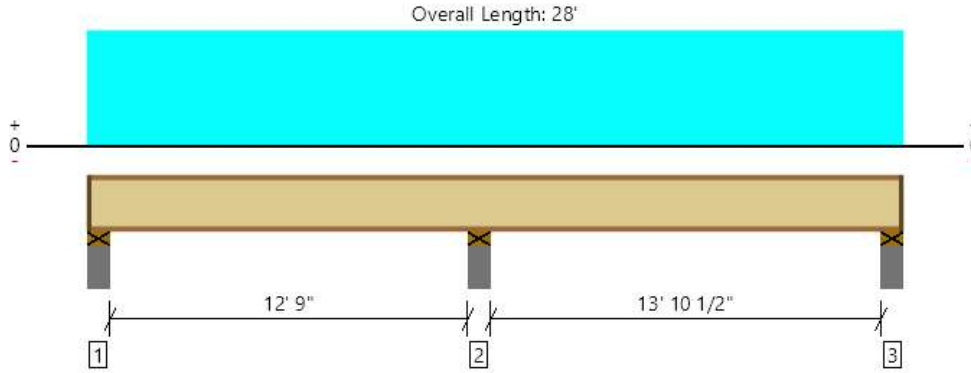




1st Floor EWP (Basement Walls), FC1: 28 (i520)
1 piece(s) 11 7/8" TJI® 210 @ 19.1875" OC



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)	1364 @ 13' 5 1/4"	2565 (5.25")	Passed (53%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	648 @ 13' 8"	1821	Passed (36%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	-1866 @ 13' 5 1/4"	3795	Passed (49%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.131 @ 20' 11 5/16"	0.355	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.155 @ 21' 5/16"	0.709	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	52	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).
- 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 19/32" Panel (20" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: 1/2" Gypsum ceiling.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Plate on concrete - HF	5.50"	4.38"	1.75"	82	392/-58	474/-58	1 1/8" Rim Board
2 - Plate on concrete - HF	5.50"	5.50"	3.50"	273	1091	1364	None
3 - Plate on concrete - HF	5.50"	4.38"	1.75"	93	419/-40	512/-40	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)	6' 2" o/c	
Bottom Edge (Lu)	5' 5" o/c	

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

Vertical Load	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PLF)	0 to 28'	N/A	16.0	64.0	Imported Load

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The product application, input design loads, dimensions and support information have been provided by Import from Sapphire software

1st Floor EWP (Basement Walls), DB1 (i613)
2 piece(s) 1 3/4" x 9 1/2" 2.0E Microllam® LVL

Overall Length: 6' 2 1/16"



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) [Group]
Member Reaction (lbs)	5484 @ 6' 1/16"	8881 (3.50")	Passed (62%)	--	1.0 D + 1.0 L (All Spans) [1]
Shear (lbs)	2093 @ 1' 1"	6318	Passed (33%)	1.00	1.0 D + 1.0 L (All Spans) [1]
Moment (Ft-lbs)	3566 @ 2' 10 1/4"	11775	Passed (30%)	1.00	1.0 D + 1.0 L (All Spans) [1]
Live Load Defl. (in)	0.043 @ 2' 10 1/4"	0.146	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans) [1]
Total Load Defl. (in)	0.054 @ 2' 10 1/4"	0.292	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans) [1]

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

- Deflection criteria: LL (L/480) 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 - Plate on concrete - HF	3.50"	3.50"	1.50"	444	1660	2104	Blocking
2 - Column - HF	3.50"	3.50"	2.16"	971	4513	5484	Blocking

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

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 2" o/c	
Bottom Edge (Lu)	6' 2" o/c	

- Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 6' 2 1/16"	N/A	9.7	--	
1 - Point (lb)	1' 3" (Top)	N/A	255	1022	Imported Load
2 - Point (lb)	2' 10 1/4" (Top)	N/A	255	1022	Imported Load
3 - Point (lb)	4' 5 7/16" (Top)	N/A	259	1037	Imported Load
4 - Point (lb)	6' (Top)	N/A	586	3092/-1195	Imported Load

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