

1st Floor			
Member Name	Results	Current Solution	Comments
FC1: J4 (i489)	Damage Evaluation	1 piece(s) 11 7/8" TJI@ 210 @ 19.1875" OC	
FC1: J2 (i462)	Damage Evaluation	2 piece(s) 11 7/8" TJI@ 210 @ 19.1875" OC	
J2 Single Joist	Passed	1 piece(s) 11 7/8" TJI@ 210 @ 19.1875" OC	

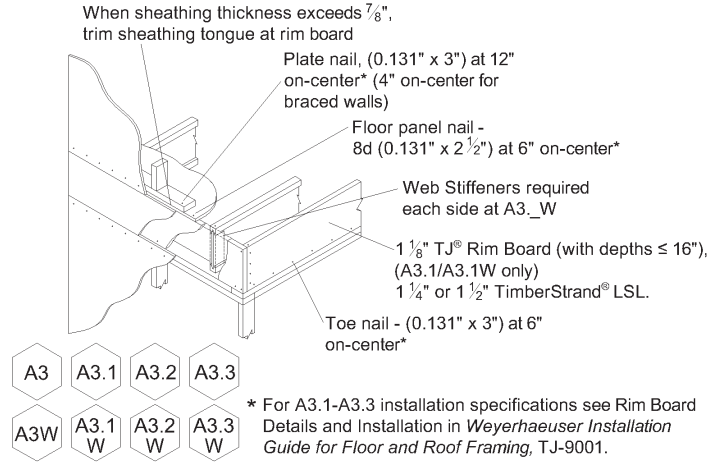
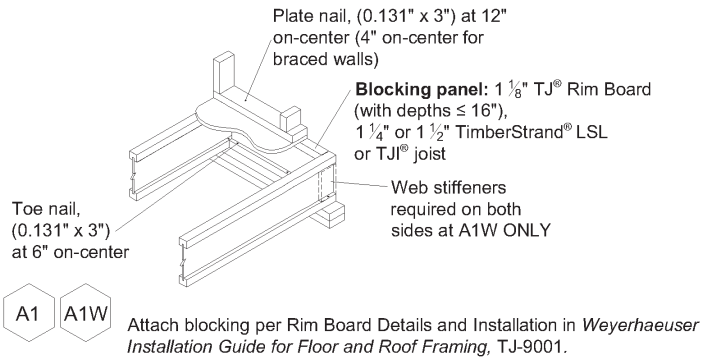
ForteWEB Software Operator	Job Notes
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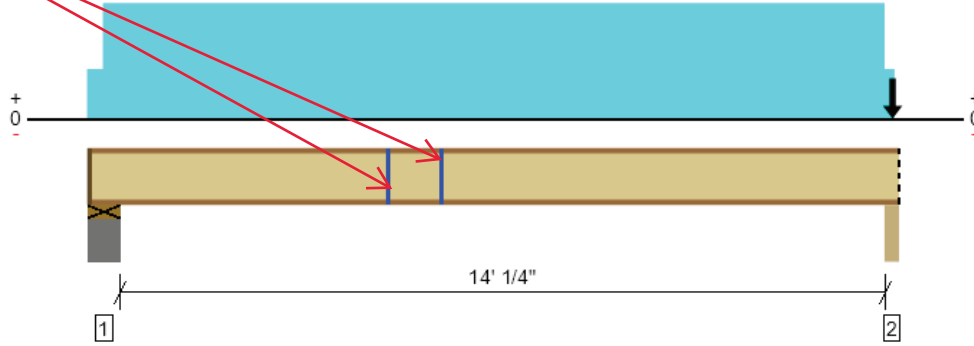
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TOP FLANGE NOTCH:
SEE LOCATION ANALYSIS FOR NOTCH DEPTH



1st Floor, FC1: J4 (i489)
1 piece(s) 11 7/8" TJI® 210 @ 19.1875" OC

Overall Length: 14' 11 3/4"



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)	719 @ 7"	1460 (3.50")	Passed (49%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	674 @ 8"	1655	Passed (41%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	2420 @ 7' 8 1/8"	3795	Passed (64%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.088 @ 7' 8 1/8"	0.355	Passed (L/999+)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.265 @ 7' 8 1/8"	0.709	Passed (L/643)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	44	40	Passed	--	--

Member Length : 14' 10 5/8"
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 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	Details
	Total	Available	Required	Dead	Floor Live	Factored		
1 - Plate on concrete - SPF	8.00"	6.88"	1.75"	477	246	722	1 1/8" Rim Board	A3
2 - Beam - SPF	3.50"	3.50"	1.75"	473	231	703	Blocking	A1

- 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.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 8" o/c	
Bottom Edge (Lu)	14' 11" o/c	

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

Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PLF)	0 to 14' 10 11/16"	N/A	9.6	32.0	Imported Load
2 - Uniform (PLF)	3 1/2" to 14' 8 9/16"	N/A	54.6	--	Imported Load
3 - Point (lb)	14' 10 5/16"	N/A	16	--	Imported Load

Location Analysis	Shear (lbs)			Moment (Ft-lbs)			Deflection (in)		Comments
	Actual	Allowed	LDF	Actual	Allowed	LDF	Live Load	Total	
1 - 6' 6 1/2"	109	1655	1.00	2358	3795	1.00	0.085	0.257	(2).5"x.5" Side Flange Notches
2 - 5' 6 1/2"	205	1655	1.00	2201	3795	1.00	0.079	0.237	(2).5"x.5" Side Flange Notches

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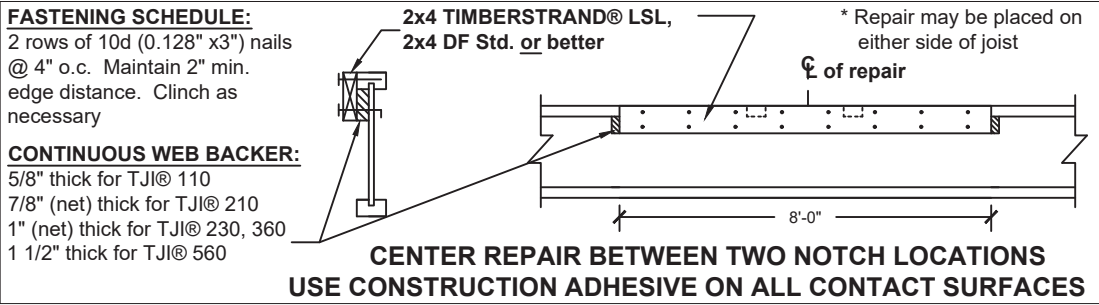


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The product application, input design loads, dimensions and support information have been provided by Dylan Vaughn - UFP



Member with damage as shown (and repaired if required) has adequate structural capacity for the design condition indicated. I have not reviewed the project plans or field conditions. The proper authority is to review the damage evaluation inputs and confirm they are consistent with the intent of the overall building design and field conditions. This damage evaluation is based on the information provided to Weyerhaeuser; if not consistent with the building design and field conditions, it should be rejected or returned to us to be corrected.

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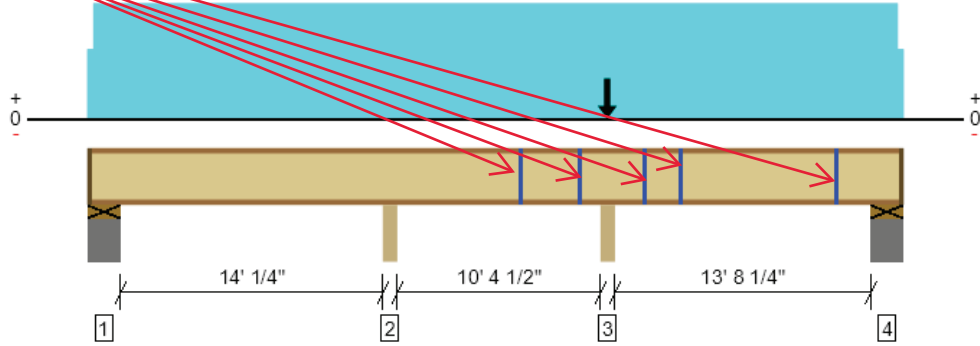
TOP FLANGE NOTCH:
SEE LOCATION ANALYSIS FOR NOTCH DEPTH



(5) 3/4"x3/4" HOLE/NOTCHES IN TOP FLANGE OF (1) PLY OF THE DOUBLE JOIST

1st Floor, FC1: J2 (i462)
2 piece(s) 11 7/8" TJI® 210 @ 19.1875" OC

Overall Length: 40'



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)	2045 @ 25' 6"	4290 (3.50")	Passed (48%)	1.00	1.0 D + 1.0 L (Adj Spans)
Shear (lbs)	1046 @ 14' 8 1/4"	3641	Passed (29%)	1.00	1.0 D + 1.0 L (Adj Spans)
Moment (Ft-lbs)	-2559 @ 14' 10"	7590	Passed (34%)	1.00	1.0 D + 1.0 L (Adj Spans)
Live Load Defl. (in)	0.073 @ 7' 4 1/16"	0.356	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.146 @ 7' 2 3/4"	0.712	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	57	40	Passed	--	--

- 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.

Member Length : 39' 9 3/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2015
Design Methodology : ASD

Supports	Bearing Length			Loads to Supports (lbs)			Accessories	Details
	Total	Available	Required	Dead	Floor Live	Factored		
1 - Plate on concrete - SPF	8.00"	6.88"	1.75"	464	439/-16	903	1 1/8" Rim Board	A3
2 - Beam - SPF	3.50"	3.50"	3.50"	1015	998	2013	None	--
3 - Beam - SPF	3.50"	3.50"	3.50"	1065	981	2045	None	--
4 - Plate on concrete - SPF	8.00"	6.88"	1.75"	455	431/-17	887	1 1/8" Rim Board	A3

- 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' 7" o/c	
Bottom Edge (Lu)	6' 7" o/c	

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

Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PLF)	0 to 40'	N/A	19.2	64.0	Imported Load
2 - Uniform (PLF)	3 1/2" to 39' 8 9/16"	N/A	54.6	--	Imported Load
3 - Point (lb)	25' 5 3/4"	N/A	79	--	Imported Load
4 - Point (lb)	39' 8 9/16"	N/A	--	--	Imported Load

Location Analysis	Shear (lbs)			Moment (Ft-lbs)			Deflection (in)		Comments
	Actual	Allowed	LDF	Actual	Allowed	LDF	Live Load	Total	
1 - 21' 3"	-248	3310	1.00	-951	7590	1.00	-0.024	-0.026	
2 - 24' 1 1/4"	-641	3310	1.00	-1441	7590	1.00	-0.011	-0.014	
3 - 27' 3 3/4"	884	3310	1.00	-608	7590	1.00	0.025	0.047	
4 - 29' 1 1/4"	637	3310	1.00	1152	7590	1.00	0.047	0.091	
5 - 36' 8 3/4"	-452	3310	1.00	1711	7590	1.00	0.041	0.083	

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NO REPAIR REQUIRED

- JOIST RETAINS SUFFICIENT CAPACITY TO SUPPORT LOADS SHOWN

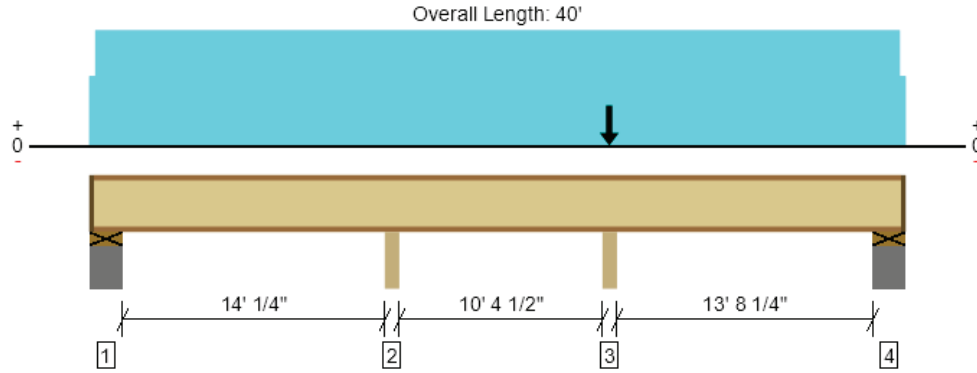
JOIST WORKS AS A SINGLE PLY
JOIST. SEE PAGE 7

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1st Floor, J2 Single Joist
1 piece(s) 11 7/8" TJI® 210 @ 19.1875" OC



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Design Results	Actual @ Location	Allowed	Result	LDF	Load: Combination (Pattern)
Member Reaction (lbs)	2045 @ 25' 6"	2145 (3.50")	Passed (95%)	1.00	1.0 D + 1.0 L (Adj Spans)
Shear (lbs)	1046 @ 14' 8 1/4"	1821	Passed (57%)	1.00	1.0 D + 1.0 L (Adj Spans)
Moment (Ft-lbs)	-2559 @ 14' 10"	3795	Passed (67%)	1.00	1.0 D + 1.0 L (Adj Spans)
Live Load Defl. (in)	0.136 @ 7' 4 1/16"	0.356	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.273 @ 7' 2 3/4"	0.712	Passed (L/626)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	46	40	Passed	--	--

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

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- 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' 6" o/c	
Bottom Edge (Lu)	4' 6" o/c	

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The product application, input design loads, dimensions and support information have been provided by Dylan Vaughn - UFP

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