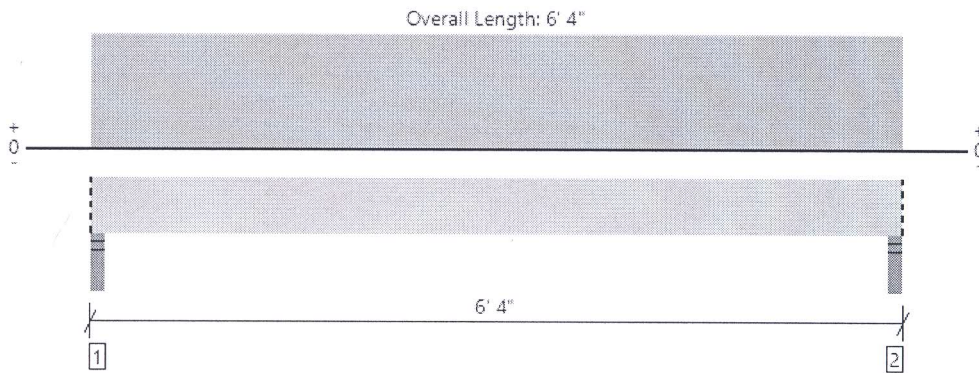


ROOF, BEAM A
2 piece(s) 2 x 10 Spruce-Pine-Fir No. 1 / No. 2



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)	2375 @ 2"	4463 (3.50")	Passed (53%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	1578 @ 1' 3/4"	2872	Passed (55%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	3375 @ 3' 2"	3946	Passed (86%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.043 @ 3' 2"	0.300	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.079 @ 3' 2"	0.400	Passed (L/912)	--	1.0 D + 1.0 S (All Spans)

System : Roof
Member Type : Flush Beam
Building Use : Residential
Building Code : IBC 2015
Design Methodology : ASD
Member Pitch : 0/12

- Deflection criteria: LL (L/240) and TL (L/180).
- Top Edge Bracing (Lu): Top compression edge must be braced at 6' 4" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 6' 4" o/c unless detailed otherwise.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Snow	Total	
1 - Stud wall - SPF	3.50"	3.50"	1.86"	1067	1308	2375	Blocking
2 - Stud wall - SPF	3.50"	3.50"	1.86"	1067	1308	2375	Blocking

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

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 6' 4"	N/A	7.0	--	
1 - Uniform (PLF)	0 to 6' 4" (Front)	N/A	260.0	325.0	26-0-0 URT
2 - Uniform (PLF)	0 to 6' 4" (Back)	N/A	70.0	88.0	7-0-0 UR

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



ForteWEB Software Operator	Job Notes
Bruce Vetter Vetter Engineering Inc (330) 882-6119 bvpe@outlook.com	

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