

Design Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'-1/2"	Bottom:	11'-8 1/2"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	6'- 3 1/8"	11744.29 lb ft	22872.20 lb ft	Passed - 51%	1.15	D + Lr
Critical Moment (Neg)	6'- 4 3/4"	-1549.68 lb ft	7937.41 lb ft	Passed - 20%	1.60	0.6D + 0.6W
Critical Shear	1'- 5 3/8"	3326.01 lb	9081.41 lb	Passed - 37%	1.15	D + Lr
Live Load Deflection	6'- 3 1/16"	0'- 3/16"	0'- 3/4" (L/360)	Passed - L/887	-	0.75(L + Lr + 0.6W)
Total Load Deflection	6'- 3 1/16"	0'- 5/16"	0'- 1" (L/240)	Passed - L/444	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction			Supported Mt Supporting Mt			
	0'- 4 1/2"	4290.11 lb	14437.48 lb 25467.71 lb	Passed - 30%	1.15	D + Lr
	0'- 4 1/2"	-553.33 lb	20086.93 lb -	Passed - 3%	1.60	0.6D + 0.6W
	12'- 1 1/2"	3768.32 lb	14437.67 lb 13956.41 lb	Passed - 27%	1.15	D + Lr
	12'- 1 1/2"	-530.28 lb	20087.19 lb -	Passed - 4%	1.60	0.6D + 0.6W

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

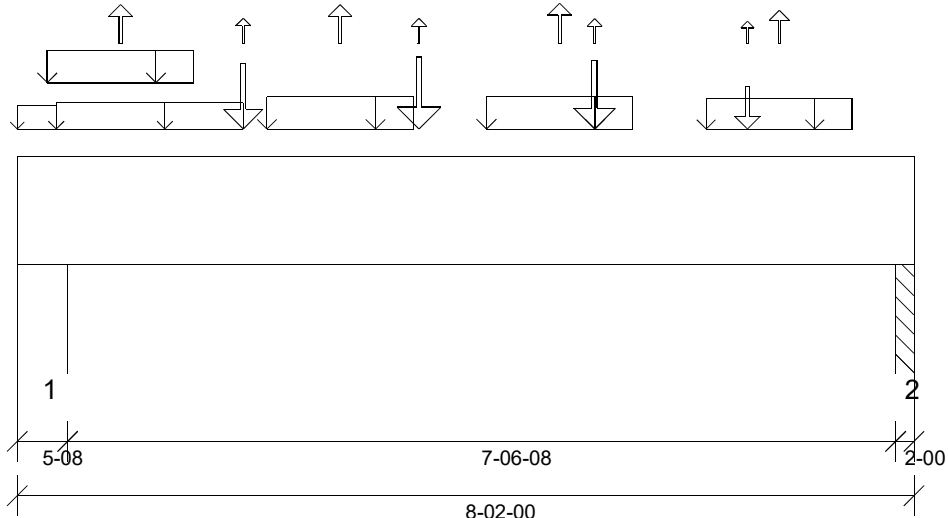
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	12'- 6"	Self Weight	12 lb/ft	-	-	-
Uniform	0'	12'- 4 3/8"	Ca1(i1191)	4 lb/ft	-	-	-
Uniform	0'	1'- 3/4"	Ca1(i1191)	428 lb/ft	-	377 lb/ft	-
Uniform	5'	12'- 4 3/8"	Ca1(i1191)	-	2 lb/ft	-	-
Uniform	11'- 8 3/4"	12'- 4 3/8"	Ca1(i1191)	104 lb/ft	-	152 lb/ft	-
Tapered	1'- 4 3/4"	11'- 4 3/4"	Ca1(i1191)	336 To 337 lb/ft	-	337 To 342 lb/ft	-
Point	0'- 3/8"	0'- 3/8"	Ca1(i1191)	27.00 lb	-	24.00 lb	-
Point	0'- 4 3/4"	0'- 4 3/4"	Ca1(i1191)	-	-	-48.00 lb	-
Point	2'- 4 3/4"	2'- 4 3/4"	Ca1(i1191)	-	-	-64.00 lb	-
Point	4'- 4 3/4"	4'- 4 3/4"	Ca1(i1191)	-	-	-64.00 lb	-
Point	6'- 4 3/4"	6'- 4 3/4"	Ca1(i1191)	-	-	-64.00 lb	-
Point	8'- 4 3/4"	8'- 4 3/4"	Ca1(i1191)	-	-	-68.00 lb	-
Point	10'- 4 3/4"	10'- 4 3/4"	Ca1(i1191)	-	-	-68.00 lb	-
Point	12'- 5 1/2"	12'- 5 1/2"	Ca1(i1196)	10.00 lb	-	14.00/-5.00 lb	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 5 1/2"	E3(i31)	2217.00 lb	4.00 lb	2073.00/-204.00 lb	-
2	12'- 1/2"	12'- 6"	PBO13(i234)	1909.00 lb	10.00 lb	1860.00/-173.00 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 sloped 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.



8-02-00
 Graphical Illustration - Not To Scale
 Member Cut Length - 8'- 2"
 MemberPitch - 0/12

Design Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'	Bottom:	7'- 8 1/2"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	3'- 7 7/8"	2233.18 lb ft	19899.97 lb ft	Passed - 11%	1.00	D + L
Critical Moment (Neg)	0'- 4 1/2"	-4.21 lb ft	19899.97 lb ft	Passed - 0%	1.00	D + L
Critical Shear	1'- 5 3/8"	898.18 lb	7896.87 lb	Passed - 11%	1.00	D + L
Live Load Deflection	4'- 2 3/8"	0'	0'- 3/4" (L/360)	Passed - L/999	-	0.75(L + Lr + 0.6W)
Total Load Deflection	4'- 2 7/16"	0'	0'- 1" (L/240)	Passed - L/999	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction	0'- 4 1/2"	1107.29 lb	Supported Mt: 14437.41 lb Supporting Mt: 25467.60 lb	Passed - 8%	1.00	D + L
	8'- 1"	887.01 lb	5250.78 lb 5075.75 lb	Passed - 17%	1.00	D + L

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

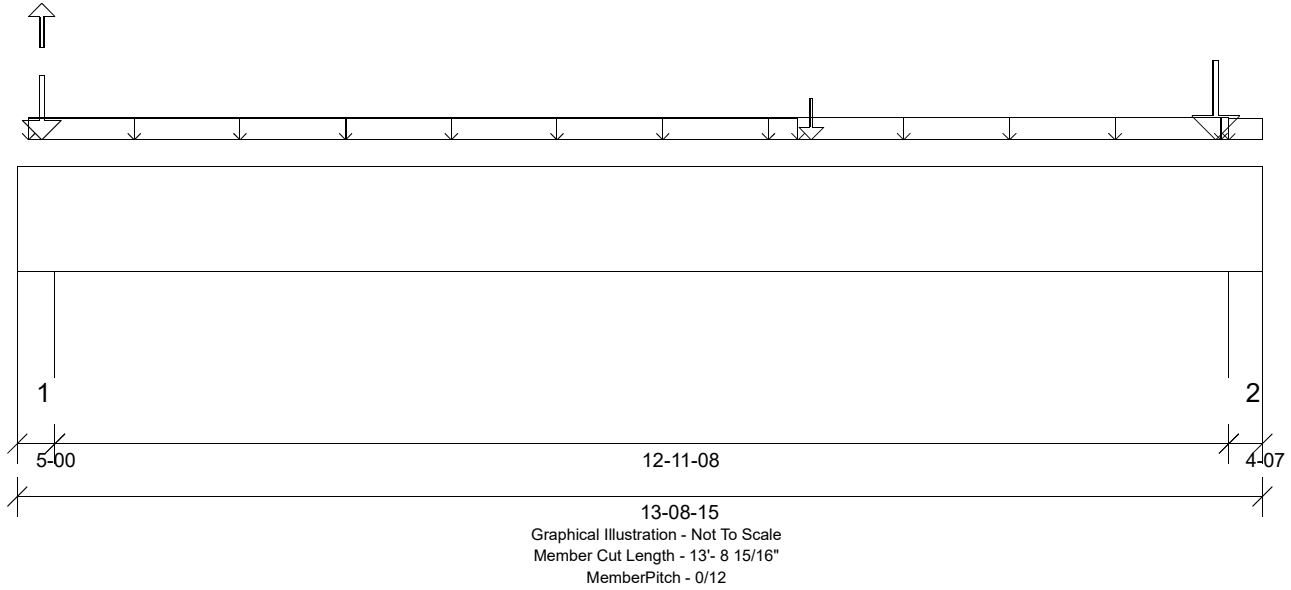
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	8'- 2"	Self Weight	12 lb/ft	-	-	-
Uniform	0'	0'- 4 1/4"	Ca1(i1196)	8 lb/ft	34 lb/ft	-	-
Uniform	0'- 3 1/4"	1'- 7 1/4"	Ca1(i1196)	71 lb/ft	-	71 lb/ft	-
Uniform	0'- 4 1/4"	2'- 11/16"	Ca1(i1196)	17 lb/ft	68 lb/ft	-	-
Uniform	2'- 3 1/4"	3'- 7 1/4"	Ca1(i1196)	70 lb/ft	-	71 lb/ft	-
Uniform	4'- 3 1/4"	5'- 7 1/4"	Ca1(i1196)	74 lb/ft	-	74 lb/ft	-
Uniform	6'- 3 1/4"	7'- 7 1/4"	Ca1(i1196)	61 lb/ft	-	68 lb/ft	-
Point	0'- 11 5/16"	0'- 11 5/16"	Ca1(i1196)	-	-	-	-
Point	2'- 11/16"	2'- 11/16"	J24(i1178)	65.00 lb	303.00/-41.00 lb	-	-
Point	2'- 11 5/16"	2'- 11 5/16"	Ca1(i1196)	-	-	-	-
Point	3'- 7 7/8"	3'- 7 7/8"	J24(i1177)	77.00 lb	346.00/-39.00 lb	-	-
Point	4'- 11 5/16"	4'- 11 5/16"	Ca1(i1196)	-	-	-	-
Point	5'- 3 1/8"	5'- 3 1/8"	J24(i1176)	72.00 lb	323.00/-37.00 lb	-	-
Point	6'- 7 13/16"	6'- 7 13/16"	J24(i1175)	33.00 lb	150.00/-17.00 lb	-	-
Point	6'- 11 5/16"	6'- 11 5/16"	Ca1(i1196)	-	-	-	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 5 1/2"	-	410.00 lb	695.00/-71.00 lb	206.00 lb	-
++>	0'- 1"	0'- 1"	E6(i8)	149.00 lb	253.00/-26.00 lb	75.00 lb	-
++>	0'- 3 3/4"	0'- 3 3/4"	E5(i3)	261.00 lb	442.00/-45.00 lb	131.00 lb	-
2	8'	8'- 2"	PBO13(i234)	334.00 lb	555.00/-63.00 lb	173.00 lb	-

Errors, Warnings & Notes:

- * The dead loads used in the design of this member were applied to the structure as sloped 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 Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'	Bottom:	8'- 2 7/16"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	8'- 9 3/16"	4394.55 lb ft	27030.46 lb ft	Passed - 16%	1.00	D + L
Critical Moment (Neg)	0'- 4"	-112.71 lb ft	31085.03 lb ft	Passed - 0%	1.15	D + Lr
Critical Shear	12'- 2 1/2"	858.62 lb	9310.00 lb	Passed - 9%	1.00	D + L
Live Load Deflection	7'- 4 11/16"	0'- 1/16"	0'- 3/4" (L/360)	Passed - L/999	-	L
Total Load Deflection	7'- 4 3/8"	0'- 1/16"	0'- 1" (L/240)	Passed - L/999	-	D + L
Max. Reaction			Supported Mt/ Supporting Mt/			
	0'- 4"	2147.64 lb	13124.94 lb / 7437.46 lb	Passed - 29%	1.15	D + 0.75(L + Lr)
	0'- 4"	-112.57 lb	18260.78 lb / -	Passed - 2%	1.60	0.6D + 0.6W
	13'- 5 1/2"	3747.30 lb	11680.26 lb / 6618.81 lb	Passed - 57%	1.00	D + L

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	13'- 8 15/16"	Self Weight	14 lb/ft	-	-	-
Uniform	0'- 1 1/2"	8'- 7 7/16"	FC1 Floor Material	5 lb/ft	20 lb/ft	-	-
Uniform	8'- 7 7/16"	13'- 4 1/2"	FC1 Floor Material	8 lb/ft	32 lb/ft	-	-
Uniform	13'- 4 1/2"	13'- 8 15/16"	FC1 Floor Material	5 lb/ft	18 lb/ft	-	-
Point	8'- 9 3/16"	8'- 9 3/16"	FBM7(i1128)	248.00 lb	788.00 lb	-	-
Point	13'- 2 3/4"	13'- 2 3/4"	FBM4(i1149)	636.00 lb	2176.00 lb	-	-
Point	0'- 3 1/4"	0'- 3 1/4"	E18(i38)	886.00 lb	-	899.00/-85.00 lb	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 5"	1(i11)	1132.00 lb	434.00 lb	922.00/-87.00 lb	-
2	13'- 4 1/2"	13'- 8 15/16"	15(i364)	912.00 lb	2856.00 lb	2.00/-23.00 lb	-

Errors, Warnings & Notes:

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

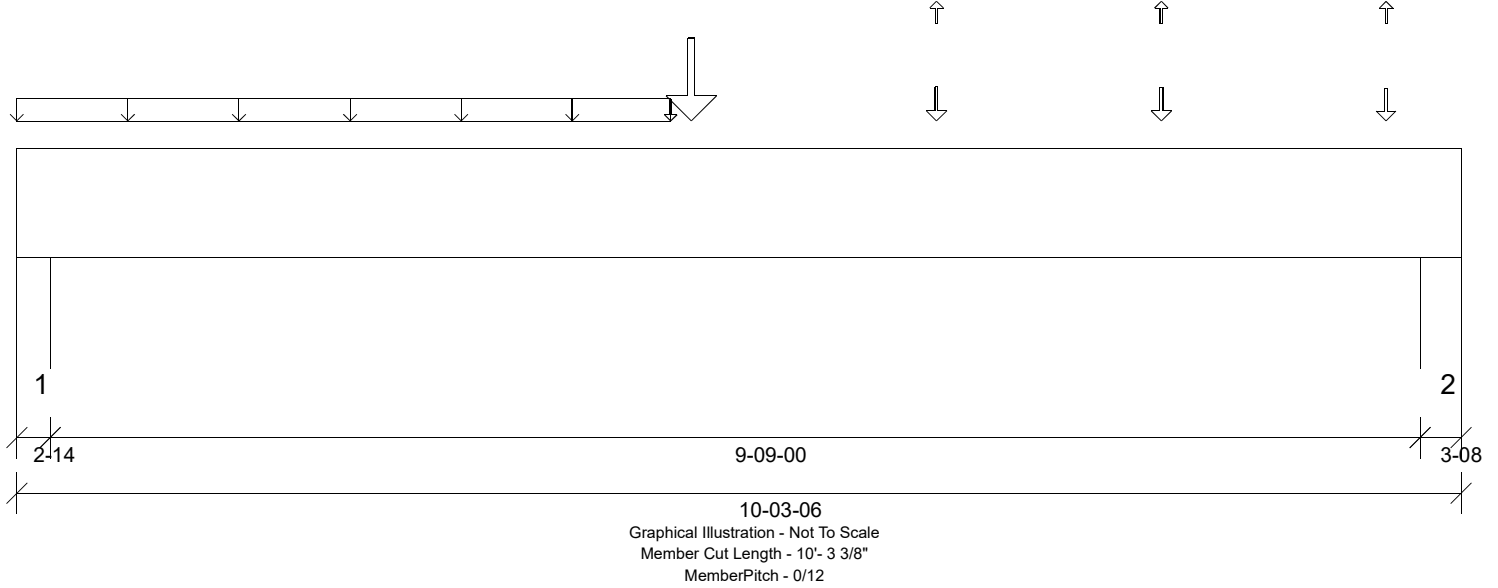


Job: Q2001104
 Member Type: Beam | Level: 1st Floor
 MiTek SAPPiRE™ Structure Version 8.3.2.221.Update7
 Designed by Single Member Design Engine
Member: 2 - 1-3/4X9-1/4 LP-LVL 2900Fb-2.0E

Label: DBM3-i1232

Page: 4 of 10
 Date: 08/07/2020 09:31:35

Status: Design Passed



Design Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'	Bottom:	9'- 9"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination			
Critical Moment (Pos)	4'- 9 5/8"	6062.17 lb ft	12415.55 lb ft	Passed - 49%	1.00	D + L			
Critical Shear	9'- 2 5/8"	1529.97 lb	6151.25 lb	Passed - 25%	1.00	D + L			
Live Load Deflection	5'- 1 11/16"	0'- 3/16"	0'- 3/4" (L/360)	Passed - L/739	-	L			
Total Load Deflection	5'- 1 9/16"	0'- 3/16"	0'- 1" (L/240)	Passed - L/565	-	D + L			
Max. Reaction	0'- 1 7/8"	1384.67 lb	Supported Mt	7482.26 lb	Supporting Mt	13198.70 lb	Passed - 19%	1.00	D + L
	10'- 7/8"	1906.82 lb	9187.57 lb	16206.88 lb	Passed - 21%	1.00	D + L		

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

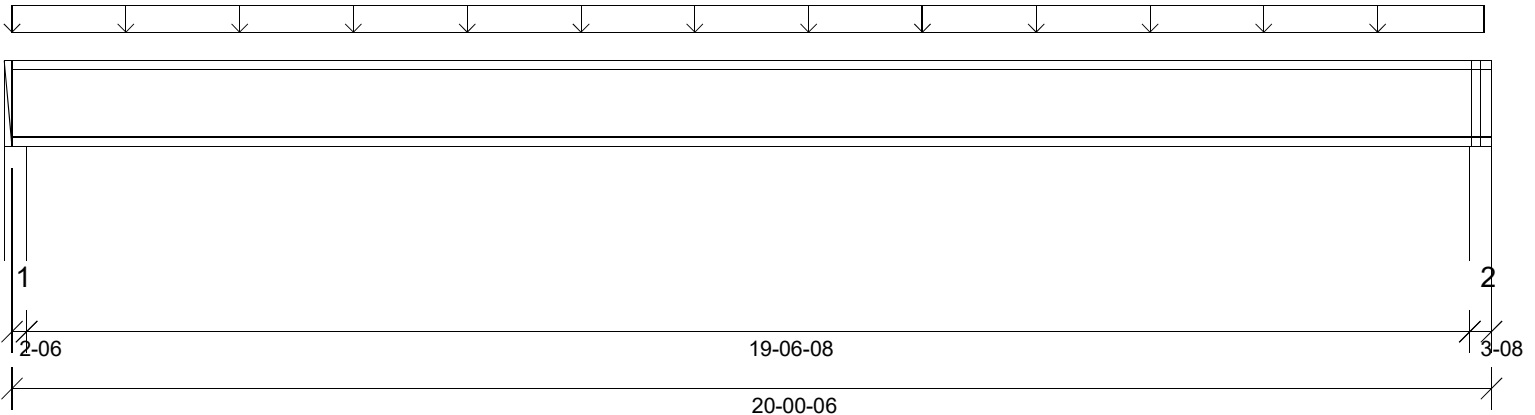
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	10'- 3 3/8"	Self Weight	9 lb/ft	-	-	-
Uniform	-0'	4'- 7 7/8"	Ca1(i1218)	5 lb/ft	18 lb/ft	-	-
Point	4'- 7 7/8"	4'- 7 7/8"	Ca1(i1218)	1.00 lb	3.00 lb	-	-
Point	4'- 9 5/8"	4'- 9 5/8"	FBM6(i1144)	448.00 lb	1466.00 lb	-	-
Point	6'- 6 9/16"	6'- 6 9/16"	J24(i1178)	72.00 lb	340.00/-55.00 lb	-	-
Point	8'- 1 3/4"	8'- 1 3/4"	J24(i1177)	68.00 lb	325.00/-53.00 lb	-	-
Point	9'- 8 15/16"	9'- 8 15/16"	J24(i1176)	63.00 lb	304.00/-50.00 lb	-	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 2 7/8"	15(i364)	343.00 lb	1041.00/-31.00 lb	-	-
2	9'- 11 7/8"	10'- 3 3/8"	10(i34)	425.00 lb	1483.00/-127.00 lb	-	-

Errors, Warnings & Notes:

- * The dead loads used in the design of this member were applied to the structure as sloped 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 - 20'- 3/8"
 MemberPitch - 0/12

Design Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'	Bottom:	19'- 6 1/2"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	9'- 11 5/8"	3883.32 lb ft	4400.03 lb ft	Passed - 88%	1.00	D + L	
Critical Shear	0'- 2 7/16"	781.30 lb	1680.00 lb	Passed - 47%	1.00	D + L	
Live Load Deflection	9'- 11 5/8"	0'- 7/16"	0'- 3/4" (L/480)	Passed - L/568	-	L	
Total Load Deflection	9'- 11 5/8"	0'- 1/2"	0'- 1" (L/240)	Passed - L/454	-	D + L	
Max. Reaction	0'- 1 3/8"	805.05 lb	Supported Mt 1050.50 lb	Supporting Mt 2523.46 lb	Passed - 77%	1.00	D + L
	19'- 9 7/8"	796.62 lb	1154.00 lb	3718.77 lb	Passed - 69%	1.00	D + L

Loading:

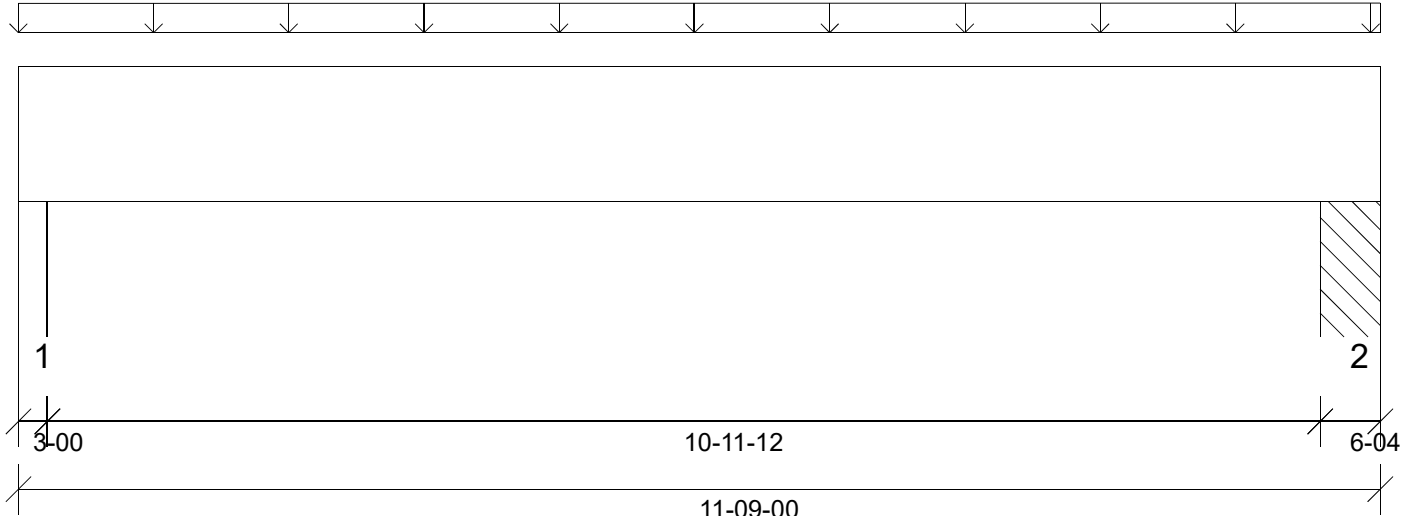
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Uniform	0'	19'- 11 1/8"	FC1 Floor Material	16 lb/ft	64 lb/ft	-	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 2 3/8"	2(i12)	161.00 lb	644.00 lb	-	-
2	19'- 8 7/8"	20'- 3/8"	E5(i3)	159.00 lb	637.00 lb	-	-

Errors, Warnings & Notes:

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



Graphical Illustration - Not To Scale
 Member Cut Length - 11'- 9"
 MemberPitch - 0/12

Design Information:

Building Code: IRC 2018	Floor Dead Load: 10.0 lb/ft ²	Roof Dead Load: 10.0 lb/ft ²	Ground Snow Load: 0.0 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'	Bottom: 11'- 6"	

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	5'- 8 7/8"	980.04 lb ft	27030.46 lb ft	Passed - 4%	1.00	D + L
Critical Moment (Neg)	11'- 3 3/4"	-6.03 lb ft	27030.46 lb ft	Passed - 0%	1.00	D + L
Critical Shear	10'- 3/4"	274.47 lb	9310.00 lb	Passed - 3%	1.00	D + L
Live Load Deflection	5'- 8 7/8"	0'	0'- 3/4" (L/360)	Passed - L/999	-	L
Total Load Deflection	5'- 8 7/8"	0'	0'- 1" (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 2"	362.27 lb	Supported Mt/ 7880.08 lb	Passed - 8%	1.00	D + L
	11'- 3 3/4"	381.73 lb	Supporting Mt/ 4465.38 lb	Passed - 2%	1.00	D + L
			16339.52 lb	15794.87 lb		

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	11'- 9"	Self Weight	14 lb/ft	-	-	-
Tapered	-0'	11'- 9"	FC1 Floor Material	10 lb/ft	39 To 40 lb/ft	-	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 3"	5(i24)	137.00 lb	226.00 lb	-	-
2	11'- 2 3/4"	11'- 9"	PBO1(i25)	144.00 lb	238.00 lb	-	-

Errors, Warnings & Notes:

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



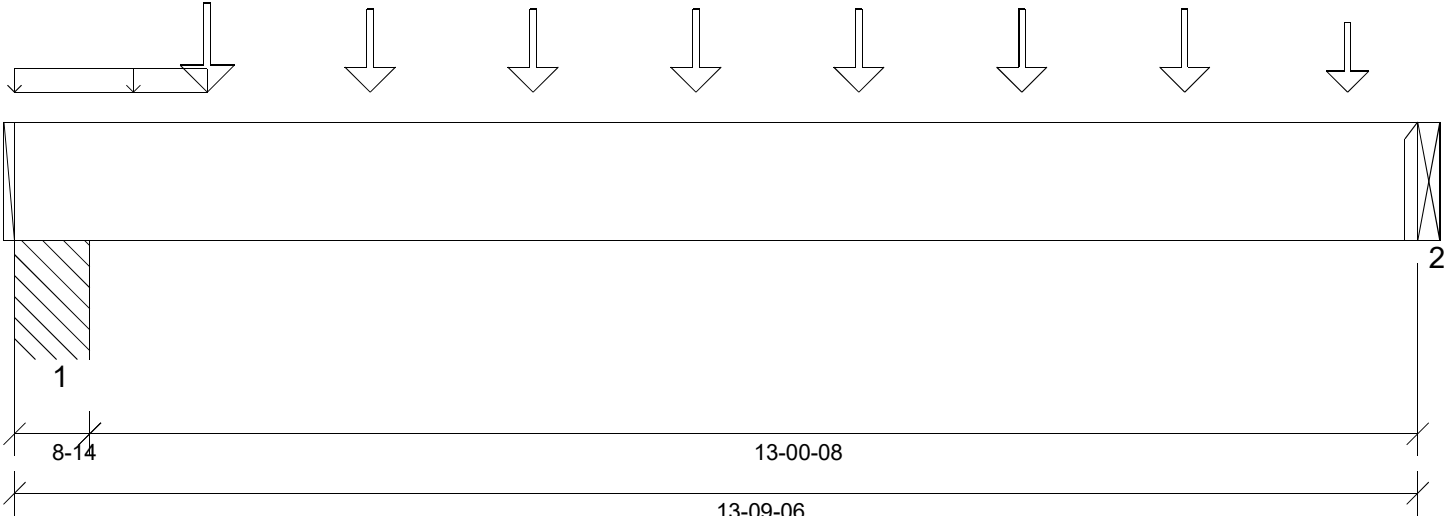
Job: Q2001104
 Member Type: Beam | Level: 1st Floor
 MiTek SAPPHERE™ Structure Version 8.3.2.221.Update7
 Designed by Single Member Design Engine

Label: FBM5-i1149

Page: 7 of 10
 Date: 08/07/2020 09:31:35

Member: 2 - 1-3/4X14 LP-LVL 2900Fb-2.0E

Status: Design Passed



13-09-06
 Graphical Illustration - Not To Scale
 Member Cut Length - 13'- 9 3/8"
 MemberPitch - 0/12

Design Information:

Building Code: IRC 2018	Floor Dead Load: 10.0 lb/ft²	Roof Dead Load: 10.0 lb/ft²	Ground Snow Load: 0.0 lb/ft²
Design Methodology: ASD	Floor Live Load: 40.0 lb/ft²	Roof Live Load: 20.0 lb/ft²	
	Unbraced Length Top: 0'	Bottom: 1'- 7 1/4"	

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	6'- 8 5/16"	9572.16 lb ft	27030.46 lb ft	Passed - 35%	1.00	D + L
Critical Moment (Neg)	0'- 7 7/8"	-7.04 lb ft	27030.46 lb ft	Passed - 0%	1.00	D + L
Critical Shear	12'- 7 3/8"	2259.68 lb	9310.00 lb	Passed - 24%	1.00	D + L
Live Load Deflection	7'- 2 1/2"	0'- 1/8"	0'- 3/4" (L/360)	Passed - L/999	-	L
Total Load Deflection	7'- 2 1/2"	0'- 3/16"	0'- 1" (L/240)	Passed - L/822	-	D + L
Max. Reaction	0'- 7 7/8"	2805.90 lb	Supported MtI: 23285.78 lb Supporting MtI: 22509.59 lb	Passed - 12%	1.00	D + L
	13'- 9 3/8"	2812.01 lb	3937.50 lb 0.00 lb	Passed - 71%	1.00	D + L

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	-0'	13'- 9 3/8"	Self Weight	14 lb/ft	-	-	-
Tapered	-0'	1'- 10 3/4"	FC1 Floor Material	3 lb/ft	12 To 11 lb/ft	-	-
Point	1'- 10 3/4"	1'- 10 3/4"	J18(i1215)	150.00 lb	600.00 lb	-	-
Point	3'- 5 15/16"	3'- 5 15/16"	J18(i1214)	137.00 lb	548.00 lb	-	-
Point	5'- 1 1/8"	5'- 1 1/8"	J18(i1213)	137.00 lb	548.00 lb	-	-
Point	6'- 8 5/16"	6'- 8 5/16"	J18(i1212)	137.00 lb	548.00 lb	-	-
Point	8'- 3 1/2"	8'- 3 1/2"	J18(i1211)	137.00 lb	548.00 lb	-	-
Point	9'- 10 3/4"	9'- 10 3/4"	J18(i1210)	137.00 lb	548.00 lb	-	-
Point	11'- 5 15/16"	11'- 5 15/16"	J18(i1209)	137.00 lb	548.00 lb	-	-
Point	13'- 1 1/8"	13'- 1 1/8"	J18(i1208)	107.00 lb	429.00 lb	-	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	-0'	0'- 8 7/8"	PBO1(i25)	642.00 lb	2164.00 lb	-	-
2	13'- 9 3/8"	13'- 9 3/8"	FBM3(i1142)	636.00 lb	2176.00 lb	-	-

Connector Information:

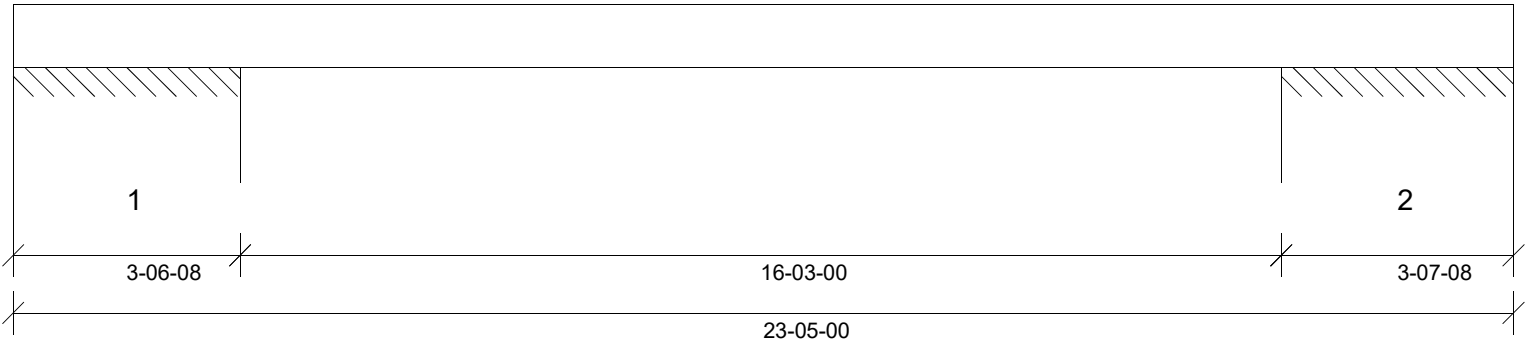
Support	Manufacturer	Model	Nailing Requirements			Min Seal Length	Other Information
			Top	Face	Member		
2	Simpson	HUC414	-	24- 10d	12- 10d	N/A	-

Errors, Warnings & Notes:

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

- This report is based on modeled conditions input by the user. Actual field conditions may differ from those shown. These results should be reviewed by a qualified design professional.



Graphical Illustration - Not To Scale
 Member Cut Length - 23'- 5"
 MemberPitch - 0/12

Design Information:

Building Code: IRC 2018	Floor Dead Load: 10.0 lb/ft ²	Roof Dead Load: 10.0 lb/ft ²	Ground Snow Load: 0.0 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: 16'- 3"	Bottom: 16'- 3"	

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	11'- 8 1/16"	164.96 lb ft	5811.99 lb ft	Passed - 3%	0.90	D
Critical Moment (Neg)	3'- 5"	-240.41 lb ft	5811.99 lb ft	Passed - 4%	0.90	D
Critical Shear	4'- 6 3/8"	84.93 lb	7107.19 lb	Passed - 1%	0.90	D
Live Load Deflection	3'- 6 1/2"	0'	0'- 3/4" (L/360)	Passed - L/999	-	D
Total Load Deflection	11'- 8 1/16"	0'	0'- 1" (L/240)	Passed - L/999	-	D
Max. Reaction			Supported Mt/ Supporting Mt/			
	0'- 1 1/2"	-51.95 lb	18375.00 lb	-	0.90	D
	3'- 5"	190.77 lb	18375.00 lb	17762.50 lb	0.90	D
	19'- 11"	188.89 lb	18375.00 lb	17762.50 lb	0.90	D
	23'- 3 1/2"	-49.25 lb	18375.00 lb	-	0.90	D

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

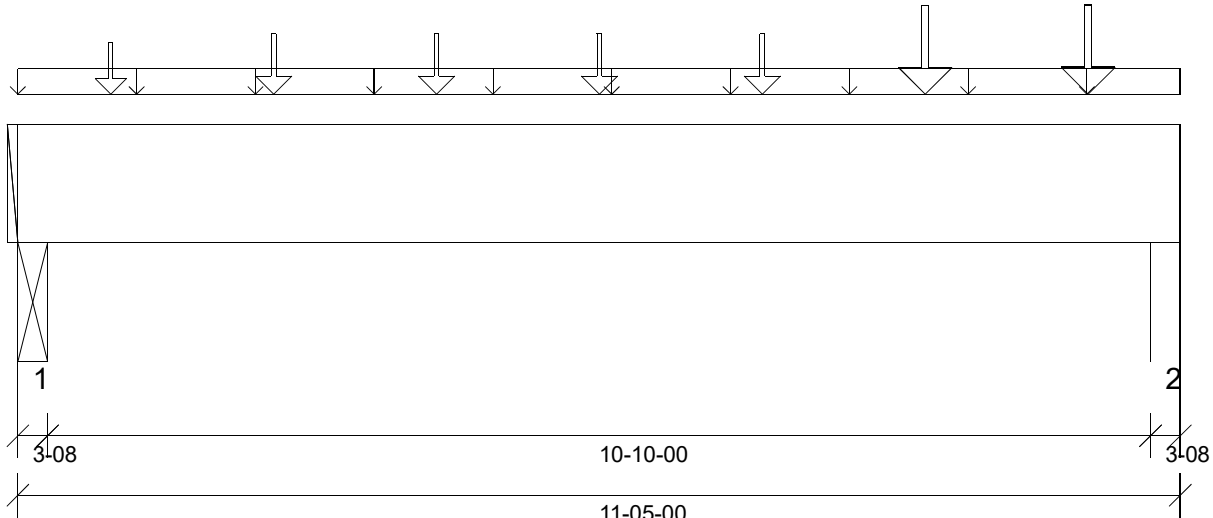
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	23'- 5"	Self Weight	12 lb/ft	-	-	-

Support Information:

Support	Start	End	Source	Dead	Maximum Analysis Reactions		
					Floor Live	Roof Live	Snow
1	0'	3'- 6 1/2"	E9(i274)	191.00/-52.00 lb	-	-	-
==>	0'- 1 1/2"	0'- 1 1/2"	E9(i274)	-52.00 lb	-	-	-
==>	3'- 5"	3'- 5"	E9(i274)	191.00 lb	-	-	-
2	19'- 9 1/2"	23'- 5"	E8(i6)	189.00/-49.00 lb	-	-	-
==>	19'- 11"	19'- 11"	E8(i6)	189.00 lb	-	-	-
==>	23'- 3 1/2"	23'- 3 1/2"	E8(i6)	-49.00 lb	-	-	-

Errors, Warnings & Notes:

- * CAUTION: This member didn't transfer any live load reactions to any of its supports. Verify load transfer is occurring as expected for this member.
- * The dead loads used in the design of this member were applied to the structure as sloped 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.



11-05-00
 Graphical Illustration - Not To Scale
 Member Cut Length - 11'- 5"
 MemberPitch - 0/12

Design Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'	Bottom:	1'- 4 11/16"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	5'- 8 9/16"	5720.35 lb ft	27030.46 lb ft	Passed - 21%	1.00	D + L
Critical Shear	1'- 5 1/2"	1664.72 lb	9310.00 lb	Passed - 18%	1.00	D + L
Live Load Deflection	5'- 9 7/16"	0'- 1/16"	0'- 3/4" (L/360)	Passed - L/999	-	L
Total Load Deflection	5'- 9 3/8"	0'- 1/16"	0'- 1" (L/240)	Passed - L/999	-	D + L
Max. Reaction	0'- 2 1/2"	1913.99 lb	Supported Mt 9187.68 lb	Passed - 21%	1.00	D + L
	11'- 2 1/2"	2498.34 lb	Supporting Mt 9187.84 lb 5206.44 lb	Passed - 48%	1.00	D + L

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

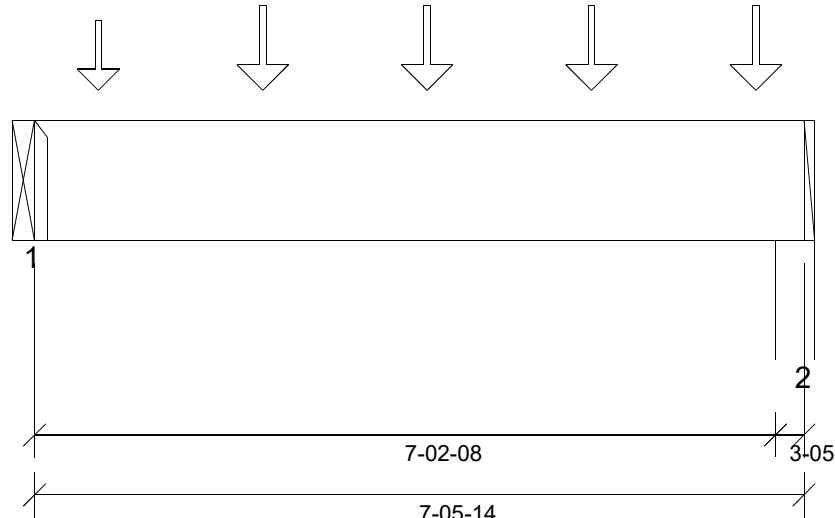
Type	Start	End	Source	Dead	Maximum Load Magnitudes		
					Floor Live	Roof Live	Snow
Self Weight	0'	11'- 5"	Self Weight	14 lb/ft	-	-	-
Uniform	-0'	11'- 5"	FC1 Floor Material	9 lb/ft	35 lb/ft	-	-
Point	0'- 10 15/16"	0'- 10 15/16"	J12(i1200)	71.00 lb	282.00 lb	-	-
Point	2'- 6 1/8"	2'- 6 1/8"	J12(i1199)	91.00 lb	363.00 lb	-	-
Point	4'- 1 3/8"	4'- 1 3/8"	J12(i1179)	91.00 lb	363.00 lb	-	-
Point	5'- 8 9/16"	5'- 8 9/16"	J12(i1219)	91.00 lb	363.00 lb	-	-
Point	7'- 3 3/4"	7'- 3 3/4"	J12(i1181)	91.00 lb	363.00 lb	-	-
Point	8'- 10 15/16"	8'- 10 15/16"	J20(i1182)	158.00 lb	631.00 lb	-	-
Point	10'- 6 1/8"	10'- 6 1/8"	J20(i1183)	159.00 lb	637.00 lb	-	-

Support Information:

Support	Start	End	Source	Dead	Maximum Analysis Reactions		
					Floor Live	Roof Live	Snow
1	0'	0'- 3 1/2"	DBM3(i1232)	448.00 lb	1466.00 lb	-	-
2	11'- 1 1/2"	11'- 5"	E5(i3)	564.00 lb	1934.00 lb	-	-

Errors, Warnings & Notes:

- * The dead loads used in the design of this member were applied to the structure as sloped 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 - 7'- 5 7/8"
 MemberPitch - 0/12

Design Information:

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft ²	Roof Dead Load:	10.0 lb/ft ²	Ground Snow Load:	0.0 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'	Bottom:	1'- 4 11/16"		

Design Results:

	Location	Design	Control	Result	LDF	Load Combination	
Critical Moment (Pos)	3'- 9 7/8"	2057.02 lb ft	27030.46 lb ft	Passed - 8%	1.00	D + L	
Critical Shear	1'- 2"	873.26 lb	9310.00 lb	Passed - 9%	1.00	D + L	
Live Load Deflection	3'- 7 7/8"	0'	0'- 3/4" (L/360)	Passed - L/999	-	L	
Total Load Deflection	3'- 7 7/8"	0'	0'- 1" (L/240)	Passed - L/999	-	D + L	
Max. Reaction			Supported Mt	Supporting Mt			
	0'	1053.83 lb	3937.50 lb	0.00 lb	Passed - 27%	1.00	D + L
	7'- 3 1/2"	1262.16 lb	8759.98 lb	4963.99 lb	Passed - 25%	1.00	D + L

Design Notes:

* Member design assumed proper ply to ply connection. Verify connection between plies according to code specification

Loading:

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	7'- 5 7/8"	Self Weight	14 lb/ft	-	-	-
Point	0'- 7 7/16"	0'- 7 7/16"	J12(i1200)	70.00 lb	281.00 lb	-	-
Point	2'- 2 5/8"	2'- 2 5/8"	J12(i1199)	93.00 lb	372.00 lb	-	-
Point	3'- 9 7/8"	3'- 9 7/8"	J12(i1179)	93.00 lb	372.00 lb	-	-
Point	5'- 5 1/16"	5'- 5 1/16"	J12(i1219)	93.00 lb	372.00 lb	-	-
Point	7'- 1/4"	7'- 1/4"	J12(i1181)	93.00 lb	372.00 lb	-	-

Support Information:

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'	FBM3(i1142)	248.00 lb	788.00 lb	-	-
2	7'- 2 1/2"	7'- 5 7/8"	17(i879)	299.00 lb	981.00 lb	-	-

Connector Information:

Support	Manufacturer	Model	Nailing Requirements			Weld Seal Length	Other Information
			Top	Face	Member		
1	Simpson	HHUS410	-	30- 10d	10- 10d	N/A	-

Errors, Warnings & Notes:

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