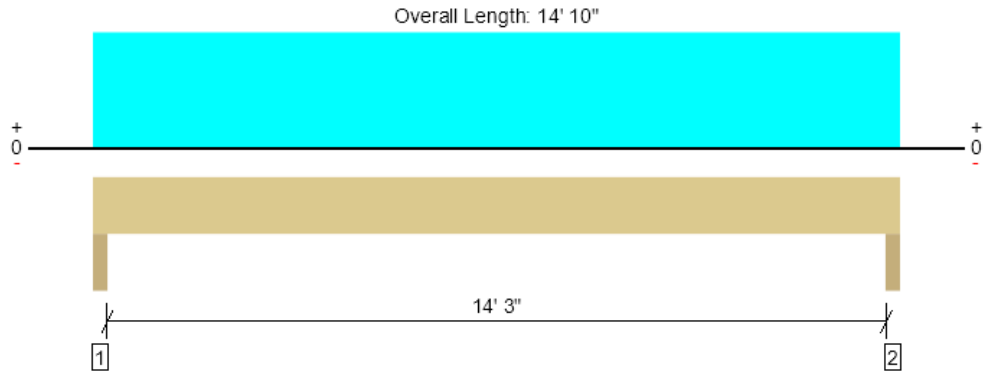
FORTEWEB

MEMBER REPORT

PASSED

Level, Roof: Drop Beam

1 piece(s) 4 x 12 DF No.1



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

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2359 @ 2"	7656 (3.50")	Passed (31%)	--	1.0 D + 1.0 Lr (All Spans)
Shear (lbs)	1968 @ 1' 2 3/4"	5906	Passed (33%)	1.25	1.0 D + 1.0 Lr (All Spans)
Moment (Ft-lbs)	8360 @ 7' 5"	8459	Passed (99%)	1.25	1.0 D + 1.0 Lr (All Spans)
Live Load Defl. (in)	0.240 @ 7' 5"	0.725	Passed (L/727)	--	1.0 D + 1.0 Lr (All Spans)
Total Load Defl. (in)	0.448 @ 7' 5"	0.967	Passed (L/388)	--	1.0 D + 1.0 Lr (All Spans)

Member Length : 14' 10"
System : Roof
Member Type : Drop Beam
Building Use : Residential
Building Code : IBC 2021
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.
- Applicable calculations are based on NDS.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Roof Live	Factored	
1 - Column - DF	3.50"	3.50"	1.50"	1098	1261	2359	None
2 - Column - DF	3.50"	3.50"	1.50"	1098	1261	2359	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 8" o/c	
Bottom Edge (Lu)	14' 10" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Roof Live (1.25)	Comments
0 - Self Weight (PLF)	0 to 14' 10"	N/A	10.0	--	
1 - Uniform (PSF)	0 to 14' 10" (Top)	8' 6"	16.2	20.0	Default Load

• Side loads are assumed to not induce cross-grain tension.

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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
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