

2nd Floor, FC1			
Member Name	Results	Current Solution	Comments
J10 (i1334)	Damage Evaluation	1 piece(s) 14" TJI@ 360 @ 24" OC	

ForteWEB Software Operator	Job Notes
Kyle Olson Weyerhaeuser (678) 407-6926 kyle.olson@weyerhaeuser.com	Harrington Lot 57 143 Mildred Place Broadway NC 27505 159077



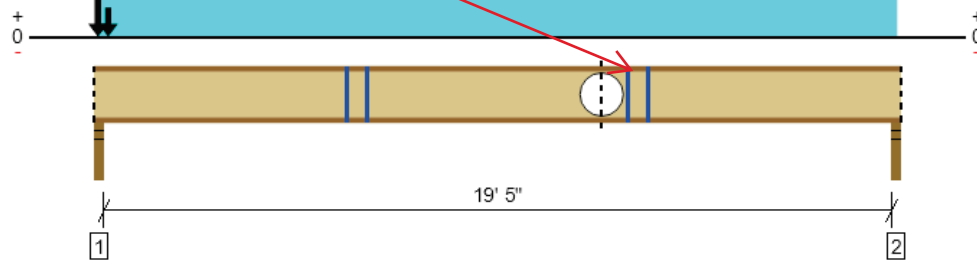
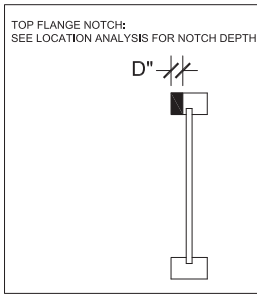
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2nd Floor, FC1, J10 (i1334)
1 piece(s) 14" TJI® 360 @ 24" OC

Overall Length: 19' 9 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)	1106 @ 1 3/8"	1232 (2.38")	Passed (90%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1009 @ 2 3/8"	1955	Passed (52%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	4015 @ 9' 6 9/16"	7335	Passed (55%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.316 @ 9' 10 1/8"	0.490	Passed (L/744)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.432 @ 9' 9 3/4"	0.979	Passed (L/544)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	44	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: 1/2" Gypsum ceiling, Perpendicular Partitions.

Member Length : 19' 9 3/4"
System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2021
Design Methodology : ASD

Supports	Bearing Length			Loads to Supports (lbs)				Accessories	Details
	Total	Available	Required	Dead	Floor Live	Roof Live	Factored		
1 - Stud wall - SPF	2.38"	2.38"	1.86"	448	658	67	1106	Blocking	A1
2 - Stud wall - SPF	2.38"	2.38"	1.75"	205	587	--	792	Blocking	A1

- 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)	5' 1" o/c	
Bottom Edge (Lu)	19' 10" 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)	Roof Live (1.25)	Comments
1 - Uniform (PLF)	1 3/16" to 19' 8 9/16"	N/A	19.5	58.4	--	Imported Load
2 - Point (lb)	1 3/16"	N/A	86	3	67	Imported Load
3 - Point (lb)	4 3/16"	N/A	93	--	--	Imported Load
4 - Uniform (PLF)	5 15/16" to 5' 2 3/8"	N/A	19.4	--	--	Imported Load
5 - Uniform (PLF)	5 15/16" to 5' 5 15/16"	N/A	--	19.4	--	Imported Load

Holes (Size)	Width	Height	Vertical Offset	Location	Shear (lbs)			Comments
					Actual	Allowed	Result	
1 - Circular (L)	10.00"	10.00"	7"	12' 5 9/16"	227	483	Passed (47%)	

- Hole locations are measured from the outside face of left support (or left cantilever end) to the centerline of the hole.
- Vertical Offset is measured from the top of the member to the centerline of the hole.

Location Analysis	Shear (lbs)			Moment (Ft-lbs)			Deflection (in)		Comments
	Actual	Allowed	LDF	Actual	Allowed	LDF	Live Load	Total	
1 - 6' 2 3/8"	261	1955	1.00	3578	7335	1.00	0.266	0.366	

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Location Analysis	Shear (lbs)			Moment (Ft-lbs)			Deflection (in)		Comments
	Actual	Allowed	LDF	Actual	Allowed	LDF	Live Load	Total	
2 - 13' 7 3/8"	-317	1955	1.00	3370	7335	1.00	0.262	0.358	
3 - 6' 8 3/8"	222	1955	1.00	3699	7335	1.00	0.279	0.383	
4 - 13' 1 3/8"	-278	1955	1.00	3519	7335	1.00	0.275	0.375	

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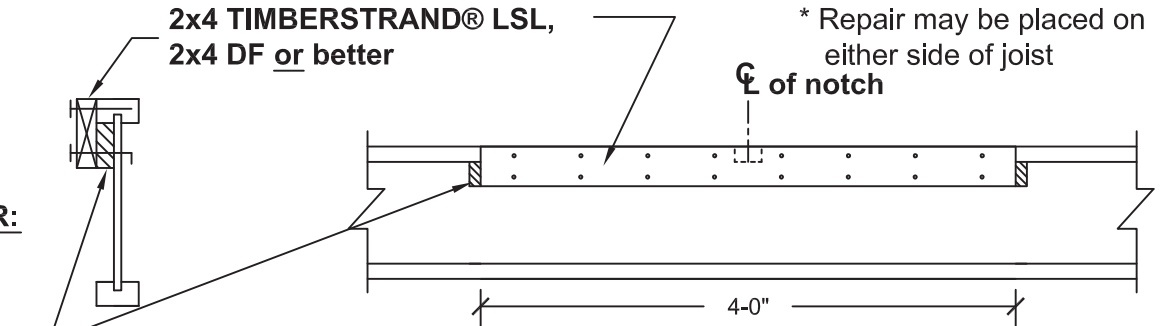
The product application, input design loads, dimensions and support information have been provided by Brianna Lynn - UFPI

FASTENING SCHEDULE:

2 rows of 8d nails @ 4" o.c.
Maintain 4" minimum edge distance
Clinch as necessary

CONTINUOUS WEB BACKER:

5/8" thick for TJI® 110
7/8" (net) thick for TJI® 210
1" (net) thick for TJI® 230, 360
1 1/2" thick for TJI® 560



CENTER REPAIR AT FLANGE NOTCH LOCATION
USE CONSTRUCTION ADHESIVE ON ALL CONTACT SURFACES

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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