

Graphical Illustration - Not To Scale  
 Member Cut Length - 12'- 3"  
 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: 1'- 10 1/2"	Bottom: 12'	

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	6'- 9 1/4"	2505.34 lb ft	4911.81 lb ft	Passed - 51%	1.15	D + Lr
Critical Moment (Neg)	7'- 3/4"	-70.64 lb ft	6733.41 lb ft	Passed - 1%	1.60	0.6D + 0.6W
Critical Shear	0'- 10 3/4"	810.26 lb	5584.69 lb	Passed - 15%	1.15	D + Lr
Live Load Deflection	6'- 1 1/2"	0'- 1/16"	0'- 3/4" (L/360)	Passed - L/999	-	0.75(L + Lr + 0.6W)
Total Load Deflection	6'- 1 1/2"	0'- 3/16"	0'- 1" (L/240)	Passed - L/849	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction			<u>Supported Mt</u> <u>Supporting Mt</u>			
	0'- 1/2"	820.82 lb	3813.83 lb    8538.92 lb	Passed - 22%	1.15	D + Lr
	12'- 2 1/2"	805.59 lb	3813.75 lb    8538.75 lb	Passed - 21%	1.15	D + Lr
	12'- 2 1/2"	-27.42 lb	5306.09 lb    -	Passed - 1%	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:**

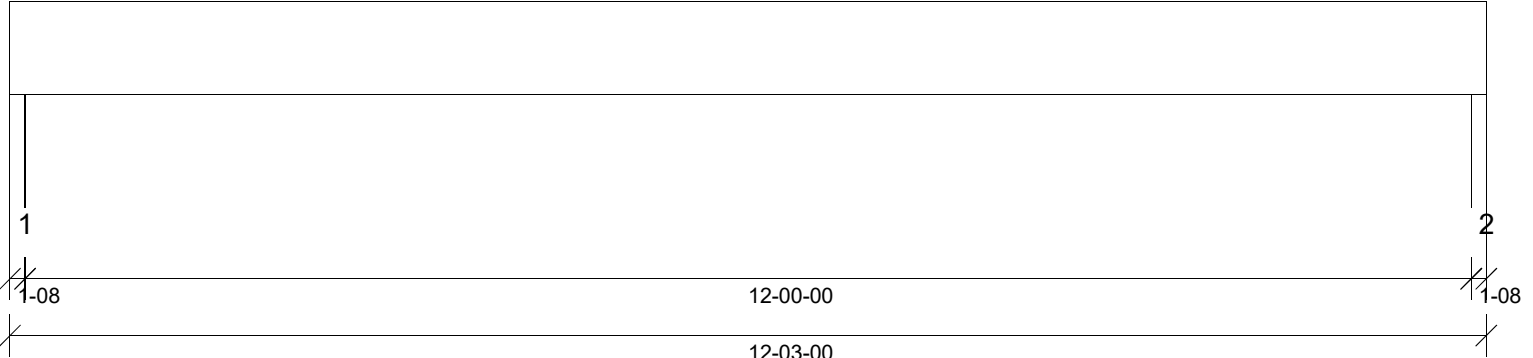
Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	12'- 3"	Self Weight	12 lb/ft	-	-	-
Point	1'- 3/4"	1'- 3/4"	H06(c01)	123.00 lb	-	124.00 lb	-
Point	3'- 3/4"	3'- 3/4"	H06(c03)	123.00 lb	-	124.00 lb	-
Point	5'- 3/4"	5'- 3/4"	H06(c04)	123.00 lb	-	124.00 lb	-
Point	7'- 3/4"	7'- 3/4"	H06(c05)	123.00 lb	-	124.00 lb	-
Point	9'- 3/4"	9'- 3/4"	H06(c06)	123.00 lb	-	124.00 lb	-
Point	11'- 3/4"	11'- 3/4"	H06(c07)	123.00 lb	-	124.00 lb	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 1 1/2"	E27(i56)	445.00 lb	-	376.00 lb	-
2	12'- 1 1/2"	12'- 3"	E28(i154)	437.00 lb	-	368.00 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.



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**Design Information:**

Building Code:	IRC 2018	Floor Dead Load:	10.0 lb/ft <sup>2</sup>	Roof Dead Load:	10.0 lb/ft <sup>2</sup>	Ground Snow Load:	0.0 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 1/2"	Bottom:	12'		

**Design Results:**

	Location	Design	Control	Result	LDF	Load Combination
Critical Moment (Pos)	5'- 3 1/4"	2485.82 lb ft	4911.81 lb ft	Passed - 51%	1.15	D + Lr
Critical Moment (Neg)	7'- 3 1/4"	-71.70 lb ft	6733.41 lb ft	Passed - 1%	1.60	0.6D + 0.6W
Critical Shear	11'- 4 1/4"	811.19 lb	5584.69 lb	Passed - 15%	1.15	D + Lr
Live Load Deflection	6'- 1 1/2"	0'- 1/16"	0'- 3/4" (L/360)	Passed - L/999	-	0.75(L + Lr + 0.6W)
Total Load Deflection	6'- 1 1/2"	0'- 3/16"	0'- 1" (L/240)	Passed - L/860	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction			Supported Mt/ Supporting Mt/			
	0'- 1/2"	786.65 lb	3813.75 lb 8538.75 lb	Passed - 21%	1.15	D + Lr
	12'- 2 1/2"	821.75 lb	3813.75 lb 8538.75 lb	Passed - 22%	1.15	D + Lr
	12'- 2 1/2"	-30.30 lb	5306.09 lb -	Passed - 1%	1.60	0.6D + 0.6W

**Design Notes:**

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**Loading:**

Type	Start	End	Source	Maximum Load Magnitudes			
				Dead	Floor Live	Roof Live	Snow
Self Weight	0'	12'- 3"	Self Weight	12 lb/ft	-	-	-
Point	1'- 3 1/4"	1'- 3 1/4"	H05(c03)	121.00 lb	-	123.00 lb	-
Point	3'- 3 1/4"	3'- 3 1/4"	H05(c04)	121.00 lb	-	123.00 lb	-
Point	5'- 3 1/4"	5'- 3 1/4"	H05(c05)	121.00 lb	-	123.00 lb	-
Point	7'- 3 1/4"	7'- 3 1/4"	H05(c06)	121.00 lb	-	123.00 lb	-
Point	9'- 3 1/4"	9'- 3 1/4"	H05(c07)	121.00 lb	-	123.00 lb	-
Point	11'- 3 1/4"	11'- 3 1/4"	H05(c08)	121.00 lb	-	123.00 lb	-

**Support Information:**

Support	Start	End	Source	Maximum Analysis Reactions			
				Dead	Floor Live	Roof Live	Snow
1	0'	0'- 1 1/2"	E10(i28)	427.00 lb	-	360.00 lb	-
2	12'- 1 1/2"	12'- 3"	E11(i175)	444.00 lb	-	378.00 lb	-

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