

FLOOR JOIST SPAN LIMITATIONS

10psf Dead Load and 40psf Live Load (TL Deflection=L/240)

| Member     | Yield strength<br>Fy (ksi) | Live Load Deflection L/360       |          |           |                                     |           |           | Live Load Deflection L/480       |          |           |                                     |           |           |
|------------|----------------------------|----------------------------------|----------|-----------|-------------------------------------|-----------|-----------|----------------------------------|----------|-----------|-------------------------------------|-----------|-----------|
|            |                            | Single span<br>spacing (in) o.c. |          |           | Two equal span<br>spacing (in) o.c. |           |           | Single span<br>spacing (in) o.c. |          |           | Two equal span<br>spacing (in) o.c. |           |           |
|            |                            | 12                               | 16       | 24        | 12                                  | 16        | 24        | 12                               | 16       | 24        | 12                                  | 16        | 24        |
| 600S137-33 | 33                         | 10' 2" e                         | 8' 10" e | 7' 3" e   | 10' 2" i                            | 8' 10" a  | 7' 2" a   | 10' 2" e                         | 8' 10" e | 7' 3" e   | 10' 2" i                            | 8' 10" a  | 7' 2" a   |
| 600S137-43 | 33                         | 12' 3"                           | 10' 7"   | 8' 8" e   | 12' 3" i                            | 10' 7" i  | 8' 8" i   | 11' 10"                          | 10' 7"   | 8' 8" e   | 12' 3" i                            | 10' 7" i  | 8' 8" i   |
| 600S137-54 | 50                         | 14' 0"                           | 12' 9"   | 11' 1"    | 15' 9" i                            | 14' 2" i  | 11' 7" i  | 12' 9"                           | 11' 7"   | 10' 1"    | 14' 4"                              | 13' 0" i  | 11' 4" i  |
| 600S137-68 | 50                         | 15' 0"                           | 13' 8"   | 11' 11"   | 16' 10"                             | 15' 4" i  | 13' 4" i  | 13' 8"                           | 12' 5"   | 10' 10"   | 15' 4"                              | 13' 11"   | 12' 2" i  |
| 600S137-97 | 50                         | 16' 7"                           | 15' 1"   | 13' 2"    | 18' 8"                              | 16' 11"   | 14' 10"   | 15' 1"                           | 13' 8"   | 12' 0"    | 16' 11"                             | 15' 5"    | 13' 5"    |
| 600S162-33 | 33                         | 11' 0" e                         | 9' 7" e  | 7' 10" e  | 11' 0" i                            | 9' 7" a   | 7' 6" a   | 11' 0" e                         | 9' 7" e  | 7' 10" e  | 11' 0" i                            | 9' 7" a   | 7' 6" a   |
| 600S162-43 | 33                         | 13' 2"                           | 11' 5"   | 9' 4" e   | 13' 2" i                            | 11' 5" i  | 9' 4" i   | 12' 5"                           | 11' 3"   | 9' 4" e   | 13' 2" i                            | 11' 5" i  | 9' 4" i   |
| 600S162-54 | 50                         | 14' 7"                           | 13' 3"   | 11' 7"    | 16' 5" i                            | 14' 11" i | 12' 5" i  | 13' 3"                           | 12' 1"   | 10' 7"    | 14' 11"                             | 13' 7" i  | 11' 10" i |
| 600S162-68 | 50                         | 15' 8"                           | 14' 3"   | 12' 5"    | 17' 7"                              | 16' 0"    | 14' 0" i  | 14' 3"                           | 12' 11"  | 11' 4"    | 16' 0"                              | 14' 6"    | 12' 8" i  |
| 600S162-97 | 50                         | 17' 4"                           | 15' 9"   | 13' 9"    | 19' 6"                              | 17' 9"    | 15' 6"    | 15' 9"                           | 14' 4"   | 12' 6"    | 17' 9"                              | 16' 1"    | 14' 1"    |
| 600S200-33 | 33                         | 11' 10" e                        | 10' 3" e | 8' 4" e   | 11' 10" a                           | 10' 3" a  | 7' 10" a  | 11' 10" e                        | 10' 3" e | 8' 4" e   | 11' 10" a                           | 10' 3" a  | 7' 10" a  |
| 600S200-43 | 33                         | 14' 1"                           | 12' 3" e | 10' 0" e  | 14' 1" i                            | 12' 3" i  | 10' 0" a  | 13' 0"                           | 11' 10"  | 10' 0" e  | 14' 1" i                            | 12' 3" i  | 10' 0" a  |
| 600S200-54 | 50                         | 15' 4"                           | 14' 0"   | 12' 2"    | 17' 3" i                            | 15' 8" i  | 13' 3" i  | 14' 0"                           | 12' 8"   | 11' 1"    | 15' 8"                              | 14' 3" i  | 12' 5" i  |
| 600S200-68 | 50                         | 16' 6"                           | 15' 0"   | 13' 1"    | 18' 6"                              | 16' 10"   | 14' 8" i  | 15' 0"                           | 13' 7"   | 11' 11"   | 16' 10"                             | 15' 3"    | 13' 4" i  |
| 600S200-97 | 50                         | 18' 4"                           | 16' 8"   | 14' 6"    | 20' 7"                              | 18' 8"    | 16' 4"    | 16' 8"                           | 15' 1"   | 13' 2"    | 18' 8"                              | 17' 0"    | 14' 10"   |
| 600S250-43 | 33                         | 14' 6"                           | 12' 7" e | 10' 3" e  | 14' 6" i                            | 12' 7" i  | 10' 3" a  | 13' 7"                           | 12' 4" e | 10' 3" e  | 14' 6" i                            | 12' 7" i  | 10' 3" a  |
| 600S250-54 | 50                         | 16' 0"                           | 14' 7"   | 12' 9"    | 18' 0" i                            | 16' 4" i  | 13' 7" i  | 14' 7"                           | 13' 3"   | 11' 7"    | 16' 4"                              | 14' 10" i | 13' 0" i  |
| 600S250-68 | 50                         | 17' 3"                           | 15' 8"   | 13' 9"    | 19' 5"                              | 17' 8" i  | 15' 5" i  | 15' 8"                           | 14' 3"   | 12' 6"    | 17' 8"                              | 16' 0"    | 14' 0" i  |
| 600S250-97 | 50                         | 19' 3"                           | 17' 6"   | 15' 3"    | 21' 7"                              | 19' 7"    | 17' 2"    | 17' 6"                           | 15' 10"  | 13' 10"   | 19' 7"                              | 17' 10"   | 15' 7"    |
| 600S300-54 | 50                         | 16' 4"                           | 14' 10"  | 13' 0"    | 18' 5" i                            | 16' 8" i  | 13' 10" i | 14' 10"                          | 13' 6"   | 11' 10"   | 16' 8"                              | 15' 2" i  | 13' 3" i  |
| 600S300-68 | 50                         | 17' 10"                          | 16' 3"   | 14' 2"    | 20' 1"                              | 18' 3" i  | 15' 11" i | 16' 3"                           | 14' 9"   | 12' 11"   | 18' 3"                              | 16' 7"    | 14' 6" i  |
| 600S300-97 | 50                         | 20' 0"                           | 18' 2"   | 15' 10"   | 22' 5"                              | 20' 4"    | 17' 9"    | 18' 2"                           | 16' 6"   | 14' 5"    | 20' 4"                              | 18' 6"    | 16' 2"    |
| 800S137-33 | 33                         | 11' 9" e                         | 10' 2" e | 8' 3" e   | 11' 3" a                            | 9' 2" a   | 6' 9" a   | 11' 9" e                         | 10' 2" e | 8' 3" e   | 11' 3" a                            | 9' 2" a   | 6' 9" a   |
| 800S137-43 | 33                         | 14' 2"                           | 12' 3" e | 10' 0" e  | 14' 2" i                            | 12' 3" i  | 10' 0" a  | 14' 2"                           | 12' 3" e | 10' 0" e  | 14' 2" i                            | 12' 3" i  | 10' 0" a  |
| 800S137-54 | 50                         | 17' 7"                           | 16' 0"   | 13' 5"    | 19' 0" i                            | 16' 5" i  | 13' 5" i  | 16' 0"                           | 14' 6"   | 12' 8"    | 17' 11" i                           | 16' 4" i  | 13' 5" i  |
| 800S137-68 | 50                         | 19' 0"                           | 17' 3"   | 15' 1"    | 21' 4" i                            | 19' 4" i  | 15' 9" i  | 17' 3"                           | 15' 8"   | 13' 8"    | 19' 5"                              | 17' 7" i  | 15' 5" i  |
| 800S137-97 | 50                         | 21' 1"                           | 19' 2"   | 16' 9"    | 23' 8"                              | 21' 6"    | 18' 10" i | 19' 2"                           | 17' 5"   | 15' 3"    | 21' 6"                              | 19' 7"    | 17' 1"    |
| 800S162-33 | 33                         | 12' 9" e                         | 11' 1" e | 9' 0" e   | 11' 10" a                           | 9' 7" a   | 7' 0" a   | 12' 9" e                         | 11' 1" e | 9' 0" e   | 11' 10" a                           | 9' 7" a   | 7' 0" a   |
| 800S162-43 | 33                         | 15' 4" e                         | 13' 4" e | 10' 10" e | 15' 4" i                            | 13' 4" i  | 10' 10" a | 15' 4" e                         | 13' 4" e | 10' 10" e | 15' 4" i                            | 13' 4" i  | 10' 10" a |
| 800S162-54 | 50                         | 18' 3"                           | 16' 7"   | 14' 6"    | 20' 6" i                            | 17' 9" i  | 14' 6" i  | 16' 7"                           | 15' 1"   | 13' 2"    | 18' 8" i                            | 16' 11" i | 14' 6" i  |
| 800S162-68 | 50                         | 19' 9"                           | 18' 0"   | 15' 8"    | 22' 2" i                            | 20' 2" i  | 17' 0" i  | 18' 0"                           | 16' 4"   | 14' 3"    | 20' 2"                              | 18' 4" i  | 16' 0" i  |
| 800S162-97 | 50                         | 22' 0"                           | 20' 0"   | 17' 5"    | 24' 8"                              | 22' 5"    | 19' 7"    | 20' 0"                           | 18' 2"   | 15' 10"   | 22' 5"                              | 20' 4"    | 17' 10"   |

Notes:

- 1

Web punchouts are not considered for shear and web crippling.
- 2

Deflection checks are computed using unbalanced loads for the two equal span conditions.
- 3

"e" indicates that the web stiffeners are required at the end support only.
- 4

"i" indicates that the web stiffeners are required at the interior support only.
- 5

"a" indicates that the web stiffeners are required at all supports.
- 6

See additional floor joist notes on page 62.

# FLOOR JOIST SPAN LIMITATIONS

10psf Dead Load and 40psf Live Load (TL Deflection=L/240)

| Member      | Yield strength<br>Fy (ksi) | Live Load Deflection L/360       |           |           |                                     |           |           | Live Load Deflection L/480       |           |           |                                     |           |           |
|-------------|----------------------------|----------------------------------|-----------|-----------|-------------------------------------|-----------|-----------|----------------------------------|-----------|-----------|-------------------------------------|-----------|-----------|
|             |                            | Single span<br>spacing (in) o.c. |           |           | Two equal span<br>spacing (in) o.c. |           |           | Single span<br>spacing (in) o.c. |           |           | Two equal span<br>spacing (in) o.c. |           |           |
|             |                            | 12                               | 16        | 24        | 12                                  | 16        | 24        | 12                               | 16        | 24        | 12                                  | 16        | 24        |
| 800S200-33  | 33                         | 13' 9" e                         | 11' 11" e | 9' 6" e   | 12' 4" a                            | 9' 11" a  | 7' 3" a   | 13' 9" e                         | 11' 11" e | 9' 6" e   | 12' 4" a                            | 9' 11" a  | 7' 3" a   |
| 800S200-43  | 33                         | 16' 6" e                         | 14' 3" e  | 11' 8" e  | 16' 6" i                            | 14' 3" a  | 11' 8" a  | 16' 4" e                         | 14' 3" e  | 11' 8" e  | 16' 6" i                            | 14' 3" a  | 11' 8" a  |
| 800S200-54  | 50                         | 19' 4" e                         | 17' 6" e  | 15' 4" e  | 21' 8" i                            | 19' 0" i  | 15' 6" i  | 17' 6" e                         | 15' 11" e | 13' 11" e | 19' 8" i                            | 17' 11" i | 15' 6" i  |
| 800S200-68  | 50                         | 20' 9" e                         | 18' 10" e | 16' 5" e  | 23' 3" i                            | 21' 2" i  | 18' 2" i  | 18' 10" e                        | 17' 1" e  | 14' 11" e | 21' 2" e                            | 19' 2" i  | 16' 9" i  |
| 800S200-97  | 50                         | 23' 1" e                         | 20' 11" e | 18' 4" e  | 25' 11" e                           | 23' 6" e  | 20' 6" e  | 20' 11" e                        | 19' 0" e  | 16' 7" e  | 23' 6" e                            | 21' 4" e  | 18' 8" e  |
| 800S250-43  | 33                         | 16' 11" e                        | 14' 8" e  | 12' 0" e  | 16' 11" i                           | 14' 8" a  | 11' 11" a | 16' 11" e                        | 14' 8" e  | 12' 0" e  | 16' 11" i                           | 14' 8" a  | 11' 11" a |
| 800S250-54  | 50                         | 20' 1" e                         | 18' 3" e  | 15' 11" e | 22' 6" i                            | 19' 6" i  | 15' 11" i | 18' 3" e                         | 16' 7" e  | 14' 6" e  | 20' 5" i                            | 18' 7" i  | 15' 11" i |
| 800S250-68  | 50                         | 21' 7" e                         | 19' 8" e  | 17' 2" e  | 24' 3" i                            | 22' 1" i  | 18' 7" i  | 19' 8" e                         | 17' 10" e | 15' 7" e  | 22' 1" e                            | 20' 0" i  | 17' 6" i  |
| 800S250-97  | 50                         | 24' 1" e                         | 21' 11" e | 19' 1" e  | 27' 1" e                            | 24' 7" e  | 21' 6" i  | 21' 11" e                        | 19' 11" e | 17' 4" e  | 24' 7" e                            | 22' 4" e  | 19' 6" e  |
| 800S300-54  | 50                         | 20' 6" e                         | 18' 7" e  | 16' 2" e  | 22' 10" i                           | 19' 9" i  | 16' 2" i  | 18' 7" e                         | 16' 11" e | 14' 9" e  | 20' 11" i                           | 19' 0" i  | 16' 2" i  |
| 800S300-68  | 50                         | 22' 3" e                         | 20' 3" e  | 17' 8" e  | 25' 0" i                            | 22' 8" i  | 18' 11" i | 20' 3" e                         | 18' 4" e  | 16' 1" e  | 22' 8" e                            | 20' 7" i  | 18' 0" i  |
| 800S300-97  | 50                         | 24' 11" e                        | 22' 8" e  | 19' 9" e  | 28' 0" e                            | 25' 5" e  | 22' 3" i  | 22' 8" e                         | 20' 7" e  | 18' 0" e  | 25' 5" e                            | 23' 1" e  | 20' 2" e  |
| 1000S162-43 | 33                         | 17' 1" e                         | 14' 9" e  | 12' 1" e  | 17' 1" a                            | 14' 6" a  | 10' 10" a | 17' 1" e                         | 14' 9" e  | 12' 1" e  | 17' 1" a                            | 14' 6" a  | 10' 10" a |
| 1000S162-54 | 50                         | 21' 9" e                         | 19' 9" e  | 16' 1" e  | 22' 9" i                            | 19' 9" i  | 16' 1" i  | 19' 9" e                         | 17' 11" e | 15' 8" e  | 22' 2" i                            | 19' 9" i  | 16' 1" i  |
| 1000S162-68 | 50                         | 23' 7" e                         | 21' 5" e  | 18' 8" e  | 26' 6" i                            | 23' 3" i  | 19' 0" i  | 21' 5" e                         | 19' 5" e  | 17' 0" e  | 24' 0" i                            | 21' 10" i | 19' 0" i  |
| 1000S162-97 | 50                         | 26' 6" e                         | 24' 1" e  | 21' 0" e  | 29' 9" e                            | 27' 0" e  | 23' 7" i  | 24' 1" e                         | 21' 10" e | 19' 1" e  | 27' 0" e                            | 24' 6" e  | 21' 5" e  |
| 1000S200-43 | 33                         | 18' 5" e                         | 16' 0" e  | 13' 0" e  | 18' 5" a                            | 15' 2" a  | 11' 3" a  | 18' 5" e                         | 16' 0" e  | 13' 0" e  | 18' 5" a                            | 15' 2" a  | 11' 3" a  |
| 1000S200-54 | 50                         | 22' 9" e                         | 20' 8" e  | 17' 4" e  | 24' 7" i                            | 21' 3" i  | 17' 4" i  | 20' 8" e                         | 18' 9" e  | 16' 5" e  | 23' 2" i                            | 21' 1" i  | 17' 4" i  |
| 1000S200-68 | 50                         | 24' 7" e                         | 22' 4" e  | 19' 7" e  | 27' 8" i                            | 25' 0" i  | 20' 5" i  | 22' 4" e                         | 20' 4" e  | 17' 9" e  | 25' 1" i                            | 22' 10" i | 19' 11" i |
| 1000S200-97 | 50                         | 27' 8" e                         | 25' 1" e  | 21' 11" e | 31' 0" e                            | 28' 2" e  | 24' 8" i  | 25' 1" e                         | 22' 10" e | 19' 11" e | 28' 2" e                            | 25' 7" e  | 22' 5" e  |
| 1000S250-54 | 50                         | 24' 0" e                         | 21' 10" e | 17' 10" e | 25' 3" i                            | 21' 10" i | 17' 10" i | 21' 10" e                        | 19' 10" e | 17' 4" e  | 24' 6" i                            | 21' 10" i | 17' 10" i |
| 1000S250-68 | 50                         | 25' 10" e                        | 23' 5" e  | 20' 6" e  | 29' 0" i                            | 25' 8" i  | 21' 0" i  | 23' 5" e                         | 21' 4" e  | 18' 7" e  | 26' 4" i                            | 23' 11" i | 20' 11" i |
| 1000S250-97 | 50                         | 28' 9" e                         | 26' 2" e  | 22' 10" e | 32' 4" e                            | 29' 4" e  | 25' 8" i  | 26' 2" e                         | 23' 9" e  | 20' 9" e  | 29' 4" e                            | 26' 8" e  | 23' 4" i  |
| 1000S300-54 | 50                         | 24' 6" e                         | 22' 3" e  | 18' 2" e  | 25' 8" i                            | 22' 3" i  | 18' 2" i  | 22' 3" e                         | 20' 3" e  | 17' 8" e  | 25' 0" i                            | 22' 3" i  | 18' 2" i  |
| 1000S300-68 | 50                         | 26' 6" e                         | 24' 1" e  | 21' 1" e  | 29' 9" i                            | 26' 2" i  | 21' 4" i  | 24' 1" e                         | 21' 11" e | 19' 2" e  | 27' 1" i                            | 24' 7" i  | 21' 4" i  |
| 1000S300-97 | 50                         | 29' 8" e                         | 27' 0" e  | 23' 7" e  | 33' 4" e                            | 30' 4" e  | 26' 6" i  | 27' 0" e                         | 24' 6" e  | 21' 5" e  | 30' 4" e                            | 27' 6" e  | 24' 1" i  |
| 1200S162-54 | 50                         | 24' 7" e                         | 21' 3" e  | 17' 4" e  | 24' 7" a                            | 21' 3" a  | 16' 7" a  | 22' 9" e                         | 20' 8" e  | 17' 4" e  | 24' 7" a                            | 21' 3" a  | 16' 7" a  |
| 1200S162-68 | 50                         | 27' 2" e                         | 24' 8" e  | 20' 7" e  | 29' 2" i                            | 25' 3" i  | 20' 7" i  | 24' 8" e                         | 22' 5" e  | 19' 7" e  | 27' 9" i                            | 25' 2" i  | 20' 7" i  |
| 1200S162-97 | 50                         | 30' 10" e                        | 28' 0" e  | 24' 5" e  | 34' 7" e                            | 31' 5" i  | 26' 8" i  | 28' 0" e                         | 25' 5" e  | 22' 3" e  | 31' 5" e                            | 28' 7" e  | 24' 11" i |
| 1200S200-54 | 50                         | 26' 2" e                         | 23' 1" e  | 18' 10" e | 26' 8" a                            | 23' 1" a  | 17' 4" a  | 23' 9" e                         | 21' 7" e  | 18' 10" e | 26' 8" a                            | 23' 1" a  | 17' 4" a  |
| 1200S200-68 | 50                         | 28' 4" e                         | 25' 9" e  | 22' 3" e  | 31' 6" i                            | 27' 3" i  | 22' 3" i  | 25' 9" e                         | 23' 5" e  | 20' 5" e  | 28' 11" i                           | 26' 3" i  | 22' 3" i  |
| 1200S200-97 | 50                         | 32' 1" e                         | 29' 2" e  | 25' 5" e  | 36' 0" e                            | 32' 9" i  | 28' 7" i  | 29' 2" e                         | 26' 6" e  | 23' 1" e  | 32' 9" e                            | 29' 9" e  | 26' 0" i  |

## Notes:

- Web punchouts are not considered for shear and web crippling.
- Deflection checks are computed using unbalanced loads for the two equal span conditions.
- "e" indicates that the web stiffeners are required at the end support only.
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- "a" indicates that the web stiffeners are required at all supports.
- See additional floor joist notes on page 62.

Complies with AISI S100-16 (2020) w/S20-20 • IBC 2024

## FLOOR JOIST SPAN LIMITATIONS

10psf Dead Load and 40psf Live Load (TL Deflection=L/240)

| Member      | Yield strength<br>F <sub>y</sub> (ksi) | Live Load Deflection L/360       |           |           |                                     |           |           | Live Load Deflection L/480       |          |           |                                     |           |           |
|-------------|----------------------------------------|----------------------------------|-----------|-----------|-------------------------------------|-----------|-----------|----------------------------------|----------|-----------|-------------------------------------|-----------|-----------|
|             |                                        | Single span<br>spacing (in) o.c. |           |           | Two equal span<br>spacing (in) o.c. |           |           | Single span<br>spacing (in) o.c. |          |           | Two equal span<br>spacing (in) o.c. |           |           |
|             |                                        | 12                               | 16        | 24        | 12                                  | 16        | 24        | 12                               | 16       | 24        | 12                                  | 16        | 24        |
| 1200S250-54 | 50                                     | 27' 3" e                         | 23' 10" e | 19' 6" e  | 27' 7" a                            | 23' 7" a  | 17' 8" a  | 24' 9" e                         | 22' 6" e | 19' 6" e  | 27' 7" a                            | 23' 7" a  | 17' 8" a  |
| 1200S250-68 | 50                                     | 29' 6"                           | 26' 10"   | 23' 0"    | 32' 6" i                            | 28' 2" i  | 23' 0" i  | 26' 10"                          | 24' 5"   | 21' 4"    | 30' 2" i                            | 27' 4" i  | 23' 0" i  |
| 1200S250-97 | 50                                     | 33' 4"                           | 30' 3"    | 26' 5"    | 37' 5"                              | 34' 0" i  | 29' 7" i  | 30' 3"                           | 27' 6"   | 24' 0"    | 34' 0"                              | 30' 11"   | 27' 0" i  |
| 1200S300-54 | 50                                     | 28' 1" e                         | 24' 4" e  | 19' 10" e | 28' 1" a                            | 23' 10" a | 17' 11" a | 25' 10" e                        | 23' 6" e | 19' 10" e | 28' 1" a                            | 23' 10" a | 17' 11" a |
| 1200S300-68 | 50                                     | 30' 9"                           | 27' 11"   | 23' 5"    | 33' 2" i                            | 28' 9" i  | 23' 5" i  | 27' 11"                          | 25' 4"   | 22' 2"    | 31' 4" i                            | 28' 6" i  | 23' 5" i  |
| 1200S300-97 | 50                                     | 34' 4"                           | 31' 2"    | 27' 3"    | 38' 7"                              | 35' 0" i  | 30' 2" i  | 31' 2"                           | 28' 4"   | 24' 9"    | 35' 0"                              | 31' 10"   | 27' 10" i |
| 1400S162-54 | 50                                     | 25' 11" e                        | 22' 6" e  | 18' 4" e  | 25' 11" a                           | 21' 4" a  | 15' 11" a | 25' 7" e                         | 22' 6" e | 18' 4" e  | 25' 11" a                           | 21' 4" a  | 15' 11" a |
| 1400S162-68 | 50                                     | 30' 8"                           | 26' 10"   | 21' 11"   | 31' 0" i                            | 26' 10" i | 21' 11" i | 27' 10"                          | 25' 4"   | 21' 11"   | 31' 0" i                            | 26' 10" i | 21' 11" i |
| 1400S162-97 | 50                                     | 34' 11"                          | 31' 8"    | 27' 8"    | 39' 2" i                            | 35' 0" i  | 28' 7" i  | 31' 8"                           | 28' 10"  | 25' 2"    | 35' 7"                              | 32' 4" i  | 28' 3" i  |
| 1400S200-54 | 50                                     | 28' 4" e                         | 24' 6" e  | 20' 0" e  | 27' 6" a                            | 22' 5" a  | 16' 8" a  | 26' 8" e                         | 24' 3" e | 20' 0" e  | 27' 6" a                            | 22' 5" a  | 16' 8" a  |
| 1400S200-68 | 50                                     | 31' 11"                          | 29' 0"    | 23' 9"    | 33' 7" i                            | 29' 1" i  | 23' 9" i  | 29' 0"                           | 26' 4"   | 23' 0"    | 32' 7" i                            | 29' 1" i  | 23' 9" i  |
| 1400S200-97 | 50                                     | 36' 3"                           | 32' 11"   | 28' 9"    | 40' 8" i                            | 37' 0" i  | 30' 10" i | 32' 11"                          | 29' 11"  | 26' 2"    | 37' 0"                              | 33' 7" i  | 29' 4" i  |
| 1400S250-54 | 50                                     | 29' 5" e                         | 25' 6" e  | 20' 10" e | 28' 2" a                            | 23' 0" a  | 16' 11" a | 27' 9" e                         | 25' 3" e | 20' 10" e | 28' 2" a                            | 23' 0" a  | 16' 11" a |
| 1400S250-68 | 50                                     | 33' 3"                           | 30' 2"    | 24' 8" e  | 34' 11" i                           | 30' 3" i  | 24' 8" i  | 30' 2"                           | 27' 5"   | 24' 0"    | 33' 11" i                           | 30' 3" i  | 24' 8" i  |
| 1400S250-97 | 50                                     | 37' 7"                           | 34' 2"    | 29' 10"   | 42' 3" i                            | 38' 4" i  | 32' 0" i  | 34' 2"                           | 31' 0"   | 27' 1"    | 38' 4"                              | 34' 10" i | 30' 5" i  |
| 1400S300-54 | 50                                     | 30' 2" e                         | 26' 1" e  | 21' 4" e  | 28' 7" a                            | 23' 3" a  | 17' 2" a  | 28' 2" e                         | 25' 7" e | 21' 4" e  | 28' 7" a                            | 23' 3" a  | 17' 2" a  |
| 1400S300-68 | 50                                     | 34' 1"                           | 30' 11"   | 25' 3" e  | 35' 9" i                            | 30' 11" i | 25' 3" i  | 31' 0"                           | 28' 2"   | 24' 7" e  | 34' 9" i                            | 30' 11" i | 25' 3" i  |
| 1400S300-97 | 50                                     | 38' 9"                           | 35' 2"    | 30' 9"    | 43' 6" i                            | 39' 6" i  | 32' 9" i  | 35' 2"                           | 32' 0"   | 27' 11"   | 39' 6"                              | 35' 11" i | 31' 4" i  |

## Notes:

- 1 Web punchouts are not considered for shear and web crippling.
- 2 Deflection checks are computed using unbalanced loads for the two equal span conditions.
- 3 "e" indicates that the web stiffeners are required at the end support only.
- 4 "i" indicates that the web stiffeners are required at the interior support only.
- 5 "a" indicates that the web stiffeners are required at all supports.
- 6 See additional floor joist notes on page 62.

Complies with AISI S100-16 (2020) w/S2-20 • IBC 2024