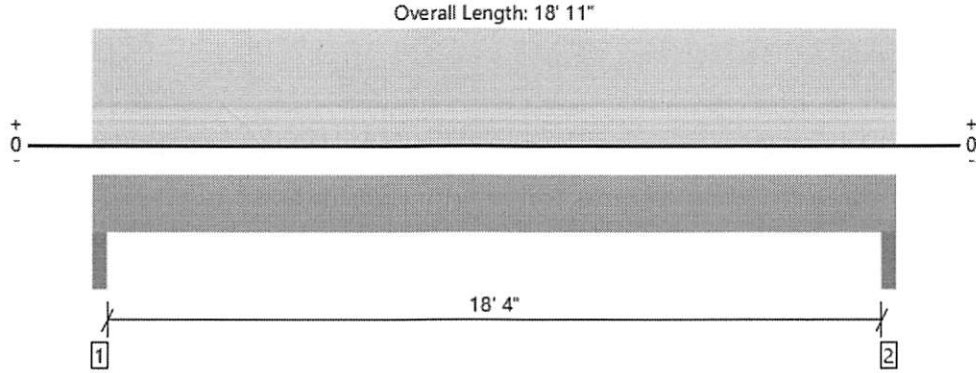


Level			
Member Name	Results	Current Solution	Comments
Great Room	Passed	2 piece(s) 1 3/4" x 18" 2.0E Microllam® LVL	
Bonus Room Joist	Passed	1 piece(s) 16" TJI® 360 @ 16" OC	
Garage Door Header	Passed	2 piece(s) 1 3/4" x 14" 2.0E Microllam® LVL	

ForteWEB Software Operator	Job Notes
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Level, Great Room  
2 piece(s) 1 3/4" x 18" 2.0E MicroIam® 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)	5901 @ 2"	8881 (3.50')	Passed (66%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	4783 @ 1' 9 1/2"	11970	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	26931 @ 9' 5 1/2"	38753	Passed (69%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.375 @ 9' 5 1/2"	0.619	Passed (L/594)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.541 @ 9' 5 1/2"	0.929	Passed (L/412)	--	1.0 D + 1.0 L (All Spans)

System : Floor  
Member Type : Flush Beam  
Building Use : Residential  
Building Code : IBC 2018  
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - SPF	3.50"	3.50"	2.33"	1810	4091	5901	None
2 - Column - SPF	3.50"	3.50"	2.33"	1810	4091	5901	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 7" o/c	
Bottom Edge (Lu)	18' 11" 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 to 18' 11"	10d Nail (0.128" x 3")		One Side	3	12"	--	L17

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 18' 11"	N/A	18.4	--	
1 - Uniform (PSF)	0 to 18' 11" (Front)	7' 2 1/2"	12.0	30.0	Attic storage
2 - Uniform (PSF)	0 to 18' 11" (Back)	7' 2 1/2"	12.0	30.0	Attic storage

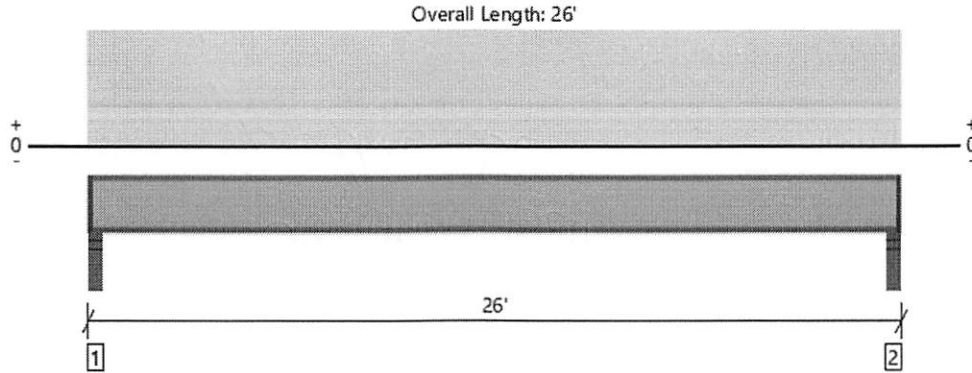
Member Notes
No roof load added to beam

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Level, Bonus Room Joist  
1 piece(s) 16" TJI® 360 @ 16" OC



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)	895 @ 2 1/2'	1232 (2.38")	Passed (73%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	881 @ 3 1/2'	2190	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	5672 @ 13'	8405	Passed (67%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.588 @ 13'	0.640	Passed (L/522)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.765 @ 13'	1.279	Passed (L/401)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	28	Any	Passed	--	--

System : Floor  
Member Type : Joist  
Building Use : Residential  
Building Code : IBC 2018  
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- 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 Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Stud wall - SPF	3.50"	2.38"	1.75"	208	693	901	1 1/8" Rim Board
2 - Stud wall - SPF	3.50"	2.38"	1.75"	208	693	901	1 1/8" Rim Board

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

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 7" o/c	
Bottom Edge (Lu)	25' 10" o/c	

- TJI joists are only analyzed using Maximum Allowable bracing solutions.
- Maximum allowable bracing intervals based on applied load.

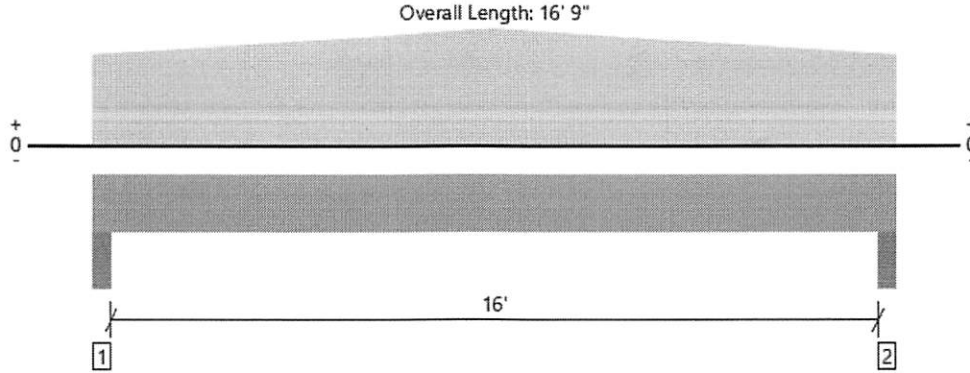
Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 26'	16"	12.0	40.0	Default Load

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Level, Garage Door Header  
2 piece(s) 1 3/4" x 14" 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)	2031 @ 3"	11419 (4.50')	Passed (18%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1565 @ 1' 6 1/2"	9310	Passed (17%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	7753 @ 8' 4 1/2"	24258	Passed (32%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.063 @ 8' 4 1/2"	0.542	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.268 @ 8' 4 1/2"	0.813	Passed (L/728)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

System : Wall  
Member Type : Header  
Building Use : Residential  
Building Code : IBC 2018  
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)					Accessories
	Total	Available	Required	Dead	Floor Live	Roof Live	Snow	Total	
1 - Trimmer - SPF	4.50"	4.50"	1.50"	1529	335	335	335	2534	None
2 - Trimmer - SPF	4.50"	4.50"	1.50"	1529	335	335	335	2534	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	16' 9" o/c	
Bottom Edge (Lu)	16' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 16' 9"	N/A	14.3	--	--	--	
1 - Uniform (PSF)	0 to 16' 9"	1'	12.0	40.0	-	-	Floor
2 - Uniform (PSF)	0 to 16' 9"	2'	15.6	-	20.0	20.0	Roof
3 - Tapered (PLF)	0 to 8' 4 1/2"	N/A	90.0 to 160.0	-	-	-	Gable end wall
4 - Tapered (PLF)	8' 4 1/2" to 16' 9"	N/A	160.0 to 90.0	-	-	-	Gable end wall

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