TECHNICAL BULLETIN

Trus Joist® TJI® Joist Residential Bonus Room Span Tables

TABLE 1: ROOF LOAD 20 PSF LL AND 15 PSF DL AT 125%

Span	TJI® Joist Spacing		
	16″ o.c.	19.2″ o.c.	24″ o.c.
20′	14″ TJI® 230 11⅞″ TJI® 360	14″ TJI® 230	14″ TJI® 360
22′	16″ TJI® 230 14″ TJI® 360	16″ TJI® 360	16″ TJI® 360
24′	16″ TJI® 360	16″ TJI® 560	16″ TJI® 560
26′	16″ TJI® 560 18″ TJI® 360[1]	[2]	[2]

[1] Do not rafter cut 18″ or deeper joists.
[2] Contact Weyerhaeuser for more information.

TABLE 2: ROOF LOAD 20 PSF LL AND 15 PSF DL AT 115%

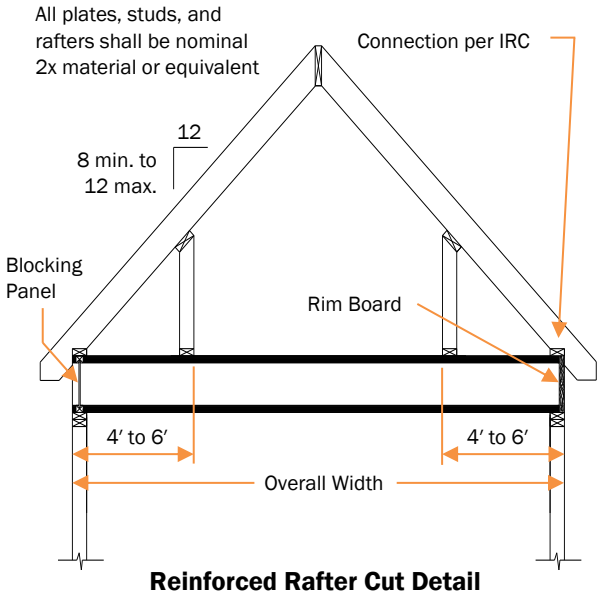
Span	TJI® Joist Spacing		
	16″ o.c.	19.2″ o.c.	24″ o.c.
20′	14″ TJI® 230 11⅞″ TJI® 360	14″ TJI® 360	14″ TJI® 360
22′	16″ TJI® 230 14″ TJI® 360	16″ TJI® 360	16″ TJI® 360[2]
24′	16″ TJI® 360	16″ TJI® 560	16″ TJI® 560[2]
26′	16″ TJI® 560 18″ TJI® 360[1]	18″ TJI® 360[1][2]	18″ TJI® 360[1][2]

[1] Do not rafter cut 18″ or deeper joists.
[2] Contact Weyerhaeuser for more information.

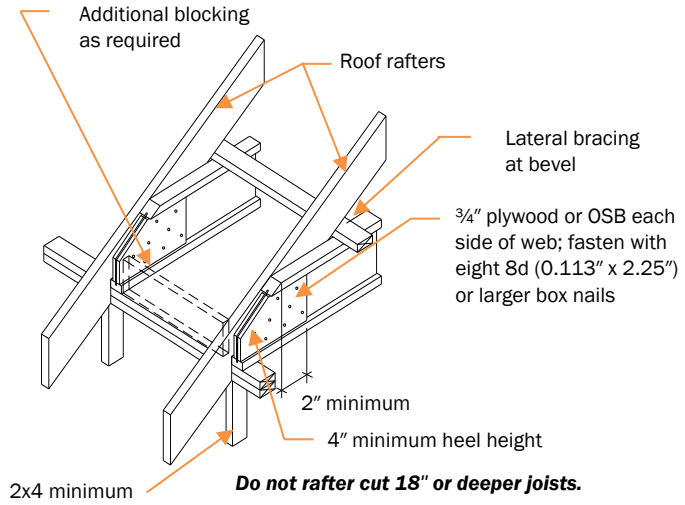
TABLE 3: ROOF LOAD 30 PSF LL AND 15 PSF DL AT 115%

Span	TJI® Joist Spacing		
	16″ o.c.	19.2″ o.c.	24″ o.c.
20′	14″ TJI® 230 11⅞″ TJI® 560	14″ TJI® 360	14″ TJI® 560
22′	16″ TJI® 230 14″ TJI® 360	16″ TJI® 360	16″ TJI® 560
24′	16″ TJI® 360	16″ TJI® 560	16″ TJI® 560[2]
26′	16″ TJI® 560 18″ TJI® 360[1]	18″ TJI® 560[1]	18″ TJI® 560[1][2]

[1] Do not rafter cut 18″ or deeper joists.
[2] Minimum end bearing of 3½″ required.



Reinforced Rafter Cut Detail



Do not rafter cut 18″ or deeper joists.

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/480 live load, L/240 total load.
  - Roof slope between 8:12 and 12:12.
  - Minimum end bearing of 2¼″.
- Locate knee walls 4′ to 6′ from end of joist.
- Rafter cuts on TJI® joists are permitted when reinforcement is provided (Except as noted in Table). See Reinforced Rafter Cut detail above.
- Assumed composite action with a single layer of 24″ o.c. span-rated, glue-nailed floor panels for deflection only.
- Lateral design and uplift connections by others.
- Rafter thrust force must be considered. Rafter-Heel Connection by others.