

2nd Floor			
Member Name	Results	Current Solution	Comments
Joist w/ new header (Top)	Passed	1 piece(s) 14" TJI@ 110 @ 12" OC	
Joist w/ new header (Bottom)	Passed	1 piece(s) 14" TJI@ 110 @ 18" OC	Web Stiffeners Required

ForteWEB Software Operator	Job Notes
Robert L Baldwin Weyerhaeuser (888) 453-8358 robert.baldwin@weyerhaeuser.com	Smith Douglas Lot 25 72 Clyde dog ct Lillington NC 27546 TC#141876

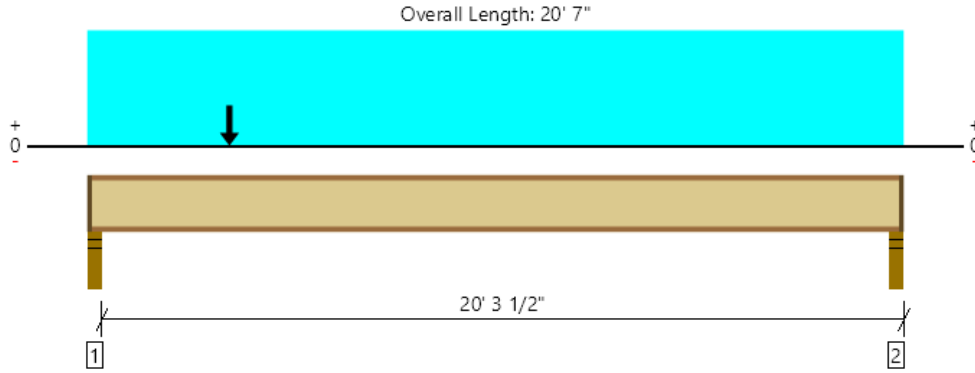


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File Name: 141876

2nd Floor, Joist w/ new header (Top)
1 piece(s) 14" TJI® 110 @ 12" 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)	728 @ 2 1/2"	1074 (2.38")	Passed (68%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	718 @ 3 1/2"	1860	Passed (39%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	3060 @ 9' 6 5/16"	3740	Passed (82%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.408 @ 10' 1 3/16"	0.672	Passed (L/593)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.530 @ 10' 1 3/16"	1.008	Passed (L/456)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	42	Any	Passed	--	--

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

- Deflection criteria: LL (L/360) 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	Factored	
1 - Stud wall - SPF	3.50"	2.38"	1.75"	169	564	733	1 1/8" Rim Board
2 - Stud wall - SPF	3.50"	2.38"	1.75"	133	442	575	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)	3' 6" o/c	
Bottom Edge (Lu)	20' 5" 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 (PSF)	0 to 20' 7"	12"	12.0	40.0	Floor Loading
2 - Point (lb)	3' 7"	N/A	55	183	New Header Load

Weyerhaeuser Notes

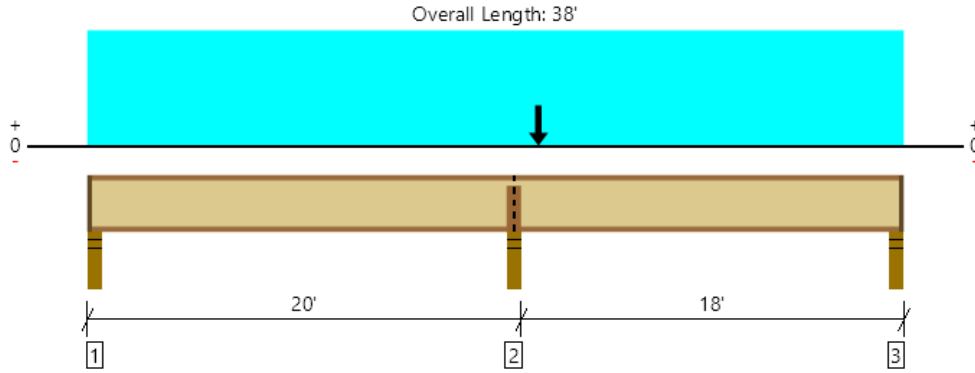
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The product application, input design loads, dimensions and support information have been provided by James Neal

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Robert L Baldwin Weyerhaeuser (888) 453-8358 robert.baldwin@weyerhaeuser.com	Smith Douglas Lot 25 72 Clyde dog ct Lillington NC 27546 TC#141876



2nd Floor, Joist w/ new header (Bottom)
 1 piece(s) 14" TJI @ 110 @ 18" 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)	2071 @ 19' 10 1/4"	2295 (3.50")	Passed (90%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	1055 @ 20'	1860	Passed (57%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	-3582 @ 19' 10 1/4"	3740	Passed (96%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.324 @ 9' 5 9/16"	0.655	Passed (L/728)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.390 @ 9' 3 11/16"	0.982	Passed (L/604)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	37	Any	Passed	--	--

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

- Deflection criteria: LL (L/360) 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	Factored	
1 - Stud wall - SYP	3.50"	2.38"	1.75"	138	525/-58	663	1 1/8" Rim Board
2 - Stud wall - SPF	3.50"	3.50"	3.50"	478	1593	2071	Blocking, Web Stiffeners
3 - Stud wall - SYP	3.50"	2.38"	1.75"	123	493/-79	616	1 1/8" Rim Board

- 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)	3' 9" o/c	
Bottom Edge (Lu)	3' 2" 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 (PSF)	0 to 38'	18"	12.0	40.0	Floor Loading
2 - Point (lb)	21'	N/A	55	183	New Header Load

Weyerhaeuser Notes

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