Roseburg



RFPI®-JOIST SPAN TABLES – LIMIT STATES DESIGN (LSD)

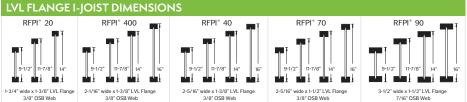
- Meets NBCC 2020 & CSA 086-19
- For RFPI[®] Joists Series 20, 40S, 400, 40, 60S, 70, 80S, 90
- Vibration-Controlled, Standard Term
- 23/32", 5/8", and 7/8" Subfloors

- Simple and Continuous Spans
- Directly Applied Ceiling and No Directly Applied Ceiling
- 12", 16", 19.2", and 24" On-center Spacings
- 40/10, 40/15, 40/30, and 40/35 Loading





RFPI®-Joist Design Properties



| SOLID SAWN FLANC | GE I-JOIST DIMENSIO | NS |
|--|--|-----------|
| RFPI* 40S 9-1/2* 11-7/8* 14* 16* 2-1/2* wida x 1-1/2* Sold Sawn Flange 3/8* OSB Web | RFPI* 60S 9-1/2" 11-7/8" 14" 16" 2-1/2" wide x 1-1/2" Sold Sawn Flange 3/8" OSB Web | RFPI* 80S |

| FACTORE | RESISTANC | CE VALUES (1)(| ²⁾⁽³⁾⁽⁴⁾⁽⁵⁾ - STA1 | NDARD TER | М | | |
|-------------|--------------|---|------------------------------------|-----------------------------------|---------------------------|--------------|------------|
| Joist Depth | Joist Series | El ⁽⁶⁾ x10 ⁶ lb-in ² | M _{r⁽⁷⁾ lb-ft} | V _r ⁽⁸⁾ lbs | VLC ⁽⁹⁾ lbs/ft | K(10)x106 lb | Weight plf |
| | RFPI 20 | 165 | 4,690 | 1,926 | 2,900 | 4.94 | 2.06 |
| | RFPI 40S | 193 | 4,426 | 1,768 | 2,900 | 4.94 | 2.56 |
| | RFPI 400 | 193 | 5,563 | 1,926 | 2,900 | 4.94 | 2.29 |
| 9-1/2" | RFPI 40 | 215 | 6,254 | 2,099 | 2,900 | 4.94 | 2.56 |
| | RFPI 60S | 231 | 5,644 | 1,768 | 2,900 | 4.94 | 2.56 |
| | RFPI 70 | 266 | 8,532 | 2,099 | 2,900 | 4.94 | 2.57 |
| | RFPI 90 | 398 | 13,023 | 2,983 | 2,900 | 4.94 | 3.70 |
| | RFPI 20 | 283 | 6,054 | 2,241 | 2,900 | 6.18 | 2.37 |
| | RFPI 40S | 330 | 5,686 | 2,241 | 2,900 | 6.18 | 2.83 |
| | RFPI 400 | 330 | 7,177 | 2,336 | 2,900 | 6.18 | 2.60 |
| 11-7/8" | RFPI 40 | 366 | 8,075 | 2,447 | 2,900 | 6.18 | 2.81 |
| 11-7/8" | RFPI 60S | 396 | 7,311 | 2,241 | 2,900 | 6.18 | 2.83 |
| | RFPI 70 | 455 | 11,052 | 2,447 | 2,900 | 6.18 | 2.95 |
| | RFPI 80S | 547 | 11,593 | 2,510 | 2,900 | 6.18 | 3.79 |
| | RFPI 90 | 676 | 16,873 | 3,236 | 2,900 | 6.18 | 4.17 |
| | RFPI 20 | 420 | 7,202 | 2,541 | 2,900 | 7.28 | 2.60 |
| | RFPI 40S | 482 | 7,102 | 2,699 | 2,900 | 7.28 | 3.07 |
| | RFPI 400 | 486 | 8,549 | 2,699 | 2,900 | 7.28 | 2.98 |
| 14" | RFPI 40 | 540 | 9,622 | 2,794 | 2,900 | 7.28 | 3.13 |
| 14" | RFPI 60S | 584 | 8,803 | 2,699 | 2,900 | 7.28 | 3.07 |
| | RFPI 70 | 672 | 13,181 | 2,794 | 2,900 | 7.28 | 3.21 |
| | RFPI 80S | 802 | 13,954 | 2,896 | 2,900 | 7.28 | 4.03 |
| | RFPI 90 | 992 | 20,125 | 3,465 | 2,900 | 7.28 | 4.51 |
| | RFPI 40S | 657 | 8,233 | 3,109 | 2,900 | 8.32 | 3.31 |
| | RFPI 400 | 665 | 9,780 | 3,109 | 2,900 | 8.32 | 3.19 |
| | RFPI 40 | 737 | 11,002 | 3,109 | 2,900 | 8.32 | 3.34 |
| 16" | RFPI 60S | 799 | 10,207 | 3,109 | 2,900 | 8.32 | 3.31 |
| | RFPI 70 | 918 | 15,102 | 3,109 | 2,900 | 8.32 | 3.48 |
| | RFPI 80S | 1,092 | 16,183 | 3,267 | 2,900 | 8.32 | 4.26 |
| | RFPI 90 | 1,350 | 23,060 | 3,678 | 2,900 | 8.32 | 4.80 |

- 1. Factored resistances are based on Limit States Design in accordance with CSA O86-14.
- 2. All resistance values include the resistance factor and reliability normalization factor (Kr).
- 3. Design values shall not be increased for load-sharing.
- Duration of load, service and treatment factors = 1.0.
- 5. Full lateral support of compression flange is required.
- 6. Bending stiffness of the I-joist.
- 7. Factored Moment Resistance of a single I-joist.
- 8. Factored Shear Resistance of the I-joist.

- 9. Vertical Load Capacity when continuously supported.
- 10. Coefficient of shear deflection (K), used to calculate deflections for I-joist application. Equations 1 and 2 below are provided for uniform load and center point load conditions for simple spans.

[1] $d = \frac{5V_{*}^{4}}{384EI} + \frac{V_{*}^{2}}{K}$ [2] $d = \frac{P_{*}^{3}}{48EI} + \frac{2P_{*}}{K}$

d = calculated deflection (in)

P = concentrated load (lb) v = uniform load (lb/in) EI = bending stiffness of the I-joist (Ib-in²)

, = design span (in)

K = coefficient of shear deflection (lb)





RFPI®-Joist Factored Reaction Information

TABLE 1: FACTORED REACTION CAPACITIES WITH OR WITHOUT WEB STIFFENERS (W.S.)(1) End Reaction (lbs) Intermediate Reaction (lbs) Joist Depth Joist Series 1-3/4" Bearing 3-1/2" Bearing 5-1/4" Bearing Web Stiffener Nails (2) No W.S. With W.S. No W.S. With W.S. No W.S. With W.S. No W.S. With W.S. RFPI-20 1,436 1,815 1,926 1,926 2,802 2,960 3,157 3,630 4-8d RFPI-40S 1,768 4-8d 1,705 1,768 1,768 3,409 3,536 3.536 3,536 RFPI-400 1,618 1,926 1,926 1,926 3,394 3,551 3,630 3,851 4-8d 9 -1/2" RFPI-40 1,705 1,926 2,099 2,099 3,551 3,946 4,025 4,183 4-8d RFPI-60S 1.705 1.768 1.768 1.768 3.409 3.536 3.536 3.536 4-8d RFPI-70 4-8d 1,768 2,099 2,099 2,099 3,686 3,946 4,025 4,183 RFPI-90 2.099 2.502 2 683 2 983 4.767 5.438 5.438 5.485 4-10d 3,370 RFPI-20 1,499 1,934 2,241 2,241 3,054 3,212 3,843 4-8d RFPI-40S 1,894 2,115 2,241 2,241 3,946 4,143 4,199 4,483 4-8d RFPI-400 1,657 1,997 2,336 2,336 3,551 3,709 3,709 4,183 4-8d RFPI-40 1.894 2.210 2.447 2.447 3.929 4.143 4.199 4.530 4-8d 11-7/8" RFPI-60S 1,894 2,115 2,241 2,241 3,946 4,143 4,199 4,483 4-8d RFPI-70 1,894 2,320 2,447 3,946 4,143 4,199 4,530 4-8d RFPI-80S 2,020 2,510 2,447 2,510 4,435 5,019 4.893 5,019 4-10d RFPI-90 2,210 2,754 2,975 3,236 5,296 5,485 5,485 5,801 4-10d RFPI-20 1,499 2,036 2,447 2,541 3,054 3,212 3,370 3,843 4-8d RFPI-40S 1.894 2.415 2.447 2.699 3.946 4.325 4.349 4.814 4-8d RFPI-400 2,060 2,447 2,699 4-8d 1,657 3,709 3,709 4,183 RFPI-40 1.894 2.462 2.447 2.794 3.946 4.325 4.349 4.838 4-8d 2,447 RFPI-60S 1.894 2,415 2.699 3.946 4.325 4.349 4.814 4-8d RFPI-70 1,894 2,447 2,794 4,325 4,349 4-8d 4,838 RFPI-80S 2,020 2,762 2,447 2,896 4,767 5,303 5,067 5,682 4-10d RFPI-90 2 210 2 9 7 5 2 975 3 465 5 5 2 4 5 5 2 4 6.077 4-10d 5 296 RFPI-40S 1,894 2,699 2,447 3,109 3,946 4,498 4,498 5,130 RFPI-400 1,657 2,115 2,447 3,109 3,551 3,709 3,709 4,183 4-8d RFPI-40 1,894 2,699 2,447 3,109 3 946 4,498 4,498 5,130 4-8d RFPI-60S 1,894 2,699 2,447 3,109 3,946 4,498 4,498 5,130 4-8d 4-8d RFPI-70 1,894 2,699 2,447 3,109 3,946 4,498 4,498 5,130 REPI-80S 2 020 2699 2 447 3 267 4-10d 4.767 5 564 5 225 6.314 RFPI-90 2,210 3,196 2,447 3,678 5,296 6,353 4-10d 5.564 5,564

Notes:

- 1. The tabulated values are for the standard term of load duration (K₀ = 1.0). All values are permitted to be adjusted for other load durations as permitted by the code provided that the adjusted values do not exceed the factored compressive resistance perpendicular to grain (Q₁) of the bearing plate supporting the I-joist in accordance with CSA O86. Interpolation between bearing lengths is permitted.
- 2. Number and size of nails required for web stiffeners. Refer to page 25 for web stiffener and nail installation requirements.





Web Stiffener Requirements

A web stiffener is a block of plywood, OSB, or even a 2x4 that is added to stiffen the I-joist's web, increase the bearing surface between the web and the flange, and provide additional support for a hanger or other connector. Web stiffeners are common with certain types of joist hanger installations, particularly in roof systems. They are typically placed at the end of the I-joist, between the flanges and against both sides of the web. When used at end bearings, web stiffeners should be installed tight against the bottom flange of the I-joist, but with a minimum 1/8" gap between the top of the stiffener and the bottom of the top flange. Web stiffeners must be made of Utility grade SPF (south) or better for lumber and/or Sheathing grade or better for wood structural panels.

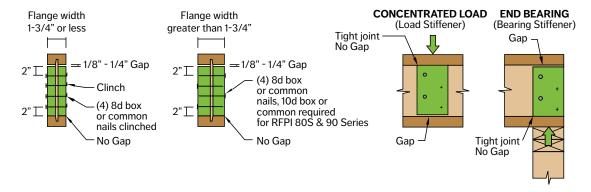
When designed in accordance with the load/span conditions set forth in the tables in this guide, RFPI-Joists do not require web stiffeners, with the following exceptions:

- When sides of the hangers do not laterally brace the top flange of each I-joist.
- · Birds mouth cuts for roof joists.
- When I-joists are designed to support concentrated factored loads greater than 2,370 lbs applied to the I-joist's top flange between supports. In these applications only, the gap between the web stiffener and the flange shall be at the bottom flange (See Figure B below).

The use of web stiffeners or bearing lengths that are longer than the minimum required may result in allowable spans that are longer than those shown in this guide. The most accurate method of determining if a joist is adequate and if web stiffeners are required is to use appropriate software (e.g. Simpson Strong-Tie[®] Component Solutions™) or engineering analysis for the actual conditions.

Web stiffeners may be cut in the field as required for the application.

FIGURE B
RFPI-JOIST WEB STIFFENER REQUIREMENTS



| TABLE B: WEB STIFFENE | R SIZE REQUIRED |
|--------------------------|-------------------------------------|
| RFPI®-Joist Flange Width | Web Stiffener Size Each Side of Web |
| 1-3/4" | 19/32" x 2-5/16" minimum width |
| 2-1/16" | 3/4" x 2-5/16" minimum width |
| 2-5/16" | 7/8" x 2-5/16" minimum width |
| 2-1/2" | 1" x 2-5/16" minimum width |
| 3-1/2" | 1-1/2" x 2-5/16" minimum width |





| | | | | | 23/3 | 2" (3/4") | OSB SUB | FLOOR (G | LUED-N | AILED), S | TANDARI | D TERM | | | | | | | | | | | |
|---------|-------|----------|------------|------------|-------------|--------------|-----------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|----------|---------|-------|-------------|-----------|---|----------|
| | | | | | Directly Ap | plied Ceilir | ng | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. su | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | | Continuou | s Span Onl | у | Sir | mple or Co | ntinuous S | pan | | Continuou | s Span Onl | у | Depth | RFPI® | | | e int. bearing le de of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /10 PSF De | ead Load | | | | | | | | | 40 PS | F Live Load | /10 PSF [| Dead Load | |
| | 20 | 16'-5" | 15'-6" | 15'-0" | 13'-11" | 17'-0" | 16'-1" | 15'-6" | 14'-11" | 16'-0" | 15'-1" | 14'-6" | 13'-11" | 16'-6" | 15'-7" | 15'-0" | 14'-5" | | 20 | | | | |
| | 40S | 16'-10" | 15'-11" | 15'-4" | 14'-8" | 17'-5" | 16'-6" | 15'-10" | 15'-3" | 16'-5" | 15'-6" | 14'-11" | 14'-4" | 17'-0" | 16'-0" | 15'-5" | 14'-10" | | 40S | | | | |
| | 400 | 16'-10" | 15'-11" | 15'-4" | 14'-8" | 17'-5" | 16'-5" | 15'-10" | 15'-3" | 16'-5" | 15'-6" | 14'-11" | 14'-4" | 17'-0" | 16'-0" | 15'-5" | 14'-10" | | 400 | | | | |
| 9-1/2" | 40 | 17'-1" | 16'-2" | 15'-7" | 14'-11" | 17'-9" | 16'-9" | 16'-1" | 15'-6" | 16'-8" | 15'-9" | 15'-2" | 14'-7" | 17'-4" | 16'-3" | 15'-8" | 15'-1" | 9-1/2" | 40 | | | | |
| | 60S | 17'-4" | 16'-4" | 15'-9" | 15'-1" | 18'-0" | 16'-11" | 16'-4" | 15'-8" | 16'-11" | 15'-11" | 15'-4" | 14'-9" | 17'-6" | 16'-6" | 15'-11" | 15'-3" | | 60S | | | | |
| | 70 | 17'-8" | 16'-8" | 16'-1" | 15'-5" | 18'-6" | 17'-3" | 16'-8" | 16'-0" | 17'-4" | 16'-4" | 15'-8" | 15'-1" | 18'-0" | 16'-11" | 16'-3" | 15'-7" | | 70 | | | | |
| | 90 | 19'-2" | 17'-9" | 17'-1" | 16'-4" | 20'-2" | 18'-7" | 17'-9" | 17'-0" | 18'-9" | 17'-5" | 16'-9" | 16'-1" | 19'-8" | 18'-2" | 17'-5" | 16'-8" | | 90 | | | | |
| | 20 | 18'-7" | 17'-5" | 16'-10" | 16'-2" | 19'-6" | 18'-2" | 17'-5" | 16'-9"* | 17'-11" | 16'-11" | 16'-4" | 15'-8" | 18'-10" | 17'-6" | 16'-10" | 16'-2" | | 20 | | | | 16'-6" |
| | 40S | 19'-2" | 17'-10" | 17'-2" | 16'-6" | 20'-1" | 18'-8" | 17'-10" | 17'-1" | 18'-7" | 17'-4" | 16'-9" | 16'-1" | 19'-5" | 18'-0" | 17'-4" | 16'-7" | | 40S | | | | |
| | 400 | 19'-2" | 17'-10" | 17'-2" | 16'-6" | 20'-1" | 18'-8" | 17'-10" | 17'-1" | 18'-6" | 17'-4" | 16'-8" | 16'-0" | 19'-5" | 18'-0" | 17'-4" | 16'-7" | | 400 | | | | |
| | 40 | 19'-7" | 18'-2" | 17'-5" | 16'-9" | 20'-6" | 19'-1" | 18'-2" | 17'-4" | 18'-11" | 17'-8" | 17'-0" | 16'-4" | 19'-10" | 18'-5" | 17'-7" | 16'-11" | | 40 | | | | |
| 11-7/8" | 60S | 19'-10" | 18'-5" | 17'-8" | 16'-11" | 20'-10" | 19'-4" | 18'-6" | 17'-7" | 19'-3" | 17'-10" | 17'-3" | 16'-6" | 20'-3" | 18'-9" | 17'-10" | 17'-1" | 11-7/8" | 60S | | | | |
| | 70 | 20'-5" | 18'-11" | 18'-1" | 17'-4" | 21'-5" | 19'-11" | 19'-0" | 18'-0" | 19'-10" | 18'-5" | 17'-7" | 16'-11" | 20'-10" | 19'-3" | 18'-5" | 17'-6" | | 70 | | | | |
| | 80S | 21'-3" | 19'-8" | 18'-9" | 17'-9" | 22'-4" | 20'-8" | 19'-8" | 18'-8" | 20'-8" | 19'-2" | 18'-3" | 17'-5" | 21'-9" | 20'-1" | 19'-1" | 18'-1" | | 80S | | | | |
| | 90 | 22'-2" | 20'-6" | 19'-6" | 18'-6" | 23'-4" | 21'-7" | 20'-6" | 19'-5" | 21'-8" | 20'-0" | 19'-1" | 18'-0" | 22'-10" | 21'-0" | 20'-0" | 18'-11" | | 90 | | | | |
| | 20 | 20'-9" | 19'-3" | 18'-5" | 17'-5"* | 21'-9" | 20'-3" | 19'-4" | 17'-5"* | 20'-0" | 18'-6" | 17'-9" | 17'-0"* | 20'-11" | 19'-5" | 18'-6" | 17'-5"* | | 20 | | | | 16'-6" |
| | 40S | 21'-3" | 19'-9" | 18'-11" | 17'-11" | 22'-4" | 20'-9" | 19'-10" | 18'-10" | 20'-7" | 19'-1" | 18'-2" | 17'-5" | 21'-7" | 20'-0" | 19'-1" | 18'-2" | | 40S | | | | |
| | 400 | 21'-4" | 19'-10" | 18'-11" | 18'-0" | 22'-5" | 20'-10" | 19'-10" | 18'-10" | 20'-7" | 19'-1" | 18'-3" | 17'-5" | 21'-7" | 20'-0" | 19'-1" | 18'-2" | | 400 | | | | |
| | 40 | 21'-9" | 20'-3" | 19'-3" | 18'-4" | 22'-10" | 21'-3" | 20'-3" | 19'-3" | 21'-1" | 19'-6" | 18'-7" | 17'-9" | 22'-1" | 20'-6" | 19'-6" | 18'-6" | | 40 | | | | |
| 14" | 60S | 22'-1" | 20'-6" | 19'-7" | 18'-7" | 23'-3" | 21'-7" | 20'-7" | 19'-6" | 21'-5" | 19'-10" | 18'-11" | 18'-0" | 22'-6" | 20'-10" | 19'-10" | 18'-10" | 14" | 60S | | | | |
| | 70 | 22'-9" | 21'-1" | 20'-1" | 19'-1" | 23'-11" | 22'-2" | 21'-2" | 20'-0" | 22'-1" | 20'-5" | 19'-6" | 18'-6" | 23'-3" | 21'-6" | 20'-5" | 19'-5" | | 70 | | | | |
| | 80S | 23'-7" | 21'-10" | 20'-10" | 19'-9" | 24'-10" | 23'-0" | 21'-11" | 20'-9" | 23'-0" | 21'-3" | 20'-3" | 19'-2" | 24'-2" | 22'-4" | 21'-3" | 20'-1" | | 80S | | | | |
| | 90 | 24'-8" | 22'-10" | 21'-9" | 20'-7" | 26'-0" | 24'-0" | 22'-10" | 21'-7" | 24'-2" | 22'-3" | 21'-2" | 20'-0" | 25'-5" | 23'-5" | 22'-3" | 21'-0" | | 90 | | | | |
| | 40S | 23'-2" | 21'-7" | 20'-7" | 19'-7" | 24'-4" | 22'-8" | 21'-8" | 20'-7" | 22'-5" | 20'-9" | 19'-10" | 18'-10" | 23'-6" | 21'-10" | 20'-9" | 19'-9" | | 405 | | | | |
| | 400 | 23'-3" | 21'-7" | 20'-8" | 19'-7"* | 24'-5" | 22'-8" | 21'-8" | 20'-2"* | 22'-6" | 20'-10" | 19'-10" | 18'-10" | 23'-7" | 21'-10" | 20'-10" | 19'-9"* | | 400 | | | | 19'-3" |
| | 40 | 23'-9" | 22'-0" | 21'-0" | 20'-0" | 24'-11" | 23'-2" | 22'-1" | 21'-0" | 23'-0" | 21'-3" | 20'-3" | 19'-3" | 24'-1" | 22'-4" | 21'-3" | 20'-2" | | 40 | | | | |
| 16" | 60S | 24'-1" | 22'-5" | 21'-4" | 20'-3" | 25'-4" | 23'-6" | 22'-5" | 21'-4" | 23'-5" | 21'-8" | 20'-8" | 19'-7" | 24'-7" | 22'-9" | 21'-8" | 20'-6" | 16" | 60S | | | | |
| | 70 | 24'-10" | 23'-0" | 21'-11" | 20'-10" | 26'-1" | 24'-2" | 23'-1" | 21'-10"* | 24'-1" | 22'-3" | 21'-3" | 20'-1" | 25'-4" | 23'-5" | 22'-4" | 21'-1" | | 70 | | | | 21'-5" |
| | 805 | 25'-9" | 23'-10" | 22'-8" | 21'-6" | 27'-1" | 25'-1" | 23'-10" | 22'-7" | 25'-1" | 23'-2" | 22'-0" | 20'-10" | 26'-4" | 24'-4" | 23'-2" | 21'-11" | | 805 | | | | |
| | 90 | 26'-11" | 24'-11" | 23'-8" | 22'-5" | 28'-4" | 26'-2" | 24'-11" | 23'-7" | 26'-4" | 24'-3" | 23'-1" | 21'-9" | 27'-8" | 25'-6" | 24'-3" | 22'-11" | | 90 | | | | |





| | | | | | 23/3 | 2" (3/4") | OSB SUB | FLOOR (G | LUED-N | AILED), S | TANDARI | D TERM | | | | | | | | | | | |
|----------|-------|----------|------------|------------|-------------|--------------|-----------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|----------|---------|--------|-------------|------------|--|----------|
| | | | | D | irectly App | plied Ceilir | ng | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. so ne int. bearing le | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | | Continuou | s Span Onl | у | Sin | nple or Co | ntinuous S | pan | | Continuou | s Span Onl | у | Depth | RFPI® | | | de of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /15 PSF De | ead Load | | | | | | | | | 40 PSI | F Live Load | 1/15 PSF [| Dead Load | |
| | 20 | 16'-5" | 15'-6" | 15'-0" | 13'-11"* | 17'-0" | 16'-1" | 15'-6" | 14'-8"* | 16'-0" | 15'-1" | 14'-6" | 13'-11"* | 16'-6" | 15'-7" | 15'-0" | 14'-5"* | | 20 | | | | 13'-11" |
| | 40S | 16'-10" | 15'-11" | 15'-4" | 14'-8" | 17'-5" | 16'-6" | 15'-10" | 14'-8" | 16'-5" | 15'-6" | 14'-11" | 14'-4" | 17'-0" | 16'-0" | 15'-5" | 14'-8" | | 40\$ | | | | |
| | 400 | 16'-10" | 15'-11" | 15'-4" | 14'-8" | 17'-5" | 16'-5" | 15'-10" | 15'-3" | 16'-5" | 15'-6" | 14'-11" | 14'-4" | 17'-0" | 16'-0" | 15'-5" | 14'-10" | | 400 | | | | |
| 9-1/2" | 40 | 17'-1" | 16'-2" | 15'-7" | 14'-11" | 17'-9" | 16'-9" | 16'-1" | 15'-6" | 16'-8" | 15'-9" | 15'-2" | 14'-7" | 17'-4" | 16'-3" | 15'-8" | 15'-1" | 9-1/2" | 40 | | | | |
| | 60S | 17'-4" | 16'-4" | 15'-9" | 15'-1" | 18'-0" | 16'-11" | 16'-4" | 15'-8" | 16'-11" | 15'-11" | 15'-4" | 14'-9" | 17'-6" | 16'-6" | 15'-11" | 15'-3" | | 60S | | | | |
| | 70 | 17'-8" | 16'-8" | 16'-1" | 15'-5" | 18'-6" | 17'-3" | 16'-8" | 16'-0" | 17'-4" | 16'-4" | 15'-8" | 15'-1" | 18'-0" | 16'-11" | 16'-3" | 15'-7" | | 70 | | | | |
| | 90 | 19'-2" | 17'-9" | 17'-1" | 16'-4" | 20'-2" | 18'-7" | 17'-9" | 17'-0" | 18'-9" | 17'-5" | 16'-9" | 16'-1" | 19'-8" | 18'-2" | 17'-5" | 16'-8" | | 90 | | | | |
| | 20 | 18'-7" | 17'-5" | 16'-10" | 16'-0"* | 19'-6" | 18'-2" | 17'-5" | 16'-0"* | 17'-11" | 16'-11" | 16'-4" | 15'-8"* | 18'-10" | 17'-6" | 16'-10" | 16'-0"* | | 20 | | | | 15'-2" |
| | 40S | 19'-2" | 17'-10" | 17'-2" | 16'-6" | 20'-1" | 18'-8" | 17'-10" | 16'-8" | 18'-7" | 17'-4" | 16'-9" | 16'-1" | 19'-5" | 18'-0" | 17'-4" | 16'-7" | | 40S | | | | |
| | 400 | 19'-2" | 17'-10" | 17'-2" | 16'-6" | 20'-1" | 18'-8" | 17'-10" | 17'-1" | 18'-6" | 17'-4" | 16'-8" | 16'-0" | 19'-5" | 18'-0" | 17'-4" | 16'-7" | | 400 | | | | |
| 44 7 (0" | 40 | 19'-7" | 18'-2" | 17'-5" | 16'-9" | 20'-6" | 19'-1" | 18'-2" | 17'-4" | 18'-11" | 17'-8" | 17'-0" | 16'-4" | 19'-10" | 18'-5" | 17'-7" | 16'-11" | 44 7/0" | 40 | | | | |
| 11-7/8" | 60S | 19'-10" | 18'-5" | 17'-8" | 16'-11" | 20'-10" | 19'-4" | 18'-6" | 17'-7" | 19'-3" | 17'-10" | 17'-3" | 16'-6" | 20'-3" | 18'-9" | 17'-10" | 17'-1" | 11-7/8" | 60S | | | | |
| | 70 | 20'-5" | 18'-11" | 18'-1" | 17'-4" | 21'-5" | 19'-11" | 19'-0" | 18'-0" | 19'-10" | 18'-5" | 17'-7" | 16'-11" | 20'-10" | 19'-3" | 18'-5" | 17'-6" | | 70 | | | | |
| | 80S | 21'-3" | 19'-8" | 18'-9" | 17'-9" | 22'-4" | 20'-8" | 19'-8" | 18'-8" | 20'-8" | 19'-2" | 18'-3" | 17'-5" | 21'-9" | 20'-1" | 19'-1" | 18'-1" | | 80S | | | | |
| | 90 | 22'-2" | 20'-6" | 19'-6" | 18'-6" | 23'-4" | 21'-7" | 20'-6" | 19'-5" | 21'-8" | 20'-0" | 19'-1" | 18'-0" | 22'-10" | 21'-0" | 20'-0" | 18'-11" | | 90 | | | | |
| | 20 | 20'-9" | 19'-3" | 18'-5" | 16'-0"* | 21'-9" | 20'-3" | 19'-4"* | 16'-0"* | 20'-0" | 18'-6" | 17'-9" | 16'-0"* | 20'-11" | 19'-5" | 18'-6" | 16'-0"* | | 20 | | | 19'-1" | 15'-2" |
| | 40S | 21'-3" | 19'-9" | 18'-11" | 17'-11" | 22'-4" | 20'-9" | 19'-10" | 18'-8" | 20'-7" | 19'-1" | 18'-2" | 17'-5" | 21'-7" | 20'-0" | 19'-1" | 18'-2" | | 40S | | | | |
| | 400 | 21'-4" | 19'-10" | 18'-11" | 18'-0"* | 22'-5" | 20'-10" | 19'-10" | 18'-6"* | 20'-7" | 19'-1" | 18'-3" | 17'-5" | 21'-7" | 20'-0" | 19'-1" | 18'-2"* | | 400 | | | | 17'-8" |
| | 40 | 21'-9" | 20'-3" | 19'-3" | 18'-4" | 22'-10" | 21'-3" | 20'-3" | 19'-3" | 21'-1" | 19'-6" | 18'-7" | 17'-9" | 22'-1" | 20'-6" | 19'-6" | 18'-6" | | 40 | | | | |
| 14" | 60S | 22'-1" | 20'-6" | 19'-7" | 18'-7" | 23'-3" | 21'-7" | 20'-7" | 19'-6" | 21'-5" | 19'-10" | 18'-11" | 18'-0" | 22'-6" | 20'-10" | 19'-10" | 18'-10" | 14" | 60S | | | | |
| | 70 | 22'-9" | 21'-1" | 20'-1" | 19'-1" | 23'-11" | 22'-2" | 21'-2" | 20'-0"* | 22'-1" | 20'-5" | 19'-6" | 18'-6" | 23'-3" | 21'-6" | 20'-5" | 19'-5" | | 70 | | | | 19'-9" |
| | 80S | 23'-7" | 21'-10" | 20'-10" | 19'-9" | 24'-10" | 23'-0" | 21'-11" | 20'-9" | 23'-0" | 21'-3" | 20'-3" | 19'-2" | 24'-2" | 22'-4" | 21'-3" | 20'-1" | | 80S | | | | |
| | 90 | 24'-8" | 22'-10" | 21'-9" | 20'-7" | 26'-0" | 24'-0" | 22'-10" | 21'-7" | 24'-2" | 22'-3" | 21'-2" | 20'-0" | 25'-5" | 23'-5" | 22'-3" | 21'-0" | | 90 | | | | |
| | 40S | 23'-2" | 21'-7" | 20'-7" | 19'-7" | 24'-4" | 22'-8" | 21'-8" | 20'-1"* | 22'-5" | 20'-9" | 19'-10" | 18'-10" | 23'-6" | 21'-10" | 20'-9" | 19'-9"* | | 40S | | | | 19'-9" |
| | 400 | 23'-3" | 21'-7" | 20'-8" | 18'-6"* | 24'-5" | 22'-8" | 21'-8" | 18'-6"* | 22'-6" | 20'-10" | 19'-10" | 18'-6"* | 23'-7" | 21'-10" | 20'-10" | 18'-6"* | | 400 | | | | 17'-8" |
| | 40 | 23'-9" | 22'-0" | 21'-0" | 20'-0"* | 24'-11" | 23'-2" | 22'-1" | 21'-0"* | 23'-0" | 21'-3" | 20'-3" | 19'-3" | 24'-1" | 22'-4" | 21'-3" | 20'-2"* | | 40 | | | | 19'-9" |
| 16" | 60S | 24'-1" | 22'-5" | 21'-4" | 20'-3"* | 25'-4" | 23'-6" | 22'-5" | 21'-4"* | 23'-5" | 21'-8" | 20'-8" | 19'-7" | 24'-7" | 22'-9" | 21'-8" | 20'-6"* | 16" | 60S | | | | 19'-9" |
| | 70 | 24'-10" | 23'-0" | 21'-11" | 20'-10"* | 26'-1" | 24'-2" | 23'-1" | 21'-10"* | 24'-1" | 22'-3" | 21'-3" | 20'-1"* | 25'-4" | 23'-5" | 22'-4" | 21'-1"* | | 70 | | | | 19'-9" |
| | 80S | 25'-9" | 23'-10" | 22'-8" | 21'-6" | 27'-1" | 25'-1" | 23'-10" | 22'-7" | 25'-1" | 23'-2" | 22'-0" | 20'-10" | 26'-4" | 24'-4" | 23'-2" | 21'-11" | | 80S | | | | |
| | 90 | 26'-11" | 24'-11" | 23'-8" | 22'-5" | 28'-4" | 26'-2" | 24'-11" | 23'-7" | 26'-4" | 24'-3" | 23'-1" | 21'-9" | 27'-8" | 25'-6" | 24'-3" | 22'-11" | | 90 | | | | |





| | | | | | 23/3 | 2" (3/4") | OSB SUB | FLOOR (G | LUED-N | AILED), S | TANDAR | D TERM | | | | | | | | | | | |
|----------|-------|----------|------------|------------|--------------|--------------|-----------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|----------|----------|--------|-----------|-----------|--------------------|-------------------------------|
| | | | | D | Directly App | plied Ceilir | ng | | | | | No | Directly A | pplied Cei | iling | | | | | | | equired at int. s | supports of ength is < 5 1/4" |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | (| Continuou | s Span Onl | у | Sir | nple or Co | ntinuous S | pan | | Continuou | s Span Onl | ly | Depth | RFPI® | | | le of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /30 PSF De | ead Load | | | | | | | | | 40 PSI | Live Load | /30 PSF E | ead Load | |
| | 20 | 16'-5" | 15'-6" | 14'-10"* | 11'-10"* | 17'-0" | 16'-1" | 14'-10"* | 11'-10"* | 16'-0" | 15'-1" | 14'-6"* | 11'-10"* | 16'-6" | 15'-7" | 14'-10"* | 11'-10"* | | 20 | | | 14'-0" | 11'-2" |
| | 40S | 16'-10" | 15'-11" | 14'-9" | 13'-2" | 17'-5" | 16'-2" | 14'-9" | 13'-2" | 16'-5" | 15'-6" | 14'-9" | 13'-2" | 17'-0" | 16'-0" | 14'-9" | 13'-2" | | 40S | | | | |
| | 400 | 16'-10" | 15'-11" | 15'-4" | 14'-3"* | 17'-5" | 16'-5" | 15'-10" | 14'-3"* | 16'-5" | 15'-6" | 14'-11" | 14'-3"* | 17'-0" | 16'-0" | 15'-5" | 14'-3"* | | 400 | | | | 13'-7" |
| 9-1/2" | 40 | 17'-1" | 16'-2" | 15'-7" | 14'-11"* | 17'-9" | 16'-9" | 16'-1" | 15'-6"* | 16'-8" | 15'-9" | 15'-2" | 14'-7"* | 17'-4" | 16'-3" | 15'-8" | 15'-1"* | 9-1/2" | 40 | | | | 14'-3" |
| | 60S | 17'-4" | 16'-4" | 15'-9" | 14'-2"* | 18'-0" | 16'-11" | 16'-4" | 14'-2"* | 16'-11" | 15'-11" | 15'-4" | 14'-2"* | 17'-6" | 16'-6" | 15'-11" | 14'-2"* | | 60S | | | | 13'-8" |
| | 70 | 17'-8" | 16'-8" | 16'-1" | 15'-5"* | 18'-6" | 17'-3" | 16'-8" | 15'-10"* | 17'-4" | 16'-4" | 15'-8" | 15'-1"* | 18'-0" | 16'-11" | 16'-3" | 15'-7"* | | 70 | | | | 14'-9" |
| | 90 | 19'-2" | 17'-9" | 17'-1" | 16'-4" | 20'-2" | 18'-7" | 17'-9" | 17'-0" | 18'-9" | 17'-5" | 16'-9" | 16'-1" | 19'-8" | 18'-2" | 17'-5" | 16'-8" | | 90 | | | | |
| | 20 | 18'-7" | 17'-5" | 16'-2"* | 12'-10"* | 19'-6" | 18'-2" | 16'-2"* | 12'-10"* | 17'-11" | 16'-11" | 16'-2"* | 12'-10"* | 18'-10" | 17'-6" | 16'-2"* | 12'-10"* | | 20 | | | 15'-4" | 12'-2" |
| | 40S | 19'-2" | 17'-10" | 16'-9" | 14'-11" | 20'-1" | 18'-4" | 16'-9" | 14'-11" | 18'-7" | 17'-4" | 16'-9" | 14'-11" | 19'-5" | 18'-0" | 16'-9" | 14'-11" | | 40S | | | | |
| | 400 | 19'-2" | 17'-10" | 17'-2" | 14'-11"* | 20'-1" | 18'-8" | 17'-10" | 14'-11"* | 18'-6" | 17'-4" | 16'-8" | 14'-11"* | 19'-5" | 18'-0" | 17'-4" | 14'-11"* | | 400 | | | | 14'-3" |
| 44 7 (0" | 40 | 19'-7" | 18'-2" | 17'-5" | 16'-8"* | 20'-6" | 19'-1" | 18'-2" | 16'-8"* | 18'-11" | 17'-8" | 17'-0" | 16'-4"* | 19'-10" | 18'-5" | 17'-7" | 16'-8"* | 44 7 (0) | 40 | | | | 15'-9" |
| 11-7/8" | 60S | 19'-10" | 18'-5" | 17'-8" | 16'-8"* | 20'-10" | 19'-4" | 18'-6" | 16'-8"* | 19'-3" | 17'-10" | 17'-3" | 16'-6"* | 20'-3" | 18'-9" | 17'-10" | 16'-8"* | 11-7/8" | 60S | | | | 15'-10" |
| | 70 | 20'-5" | 18'-11" | 18'-1" | 16'-8"* | 21'-5" | 19'-11" | 19'-0" | 16'-8"* | 19'-10" | 18'-5" | 17'-7" | 16'-8"* | 20'-10" | 19'-3" | 18'-5" | 16'-8"* | | 70 | | | | 15'-10" |
| | 80S | 21'-3" | 19'-8" | 18'-9" | 17'-9" | 22'-4" | 20'-8" | 19'-8" | 18'-8"* | 20'-8" | 19'-2" | 18'-3" | 17'-5" | 21'-9" | 20'-1" | 19'-1" | 18'-1"* | | 80S | | | | 17'-10" |
| | 90 | 22'-2" | 20'-6" | 19'-6" | 18'-6" | 23'-4" | 21'-7" | 20'-6" | 19'-5" | 21'-8" | 20'-0" | 19'-1" | 18'-0" | 22'-10" | 21'-0" | 20'-0" | 18'-11" | | 90 | | | | |
| | 20 | 20'-9" | 19'-3"* | 16'-2"* | 12'-10"* | 21'-9" | 19'-5"* | 16'-2"* | 12'-10"* | 20'-0" | 18'-6"* | 16'-2"* | 12'-10"* | 20'-11" | 19'-5"* | 16'-2"* | 12'-10"* | | 20 | | 18'-6" | 15'-4" | 12'-2" |
| | 40S | 21'-3" | 19'-9" | 18'-9" | 16'-9"* | 22'-4" | 20'-7" | 18'-9" | 16'-9"* | 20'-7" | 19'-1" | 18'-2" | 16'-9"* | 21'-7" | 20'-0" | 18'-9" | 16'-9"* | | 40S | | | | 15'-10" |
| | 400 | 21'-4" | 19'-10" | 18'-8"* | 14'-11"* | 22'-5" | 20'-10" | 18'-8"* | 14'-11"* | 20'-7" | 19'-1" | 18'-3"* | 14'-11"* | 21'-7" | 20'-0" | 18'-8"* | 14'-11"* | | 400 | | | 17'-11" | 14'-3" |
| | 40 | 21'-9" | 20'-3" | 19'-3" | 17'-5"* | 22'-10" | 21'-3" | 20'-3"* | 17'-5"* | 21'-1" | 19'-6" | 18'-7"* | 17'-5"* | 22'-1" | 20'-6" | 19'-6" | 17'-5"* | 4.49 | 40 | | | 19'-11" | 15'-10" |
| 14" | 60S | 22'-1" | 20'-6" | 19'-7" | 17'-5"* | 23'-3" | 21'-7" | 20'-7"* | 17'-5"* | 21'-5" | 19'-10" | 18'-11"* | 17'-5"* | 22'-6" | 20'-10" | 19'-10" | 17'-5"* | 14" | 60S | | | 19'-11" | 15'-10" |
| | 70 | 22'-9" | 21'-1" | 20'-1"* | 17'-5"* | 23'-11" | 22'-2" | 21'-2"* | 17'-5"* | 22'-1" | 20'-5" | 19'-6" | 17'-5"* | 23'-3" | 21'-6" | 20'-5"* | 17'-5"* | | 70 | | | 19'-11" | 15'-10" |
| | 80S | 23'-7" | 21'-10" | 20'-10" | 19'-9"* | 24'-10" | 23'-0" | 21'-11" | 20'-9"* | 23'-0" | 21'-3" | 20'-3" | 19'-2" | 24'-2" | 22'-4" | 21'-3" | 20'-1"* | | 80S | | | | 19'-3" |
| | 90 | 24'-8" | 22'-10" | 21'-9" | 20'-7" | 26'-0" | 24'-0" | 22'-10" | 21'-7"* | 24'-2" | 22'-3" | 21'-2" | 20'-0" | 25'-5" | 23'-5" | 22'-3" | 21'-0" | | 90 | | | | 21'-5" |
| | 40S | 23'-2" | 21'-7" | 20'-3"* | 18'-1"* | 24'-4" | 22'-2" | 20'-3"* | 18'-1"* | 22'-5" | 20'-9" | 19'-10" | 18'-1"* | 23'-6" | 21'-10" | 20'-3"* | 18'-1"* | | 40S | | | 19'-11" | 15'-10" |
| | 400 | 23'-3" | 21'-7"* | 18'-8"* | 14'-11"* | 24'-5" | 22'-6"* | 18'-8"* | 14'-11"* | 22'-6" | 20'-10" | 18'-8"* | 14'-11"* | 23'-7" | 21'-10"* | 18'-8"* | 14'-11"* | | 400 | | 21'-6" | 17'-11" | 14'-3" |
| | 40 | 23'-9" | 22'-0" | 21'-0"* | 18'-1"* | 24'-11" | 23'-2" | 22'-1"* | 18'-1"* | 23'-0" | 21'-3" | 20'-3"* | 18'-1"* | 24'-1" | 22'-4" | 21'-3"* | 18'-1"* | | 40 | | | 19'-11" | 15'-10" |
| 16" | 60S | 24'-1" | 22'-5" | 21'-4"* | 18'-1"* | 25'-4" | 23'-6" | 22'-5"* | 18'-1"* | 23'-5" | 21'-8" | 20'-8"* | 18'-1"* | 24'-7" | 22'-9" | 21'-8"* | 18'-1"* | 16" | 60S | | | 19'-11" | 15'-10" |
| | 70 | 24'-10" | 23'-0" | 21'-11"* | 18'-1"* | 26'-1" | 24'-2"* | 22'-9"* | 18'-1"* | 24'-1" | 22'-3" | 21'-3"* | 18'-1"* | 25'-4" | 23'-5" | 22'-4"* | 18'-1"* | | 70 | | 23'-11" | 19'-11" | 15'-10" |
| | 80S | 25'-9" | 23'-10" | 22'-8" | 20'-6"* | 27'-1" | 25'-1" | 23'-10" | 22'-6"* | 25'-1" | 23'-2" | 22'-0" | 20'-6"* | 26'-4" | 24'-4" | 23'-2" | 21'-11"* | | 80S | | | | 19'-3" |
| | 90 | 26'-11" | 24'-11" | 23'-8" | 22'-5"* | 28'-4" | 26'-2" | 24'-11" | 22'-6"* | 26'-4" | 24'-3" | 23'-1" | 21'-9"* | 27'-8" | 25'-6" | 24'-3" | 22'-6"* | | 90 | | | | 21'-5" |





| | | | | | 23/3 | 2" (3/4") | | | | 11220/, 0 | IAI (DAIC | | | | | | | | | | | | |
|---------|-------|----------|------------|------------|------------|--------------|-----------|------------|-----------|-----------|------------|-------------------------|------------|------------|-----------|------------|----------|---------|--------|-----------|-----------|-------------------|------------------------------|
| | | | | D | irectly Ap | plied Ceilir | ng | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. s | supports of ength is < 5 1/4 |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | (| Continuou | s Span Onl | у | Sin | nple or Co | ntinuous S _l | oan | (| Continuou | s Span Onl | У | Depth | RFPI® | | | | aring is ≥ than: |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load/ | 35 PSF De | ead Load | | | | | | | | | 40 PSF | Live Load | /35 PSF D | ead Load | |
| | 20 | 16'-5" | 15'-6" | 13'-11"* | 11'-1"* | 17'-0" | 16'-1"* | 13'-11"* | 11'-1"* | 16'-0" | 15'-1" | 13'-11"* | 11'-1"* | 16'-6" | 15'-7" | 13'-11"* | 11'-1"* | | 20 | | 15'-10" | 13'-2" | 10'-6" |
| | 40S | 16'-10" | 15'-8" | 14'-3" | 12'-9" | 17'-5" | 15'-8" | 14'-3" | 12'-9" | 16'-5" | 15'-6" | 14'-3" | 12'-9" | 17'-0" | 15'-8" | 14'-3" | 12'-9" | | 40S | | | | |
| | 400 | 16'-10" | 15'-11" | 15'-4" | 13'-4"* | 17'-5" | 16'-5" | 15'-10" | 13'-4"* | 16'-5" | 15'-6" | 14'-11" | 13'-4"* | 17'-0" | 16'-0" | 15'-5" | 13'-4"* | | 400 | | | | 12'-9" |
| 9-1/2" | 40 | 17'-1" | 16'-2" | 15'-7" | 14'-11"* | 17'-9" | 16'-9" | 16'-1" | 14'-11"* | 16'-8" | 15'-9" | 15'-2" | 14'-7"* | 17'-4" | 16'-3" | 15'-8" | 14'-11"* | 9-1/2" | 40 | | | | 13'-4" |
| | 60S | 17'-4" | 16'-4" | 15'-9" | 13'-4"* | 18'-0" | 16'-11" | 16'-2"* | 13'-4"* | 16'-11" | 15'-11" | 15'-4" | 13'-4"* | 17'-6" | 16'-6" | 15'-11" | 13'-4"* | | 60S | | | 16'-1" | 12'-10" |
| | 70 | 17'-8" | 16'-8" | 16'-1" | 14'-11"* | 18'-6" | 17'-3" | 16'-8" | 14'-11"* | 17'-4" | 16'-4" | 15'-8" | 14'-11"* | 18'-0" | 16'-11" | 16'-3" | 14'-11"* | | 70 | | | | 13'-11" |
| | 90 | 19'-2" | 17'-9" | 17'-1" | 16'-4" | 20'-2" | 18'-7" | 17'-9" | 17'-0" | 18'-9" | 17'-5" | 16'-9" | 16'-1" | 19'-8" | 18'-2" | 17'-5" | 16'-8" | | 90 | | | | |
| | 20 | 18'-7" | 17'-5"* | 15'-2"* | 12'-1"* | 19'-6" | 18'-2"* | 15'-2"* | 12'-1"* | 17'-11" | 16'-11" | 15'-2"* | 12'-1"* | 18'-10" | 17'-6"* | 15'-2"* | 12'-1"* | | 20 | | 17'-4" | 14'-5" | 11'-5" |
| | 40S | 19'-2" | 17'-10" | 16'-3" | 14'-6" | 20'-1" | 17'-10" | 16'-3" | 14'-6" | 18'-7" | 17'-4" | 16'-3" | 14'-6" | 19'-5" | 17'-10" | 16'-3" | 14'-6" | | 40S | | | | |
| | 400 | 19'-2" | 17'-10" | 17'-2"* | 14'-0"* | 20'-1" | 18'-8" | 17'-6"* | 14'-0"* | 18'-6" | 17'-4" | 16'-8" | 14'-0"* | 19'-5" | 18'-0" | 17'-4"* | 14'-0"* | | 400 | | | 16'-9" | 13'-4" |
| | 40 | 19'-7" | 18'-2" | 17'-5" | 15'-8"* | 20'-6" | 19'-1" | 18'-2" | 15'-8"* | 18'-11" | 17'-8" | 17'-0" | 15'-8"* | 19'-10" | 18'-5" | 17'-7" | 15'-8"* | | 40 | | | | 14'-10" |
| L1-7/8" | 60S | 19'-10" | 18'-5" | 17'-8" | 15'-8"* | 20'-10" | 19'-4" | 18'-5" | 15'-8"* | 19'-3" | 17'-10" | 17'-3" | 15'-8"* | 20'-3" | 18'-9" | 17'-10" | 15'-8"* | 11-7/8" | 60S | | | | 14'-11" |
| | 70 | 20'-5" | 18'-11" | 18'-1" | 15'-8"* | 21'-5" | 19'-11" | 19'-0"* | 15'-8"* | 19'-10" | 18'-5" | 17'-7" | 15'-8"* | 20'-10" | 19'-3" | 18'-5" | 15'-8"* | | 70 | | | 18'-8" | 14'-11" |
| | 80S | 21'-3" | 19'-8" | 18'-9" | 18'-8"* | 22'-4" | 20'-8" | 19'-8" | 18'-8"* | 20'-8" | 19'-2" | 18'-3" | 17'-5"* | 21'-9" | 20'-1" | 19'-1" | 18'-1"* | | 80S | | | | 16'-9" |
| | 90 | 22'-2" | 20'-6" | 19'-6" | 18'-6" | 23'-4" | 21'-7" | 20'-6" | 19'-5" | 21'-8" | 20'-0" | 19'-1" | 18'-0" | 22'-10" | 21'-0" | 20'-0" | 18'-11" | | 90 | | | | |
| | 20 | 20'-9" | 18'-3"* | 15'-2"* | 12'-1"* | 21'-9" | 18'-3"* | 15'-2"* | 12'-1"* | 20'-0" | 18'-3"* | 15'-2"* | 12'-1"* | 20'-11" | 18'-3"* | 15'-2"* | 12'-1"* | | 20 | | 17'-4" | 14'-5" | 11'-5" |
| | 40S | 21'-3" | 19'-9" | 18'-2" | 16'-3"* | 22'-4" | 19'-11" | 18'-2" | 16'-3"* | 20'-7" | 19'-1" | 18'-2" | 16'-3"* | 21'-7" | 19'-11" | 18'-2" | 16'-3"* | | 40S | | | | 14'-11" |
| | 400 | 21'-4" | 19'-10" | 17'-6"* | 14'-0"* | 22'-5" | 20'-10"* | 17'-6"* | 14'-0"* | 20'-7" | 19'-1" | 17'-6"* | 14'-0"* | 21'-7" | 20'-0" | 17'-6"* | 14'-0"* | | 400 | | 20'-2" | 16'-9" | 13'-4" |
| | 40 | 21'-9" | 20'-3" | 19'-3"* | 16'-4"* | 22'-10" | 21'-3" | 20'-3"* | 16'-4"* | 21'-1" | 19'-6" | 18'-7" | 16'-4"* | 22'-1" | 20'-6" | 19'-6"* | 16'-4"* | | 40 | | | 18'-8" | 14'-11" |
| 14" | 60S | 22'-1" | 20'-6" | 19'-7"* | 16'-4"* | 23'-3" | 21'-7" | 20'-3"* | 16'-4"* | 21'-5" | 19'-10" | 18'-11"* | 16'-4"* | 22'-6" | 20'-10" | 19'-10"* | 16'-4"* | 14" | 60S | | | 18'-8" | 14'-11" |
| | 70 | 22'-9" | 21'-1" | 20'-1"* | 16'-4"* | 23'-11" | 22'-2" | 20'-6"* | 16'-4"* | 22'-1" | 20'-5" | 19'-6"* | 16'-4"* | 23'-3" | 21'-6" | 20'-5"* | 16'-4"* | | 70 | | | 18'-8" | 14'-11" |
| | 80S | 23'-7" | 21'-10" | 20'-10" | 19'-3"* | 24'-10" | 23'-0" | 21'-11" | 20'-1"* | 23'-0" | 21'-3" | 20'-3" | 19'-2"* | 24'-2" | 22'-4" | 21'-3" | 20'-1"* | | 80S | | | | 18'-1" |
| | 90 | 24'-8" | 22'-10" | 21'-9" | 20'-7"* | 26'-0" | 24'-0" | 22'-10" | 21'-0"* | 24'-2" | 22'-3" | 21'-2" | 20'-0" | 25'-5" | 23'-5" | 22'-3" | 21'-0"* | | 90 | | | | 20'-1" |
| | 40S | 23'-2" | 21'-6" | 19'-7"* | 17'-0"* | 24'-4" | 21'-6" | 19'-7"* | 17'-0"* | 22'-5" | 20'-9" | 19'-7"* | 17'-0"* | 23'-6" | 21'-6" | 19'-7"* | 17'-0"* | | 40S | | | 18'-8" | 14'-11" |
| | 400 | 23'-3" | 21'-1"* | 17'-6"* | 14'-0"* | 24'-5" | 21'-1"* | 17'-6"* | 14'-0"* | 22'-6" | 20'-10"* | 17'-6"* | 14'-0"* | 23'-7" | 21'-1"* | 17'-6"* | 14'-0"* | | 400 | | 20'-2" | 16'-9" | 13'-4" |
| | 40 | 23'-9" | 22'-0" | 21'-0"* | 17'-0"* | 24'-11" | 23'-2"* | 21'-4"* | 17'-0"* | 23'-0" | 21'-3" | 20'-3"* | 17'-0"* | 24'-1" | 22'-4" | 21'-3"* | 17'-0"* | | 40 | | 22'-6" | 18'-8" | 14'-11" |
| 16" | 60S | 24'-1" | 22'-5" | 21'-4"* | 17'-0"* | 25'-4" | 23'-6"* | 21'-4"* | 17'-0"* | 23'-5" | 21'-8" | 20'-8"* | 17'-0"* | 24'-7" | 22'-9"* | 21'-4"* | 17'-0"* | 16" | 60S | | 22'-6" | 18'-8" | 14'-11" |
| | 70 | 24'-10" | 23'-0"* | 21'-4"* | 17'-0"* | 26'-1" | 24'-2"* | 21'-4"* | 17'-0"* | 24'-1" | 22'-3" | 21'-3"* | 17'-0"* | 25'-4" | 23'-5"* | 21'-4"* | 17'-0"* | | 70 | | 22'-6" | 18'-8" | 14'-11" |
| | 80S | 25'-9" | 23'-10" | 22'-8"* | 19'-3"* | 27'-1" | 25'-1" | 23'-10"* | 21'-1"* | 25'-1" | 23'-2" | 22'-0" | 19'-3"* | 26'-4" | 24'-4" | 23'-2"* | 21'-1"* | | 80S | | | 22'-8" | 18'-1" |
| | 90 | 26'-11" | 24'-11" | 23'-8" | 21'-1"* | 28'-4" | 26'-2" | 24'-11" | 21'-1"* | 26'-4" | 24'-3" | 23'-1" | 21'-1"* | 27'-8" | 25'-6" | 24'-3" | 21'-1"* | | 90 | | | | 20'-1" |





| | | | | | 19/3 | 2" (5/8") (| OSB SUB | FLOOR (G | LUED-N | AILED), S | TANDARI | D TERM | | | | | | | | | | | |
|---------|-------|----------|------------|------------|------------|--------------|-----------|------------|-----------|-----------|------------|-------------------------|------------|------------|-----------|------------|----------|---------|-------|-------------|-----------|--------------------|---------------------------------------|
| | | | | D | irectly Ap | plied Ceilin | ıg | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. su | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | (| Continuou | s Span Onl | у | Sir | nple or Co | ntinuous S _l | pan | (| Continuou | s Span Onl | у | Depth | RFPI® | | | le of the int. bea | ength is < 5 1/4" aring is ≥ than: |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /10 PSF D | ead Load | | | | | | | | | 40 PS | F Live Load | /10 PSF D | ead Load | |
| | 20 | 15'-7" | 14'-9" | 14'-3" | | 16'-2" | 15'-3" | 14'-9" | | 15'-1" | 14'-3" | 13'-10" | | 15'-8" | 14'-9" | 14'-3" | | | 20 | | | | |
| | 40S | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 40S | | | | |
| | 400 | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 400 | | | | |
| 9-1/2" | 40 | 16'-3" | 15'-4" | 14'-10" | | 16'-10" | 15'-11" | 15'-4" | | 15'-10" | 14'-11" | 14'-5" | | 16'-4" | 15'-5" | 14'-11" | | 9-1/2" | 40 | | | | |
| | 60S | 16'-5" | 15'-6" | 15'-0" | | 17'-0" | 16'-1" | 15'-6" | | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | | 60S | | | | |
| | 70 | 16'-10" | 15'-10" | 15'-4" | | 17'-5" | 16'-5" | 15'-10" | | 16'-5" | 15'-5" | 14'-11" | | 17'-0" | 16'-0" | 15'-6" | | | 70 | | | | |
| | 90 | 18'-0" | 16'-11" | 16'-4" | | 18'-11" | 17'-6" | 16'-11" | | 17'-7" | 16'-6" | 16'-0" | | 18'-5" | 17'-2" | 16'-7" | | | 90 | | | | |
| | 20 | 17'-6" | 16'-7" | 16'-0" | | 18'-3" | 17'-2" | 16'-7" | | 17'-0" | 16'-0" | 15'-6" | | 17'-7" | 16'-7" | 16'-1" | | | 20 | | | | |
| | 40S | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 17'-0" | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-6" | | | 40S | | | | |
| | 400 | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 17'-0" | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-6" | | | 400 | | | | |
| | 40 | 18'-4" | 17'-3" | 16'-8" | | 19'-3" | 17'-11" | 17'-3" | | 17'-9" | 16'-9" | 16'-2" | | 18'-7" | 17'-4" | 16'-9" | | | 40 | | | | |
| 11-7/8" | 60S | 18'-8" | 17'-5" | 16'-10" | | 19'-7" | 18'-2" | 17'-6" | | 18'-0" | 16'-11" | 16'-5" | | 18'-11" | 17'-7" | 17'-0" | | 11-7/8" | 60S | | | | |
| | 70 | 19'-2" | 17'-10" | 17'-2" | | 20'-2" | 18'-8" | 17'-10" | | 18'-7" | 17'-4" | 16'-9" | | 19'-6" | 18'-0" | 17'-4" | | | 70 | | | | |
| | 80S | 19'-11" | 18'-5" | 17'-8" | | 20'-11" | 19'-5" | 18'-7" | | 19'-4" | 17'-11" | 17'-3" | | 20'-4" | 18'-9" | 18'-0" | | | 80S | | | | |
| | 90 | 20'-10" | 19'-3" | 18'-5" | | 21'-11" | 20'-3" | 19'-4" | | 20'-3" | 18'-9" | 17'-11" | | 21'-4" | 19'-8" | 18'-10" | | | 90 | | | | |
| | 20 | 19'-5" | 18'-1" | 17'-6" | | 20'-5" | 19'-0" | 18'-2" | | 18'-8" | 17'-5" | 16'-11" | | 19'-7" | 18'-2" | 17'-6" | | | 20 | | | | |
| | 40S | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-8" | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11" | | | 405 | | | | |
| | 400 | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-9" | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11" | | | 400 | | | | |
| | 40 | 20'-5" | 19'-0" | 18'-2" | | 21'-5" | 19'-11" | 19'-1" | | 19'-8" | 18'-3" | 17'-7" | | 20'-8" | 19'-2" | 18'-4" | | | 40 | | | | |
| 14" | 60S | 20'-9" | 19'-3" | 18'-6" | | 21'-10" | 20'-3" | 19'-5" | | 20'-1" | 18'-7" | 17'-10" | | 21'-1" | 19'-6" | 18'-8" | | 14" | 60S | | | | |
| | 70 | 21'-5" | 19'-10" | 19'-0" | | 22'-6" | 20'-10" | 19'-11" | | 20'-8" | 19'-2" | 18'-4" | | 21'-9" | 20'-1" | 19'-3" | | | 70 | | | | |
| | 80S | 22'-2" | 20'-6" | 19'-8" | | 23'-4" | 21'-7" | 20'-8" | | 21'-6" | 19'-11" | 19'-0" | | 22'-7" | 20'-11" | 20'-0" | | | 80S | | | | |
| | 90 | 23'-3" | 21'-6" | 20'-6" | | 24'-5" | 22'-7" | 21'-7" | | 22'-7" | 20'-10" | 19'-11" | | 23'-9" | 21'-11" | 20'-11" | | | 90 | | | | |
| | 40S | 21'-9" | 20'-3" | 19'-5" | | 22'-11" | 21'-3" | 20'-5" | | 20'-11" | 19'-5" | 18'-8" | | 22'-0" | 20'-5" | 19'-7" | | | 405 | | | | |
| | 400 | 21'-10" | 20'-3" | 19'-5" | | 22'-11" | 21'-4" | 20'-5" | | 21'-0" | 19'-6" | 18'-8" | | 22'-0" | 20'-5" | 19'-7" | | | 400 | | | | |
| | 40 | 22'-3" | 20'-8" | 19'-10" | | 23'-5" | 21'-9" | 20'-10" | | 21'-6" | 19'-11" | 19'-1" | | 22'-7" | 20'-11" | 20'-0" | | | 40 | | | | |
| 16" | 60S | 22'-8" | 21'-0" | 20'-2" | | 23'-10" | 22'-1" | 21'-2" | | 21'-10" | 20'-3" | 19'-5" | | 23'-0" | 21'-3" | 20'-4" | | 16" | 60S | | | | |
| | 70 | 23'-4" | 21'-7" | 20'-8" | | 24'-6" | 22'-9" | 21'-9" | | 22'-7" | 20'-10" | 20'-0" | | 23'-8" | 21'-11" | 21'-0" | | | 70 | | | | |
| | 805 | 24'-2" | 22'-5" | 21'-5" | | 25'-5" | 23'-7" | 22'-6" | | 23'-6" | 21'-8" | 20'-9" | | 24'-8" | 22'-9" | 21'-9" | | | 80S | | | | |
| | 90 | 25'-4" | 23'-5" | 22'-4" | | 26'-8" | 24'-8" | 23'-6" | | 24'-8" | 22'-8" | 21'-8" | | 25'-11" | 23'-11" | 22'-9" | | | 90 | | | | |





| | | | | | 19/3 | 2" (5/8") (| OSB SUBI | LOOR (C | LUED-N | AILED), S | TANDARI | D TERM | | | | | | | | | | | |
|---------|-------|----------|------------|------------|-------------|--------------|------------|------------|------------|-----------|------------|-------------------------|------------|------------|-----------|------------|----------|---------|-------|-------------|-----------|--------------------|----------|
| | | | | D | Directly Ap | plied Ceilir | ng | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. si | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | (| Continuous | Span On | ly | Sin | nple or Co | ntinuous S _l | pan | (| Continuou | s Span Onl | у | Depth | RFPI® | | | le of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /15 PSF De | ead Load | | | | | | | | | 40 PS | F Live Load | /15 PSF D | Dead Load | |
| | 20 | 15'-7" | 14'-9" | 14'-3" | | 16'-2" | 15'-3" | 14'-9" | | 15'-1" | 14'-3" | 13'-10" | | 15'-8" | 14'-9" | 14'-3" | | | 20 | | | | |
| | 40S | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 40S | | | | |
| | 400 | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 400 | | | | |
| 9-1/2" | 40 | 16'-3" | 15'-4" | 14'-10" | | 16'-10" | 15'-11" | 15'-4" | | 15'-10" | 14'-11" | 14'-5" | | 16'-4" | 15'-5" | 14'-11" | | 9-1/2" | 40 | | | | |
| | 60S | 16'-5" | 15'-6" | 15'-0" | | 17'-0" | 16'-1" | 15'-6" | | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | | 60S | | | | |
| | 70 | 16'-10" | 15'-10" | 15'-4" | | 17'-5" | 16'-5" | 15'-10" | | 16'-5" | 15'-5" | 14'-11" | | 17'-0" | 16'-0" | 15'-6" | | | 70 | | | | |
| | 90 | 18'-0" | 16'-11" | 16'-4" | | 18'-11" | 17'-6" | 16'-11" | | 17'-7" | 16'-6" | 16'-0" | | 18'-5" | 17'-2" | 16'-7" | | | 90 | | | | |
| | 20 | 17'-6" | 16'-7" | 16'-0" | | 18'-3" | 17'-2" | 16'-7" | | 17'-0" | 16'-0" | 15'-6" | | 17'-7" | 16'-7" | 16'-1" | | | 20 | | | | |
| | 40S | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 17'-0" | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-6" | | | 40S | | | | |
| | 400 | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 17'-0" | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-6" | | | 400 | | | | |
| | 40 | 18'-4" | 17'-3" | 16'-8" | | 19'-3" | 17'-11" | 17'-3" | | 17'-9" | 16'-9" | 16'-2" | | 18'-7" | 17'-4" | 16'-9" | | | 40 | | | | |
| 11-7/8" | 60S | 18'-8" | 17'-5" | 16'-10" | | 19'-7" | 18'-2" | 17'-6" | | 18'-0" | 16'-11" | 16'-5" | | 18'-11" | 17'-7" | 17'-0" | | 11-7/8" | 60S | | | | |
| | 70 | 19'-2" | 17'-10" | 17'-2" | | 20'-2" | 18'-8" | 17'-10" | | 18'-7" | 17'-4" | 16'-9" | | 19'-6" | 18'-0" | 17'-4" | | | 70 | | | | |
| | 80S | 19'-11" | 18'-5" | 17'-8" | | 20'-11" | 19'-5" | 18'-7" | | 19'-4" | 17'-11" | 17'-3" | | 20'-4" | 18'-9" | 18'-0" | | | 805 | | | | |
| | 90 | 20'-10" | 19'-3" | 18'-5" | | 21'-11" | 20'-3" | 19'-4" | | 20'-3" | 18'-9" | 17'-11" | | 21'-4" | 19'-8" | 18'-10" | | | 90 | | | | |
| | 20 | 19'-5" | 18'-1" | 17'-6" | | 20'-5" | 19'-0" | 18'-2" | | 18'-8" | 17'-5" | 16'-11" | | 19'-7" | 18'-2" | 17'-6" | | | 20 | | | | |
| | 40S | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-8" | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11" | | | 40S | | | | |
| | 400 | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-9" | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11" | | | 400 | | | | |
| | 40 | 20'-5" | 19'-0" | 18'-2" | | 21'-5" | 19'-11" | 19'-1" | | 19'-8" | 18'-3" | 17'-7" | | 20'-8" | 19'-2" | 18'-4" | | | 40 | | | | |
| 14" | 60S | 20'-9" | 19'-3" | 18'-6" | | 21'-10" | 20'-3" | 19'-5" | | 20'-1" | 18'-7" | 17'-10" | | 21'-1" | 19'-6" | 18'-8" | | 14" | 60S | | | | |
| | 70 | 21'-5" | 19'-10" | 19'-0" | | 22'-6" | 20'-10" | 19'-11" | | 20'-8" | 19'-2" | 18'-4" | | 21'-9" | 20'-1" | 19'-3" | | | 70 | | | | |
| | 80S | 22'-2" | 20'-6" | 19'-8" | | 23'-4" | 21'-7" | 20'-8" | | 21'-6" | 19'-11" | 19'-0" | | 22'-7" | 20'-11" | 20'-0" | | | 80S | | | | |
| | 90 | 23'-3" | 21'-6" | 20'-6" | | 24'-5" | 22'-7" | 21'-7" | | 22'-7" | 20'-10" | 19'-11" | | 23'-9" | 21'-11" | 20'-11" | | | 90 | | | | |
| | 40S | 21'-9" | 20'-3" | 19'-5" | | 22'-11" | 21'-3" | 20'-5" | | 20'-11" | 19'-5" | 18'-8" | | 22'-0" | 20'-5" | 19'-7" | | | 40S | | | | |
| | 400 | 21'-10" | 20'-3" | 19'-5" | | 22'-11" | 21'-4" | 20'-5" | | 21'-0" | 19'-6" | 18'-8" | | 22'-0" | 20'-5" | 19'-7" | | | 400 | | | | |
| | 40 | 22'-3" | 20'-8" | 19'-10" | | 23'-5" | 21'-9" | 20'-10" | | 21'-6" | 19'-11" | 19'-1" | | 22'-7" | 20'-11" | 20'-0" | | | 40 | | | | |
| 16" | 60S | 22'-8" | 21'-0" | 20'-2" | | 23'-10" | 22'-1" | 21'-2" | | 21'-10" | 20'-3" | 19'-5" | | 23'-0" | 21'-3" | 20'-4" | | 16" | 60S | | | | |
| | 70 | 23'-4" | 21'-7" | 20'-8" | | 24'-6" | 22'-9" | 21'-9" | | 22'-7" | 20'-10" | 20'-0" | | 23'-8" | 21'-11" | 21'-0" | | | 70 | | | | |
| | 80S | 24'-2" | 22'-5" | 21'-5" | | 25'-5" | 23'-7" | 22'-6" | | 23'-6" | 21'-8" | 20'-9" | | 24'-8" | 22'-9" | 21'-9" | | | 80S | | | | |
| | 90 | 25'-4" | 23'-5" | 22'-4" | | 26'-8" | 24'-8" | 23'-6" | | 24'-8" | 22'-8" | 21'-8" | | 25'-11" | 23'-11" | 22'-9" | | | 90 | | | | |





| | | | | | 19/3 | 2" (5/8") (| OSB SUB | FLOOR (C | JLUED-N | AILED), S | TANDARI | O TERM | | | | | | | | | | | |
|---------|-------|----------|--------------------|-------------------------|-------------|--------------|-----------|------------|------------|-----------|------------|------------|------------|------------|-----------|------------|----------|---------|--------|-------------|-----------|---|----------|
| | | | | D | irectly App | plied Ceilin | ıg | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. su e int. bearing le | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S _l | pan | (| Continuou | s Span On | ly | Sin | nple or Co | ntinuous S | oan | (| Continuou | s Span Onl | у | Depth | RFPI® | | | le of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /30 PSF De | ead Load | | | | | | | | | 40 PSI | F Live Load | /30 PSF D | ead Load | |
| | 20 | 15'-7" | 14'-9" | 14'-3"* | | 16'-2" | 15'-3" | 14'-9"* | | 15'-1" | 14'-3" | 13'-10" | | 15'-8" | 14'-9" | 14'-3"* | | | 20 | | | 14'-0" | |
| | 40S | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 14'-9" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 40S | | | | |
| | 400 | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 400 | | | | |
| 9-1/2" | 40 | 16'-3" | 15'-4" | 14'-10" | | 16'-10" | 15'-11" | 15'-4" | | 15'-10" | 14'-11" | 14'-5" | | 16'-4" | 15'-5" | 14'-11" | | 9-1/2" | 40 | | | | |
| | 60S | 16'-5" | 15'-6" | 15'-0" | | 17'-0" | 16'-1" | 15'-6" | | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | | 60S | | | | |
| | 70 | 16'-10" | 15'-10" 16'-11" | 15'-4" | | 17'-5" | 16'-5" | 15'-10" | | 16'-5" | 15'-5" | 14'-11" | | 17'-0" | 16'-0" | 15'-6" | | | 70 | | | | |
| | 90 | 18'-0" | 16'-11" | 16'-4" | | 18'-11" | 17'-6" | 16'-11" | | 17'-7" | 16'-6" | 16'-0" | | 18'-5" | 17'-2" | 16'-7" | | | 90 | | | | |
| | 20 | 17'-6" | 16'-7" | 16'-0"* | | 18'-3" | 17'-2" | 16'-2"* | | 17'-0" | 16'-0" | 15'-6"* | | 17'-7" | 16'-7" | 16'-1"* | | | 20 | | | 15'-4" | |
| | 40S | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 16'-9" | | 17'-5" | 16'-5" | 15'-11" | | | | 40S | | | | | | | |
| | 400 | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 17'-0" | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-6" | | | 400 | | | | |
| | 40 | 18'-4" | 17'-3" | 16'-8" | | 19'-3" | 17'-11" | 17'-3" | | 17'-9" | 16'-9" | 16'-2" | | 18'-7" | 17'-4" | 16'-9" | | | 40 | | | | |
| 11-7/8" | 60S | 18'-8" | 17'-5" | 16'-10" | | 19'-7" | 18'-2" | 17'-6" | | 18'-0" | 16'-11" | 16'-5" | | 18'-11" | 17'-7" | 17'-0" | | 11-7/8" | 60S | | | | |
| | 70 | 19'-2" | 17'-10" | 17'-2" | | 20'-2" | 18'-8" | 17'-10" | | 18'-7" | 17'-4" | 16'-9" | | 19'-6" | 18'-0" | 17'-4" | | | 70 | | | | |
| | 80S | 19'-11" | 18'-5" | 17'-8" | | 20'-11" | 19'-5" | 18'-7" | | 19'-4" | 17'-11" | 17'-3" | | 20'-4" | 18'-9" | 18'-0" | | | 80S | | | | |
| | 90 | 20'-10" | 19'-3" | 18'-5" | | 21'-11" | 20'-3" | 19'-4" | | 20'-3" | 18'-9" | 17'-11" | | 21'-4" | 19'-8" | 18'-10" | | | 90 | | | | |
| | 20 | 19'-5" | 18'-1" | 16'-2"* | | 20'-5" | 19'-0"* | 16'-2"* | | 18'-8" | 17'-5" | 16'-2"* | | 19'-7" | 18'-2" | 16'-2"* | | | 20 | | 18'-6" | 15'-4" | |
| | 40S | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-8" | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11" | | | 40S | | | | |
| | 400 | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-8"* | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11"* | | | 400 | | | 17'-11" | |
| | 40 | 20'-5" | 19'-0" | 18'-2" | | 21'-5" | 19'-11" | 19'-1" | | 19'-8" | 18'-3" | 17'-7" | | 20'-8" | 19'-2" | 18'-4" | | | 40 | | | | |
| 14" | 60S | 20'-9" | 19'-3" | 18'-6" | | 21'-10" | 20'-3" | 19'-5" | | 20'-1" | 18'-7" | 17'-10" | | 21'-1" | 19'-6" | 18'-8" | | 14" | 60S | | | | |
| | 70 | 21'-5" | 19'-10" | 19'-0" | | 22'-6" | 20'-10" | 19'-11"* | | 20'-8" | 19'-2" | 18'-4" | | 21'-9" | 20'-1" | 19'-3" | | | 70 | | | 19'-11" | |
| | 80S | 22'-2" | 20'-6" | 19'-8" | | 23'-4" | 21'-7" | 20'-8" | | 21'-6" | 19'-11" | 19'-0" | | 22'-7" | 20'-11" | 20'-0" | | | 80S | | | | |
| | 90 | 23'-3" | 21'-6" | 20'-6" | | 24'-5" | 22'-7" | 21'-7" | | 22'-7" | 20'-10" | 19'-11" | | 23'-9" | 21'-11" | 20'-11" | | | 90 | | | | |
| | 40\$ | 21'-9" | 20'-3" | 19'-5" | | 22'-11" | 21'-3" | 20'-3"* | | 20'-11" | 19'-5" | 18'-8" | | 22'-0" | 20'-5" | 19'-7" | | | 40S | | | 19'-11" | |
| | 400 | 21'-10" | 20'-3" | 18'-8"* | | 22'-11" | 21'-4" | 18'-8"* | | 21'-0" | 19'-6" | 18'-8"* | | 22'-0" | 20'-5" | 18'-8"* | | | 400 | | | 17'-11" | |
| | 40 | 22'-3" | 20'-8" | 19'-10" | | 23'-5" | 21'-9" | 20'-10"* | | 21'-6" | 19'-11" | 19'-1" | | 22'-7" | 20'-11" | 20'-0"* | | | 40 | | | 19'-11" | |
| 16" | 60S | 22'-8" | 21'-0" | 20'-2"* | | 23'-10" | 22'-1" | 21'-2"* | | 21'-10" | 20'-3" | 19'-5" | | 23'-0" | 21'-3" | 20'-4"* | | 16" | 60S | | | 19'-11" | |
| | 70 | 23'-4" | 21'-7" | 20'-8"* | | 24'-6" | 22'-9" | 21'-9"* | | 22'-7" | 20'-10" | 20'-0"* | | 23'-8" | 21'-11" | 21'-0"* | | | 70 | | | 19'-11" | |
| | 80S | 24'-2" | 22'-5" | 21'-5" | | 25'-5" | 23'-7" | 22'-6" | | 23'-6" | 21'-8" | 20'-9" | | 24'-8" | 22'-9" | 21'-9" | | | 80S | | | | |
| | 90 | 25'-4" | 23'-5" | 22'-4" | | 26'-8" | 24'-8" | 23'-6" | | 24'-8" | 22'-8" | 21'-8" | | 25'-11" | 23'-11" | 22'-9" | | | 90 | | | | |





| | | | | | 19/3 | 2" (5/8") (| OSB SUB | FLOOR (G | LUED-N | AILED), S | TANDARI | D TERM | | | | | | | | | | | |
|---------|-------|----------|------------|-------------------------|-------------|--------------|-----------|------------|-----------|-----------|------------|-------------------------|------------|------------|-----------|------------|----------|---------|--------|-----------|-------------------|--------------------|----------|
| | | | | D | irectly App | plied Ceilin | ıg | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. so | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S _l | pan | (| Continuou | s Span Onl | у | Sin | nple or Co | ntinuous S _l | oan | (| Continuou | s Span Onl | У | Depth | RFPI® | | | le of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load | /35 PSF D | ead Load | | | | | | | | | 40 PSF | Live Load | /35 PS F D | ead Load | |
| | 20 | 15'-7" | 14'-9" | 13'-11"* | | 16'-2" | 15'-3" | 13'-11"* | | 15'-1" | 14'-3" | 13'-10"* | | 15'-8" | 14'-9" | 13'-11"* | | | 20 | | | 13'-2" | |
| | 40S | 16'-0" | 15'-1" | 14'-3" | | 16'-7" | 15'-8" | 14'-3" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-3" | | | 40S | | | | |
| | 400 | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | 15'-6" | 14'-8" | 14'-2" | | 16'-1" | 15'-2" | 14'-8" | | | 400 | | | | |
| 9-1/2" | 40 | 16'-3" | 15'-4" | 14'-10" | | 16'-10" | 15'-11" | 15'-4" | | 15'-10" | 14'-11" | 14'-5" | | 16'-4" | 15'-5" | 14'-11" | | 9-1/2" | 40 | | | | |
| | 60S | 16'-5" | 15'-6" | 15'-0" | | 17'-0" | 16'-1" | 15'-6" | | 16'-0" | 15'-1" | 14'-7" | | 16'-7" | 15'-8" | 15'-1" | | | 60S | | | | |
| | 70 | 16'-10" | 15'-10" | 15'-4" | | 17'-5" | 16'-5" | 15'-10" | | 16'-5" | 15'-5" | 14'-11" | | 17'-0" | 16'-0" | 15'-6" | | | 70 | | | | |
| | 90 | 18'-0" | 16'-11" | 16'-4" | | 18'-11" | 17'-6" | 16'-11" | | 17'-7" | 16'-6" | 16'-0" | | 18'-5" | 17'-2" | 16'-7" | | | 90 | | | | |
| | 20 | 17'-6" | 16'-7" | 15'-2"* | | 18'-3" | 17'-2" | 15'-2"* | | 17'-0" | 16'-0" | 15'-2"* | | 17'-7" | 16'-7" | 15'-2"* | | | 20 | | | 14'-5" | |
| | 40S | 18'-0" | 16'-11" | 16'-3" | | 18'-10" | 17'-7" | 16'-3" | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-3" | | | 40S | | | | |
| | 400 | 18'-0" | 16'-11" | 16'-5" | | 18'-10" | 17'-7" | 17'-0"* | | 17'-5" | 16'-5" | 15'-11" | | 18'-2" | 17'-0" | 16'-6" | | | 400 | | | 16'-9" | |
| | 40 | 18'-4" | 17'-3" | 16'-8" | | 19'-3" | 17'-11" | 17'-3" | | 17'-9" | 16'-9" | 16'-2" | | 18'-7" | 17'-4" | 16'-9" | | | 40 | | | | |
| 11-7/8" | 60S | 18'-8" | 17'-5" | 16'-10" | | 19'-7" | 18'-2" | 17'-6" | | 18'-0" | 16'-11" | 16'-5" | | 18'-11" | 17'-7" | 17'-0" | | 11-7/8" | 60S | | | | |
| | 70 | 19'-2" | 17'-10" | 17'-2" | | 20'-2" | 18'-8" | 17'-10" | | 18'-7" | 17'-4" | 16'-9" | | 19'-6" | 18'-0" | 17'-4" | | | 70 | | | | |
| | 80S | 19'-11" | 18'-5" | 17'-8" | | 20'-11" | 19'-5" | 18'-7" | | 19'-4" | 17'-11" | 17'-3" | | 20'-4" | 18'-9" | 18'-0" | | | 80S | | | | |
| | 90 | 20'-10" | 19'-3" | 18'-5" | | 21'-11" | 20'-3" | 19'-4" | | 20'-3" | 18'-9" | 17'-11" | | 21'-4" | 19'-8" | 18'-10" | | | 90 | | | | |
| | 20 | 19'-5" | 18'-1"* | 15'-2"* | | 20'-5" | 18'-3"* | 15'-2"* | | 18'-8" | 17'-5"* | 15'-2"* | | 19'-7" | 18'-2"* | 15'-2"* | | | 20 | | 17'-4" | 14'-5" | |
| | 40S | 20'-0" | 18'-7" | 17'-10" | | 21'-0" | 19'-6" | 18'-2" | | 19'-3" | 17'-10" | 17'-3" | | 20'-2" | 18'-9" | 17'-11" | | | 40S | | | | |
| | 400 | 20'-0" | 18'-7" | 17'-6"* | | 21'-0" | 19'-6" | 17'-6"* | | 19'-3" | 17'-10" | 17'-3"* | | 20'-2" | 18'-9" | 17'-6"* | | | 400 | | | 16'-9" | |
| 4.49 | 40 | 20'-5" | 19'-0" | 18'-2" | | 21'-5" | 19'-11" | 19'-1"* | | 19'-8" | 18'-3" | 17'-7" | | 20'-8" | 19'-2" | 18'-4" | | 4 4 11 | 40 | | | 18'-8" | |
| 14" | 60S | 20'-9" | 19'-3" | 18'-6" | | 21'-10" | 20'-3" | 19'-5"* | | 20'-1" | 18'-7" | 17'-10" | | 21'-1" | 19'-6" | 18'-8"* | | 14" | 60S | | | 18'-8" | |
| | 70 | 21'-5" | 19'-10" | 19'-0"* | | 22'-6" | 20'-10" | 19'-11"* | | 20'-8" | 19'-2" | 18'-4" | | 21'-9" | 20'-1" | 19'-3"* | | | 70 | | | 18'-8" | |
| | 80S | 22'-2" | 20'-6" | 19'-8" | | 23'-4" | 21'-7" | 20'-8" | | 21'-6" | 19'-11" | 19'-0" | | 22'-7" | 20'-11" | 20'-0" | | | 80S | | | | |
| | 90 | 23'-3" | 21'-6" | 20'-6" | | 24'-5" | 22'-7" | 21'-7" | | 22'-7" | 20'-10" | 19'-11" | | 23'-9" | 21'-11" | 20'-11" | | | 90 | | | | |
| | 40S | 21'-9" | 20'-3" | 19'-5"* | | 22'-11" | 21'-3" | 19'-7"* | | 20'-11" | 19'-5" | 18'-8"* | | 22'-0" | 20'-5" | 19'-7"* | | | 40S | | | 18'-8" | |
| | 400 | 21'-10" | 20'-3"* | 17'-6"* | | 22'-11" | 21'-1"* | 17'-6"* | | 21'-0" | 19'-6" | 17'-6"* | | 22'-0" | 20'-5"* | 17'-6"* | | | 400 | | 20'-2" | 16'-9" | |
| | 40 | 22'-3" | 20'-8" | 19'-10"* | | 23'-5" | 21'-9" | 20'-10"* | | 21'-6" | 19'-11" | 19'-1"* | | 22'-7" | 20'-11" | 20'-0"* | | | 40 | | | 18'-8" | |
| 16" | 60S | 22'-8" | 21'-0" | 20'-2"* | | 23'-10" | 22'-1" | 21'-2"* | | 21'-10" | 20'-3" | 19'-5"* | | 23'-0" | 21'-3" | 20'-4"* | | 16" | 60S | | | 18'-8" | |
| | 70 | 23'-4" | 21'-7" | 20'-8"* | | 24'-6" | 22'-9"* | 21'-4"* | | 22'-7" | 20'-10" | 20'-0"* | | 23'-8" | 21'-11" | 21'-0"* | | | 70 | | 22'-6" | 18'-8" | |
| | 80S | 24'-2" | 22'-5" | 21'-5" | | 25'-5" | 23'-7" | 22'-6" | | 23'-6" | 21'-8" | 20'-9" | | 24'-8" | 22'-9" | 21'-9" | | | 80S | | | | |
| | 90 | 25'-4" | 23'-5" | 22'-4" | | 26'-8" | 24'-8" | 23'-6" | | 24'-8" | 22'-8" | 21'-8" | | 25'-11" | 23'-11" | 22'-9" | | | 90 | | | | |





| | | | | | | 7/8" OSB | SUBFLOC | OR (GLUE | D-NAILE | D), STANI | DARD TE | RM | | | | | | | | | | | |
|---------|-------|----------|------------|------------|-------------|--------------|------------|------------|-----------|-----------|------------|-------------------------|------------|------------|-----------|------------|----------|---------|-------|-------------|------------|---|----------|
| | | | | D | Directly Ap | plied Ceilir | ıg | | | | | No | Directly A | pplied Cei | ling | | | | | | | equired at int. su e int. bearing le | |
| Depth | RFPI® | Sin | nple or Co | ntinuous S | pan | (| Continuous | Span Onl | у | Sin | nple or Co | ntinuous S _l | pan | (| Continuou | s Span Onl | У | Depth | RFPI® | | | le of the int. bea | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | | | | | | 40 PSF | Live Load/ | 10 PSF De | ad Load | | | | | | | | | 40 PS | F Live Load | 1/10 PSF D | ead Load | |
| | 20 | 17'-4" | 16'-1" | 15'-1" | 13'-11" | 18'-0" | 17'-0" | 16'-4" | 15'-1" | 16'-11" | 16'-0" | 15'-1" | 13'-11" | 17'-6" | 16'-6" | 15'-11" | 15'-1" | | 20 | | | | |
| | 40S | 17'-9" | 16'-10" | 15'-10" | 14'-8" | 18'-7" | 17'-5" | 16'-9" | 15'-4" | 17'-4" | 16'-5" | 15'-9" | 14'-8" | 18'-0" | 16'-11" | 16'-4" | 15'-4" | | 40S | | | | |
| | 400 | 17'-9" | 16'-9" | 15'-10" | 14'-8" | 18'-7" | 17'-5" | 16'-9" | 15'-10" | 17'-4" | 16'-4" | 15'-9" | 14'-8" | 18'-0" | 16'-11" | 16'-4" | 15'-7" | | 400 | | | | |
| 9-1/2" | 40 | 18'-1" | 17'-1" | 16'-5" | 15'-2" | 19'-0" | 17'-8" | 17'-0" | 16'-3" | 17'-8" | 16'-8" | 16'-0" | 15'-2" | 18'-5" | 17'-3" | 16'-7" | 15'-10" | 9-1/2" | 40 | | | | |
| | 60S | 18'-4" | 17'-3" | 16'-7" | 15'-6" | 19'-3" | 17'-11" | 17'-3" | 16'-5" | 17'-11" | 16'-10" | 16'-3" | 15'-6" | 18'-9" | 17'-6" | 16'-10" | 16'-1" | | 60S | | | | |
| | 70 | 18'-10" | 17'-7" | 16'-11" | 16'-2" | 19'-9" | 18'-5" | 17'-7" | 16'-9" | 18'-5" | 17'-3" | 16'-7" | 15'-10" | 19'-3" | 17'-11" | 17'-2" | 16'-5" | | 70 | | | | |
| | 90 | 20'-6" | 19'-0" | 18'-1" | 17'-2" | 21'-6" | 19'-11" | 18'-11" | 17'-10" | 20'-1" | 18'-7" | 17'-9" | 16'-11" | 21'-1" | 19'-6" | 18'-6" | 17'-6" | | 90 | | | | |
| | 20 | 19'-11" | 18'-7" | 17'-9" | 16'-9"* | 20'-11" | 19'-6" | 18'-7" | 17'-5"* | 19'-3" | 17'-11" | 17'-3" | 16'-5" | 20'-2" | 18'-9" | 17'-10" | 17'-0"* | | 20 | | | | 16'-6" |
| | 40S | 20'-6" | 19'-1" | 18'-3" | 17'-4" | 21'-6" | 20'-0" | 19'-1" | 17'-5" | 19'-10" | 18'-6" | 17'-8" | 16'-10" | 20'-10" | 19'-4" | 18'-5" | 17'-5" | | 40S | | | | |
| | 400 | 20'-6" | 19'-1" | 18'-2" | 17'-4" | 21'-6" | 20'-0" | 19'-1" | 18'-0" | 19'-10" | 18'-5" | 17'-8" | 16'-10" | 20'-10" | 19'-4" | 18'-5" | 17'-5" | | 400 | | | | |
| = | 40 | 20'-11" | 19'-5" | 18'-7" | 17'-7" | 21'-11" | 20'-5" | 19'-6" | 18'-5" | 20'-4" | 18'-10" | 17'-11" | 17'-2" | 21'-3" | 19'-9" | 18'-10" | 17'-9" | | 40 | | | | |
| 11-7/8" | 60S | 21'-3" | 19'-9" | 18'-10" | 17'-10" | 22'-3" | 20'-9" | 19'-9" | 18'-8" | 20'-8" | 19'-2" | 18'-3" | 17'-4" | 21'-8" | 20'-1" | 19'-2" | 18'-1" | 11-7/8" | 60S | | | | |
| | 70 | 21'-10" | 20'-3" | 19'-4" | 18'-3" | 22'-11" | 21'-4" | 20'-4" | 19'-2" | 21'-3" | 19'-9" | 18'-9" | 17'-9" | 22'-4" | 20'-8" | 19'-8" | 18'-7" | | 70 | | | | |
| | 80S | 22'-8" | 21'-0" | 20'-0" | 18'-10" | 23'-10" | 22'-1" | 21'-0" | 19'-10" | 22'-2" | 20'-6" | 19'-6" | 18'-5" | 23'-3" | 21'-6" | 20'-6" | 19'-3" | | 80S | | | | |
| | 90 | 23'-8" | 21'-11" | 20'-10" | 19'-8" | 24'-11" | 23'-1" | 21'-11" | 20'-8" | 23'-3" | 21'-6" | 20'-5" | 19'-2" | 24'-5" | 22'-7" | 21'-5" | 20'-2" | | 90 | | | | |
| | 20 | 22'-2" | 20'-8" | 19'-9" | 17'-5"* | 23'-3" | 21'-8" | 20'-8" | 17'-5"* | 21'-5" | 19'-10" | 18'-11" | 17'-5"* | 22'-5" | 20'-10" | 19'-10" | 17'-5"* | | 20 | | | | 16'-6" |
| | 40S | 22'-9" | 21'-2" | 20'-3" | 19'-1" | 23'-11" | 22'-3" | 21'-3" | 19'-6" | 22'-1" | 20'-6" | 19'-6" | 18'-5" | 23'-1" | 21'-6" | 20'-5" | 19'-3" | | 40S | | | | |
| | 400 | 22'-9" | 21'-3" | 20'-3" | 19'-1" | 23'-11" | 22'-3" | 21'-3" | 20'-1"* | 22'-1" | 20'-6" | 19'-6" | 18'-5" | 23'-2" | 21'-6" | 20'-5" | 19'-4"* | | 400 | | | | 19'-3" |
| | 40 | 23'-3" | 21'-8" | 20'-8" | 19'-6" | 24'-5" | 22'-9" | 21'-8" | 20'-6" | 22'-7" | 20'-11" | 19'-11" | 18'-10" | 23'-8" | 22'-0" | 20'-11" | 19'-9" | | 40 | | | | |
| 14" | 60S | 23'-7" | 22'-0" | 20'-11" | 19'-9" | 24'-10" | 23'-1" | 22'-0" | 20'-9" | 23'-0" | 21'-4" | 20'-3" | 19'-1" | 24'-1" | 22'-4" | 21'-3" | 20'-1" | 14" | 60S | | | | |
| | 70 | 24'-3" | 22'-7" | 21'-6" | 20'-3" | 25'-6" | 23'-9" | 22'-7" | 21'-4" | 23'-8" | 21'-11" | 20'-10" | 19'-8" | 24'-10" | 23'-0" | 21'-11" | 20'-8" | | 70 | | | | |
| | 80S | 25'-2" | 23'-5" | 22'-3" | 21'-0" | 26'-5" | 24'-7" | 23'-5" | 22'-1" | 24'-7" | 22'-9" | 21'-8" | 20'-5" | 25'-10" | 23'-11" | 22'-9" | 21'-5" | | 80S | | | | |
| | 90 | 26'-4" | 24'-5" | 23'-3" | 21'-10" | 27'-8" | 25'-8" | 24'-5" | 23'-0" | 25'-10" | 23'-10" | 22'-8" | 21'-4" | 27'-2" | 25'-1" | 23'-10" | 22'-5" | | 90 | | | | |
| | 40S | 24'-9" | 23'-1" | 22'-0" | 20'-10" | 26'-0" | 24'-3" | 23'-2" | 21'-0" | 24'-0" | 22'-3" | 21'-3" | 20'-0" | 25'-2" | 23'-5" | 22'-3" | 21'-0" | | 40S | | | | |
| | 400 | 24'-10" | 23'-2" | 22'-1" | 20'-2"* | 26'-1" | 24'-4" | 23'-2" | 20'-2"* | 24'-0" | 22'-4" | 21'-3" | 20'-0"* | 25'-3" | 23'-5" | 22'-3" | 20'-2"* | | 400 | | | | 19'-3" |
| | 40 | 25'-4" | 23'-7" | 22'-6" | 21'-3" | 26'-7" | 24'-9" | 23'-8" | 22'-4"* | 24'-7" | 22'-10" | 21'-8" | 20'-5" | 25'-10" | 23'-11" | 22'-9" | 21'-6"* | | 40 | | | | 21'-5" |
| 16" | 60S | 25'-9" | 23'-11" | 22'-10" | 21'-7"* | 27'-0" | 25'-2" | 24'-0" | 22'-8"* | 25'-0" | 23'-2" | 22'-1" | 20'-10" | 26'-3" | 24'-4" | 23'-2" | 21'-10"* | 16" | 60S | | | | 21'-5" |
| | 70 | 26'-5" | 24'-7" | 23'-5" | 22'-1"* | 27'-10" | 25'-10" | 24'-8" | 23'-3"* | 25'-9" | 23'-11" | 22'-9" | 21'-5"* | 27'-1" | 25'-1" | 23'-10" | 22'-6"* | | 70 | | | | 21'-5" |
| | 80S | 27'-5" | 25'-6" | 24'-3" | 22'-10" | 28'-10" | 26'-9" | 25'-6" | 24'-0" | 26'-10" | 24'-10" | 23'-7" | 22'-2" | 28'-2" | 26'-1" | 24'-9" | 23'-4" | | 80S | | | | |
| | 90 | 28'-8" | 26'-7" | 25'-3" | 23'-10" | 30'-2" | 28'-0" | 26'-7" | 25'-1" | 28'-1" | 26'-0" | 24'-8" | 23'-2" | 29'-7" | 27'-4" | 25'-11" | 24'-5" | | 90 | | | | |





| | | | | | 7 | 7/8″ OSB | SUBFLO | OR (GLUE | D-NAILE | D), STANI | DARD TE | RM | | | | | | | | | | | | |
|---------|-------|----------|--------------------------|------------|----------|----------|-----------|------------|------------|-----------|------------|-----------------------------|----------|----------|--|------------|----------|---------|-------|-------------|--|------------|----------|--|
| Depth | RFPI® | | Directly Applied Ceiling | | | | | | | | | No Directly Applied Ceiling | | | | | | | | | *Web stiffeners are required at int. supports of | | | |
| | RFPI® | Sin | nple or Co | ntinuous S | pan | (| Continuou | s Span Onl | у | Sir | nple or Co | ntinuous S | pan | (| Continuous Span Only Depth RFPI® and the span on eit | | | | | | | | | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | |
| | | | | | | | 40 PSF | Live Load | /15 PSF De | ead Load | | | | | | | | | 40 PS | F Live Load | /15 PSF 0 | Dead Load | | |
| | 20 | 17'-4" | 16'-1" | 15'-1" | 13'-11"* | 18'-0" | 17'-0" | 16'-4" | 14'-8"* | 16'-11" | 16'-0" | 15'-1" | 13'-11"* | 17'-6" | 16'-6" | 15'-11" | 14'-8"* | | 20 | | | | 13'-11" | |
| | 40S | 17'-9" | 16'-10" | 15'-10" | 14'-8" | 18'-7" | 17'-5" | 16'-5" | 14'-8" | 17'-4" | 16'-5" | 15'-9" | 14'-8" | 18'-0" | 16'-11" | 16'-4" | 14'-8" | | 40S | | | | | |
| | 400 | 17'-9" | 16'-9" | 15'-10" | 14'-8" | 18'-7" | 17'-5" | 16'-9" | 15'-10" | 17'-4" | 16'-4" | 15'-9" | 14'-8" | 18'-0" | 16'-11" | 16'-4" | 15'-7" | | 400 | | | | | |
| 9-1/2" | 40 | 18'-1" | 17'-1" | 16'-5" | 15'-2" | 19'-0" | 17'-8" | 17'-0" | 16'-3" | 17'-8" | 16'-8" | 16'-0" | 15'-2" | 18'-5" | 17'-3" | 16'-7" | 15'-10" | 9-1/2" | 40 | | | | | |
| | 60S | 18'-4" | 17'-3" | 16'-7" | 15'-6" | 19'-3" | 17'-11" | 17'-3" | 16'-5" | 17'-11" | 16'-10" | 16'-3" | 15'-6" | 18'-9" | 17'-6" | 16'-10" | 16'-1" | | 60S | | | | | |
| | 70 | 18'-10" | 17'-7" | 16'-11" | 16'-2" | 19'-9" | 18'-5" | 17'-7" | 16'-9" | 18'-5" | 17'-3" | 16'-7" | 15'-10" | 19'-3" | 17'-11" | 17'-2" | 16'-5" | | 70 | | | | | |
| | 90 | 20'-6" | 19'-0" | 18'-1" | 17'-2" | 21'-6" | 19'-11" | 18'-11" | 17'-10" | 20'-1" | 18'-7" | 17'-9" | 16'-11" | 21'-1" | 19'-6" | 18'-6" | 17'-6" | | 90 | | | | | |
| | 20 | 19'-11" | 18'-7" | 17'-9" | 16'-0"* | 20'-11" | 19'-6" | 18'-7" | 16'-0"* | 19'-3" | 17'-11" | 17'-3" | 16'-0"* | 20'-2" | 18'-9" | 17'-10" | 16'-0"* | | 20 | | | | 15'-2" | |
| | 40S | 20'-6" | 19'-1" | 18'-3" | 16'-10" | 21'-6" | 20'-0" | 18'-8" | 16'-8" | 19'-10" | 18'-6" | 17'-8" | 16'-10" | 20'-10" | 19'-4" | 18'-5" | 16'-8" | | 40S | | | | | |
| | 400 | 20'-6" | 19'-1" | 18'-2" | 17'-4" | 21'-6" | 20'-0" | 19'-1" | 18'-0"* | 19'-10" | 18'-5" | 17'-8" | 16'-10" | 20'-10" | 19'-4" | 18'-5" | 17'-5" | | 400 | | | | 17'-8" | |
| | 40 | 20'-11" | 19'-5" | 18'-7" | 17'-7" | 21'-11" | 20'-5" | 19'-6" | 18'-5" | 20'-4" | 18'-10" | 17'-11" | 17'-2" | 21'-3" | 19'-9" | 18'-10" | 17'-9" | | 40 | | | | | |
| 11-7/8" | 60S | 21'-3" | 19'-9" | 18'-10" | 17'-10" | 22'-3" | 20'-9" | 19'-9" | 18'-8" | 20'-8" | 19'-2" | 18'-3" | 17'-4" | 21'-8" | 20'-1" | 19'-2" | 18'-1" | 11-7/8" | 60S | | | | | |
| | 70 | 21'-10" | 20'-3" | 19'-4" | 18'-3" | 22'-11" | 21'-4" | 20'-4" | 19'-2" | 21'-3" | 19'-9" | 18'-9" | 17'-9" | 22'-4" | 20'-8" | 19'-8" | 18'-7" | | 70 | | | | | |
| | 80S | 22'-8" | 21'-0" | 20'-0" | 18'-10" | 23'-10" | 22'-1" | 21'-0" | 19'-10" | 22'-2" | 20'-6" | 19'-6" | 18'-5" | 23'-3" | 21'-6" | 20'-6" | 19'-3" | | 80S | | | | | |
| | 90 | 23'-8" | 21'-11" | 20'-10" | 19'-8" | 24'-11" | 23'-1" | 21'-11" | 20'-8" | 23'-3" | 21'-6" | 20'-5" | 19'-2" | 24'-5" | 22'-7" | 21'-5" | 20'-2" | | 90 | | | | | |
| | 20 | 22'-2" | 20'-8" | 19'-9"* | 16'-0"* | 23'-3" | 21'-8" | 20'-1"* | 16'-0"* | 21'-5" | 19'-10" | 18'-11" | 16'-0"* | 22'-5" | 20'-10" | 19'-10"* | 16'-0"* | | 20 | | | 19'-1" | 15'-2" | |
| | 40S | 22'-9" | 21'-2" | 20'-3" | 18'-8" | 23'-11" | 22'-3" | 20'-11" | 18'-8" | 22'-1" | 20'-6" | 19'-6" | 18'-5" | 23'-1" | 21'-6" | 20'-5" | 18'-8" | | 40S | | | | | |
| | 400 | 22'-9" | 21'-3" | 20'-3" | 18'-6"* | 23'-11" | 22'-3" | 21'-3" | 18'-6"* | 22'-1" | 20'-6" | 19'-6" | 18'-5"* | 23'-2" | 21'-6" | 20'-5" | 18'-6"* | | 400 | | | | 17'-8" | |
| | 40 | 23'-3" | 21'-8" | 20'-8" | 19'-6" | 24'-5" | 22'-9" | 21'-8" | 20'-6"* | 22'-7" | 20'-11" | 19'-11" | 18'-10" | 23'-8" | 22'-0" | 20'-11" | 19'-9"* | | 40 | | | | 19'-9" | |
| 14" | 60S | 23'-7" | 22'-0" | 20'-11" | 19'-9"* | 24'-10" | 23'-1" | 22'-0" | 20'-9"* | 23'-0" | 21'-4" | 20'-3" | 19'-1" | 24'-1" | 22'-4" | 21'-3" | 20'-1"* | 14" | 60S | | | | 19'-9" | |
| | 70 | 24'-3" | 22'-7" | 21'-6" | 20'-3"* | 25'-6" | 23'-9" | 22'-7" | 21'-4"* | 23'-8" | 21'-11" | 20'-10" | 19'-8" | 24'-10" | 23'-0" | 21'-11" | 20'-8"* | | 70 | | | | 19'-9" | |
| | 80S | 25'-2" | 23'-5" | 22'-3" | 21'-0" | 26'-5" | 24'-7" | 23'-5" | 22'-1" | 24'-7" | 22'-9" | 21'-8" | 20'-5" | 25'-10" | 23'-11" | 22'-9" | 21'-5" | | 80S | | | | | |
| | 90 | 26'-4" | 24'-5" | 23'-3" | 21'-10" | 27'-8" | 25'-8" | 24'-5" | 23'-0" | 25'-10" | 23'-10" | 22'-8" | 21'-4" | 27'-2" | 25'-1" | 23'-10" | 22'-5" | | 90 | | | | | |
| | 40S | 24'-9" | 23'-1" | 22'-0" | 20'-1"* | 26'-0" | 24'-3" | 22'-6" | 20'-1"* | 24'-0" | 22'-3" | 21'-3" | 20'-0"* | 25'-2" | 23'-5" | 22'-3" | 20'-1"* | | 40S | | | | 19'-9" | |
| | 400 | 24'-10" | 23'-2" | 22'-1" | 18'-6"* | 26'-1" | 24'-4" | 23'-2"* | 18'-6"* | 24'-0" | 22'-4" | 21'-3" | 18'-6"* | 25'-3" | 23'-5" | 22'-3"* | 18'-6"* | | 400 | | | 22'-3" | 17'-8" | |
| | 40 | 25'-4" | 23'-7" | 22'-6" | 21'-3"* | 26'-7" | 24'-9" | 23'-8" | 22'-4"* | 24'-7" | 22'-10" | 21'-8" | 20'-5"* | 25'-10" | 23'-11" | 22'-9" | 21'-6"* | | 40 | | | | 19'-9" | |
| 16" | 60S | 25'-9" | 23'-11" | 22'-10" | 21'-7"* | 27'-0" | 25'-2" | 24'-0" | 22'-5"* | 25'-0" | 23'-2" | 22'-1" | 20'-10"* | 26'-3" | 24'-4" | 23'-2" | 21'-10"* | 16" | 60S | | | | 19'-9" | |
| | 70 | 26'-5" | 24'-7" | 23'-5" | 22'-1"* | 27'-10" | 25'-10" | 24'-8" | 22'-6"* | 25'-9" | 23'-11" | 22'-9" | 21'-5"* | 27'-1" | 25'-1" | 23'-10" | 22'-6"* | | 70 | | | | 19'-9" | |
| | 80S | 27'-5" | 25'-6" | 24'-3" | 22'-10" | 28'-10" | 26'-9" | 25'-6" | 24'-0"* | 26'-10" | 24'-10" | 23'-7" | 22'-2" | 28'-2" | 26'-1" | 24'-9" | 23'-4" | | 80S | | | | 23'-11" | |
| | 90 | 28'-8" | 26'-7" | 25'-3" | 23'-10" | 30'-2" | 28'-0" | 26'-7" | 25'-1" | 28'-1" | 26'-0" | 24'-8" | 23'-2" | 29'-7" | 27'-4" | 25'-11" | 24'-5" | | 90 | | | | | |





| | | | | | 7 | /8" OSB | SUBFLO | OR (GLUE | D-NAILEI |), STANI | DARD TEI | RM | | | | | | | | | | | |
|---------|-------|-----------------------------------|----------|------------|----------|----------------------|----------|------------|----------|---------------------------|-----------------------------|------------|----------|----------------------|----------|------------|----------|---------|-----------|--|----------|--------------------|----------|
| Depth | | Directly Applied Ceiling | | | | | | | | | No Directly Applied Ceiling | | | | | | | | | | | equired at int. so | |
| | RFPI® | Simple or Continuous Span | | | | Continuous Span Only | | | | Simple or Continuous Span | | | | Continuous Span Only | | | | Depth | RFPI® | continuous-spans when the int. bearing length is $< 5 1/4$ " and the span on either side of the int. bearing is \ge than: | | | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| | | 40 PSF Live Load/30 PSF Dead Load | | | | | | | | | | | | | | | | 40 PSI | Live Load | /30 PSF D | ead Load | | |
| | 20 | 17'-4" | 16'-1" | 14'-10"* | 11'-10"* | 18'-0" | 16'-8" | 14'-10"* | 11'-10"* | 16'-11" | 16'-0" | 14'-10"* | 11'-10"* | 17'-6" | 16'-6" | 14'-10"* | 11'-10"* | | 20 | | | 14'-0" | 11'-2" |
| | 40S | 17'-9" | 16'-2" | 14'-9" | 13'-2" | 18'-7" | 16'-2" | 14'-9" | 13'-2" | 17'-4" | 16'-2" | 14'-9" | 13'-2" | 18'-0" | 16'-2" | 14'-9" | 13'-2" | | 40S | | | | |
| | 400 | 17'-9" | 16'-9" | 15'-10" | 14'-3"* | 18'-7" | 17'-5" | 16'-7" | 14'-3"* | 17'-4" | 16'-4" | 15'-9" | 14'-3"* | 18'-0" | 16'-11" | 16'-4" | 14'-3"* | | 400 | | | | 13'-7" |
| 9-1/2" | 40 | 18'-1" | 17'-1" | 16'-5" | 15'-2"* | 19'-0" | 17'-8" | 17'-0" | 15'-8"* | 17'-8" | 16'-8" | 16'-0" | 15'-2"* | 18'-5" | 17'-3" | 16'-7" | 15'-8"* | 9-1/2" | 40 | | | | 14'-3" |
| | 60S | 18'-4" | 17'-3" | 16'-7" | 14'-2"* | 19'-3" | 17'-11" | 16'-8" | 14'-2"* | 17'-11" | 16'-10" | 16'-3" | 14'-2"* | 18'-9" | 17'-6" | 16'-8" | 14'-2"* | | 60S | | | | 13'-8" |
| | 70 | 18'-10" | 17'-7" | 16'-11" | 15'-10"* | 19'-9" | 18'-5" | 17'-7" | 15'-10"* | 18'-5" | 17'-3" | 16'-7" | 15'-10"* | 19'-3" | 17'-11" | 17'-2" | 15'-10"* | | 70 | | | | 14'-9" |
| | 90 | 20'-6" | 19'-0" | 18'-1" | 17'-2" | 21'-6" | 19'-11" | 18'-11" | 17'-10" | 20'-1" | 18'-7" | 17'-9" | 16'-11" | 21'-1" | 19'-6" | 18'-6" | 17'-6" | | 90 | | | | |
| | 20 | 19'-11" | 18'-7"* | 16'-2"* | 12'-10"* | 20'-11" | 19'-0"* | 16'-2"* | 12'-10"* | 19'-3" | 17'-11" | 16'-2"* | 12'-10"* | 20'-2" | 18'-9"* | 16'-2"* | 12'-10"* | | 20 | | 18'-6" | 15'-4" | 12'-2" |
| | 40S | 20'-6" | 18'-4" | 16'-9" | 14'-11" | 21'-3" | 18'-4" | 16'-9" | 14'-11" | 19'-10" | 18'-4" | 16'-9" | 14'-11" | 20'-10" | 18'-4" | 16'-9" | 14'-11" | | 40S | | | | |
| | 400 | 20'-6" | 19'-1" | 18'-2"* | 14'-11"* | 21'-6" | 20'-0" | 18'-8"* | 14'-11"* | 19'-10" | 18'-5" | 17'-8" | 14'-11"* | 20'-10" | 19'-4" | 18'-5"* | 14'-11"* | | 400 | | | 17'-11" | 14'-3" |
| | 40 | 20'-11" | 19'-5" | 18'-7" | 16'-8"* | 21'-11" | 20'-5" | 19'-6" | 16'-8"* | 20'-4" | 18'-10" | 17'-11" | 16'-8"* | 21'-3" | 19'-9" | 18'-10" | 16'-8"* | | 40 | | | | 15'-9" |
| 11-7/8" | 60S | 21'-3" | 19'-9" | 18'-10" | 16'-8"* | 22'-3" | 20'-9" | 19'-0" | 16'-8"* | 20'-8" | 19'-2" | 18'-3" | 16'-8"* | 21'-8" | 20'-1" | 19'-0" | 16'-8"* | 11-7/8" | 60S | | | | 15'-10" |
| | 70 | 21'-10" | 20'-3" | 19'-4" | 16'-8"* | 22'-11" | 21'-4" | 20'-4"* | 16'-8"* | 21'-3" | 19'-9" | 18'-9" | 16'-8"* | 22'-4" | 20'-8" | 19'-8" | 16'-8"* | | 70 | | | 19'-11" | 15'-10" |
| | 80S | 22'-8" | 21'-0" | 20'-0" | 18'-10"* | 23'-10" | 22'-1" | 21'-0" | 19'-10"* | 22'-2" | 20'-6" | 19'-6" | 18'-5"* | 23'-3" | 21'-6" | 20'-6" | 19'-3"* | | 80S | | | | 17'-10" |
| | 90 | 23'-8" | 21'-11" | 20'-10" | 19'-8" | 24'-11" | 23'-1" | 21'-11" | 20'-8" | 23'-3" | 21'-6" | 20'-5" | 19'-2" | 24'-5" | 22'-7" | 21'-5" | 20'-2" | | 90 | | | | |
| | 20 | 22'-2" | 19'-5"* | 16'-2"* | 12'-10"* | 23'-3" | 19'-5"* | 16'-2"* | 12'-10"* | 21'-5" | 19'-5"* | 16'-2"* | 12'-10"* | 22'-5" | 19'-5"* | 16'-2"* | 12'-10"* | 2 | 20 | | 18'-6" | 15'-4" | 12'-2" |
| | 40S | 22'-9" | 20'-7" | 18'-9" | 16'-9"* | 23'-10" | 20'-7" | 18'-9" | 16'-9"* | 22'-1" | 20'-7" | 18'-9" | 16'-9"* | 23'-1" | 20'-7" | 18'-9" | 16'-9"* | | 40S | | | | 15'-10" |
| | 400 | 22'-9" | 21'-3" | 18'-8"* | 14'-11"* | 23'-11" | 22'-3"* | 18'-8"* | 14'-11"* | 22'-1" | 20'-6" | 18'-8"* | 14'-11"* | 23'-2" | 21'-6"* | 18'-8"* | 14'-11"* | | 400 | | 21'-6" | 17'-11" | 14'-3" |
| 4.411 | 40 | 23'-3" | 21'-8" | 20'-8"* | 17'-5"* | 24'-5" | 22'-9" | 21'-8"* | 17'-5"* | 22'-7" | 20'-11" | 19'-11"* | 17'-5"* | 23'-8" | 22'-0" | 20'-11"* | 17'-5"* | 4 4 11 | 40 | | | 19'-11" | 15'-10" |
| 14" | 60S | 23'-7" | 22'-0" | 20'-11"* | 17'-5"* | 24'-10" | 22'-11" | 20'-11"* | 17'-5"* | 23'-0" | 21'-4" | 20'-3"* | 17'-5"* | 24'-1" | 22'-4" | 20'-11"* | 17'-5"* | 14" | 60S | | | 19'-11" | 15'-10" |
| | 70 | 24'-3" | 22'-7" | 21'-6"* | 17'-5"* | 25'-6" | 23'-9" | 21'-10"* | 17'-5"* | 23'-8" | 21'-11" | 20'-10"* | 17'-5"* | 24'-10" | 23'-0" | 21'-10"* | 17'-5"* | | 70 | | | 19'-11" | 15'-10" |
| | 80S | 25'-2" | 23'-5" | 22'-3" | 20'-6"* | 26'-5" | 24'-7" | 23'-5" | 21'-5"* | 24'-7" | 22'-9" | 21'-8" | 20'-5"* | 25'-10" | 23'-11" | 22'-9" | 21'-5"* | | 80S | | | | 19'-3" |
| | 90 | 26'-4" | 24'-5" | 23'-3" | 21'-10"* | 27'-8" | 25'-8" | 24'-5" | 22'-4"* | 25'-10" | 23'-10" | 22'-8" | 21'-4" | 27'-2" | 25'-1" | 23'-10" | 22'-4"* | | 90 | | | | 21'-5" |
| | 40S | 24'-9" | 22'-2" | 20'-3"* | 18'-1"* | 25'-8" | 22'-2" | 20'-3"* | 18'-1"* | 24'-0" | 22'-2" | 20'-3"* | 18'-1"* | 25'-2" | 22'-2" | 20'-3"* | 18'-1"* | | 40S | | | 19'-11" | 15'-10" |
| | 400 | 24'-10" | 22'-6"* | 18'-8"* | 14'-11"* | 26'-1" | 22'-6"* | 18'-8"* | 14'-11"* | 24'-0" | 22'-4"* | 18'-8"* | 14'-11"* | 25'-3" | 22'-6"* | 18'-8"* | 14'-11"* | | 400 | | 21'-6" | 17'-11" | 14'-3" |
| | 40 | 25'-4" | 23'-7" | 22'-6"* | 18'-1"* | 26'-7" | 24'-9"* | 22'-9"* | 18'-1"* | 24'-7" | 22'-10" | 21'-8"* | 18'-1"* | 25'-10" | 23'-11"* | 22'-9"* | 18'-1"* | | 40 | | 23'-11" | 19'-11" | 15'-10" |
| 16" | 60S | 25'-9" | 23'-11"* | 22'-7"* | 18'-1"* | 27'-0" | 24'-9"* | 22'-7"* | 18'-1"* | 25'-0" | 23'-2" | 22'-1"* | 18'-1"* | 26'-3" | 24'-4"* | 22'-7"* | 18'-1"* | 16" | 60S | | 23'-11" | 19'-11" | 15'-10" |
| | 70 | 26'-5" | 24'-7"* | 22'-9"* | 18'-1"* | 27'-10" | 25'-10"* | 22'-9"* | 18'-1"* | 25'-9" | 23'-11"* | 22'-9"* | 18'-1"* | 27'-1" | 25'-1"* | 22'-9"* | 18'-1"* | | 70 | | 23'-11" | 19'-11" | 15'-10" |
| | 80S | 27'-5" | 25'-6" | 24'-3"* | 20'-6"* | 28'-10" | 26'-9" | 25'-6"* | 22'-6"* | 26'-10" | 24'-10" | 23'-7" | 20'-6"* | 28'-2" | 26'-1" | 24'-9"* | 22'-6"* | | 80S | | | 24'-1" | 19'-3" |
| | 90 | 28'-8" | 26'-7" | 25'-3" | 22'-6"* | 30'-2" | 28'-0" | 26'-7" | 22'-6"* | 28'-1" | 26'-0" | 24'-8" | 22'-6"* | 29'-7" | 27'-4" | 25'-11" | 22'-6"* | | 90 | | | | 21'-5" |





| | | | | | Directly Apı | alied Ceilir | na | | | | | No | Directly A | nnlied Cei | lina | | | | | *Web st | iffonors are re | quired at int. su | unports of |
|-----------------------------------|-------|----------|------------|------------|------------------|------------------|----------|------------|----------|----------|-------------|------------|---------------------------------------|--------------|---------------|-----------------------------------|------------------|---------|-----|-----------|-----------------|-------------------|------------|
| Depth | RFPI® | Sin | nple or Co | ntinuous S | | | • | s Span Onl | у | Sir | nple or Cor | | Span Continuous Span Only Depth RFPI® | continuous-s | pans when the | | ength is < 5 1/4 | | | | | | |
| | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. | | | 12" o.c. | 16" o.c. | 19.2" o.c. | 24" o.c. |
| 40 PSF Live Load/35 PSF Dead Load | | | | | | | | | | | | | | | | 40 PSF Live Load/35 PSF Dead Load | | | | | | | |
| | 20 | 17'-4" | 16'-0"* | 13'-11"* | 13'-11"* 11'-1"* | | 16'-2"* | 13'-11"* | 11'-1"* | 16'-11" | 16'-0"* | 13'-11"* | 11'-1"* | 17'-6" | 16'-2"* | 13'-11"* | 11'-1"* | | 20 | LIVE LOUG | 15'-10" | 13'-2" | 10'-6" |
| | 40S | 17'-9" | 15'-8" | 14'-3" | 12'-9" | 18'-0" 18'-2" | 15'-8" | 14'-3" | 12'-9" | 17'-4" | 15'-8" | 14'-3" | 12'-9" | 18'-0" | 15'-8" | 14'-3" | 12'-9" | | 40S | | 13 10 | 15 2 | 10 0 |
| | 400 | 17'-9" | 16'-8" | 15'-9" | 13'-4"* | 18'-7" | 17'-5" | 16'-0"* | 13'-4"* | 17'-4" | 16'-4" | 15'-9" | 13'-4"* | 18'-0" | 16'-11" | 16'-0"* | 13'-4"* | 9-1/2" | 400 | | | 16'-0" | 12'-9" |
| 9-1/2" | 40 | 18'-1" | 17'-1" | 16'-3" | 14'-11"* | 19'-0" | 17'-8" | 17'-0"* | 14'-11"* | 17'-8" | 16'-8" | 16'-0" | 14'-11"* | 18'-5" | 17'-3" | 16'-7" | 14'-11"* | | 40 | | | 16'-9" | 13'-4" |
| | 60S | 18'-4" | 17'-3" | 16'-2"* | 13'-4"* | 19'-3" | 17'-9" | 16'-2"* | 13'-4"* | 17'-11" | 16'-10" | 16'-2"* | 13'-4"* | 18'-9" | 17'-6" | 16'-2"* | 13'-4"* | 0 2/2 | 605 | | | 16'-1" | 12'-10" |
| | 70 | 18'-10" | 17'-7" | 16'-11" | 14'-11"* | 19'-9" | 18'-5" | 17'-7"* | 14'-11"* | 18'-5" | 17'-3" | 16'-7" | 14'-11"* | 19'-3" | 17'-11" | 17'-2" | 14'-11"* | | 70 | | | 17'-5" | 13'-11" |
| | 90 | 20'-6" | 19'-0" | 18'-1" | 17'-2" | 21'-6" | 19'-11" | 18'-11" | 17'-10" | 20'-1" | 18'-7" | 17'-9" | 16'-11" | 21'-1" | 19'-6" | 18'-6" | 17'-6" | | 90 | | | | |
| 11-7/8" | 20 | 19'-11" | 18'-3"* | 15'-2"* | 12'-1"* | 20'-11" | 18'-3"* | 15'-2"* | 12'-1"* | 19'-3" | 17'-11"* | 15'-2"* | 12'-1"* | 20'-2" | 18'-3"* | 15'-2"* | 12'-1"* | | 20 | | 17'-4" | 14'-5" | 11'-5" |
| | 40S | 20'-6" | 17'-10" | 16'-3" | 14'-6" | 20'-7" | 17'-10" | 16'-3" | 14'-6" | 19'-10" | 17'-10" | 16'-3" | 14'-6" | 20'-7" | 17'-10" | 16'-3" | 14'-6" | | 405 | | | | |
| | 400 | 20'-6" | 19'-1" | 17'-6"* | 14'-0"* | 21'-6" | 20'-0" | 17'-6"* | 14'-0"* | 19'-10" | 18'-5" | 17'-6"* | 14'-0"* | 20'-10" | 19'-4" | 17'-6"* | 14'-0"* | | 400 | | | 16'-9" | 13'-4" |
| | 40 | 20'-11" | 19'-5" | 18'-7"* | 15'-8"* | 21'-11" | 20'-5" | 19'-5"* | 15'-8"* | 20'-4" | 18'-10" | 17'-11" | 15'-8"* | 21'-3" | 19'-9" | 18'-10"* | 15'-8"* | | 40 | | | 18'-7" | 14'-10" |
| | 60S | 21'-3" | 19'-9" | 18'-5" | 15'-8"* | 22'-3" | 20'-3" | 18'-5" | 15'-8"* | 20'-8" | 19'-2" | 18'-3" | 15'-8"* | 21'-8" | 20'-1" | 18'-5" | 15'-8"* | 11-7/8" | 60S | | | | 14'-11" |
| | 70 | 21'-10" | 20'-3" | 19'-4"* | 15'-8"* | 22'-11" | 21'-4" | 19'-8"* | 15'-8"* | 21'-3" | 19'-9" | 18'-9"* | 15'-8"* | 22'-4" | 20'-8" | 19'-8"* | 15'-8"* | | 70 | | | 18'-8" | 14'-11" |
| | 80S | 22'-8" | 21'-0" | 20'-0" | 18'-10"* | 23'-10" | 22'-1" | 21'-0" | 19'-0"* | 22'-2" | 20'-6" | 19'-6" | 18'-5"* | 23'-3" | 21'-6" | 20'-6" | 19'-0"* | | 80S | | | | 16'-9" |
| | 90 | 23'-8" | 21'-11" | 20'-10" | 19'-8" | 24'-11" | 23'-1" | 21'-11" | 20'-8"* | 23'-3" | 21'-6" | 20'-5" | 19'-2" | 24'-5" | 22'-7" | 21'-5" | 20'-2"* | | 90 | | | | 20'-1" |
| | 20 | 22'-2" | 18'-3"* | 15'-2"* | 12'-1"* | 23'-3"* | 18'-3"* | 15'-2"* | 12'-1"* | 21'-5" | 18'-3"* | 15'-2"* | 12'-1"* | 22'-5" | 18'-3"* | 15'-2"* | 12'-1"* | | 20 | 23'-3" | 17'-4" | 14'-5" | 11'-5" |
| | 40S | 22'-9" | 19'-11" | 18'-2" | 16'-3"* | 23'-1" | 19'-11" | 18'-2" | 16'-3"* | 22'-1" | 19'-11" | 18'-2" | 16'-3"* | 23'-1" | 19'-11" | 18'-2" | 16'-3"* | | 40S | | | | 14'-11" |
| | 400 | 22'-9" | 21'-1"* | 17'-6"* | 14'-0"* | 23'-11" | 21'-1"* | 17'-6"* | 14'-0"* | 22'-1" | 20'-6"* | 17'-6"* | 14'-0"* | 23'-2" | 21'-1"* | 17'-6"* | 14'-0"* | | 400 | | 20'-2" | 16'-9" | 13'-4" |
| | 40 | 23'-3" | 21'-8" | 20'-6"* | 16'-4"* | 24'-5" | 22'-9"* | 20'-6"* | 16'-4"* | 22'-7" | 20'-11" | 19'-11"* | 16'-4"* | 23'-8" | 22'-0" | 20'-6"* | 16'-4"* | | 40 | | 22'-6" | 18'-8" | 14'-11" |
| 14" | 60S | 23'-7" | 22'-0" | 20'-3"* | 16'-4"* | 24'-10" | 22'-3" | 20'-3"* | 16'-4"* | 23'-0" | 21'-4" | 20'-3"* | 16'-4"* | 24'-1" | 22'-3" | 20'-3"* | 16'-4"* | 14" | 60S | | | 18'-8" | 14'-11" |
| | 70 | 24'-3" | 22'-7"* | 20'-6"* | 16'-4"* | 25'-6" | 23'-9"* | 20'-6"* | 16'-4"* | 23'-8" | 21'-11" | 20'-6"* | 16'-4"* | 24'-10" | 23'-0"* | 20'-6"* | 16'-4"* | | 70 | | 22'-6" | 18'-8" | 14'-11" |
| | 80S | 25'-2" | 23'-5" | 22'-3" | 19'-3"* | 26'-5" | 24'-7" | 23'-5"* | 20'-1"* | 24'-7" | 22'-9" | 21'-8" | 19'-3"* | 25'-10" | 23'-11" | 22'-9"* | 20'-1"* | | 805 | | | 22'-8" | 18'-1" |
| | 90 | 26'-4" | 24'-5" | 23'-3" | 21'-0"* | 27'-8" | 25'-8" | 24'-5" | 21'-0"* | 25'-10" | 23'-10" | 22'-8" | 21'-0"* | 27'-2" | 25'-1" | 23'-10" | 21'-0"* | | 90 | | | | 20'-1" |
| | 40S | 24'-9" | 21'-6" | 19'-7"* | 17'-0"* | 24'-10" | 21'-6" | 19'-7"* | 17'-0"* | 24'-0" | 21'-6" | 19'-7"* | 17'-0"* | 24'-10" | 21'-6" | 19'-7"* | 17'-0"* | | 40S | | | 18'-8" | 14'-11" |
| | 400 | 24'-10" | 21'-1"* | 17'-6"* | 14'-0"* | 26'-1" | 21'-1"* | 17'-6"* | 14'-0"* | 24'-0" | 21'-1"* | 17'-6"* | 14'-0"* | 25'-3" | 21'-1"* | 17'-6"* | 14'-0"* | | 400 | | 20'-2" | 16'-9" | 13'-4" |
| | 40 | 25'-4" | 23'-7"* | 21'-4"* | 17'-0"* | 26'-7" | 24'-9"* | 21'-4"* | 17'-0"* | 24'-7" | 22'-10"* | 21'-4"* | 17'-0"* | 25'-10" | 23'-11"* | 21'-4"* | 17'-0"* | | 40 | | 22'-6" | 18'-8" | 14'-11" |
| 16" | 60S | 25'-9" | 23'-11"* | 21'-4"* | 17'-0"* | 27'-0" | 24'-0"* | 21'-4"* | 17'-0"* | 25'-0" | 23'-2"* | 21'-4"* | 17'-0"* | 26'-3" | 24'-0"* | 21'-4"* | 17'-0"* | 16" | 60S | | 22'-6" | 18'-8" | 14'-11" |
| | 70 | 26'-5" | 24'-7"* | 21'-4"* | 17'-0"* | 27'-10" | 25'-8"* | 21'-4"* | 17'-0"* | 25'-9" | 23'-11"* | 21'-4"* | 17'-0"* | 27'-1" | 25'-1"* | 21'-4"* | 17'-0"* | | 70 | | 22'-6" | 18'-8" | 14'-11" |
| | 80S | 27'-5" | 25'-6" | 24'-2"* | 19'-3"* | 28'-10" | 26'-9" | 25'-6"* | 21'-1"* | 26'-10" | 24'-10" | 23'-7"* | 19'-3"* | 28'-2" | 26'-1" | 24'-9"* | 21'-1"* | | 80S | | | 22'-8" | 18'-1" |
| | 90 | 28'-8" | 26'-7" | 25'-3"* | 21'-1"* | 30'-2" | 28'-0" | 26'-6"* | 21'-1"* | 28'-1" | 26'-0" | 24'-8"* | 21'-1"* | 29'-7" | 27'-4" | 25'-11"* | 21'-1"* | | 90 | | | 25'-2" | 20'-1" |





Notes applicable to all spans:

- 1. Allowable spans shown are based on uniformly loaded I-Joists with 1¾" end bearing lengths and 3½" intermediate bearing lengths without the use of web stiffeners, except when indicated by bold number with * where web stiffeners are required at interior supports of continuous-spans when the interior bearing length is < 5 1/4" and the span on either side of the interior bearing is ≥ than the spans shown in the adjacent table. For applications with any of these other conditions, an engineering analysis may be required using the design properties found in this guide. Use appropriate software (e.g. Simpson Strong-Tie® Component Solutions™) or engineering analysis for other loading.</p>
- 2. Design is to CSA 086-19 with the CCMC vibration concluding report dated September 4, 1997.
- 3. Simple Spans are for joists supported at each end only.
- 4. Continuous spans are for continuous joists spanning over three or more supports, where the shortest span is at least 50% of the longest span.
- 5. Continuous span lengths shown require adequate bottom flange lateral bracing.
- 6. Spans listed are clear distances between the face of supports.
- 7. Web stiffeners may be required for hangers.
- 8. Use in dry service conditions only.
- 9. Provide lateral support at points of bearing to prevent twisting of joists.
- 10. Spans are based on the controlling condition of: L/360 live load deflection, L/240 total load deflection, or the CCMC floor vibration criteria.
- 11. Floor sheathing shall conform to CSA O325. Subfloor adhesive shall adhere to requirements of CGSB Standard CAN-CGSB-71.26-M88.
- 12. Minimum bearing length to be 1-3/4" at ends and 3-1/2" at interior supports.
- 13. The ends of multiple span joists must be anchored to resist a factored uplift force of 10 psf x joist spacing x largest span (due to pattern loading).

PRODUCT & PERFORMANCE WARRANCE

Roseburg Forest Products warrants that its **RFPI®-Joists, RigidLam® laminated veneer lumber (LVL)** and **RigidRim® Rimboard** will be free from manufacturing errors and defects in workmanship and materials in accordance with our specifications.

Furthermore, we warrant that these products, when properly stored, installed and used in dry use service conditions, will meet or exceed our performance specifications for the expected life of the structure.

RFPI*, RigidLam*, RigidRim* are registered trademarks of Roseburg Forest Products, Roseburg, Oregon.



