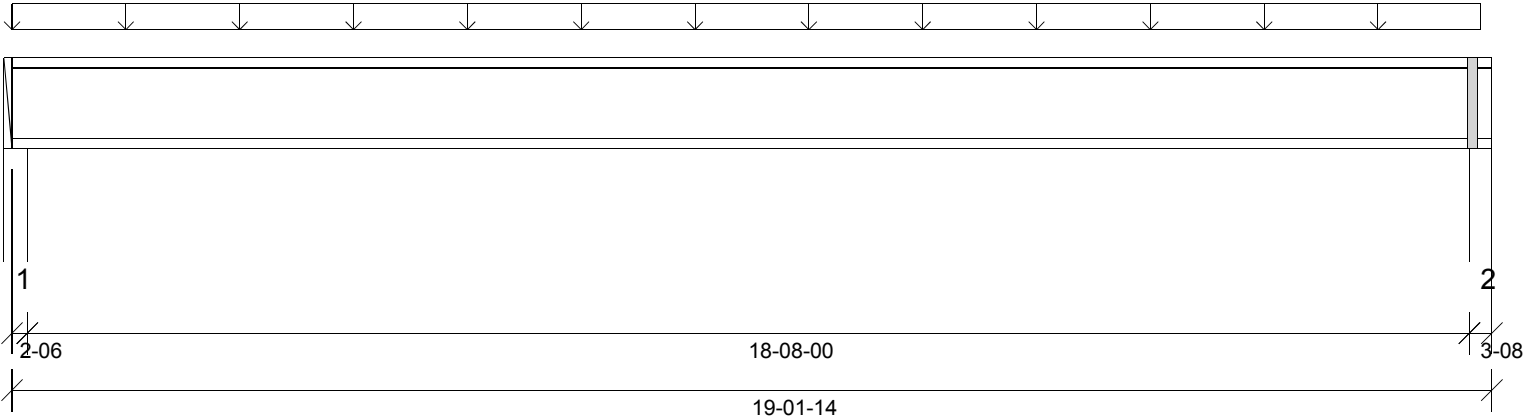
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- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* A load bearing wall is supported by the I-joist at a location where the I-joist is supported by a member below. Please see manufacturer installation guidelines for requirements of blocking/squash blocks.

- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.

- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.





Graphical Illustration - Not To Scale  
Member Cut Length - 19-01-14  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length	Top: 0-00	Bottom:	18-08-00		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	9-06-06	2955.16 lb ft	4530.03 lb ft	Passed - 65%	1.00	D + L
Critical Shear	2-07	621.93 lb	1730.00 lb	Passed - 36%	1.00	D + L
Live Load Deflection	9-06-06	0-04	0-12 (L/480)	Passed - L/851	-	L
Total Load Deflection	9-06-06	0-05	1-00 (L/240)	Passed - L/681	-	D + L
Max. Reaction			Supported Mt   Supporting Mt			
	1-06	641.72 lb	1387.50 lb   5195.30 lb	Passed - 46%	1.00	D + L
	18-11-06	631.89 lb	1500.00 lb   7656.23 lb	Passed - 42%	1.00	D + L

**Design Notes:**

\*

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Uniform	0-00	19-00-02	FC1 Floor Decking	13 lb/ft	53 lb/ft	-	-

**Support Information:**

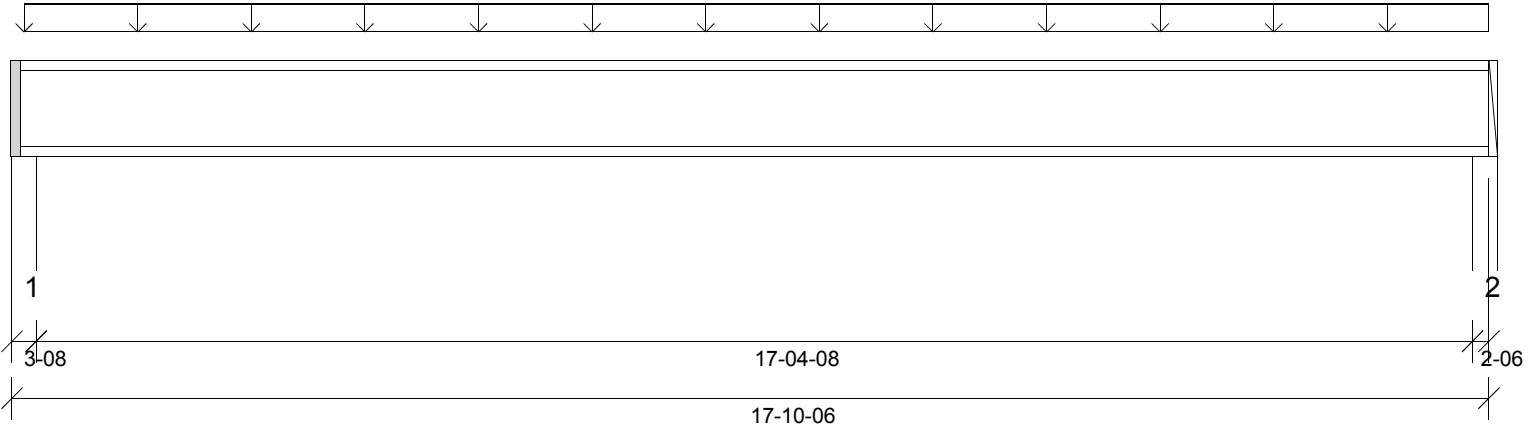
Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	2-06	W23(i25)	129.00 lb	515.00 lb	-	-
2	18-10-06	19-01-14	W39(i39)	126.00 lb	504.00 lb	-	-

**Errors, Warnings & Notes:**

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- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* A load bearing wall is supported by the I-joist at a location where the I-joist is supported by a member below. Please see manufacturer installation guidelines for requirements of blocking/squash blocks.

- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.

- This report is based on modeled conditions input by the user. Source information for the loads and supports are provided for reference only. Verify that all loads and support conditions are correct.



Graphical Illustration - Not To Scale  
Member Cut Length - 17-10-06  
MemberPitch - 0/12

**Design Information:**

Building Code: IRC2015	Floor Dead Load: 10.0 lb/ft <sup>2</sup>	Roof Dead Load: 10.0 lb/ft <sup>2</sup>	Ground Snow Load: 20.0 lb/ft <sup>2</sup>
Design Methodology: ASD	Floor Live Load: 40.0 lb/ft <sup>2</sup>	Roof Live Load: 20.0 lb/ft <sup>2</sup>	
	Unbraced Length Top: 0-00	Bottom: 17-04-08	

**Design Results:**

	<u>Location</u>	<u>Design</u>	<u>Control</u>	<u>Result</u>	<u>LDF</u>	<u>Load Combination</u>
Critical Moment (Pos)	8-11-12	3845.43 lb ft	4530.03 lb ft	Passed - 85%	1.00	D + L
Critical Shear	17-07-15	868.32 lb	1730.00 lb	Passed - 50%	1.00	D + L
Live Load Deflection	8-11-12	0-05	0-12 (L/480)	Passed - L/724	-	L
Total Load Deflection	8-11-12	0-06	1-00 (L/240)	Passed - L/579	-	D + L
Max. Reaction			<u>Supported Mt</u> <u>Supporting Mt</u>			
	2-08	883.25 lb	1500.00 lb 7656.21 lb	Passed - 59%	1.00	D + L
	17-09-00	898.00 lb	1387.50 lb 5195.30 lb	Passed - 65%	1.00	D + L

**Design Notes:**

\*

**Loading:**

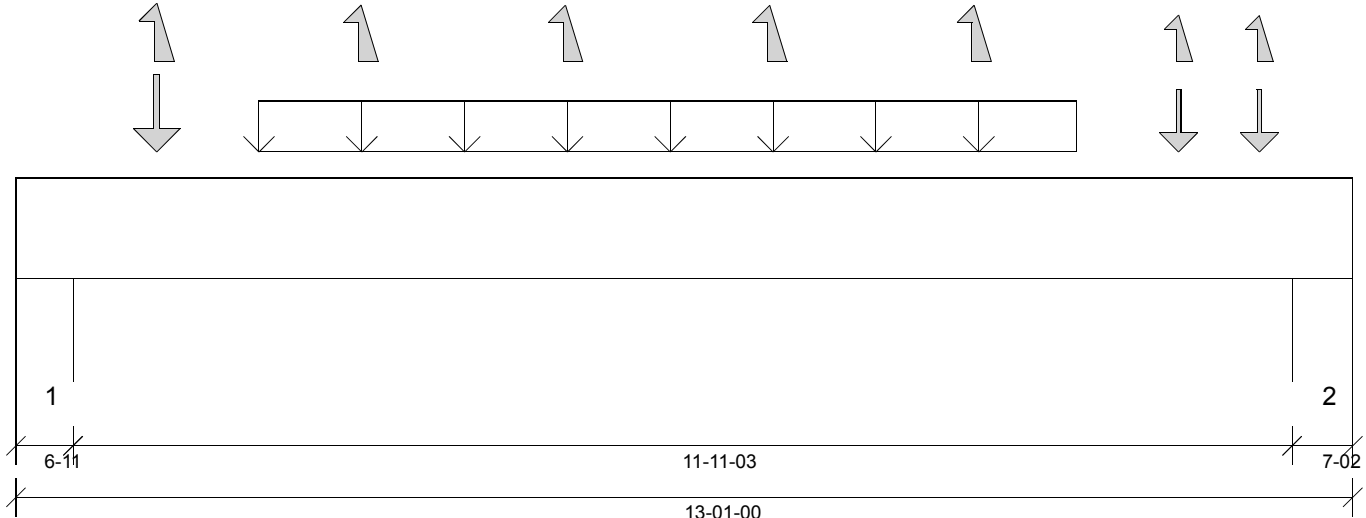
<u>Type</u>	<u>Start</u>	<u>End</u>	<u>Source</u>	<u>Maximum Load Magnitudes</u>			
				<u>Dead</u>	<u>Floor Live</u>	<u>Roof Live</u>	<u>Snow</u>
Uniform	1-12	17-10-06	FC1 Floor Decking	20 lb/ft	80 lb/ft	-	-

**Support Information:**

<u>Support</u>	<u>Start</u>	<u>End</u>	<u>Source</u>	<u>Maximum Analysis Reactions</u>			
				<u>Dead</u>	<u>Floor Live</u>	<u>Roof Live</u>	<u>Snow</u>
1	0-00	3-08	W39(i39)	176.00 lb	704.00 lb	-	-
2	17-08-00	17-10-06	W29(i31)	180.00 lb	721.00 lb	-	-

**Errors, Warnings & Notes:**

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- \* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.
- \* A load bearing wall is supported by the I-joist at a location where the I-joist is supported by a member below. Please see manufacturer installation guidelines for requirements of blocking/squash blocks.



Graphical Illustration - Not To Scale  
Member Cut Length - 13-01-00  
MemberPitch - 0/12

**Design Information:**

Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	20.0 lb/ft <sup>2</sup>
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>		
		Unbraced Length Top:	1-10-08	Bottom:	1-10-08		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	7-04-09	12235.02 lb ft	24437.95 lb ft	Passed - 50%	1.15	D + Lr	
Critical Moment (Neg)	7-04-09	-4068.24 lb ft	34000.63 lb ft	Passed - 12%	1.60	0.6D + 0.6W	
Critical Shear	11-06-00	3928.19 lb	9081.41 lb	Passed - 43%	1.15	D + Lr	
Live Load Deflection	6-06-04	0-04	0-12 (L/360)	Passed - L/652	-	0.6W	
Total Load Deflection	6-06-05	0-06	1-00 (L/240)	Passed - L/412	-	D + 0.75(L + Lr + 0.6W)	
Max. Reaction	5-11	4191.86 lb	17586.81 lb	20517.95 lb	Passed - 24%	1.60	D + 0.75(L + Lr + 0.6W)
	5-11	-1391.66 lb	0.00 lb	-	1.60	0.6D + 0.6W	
	12-06-14	4724.26 lb	18673.47 lb	21785.72 lb	Passed - 25%	1.60	D + 0.75(L + Lr + 0.6W)
	12-06-14	-1415.25 lb	0.00 lb	-	1.60	0.6D + 0.6W	

**Design Notes:**

\* Member design assumed proper ply to ply connection by others. Fastener spacing along length of member must not exceed 4 times depth of member. Verify connection between plies according to code specification and follow the manufacturer's installation instruction. Loads assumed to be distributed equally to each ply.

**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	13-01-00	Self Weight	12 lb/ft	-	-	-
Uniform	2-04-09	10-04-09	Smoothed Load	327 lb/ft	-	321 lb/ft	135 lb/ft
Point	1-04-09	1-04-09	A3(c01)	673.00 lb	-	679.00 lb	284.00 lb
Point	3-04-09	3-04-09	A3(c02)	-	-	-	-
Point	5-04-09	5-04-09	A4(c01)	-	-	-0.80 lb	-
Point	7-04-09	7-04-09	A4(c02)	-	-	-0.70 lb	-
Point	9-04-09	9-04-09	A4(c03)	-	-	-0.70 lb	-
Point	11-04-09	11-04-09	A4(c04)	570.00 lb	-	472.00/-0.50 lb	198.00 lb
Point	12-02-01	12-02-01	A4(c05)	566.00 lb	-	465.00/-0.50 lb	195.00 lb

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0-00	6-11	-	2117.00 lb	-	2006.00/-1.00 lb	841.00 lb
++>	2-02	2-02	W49(i343)	1335.00 lb	-	1265.00/-1.00 lb	530.00 lb
++>	6-00	6-00	W50(i333)	782.00 lb	-	741.00 lb	311.00 lb
2	12-05-14	13-01-00	-	2467.00 lb	-	2178.00/-2.00 lb	914.00 lb
++>	12-06-10	12-06-10	W52(i339)	858.00 lb	-	758.00/-1.00 lb	318.00 lb
++>	12-10-11	12-10-11	W53(i345)	1609.00 lb	-	1420.00/-1.00 lb	596.00 lb

**Errors, Warnings & Notes:**

- \* CAUTION: The maximum net analysis reaction exceeds the user-defined maximum uplift value at one or more supports.
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