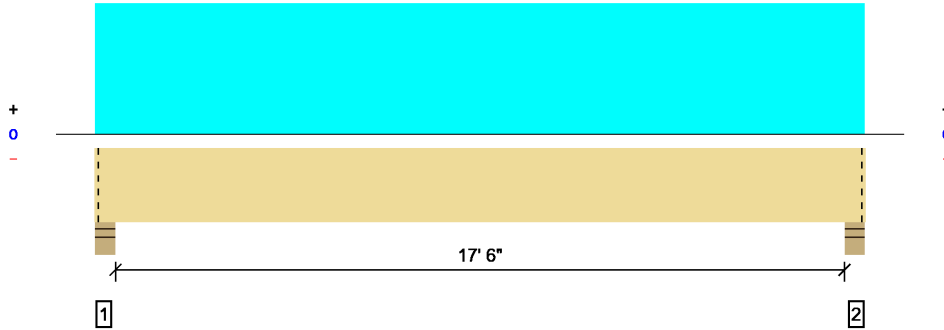


01: ROOF BEAM			
Member Name	Results	Current Solution	Comments
Roof: Beam	Passed	1 Piece(s) 3 1/2" x 15" 24F-V4 DF Glulam	
Roof: Drop Beam no.2	Passed	1 Piece(s) 4 x 8 Douglas Fir-Larch No. 2	
Roof: Beam no.3	Passed	1 Piece(s) 4 x 10 Douglas Fir-Larch No. 2	
02: FLOOR JOISTS			
Member Name	Results	Current Solution	Comments
Floor: Joist	Passed	1 Piece(s) 9 1/2" TJI@ 110 @ 16" OC	

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Overall Length: 18' 5"



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

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	4952 @ 4"	8181 (5.50")	Passed (61%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	4033 @ 1' 8 1/2"	10666	Passed (38%)	1.15	1.0 D + 1.0 S (All Spans)
Pos Moment (Ft-lbs)	21179 @ 9' 2 1/2"	30188	Passed (70%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.378 @ 9' 2 1/2"	0.592	Passed (L/563)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.678 @ 9' 2 1/2"	0.887	Passed (L/314)	--	1.0 D + 1.0 S (All Spans)

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

- Deflection criteria: LL (L/360) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 18' 5" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 18' 5" o/c unless detailed otherwise.
- Critical positive moment adjusted by a volume factor of 1.00 that was calculated using length L = 17' 9".
- The effects of positive or negative camber have not been accounted for when calculating deflection.
- The specified glulam is assumed to have its strong laminations at the bottom of the beam. Install with proper side up as indicated by the manufacturer.
- Applicable calculations are based on NDS.

Supports	Bearing			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live	Snow	Total	
1 - Stud wall - SPF	5.50"	5.50"	3.33"	2189	2763	2763	7715	Blocking
2 - Stud wall - SPF	5.50"	5.50"	3.33"	2189	2763	2763	7715	Blocking

- 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)	Tributary Width	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 18' 5"	N/A	12.8			
1 - Uniform (PSF)	0 to 18' 5" (Front)	15'	15.0	20.0	20.0	Roof

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

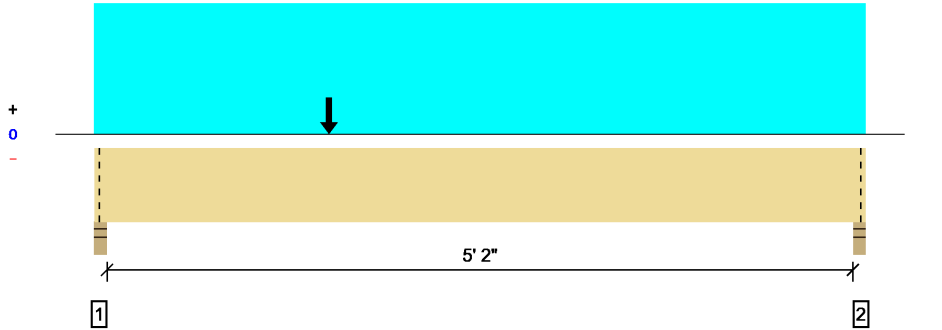


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1 piece(s) 4 x 8 Douglas Fir-Larch No. 2

Overall Length: 5' 9"



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

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	1758 @ 2"	5206 (3.50")	Passed (34%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	1256 @ 10 3/4"	2741	Passed (46%)	0.90	1.0 D (All Spans)
Moment (Ft-lbs)	1977 @ 1' 9"	2691	Passed (73%)	0.90	1.0 D (All Spans)
Live Load Defl. (in)	0.015 @ 2' 10 3/8"	0.181	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.064 @ 2' 8 13/16"	0.271	Passed (L/999+)	--	1.0 D + 1.0 S (All Spans)

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

- Deflection criteria: LL (L/360) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 5' 9" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 5' 9" o/c unless detailed otherwise.
- Applicable calculations are based on NDS.

Supports	Bearing			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live (non-snow: 1.25)	Snow (1.15)	Total	
1 - Stud wall - SPF	3.50"	3.50"	1.50"	1356	403	403	2162	Blocking
2 - Stud wall - SPF	3.50"	3.50"	1.50"	748	403	403	1554	Blocking

- 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)	Tributary Width	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 5' 9"	N/A	6.4			
1 - Uniform (PSF)	0 to 5' 9" (Front)	7'	15.0	20.0	20.0	Roof
2 - Point (lb)	1' 9" (Front)	N/A	1463	-	-	

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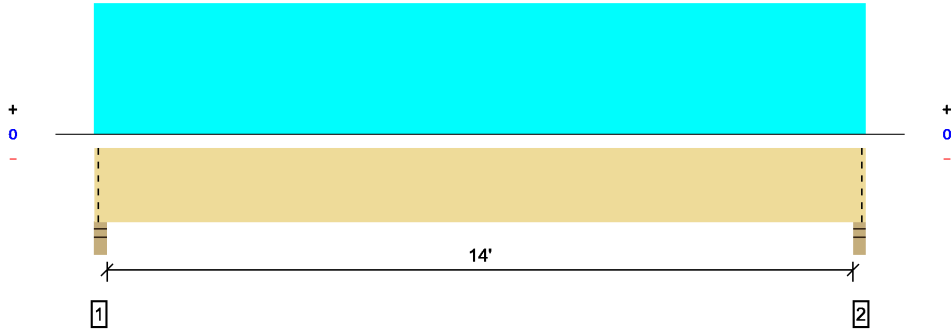
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Overall Length: 14' 7"



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

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	953 @ 2"	5206 (3.50")	Passed (18%)	--	1.0 D + 1.0 S (All Spans)
Shear (lbs)	814 @ 1' 3/4"	4468	Passed (18%)	1.15	1.0 D + 1.0 S (All Spans)
Moment (Ft-lbs)	3318 @ 7' 3 1/2"	5166	Passed (64%)	1.15	1.0 D + 1.0 S (All Spans)
Live Load Defl. (in)	0.176 @ 7' 3 1/2"	0.475	Passed (L/972)	--	1.0 D + 1.0 S (All Spans)
Total Load Defl. (in)	0.328 @ 7' 3 1/2"	0.712	Passed (L/521)	--	1.0 D + 1.0 S (All Spans)

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

- Deflection criteria: LL (L/360) and TL (L/240).
- Top Edge Bracing (Lu): Top compression edge must be braced at 14' 7" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 14' 7" o/c unless detailed otherwise.
- Applicable calculations are based on NDS.

Supports	Bearing			Loads to Supports (lbs)				Accessories
	Total	Available	Required	Dead	Roof Live (non-snow: 1.25)	Snow (1.15)	Total	
1 - Stud wall - SPF	3.50"	3.50"	1.50"	443	510	510	1463	Blocking
2 - Stud wall - SPF	3.50"	3.50"	1.50"	443	510	510	1463	Blocking

- 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)	Tributary Width	Dead (0.90)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 14' 7"	N/A	8.2			
1 - Uniform (PSF)	0 to 14' 7" (Front)	3' 6"	15.0	20.0	20.0	Roof

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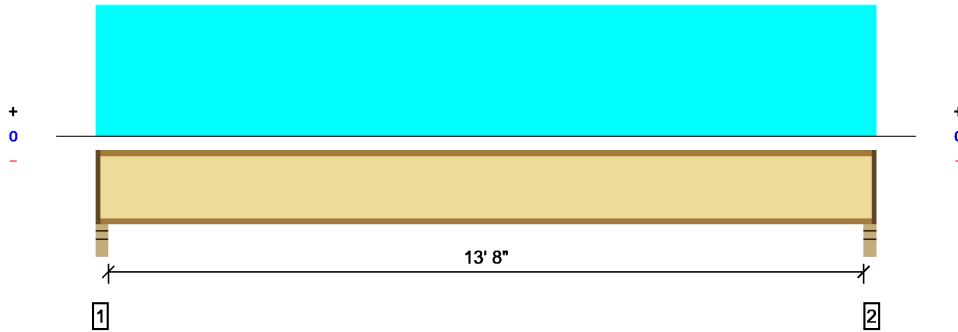
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Overall Length: 14' 3"



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

Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	487 @ 2 1/2"	1041 (2.25")	Passed (47%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	474 @ 3 1/2"	1220	Passed (39%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	1658 @ 7' 1 1/2"	2500	Passed (66%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.247 @ 7' 1 1/2"	0.346	Passed (L/672)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.321 @ 7' 1 1/2"	0.692	Passed (L/517)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	41	40	Passed	--	--

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 3' 10" o/c unless detailed otherwise.
- Bottom Edge Bracing (Lu): Bottom compression edge must be braced at 14' 1" o/c unless detailed otherwise.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 23/32" Weyerhaeuser Edge™ Panel (24" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: None

Supports	Bearing			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Stud wall - SPF	3.50"	2.25"	1.75"	114	380	494	1 1/4" Rim Board
2 - Stud wall - SPF	3.50"	2.25"	1.75"	114	380	494	1 1/4" Rim Board

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

Loads	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 14' 3"	16"	12.0	40.0	Residential - Living Areas

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