

Level			
Member Name	Results	Current Solution	Comments
BM1-3	Passed	3 piece(s) 1 3/4" x 9 1/4" 2.0E Microllam® LVL	

ForteWEB Software Operator	Job Notes
Steve Farr Carolina Structural Systems (844) 767-1926 sfarr@carolinastructuralsystems.com	212553RT1 GARRIS EVANS DAWSON

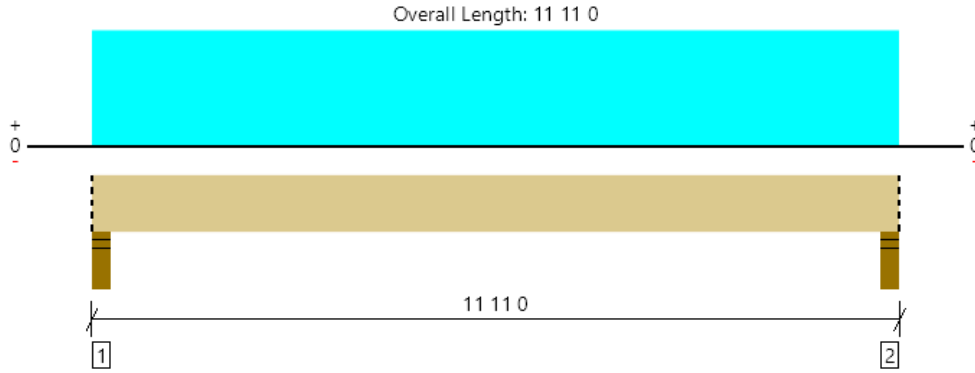


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ForteWEB v3.2

File Name: 212553RT1

Level, BM1-3  
3 piece(s) 1 3/4" x 9 1/4" 2.0E Microllam® LVL



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4355 @ 0 3 0	10041 (4.50")	Passed (43%)	--	1.0 D + 1.0 Lr (All Spans)
Shear (lbs)	3517 @ 1 1 12	11534	Passed (30%)	1.25	1.0 D + 1.0 Lr (All Spans)
Moment (Ft-lbs)	11907 @ 5 11 8	21007	Passed (57%)	1.25	1.0 D + 1.0 Lr (All Spans)
Live Load Defl. (in)	0.212 @ 5 11 8	0.571	Passed (L/647)	--	1.0 D + 1.0 Lr (All Spans)
Total Load Defl. (in)	0.432 @ 5 11 8	0.761	Passed (L/317)	--	1.0 D + 1.0 Lr (All Spans)

System : Roof  
Member Type : Flush Beam  
Building Use : Residential  
Building Code : IBC 2018  
Design Methodology : ASD  
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Roof Live	Total	
1 - Stud wall - SPF	4.50"	4.50"	1.95"	2219	2135	4354	Blocking
2 - Stud wall - SPF	4.50"	4.50"	1.95"	2219	2135	4354	Blocking

- Blocking Panels are assumed to carry no loads applied directly above them and the full load is applied to the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	11 11 0 o/c	
Bottom Edge (Lu)	11 11 0 o/c	

- Maximum allowable bracing intervals based on applied load.

Multiple Member Connections							
Type	Location	Fastener	Placement	Rows	O.C.	# of Fasteners	Details
Uniform	0 0 0 to 11 11 0	10d Nail (0.128" x 3") [1]	Both Sides	3	6"	--	L17

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Roof Live (non-snow: 1.25)	Comments
0 - Self Weight (PLF)	0 0 0 to 11 11 0	N/A	14.2	--	
1 - Uniform (PSF)	0 0 0 to 11 11 0 (Front)	17 11 0	20.0	20.0	Default Load

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

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