

## Overall Length: 32'



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)	633 @ 8'	2231 (3.50")	Passed (28%)		1.0 D + 1.0 L (Adj Spans)
Shear (lbs)	261 @ 7' 1"	1619	Passed (16%)	1.00	1.0 D + 1.0 L (Adj Spans)
Moment (Ft-lbs)	-487 @ 24'	1640	Passed (30%)	1.00	1.0 D + 1.0 L (Adj Spans)
Live Load Defl. (in)	0.024 @ 28' 9/16"	0.195	Passed (L/999+)		1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.028 @ 28' 1 1/8"	0.390	Passed (L/999+)		1.0 D + 1.0 L (Alt Spans)
TJ-Pro <sup>™</sup> Rating	N/A	N/A			

System : Floor Member Type : Joist Building Use : Residential Building Code : IBC 2015 Design Methodology : ASD

• Deflection criteria: LL (L/480) and TL (L/240).

• Top Edge Bracing (Lu): Top compression edge must be braced at 27' 6" o/c unless detailed otherwise.

• Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 25' 10" o/c unless detailed otherwise.

• A 15% increase in the moment capacity has been added to account for repetitive member usage.

• Applicable calculations are based on NDS.

• No composite action between deck and joist was considered in analysis.

	Bearing Length			Loads to Supports (lbs)			
Supports	Total	Available	Required	Dead	Floor Live	Total	Accessories
1 - Plate on concrete - SPF	3.50"	2.00"	1.50"	43	197/-17	240/-17	1 1/2" Rim Board
2 - Beam - SPF	3.50"	3.50"	1.50"	120	514	634	Blocking
3 - Beam - SPF	3.50"	3.50"	1.50"	100	487	587	None
4 - Beam - SPF	3.50"	3.50"	1.50"	120	514	634	Blocking
5 - Plate on concrete - SPF	3.50"	2.00"	1.50"	43	197/-17	240/-17	1 1/2" Rim Board

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

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

Loads	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 32'	16"	10.0	40.0	Residential - Living Areas

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

Forte Software Operator	Job Notes
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## SUSTAINABLE FORESTRY INITIATIVE

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