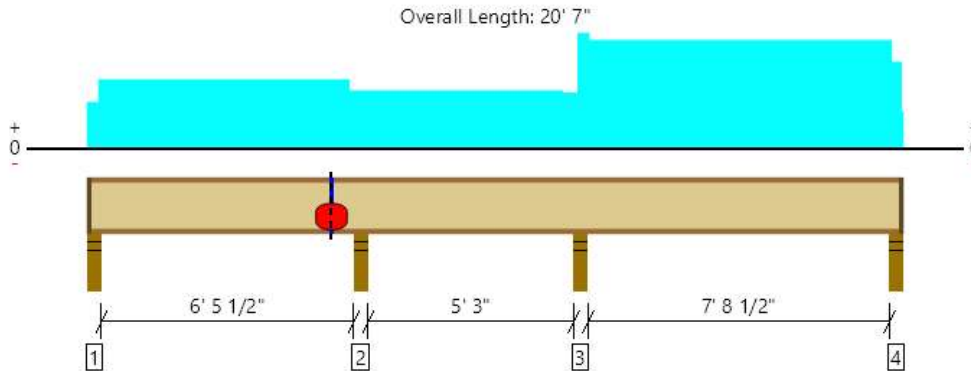


2nd Floor, FC1: C22' (i2655) - 2 such damaged joists

1 piece(s) 14" TJI® 110 @ 24" 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)	614 @ 12' 5 1/4"	1935 (3.50")	Passed (32%)	1.00	1.0 D + 1.0 L (Adj Spans)
Shear (lbs)	385 @ 12' 8"	1860	Passed (21%)	1.00	1.0 D + 1.0 L (Adj Spans)
Moment (Ft-lbs)	500 @ 16' 11 13/16"	3740	Passed (13%)	1.00	1.0 D + 1.0 L (Alt Spans)
Live Load Defl. (in)	0.016 @ 16' 7 3/4"	0.198	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.020 @ 16' 7 13/16"	0.397	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	67	40	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" Panel (24" 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	Factored	
1 - Stud wall - SPF	3.50"	2.38"	1.75"	54	123/-5	178	1 1/8" Rim Board
2 - Stud wall - SPF	3.50"	3.50"	3.50"	87	281	368	None
3 - Stud wall - SPF	3.50"	3.50"	3.50"	112	501	614	None
4 - Stud wall - SPF	3.50"	2.38"	1.75"	62	245/-3	306	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)	7' 4" o/c	
Bottom Edge (Lu)	7' 4" o/c	

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

FORTEWEB Software Operator	Job Notes
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Vertical Loads	Location	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PLF)	0 to 2'	N/A	7.8	23.3	Imported Load
2 - Uniform (PLF)	2' to 6'	N/A	15.5	-	Imported Load
3 - Uniform (PLF)	0 to 12' 4 3/8"	N/A	1.6	4.7	Imported Load
4 - Uniform (PLF)	6' to 12'	N/A	7.8	-	Imported Load
5 - Uniform (PLF)	12' to 20' 7"	N/A	7.4	22.2	Imported Load
6 - Uniform (PLF)	12' 4 3/8" to 20' 6 7/16"	N/A	10.0	30.0	Imported Load
7 - Uniform (PLF)	2' to 12'	N/A	-	31.0	Imported Load
8 - Uniform (PLF)	3 1/2" to 2'	N/A	7.8	7.8	Imported Load
9 - Uniform (PLF)	3 1/2" to 12' 4 3/8"	N/A	-	1.6	Imported Load
10 - Uniform (PLF)	12' to 20' 3 1/2"	N/A	-	7.4	Imported Load
11 - Uniform (PLF)	12' 4 3/8" to 20' 3 1/2"	N/A	-	10.0	Imported Load
12 - Uniform (PLF)	3 1/2" to 6' 7 1/2"	N/A	1.2	-	Imported Load
13 - Uniform (PLF)	6' to 6' 7 1/2"	N/A	7.8	-	Imported Load
14 - Uniform (PLF)	12' 4 3/8" to 12' 8"	N/A	5.9	-	Imported Load

Holes (Size)	Width	Height	Vertical Offset	Location	Shear (lbs)			Comments
					Actual	Allowed	Result	
1 - Slotted (M)	7.00"	6.00"	9 1/2"	6' 2"	210	-	Fails	Hole too close to bearing, repair per notes

- 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"	-179	1860	1.00	-81	3740	1.00	0.002	0.003	1 3/4" wide x 4" long x 1/4" deep (max) bottom flange notch at hole- Passes as is

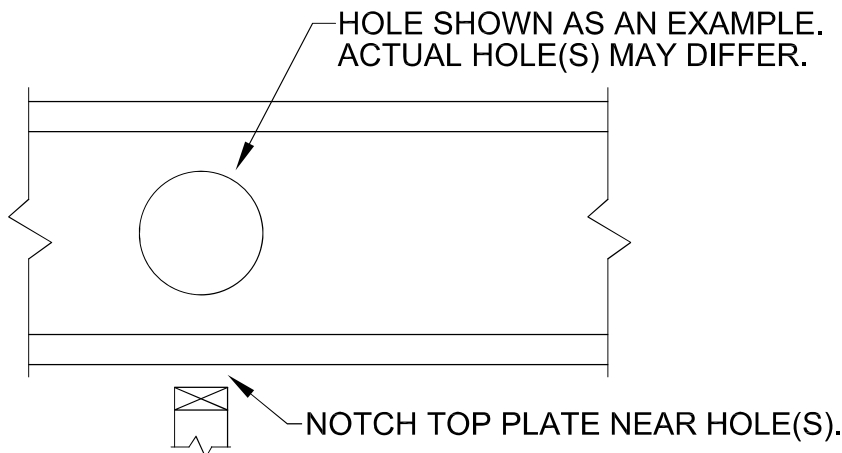
Member Notes

This joist is Structurally Inadequate with the hole being too close to support 2 as shown above. To remedy this situation, notch the top plate at support 2, by 1 1/2", so that the joist is not supported at that point, be cautious not to damage the bottom flange of the joist. This will eliminate one of the supports, and the joist will clear span about 12' in that area. See calculation shown on pages 3 & 4 that reflects this condition.

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The product application, input design loads, dimensions and support information have been provided by Javelin Import from SR-314932



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.

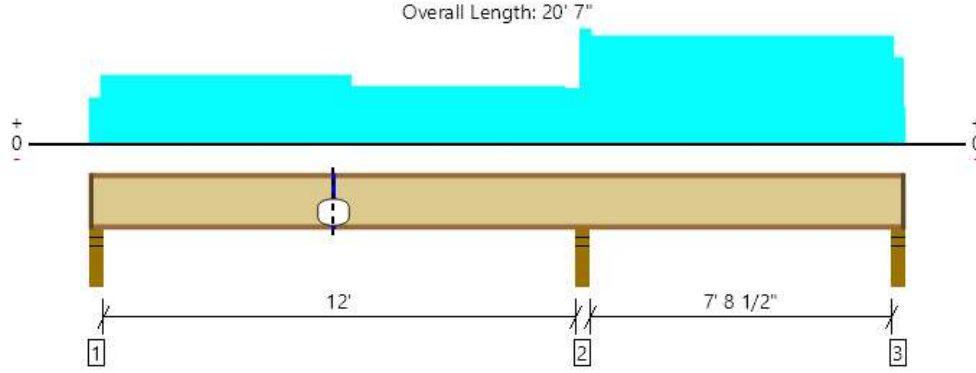
ForteWEB Software Operator	Job Notes
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File Name: 142168

2nd Floor, FC1: Repaired C22' (i2655) - 3 such damaged joists
1 piece(s) 14" TJI® 110 @ 24" 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)	822 @ 12' 5 1/4"	1935 (3.50")	Passed (42%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	432 @ 12' 8"	1860	Passed (23%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	-846 @ 12' 5 1/4"	3740	Passed (23%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.034 @ 6'	0.306	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
Total Load Defl. (in)	0.046 @ 5' 10 1/2"	0.611	Passed (L/999+)	--	1.0 D + 1.0 L (Alt Spans)
TJ-Pro™ Rating	58	40	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" Panel (24" 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	Factored	
1 - Stud wall - SPF	3.50"	2.38"	1.75"	84	198/-15	282	1 1/8" Rim Board
2 - Stud wall - SPF	3.50"	3.50"	3.50"	186	636	822	None
3 - Stud wall - SPF	3.50"	2.38"	1.75"	46	257/-50	303/-4	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)	7' 4" o/c	
Bottom Edge (Lu)	6' 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)	Comments
1 - Uniform (PLF)	0 to 2'	N/A	7.8	23.3	Imported Load
2 - Uniform (PLF)	2' to 6'	N/A	15.5	-	Imported Load
3 - Uniform (PLF)	0 to 12' 4 3/8"	N/A	1.6	4.7	Imported Load
4 - Uniform (PLF)	6' to 12'	N/A	7.8	-	Imported Load
5 - Uniform (PLF)	12' to 20' 7"	N/A	7.4	22.2	Imported Load
6 - Uniform (PLF)	12' 4 3/8" to 20' 6 7/16"	N/A	10.0	30.0	Imported Load
7 - Uniform (PLF)	2' to 12'	N/A	-	31.0	Imported Load
8 - Uniform (PLF)	3 1/2" to 2'	N/A	7.8	7.8	Imported Load
9 - Uniform (PLF)	3 1/2" to 12' 4 3/8"	N/A	-	1.6	Imported Load
10 - Uniform (PLF)	12' to 20' 3 1/2"	N/A	-	7.4	Imported Load
11 - Uniform (PLF)	12' 4 3/8" to 20' 3 1/2"	N/A	-	10.0	Imported Load
12 - Uniform (PLF)	3 1/2" to 6' 7 1/2"	N/A	1.2	-	Imported Load
13 - Uniform (PLF)	6' to 6' 7 1/2"	N/A	7.8	-	Imported Load
14 - Uniform (PLF)	12' 4 3/8" to 12' 8"	N/A	5.9	-	Imported Load

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Holes (Size)	Width	Height	Vertical Offset	Location	Shear (lbs)			Comments
					Actual	Allowed	Result	
1 - Slotted (M)	7.00"	6.00"	9 1/2"	6' 2"	210	673	Passed (31%)	

- 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"	-73	1860	1.00	657	3740	1.00	0.034	0.045	1 3/4" wide x 4" long x 1/4" deep (max) bottom flange notch at hole- Passes as is

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The product application, input design loads, dimensions and support information have been provided by Javelin Import from SR-314932

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