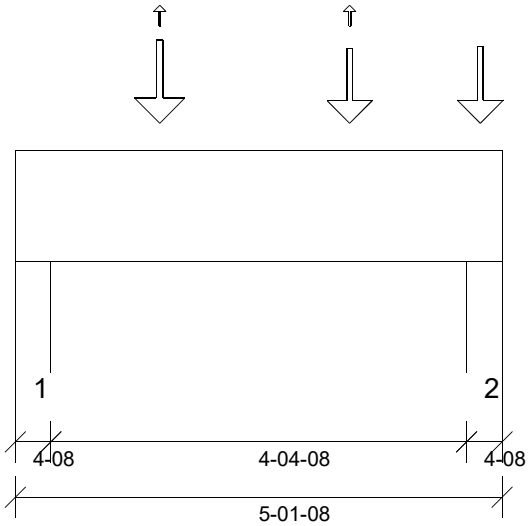
Member: 2 - 2.0 RigidLam DF LVL 1-3/4 x 14

Status: Design Passed



Graphical Illustration - Not To Scale
Member Cut Length - 5'- 1 1/2"
MemberPitch - 0/12

Design Information:

Building Code:	IRC2015	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'- 8 1/2"	Bottom:	5'- 1 1/2"		

Design Results:

	Location	Design	Control		Result	LDF	Load Combination
Critical Moment (Pos)	1'- 6 1/4"	2318.44 lb ft	28972.14 lb ft		Passed - 8%	1.00	D + L
Critical Moment (Neg)	4'- 10"	-108.61 lb ft	28972.14 lb ft		Passed - 0%	1.00	D + L
Critical Shear	1'- 6 1/2"	1843.89 lb	9473.33 lb		Passed - 19%	1.00	D + L
Live Load Deflection	2'- 6 3/8"	0'	N/A (L/480)		Passed - L/999	-	L
Total Load Deflection	2'- 6 7/16"	0'	N/A (L/240)		Passed - L/999	-	D + L
Max. Reaction			Supported Mtl	Supporting Mtl			
	0'- 3 1/2"	1898.35 lb	11812.50 lb	11418.75 lb	Passed - 17%	1.00	D + L
	4'- 10"	3487.95 lb	11812.54 lb	11418.79 lb	Passed - 31%	1.00	D + L

Design Notes:

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

Loading:

				Maximum Load Magnitudes			
Type	Start	End	Source	Dead	Floor Live	Roof Live	Snow
Self Weight	0'	5'- 1 1/2"	Self Weight	13 lb/ft	-	-	-
Point	1'- 6 1/4"	1'- 6 1/4"	FL(Cond16)	533.00 lb	1400.00 lb	7.00 lb	-
Point	3'- 6 1/4"	3'- 6 1/4"	FL(Cond15)	477.00 lb	1181.00 lb	6.00 lb	-
Point	4'- 10 3/4"	4'- 10 3/4"	FG(Cond01)	431.00 lb	1298.00 lb	3.00 lb	-

Support Information:

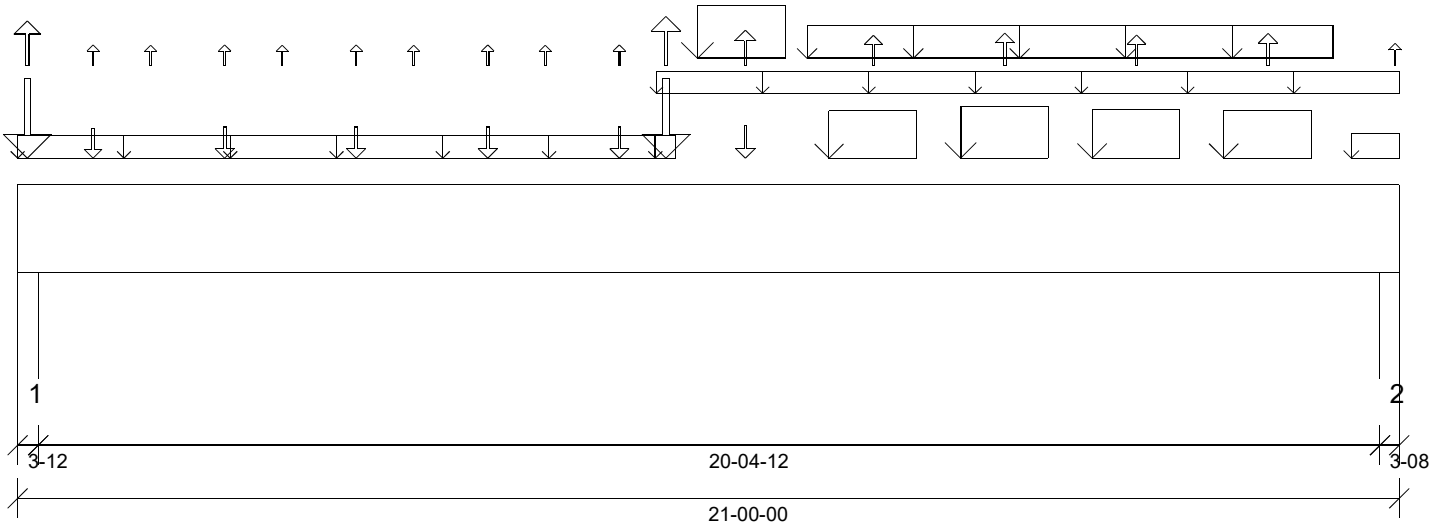
				Maximum Analysis Reactions			
Support	Start	End	Source	Dead	Floor Live	Roof Live	Snow
1	0'	0'- 4 1/2"	3(i21)	560.00 lb	1362.00 lb	7.00 lb	-
2	4'- 9"	5'- 1 1/2"	2(i8)	948.00 lb	2517.00 lb	9.00 lb	-

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.

Member: 4 - 2.0 RigidLam DF LVL 1-3/4 x 16

Status: Design Passed



Graphical Illustration - Not To Scale
Member Cut Length - 21'
MemberPitch - 0/12

Design Information:

Building Code:	IRC2015	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 3/4"		

Design Results:

	Location	Design	Control		Result	LDF	Load Combination
Critical Moment (Pos)	10'- 7 13/16"	45680.70 lb ft	74432.42 lb ft		Passed - 61%	1.00	D + L
Critical Moment (Neg)	0'- 2 3/4"	-283.47 lb ft	93040.51 lb ft		Passed - 0%	1.25	D + Lr
Critical Shear	19'- 4 1/2"	7908.86 lb	21653.33 lb		Passed - 37%	1.00	D + L
Live Load Deflection	10'- 7 7/8"	0'- 7/16"	N/A (L/480)		Passed - L/534	-	0.75(L + Lr + 0.6W)
Total Load Deflection	10'- 8 3/8"	0'- 7/8"	N/A (L/240)		Passed - L/271	-	D + 0.75(L + Lr + 0.6W)
Max. Reaction			Supported Mtl	Supporting Mtl			
	0'- 2 3/4"	9060.38 lb	19687.59 lb	19031.34 lb	Passed - 48%	1.00	D + L
	20'- 9 1/2"	8292.75 lb	18375.08 lb	17762.58 lb	Passed - 47%	1.00	D + L

Design Notes:

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

Loading:

				Maximum Load Magnitudes			
Type	Start	End	Source	Dead	Floor Live	Roof Live	Snow
Self Weight	0'	21'	Self Weight	30 lb/ft	-	-	-
Uniform	0'	10'	FC1 Floor Material	23 lb/ft	92 lb/ft	-	-
Uniform	9'- 8 1/2"	21'	E11(i10)	65 lb/ft	-	-	-
Uniform	10'- 4"	11'- 8"	E11(i10)	504 lb/ft	-	562 lb/ft	-
Uniform	12'	20'	Smoothed Load	140 lb/ft	285 lb/ft	38 lb/ft	-
Uniform	12'- 4"	13'- 8"	E11(i10)	439 lb/ft	-	448 lb/ft	-
Uniform	14'- 4"	15'- 8"	E11(i10)	488 lb/ft	-	532 lb/ft	-
Uniform	16'- 4"	17'- 8"	E11(i10)	457 lb/ft	-	473 lb/ft	-
Uniform	18'- 4"	19'- 8"	E11(i10)	453 lb/ft	-	466 lb/ft	-
Uniform	20'- 3 1/4"	21'	E11(i10)	-	-	154 lb/ft	-
Point	2'- 1/4"	2'- 1/4"	D(Cond01)	-	-	-7.00 lb	-
Point	4'- 1/4"	4'- 1/4"	D(Cond02)	-	-	-6.00 lb	-
Point	6'- 1/4"	6'- 1/4"	D(Cond01)	-	-	-6.00 lb	-
Point	8'- 1/4"	8'- 1/4"	D(Cond03)	-	-	-6.00 lb	-
Point	1'- 1 3/4"	1'- 1 3/4"	FL1A(Cond01)	174.00 lb	436.00/-31.00 lb	-	-
Point	3'- 1 3/4"	3'- 1 3/4"	FL1A(Cond09)	203.00 lb	552.00/-31.00 lb	-	-
Point	5'- 1 3/4"	5'- 1 3/4"	FL1A(Cond13)	203.00 lb	552.00/-31.00 lb	-	-
Point	7'- 1 3/4"	7'- 1 3/4"	FL1A(Cond10)	203.00 lb	552.00/-31.00 lb	-	-
Point	9'- 1 3/4"	9'- 1 3/4"	FL1A(Cond08)	203.00 lb	552.00/-31.00 lb	-	-
Point	0'- 1 3/4"	0'- 1 3/4"	-	1768.00 lb	-	1612.00/-23.00 lb	-
Point	9'- 10 1/4"	9'- 10 1/4"	-	1783.00 lb	-	1620.00/-10.00 lb	-
Point	11'- 3/4"	11'- 3/4"	-	206.00 lb	564.00/-31.00 lb	72.00/-8.00 lb	-
Point	13'- 1/16"	13'- 1/16"	-	-	-31.00 lb	-20.00 lb	-
Point	15'- 1/16"	15'- 1/16"	-	-	-31.00 lb	-11.00 lb	-
Point	17'- 1/16"	17'- 1/16"	-	-	-31.00 lb	-10.00 lb	-
Point	19'- 1/16"	19'- 1/16"	-	-	-30.00 lb	-6.00 lb	-
Point	20'- 11 1/4"	20'- 11 1/4"	E11(i10)	-	-	-	-

Support Information:

				Maximum Analysis Reactions			
Support	Start	End	Source	Dead	Floor Live	Roof Live	Snow
1	0'	0'- 3 3/4"	-	5590.00 lb	3493.00/-161.00 lb	3630.00/-64.00 lb	-
++>	0'- 7/8"	0'- 7/8"	E5(i2)	2609.00 lb	1630.00/-75.00 lb	1694.00/-30.00 lb	-

- 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.

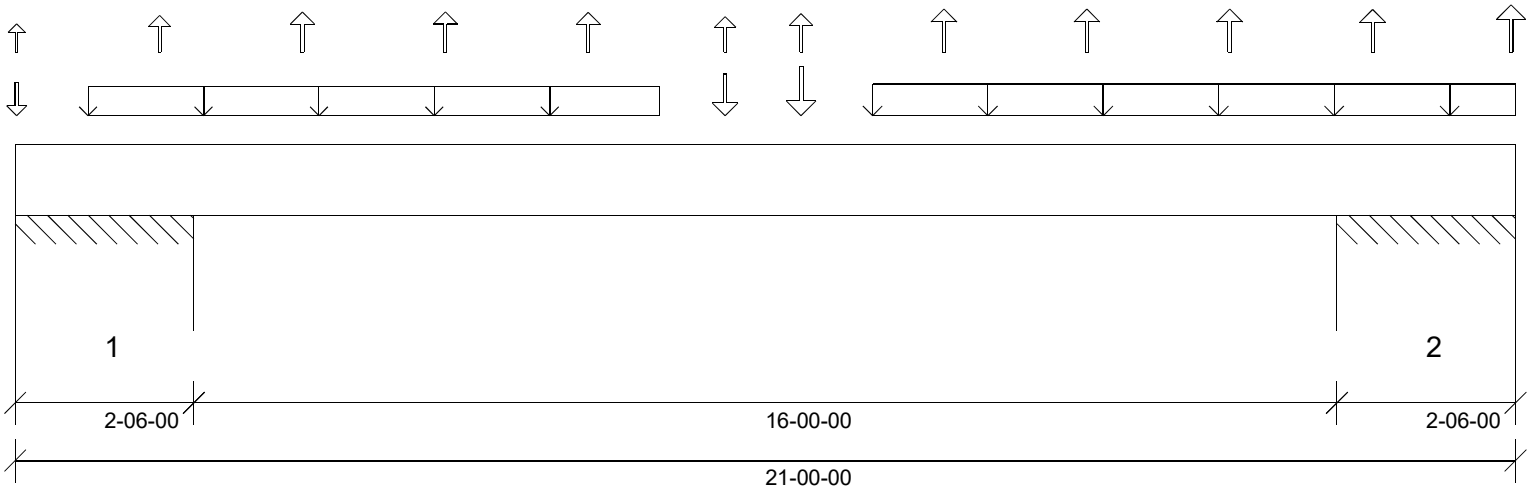
++>	0'- 1"	0'- 1"	1(i7)	2981.00 lb	1863.00/-86.00 lb	1936.00/-34.00 lb	-
2	20'- 8 1/2"	21'	E8(i1)	5335.00 lb	2934.00/-149.00 lb	3501.00/-49.00 lb	-

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.

Member: 2 - 2.0 RigidLam DF LVL 1-3/4 x 11-7/8

Status: Design Passed



Graphical Illustration - Not To Scale
Member Cut Length - 21'
MemberPitch - 0/12

Design Information:

Building Code:	IRC2015	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: 21'			

Design Results:

	Location	Design	Control		Result	LDF	Load Combination
Critical Moment (Pos)	11'	1559.24 lb ft	26389.48 lb ft		Passed - 6%	1.25	D + Lr
Critical Moment (Neg)	18'- 7 1/2"	-2433.73 lb ft	17633.84 lb ft		Passed - 14%	1.25	D + Lr
Critical Shear	17'- 6 1/8"	911.88 lb	10044.27 lb		Passed - 9%	1.25	D + Lr
Live Load Deflection	10'- 7 1/8"	0'	N/A (L/480)		Passed - L/999	-	Lr
Total Load Deflection	10'- 6 7/8"	0'- 1/16"	N/A (L/240)		Passed - L/999	-	D + Lr
Max. Reaction			Supported Mtl	Supporting Mtl			
	0'- 1 1/2"	159.51 lb	23520.00 lb	17762.50 lb	Passed - 1%	1.60	0.6D + 0.6W
	0'- 1 1/2"	-962.01 lb	18375.00 lb	-	Passed - 5%	1.25	D + Lr
	2'- 4 1/2"	2060.77 lb	18375.00 lb	17762.50 lb	Passed - 12%	1.25	D + Lr
	2'- 4 1/2"	-303.00 lb	23520.00 lb	-	Passed - 2%	1.60	0.6D + 0.6W
	18'- 7 1/2"	2199.29 lb	18375.00 lb	17762.50 lb	Passed - 12%	1.25	D + Lr
	18'- 7 1/2"	-355.82 lb	23520.00 lb	-	Passed - 2%	1.60	0.6D + 0.6W
	20'- 10 1/2"	96.36 lb	23520.00 lb	17762.50 lb	Passed - 1%	1.60	0.6D + 0.6W
	20'- 10 1/2"	-945.29 lb	18375.00 lb	-	Passed - 5%	1.25	D + Lr

Design Notes:

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

Loading:

				Maximum Load Magnitudes			
Type	Start	End	Source	Dead	Floor Live	Roof Live	Snow
Self Weight	0'	21'	Self Weight	11 lb/ft	-	-	-
Uniform	1'- 1/4"	9'- 1/4"	Smoothed Load	45 lb/ft	-	52 lb/ft	-
Uniform	12'	21'	Smoothed Load	56 lb/ft	-	70 lb/ft	-
Point	0'- 1/4"	0'- 1/4"	D(Cond01)	40.00 lb	-	41.00 lb	-
Point	2'- 1/4"	2'- 1/4"	D(Cond01)	-	-	-	-
Point	4'- 1/4"	4'- 1/4"	D(Cond02)	-	-	-	-
Point	6'- 1/4"	6'- 1/4"	D(Cond01)	-	-	-	-
Point	8'- 1/4"	8'- 1/4"	D(Cond03)	-	-	-	-
Point	9'- 11 1/4"	9'- 11 1/4"	D(Cond01)	63.00 lb	-	77.00 lb	-
Point	11'	11'	CA(Cond01)	88.00 lb	-	102.00 lb	-
Point	13'	13'	CA(Cond04)	-	-	-	-
Point	15'	15'	CA(Cond03)	-	-	-	-
Point	17'	17'	CA(Cond02)	-	-	-	-
Point	19'	19'	CA(Cond01)	-	-	-	-
Point	20'- 11 1/4"	20'- 11 1/4"	CE(Cond01)	-	-	-	-

Support Information:

				Maximum Analysis Reactions			
Support	Start	End	Source	Dead	Floor Live	Roof Live	Snow
1	0'	2'- 6"	E3(i25)	1049.00/-454.00 lb	-	1071.00/-508.00 lb	-
==>	0'- 1 1/2"	0'- 1 1/2"	E3(i25)	-454.00 lb	-	59.00/-508.00 lb	-
==>	2'- 4 1/2"	2'- 4 1/2"	E3(i25)	1049.00 lb	-	1012.00 lb	-
2	18'- 6"	21'	E1(i3)	1100.00/-410.00 lb	-	1250.00/-538.00 lb	-
==>	18'- 7 1/2"	18'- 7 1/2"	E1(i3)	1100.00 lb	-	1106.00 lb	-
==>	20'- 10 1/2"	20'- 10 1/2"	E1(i3)	-410.00 lb	-	144.00/-538.00 lb	-

Errors, Warnings & Notes:

- 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.

* 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.