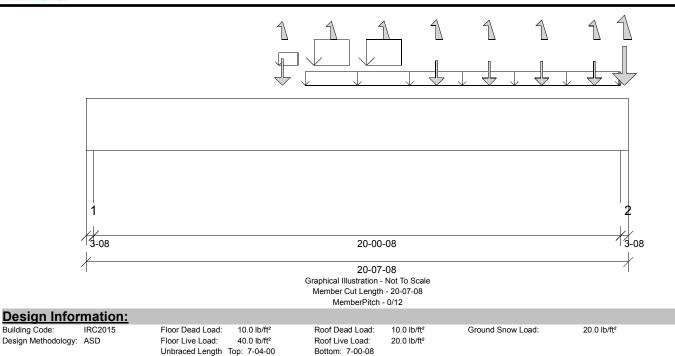
Member Type: Beam | Level: 2nd Floor

# Label: 1BM1-3-i26

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Member: 3 - 1 3/4" x 23 7/8" LVL





#### **Design Notes:**

\* Member was not designed due to missing strength properties. If possible select a new material or change the orientation of the member.

## Loading:

<u>Louanng.</u>										
				Maximum Load Magnitudes						
Type	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow			
Self Weight	0-00	20-07-08	Self Weight	37 lb/ft	-	-	-			
Uniform	7-04-00	8-00-12	W38(i153)	-	-	147 lb/ft	58 lb/ft			
Uniform	8-04-00	20-04-00	Smoothed Load	66 lb/ft	266 lb/ft	-	-			
Uniform	8-08-00	10-00-00	W38(i153)	527 lb/ft	-	576 lb/ft	215 lb/ft			
Uniform	10-08-00	12-00-00	W38(i153)	532 lb/ft	-	588 lb/ft	218 lb/ft			
Point	7-05-10	7-05-10	-	888.00 lb	310.00 lb	738.00/-17.00 lb	368.00 lb			
Point	9-04-00	9-04-00	-	-	-14.00 lb	-76.00 lb	-			
Point	11-04-00	11-04-00	-	-	-14.00 lb	-77.00 lb	-			
Point	13-04-00	13-04-00	-	752.00 lb	-14.00 lb	871.00/-77.00 lb	327.00 lb			
Point	15-04-00	15-04-00	-	745.00 lb	-14.00 lb	857.00/-77.00 lb	321.00 lb			
Point	17-04-00	17-04-00	-	745.00 lb	-14.00 lb	857.00/-77.00 lb	321.00 lb			
Point	19-04-00	19-04-00	-	746.00 lb	-14.00 lb	859.00/-77.00 lb	322.00 lb			
Point	20-05-12	20-05-12	W37(i157)	1565.00 lb	-	1754.00/-271.00 lb	600.00 lb			

## Support Information:

			_	Maximum Analysis Reactions							
Support	Start	End	Source	<u>Dead</u>	Floor Live	Roof Live	<u>Snow</u>				
1	0-00	3-08	W28(i150)	2539.00 lb	1160.00/-25.00 lb	2016.00/-154.00 lb	813.00 lb				
2	20-04-00	20-07-08	-	5920.00 lb	2339.00/-59.00 lb	5578.00/-602.00 lb	2064.00 lb				
++>	20-06-05	20-06-05	W16(i16)	3947.00 lb	1559.00/-39.00 lb	3719.00/-401.00 lb	1376.00 lb				
++>	20-06-15	20-06-15	W20(i20)	1973.00 lb	780.00/-20.00 lb	1859.00/-201.00 lb	688.00 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.

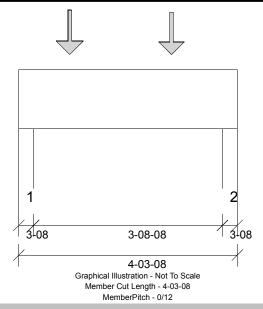
\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

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



Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine

## Member: 2 - 1 3/4" x 14" (2.0E 3100) LVL



## **Design Information:**

Boolginmonn							
J		Floor Dead Load: 10.0 lb/ft <sup>2</sup>			Ground Snow Load:	20.0 lb/ft <sup>2</sup>	
Design Methodology: AS		Floor Live Load: 40.0 lb/ft <sup>2</sup>		20.0 lb/ft <sup>2</sup>			
	I	Unbraced Length Top: 0-00	Bottom: 1-09-08				
<b>Design Results</b>	<u>s:</u>						
	Location	<u>Design</u>	<u>Control</u>	Resu	t <u>LDF</u>	Load Combination	
Critical Moment (Pos)	3-00-00	1410.12 lb ft	28945.56 lb ft	Passed -	5% 1.00	D + L	
Critical Shear	1-05-08	1551.85 lb	9310.00 lb	Passed - 7	1.00	D + L	
Live Load Deflection	2-01-13	0-00	0-12 (L/360)	Passed - L	/999 -	L	
Total Load Deflection	2-01-13	0-00	1-00 (L/240)	Passed - L	/999 -	D + L	
Max. Reaction			Supported Mtl Supporting	g Mtl			
	2-08	1572.69 lb	9187.50 lb 10718.75	5 lb Passed - 7	1.00	D + L	
	4-01-00	1312.64 lb	9187.52 lb 10718.78	B 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:												
				Maximum Load Magnitudes								
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow					
Self Weight	0-00	4-03-08	Self Weight	14 lb/ft	-	-	-					
Point	1-00-00	1-00-00	-	292.00 lb	1166.00 lb	-	-					
Point	3-00-00	3-00-00	-	273.00 lb	1093.00 lb	-	-					
Support Info	rmation:											
					Maximum Anal	vsis Reactions						
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>					
1	0-00	3-08	W21(i21)	339.00 lb	1233.00 lb	-	-					
2	4-00-00	4-03-08	W24(i24)	287.00 lb	1026.00 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.

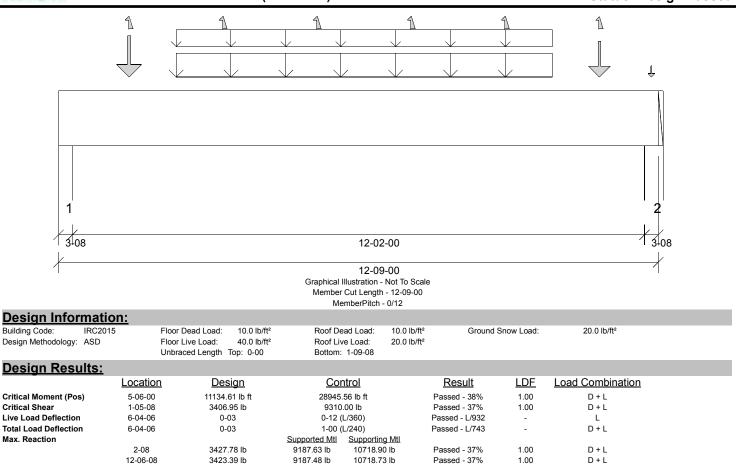
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.



## Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine

## Member: 2 - 1 3/4" x 14" (2.0E 3100) LVL

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#### 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:

				Maximum Load Magnitudes					
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow		
Self Weight	0-00	12-09-00	Self Weight	14 lb/ft	-	-	-		
Uniform	2-06-00	10-06-00	Smoothed Load	78 lb/ft	312 lb/ft	-	-		
Uniform	2-06-00	10-06-00	Smoothed Load	28 lb/ft	158 lb/ft	-	-		
Point	1-06-00	1-06-00	-	205.00 lb	917.00/-98.00 lb	-	-		
Point	3-06-00	3-06-00	FJ22(i894)	-	-98.00 lb	-	-		
Point	5-06-00	5-06-00	FJ22(i896)	-	-98.00 lb	-	-		
Point	7-06-00	7-06-00	FJ22(i997)	-	-98.00 lb	-	-		
Point	9-06-00	9-06-00	FJ22(i979)	-	-98.00 lb	-	-		
Point	11-06-00	11-06-00	-	171.00 lb	763.00/-80.00 lb	-	-		
Point	12-07-04	12-07-04	W39(i232)	13.00 lb	-	11.00 lb	4.00 lb		

#### Support Information:

				Maximum Analysis Reactions						
Support	<u>Start</u>	<u>End</u>	Source	Dead	Floor Live	Roof Live	<u>Snow</u>			
1	0-00	3-08	W24(i24)	703.00 lb	2725.00/-287.00 lb	-	-			
2	12-05-08	12-09-00	W15(i18)	713.00 lb	2711.00/-283.00 lb	11.00 lb	4.00 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.

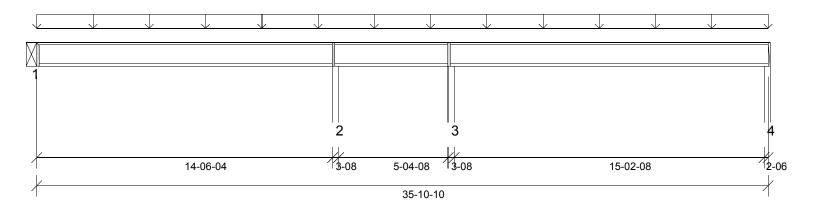
\* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting

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



Member Type: FloorJoist | Level: 2nd Floor Designed by Single Member Design Engine

Member: 1 - 14" NI-40x



#### Graphical Illustration - Not To Scale Member Cut Length - 35-10-10 MemberPitch - 0/12

<b>Design Infor</b>	mation:									
Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof D	ead 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 Li	ve Load:	20.0 lb/ft <sup>2</sup>				
		Unbraced Length	Top: 0-00	Bottom	: 15-02-08					
<b>Design Resu</b>	<u>lts:</u>									
	Locatio	on <u>De</u>	<u>sign</u>	<u>Co</u>	ntrol		<u>Result</u>	LDF	Load Combination	
<b>Critical Moment (Pos</b>	) 29-03-1	5 2072	.91 lb ft	4530	.03 lb ft		Passed - 46%	1.00	D + L	
<b>Critical Moment (Neg</b>	) 20-04-0	0 -2261	.44 lb ft	4530	.03 lb ft		Passed - 50%	1.00	D + L	
Critical Shear	20-05-1	3 903	15 lb	1730	0.00 lb		Passed - 52%	1.00	D + L	
Live Load Deflection	28-08-0	1 C	-02	0-12	(L/480)		Passed - L/999	-	L	
Total Load Deflection	28-08-0	2 0	-02	1-00	(L/240)		Passed - L/999	-	D + L	
Max. Reaction				Supported Mtl	Supporting	a Mtl				
	0-00	662	2.06 lb	1325.00 lb	0.00 lb	)	Passed - 50%	1.00	D + L	
	14-08-0	0 108	7.07 lb	3130.00 lb	7656.23	lb	Passed - 35%	1.00	D + L	
	20-04-0	0 156	8.08 lb	3130.00 lb	7656.28	lb	Passed - 50%	1.00	D + L	
	35-09-0	4 664	.98 lb	1387.50 lb	5195.35	lb	Passed - 48%	1.00	D + L	

#### Design Notes:

\* The required bearing length for this member is the same for both with and without web stiffeners (112)

### Loading:

1		ITS2.56/14	-	-	-	N/A	Connector manually specified by the user.
Support	Manufacturer	Model	<u>Top</u>	Face	<u>Member</u>	l ength	Other Information
				Nailing Requirement	S		
onnecto	r Information:	1					
4	35-08-04	35-10-10	W14(i14)	132.00 lb	533.00/-5.00 lb	-	-
3	20-02-04	20-05-12	W21(i21)	248.00 lb	1186.00/-99.00 lb	-	-
2	14-06-04	14-09-12	W19(i19)	217.00 lb	1244.00 lb	-	-
1	0-00	0-00	1BM1-3(i26)	131.00 lb	531.00/-14.00 lb	-	-
Support	Start	End	Source	Dead	Floor Live	Roof Live	Snow
					Maximum Anal	vsis Reactions	
upport Ir	nformation:						
Uniform	0-00	35-10-10	FC1 Floor Decking	20 lb/ft	80 lb/ft	-	-
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow
					<u>Maximum Loa</u>		

#### 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.

\* 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.

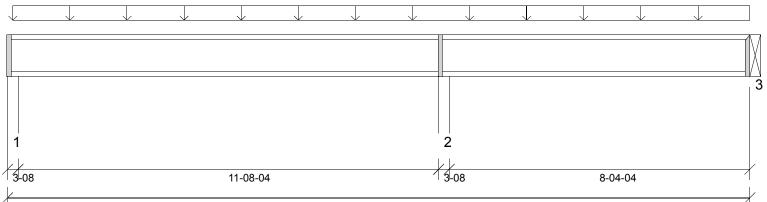
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.



Member Type: FloorJoist | Level: 2nd Floor Designed by Single Member Design Engine

Member: 1 - 14" NI-40x

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#### 20-07-08

#### Graphical Illustration - Not To Scale Member Cut Length - 20-07-08 MemberPitch - 0/12

<b>Design Infor</b>	mation:								
Building Code:	IRC2015	Floor Dead Load	: 10.0 lb/ft <sup>2</sup>	Roof De	ead 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 Li	ve Load:	20.0 lb/ft <sup>2</sup>			
		Unbraced Length	Top: 0-00	Bottom	11-08-04				
<b>Design Resu</b>	<u>lts:</u>								
	Locati	on <u>D</u> e	<u>esign</u>	<u>Co</u>	ntrol		<u>Result</u>	LDF	Load Combination
Critical Moment (Pos	) 5-02-1	3 1262	2.85 lb ft	4530.	03 lb ft		Passed - 28%	1.00	D + L
<b>Critical Moment (Neg</b>	) 12-01-	08 -141	2.02 lb ft	4530.	03 lb ft		Passed - 31%	1.00	D + L
Critical Shear	11-11-	11 69	9.20 lb	1730	0.00 lb		Passed - 40%	1.00	D + L
Live Load Deflection	5-09-0	02	0-01	0-12	(L/480)		Passed - L/999	-	L
Total Load Deflection	5-08-1	0	0-01	1-00	(L/240)		Passed - L/999	-	D + L
Max. Reaction				Supported Mtl	Supportin	<u>g Mtl</u>			
	2-08	50	8.85 lb	1500.00 lb	7656.30	) lb	Passed - 34%	1.00	D + L
	12-01-	08 130	)5.42 lb	3130.00 lb	7656.18	3 lb	Passed - 42%	1.00	D + L
	20-07-	08 37	0.97 lb	1325.00 lb	0.00 1	b	Passed - 28%	1.00	D + L
	20-07-	08 -42	2.81 lb	0.00 lb	-			1.00	D + L

#### **Design Notes:**

\* The required bearing length for this member is the same for both with and without web stiffeners (112)

## Loading:

				Maximum Load Magnitudes						
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>			
Uniform	1-12	20-07-08	FC1 Floor Decking	20 lb/ft	80 lb/ft	-	-			
Support Info	ormation:									
					Maximum Anal	sis Reactions				
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>			
1	0-00	3-08	W16(i16)	96.00 lb	409.00/-25.00 lb	-	-			
2	11-11-12	12-03-04	W25(i25)	262.00 lb	1048.00 lb	-	-			
3	20-07-08	20-07-08	1BM3-2(i1007)	55.00 lb	316.00/-98.00 lb	-	-			
Connector In	nformation:									
			N I	ailing Requireme						

				Raining Requirement	110		
<u>Support</u>	Manufacturer	Model	<u>Top</u>	Face	Member	I enath	Other Information
3		ITS2.56/14	-	-	-	N/A	Connector manually specified by the user.

## 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.

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



## Member Type: FloorJoist | Level: 2nd Floor Designed by Single Member Design Engine

Member: 1 - 14" NI-40x

Page: 6 of 9 Date: 08/16/2021 14:30:40 Status: Design Passed

$\Lambda$	 	 			 	 	
\	 	 			 	 	
1							
			1	5-02-08			12
1				15-04-14			

#### 15-04-14

#### Graphical Illustration - Not To Scale . Member Cut Length - 15-04-14 MemberPitch - 0/12

<b>Design Infor</b>	esign Information:								
Building Code:	IRC2015	Floor Dead Load: 1	0.0 lb/ft <sup>2</sup> F	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground S	now Load:	20.0 lb/ft <sup>2</sup>	
Design Methodology:	ASD	Floor Live Load: 4	0.0 lb/ft <sup>2</sup> F	Roof Live Load:	20.0 lb/ft <sup>2</sup>				
		Unbraced Length Top:	0-00 E	Bottom: 15-02-08					
Design Resu	<u>ilts:</u>								
	Locatio	on <u>Design</u>	<u>l</u>	<u>Control</u>		<u>Result</u>	<u>LDF</u>	Load Combination	
Critical Moment (Pos	s) 7-07-12	2922.09 lb	ft	4530.03 lb ft		Passed - 65%	1.00	D + L	
Critical Shear	0-01	763.95 lb	)	1730.00 lb		Passed - 44%	1.00	D + L	
Live Load Deflection	7-07-12	0-03		0-12 (L/480)		Passed - L/999	-	L	
Total Load Deflection	n 7-07-12	0-03		1-00 (L/240)		Passed - L/840	-	D + L	
Max. Reaction			Supporte	ed Mtl Supporting	<u>g Mtl</u>				
	0-00	779.05 lb	1325.0	0 lb 0.00 lb	)	Passed - 59%	1.00	D + L	
	15-03-0	8 785.53 lb	1387.5	0 lb 5195.30	lb	Passed - 57%	1.00	D + L	

#### **Design Notes:**

The required bearing length for this member is the same for both with and without web stiffeners (112)

heo I	ina	
<u>Load</u>	<u>my.</u>	

					Maximum Lo	ad Magnitudes				
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>			
Uniform	0-00	15-04-14	FC1 Floor Decking	20 lb/ft	80 lb/ft	-	-			
Support Information:										
					Maximum Ana	alysis Reactions				
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>			
1	0-00	0-00	1BM3-2(i1007)	156.00 lb	623.00 lb	-	-			
2	15-02-08	15-04-14	W14(i14)	157.00 lb	628.00 lb	-	-			
Connector	r Information:	<u>.</u>								
				Nailing Requirements						
Support	Manufacturer	Model	<u>Top</u>	<u>Face</u>	<u>Member</u>	Length	Other Information			
1		ITS2.56/14	-	-	-	N/A	Connector manually specified by the user.			
							specified by the user.			

## 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.

\* 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.

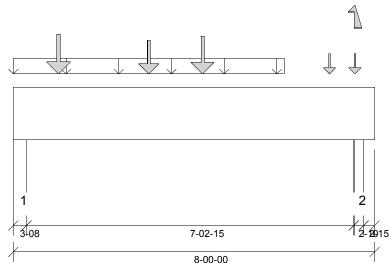
- Transfer reactions may differ from design results as allowed per building codes and standard load distribution practices.



## Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine

## Member: 2 - 1 3/4" x 14" (2.0E 3100) LVL

Status: Design Passed



#### 8-00-00 Graphical Illustration - Not To Scale Member Cut Length - 8-00-00 MemberPitch - 0/12

### **Design Information:**

Design informa								
Building Code: IRC	2015 Floo	r Dead Load: 10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground S	Snow Load:	20.0 lb/ft <sup>2</sup>	
Design Methodology: ASI	D Floo	r Live Load: 40.0 lb/ft <sup>2</sup>	Roof Live Load:	20.0 lb/ft <sup>2</sup>				
	Unb	raced Length Top: 0-00	Bottom: 1-09-08					
<b>Design Results</b>	<u>s:</u>							
	Location	<u>Design</u>	<u>Control</u>		<u>Result</u>	<u>LDF</u>	Load Combination	
Critical Moment (Pos)	3-07-04	3431.14 lb ft	28945.56 lb ft		Passed - 12%	1.00	D + L	
Critical Shear	1-05-08	1974.68 lb	9310.00 lb		Passed - 21%	1.00	D + L	
Live Load Deflection	3-10-01	0-00	0-12 (L/360)		Passed - L/999	-	L	
Total Load Deflection	3-10-01	0-00	1-00 (L/240)		Passed - L/999	-	D + L	
Max. Reaction			Supported Mtl Supportin	ng Mtl				
	2-08	1995.51 lb	9187.42 lb 10718.6	6 lb	Passed - 22%	1.00	D + L	
	7-07-12	1304.79 lb	6890.59 lb 8039.03	3 lb	Passed - 19%	1.00	D + L	

#### **Design Notes:**

\* The deflection at the cantilever for either live and/or total loads is less than 3/8" and therefore has been excluded from the deflection ratio considerations.

\* 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:

				Maximum Load Magnitudes					
Type	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow		
Self Weight	0-00	8-00-00	Self Weight	14 lb/ft	-	-	-		
Uniform	0-00	6-00-00	Smoothed Load	36 lb/ft	144 lb/ft	-	-		
Point	7-00-00	7-00-00	FJ8(i980)	46.00 lb	184.00 lb	-	-		
Point	7-06-12	7-06-12	FJ8(i866)	-91.00 lb	103.00 lb	13.00/-127.00 lb	-39.00 lb		
Point	1-00-00	1-00-00	FJ14(i1004)	136.00 lb	543.00 lb	-	-		
Point	3-00-00	3-00-00	FJ14(i986)	109.00 lb	436.00 lb	-	-		
Point	4-02-04	4-02-04	FJ12(i999)	128.00 lb	512.00 lb	-	-		

#### Support Information: Maximum Analysis Reactions Support Start 5 End Dead Floor Live Roof Live <u>Snow</u> Source 1 2 0-00 3-08 W20(i20) 444.00 lb 1551.00 lb 13.00/-127.00 lb -39.00 lb 7-06-07 7-09-01 W26(i142) 214.00 lb 1091.00 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.

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

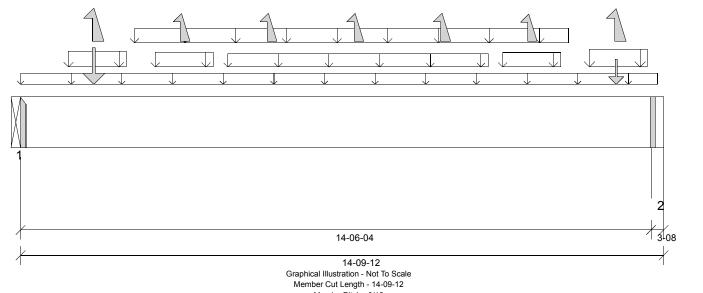


## Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine

## Member: 2 - 1 3/4" x 14" (2.0E 3100) LVL

# Label: 1BM5-2-i877

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## MemberPitch - 0/12

			Wichtb					
<b>Design Infor</b>	mation:							
Building Code:	IRC2015	Floor Dead Load: 10.0 lb/ft	2 Roof Dead	Load: 10.0 lb/ft <sup>2</sup>	Ground S	now Load:	20.0 lb/ft <sup>2</sup>	
Design Methodology:	ASD	Floor Live Load: 40.0 lb/ft	2 Roof Live L	.oad: 20.0 lb/ft <sup>2</sup>				
		Unbraced Length Top: 0-00	Bottom: 1-	10-08				
Design Resu	lts:							
	Locati	on <u>Design</u>	Contro	<u>ol</u>	<u>Result</u>	<u>LDF</u>	Load Combination	
Critical Moment (Pos	) 7-07-0	8 6266.58 lb ft	33287.39	lb ft	Passed - 19%	1.15	D + 0.75(L + Lr)	
Critical Moment (Neg	) 7-09-0	4 -702.18 lb ft	46312.89	lb ft	Passed - 2%	1.60	0.6D + 0.6W	
Critical Shear	1-02-0	0 1585.69 lb	10706.50	) lb	Passed - 15%	1.15	D + 0.75(L + Lr)	
Live Load Deflection	7-03-0	8 0-01	0-12 (L/36	60)	Passed - L/999	-	0.75(L + Lr + 0.6W)	
Total Load Deflection	7-03-0	8 0-03	1-00 (L/24	40)	Passed - L/999	-	D + 0.75(L + Lr + 0.6W)	
Max. Reaction			Supported Mtl Si	upporting Mtl				
	0-00	1674.52 lb	1674.52 lb	0.00 lb	Passed - 100%	1.15	D + 0.75(L + Lr)	
	0-00	-170.46 lb	0.00 lb	-		1.60	0.6D + 0.6W	
	14-07-0	04 1754.93 lb	9187.51 lb	10718.76 lb	Passed - 19%	1.15	D + 0.75(L + Lr)	
	14-07-0	-200.47 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:

				Maximum Load Magnitudes					
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow		
Self Weight	0-00	14-09-12	Self Weight	14 lb/ft	-	-	-		
Uniform	0-00	14-08-00	FC1 Floor Decking	10 lb/ft	40 lb/ft	-	-		
Uniform	1-01-04	2-05-04	W31(i155)	68 lb/ft	-	79 lb/ft	28 lb/ft		
Uniform	2-07-08	12-07-08	Smoothed Load	63 lb/ft	-	56 lb/ft	34 lb/ft		
Uniform	3-01-04	4-05-04	W31(i155)	56 lb/ft	-	69 lb/ft	23 lb/ft		
Uniform	4-09-04	10-09-04	W31(i155)	39 lb/ft	-	44 lb/ft	16 lb/ft		
Uniform	11-01-04	12-05-04	W31(i155)	56 lb/ft	-	66 lb/ft	23 lb/ft		
Uniform	13-01-04	14-05-04	W31(i155)	66 lb/ft	-	134 lb/ft	32 lb/ft		
Point	1-08-04	1-08-04	-	154.00 lb	-	171.00/-5.00 lb	103.00 lb		
Point	3-08-08	3-08-08	-	-	-	-3.00 lb	-		
Point	5-08-08	5-08-08	-	-	-	-3.00 lb	-		
Point	7-08-08	7-08-08	-	-	-	-3.00 lb	-		
Point	9-08-08	9-08-08	-	-	-	-3.00 lb	-		
Point	11-08-08	11-08-08	-	-	-	-7.00 lb	-		
Point	13-08-10	13-08-10	-	113.00 lb	-	87.00/-65.00 lb	53.00 lb		

#### Support Information:

				Maximum Analysis Reactions					
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow		
1	0-00	0-00	1BM1-3(i26)	888.00 lb	310.00 lb	738.00/-17.00 lb	368.00 lb		
2	14-06-04	14-09-12	W12(i15)	927.00 lb	295.00 lb	810.00/-72.00 lb	368.00 lb		
Connecto	r Information	<u>:</u>							
				Nailing Requirement	S				
Support	Manufacturer	Model	<u>Top</u>	<u>Face</u>	<u>Member</u>		Other Information		
1		MIU3.56/14	-	-	-	N/A	Connector manually specified by the user.		

#### Errors, Warnings & Notes:

\* The dead loads used in the design of this member were applied to the structure as projected dead loads.

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



Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine Member: 2 - 1 3/4" x 14" (2.0E 3100) LVL Label: 1BM5-2-i877 Page: 9 of 9 Date: 08/16/2021 14:30:41 Status: Design Passed

\* 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.

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