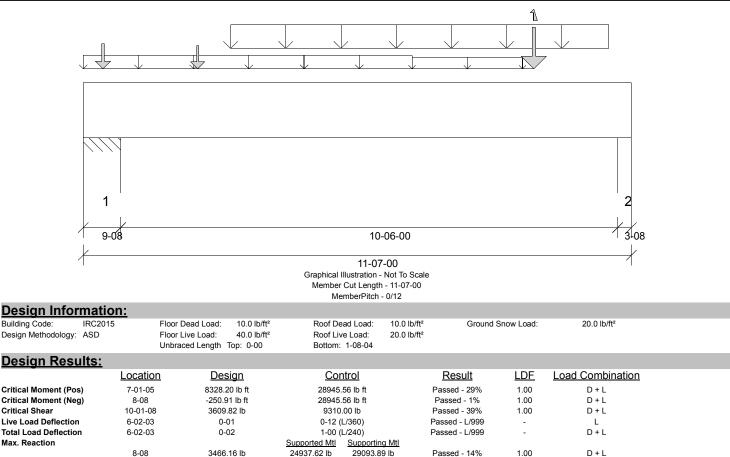


Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine

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

Label: 1BM1-2-i1248

Page: 1 of 11 Date: 08/17/2021 13:12:32 Status: Design Passed



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.

10718.73 lb

Passed - 40%

1.00

D + L

9187.48 lb

Loading:

				Maximum Load Magnitudes					
Type	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>		
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(i1345)	338.00 lb	1267.00/-55.00 lb	-	-		
Point	5-00	5-00	FJ16(i1259)	154.00 lb	616.00 lb	-	-		
Point	2-05-00	2-05-00	FJ16(i1261)	135.00 lb	538.00 lb	-	-		

Support Information:

			_	Maximum Analysis Reactions						
Support	<u>Start</u>	End	Source	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:

11-04-08

* 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.

3652.68 lb

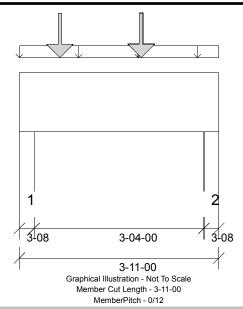
* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

- 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:

Design informat	<u>.ion.</u>							
Building Code: IRC20	015 Flo	or Dead Load: 10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground S	Snow Load:	20.0 lb/ft ²	
Design Methodology: ASD	Flo	or Live Load: 40.0 lb/ft ²	Roof Live Load:	20.0 lb/ft ²				
	Un	braced Length Top: 0-00	Bottom: 1-05-00					
Design Results:								
	Location	<u>Design</u>	<u>Control</u>		<u>Result</u>	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	I	Passed - 9%	1.00	D + L	
Live Load Deflection	1-11-10	0-00	0-12 (L/360)	P	assed - L/999	-	L	
Total Load Deflection	1-11-10	0-00	1-00 (L/240)	P	assed - L/999	-	D + L	
Max. Reaction			Supported Mtl Supporting	g Mtl				
	2-08	898.47 lb	9187.52 lb 10718.78	8lb F	Passed - 10%	1.00	D + L	
	3-08-08	614.22 lb	9187.63 lb 10718.90	0 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	<u>Snow</u>		
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(i1352)	139.00 lb	556.00 lb	-	-		
Point	2-04-12	2-04-12	FJ18(i1365)	140.00 lb	561.00 lb	-	-		
upport Info	rmation:								

			_		Maximum Anal	vsis Reactions	
Support	Start	End	Source	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:

* 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.

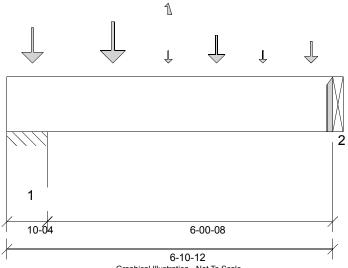
* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

- 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



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

Design Information:

Design informat	<u>1011.</u>						
Building Code: IRC20	015 Floor	Dead Load: 10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	20.0 lb/ft ²	
Design Methodology: ASD	Floor	Live Load: 40.0 lb/ft ²	Roof Live Load:	20.0 lb/ft ²			
	Unbra	iced Length Top: 0-00	Bottom: 1-01-08				
Design Results:							
	Location	<u>Design</u>	<u>Control</u>	Res	ult <u>LDF</u>	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			Supported Mtl Supportin	ng Mtl			
	9-04	3030.81 lb	26840.36 lb 31313.7	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:

				Maximum Load Magnitudes					
Type	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>		
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(i1350)	177.00 lb	710.00 lb	-	-		
Point	6-05-04	6-05-04	FJ18(i1321)	116.00 lb	462.00 lb	-	-		
Point	3-05-00	3-05-00	FJ20(i1299)	-	103.00/-75.00 lb	-	-		
Point	5-05-00	5-05-00	FJ4(i1341)	24.00 lb	95.00 lb	-	-		

Support Information:

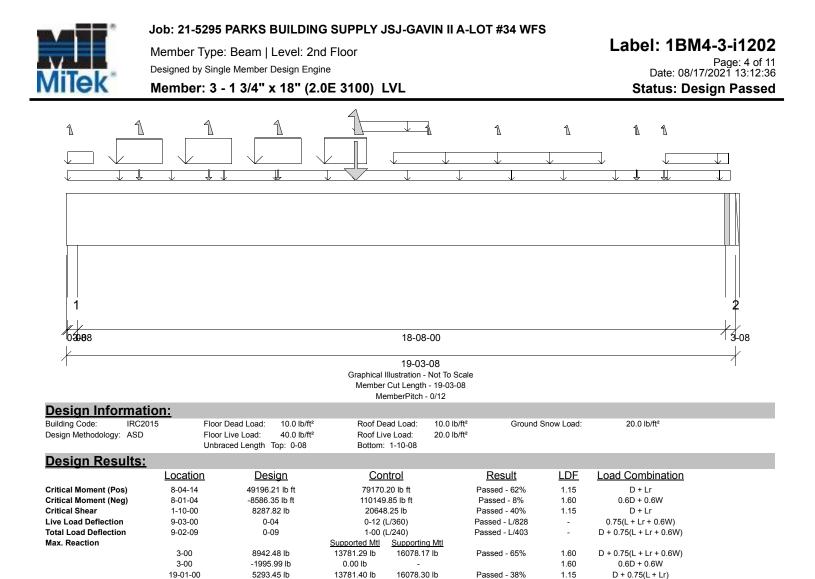
			_		Maximum Analy	sis Reactions	
Support	Start	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>
1	0-00	10-04	W39(i39)	646.00 lb	2406.00/-43.00 lb	-	-
2	6-10-12	6-10-12	1BM1-2(i1248)	338.00 lb	1267.00/-55.00 lb	-	-
Connector	r Information:	<u>.</u>					
			<u>N</u>	lailing Requireme	<u>nts</u>		
Support	Manufacturer	Model	<u>Top</u>	Face	Member	l ength	Other Information
2	Simpson	HHUS410	-	-	-	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.



Design Notes:

19-01-00

-587.04 lb

* 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.

1.60

0.6D + 0.6W

0.00 lb

Loading:

<u>aanigi</u>							
					Maximum Loa	ad Magnitudes	
<u>Type</u>	<u>Start</u>	End	Source	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)	-	-	106 lb/ft	44 lb/ft
Uniform	1-05-04	2-09-04	W61(i338)	512 lb/ft	-	520 lb/ft	218 lb/ft
Uniform	3-05-04	4-09-04	W61(i338)	524 lb/ft	-	543 lb/ft	228 lb/ft
Uniform	5-05-04	6-09-04	W61(i338)	525 lb/ft	-	546 lb/ft	229 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	-	3307.00 lb	122.00 lb	3235.00/-3.70 lb	1255.00 lb
Point	10-05-04	10-05-04	FJ8(i1256)	-	-5.00 lb	-	-
Point	12-05-04	12-05-04	FJ8(i1258)	-	-9.00 lb	-	-
Point	14-05-04	14-05-04	FJ8(i1373)	-	-9.00 lb	-	-
Point	16-05-04	16-05-04	FJ8(i1262)	-	174.00/-6.00 lb	-	-
Point	17-02-12	17-02-12	FJ8(i1367)	-	111.00/-2.00 lb	-	-
Point	1-04	1-04	W61(i338)	-	-	-	-
upport Info							
					Maximum Ana	lysis Reactions	

	<u>Maximum Analysis Reactions</u>							
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow	
1	0-08	4-00	W23(i25)	4668.00 lb	648.00/-9.00 lb	4244.00/-12.00 lb	1836.00 lb	
2	19-00-00	19-03-08	W39(i39)	2757.00 lb	1179.00/-22.00 lb	2174.00/-4.00 lb	898.00 lb	

Errors, Warnings & Notes:

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

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



MiTek*

Member Type: Beam | Level: 2nd Floor Designed by Single Member Design Engine Label: 1BM4-3-i1202 Page: 5 of 11 Date: 08/17/2021 13:12:36 Status: Design Passed

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

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

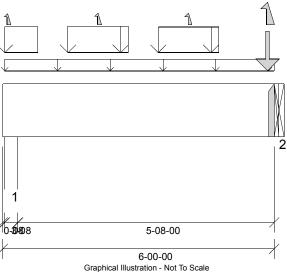
* The member graphic, dimensions, and locations shown on this report are based on the centerline of the member.
* Analysis and Design has been performed using precision loading from actual modeled conditions. Some loads may have been modified to simplify reporting.

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



Member Cut Length - 6-00-00 MemberPitch - 0/12

Design Information:

Design morm									
Building Code: IR	C2015	Floor Dead Load:	10.0 lb/ft ² Ro	oof Dead Load:	10.0 lb/ft ²	Ground S	Snow Load:	20.0 lb/ft ²	
Design Methodology: AS	SD	Floor Live Load:	40.0 lb/ft ² Ro	oof Live Load:	20.0 lb/ft ²				
		Unbraced Length T	Гор: 0-08 Вс	ottom: 5-08-00					
Design Result	<u>s:</u>								
	Locatio	<u>n Des</u>	ign	<u>Control</u>		<u>Result</u>	<u>LDF</u>	Load Combination	
Critical Moment (Pos)	3-09-02	1550.0	5 lb ft 1	16643.70 lb ft		Passed - 9%	1.15	D + Lr	
Critical Moment (Neg)	4-01-04	-369.93	3 lb ft 2	23156.44 lb ft		Passed - 2%	1.60	0.6D + 0.6W	
Critical Shear	4-10-00	1132.5	52 lb	5353.25 lb		Passed - 21%	1.15	D + Lr	
Live Load Deflection	3-02-06	0-0	0	0-12 (L/360)		Passed - L/999	-	0.6W	
Total Load Deflection	3-02-08	0-0	0	1-00 (L/240)		Passed - L/999	-	D + 0.75(L + Lr + 0.6W)	
Max. Reaction			Supported	<u>Mtl</u> Supportin	ig Mtl				
	2-04	1069.1	14 lb 4593.73	lb 5359.3	3 lb	Passed - 23%	1.60	D + 0.75(L + Lr + 0.6W)	
	2-04	-282.7	74 lb 0.00 lb	- 0			1.60	0.6D + 0.6W	
	6-00-00	6391.7	77 lb 6391.77	lb 0.00 l	b	Passed - 100%	1.15	D + Lr	
	6-00-00	-761.8	37 lb 0.00 lb	- 0			1.60	0.6D + 0.6W	

Design Notes:

Loading:

				Maximum Load Magnitudes					
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>		
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)	211 lb/ft	-	182 lb/ft	63 lb/ft		
Uniform	1-05-04	2-09-04	W60(i340)	180 lb/ft	-	202 lb/ft	70 lb/ft		
Uniform	3-05-04	4-09-04	W60(i340)	176 lb/ft	-	185 lb/ft	65 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)	3013.00 lb	-	2975.00/-3.00 lb	1165.00 lb		

Support Information:

					Maximum Analy	sis Reactions	
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>
1	0-08	4-00	W34(i26)	440.00 lb	129.00 lb	389.00 lb	135.00 lb
2	6-00-00	6-00-00	1BM4-3(i1202)	3307.00 lb	122.00 lb	3235.00/-3.00 lb	1255.00 lb
Connecto	r Information:	•					
			<u>N</u>	ailing Requiremer	<u>nts</u>		
Support	Manufacturer	Model	<u>Top</u>	Face	Member	l ength	Other Information
2		IUS1.81/14	-	-	-	N/A	Connector manually specified by the user.

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

Member: 1 - 14" NI-40x

Status: Design Passed

\checkmark		\downarrow \downarrow		```		\checkmark		\checkmark			
											1
-08					15-00	-04					/
					15-06-	02					
					10-00-	-02					
					al Illustration - I						
					er Cut Length MemberPitch -						
Design Informa Building Code: IRC		Floor Dead Load:	10.0 lb/ft ²	Deef	Dead Load:	10.0 lb/ft ²	Crowned	Snow Load:	20.0	lb/ft ²	
Design Methodology: ASI	D	Floor Live Load:	40.0 lb/ft ²	Roof	Live Load:	20.0 lb/ft ²	Ground	SHOW LOAD.	20.0	ID/IL	
Design Results		Unbraced Length	lop: 0-00	Bottor	m: 15-00-04						
Design Results	<u>Locatior</u>	<u>n De</u>	<u>sian</u>	C	ontrol		<u>Result</u>	LDF	Load Cor	nbination	
Critical Moment (Pos)	7-09-10		31 lb ft		0.03 lb ft		Passed - 64%	1.00	D+		
Critical Shear Live Load Deflection	15-03-11		.62 lb		30.00 lb		Passed - 43% Passed - L/999	1.00	D + L		
Total Load Deflection	7-09-10 7-09-10		03 03		2 (L/480)) (L/240)		Passed - L/999 Passed - L/851	-	D +		
Max. Reaction				Supported Mt		<u>Mtl</u>					
	2-08 15-04-12		52 lb 31 lb	1500.00 lb 1387.50 lb	7656.23 5195.35		Passed - 51% Passed - 56%	1.00 1.00	D + D +		
Design Notes:	13-04-12	780.	0110	1307.3010	5155.55	ID ID	r asseu - 30 /0	1.00			
Loading:											
							Maximum Lo	ad Magnit	udes		
<u>Type</u>	<u>Start</u>	End	Source		Dead		Floor Live	-	of Live	Snow	
Uniform	1-12	15-06-02	FC1 Floor Dec	king	20 lb/ft		80 lb/ft		-	-	
Support Inform	nation:										
							Maximum Ana	lysis Rea	ctions		
Support	<u>Start</u>	End	Source		Dead		Floor Live	Roc	of Live	<u>Snow</u>	
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		-	-	

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

Status: Design Passed

						\checkmark			\downarrow	\checkmark		
/												
08					17-00	-04						12
					17-06	-02						/
				Membe	Illustration - r Cut Length emberPitch -	- 17-06-02						
Design Information												
Building Code: IRC201 Design Methodology: ASD	FI	oor Dead Load: oor Live Load: nbraced Length	10.0 lb/ft ² 40.0 lb/ft ² Top: 0-00	Roof Li	ead Load: ve Load: : 17-00-04	10.0 lb/ft ² 20.0 lb/ft ²	Grour	nd Snow Load:	20	.0 lb/ft ²		
<u>Design Results:</u>		-										
	Location	Des	<u>ign</u>	<u>Co</u>	ntrol		<u>Result</u>	<u>LDF</u>	Load Co	mbination		
Critical Moment (Pos)	8-09-10	2951.4	3 lb ft	4530	.03 lb ft		Passed - 65%	1.00	C) + L		
Critical Shear	17-03-11	680.			0.00 lb		Passed - 39%	1.00) + L		
Live Load Deflection	8-09-10	0-0			(L/480)		Passed - L/931	-		L		
Total Load Deflection	8-09-10	0-0			(L/240)		Passed - L/745	-	C) + L		
Max. Reaction	2-08	691.		Supported Mtl 1500.00 lb	Supporting 7656.30		Passed - 46%	1.00	Г) + L		
	17-04-12	703.		1387.50 lb	5195.35		Passed - 40 % Passed - 51%	1.00) + L		
Design Notes:												
Loading:												
. .		– .						_oad Magnit				
	tart	End	<u>Source</u>		<u>Dead</u>		Floor Live	Roc	of Live	<u>Sno</u>	W	
Uniform	-12	17-06-02	FC1 Floor Dec	alcin a	16 lb/ft		64 lb/ft			-		

Support Information:

			_		Maximum Anal	<u>ysis Reactions</u>	
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>
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	-	-

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

		\checkmark	\checkmark			\checkmark	\checkmark	
			 				 	 Η
1								2
2-06	;			18	-08-00			3-0

19-01-14

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

Design Infor	<u>mation:</u>									
Building Code:	IRC2015	Floor Dead Load:	10.0 lb/ft ²	Roof De	ad Load: 1	0.0 lb/ft ²	Ground S	now Load:	20.0 lb/ft ²	
Design Methodology:	ASD	Floor Live Load:	40.0 lb/ft ²	Roof Liv	/e Load: 2	20.0 lb/ft ²				
		Unbraced Length	Top: 0-00	Bottom:	18-08-00					
Design Resu	<u>ults:</u>									
	Locatio	n <u>De</u>	<u>sign</u>	<u>Cor</u>	<u>ntrol</u>		<u>Result</u>	<u>LDF</u>	Load Combination	
Critical Moment (Pos	s) 9-06-06	2955.	16 lb ft	4530.0	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	n 9-06-06	0-	04	0-12 (L/480)		Passed - L/851	-	L	
Total Load Deflection	n 9-06-06	0-	05	1-00 (L/240)		Passed - L/681	-	D + L	
Max. Reaction				Supported Mtl	Supporting M	<u>1ti</u>				
	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:

				Maximum Load Magnitudes						
<u>Type</u>	<u>Start</u>	End	Source	<u>Dead</u>	Floor Live	Roof Live	<u>Snow</u>			
Uniform	0-00	19-00-02	FC1 Floor Decking	13 lb/ft	53 lb/ft	-	-			
Support Info	rmation:									
					Maximum Anal	<u>ysis Reactions</u>				
Support	Start	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>			
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:

* 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.

MiTek*

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

Member: 1 - 14" NI-40x

,							
,							
-08			1	7-04-08			1
			4	7 10 06			

17-10-06

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

Design Infor	mation:						
Building Code:	IRC2015	Floor Dead Load: 10.0 lb	/ft ² Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	20.0 lb/ft ²	
Design Methodology:	ASD	Floor Live Load: 40.0 lb	/ft ² Roof Live Load:	20.0 lb/ft ²			
		Unbraced Length Top: 0-0	Bottom: 17-04-08				
Design Resu	<u>ults:</u>						
	Locatio	on <u>Design</u>	<u>Control</u>	<u>Resu</u>	<u>lt LDF</u>	Load Combination	
Critical Moment (Pos	s) 8-11-12	2 3845.43 lb ft	4530.03 lb ft	Passed -	85% 1.00	D + L	
Critical Shear	17-07-1	5 868.32 lb	1730.00 lb	Passed -	50% 1.00	D + L	
Live Load Deflection	1 8-11-12	2 0-05	0-12 (L/480)	Passed - I	_/724 -	L	
Total Load Deflection	n 8-11-12	2 0-06	1-00 (L/240)	Passed - I	_/579 -	D + L	
Max. Reaction			Supported Mtl Supporting	Mtl			
	2-08	883.25 lb	1500.00 lb 7656.21 l	b Passed -	59% 1.00	D + L	
	17-09-0	0 898.00 lb	1387.50 lb 5195.30 l	b Passed -	65% 1.00	D + L	

Design Notes:

Loading:

					Maximum Loa	d Magnitudes	
<u>Type</u>	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<u>Snow</u>
Uniform	1-12	17-10-06	FC1 Floor Decking	20 lb/ft	80 lb/ft	-	-
Support Info	rmation:						
					Maximum Anal	<u>ysis Reactions</u>	
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	<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:

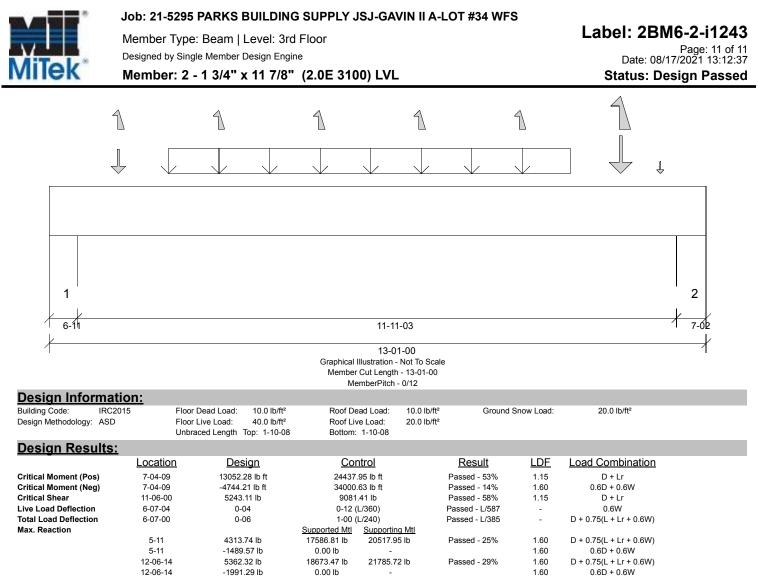
* The dead loads used in the design of this member were applied to the structure as projected dead loads.

* 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.



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	<u>Dead</u>	Floor Live	Roof Live	<u>Snow</u>				
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)	1048.00 lb	-	1428.00/-2.00 lb	599.00 lb				
Point	12-02-01	12-02-01	A5A(c01)	333.00 lb	-	-	-				

Support Information:

			_	Maximum Analysis Reactions							
Support	<u>Start</u>	End	Source	Dead	Floor Live	Roof Live	Snow				
1	0-00	6-11	-	2157.00 lb	-	2085.00/-1.00 lb	874.00 lb				
++>	2-02	2-02	W49(i343)	1360.00 lb	-	1315.00/-1.00 lb	551.00 lb				
++>	6-00	6-00	W50(i333)	797.00 lb	-	770.00 lb	323.00 lb				
2	12-05-14	13-01-00	-	2673.00 lb	-	2590.00/-3.00 lb	1086.00 lb				
++>	12-06-10	12-06-10	W52(i339)	930.00 lb	-	901.00/-1.00 lb	378.00 lb				
++>	12-10-11	12-10-11	W53(i345)	1743.00 lb	-	1689.00/-2.00 lb	708.00 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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* 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.