



Graphical Illustration - Not To Scale

**Design Results:**

	<u>Design</u>	<u>Control</u>	<u>Result</u>	<u>LDF</u>	<u>Load Combination</u>
Max. Reaction	841.34 lb @ 3-08	11812.40 lb	Passed - 7%	1.15	D + Lr
Max. Reaction	805.71 lb @ 16-05-08	11812.32 lb	Passed - 7%	1.15	D + Lr
Critical Moment (Pos)	3223.71 lb ft @ 8-04-08	17723.73 lb ft	Passed - 18%	1.15	D + Lr
Critical Moment (Neg)	0.00 lb ft	0.00 lb ft			
Critical Moment (Neg)	0.00 lb ft	0.00 lb ft			
Critical Shear	789.17 lb @ 15-04-10	9081.41 lb	Passed - 9%	1.15	D + Lr
Live Load Deflection	0-01 @ 8-05-09	L/480	Passed - L/999	-	Lr
Total Load Deflection	0-03 @ 8-05-03	L/360	Passed - L/999	-	D + Lr

**Design Notes:**

\* Member design assumed proper ply to ply connection. Verify connection between plies with manufacturer.  
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**Loading:**

Type	Start	End	Maximum Load Magnitudes			
			Dead	Floor Live	Roof Live	Snow
Self Weight	0-00	16-09-00	12.00 lb/ft	-	-	-
Point	4-08	4-08	44.00 lb	-	93.00/-1.00 lb	-
Point	2-04-08	2-04-08	87.00 lb	-	96.00 lb	-
Point	4-04-08	4-04-08	76.00 lb	-	86.00 lb	-
Point	6-04-08	6-04-08	76.00 lb	-	79.00 lb	-
Point	8-04-08	8-04-08	76.00 lb	-	86.00 lb	-
Point	10-04-08	10-04-08	87.00 lb	-	96.00 lb	-
Point	12-04-08	12-04-08	44.00 lb	-	93.00/-1.00 lb	-
Point	14-04-08	14-04-08	159.00 lb	-	166.00 lb	-

**Support Information:**

Support	Start	End	Maximum Analysis Reactions			
			Dead	Floor Live	Roof Live	Snow
1	0-00	4-08	428.00 lb	-	414.00/-1.00 lb	-
2	16-04-08	16-09-00	424.00 lb	-	381.00/-1.00 lb	-

**Errors, Warnings & Notes:**

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

**Loading (psf):**

Roof Live Load - 20  
Roof Dead Load - 10  
Floor Live Load - 40  
Floor Dead Load - 10

**Quick Design Summary:**

Building Code - IRC2015  
Design Methodology - ASD  
Critical Moment (Neg)  
Critical Shear Passed - 9%  
Unbraced Length (Top/Bottom) - 0-00/0-00

**Quick Deflection Summary:**

Live Load Deflection 0-01 @ 8-05-09 L/480  
Total Load Deflection 0-03 @ 8-05-03 L/360



UFP Mid-Atlantic, LLC  
5631 S. NC 62,  
Burlington, NC

**Job: 71048434**

**Label: BM1**

Member Type: Beam | Level: 1st Floor

**Member: 2 - 1 3/4" x 11 7/8" 2.0E Microllam® LVL**

**Status: Design Passed**

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\* 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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Roof Dead Load - 10  
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Floor Dead Load - 10

#### **Quick Design Summary:**

Building Code - IRC2015  
Design Methodology - ASD  
Critical Moment (Ned)  
Critical Shear Passed - 9%  
Unbraced Length (Top/Bottom) - 0-00/0-00

#### **Quick Deflection Summary:**

Live Load Deflection 0-01 @ 8-05-09 L/480  
Total Load Deflection 0-03 @ 8-05-03 L/360

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