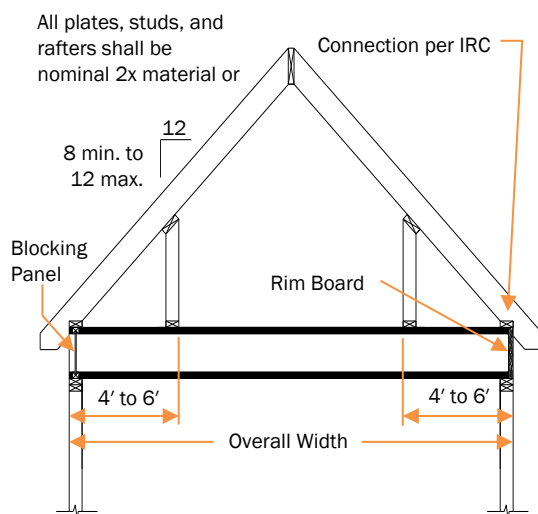


Trus Joist® TJI® Joist Residential Bonus Room Span Tables

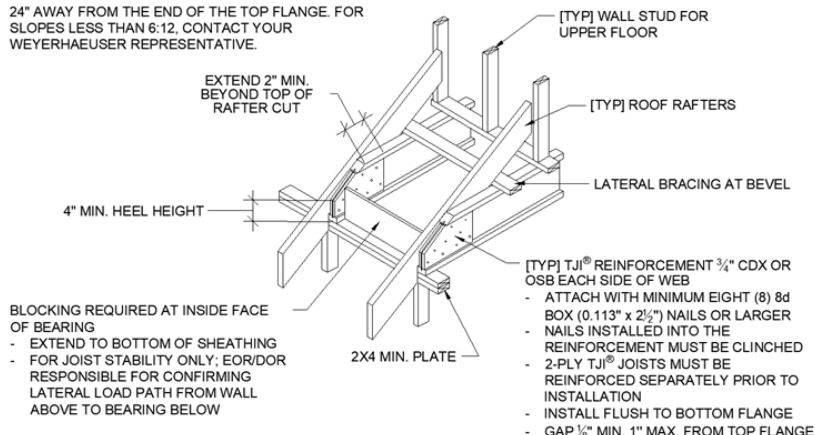
TABLE 1: BONUS ROOM FLOOR SPAN TABLE

Span	Design Roof Load (PSF)								
	Non-Snow 125% (Roof Live + Dead)			Snow 115% (Snow + Dead)			Snow 115% (Snow + Dead)		
	20 + 15			20 + 15			30 + 15		
	16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.	16" o.c.	19.2" o.c.	24" o.c.
20'	14" TJI® 230 11 7/8" TJI® 360	14" TJI® 230	14" TJI® 360	14" TJI® 230 11 7/8" TJI® 360	14" TJI® 360	14" TJI® 360	14" TJI® 230 11 7/8" TJI® 560	14" TJI® 360	14" TJI® 560
22'	16" TJI® 230 14" TJI® 360	16" TJI® 360	16" TJI® 360	16" TJI® 230 14" TJI® 360	16" TJI® 360	16" TJI® 360 ^[3]	16" TJI® 230 14" TJI® 360	16" TJI® 360	16" TJI® 560
24'	16" TJI® 360	16" TJI® 560	16" TJI® 560	16" TJI® 360	16" TJI® 560	16" TJI® 560 ^[3]	16" TJI® 360	16" TJI® 560	16" TJI® 560 ^[2]
26'	18" TJI® 360 ^[1] 16" TJI® 560	[3]	[3]	18" TJI® 360 ^[1] 16" TJI® 560	18" TJI® 360 ^{[1][2]}	18" TJI® 360 ^{[1][2]}	18" TJI® 360 ^[1] 16" TJI® 560	18" TJI® 560 ^[1]	18" TJI® 560 ^{[1][2]}

- [1] Do not rafter cut 18" or deeper joists.
[2] Minimum end bearing of 3 1/2" required.
[3] Contact Weyerhaeuser for more information.


Bonus Room Elevation View

NOTES: DETAIL NOT APPLICABLE TO CEILING JOISTS RESISTING THRUST FORCE FROM ROOF RAFTERS. FOR CEILING JOISTS RESISTING THRUST FORCE SEE TB-824. CONCENTRATED LOADS MUST BE LOCATED AT LEAST 24" AWAY FROM THE END OF THE TOP FLANGE. FOR SLOPES LESS THAN 6:12, CONTACT YOUR WEYERHAEUSER REPRESENTATIVE.


Reinforced Rafter Cut Detail

General Notes

- Tables are based on:
 - Common load durations for application.
 - Floor live load (inside knee walls) of 40 psf.
 - Floor attic load (outside knee wall) of 20 psf.
 - Floor dead load of 10 psf; 12 psf for TJI® 560 joists.
 - Deflection criteria of L/240 total load and L/480 live load.
 - Roof slope between 8:12 and 12:12.
 - Minimum end bearing length of 2 1/4".
- Assumed composite action with a single layer of 24" o.c. span-rated, glue-nailed floor panels for deflection only.
- For 2024 IBC, snow loads are adjusted to 0.7S per ASD load combinations in ASCE 7.
- Locate knee walls 4' to 6' from end of joist.
- Rafter cuts on TJI® joists are permitted when reinforcement is provided (Do not rafter cut 18" or deeper joists). See Reinforced Rafter Cut Detail above.
- Rafter thrust force must be considered. Rafter-Heel Connection by others.
- Lateral design and uplift connections by others.