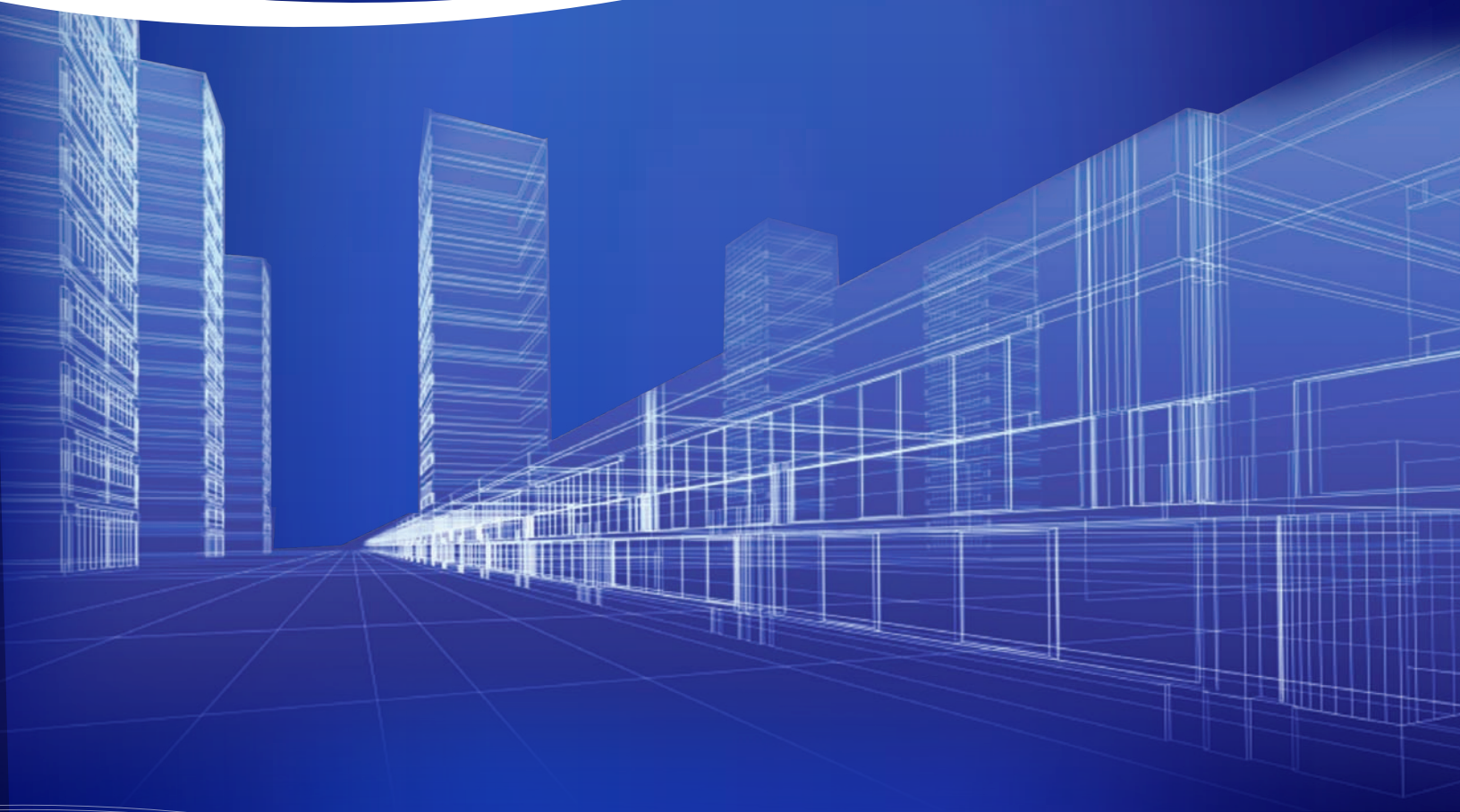
CEMCO

Steel Framing and Metal Lath

# STEEL FRAMING AND ACCESSORIES CATALOG

ICC ES™ *ICC ESR-3016*



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CERTIFIED COMPLIANT

SSMA

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Steel Framing and Metal Lath

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California Expanded Metal Products Co. Inc., commonly known as CEMCO, was founded in 1974. CEMCO is the leader in quality, service, and product development, always striving to deliver the cutting-edge solutions that save both time and money during the entire construction process. Our commitment to quality control and the use of mill-certified prime steel ensures stellar product performance long after the project is finished.

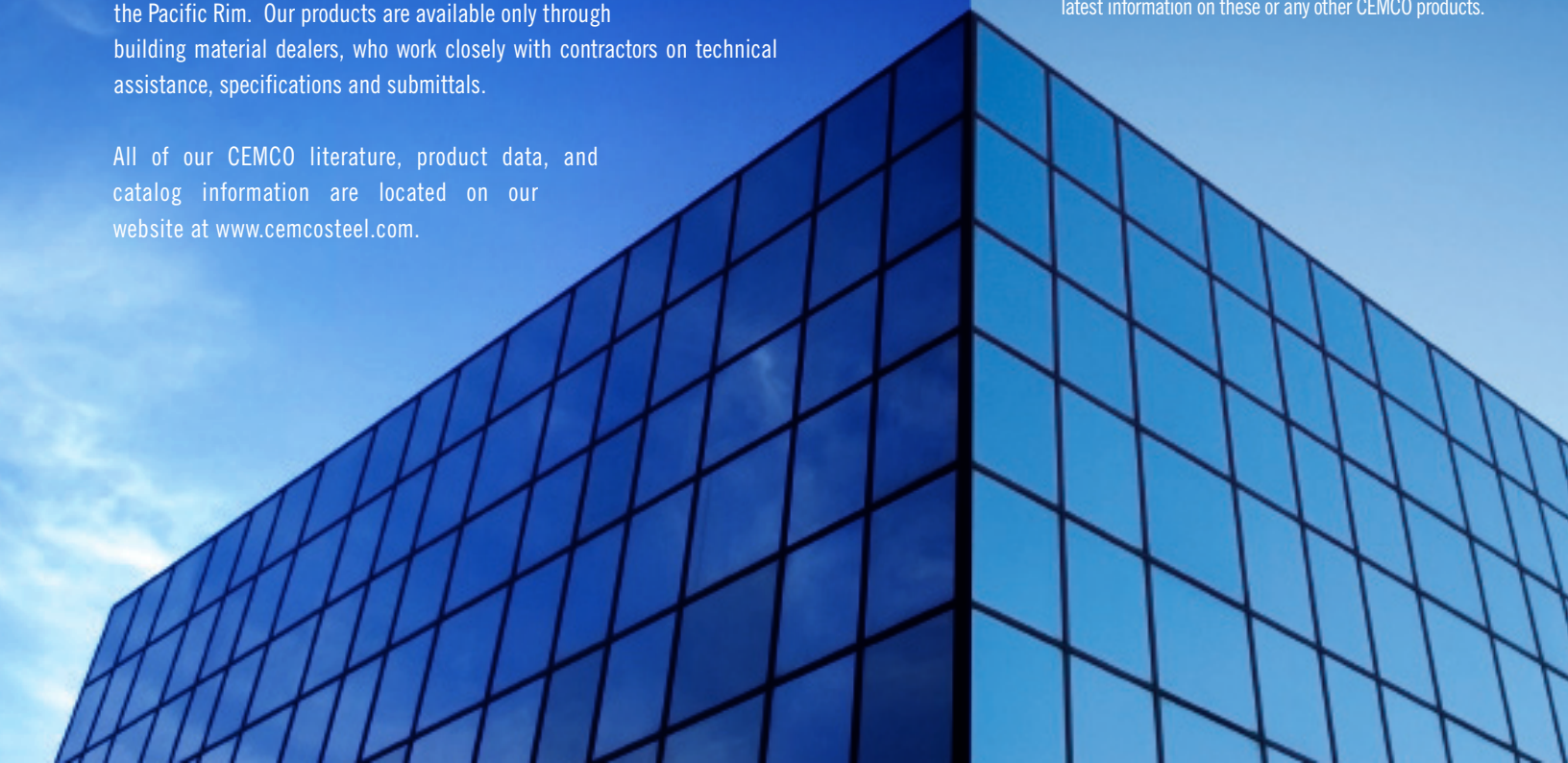
CEMCO manufactures in three state-of-the-art facilities: City of Industry, CA, Pittsburg, CA, and Denver CO.

CEMCO is one of the few manufacturers to produce all of our products from high quality mill-certified PRIME hot-dipped galvanized steel. Our products are manufactured to the stringent tolerances established by the American Iron and Steel Institute, SSMA Code Compliance standard, and the most recent IBC, IRC, and CBC Building Codes.

We are proud to offer one of the broadest product lines available in the cold-formed steel-framing industry. Each of our products has been manufactured here in the USA, and typically qualifies for credits in the Leadership in Energy and Environmental Design program, commonly known as LEED's.
Our metal lath, plastering accessories, and water management products are manufactured to handle both interior and exterior applications. Like all CEMCO products, they're produced from high-quality, mill-certified Hot-dipped galvanized PRIME steel to guarantee proper performance long after the finish coat is applied.

With our state-of-the-art facilities, CEMCO can handle any size construction project. We distribute products throughout the United States, Canada, Mexico, and the Pacific Rim. Our products are available only through building material dealers, who work closely with contractors on technical assistance, specifications and submittals.

All of our CEMCO literature, product data, and catalog information are located on our website at www.cemcosteel.com.



## DISCLAIMER

All data, specifications, and details contained in this publication are intended as a general guide for using CEMCO cold-formed steel framing products and accessories. These products are not to be used in design or construction without an independent evaluation by a licensed and qualified engineer or architect to verify the suitability of a particular product for use in a specific application. CEMCO and its entities assume no liability for failure resulting from the use or misapplication of computations, detail drawings, and specifications contained herein. This publication contains the latest information available at the time of printing. CEMCO and its entities reserve the right to make changes or modifications to the materials of any of its products without out prior notice or obligation. Contact CEMCO at 800-775-2362 or www.cemcosteel.com for the latest information on these or any other CEMCO products.

# Earn LEED Certification with help from CEMCO

California Expanded Metal Products Co. is proud to be a member of the U.S. Green Building Council and support its LEED program, which aims to improve environmental and economic performance of commercial and residential buildings.

LEED (Leadership in Energy & Environmental Design) certifies buildings that meet the standards utilizing energy, environmental design and products, as defined in the LEED rating system. The use of CEMCO products can help projects accumulate points in specific categories, including Recycled Content and Local/Regional Materials.

**Recycled Content**

Recycled steel content used in the fabrication of CEMCO cold-formed-steel productsare in compliance with the Requirement for Environmental and Recycled Content Materials. CEMCO steel suppliers have indicated that their steel contains 30% to 35% recycled steel. The steel products are manufactured from steel consisting of the following contents:

- 32.9% Recycled Steel
- 25.6% Post-Consumer
- 6.8% Pre-Consumer

Local/Regional Materials
CEMCO serves the Western United States through its primary locations in the City of Industry and Pittsburg, Calif., and Denver, Colo.

For all the information you need about becoming LEED-certified using steel-framing materials, download a copy of CEMCO's LEED Certification at www.cemcosteel.com or call (800) 775-2362.

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## Introduction To Ssma Nomenclature

The Steel Stud Manufacturer's Association (SSMA) has developed a four part identification code which identifies the size (both depth, and flange width), style, and material thickness of each member.

### Example:

**MEMBER DEPTH:**
(Example: 6" = 600 x 1/100 inches)
All member depths are taken in 1/100 inches.
For all "T" sections, member depth is the
Inside to inside dimension.

**FLANGE WIDTH:**
(Example: 1 5/8" = 162 x 1/100 inches)
All flange widths are taken in 1/100 inches.

**600 S 162 - 54**

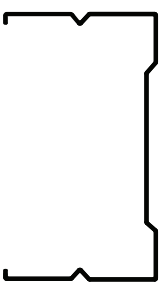
**STYLE:**
*(Example: Stud or Joist Section = S)*
The four alpha characters utilized by the Designator system is:

**Designator system is:**
S = Stud or Joist Sections
T = Track Sections
U = Channel Sections
F = Furring Channels Section

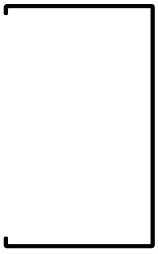
**MATERIAL THICKNESS:**
*(Example: 0.054 in. = 54 mils; 1 mil = 1/1000 in.)*
Material thickness is thickness in mils. Minimum base metal thickness represents 95% of the design thickness.

Note: For those sections where two different yield strengths (33 ksi and 50 ksi) are shown, the yield strength used in the design, if greater than 33 ksi, needs to be identified on the design and ordering of steel. (i.e. 600S162-54 (50 ksi))

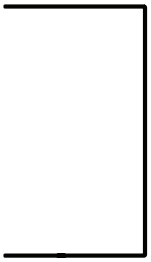
Stud/Track
***S-sections***



C-Stud/Joist
***S-Sections***



Track
***T-Sections***



Channel
***U-Sections***

Furring Channel
***F-Sections***

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## Code Approvals

Products manufactured by CEMCO are recognized by the ICC Evaluation Service and under the tolerances of the SSMA Code Compliance Program as administered by Architectural Testing Inc. (ATI). See ICC-ESR 3016.

## Material Specifications

Products manufactured by CEMCO are formed from hot-dipped galvanized steel meeting or exceeding the following ASTM, AISI standards, SSMA standards, UL, Intertek, and additional code approval agencies.

- C955 (Structural Product)
- ASTM C1007 (Installation)
- ASTM A924/A924M(Coating)
- ASTM A653/A653M (Steel)
- ASTM C1003/C1003M (Steel)
- C645 (Non-Structural Product)
- C754 (Non-Structural Installation)

CEMCO Steel framing products are manufactured according to the AISI specification for the Design of Cold-Formed Steel Structural Member, AISI S100-2007. The 2007 CBC is acceptable for use in fire and sound rated assemblies listed in the Code and Gypsum Association Fire Resistance Design Manual.

CEMCO Steel framing products meet or exceed all of the requirements of the SSMA Code Compliance Certification Program.

UL® testing Standards and UL® Certified Products and Follow-Up Service.

Intertek Fire Endurance Test Program.

## Additional Code Approvals include:

*2006 IBC, IRC*

- ICC-ESR 3016

## LEED® Credits for Cold-Formed Steel Framing Products:

- MR 2.1 & 2.2: Waste Management (2 points).
- EQ Credit 3.1: Construction Indoor Air Quality Management (1 point).
- MR 4.1 & 4.2: Recycled Content (2 points).
- MR 5.1 & 5.2: Regional Materials (2 points).
- SS Credit 1: Site Selection (1 point).

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## Thickness Table

| Minimum Thickness (mils) | Design Thickness (in.) | Minimum Thickness (in.) | Inside Corner Radii | Reference OnlyGauge No. | Color Code |
|---|---|---|---|---|---|
| 18 | 0.0188 | 0.0179 | 0.0843 | 25 | None |
| 27 | 0.0283 | 0.0269 | 0.0796 | 22 | Black |
| 30 | 0.0312 | 0.0296 | 0.0781 | 20-Non-Structural | Pink |
| 33 | 0.0346 | 0.0329 | 0.0764 | 20-Structural | White |
| 43 | 0.0451 | 0.0428 | 0.0712 | 18 | Yellow |
| 54 | 0.0566 | 0.0538 | 0.0849 | 16 | Green |
| 68 | 0.0713 | 0.0677 | 0.1069 | 14 | Orange |
| 97 | 0.1017 | 0.0966 | 0.1525 | 12 | Red |

## Design Stiffening Lip Length

| Section | Flange Width | Design Stiffening Lip Length (in) |
|---|---|---|
| S125 | 1-1/4" | 0.188 |
| S137 | 1-3/8" | 0.375 |
| S162 | 1-5/8" | 0.500 |
| S200 | 2" | 0.625 |
| S250 | 2-1/2" | 0.625 |

1. Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the job site based on A4.3 of the AISI S100-2007.
2. The tables in this catalog are calculated based on the inside corner radii listed on this table.

## General Notes for All Tables

1. Where 'NASPEC' is referenced, it is the "North American Specification for the Design of Cold-Formed Steel Structural Members", 2001 edition, including the 2004 Supplement, US provisions.

2. The strength increase from cold work of forming has been incorporated for flexural strength per NASPEC A7.2.

3. The effective moment of inertia for deflection is calculated at a stress which results in a section modulus such that the stress times the section modulus at that stress is equal to the allowable moment. NASPEC Procedure 1 for serviceability determination has been used.

4. Various sections may be manufactured with yield points of 33 or 50 ksi. The yield point used for calculations is indicated in the tables.

5. For sections available in both 33 and 50 ksi, the specifier must indicate which yield point is required. For example: 362S-54 (50).

6. When provided, factory punchouts will be located along the centerline of the webs of the members and will have a minimum center-to-center spacing of 24 inches. Punchouts for members > 2.5 inches deep are a maximum of 1.5 inches wide x 4 inches long. Members with depths of 2.5 inches and smaller are maximum 3/4" wide x 4 inches long.

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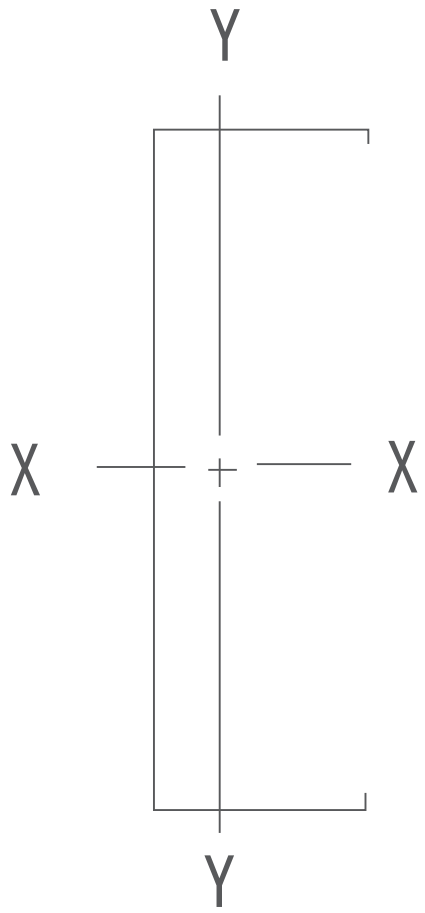
# DEFINITIONS OF STRUCTURAL PROPERTY SYMBOLS




## Gross Section Properties

**Ix** Moment of Inertia of the gross section about the X-X axis (strong axis).

**Sx** Section modulus about the X-X axis (strong axis).

**Rx** Radius of gyration of the gross section about the X-X axis.

**Iy** Moment of inertia of the gross section about the Y-Y axis (weak axis).

**Ry** Radius of gyration of the gross section about the Y-Y axis.

## Effective Section Properties

**Ixe** Moment of inertia for deflection calculations based on "Procedure 1 for Deflection Determination" of the 2004 AISI specification.

**Sx** Effective section modulus about the X-X axis (strong axis), Stress = Fy.

**Ma** Allowable bending moment – Based on the effective section modulus and the allowable stress including the strength increase from cold-work of forming (AISI 7.2) where applicable.

**Vag** Allowable strong axis shear away from the punchout, calculated in accordance with AISI section C3.2.1.

**Vanet** Allowable strong axis shear at the punchout, calculated in accordance with AISI section C3.2.2.

## Torsional and Other Properties

**J** St. Venant Torsional Constant.

**Cw** Torsional warping constant.

**M** Distance from shear center to mid-plane of web.

**Xo** Distance from the shear center to the centroid along the principle X-axis.

**Ro** Polar radius of gyration about the centroidal principle axis.

**ß** 1-(Xo/Ro) 2

**Lu** The longest weak axis (Ly) and torsional (Lt) unbraced length at which lateral torsional buckling is restrained in accordance with AISI C3.1.2.1.

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# Section Property Table Notes

1. Web depth for track sections equals nominal depth plus 2 x design thickness plus bend radius.
2. Hems on non-structural track sections are ignored.
3. Effective properties include the strength increase form cold-work of forming per NASPEC section A7.2 where applicable.
4. Tabulated gross properties are based on full, unreduced section away from punchouts.
5. Effective properties of all "S" sections based on punched sections. Track sections are considered unpunched.
6. For deflection determination, use the effective moment of inertia.
7. For sections with properties listed for both 33ksi and 50 ksi yield point, the required yield point should be specified in the design documents.
8. Where effective properties are not listed for a section at 33 ksi or 50 ksi, web depth-to-thickness limits from the NASPEC are exceeded. Only gross properties are available.

## Section Properties for Non-Structural Studs

| Member | Design Thickness (in) | Gross | | | | | | Effective Properties 33 ksi | | | | | | Torsional Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 162S125-18 | 0.0188 | 0.08 | 0.27 | 0.038 | 0.046 | 0.686 | 0.016 | 0.447 | 0.034 | 0.031 | 0.61 | 302 | 100 | 0.009 | 0.009 | -1.029 | 0.594 | 1.315 | 0.388 |
| 162S125-27 | 0.0283 | 0.12 | 0.41 | 0.056 | 0.068 | 0.682 | 0.023 | 0.443 | 0.055 | 0.053 | 1.05 | 494 | 106 | 0.032 | 0.013 | -1.017 | 0.587 | 1.302 | 0.390 |
| 162S125-30 | 0.0312 | 0.13 | 0.45 | 0.061 | 0.075 | 0.681 | 0.026 | 0.441 | 0.060 | 0.060 | 1.19 | 543 | 106 | 0.043 | 0.014 | -1.014 | 0.585 | 1.298 | 0.390 |
| 162S125-33 | 0.0346 | 0.15 | 0.49 | 0.067 | 0.083 | 0.679 | 0.028 | 0.440 | 0.066 | 0.069 | 1.37 | 601 | 105 | 0.058 | 0.016 | -1.010 | 0.583 | 1.294 | 0.391 |
| 250S125-18 | 0.0188 | 0.10 | 0.33 | 0.099 | 0.079 | 1.014 | 0.019 | 0.439 | 0.089 | 0.059 | 1.17 | 258 | 196 | 0.011 | 0.023 | -0.904 | 0.543 | 1.427 | 0.599 |
| 250S125-27 | 0.0283 | 0.14 | 0.49 | 0.147 | 0.118 | 1.009 | 0.027 | 0.434 | 0.144 | 0.097 | 1.92 | 685 | 344 | 0.039 | 0.034 | -0.893 | 0.536 | 1.416 | 0.602 |
| 250S125-30 | 0.0312 | 0.16 | 0.54 | 0.161 | 0.129 | 1.008 | 0.030 | 0.433 | 0.159 | 0.110 | 2.17 | 832 | 378 | 0.052 | 0.037 | -0.889 | 0.534 | 1.412 | 0.603 |
| 250S125-33 | 0.0346 | 0.18 | 0.60 | 0.178 | 0.142 | 1.006 | 0.033 | 0.431 | 0.175 | 0.125 | 2.48 | 975 | 399 | 0.070 | 0.040 | -0.885 | 0.532 | 1.408 | 0.605 |
| 362S125-18 | 0.0188 | 0.12 | 0.40 | 0.234 | 0.129 | 1.409 | 0.021 | 0.421 | 0.221 | 0.075 | 1.48 | 173 | 163 | 0.014 | 0.054 | -0.786 | 0.490 | 1.667 | 0.778 |
| 362S125-27 | 0.0283 | 0.18 | 0.60 | 0.347 | 0.192 | 1.404 | 0.031 | 0.416 | 0.342 | 0.135 | 2.67 | 592 | 370 | 0.047 | 0.079 | -0.776 | 0.484 | 1.657 | 0.781 |
| 362S125-30 | 0.0312 | 0.19 | 0.66 | 0.381 | 0.210 | 1.402 | 0.033 | 0.415 | 0.376 | 0.156 | 3.08 | 794 | 449 | 0.063 | 0.086 | -0.773 | 0.482 | 1.654 | 0.782 |
| 362S125-33 | 0.0346 | 0.22 | 0.73 | 0.421 | 0.232 | 1.400 | 0.037 | 0.413 | 0.415 | 0.182 | 3.59 | 1024 | 521 | 0.086 | 0.094 | -0.769 | 0.480 | 1.650 | 0.783 |
| 400S125-18[1] | 0.0188 | 0.13 | 0.42 | 0.294 | 0.147 | 1.536 | 0.021 | 0.414 | 0.281 | 0.083 | 1.64 | 156 | 156 | 0.015 | 0.068 | -0.754 | 0.475 | 1.760 | 0.816 |
| 400S125-27 | 0.0283 | 0.19 | 0.64 | 0.438 | 0.219 | 1.531 | 0.031 | 0.410 | 0.431 | 0.151 | 2.97 | 533 | 398 | 0.050 | 0.098 | -0.744 | 0.469 | 1.751 | 0.819 |
| 400S125-30 | 0.0312 | 0.21 | 0.70 | 0.481 | 0.240 | 1.529 | 0.034 | 0.408 | 0.474 | 0.174 | 3.44 | 715 | 484 | 0.067 | 0.107 | -0.741 | 0.467 | 1.748 | 0.820 |
| 400S125-33 | 0.0346 | 0.23 | 0.77 | 0.531 | 0.265 | 1.527 | 0.038 | 0.407 | 0.524 | 0.203 | 4.01 | 976 | 595 | 0.091 | 0.118 | -0.738 | 0.465 | 1.744 | 0.821 |
| 600S125-27[1] | 0.0283 | 0.24 | 0.83 | 1.160 | 0.387 | 2.183 | 0.035 | 0.377 | 1.097 | 0.271 | 5.35 | 349 | 349 | 0.065 | 0.251 | -0.614 | 0.402 | 2.299 | 0.929 |
| 600S125-30 | 0.0312 | 0.27 | 0.91 | 1.275 | 0.425 | 2.181 | 0.038 | 0.376 | 1.218 | 0.315 | 6.22 | 468 | 468 | 0.087 | 0.274 | -0.611 | 0.401 | 2.296 | 0.929 |
| 600S125-33 | 0.0346 | 0.30 | 1.01 | 1.409 | 0.470 | 2.179 | 0.042 | 0.374 | 1.361 | 0.369 | 7.30 | 638 | 638 | 0.118 | 0.300 | -0.608 | 0.399 | 2.293 | 0.930 |
| 800S125-30[1] | 0.0312 | 0.33 | 1.12 | 2.606 | 0.651 | 2.808 | 0.040 | 0.349 | 2.366 | 0.430 | 8.50 | 347 | 347 | 0.107 | 0.531 | -0.522 | 0.351 | 2.878 | 0.967 |
| 800S125-33[1] | 0.0346 | 0.37 | 1.25 | 2.881 | 0.720 | 2.806 | 0.044 | 0.347 | 2.656 | 0.507 | 10.02 | 474 | 474 | 0.146 | 0.582 | -0.519 | 0.349 | 2.875 | 0.967 |

NOTES 1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads. Suitability of web holes must be evaluated independently.

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# Section Properties for Non-Structural Tracks

| Member | Design Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | | Torsional Properties | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 162T125-18 | 0.0188 | 0.077 | 0.26 | 0.041 | 0.047 | 0.733 | 0.013 | 0.411 | 0.030 | 0.025 | 0.50 | 302 | 0.009 | 0.007 | -0.878 | 0.503 | 1.215 | 0.478 |
| 162T125-27 | 0.0283 | 0.117 | 0.40 | 0.063 | 0.072 | 0.735 | 0.020 | 0.410 | 0.050 | 0.044 | 0.87 | 541 | 0.031 | 0.010 | -0.872 | 0.501 | 1.211 | 0.482 |
| 162T125-30 | 0.0312 | 0.129 | 0.44 | 0.070 | 0.079 | 0.735 | 0.022 | 0.409 | 0.057 | 0.050 | 1.00 | 597 | 0.042 | 0.012 | -0.870 | 0.500 | 1.210 | 0.483 |
| 162T125-33 | 0.0346 | 0.143 | 0.49 | 0.077 | 0.087 | 0.736 | 0.024 | 0.408 | 0.066 | 0.058 | 1.15 | 663 | 0.057 | 0.013 | -0.868 | 0.499 | 1.209 | 0.484 |
| 250T125-18 | 0.0188 | 0.094 | 0.32 | 0.103 | 0.079 | 1.051 | 0.015 | 0.400 | 0.078 | 0.045 | 0.90 | 249 | 0.011 | 0.018 | -0.769 | 0.460 | 1.362 | 0.681 |
| 250T125-27 | 0.0283 | 0.141 | 0.48 | 0.157 | 0.119 | 1.053 | 0.022 | 0.398 | 0.129 | 0.079 | 1.56 | 685 | 0.038 | 0.027 | -0.763 | 0.457 | 1.360 | 0.685 |
| 250T125-30 | 0.0312 | 0.156 | 0.53 | 0.173 | 0.131 | 1.053 | 0.025 | 0.397 | 0.145 | 0.090 | 1.77 | 832 | 0.051 | 0.030 | -0.762 | 0.456 | 1.359 | 0.686 |
| 250T125-33 | 0.0346 | 0.173 | 0.59 | 0.192 | 0.145 | 1.054 | 0.027 | 0.397 | 0.166 | 0.103 | 2.03 | 1024 | 0.069 | 0.033 | -0.760 | 0.456 | 1.358 | 0.687 |
| 350T125-18 | 0.0188 | 0.113 | 0.38 | 0.219 | 0.121 | 1.394 | 0.016 | 0.383 | 0.174 | 0.063 | 1.25 | 175 | 0.013 | 0.038 | -0.675 | 0.418 | 1.595 | 0.821 |
| 350T125-27 | 0.0283 | 0.170 | 0.58 | 0.331 | 0.182 | 1.396 | 0.025 | 0.381 | 0.277 | 0.128 | 2.53 | 590 | 0.045 | 0.057 | -0.670 | 0.416 | 1.595 | 0.823 |
| 350T125-30 | 0.0312 | 0.187 | 0.64 | 0.365 | 0.200 | 1.396 | 0.027 | 0.380 | 0.312 | 0.145 | 2.86 | 790 | 0.061 | 0.063 | -0.669 | 0.415 | 1.594 | 0.824 |
| 350T125-33 | 0.0346 | 0.207 | 0.71 | 0.405 | 0.222 | 1.397 | 0.030 | 0.379 | 0.354 | 0.165 | 3.27 | 1024 | 0.083 | 0.070 | -0.668 | 0.414 | 1.594 | 0.824 |
| 362T125-18 | 0.0188 | 0.115 | 0.39 | 0.237 | 0.126 | 1.435 | 0.017 | 0.380 | 0.189 | 0.065 | 1.29 | 169 | 0.014 | 0.042 | -0.665 | 0.413 | 1.627 | 0.833 |
| 362T125-27 | 0.0283 | 0.173 | 0.59 | 0.358 | 0.191 | 1.438 | 0.025 | 0.378 | 0.301 | 0.135 | 2.66 | 569 | 0.046 | 0.062 | -0.661 | 0.411 | 1.627 | 0.835 |
| 362T125-30 | 0.0312 | 0.191 | 0.65 | 0.395 | 0.210 | 1.438 | 0.027 | 0.378 | 0.339 | 0.152 | 3.01 | 762 | 0.062 | 0.068 | -0.659 | 0.410 | 1.626 | 0.836 |
| 362T125-33 | 0.0346 | 0.212 | 0.72 | 0.438 | 0.232 | 1.438 | 0.030 | 0.377 | 0.384 | 0.174 | 3.44 | 1024 | 0.085 | 0.076 | -0.658 | 0.409 | 1.626 | 0.836 |
| 400T125-18[1] | 0.0188 | 0.122 | 0.41 | 0.297 | 0.144 | 1.560 | 0.017 | 0.374 | 0.241 | 0.072 | 1.42 | 153 | 0.014 | 0.052 | -0.637 | 0.400 | 1.726 | 0.864 |
| 400T125-27 | 0.0283 | 0.184 | 0.63 | 0.449 | 0.217 | 1.562 | 0.025 | 0.372 | 0.380 | 0.156 | 3.08 | 515 | 0.049 | 0.078 | -0.633 | 0.398 | 1.726 | 0.866 |
| 400T125-30 | 0.0312 | 0.203 | 0.69 | 0.495 | 0.239 | 1.562 | 0.028 | 0.371 | 0.427 | 0.176 | 3.49 | 689 | 0.066 | 0.085 | -0.632 | 0.397 | 1.726 | 0.866 |
| 400T125-33 | 0.0346 | 0.225 | 0.76 | 0.549 | 0.265 | 1.563 | 0.031 | 0.371 | 0.484 | 0.201 | 3.97 | 940 | 0.090 | 0.095 | -0.630 | 0.396 | 1.725 | 0.867 |
| 550T125-18[1] | 0.0188 | 0.150 | 0.51 | 0.627 | 0.223 | 2.044 | 0.018 | 0.349 | | | | | 0.018 | 0.107 | -0.547 | 0.354 | 2.144 | 0.935 |
| 550T125-27 | 0.0283 | 0.226 | 0.77 | 0.948 | 0.336 | 2.046 | 0.027 | 0.348 | 0.786 | 0.192 | 3.79 | 372 | 0.060 | 0.160 | -0.543 | 0.352 | 2.145 | 0.936 |
| 550T125-30 | 0.0312 | 0.250 | 0.85 | 1.045 | 0.370 | 2.046 | 0.030 | 0.347 | 0.897 | 0.226 | 4.47 | 499 | 0.081 | 0.176 | -0.542 | 0.351 | 2.145 | 0.936 |
| 550T125-33 | 0.0346 | 0.277 | 0.94 | 1.159 | 0.410 | 2.046 | 0.033 | 0.346 | 1.029 | 0.270 | 5.33 | 680 | 0.110 | 0.195 | -0.541 | 0.350 | 2.145 | 0.936 |
| 600T125-18[1] | 0.0188 | 0.160 | 0.54 | 0.773 | 0.253 | 2.201 | 0.019 | 0.342 | | | | | 0.019 | 0.131 | -0.522 | 0.341 | 2.288 | 0.948 |
| 600T125-27[1] | 0.0283 | 0.241 | 0.82 | 1.168 | 0.381 | 2.204 | 0.028 | 0.340 | 0.958 | 0.210 | 4.16 | 341 | 0.064 | 0.196 | -0.519 | 0.339 | 2.290 | 0.949 |
| 600T125-30 | 0.0312 | 0.265 | 0.90 | 1.288 | 0.419 | 2.204 | 0.031 | 0.340 | 1.095 | 0.249 | 4.92 | 456 | 0.086 | 0.215 | -0.518 | 0.338 | 2.289 | 0.949 |
| 600T125-33 | 0.0346 | 0.294 | 1.00 | 1.428 | 0.465 | 2.204 | 0.034 | 0.339 | 1.258 | 0.297 | 5.87 | 622 | 0.117 | 0.238 | -0.516 | 0.337 | 2.289 | 0.949 |
| 800T125-27[1] | 0.0283 | 0.297 | 1.01 | 2.369 | 0.582 | 2.824 | 0.029 | 0.314 | | | | | 0.079 | 0.376 | -0.441 | 0.295 | 2.875 | 0.976 |
| 800T125-30 | 0.0312 | 0.328 | 1.11 | 2.611 | 0.642 | 2.824 | 0.032 | 0.314 | 2.113 | 0.339 | 6.71 | 341 | 0.106 | 0.413 | -0.440 | 0.295 | 2.875 | 0.977 |
| 800T125-33[1] | 0.0346 | 0.363 | 1.24 | 2.895 | 0.711 | 2.824 | 0.036 | 0.313 | 2.441 | 0.407 | 8.03 | 465 | 0.145 | 0.456 | -0.439 | 0.294 | 2.875 | 0.977 |

1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

CEMCO
Steel Framing and Metal Lath

# Section Properties for Structural Studs

| Member | Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | | Effective Properties 50 ksi | | | | | Torsional Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 250S137-33 | 0.0346 | 0.197 | 0.67 | 0.203 | 0.163 | 1.015 | 0.052 | 0.515 | 0.203 | 0.158 | 3.11 | 975 | 399 | | | | | | 0.079 | 0.076 | -1.141 | 0.677 | 1.612 | 0.499 |
| 250S137-43 | 0.0451 | 0.255 | 0.87 | 0.261 | 0.208 | 1.010 | 0.067 | 0.511 | 0.261 | 0.205 | 4.53* | 1265 | 394 | | | | | | 0.173 | 0.096 | -1.129 | 0.670 | 1.599 | 0.501 |
| 250S137-54 | 0.0566 | 0.316 | 1.07 | 0.318 | 0.255 | 1.004 | 0.080 | 0.504 | 0.318 | 0.255 | 5.76* | 1553 | 373 | 0.318 | 0.244 | 8.22* | 2353 | 565 | 0.337 | 0.115 | -1.115 | 0.663 | 1.583 | 0.504 |
| 250S137-68 | 0.0713 | 0.390 | 1.33 | 0.386 | 0.309 | 0.994 | 0.095 | 0.495 | 0.386 | 0.309 | 7.19* | 1891 | 342 | 0.386 | 0.308 | 10.65* | 2866 | 519 | 0.661 | 0.138 | -1.096 | 0.653 | 1.561 | 0.507 |
| 250S137-97 | 0.1017 | 0.533 | 1.81 | 0.506 | 0.405 | 0.975 | 0.120 | 0.475 | 0.506 | 0.405 | 10.01* | 2506 | 283 | 0.506 | 0.405 | 14.75* | 3798 | 429 | 1.839 | 0.176 | -1.057 | 0.633 | 1.514 | 0.513 |
| 250S162-33 | 0.0346 | 0.223 | 0.76 | 0.235 | 0.188 | 1.027 | 0.087 | 0.624 | 0.235 | 0.180 | 3.55 | 975 | 399 | | | | | | 0.089 | 0.146 | -1.470 | 0.859 | 1.898 | 0.401 |
| 250S162-43 | 0.0451 | 0.289 | 0.98 | 0.302 | 0.242 | 1.022 | 0.111 | 0.620 | 0.302 | 0.240 | 5.22* | 1265 | 394 | | | | | | 0.196 | 0.184 | -1.457 | 0.852 | 1.885 | 0.402 |
| 250S162-54 | 0.0566 | 0.358 | 1.22 | 0.370 | 0.296 | 1.016 | 0.135 | 0.613 | 0.370 | 0.296 | 6.57* | 1553 | 373 | 0.370 | 0.284 | 9.42* | 2353 | 565 | 0.383 | 0.223 | -1.443 | 0.845 | 1.868 | 0.403 |
| 250S162-68 | 0.0713 | 0.443 | 1.51 | 0.450 | 0.360 | 1.007 | 0.162 | 0.605 | 0.450 | 0.360 | 8.21* | 1891 | 342 | 0.450 | 0.357 | 12.11* | 2866 | 519 | 0.752 | 0.268 | -1.424 | 0.835 | 1.846 | 0.405 |
| 250S162-97 | 0.1017 | 0.610 | 2.07 | 0.596 | 0.477 | 0.989 | 0.209 | 0.586 | 0.596 | 0.477 | 11.45* | 2506 | 283 | 0.596 | 0.477 | 16.93* | 3798 | 429 | 2.102 | 0.346 | -1.386 | 0.815 | 1.801 | 0.408 |
| 350S137-33 | 0.0346 | 0.232 | 0.79 | 0.441 | 0.252 | 1.380 | 0.059 | 0.503 | 0.441 | 0.223 | 4.41 | 1024 | 487 | | | | | | 0.093 | 0.153 | -1.016 | 0.621 | 1.786 | 0.676 |
| 350S137-43 | 0.0451 | 0.300 | 1.02 | 0.568 | 0.324 | 1.375 | 0.075 | 0.498 | 0.568 | 0.307 | 6.07 | 1739 | 631 | | | | | | 0.204 | 0.193 | -1.005 | 0.615 | 1.774 | 0.679 |
| 350S137-54 | 0.0566 | 0.372 | 1.27 | 0.696 | 0.398 | 1.367 | 0.090 | 0.492 | 0.696 | 0.385 | 7.61 | 2253 | 633 | 0.696 | 0.366 | 10.95 | 3372 | 947 | 0.398 | 0.233 | -0.991 | 0.607 | 1.759 | 0.683 |
| 350S137-68 | 0.0713 | 0.461 | 1.57 | 0.849 | 0.485 | 1.357 | 0.107 | 0.482 | 0.849 | 0.474 | 11.04* | 2774 | 592 | 0.849 | 0.472 | 14.12 | 4202 | 897 | 0.782 | 0.280 | -0.973 | 0.598 | 1.738 | 0.687 |
| 350S137-97 | 0.1017 | 0.635 | 2.16 | 1.130 | 0.646 | 1.334 | 0.136 | 0.462 | 1.130 | 0.629 | 15.54* | 3765 | 511 | 1.130 | 0.629 | 22.90* | 5704 | 775 | 2.189 | 0.361 | -0.935 | 0.579 | 1.693 | 0.695 |
| 350S162-33 | 0.0346 | 0.258 | 0.88 | 0.508 | 0.290 | 1.404 | 0.098 | 0.617 | 0.508 | 0.257 | 5.08 | 1024 | 487 | | | | | | 0.103 | 0.277 | -1.324 | 0.796 | 2.026 | 0.573 |
| 350S162-43 | 0.0451 | 0.334 | 1.14 | 0.654 | 0.374 | 1.400 | 0.125 | 0.612 | 0.654 | 0.357 | 7.05 | 1739 | 631 | | | | | | 0.227 | 0.350 | -1.312 | 0.789 | 2.014 | 0.575 |
| 350S162-54 | 0.0566 | 0.415 | 1.41 | 0.804 | 0.460 | 1.392 | 0.152 | 0.606 | 0.804 | 0.447 | 8.83 | 2253 | 633 | 0.804 | 0.426 | 12.74 | 3372 | 947 | 0.443 | 0.426 | -1.298 | 0.782 | 1.998 | 0.578 |
| 350S162-68 | 0.0713 | 0.515 | 1.75 | 0.985 | 0.563 | 1.383 | 0.184 | 0.597 | 0.985 | 0.551 | 12.56* | 2774 | 592 | 0.985 | 0.549 | 16.44 | 4202 | 897 | 0.872 | 0.514 | -1.280 | 0.772 | 1.977 | 0.581 |
| 350S162-97 | 0.1017 | 0.711 | 2.42 | 1.320 | 0.754 | 1.362 | 0.238 | 0.578 | 1.320 | 0.738 | 17.71* | 3765 | 511 | 1.320 | 0.738 | 26.18* | 5704 | 775 | 2.452 | 0.672 | -1.242 | 0.752 | 1.932 | 0.587 |
| 362S137-33 | 0.0346 | 0.236 | 0.80 | 0.479 | 0.264 | 1.424 | 0.059 | 0.501 | 0.479 | 0.232 | 4.59 | 1024 | 521 | | | | | | 0.094 | 0.165 | -1.003 | 0.615 | 1.813 | 0.694 |
| 362S137-43 | 0.0451 | 0.306 | 1.04 | 0.616 | 0.340 | 1.419 | 0.075 | 0.497 | 0.616 | 0.320 | 6.32 | 1739 | 676 | | | | | | 0.207 | 0.208 | -0.991 | 0.608 | 1.801 | 0.697 |
| 362S137-54 | 0.0566 | 0.379 | 1.29 | 0.756 | 0.417 | 1.411 | 0.091 | 0.490 | 0.756 | 0.402 | 7.94 | 2341 | 705 | 0.756 | 0.381 | 11.42 | 3372 | 1016 | 0.405 | 0.251 | -0.978 | 0.601 | 1.785 | 0.700 |
| 362S137-68 | 0.0713 | 0.470 | 1.60 | 0.922 | 0.509 | 1.401 | 0.109 | 0.480 | 0.922 | 0.498 | 9.84 | 2884 | 662 | 0.922 | 0.493 | 14.77 | 4370 | 1004 | 0.797 | 0.302 | -0.959 | 0.592 | 1.764 | 0.704 |
| 362S137-97 | 0.1017 | 0.648 | 2.20 | 1.229 | 0.678 | 1.377 | 0.137 | 0.460 | 1.229 | 0.662 | 16.36* | 3922 | 577 | 1.229 | 0.662 | 24.10* | 5943 | 875 | 2.233 | 0.390 | -0.922 | 0.573 | 1.720 | 0.713 |
| 362S162-33 | 0.0346 | 0.262 | 0.89 | 0.551 | 0.304 | 1.450 | 0.099 | 0.616 | 0.551 | 0.268 | 5.29 | 1024 | 521 | | | | | | 0.105 | 0.297 | -1.308 | 0.789 | 2.048 | 0.592 |
| 362S162-43 | 0.0451 | 0.340 | 1.16 | 0.710 | 0.392 | 1.445 | 0.127 | 0.611 | 0.710 | 0.372 | 7.34 | 1739 | 676 | | | | | | 0.230 | 0.376 | -1.297 | 0.782 | 2.036 | 0.594 |
| 362S162-54 | 0.0566 | 0.422 | 1.44 | 0.873 | 0.481 | 1.438 | 0.154 | 0.604 | 0.873 | 0.466 | 9.22 | 2341 | 705 | 0.873 | 0.444 | 13.28 | 3372 | 1016 | 0.451 | 0.457 | -1.283 | 0.774 | 2.020 | 0.597 |
| 362S162-68 | 0.0713 | 0.524 | 1.78 | 1.069 | 0.590 | 1.429 | 0.186 | 0.596 | 1.069 | 0.579 | 11.43 | 2884 | 662 | 1.069 | 0.574 | 17.18 | 4370 | 1004 | 0.887 | 0.552 | -1.264 | 0.765 | 1.998 | 0.600 |
| 362S162-97 | 0.1017 | 0.724 | 2.46 | 1.435 | 0.792 | 1.408 | 0.241 | 0.577 | 1.435 | 0.776 | 18.62* | 3922 | 577 | 1.435 | 0.776 | 27.52* | 5943 | 875 | 2.496 | 0.723 | -1.226 | 0.745 | 1.954 | 0.606 |
| 362S200-33 | 0.0346 | 0.297 | 1.01 | 0.648 | 0.358 | 1.478 | 0.177 | 0.772 | 0.647 | 0.294 | 5.81 | 1024 | 521 | | | | | | 0.118 | 0.577 | -1.741 | 1.030 | 2.411 | 0.478 |
| 362S200-43 | 0.0451 | 0.385 | 1.31 | 0.836 | 0.461 | 1.474 | 0.227 | 0.767 | 0.836 | 0.427 | 8.43 | 1739 | 676 | | | | | | 0.261 | 0.734 | -1.729 | 1.024 | 2.398 | 0.480 |
| 362S200-54 | 0.0566 | 0.479 | 1.63 | 1.030 | 0.568 | 1.467 | 0.277 | 0.761 | 1.030 | 0.553 | 10.93 | 2341 | 705 | 1.030 | 0.49 | 14.66 | 3372 | 1016 | 0.511 | 0.896 | -1.715 | 1.016 | 2.382 | 0.482 |
| 362S200-68 | 0.0713 | 0.595 | 2.02 | 1.265 | 0.698 | 1.458 | 0.337 | 0.753 | 1.265 | 0.687 | 15.29* | 2884 | 662 | 1.265 | 0.666 | 19.95 | 4370 | 1004 | 1.008 | 1.089 | -1.696 | 1.006 | 2.360 | 0.484 |
| 362S200-97 | 0.1017 | 0.826 | 2.81 | 1.711 | 0.944 | 1.440 | 0.446 | 0.735 | 1.711 | 0.928 | 21.59* | 3922 | 577 | 1.711 | 0.928 | 32.03* | 5943 | 875 | 2.847 | 1.441 | -1.658 | 0.986 | 2.315 | 0.487 |
| 362S250-43 | 0.0451 | 0.430 | 1.46 | 0.980 | 0.541 | 1.510 | 0.385 | 0.946 | 0.980 | 0.449 | 8.88 | 1739 | 676 | | | | | | 0.292 | 1.230 | -2.199 | 1.277 | 2.830 | 0.396 |
| 362S250-54 | 0.0566 | 0.535 | 1.82 | 1.210 | 0.668 | 1.504 | 0.473 | 0.940 | 1.210 | 0.582 | 11.51 | 2341 | 705 | 1.205 | 0.514 | 15.4 | 3372 | 1016 | 0.571 | 1.506 | -2.184 | 1.269 | 2.813 | 0.397 |
| 362S250-68 | 0.0713 | 0.666 | 2.27 | 1.490 | 0.822 | 1.496 | 0.578 | 0.931 | 1.490 | 0.774 | 16.85* | 2884 | 662 | 1.490 | 0.689 | 20.63 | 4370 | 1004 | 1.129 | 1.837 | -2.165 | 1.259 | 2.791 | 0.398 |
| 362S250-97 | 0.1017 | 0.927 | 3.16 | 2.027 | 1.118 | 1.478 | 0.772 | 0.912 | 2.027 | 1.100 | 24.85* | 3922 | 577 | 2.027 | 1.046 | 35.17* | 5943 | 875 | 3.197 | 2.452 | -2.126 | 1.239 | 2.746 | 0.400 |
| 362S300-54 | 0.0566 | 0.620 | 2.11 | 1.422 | 0.785 | 1.515 | 0.822 | 1.151 | 1.422 | 0.695 | 13.74 | 2341 | 705 | 1.386 | 0.628 | 18.81 | 3372 | 1016 | 0.662 | 3.237 | -2.860 | 1.640 | 3.435 | 0.307 |
| 362S300-68 | 0.0713 | 0.773 | 2.63 | 1.756 | 0.969 | 1.507 | 1.010 | 1.143 | 1.756 | 0.919 | 18.15 | 2884 | 662 | 1.756 | 0.812 | 24.31 | 4370 | 1004 | 1.310 | 3.965 | -2.841 | 1.630 | 3.413 | 0.307 |
| 362S300-97 | 0.1017 | 1.080 | 3.67 | 2.400 | 1.324 | 1.491 | 1.368 | 1.126 | 2.400 | 1.308 | 28.96* | 3922 | 577 | 2.400 | 1.259 | 37.68 | 5943 | 875 | 3.723 | 5.337 | -2.803 | 1.610 | 3.369 | 0.307 |

**NOTES** 1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads. Suitability of web holes must be evaluated independently.
* Where Ma is noted with an asterisk, cold-work of forming is applicable and has been used.

# Section Properties for Structural Studs (Continued)

| Member | Design Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | | Effective Properties 50 ksi | | | | | Torsional Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 400S137-33 | 0.0346 | 0.249 | 0.85 | 0.603 | 0.301 | 1.556 | 0.061 | 0.496 | 0.603 | 0.259 | 5.12 | 976 | 595 | | | | | | 0.099 | 0.204 | -0.965 | 0.597 | 1.897 | 0.741 |
| 400S137-43 | 0.0451 | 0.323 | 1.10 | 0.776 | 0.388 | 1.551 | 0.078 | 0.491 | 0.776 | 0.359 | 7.09 | 1739 | 810 | | | | | | 0.219 | 0.257 | -0.954 | 0.591 | 1.885 | 0.744 |
| 400S137-54 | 0.0566 | 0.401 | 1.36 | 0.953 | 0.477 | 1.542 | 0.094 | 0.484 | 0.953 | 0.453 | 8.96 | 2603 | 944 | 0.953 | 0.428 | 12.82 | 3372 | 1223 | 0.428 | 0.311 | -0.940 | 0.583 | 1.870 | 0.747 |
| 400S137-68 | 0.0713 | 0.497 | 1.69 | 1.165 | 0.582 | 1.531 | 0.112 | 0.475 | 1.165 | 0.567 | 11.21 | 3215 | 895 | 1.165 | 0.558 | 16.7 | 4871 | 1356 | 0.842 | 0.375 | -0.922 | 0.574 | 1.849 | 0.751 |
| 400S137-97 | 0.1017 | 0.686 | 2.33 | 1.557 | 0.779 | 1.507 | 0.142 | 0.454 | 1.557 | 0.764 | 18.88* | 4394 | 797 | 1.557 | 0.764 | 27.81* | 6658 | 1207 | 2.365 | 0.486 | -0.885 | 0.555 | 1.806 | 0.760 |
| 400S162-33 | 0.0346 | 0.275 | 0.94 | 0.692 | 0.346 | 1.586 | 0.103 | 0.611 | 0.692 | 0.299 | 5.91 | 976 | 595 | | | | | | 0.110 | 0.363 | -1.263 | 0.768 | 2.118 | 0.644 |
| 400S162-43 | 0.0451 | 0.357 | 1.21 | 0.892 | 0.446 | 1.581 | 0.131 | 0.606 | 0.892 | 0.417 | 8.23 | 1739 | 810 | | | | | | 0.242 | 0.460 | -1.252 | 0.761 | 2.106 | 0.647 |
| 400S162-54 | 0.0566 | 0.443 | 1.51 | 1.098 | 0.549 | 1.574 | 0.159 | 0.600 | 1.098 | 0.526 | 10.39 | 2603 | 944 | 1.098 | 0.498 | 14.9 | 3372 | 1223 | 0.473 | 0.560 | -1.238 | 0.754 | 2.090 | 0.649 |
| 400S162-68 | 0.0713 | 0.550 | 1.87 | 1.346 | 0.673 | 1.564 | 0.192 | 0.591 | 1.346 | 0.658 | 13 | 3215 | 895 | 1.346 | 0.648 | 19.41 | 4871 | 1356 | 0.933 | 0.677 | -1.220 | 0.745 | 2.069 | 0.653 |
| 400S162-97 | 0.1017 | 0.762 | 2.59 | 1.812 | 0.906 | 1.542 | 0.249 | 0.572 | 1.812 | 0.892 | 21.40* | 4394 | 797 | 1.812 | 0.892 | 31.64* | 6658 | 1207 | 2.628 | 0.889 | -1.182 | 0.725 | 2.025 | 0.659 |
| 400S200-33 | 0.0346 | 0.310 | 1.05 | 0.812 | 0.406 | 1.619 | 0.183 | 0.769 | 0.812 | 0.328 | 6.49 | 976 | 595 | | | | | | 0.124 | 0.697 | -1.688 | 1.007 | 2.462 | 0.530 |
| 400S200-43 | 0.0451 | 0.402 | 1.37 | 1.047 | 0.524 | 1.615 | 0.235 | 0.764 | 1.047 | 0.478 | 9.45 | 1739 | 810 | | | | | | 0.272 | 0.886 | -1.676 | 1.000 | 2.449 | 0.532 |
| 400S200-54 | 0.0566 | 0.500 | 1.70 | 1.292 | 0.646 | 1.608 | 0.287 | 0.758 | 1.292 | 0.623 | 12.3 | 2603 | 944 | 1.292 | 0.549 | 16.43 | 3372 | 1223 | 0.534 | 1.083 | -1.662 | 0.993 | 2.433 | 0.534 |
| 400S200-68 | 0.0713 | 0.622 | 2.12 | 1.589 | 0.795 | 1.599 | 0.349 | 0.750 | 1.589 | 0.780 | 15.4 | 3215 | 895 | 1.589 | 0.751 | 22.48 | 4871 | 1356 | 1.054 | 1.318 | -1.643 | 0.983 | 2.412 | 0.536 |
| 400S200-97 | 0.1017 | 0.864 | 2.94 | 2.155 | 1.077 | 1.579 | 0.462 | 0.731 | 2.155 | 1.063 | 24.72* | 4394 | 797 | 2.155 | 1.063 | 36.68* | 6658 | 1207 | 2.978 | 1.749 | -1.605 | 0.963 | 2.368 | 0.540 |
| 400S250-43 | 0.0451 | 0.447 | 1.52 | 1.224 | 0.612 | 1.655 | 0.399 | 0.945 | 1.224 | 0.503 | 9.93 | 1739 | 810 | | | | | | 0.303 | 1.486 | -2.139 | 1.252 | 2.864 | 0.443 |
| 400S250-54 | 0.0566 | 0.556 | 1.89 | 1.512 | 0.756 | 1.649 | 0.490 | 0.938 | 1.512 | 0.653 | 12.9 | 2603 | 944 | 1.506 | 0.576 | 17.24 | 3372 | 1223 | 0.594 | 1.821 | -2.124 | 1.244 | 2.848 | 0.444 |
| 400S250-68 | 0.0713 | 0.693 | 2.36 | 1.864 | 0.932 | 1.640 | 0.599 | 0.929 | 1.864 | 0.883 | 17.45 | 3215 | 895 | 1.864 | 0.775 | 23.19 | 4871 | 1356 | 1.174 | 2.225 | -2.105 | 1.235 | 2.826 | 0.445 |
| 400S250-97 | 0.1017 | 0.966 | 3.29 | 2.541 | 1.271 | 1.622 | 0.801 | 0.911 | 2.541 | 1.253 | 28.31* | 4394 | 797 | 2.541 | 1.191 | 40.06* | 6658 | 1207 | 3.329 | 2.978 | -2.066 | 1.214 | 2.780 | 0.448 |
| 400S300-54 | 0.0566 | 0.641 | 2.18 | 1.776 | 0.888 | 1.664 | 0.852 | 1.153 | 1.776 | 0.782 | 15.46 | 2603 | 944 | 1.734 | 0.705 | 21.11 | 3372 | 1223 | 0.685 | 3.819 | -2.792 | 1.613 | 3.449 | 0.345 |
| 400S300-68 | 0.0713 | 0.800 | 2.72 | 2.195 | 1.098 | 1.657 | 1.048 | 1.145 | 2.195 | 1.037 | 20.5 | 3215 | 895 | 2.195 | 0.913 | 27.33 | 4871 | 1356 | 1.356 | 4.683 | -2.774 | 1.603 | 3.428 | 0.345 |
| 400S300-97 | 0.1017 | 1.118 | 3.80 | 3.007 | 1.504 | 1.640 | 1.420 | 1.127 | 3.007 | 1.489 | 32.97* | 4394 | 797 | 3.007 | 1.43 | 42.81 | 6658 | 1207 | 3.855 | 6.317 | -2.735 | 1.583 | 3.383 | 0.346 |
| 550S137-33 | 0.0346 | 0.301 | 1.02 | 1.283 | 0.467 | 2.064 | 0.067 | 0.472 | 1.283 | 0.453 | 8.95 | 699 | 699 | | | | | | 0.120 | 0.411 | -0.841 | 0.536 | 2.278 | 0.864 |
| 550S137-43 | 0.0451 | 0.391 | 1.33 | 1.655 | 0.602 | 2.059 | 0.085 | 0.467 | 1.655 | 0.592 | 13.08* | 1550 | 1199 | | | | | | 0.265 | 0.520 | -0.830 | 0.530 | 2.268 | 0.866 |
| 550S137-54 | 0.0566 | 0.486 | 1.65 | 2.039 | 0.741 | 2.049 | 0.103 | 0.460 | 2.039 | 0.741 | 16.77* | 2739 | 1666 | 2.039 | 0.714 | 24.03* | 3093 | 1881 | 0.519 | 0.632 | -0.817 | 0.523 | 2.254 | 0.868 |
| 550S137-68 | 0.0713 | 0.604 | 2.05 | 2.503 | 0.910 | 2.036 | 0.123 | 0.451 | 2.503 | 0.910 | 21.22* | 4347 | 2057 | 2.503 | 0.909 | 31.42* | 5350 | 2532 | 1.023 | 0.764 | -0.801 | 0.514 | 2.234 | 0.871 |
| 550S137-97 | 0.1017 | 0.838 | 2.85 | 3.380 | 1.229 | 2.008 | 0.155 | 0.430 | 3.380 | 1.229 | 30.35* | 6282 | 1997 | 3.380 | 1.229 | 44.72* | 9518 | 3026 | 2.891 | 0.997 | -0.766 | 0.497 | 2.192 | 0.878 |
| 550S162-33 | 0.0346 | 0.327 | 1.11 | 1.458 | 0.530 | 2.112 | 0.113 | 0.589 | 1.458 | 0.512 | 10.11 | 699 | 699 | | | | | | 0.130 | 0.713 | -1.114 | 0.697 | 2.459 | 0.795 |
| 550S162-43 | 0.0451 | 0.424 | 1.44 | 1.883 | 0.685 | 2.107 | 0.145 | 0.584 | 1.883 | 0.681 | 14.79* | 1550 | 1199 | | | | | | 0.288 | 0.905 | -1.103 | 0.691 | 2.448 | 0.797 |
| 550S162-54 | 0.0566 | 0.528 | 1.80 | 2.324 | 0.845 | 2.098 | 0.176 | 0.577 | 2.324 | 0.845 | 18.76* | 2739 | 1666 | 2.324 | 0.811 | 26.86* | 3093 | 1881 | 0.564 | 1.105 | -1.090 | 0.684 | 2.434 | 0.800 |
| 550S162-68 | 0.0713 | 0.657 | 2.24 | 2.861 | 1.040 | 2.086 | 0.212 | 0.568 | 2.861 | 1.040 | 23.72* | 4347 | 2057 | 2.861 | 1.031 | 34.94* | 5350 | 2532 | 1.114 | 1.342 | -1.072 | 0.675 | 2.414 | 0.803 |
| 550S162-97 | 0.1017 | 0.915 | 3.11 | 3.886 | 1.413 | 2.061 | 0.276 | 0.549 | 3.886 | 1.413 | 33.91* | 6282 | 1997 | 3.886 | 1.413 | 50.13* | 9518 | 3026 | 3.154 | 1.775 | -1.037 | 0.656 | 2.372 | 0.809 |
| 600S137-33 | 0.0346 | 0.318 | 1.08 | 1.582 | 0.527 | 2.229 | 0.069 | 0.464 | 1.548 | 0.455 | 8.98 | 638 | 638 | | | | | | 0.127 | 0.500 | -0.807 | 0.519 | 2.416 | 0.889 |
| 600S137-43 | 0.0451 | 0.413 | 1.41 | 2.042 | 0.681 | 2.223 | 0.087 | 0.459 | 2.041 | 0.645 | 12.74 | 1416 | 1240 | | | | | | 0.280 | 0.633 | -0.796 | 0.513 | 2.406 | 0.890 |
| 600S137-54 | 0.0566 | 0.514 | 1.75 | 2.518 | 0.839 | 2.213 | 0.105 | 0.452 | 2.518 | 0.832 | 16.44 | 2739 | 1890 | 2.518 | 0.777 | 23.26 | 2823 | 1947 | 0.549 | 0.769 | -0.784 | 0.506 | 2.391 | 0.893 |
| 600S137-68 | 0.0713 | 0.640 | 2.18 | 3.094 | 1.031 | 2.200 | 0.125 | 0.443 | 3.094 | 1.031 | 24.05* | 4347 | 2339 | 3.094 | 1.03 | 30.84 | 5350 | 2879 | 1.084 | 0.930 | -0.768 | 0.497 | 2.371 | 0.895 |
| 600S137-97 | 0.1017 | 0.889 | 3.03 | 4.188 | 1.396 | 2.170 | 0.159 | 0.422 | 4.188 | 1.396 | 34.48* | 6911 | 2512 | 4.188 | 1.396 | 50.80* | 10472 | 3805 | 3.066 | 1.216 | -0.734 | 0.480 | 2.330 | 0.901 |
| 600S162-33 | 0.0346 | 0.344 | 1.17 | 1.793 | 0.598 | 2.282 | 0.116 | 0.581 | 1.793 | 0.577 | 11.41 | 638 | 638 | | | | | | 0.137 | 0.861 | -1.072 | 0.677 | 2.587 | 0.828 |
| 600S162-43 | 0.0451 | 0.447 | 1.52 | 2.316 | 0.772 | 2.276 | 0.148 | 0.576 | 2.316 | 0.767 | 16.68* | 1416 | 1240 | | | | | | 0.303 | 1.095 | -1.062 | 0.670 | 2.577 | 0.830 |
| 600S162-54 | 0.0566 | 0.556 | 1.89 | 2.860 | 0.953 | 2.267 | 0.180 | 0.570 | 2.860 | 0.953 | 21.17* | 2739 | 1890 | 2.860 | 0.916 | 30.33* | 2823 | 1947 | 0.594 | 1.337 | -1.049 | 0.663 | 2.562 | 0.832 |
| 600S162-68 | 0.0713 | 0.693 | 2.36 | 3.525 | 1.175 | 2.255 | 0.218 | 0.560 | 3.525 | 1.175 | 26.79* | 4347 | 2339 | 3.525 | 1.164 | 39.47* | 5350 | 2879 | 1.174 | 1.626 | -1.032 | 0.655 | 2.543 | 0.835 |
| 600S162-97 | 0.1017 | 0.966 | 3.29 | 4.797 | 1.599 | 2.229 | 0.283 | 0.541 | 4.797 | 1.599 | 38.37* | 6911 | 2512 | 4.797 | 1.599 | 56.73* | 10472 | 3805 | 3.329 | 2.153 | -0.997 | 0.636 | 2.501 | 0.841 |
| 600S200-33 | 0.0346 | 0.379 | 1.29 | 2.075 | 0.692 | 2.340 | 0.209 | 0.743 | 2.058 | 0.621 | 12.28 | 638 | 638 | | | | | | 0.151 | 1.593 | -1.457 | 0.901 | 2.855 | 0.740 |
| 600S200-43 | 0.0451 | 0.492 | 1.67 | 2.683 | 0.894 | 2.335 | 0.268 | 0.739 | 2.683 | 0.873 | 17.24 | 1416 | 1240 | | | | | | 0.334 | 2.033 | -1.446 | 0.894 | 2.844 | 0.742 |
| 600S200-54 | 0.0566 | 0.613 | 2.09 | 3.319 | 1.106 | 2.327 | 0.328 | 0.732 | 3.319 | 1.106 | 24.07* | 2739 | 1890 | 3.319 | 1.015 | 30.4 | 2823 | 1947 | 0.655 | 2.493 | -1.432 | 0.887 | 2.829 | 0.744 |
| 600S200-68 | 0.0713 | 0.764 | 2.60 | 4.101 | 1.367 | 2.316 | 0.400 | 0.723 | 4.101 | 1.367 | 30.42* | 4347 | 2339 | 4.101 | 1.317 | 43.71* | 5350 | 2879 | 1.295 | 3.047 | -1.415 | 0.878 | 2.809 | 0.746 |
| 600S200-97 | 0.1017 | 1.067 | 3.63 | 5.612 | 1.871 | 2.293 | 0.530 | 0.705 | 5.612 | 1.871 | 43.49* | 6911 | 2512 | 5.612 | 1.871 | 64.53* | 10472 | 3805 | 3.679 | 4.080 | -1.378 | 0.859 | 2.767 | 0.752 |
| 600S250-43 | 0.0451 | 0.537 | 1.83 | 3.082 | 1.027 | 2.396 | 0.458 | 0.923 | 3.082 | 0.918 | 18.14 | 1416 | 1240 | | | | | | 0.364 | 3.411 | -1.874 | 1.136 | 3.179 | 0.652 |
| 600S250-54 | 0.0566 | 0.670 | 2.28 | 3.819 | 1.273 | 2.388 | 0.562 | 0.917 | 3.819 | 1.159 | 22.9 | 2739 | 1890 | 3.766 | 1.069 | 32 | 2823 | 1947 | 0.715 | 4.194 | -1.860 | 1.129 | 3.163 | 0.654 |
| 600S250-68 | 0.0713 | 0.836 | 2.84 | 4.727 | 1.576 | 2.378 | 0.688 | 0.908 | 4.727 | 1.508 | 32.82* | 4347 | 2339 | 4.723 | 1.386 | 41.49 | 5350 | 2879 | 1.416 | 5.145 | -1.842 | 1.119 | 3.142 | 0.656 |
| 600S250-97 | 0.1017 | 1.169 | 3.98 | 6.496 | 2.165 | 2.357 | 0.923 | 0.889 | 6.496 | 2.161 | 48.81* | 6911 | 2512 | 6.496 | 2.063 | 69.38* | 10472 | 3805 | 4.030 | 6.947 | -1.803 | 1.100 | 3.098 | 0.661 |
| 600S300-54 | 0.0566 | 0.754 | 2.57 | 4.462 | 1.487 | 2.432 | 0.986 | 1.143 | 4.462 | 1.374 | 27.14 | 2739 | 1890 | 4.332 | 1.277 | 38.23 | 2823 | 1947 | 0.806 | 8.115 | -2.483 | 1.481 | 3.659 | 0.539 |
| 600S300-68 | 0.0713 | 0.943 | 3.21 | 5.534 | 1.845 | 2.423 | 1.214 | 1.135 | 5.534 | 1.773 | 35.03 | 4347 | 2339 | 5.534 | 1.61 | 48.2 | 5350 | 2879 | 1.597 | 9.992 | -2.465 | 1.471 | 3.638 | 0.541 |
| 600S300-97 | 0.1017 | 1.321 | 4.50 | 7.639 | 2.546 | 2.404 | 1.649 | 1.117 | 7.639 | 2.546 | 56.36* | 6911 | 2512 | 7.639 | 2.442 | 73.11 | 10472 | 3805 | 4.556 | 13.587 | -2.427 | 1.451 | 3.594 | 0.544 |
| 800S137-33[1] | 0.0346 | 0.388 | 1.32 | 3.198 | 0.799 | 2.873 | 0.073 | 0.435 | 2.998 | 0.622 | 12.3 | 474 | 474 | | | | | | 0.155 | 0.957 | -0.696 | 0.460 | 2.987 | 0.946 |
| 800S137-43 | 0.0451 | 0.503 | 1.71 | 4.134 | 1.033 | 2.866 | 0.093 | 0.430 | 4.001 | 0.896 | 17.7 | 1051 | 1051 | | | | | | 0.341 | 1.214 | -0.687 | 0.454 | 2.978 | 0.947 |
| 800S137-54 | 0.0566 | 0.627 | 2.13 | 5.110 | 1.277 | 2.855 | 0.112 | 0.423 | 5.077 | 1.179 | 23.29 | 2091 | 2091 | 4.974 | 1.083 | 32.42 | 2091 | 2091 | 0.670 | 1.478 | -0.676 | 0.448 | 2.964 | 0.948 |
| 800S137-68 | 0.0713 | 0.782 | 2.66 | 6.303 | 1.576 | 2.839 | 0.134 | 0.414 | 6.303 | 1.541 | 30.45 | 4221 | 3367 | 6.285 | 1.468 | 43.96 | 4221 | 3367 | 1.325 | 1.789 | -0.661 | 0.440 | 2.944 | 0.950 |
| 800S137-97 | 0.1017 | 1.093 | 3.72 | 8.597 | 2.149 | 2.805 | 0.169 | 0.394 | 8.597 | 2.149 | 53.09* | 8843 | 4824 | 8.597 | 2.149 | 64.35 | 10885 | 5938 | 3.767 | 2.349 | -0.630 | 0.423 | 2.902 | 0.953 |
| 800S162-33[1] | 0.0346 | 0.413 | 1.41 | 3.582 | 0.896 | 2.943 | 0.125 | 0.550 | 3.384 | 0.710 | 14.03 | 474 | 474 | | | | | | 0.165 | 1.630 | -0.936 | 0.607 | 3.137 | 0.911 |
| 800S162-43 | 0.0451 | 0.537 | 1.83 | 4.633 | 1.158 | 2.937 | 0.160 | 0.546 | 4.500 | 1.019 | 20.14 | 1051 | 1051 | | | | | | 0.364 | 2.076 | -0.926 | 0.601 | 3.128 | 0.912 |
| 800S162-54 | 0.0566 | 0.670 | 2.28 | 5.736 | 1.434 | 2.927 | 0.194 | 0.539 | 5.702 | 1.334 | 26.36 | 2091 | 2091 | 5.600 | 1.229 | 36.79 | 2091 | 2091 | 0.715 | 2.539 | -0.914 | 0.594 | 3.113 | 0.914 |
| 800S162-68 | 0.0713 | 0.836 | 2.84 | 7.089 | 1.772 | 2.913 | 0.235 | 0.530 | 7.089 | 1.737 | 34.32 | 4221 | 3367 | 7.070 | 1.663 | 49.8 | 4221 | 3367 | 1.416 | 3.093 | -0.899 | 0.586 | 3.094 | 0.916 |
| 800S162-97 | 0.1017 | 1.169 | 3.98 | 9.713 | 2.428 | 2.883 | 0.305 | 0.510 | 9.713 | 2.428 | 58.27* | 8843 | 4824 | 9.713 | 2.428 | 72.7 | 10885 | 5938 | 4.030 | 4.114 | -0.866 | 0.568 | 3.053 | 0.919 |

**NOTES** 1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads. Suitability of web holes must be evaluated independently.

* Where Ma is noted with an asterisk, cold-work of forming is applicable and has been used.

# Section Properties for Structural Studs (Continued)

| Member | Design Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | | Effective Properties 50 ksi | | | | Torsional Properties | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Vanet (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 800S200-33[1] | 0.0346 | 0.448 | 1.52 | 4.096 | 1.024 | 3.023 | 0.227 | 0.712 | 4.096 | 0.816 | 16.12 | 474 | 474 | | | | | | 0.179 | 2.971 | -1.288 | 0.817 | 3.363 | 0.853 |
| 800S200-43 | 0.0451 | 0.582 | 1.98 | 5.302 | 1.325 | 3.018 | 0.292 | 0.708 | 5.302 | 1.293 | 25.54 | 1051 | 1051 | | | | | | 0.395 | 3.797 | -1.277 | 0.811 | 3.353 | 0.855 |
| 800S200-54 | 0.0566 | 0.726 | 2.47 | 6.573 | 1.643 | 3.009 | 0.357 | 0.701 | 6.573 | 1.643 | 35.75* | 2091 | 2091 | 6.573 | 1.499 | 44.87 | 2091 | 2091 | 0.775 | 4.663 | -1.265 | 0.804 | 3.338 | 0.856 |
| 800S200-68 | 0.0713 | 0.907 | 3.09 | 8.140 | 2.035 | 2.996 | 0.435 | 0.692 | 8.140 | 2.035 | 45.29* | 4221 | 3367 | 8.140 | 1.964 | 65.21* | 4221 | 3367 | 1.537 | 5.712 | -1.248 | 0.796 | 3.319 | 0.859 |
| 800S200-97 | 0.1017 | 1.271 | 4.32 | 11.203 | 2.801 | 2.969 | 0.576 | 0.673 | 11.203 | 2.801 | 65.12* | 8843 | 4824 | 11.203 | 2.801 | 96.63* | 10885 | 5938 | 4.381 | 7.684 | -1.214 | 0.777 | 3.278 | 0.863 |
| 800S250-43 | 0.0451 | 0.627 | 2.13 | 6.015 | 1.504 | 3.097 | 0.500 | 0.893 | 6.015 | 1.313 | 25.95 | 1051 | 1051 | | | | | | 0.425 | 6.374 | -1.675 | 1.043 | 3.632 | 0.787 |
| 800S250-54 | 0.0566 | 0.783 | 2.66 | 7.465 | 1.866 | 3.088 | 0.614 | 0.886 | 7.465 | 1.712 | 33.82 | 2091 | 2091 | 7.378 | 1.525 | 45.66 | 2091 | 2091 | 0.836 | 7.850 | -1.661 | 1.036 | 3.617 | 0.789 |
| 800S250-68 | 0.0713 | 0.978 | 3.33 | 9.261 | 2.315 | 3.077 | 0.752 | 0. 77 | 9.261 | 2.220 | 48.33* | 4221 | 3367 | 9.240 | 2.059 | 61.65 | 4221 | 3367 | 1.658 | 9.652 | -1.644 | 1.027 | 3.597 | 0.791 |
| 800S250-97 | 0.1017 | 1.372 | 4.67 | 12.789 | 3.197 | 3.053 | 1.009 | 0.857 | 12.789 | 3.191 | 72.07* | 8843 | 4824 | 12.789 | 3.054 | 102.70* | 10885 | 5938 | 4.731 | 13.091 | -1.607 | 1.008 | 3.555 | 0.796 |
| 800S300-54 | 0.0566 | 0.868 | 2.95 | 8.657 | 2.164 | 3.159 | 1.085 | 1.118 | 8.657 | 2.015 | 39.82 | 2091 | 2091 | 8.443 | 1.826 | 54.66 | 2091 | 2091 | 0.927 | 14.642 | -2.244 | 1.372 | 4.033 | 0.690 |
| 800S300-68 | 0.0713 | 1.085 | 3.69 | 10.758 | 2.690 | 3.149 | 1.336 | 1.110 | 10.758 | 2.588 | 51.14 | 4221 | 3367 | 10.758 | 2.371 | 70.98 | 4221 | 3367 | 1.839 | 18.066 | -2.226 | 1.363 | 4.012 | 0.692 |
| 800S300-97 | 0.1017 | 1.525 | 5.19 | 14.913 | 3.728 | 3.127 | 1.817 | 1.092 | 14.913 | 3.728 | 82.53* | 8843 | 4824 | 14.913 | 3.576 | 107.05 | 10885 | 5938 | 5.257 | 24.677 | -2.188 | 1.343 | 3.970 | 0.696 |
| 1000S162-43[1] | 0.0451 | 0.627 | 2.13 | 8.025 | 1.605 | 3.577 | 0.168 | 0.518 | 7.523 | 1.302 | 25.74 | 836 | 836 | | | | | | 0.425 | 3.430 | -0.823 | 0.545 | 3.707 | 0.951 |
| 1000S162-54 | Q 0566 | 0.783 | 2.66 | 9.950 | 1.990 | 3.565 | 0.204 | 0.511 | 9.627 | 1.722 | 34.02 | 1661 | 1661 | 9.391 | 1.572 | 47.07 | 1661 | 1661 | 0.836 | 4.198 | -0.812 | 0.538 | 3.692 | 0.952 |
| 1000S162-68 | 0.0713 | 0.978 | 3.33 | 12.325 | 2.465 | 3.550 | 0.246 | 0.502 | 12.256 | 2.276 | 44.98 | 3345 | 3345 | 11.978 | 2.154 | 64.51 | 3345 | 3345 | 1.658 | 5.121 | -0.798 | 0.531 | 3.673 | 0.953 |
| 1000S162-97 | 0.1017 | 1.372 | 4.67 | 16.967 | 3.393 | 3.516 | 0.320 | 0.483 | 16.967 | 3.393 | 67.06 | 8843 | 6434 | 16.967 | 3.269 | 97.89 | 9864 | 7177 | 4.731 | 6.827 | -0.768 | 0.514 | 3.631 | 0.955 |
| 1000S200-43[1] | 0.0451 | 0.672 | 2.29 | 9.085 | 1.817 | 3.676 | 0.309 | 0.677 | 8.602 8 | 1.470 | 29.05 | 836 | 836 | | | | | | 0.456 | 6.236 | -1.147 | 0.743 | 3.910 | 0.914 |
| 1000S200-54 | 0.0566 | 0.839 | 2.86 | 11.278 | 2.256 | 3.666 | 0.378 | 0.671 | 10.953 | 1.984 | 39.2 | 1661 | 1661 | 10.769 | 1.705 | 51.05 | 1661 | 1661 | 0.896 | 7.665 | -1.135 | 0.737 | 3.896 | 0.915 |
| 1000S200-68 | 0.0713 | 1.050 | 3.57 | 13.994 | 2.799 | 3.652 | 0.460 | 0.662 | 13.920 | 2.607 | 51.51 | 3345 | 3345 | 13.665 | 2.42 | 72.46 | 3345 | 3345 | 1.779 | 9.401 | -1.120 | 0.729 | 3.876 | 0.917 |
| 1000S200-97 | 0.1017 | 1.474 | 5.02 | 19.336 | 3.867 | 3.622 | 0.609 | 0.643 | 19.336 | 3.867 | 76.42 | 8843 | 6434 | 19.336 | 3.741 | 112 | 9864 | 7177 | 5.082 | 12.679 | -1.088 | 0.711 | 3.836 | 0.920 |
| 1000S250-43[1] | 0.0451 | 0.717 | 2.44 | 10.203 | 2.041 | 3.771 | 0.531 | 0.860 | 10.203 | 1.617 | 31.95 | 836 | 836 | | | | | | 0.486 | 10.481 | -1.518 | 0.965 | 4.155 | 0.867 |
| 1000S250-54 | 0.0566 | 0.896 | 3.05 | 12.677 | 2.535 | 3.762 | 0.653 | 0.854 | 12.677 | 2.277 | 44.99 | 1661 | 1661 | 12.660 | 1.879 | 56.26 | 1661 | 1661 | 0.957 | 12.922 | -1.505 | 0.958 | 4.140 | 0.868 |
| 1000S250-68 | 0.0713 | 1.121 | 3.81 | 15.751 | 3.150 | 3.749 | 0.799 | 0.844 | 15.751 | 3.028 | 65.93* | 3345 | 3345 | 15.741 | 2.768 | 82.89 | 3345 | 3345 | 1.899 | 15.909 | -1.488 | 0.950 | 4.121 | 0.870 |
| 1000S250-97 | 0.1017 | 1.576 | 5.36 | 21.827 | 4.365 | 3.722 | 1.072 | 0.825 | 21.827 | 4.357 | 98.41* | 8843 | 6434 | 21.827 | 4.181 | 140.63* | 9864 | 7177 | 5.433 | 21.632 | -1.454 | 0.932 | 4.080 | 0.873 |
| 1000S300-54 | 0.0566 | 0.981 | 3.34 | 14.587 | 2.917 | 3.856 | 1.161 | 1.088 | 14.587 | 2.685 | 53.05 | 1661 | 1661 | 14.360 | 2.262 | 67.74 | 1661 | 1661 | 1.047 | 23.644 | -2.051 | 1.280 | 4.502 | 0.792 |
| 1000S300-68 | 0.0713 | 1.228 | 4.18 | 18.153 | 3.631 | 3.845 | 1.430 | 1.079 | 18.153 | 3.501 | 69.17 | 3345 | 3345 | 18.153 | 3.153 | 94.41 | 3345 | 3345 | 2.081 | 29.210 | -2.034 | 1.271 | 4.482 | 0.794 |
| 1000S300-97 | 0.1017 | 1.728 | 5.88 | 25.237 | 5.047 | 3.821 | 1.945 | 1.061 | 25.237 | 5.047 | 111.73* | 8843 | 6434 | 25.237 | 4.847 | 145.13 | 9864 | 7177 | 5.959 | 40.007 | -1.998 | 1.253 | 4.441 | 0.798 |
| 1200S162-54[1] | 0.0566 | 0.896 | 3.05 | 15.730 | 2.622 | 4.190 | 0.212 | 0.486 | 14.743 | 2.109 | 41.68 | 1377 | 1377 | 14.298 | 1.914 | 57.31 | 1377 | 1377 | 0.957 | 6.340 | -0.732 | 0.493 | 4.281 | 0.971 |
| 1200S162-68 | 0.0713 | 1.121 | 3.81 | 19.518 | 3.253 | 4.173 | 0.255 | 0.477 | 18.955 | 2.817 | 55.66 | 2771 | 2771 | 18.390 | 2.645 | 79.19 | 2771 | 2771 | 1.899 | 7.739 | -0.719 | 0.485 | 4.261 | 0.972 |
| 1200S162-97 | 0.1017 | 1.576 | 5.36 | 26.966 | 4.494 | 4.137 | 0.331 | 0.459 | 26.966 | 4.327 | 85.51 | 8147 | 7411 | 26.735 | 4.091 | 122.49 | 8147 | 7411 | 5.433 | 10.331 | -0.691 | 0.470 | 4.219 | 0.973 |
| 1200S200-54[1] | 0.0566 | 0.953 | 3.24 | 17.662 | 2.944 | 4.306 | 0.393 | 0.643 | 16.678 | 2.425 | 47.93 | 1377 | 1377 | 16.334 | 2.073 | 62.07 | 1377 | 1377 | 1.017 | 11.550 | -1.032 | 0.681 | 4.474 | 0.947 |
| 1200S200-68 | 0.0713 | 1.192 | 4.06 | 21.947 | 3.658 | 4.291 | 0.479 | 0.634 | 21.376 | 3.215 | 63.54 | 2771 | 2771 | 20.864 | 2.963 | 88.71 | 2771 | 2771 | 2.020 | 14.176 | -1.017 | 0.673 | 4.455 | 0.948 |
| 1200S200-97 | 0.1017 | 1.677 | 5.71 | 30.417 | 5.069 | 4.258 | 0.635 | 0.615 | 30.417 | 4.899 | 96.81 | 8147 | 7411 | 30.175 | 4.66 | 139.51 | 8147 | 7411 | 5.783 | 19.150 | -0.987 | 0.656 | 4.414 | 0.950 |
| 1200S250-54[1] | 0.0566 | 1.009 | 3.43 | 19.681 | 3.280 | 4.416 | 0.683 | 0.823 | 18.832 | 2.482 | 49.05 | 1377 | 1377 | 18.433 | 2.149 | 64.34 | 1377 | 1377 | 1.078 | 19.505 | -1.378 | 0.892 | 4.699 | 0.914 |
| 1200S250-68 | 0.0713 | 1.263 | 4.30 | 24.484 | 4.081 | 4.402 | 0.836 | 0.813 | 23.963 | 3.496 | 69.08 | 2771 | 2771 | 23.575 | 3.007 | 90.04 | 2771 | 2771 | 2.141 | 24.034 | -1.362 | 0.884 | 4.679 | 0.915 |
| 1200S250-97 | 0.1017 | 1.779 | 6.05 | 34.016 | 5.669 | 4.373 | 1.121 | 0.794 | 34.016 | 5.496 | 108.6 | 8147 | 7411 | 33.835 | 5.037 | 150.82 | 8147 | 7411 | 6.134 | 32.734 | -1.329 | 0.867 | 4.639 | 0.918 |
| 1200S300-54[1] | 0.0566 | 1.094 | 3.72 | 22.479 | 3.747 | 4.533 | 1.221 | 1.057 | 22.479 | 3.180 | 62.84 | 1377 | 1377 | 22.278 | 2.702 | 80.9 | 1377 | 1377 | 1.168 | 35.310 | -1.893 | 1.201 | 5.025 | 0.858 |
| 1200S300-68 | 0.0713 | 1.370 | 4.66 | 28.003 | 4.667 | 4.520 | 1.504 | 1.048 | 28.003 | 4.509 | 89.1 | 2771 | 2771 | 28.003 | 3.734 | 111.79 | 2771 | 2771 | 2.322 | 43.658 | -1.876 | 1.193 | 5.005 | 0.860 |
| 1200S300-97 | 0 1017 | 1.932 | 6.57 | 39.017 | 6.503 | 4.494 | 2.046 | 1.029 | 39.017 | 6.503 | 143.95* | 8147 | 7411 | 39.017 | 6.256 | 187.31 | 8147 | 7411 | 6.660 | 59.901 | -1.842 | 1.175 | 4.965 | 0.862 |

**NOTES** 1. 1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads. Suitability of web holes must be evaluated independently.

* Where Ma is noted with an asterisk, cold-work of forming is applicable and has been used.

CEMCO
Steel Framing and Metal Lath

# Section Properties for Structural Tracks

| Member | Design Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | Effective Properties 33 ksi | | | | Torsional Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 250T125-33 | 0.0346 | 0.173 | 0.59 | 0.192 | 0.145 | 1.054 | 0.027 | 0.397 | 0.166 | 0.103 | 2.03 | 1024 | | | | | 0.069 | 0.033 | -0.760 | 0.456 | 1.358 | 0.687 |
| 250T125-43 | 0.0451 | 0.225 | 0.77 | 0.250 | 0.188 | 1.055 | 0.035 | 0.395 | 0.231 | 0.147 | 2.91 | 1356 | | | | | 0.153 | 0.042 | -0.755 | 0.453 | 1.356 | 0.690 |
| 250T125-54 | 0.0566 | 0.282 | 0.96 | 0.318 | 0.236 | 1.062 | 0.043 | 0.392 | 0.310 | 0.203 | 4.01 | 1692 | 0.297 | 0.188 | 5.64 | 2563 | 0.301 | 0.054 | -0.749 | 0.449 | 1.357 | 0.696 |
| 250T125-68 | 0.0713 | 0.355 | 1.21 | 0.408 | 0.297 | 1.072 | 0.054 | 0.389 | 0.408 | 0.281 | 5.56 | 2111 | 0.402 | 0.262 | 7.85 | 3199 | 0.602 | 0.069 | -0.740 | 0.444 | 1.360 | 0.704 |
| 250T125-97 | 0.1017 | 0.506 | 1.72 | 0.604 | 0.423 | 1.092 | 0.074 | 0.383 | 0.604 | 0.423 | 9.56* | 2954 | 0.604 | 0.423 | 12.67 | 4476 | 1.745 | 0.101 | -0.724 | 0.434 | 1.365 | 0.719 |
| 250T150-33 | 0.0346 | 0.190 | 0.65 | 0.221 | 0.167 | 1.079 | 0.045 | 0.485 | 0.179 | 0.107 | 2.11 | 1024 | | | | | 0.076 | 0.054 | -0.973 | 0.573 | 1.532 | 0.596 |
| 250T150-43 | 0.0451 | 0.248 | 0.84 | 0.289 | 0.217 | 1.080 | 0.058 | 0.483 | 0.252 | 0.154 | 3.03 | 1356 | | | | | 0.168 | 0.070 | -0.968 | 0.570 | 1.529 | 0.599 |
| 250T150-54 | 0.0566 | 0.311 | 1.06 | 0.368 | 0.273 | 1.088 | 0.072 | 0.481 | 0.342 | 0.213 | 4.22 | 1692 | 0.325 | 0.197 | 5.89 | 2563 | 0.332 | 0.089 | -0.961 | 0.566 | 1.529 | 0.605 |
| 250T150-68 | 0.0713 | 0.391 | 1.33 | 0.472 | 0.344 | 1.099 | 0.089 | 0.478 | 0.465 | 0.299 | 5.92 | 2111 | 0.445 | 0.276 | 8.27 | 3199 | 0.663 | 0.114 | -0.953 | 0.561 | 1.531 | 0.613 |
| 250T150-97 | 0.1017 | 0.557 | 1.90 | 0.701 | 0.491 | 1.121 | 0.124 | 0.471 | 0.701 | 0.491 | 9.69 | 2954 | 0.701 | 0.463 | 13.86 | 4476 | 1.921 | 0.168 | -0.935 | 0.550 | 1.534 | 0.629 |
| 250T200-33 | 0.0346 | 0.225 | 0.76 | 0.280 | 0.212 | 1.117 | 0.097 | 0.658 | 0.203 | 0.112 | 2.22 | 1024 | | | | | 0.090 | 0.118 | -1.418 | 0.813 | 1.921 | 0.455 |
| 250T200-43 | 0.0451 | 0.293 | 1.00 | 0.366 | 0.275 | 1.118 | 0.126 | 0.657 | 0.288 | 0.163 | 3.21 | 1356 | | | | | 0.198 | 0.153 | -1.413 | 0.810 | 1.918 | 0.457 |
| 250T200-54 | 0.0566 | 0.367 | 1.25 | 0.466 | 0.346 | 1.127 | 0.157 | 0.654 | 0.396 | 0.228 | 4.51 | 1692 | 0.371 | 0.209 | 6.25 | 2563 | 0.392 | 0.195 | -1.405 | 0.806 | 1.917 | 0.462 |
| 250T200-68 | 0.0713 | 0.462 | 1.57 | 0.600 | 0.437 | 1.139 | 0.196 | 0.652 | 0.548 | 0.324 | 6.41 | 2111 | 0.517 | 0.296 | 8.86 | 3199 | 0.783 | 0.251 | -1.396 | 0.800 | 1.916 | 0.469 |
| 250T200-97 | 0.1017 | 0.659 | 2.24 | 0.893 | 0.626 | 1.165 | 0.275 | 0.646 | 0.893 | 0.556 | 10.99 | 2954 | 0.856 | 0.510 | 15.27 | 4476 | 2.271 | 0.374 | -1.376 | 0.789 | 1.915 | 0.484 |
| 250T250-43 | 0.0451 | 0.338 | 1.15 | 0.443 | 0.333 | 1.146 | 0.230 | 0.826 | 0.318 | 0.169 | 3.34 | 1356 | | | | | 0.229 | 0.283 | -1.873 | 1.053 | 2.346 | 0.362 |
| 250T250-54 | 0.0566 | 0.424 | 1.44 | 0.565 | 0.419 | 1.155 | 0.287 | 0.824 | 0.440 | 0.238 | 4.70 | 1692 | 0.410 | 0.217 | 6.50 | 2563 | 0.453 | 0.361 | -1.865 | 1.049 | 2.343 | 0.366 |
| 250T250-68 | 0.0713 | 0.534 | 1.82 | 0.728 | 0.530 | 1.168 | 0.360 | 0.821 | 0.616 | 0.341 | 6.74 | 2111 | 0.576 | 0.310 | 9.27 | 3199 | 0.904 | 0.466 | -1.855 | 1.043 | 2.341 | 0.372 |
| 250T250-97 | 0.1017 | 0.761 | 2.59 | 1.086 | 0.761 | 1.195 | 0.506 | 0.815 | 1.028 | 0.596 | 11.79 | 2954 | 0.972 | 0.541 | 16.20 | 4476 | 2.622 | 0.696 | -1.834 | 1.031 | 2.336 | 0.384 |
| 350T125-33 | 0.0346 | 0.207 | 0.71 | 0.405 | 0.222 | 1.397 | 0.030 | 0.379 | 0.354 | 0.165 | 3.27 | 1024 | | | | | 0.083 | 0.070 | -0.668 | 0.414 | 1.594 | 0.824 |
| 350T125-43 | 0.0451 | 0.270 | 0.92 | 0.528 | 0.288 | 1.397 | 0.038 | 0.377 | 0.490 | 0.233 | 4.61 | 1739 | | | | | 0.183 | 0.090 | -0.663 | 0.412 | 1.592 | 0.826 |
| 350T125-54 | 0.0566 | 0.339 | 1.15 | 0.668 | 0.361 | 1.404 | 0.048 | 0.375 | 0.651 | 0.317 | 6.26 | 2392 | 0.626 | 0.297 | 8.89 | 3372 | 0.362 | 0.114 | -0.658 | 0.408 | 1.595 | 0.830 |
| 350T125-68 | 0.0713 | 0.427 | 1.45 | 0.851 | 0.454 | 1.412 | 0.059 | 0.372 | 0.851 | 0.433 | 8.55 | 2994 | 0.839 | 0.407 | 12.18 | 4536 | 0.723 | 0.144 | -0.650 | 0.403 | 1.599 | 0.835 |
| 350T125-97 | 0.1017 | 0.608 | 2.07 | 1.243 | 0.645 | 1.430 | 0.081 | 0.366 | 1.243 | 0.645 | 14.56* | 4213 | 1.243 | 0.645 | 19.30 | 6383 | 2.096 | 0.209 | -0.636 | 0.394 | 1.607 | 0.844 |
| 350T150-33 | 0.0346 | 0.225 | 0.76 | 0.461 | 0.253 | 1.432 | 0.049 | 0.469 | 0.382 | 0.171 | 3.39 | 1024 | | | | | 0.090 | 0.114 | -0.866 | 0.527 | 1.738 | 0.752 |
| 350T150-43 | 0.0451 | 0.293 | 1.00 | 0.601 | 0.328 | 1.433 | 0.064 | 0.467 | 0.531 | 0.243 | 4.80 | 1739 | | | | | 0.198 | 0.148 | -0.861 | 0.525 | 1.736 | 0.754 |
| 350T150-54 | 0.0566 | 0.367 | 1.25 | 0.761 | 0.412 | 1.440 | 0.079 | 0.465 | 0.712 | 0.332 | 6.57 | 2392 | 0.679 | 0.310 | 9.28 | 3372 | 0.392 | 0.187 | -0.855 | 0.521 | 1.738 | 0.758 |
| 350T150-68 | 0.0713 | 0.462 | 1.57 | 0.972 | 0.518 | 1.450 | 0.099 | 0.462 | 0.957 | 0.459 | 9.07 | 2994 | 0.919 | 0.428 | 12.81 | 4536 | 0.783 | 0.238 | -0.847 | 0.516 | 1.741 | 0.763 |
| 350T150-97 | 0.1017 | 0.659 | 2.24 | 1.422 | 0.738 | 1.469 | 0.136 | 0.455 | 1.422 | 0.738 | 14.58 | 4213 | 1.422 | 0.701 | 20.98 | 6383 | 2.271 | 0.346 | -0.831 | 0.506 | 1.748 | 0.774 |
| 350T200-33 | 0.0346 | 0.259 | 0.88 | 0.574 | 0.315 | 1.487 | 0.108 | 0.647 | 0.428 | 0.181 | 3.57 | 1024 | | | | | 0.103 | 0.249 | -1.285 | 0.761 | 2.069 | 0.614 |
| 350T200-43 | 0.0451 | 0.338 | 1.15 | 0.749 | 0.409 | 1.489 | 0.140 | 0.645 | 0.600 | 0.257 | 5.09 | 1739 | | | | | 0.229 | 0.323 | -1.280 | 0.758 | 2.066 | 0.616 |
| 350T200-54 | 0.0566 | 0.424 | 1.44 | 0.949 | 0.513 | 1.496 | 0.175 | 0.642 | 0.814 | 0.355 | 7.01 | 2392 | 0.770 | 0.329 | 9.85 | 3372 | 0.453 | 0.409 | -1.273 | 0.754 | 2.067 | 0.621 |
| 350T200-68 | 0.0713 | 0.534 | 1.82 | 1.213 | 0.647 | 1.508 | 0.218 | 0.639 | 1.112 | 0.496 | 9.80 | 2994 | 1.054 | 0.458 | 13.71 | 4536 | 0.904 | 0.522 | -1.264 | 0.749 | 2.069 | 0.626 |
| 350T200-97 | 0.1017 | 0.761 | 2.59 | 1.780 | 0.923 | 1.530 | 0.305 | 0.633 | 1.779 | 0.831 | 16.41 | 4213 | 1.708 | 0.769 | 23.01 | 6383 | 2.622 | 0.765 | -1.247 | 0.738 | 2.073 | 0.638 |
| 350T250-43 | 0.0451 | 0.383 | 1.30 | 0.896 | 0.490 | 1.530 | 0.257 | 0.819 | 0.659 | 0.268 | 5.29 | 1739 | | | | | 0.260 | 0.593 | -1.719 | 0.996 | 2.443 | 0.505 |
| 350T250-54 | 0.0566 | 0.480 | 1.63 | 1.137 | 0.615 | 1.538 | 0.321 | 0.817 | 0.900 | 0.371 | 7.33 | 2392 | 0.846 | 0.343 | 10.26 | 3372 | 0.513 | 0.752 | -1.712 | 0.992 | 2.442 | 0.509 |
| 350T250-68 | 0.0713 | 0.605 | 2.06 | 1.454 | 0.776 | 1.550 | 0.401 | 0.814 | 1.241 | 0.522 | 10.31 | 2994 | 1.168 | 0.479 | 14.35 | 4536 | 1.025 | 0.961 | -1.703 | 0.987 | 2.443 | 0.514 |
| 350T250-97 | 0.1017 | 0.862 | 2.93 | 2.139 | 1.109 | 1.575 | 0.563 | 0.808 | 2.027 | 0.889 | 17.56 | 4213 | 1.924 | 0.815 | 24.39 | 6383 | 2.973 | 1.413 | -1.684 | 0.975 | 2.443 | 0.525 |
| 362T125-33 | 0.0346 | 0.212 | 0.72 | 0.438 | 0.232 | 1.438 | 0.030 | 0.377 | 0.384 | 0.174 | 3.44 | 1024 | | | | | 0.085 | 0.076 | -0.658 | 0.409 | 1.626 | 0.836 |
| 362T125-43 | 0.0451 | 0.276 | 0.94 | 0.571 | 0.302 | 1.439 | 0.039 | 0.375 | 0.531 | 0.245 | 4.84 | 1739 | | | | | 0.187 | 0.098 | -0.654 | 0.407 | 1.625 | 0.838 |
| 362T125-54 | 0.0566 | 0.346 | 1.18 | 0.723 | 0.378 | 1.445 | 0.048 | 0.373 | 0.705 | 0.332 | 6.57 | 2480 | 0.678 | 0.312 | 9.34 | 3372 | 0.369 | 0.123 | -0.648 | 0.404 | 1.627 | 0.841 |
| 362T125-68 | 0.0713 | 0.436 | 1.48 | 0.921 | 0.475 | 1.454 | 0.060 | 0.370 | 0.921 | 0.453 | 8.95 | 3104 | 0.907 | 0.427 | 12.78 | 4703 | 0.738 | 0.156 | -0.641 | 0.399 | 1.631 | 0.846 |
| 362T125-97 | 0.1017 | 0.621 | 2.11 | 1.343 | 0.675 | 1.471 | 0.082 | 0.363 | 1.343 | 0.675 | 15.24* | 4370 | 1.343 | 0.675 | 20.20 | 6622 | 2.140 | 0.226 | -0.626 | 0.390 | 1.639 | 0.854 |
| 362T150-33 | 0.0346 | 0.229 | 0.78 | 0.499 | 0.264 | 1.475 | 0.050 | 0.467 | 0.414 | 0.180 | 3.56 | 1024 | | | | | 0.091 | 0.124 | -0.854 | 0.522 | 1.767 | 0.766 |
| 362T150-43 | 0.0451 | 0.298 | 1.02 | 0.650 | 0.343 | 1.476 | 0.064 | 0.465 | 0.574 | 0.255 | 5.04 | 1739 | | | | | 0.202 | 0.160 | -0.850 | 0.519 | 1.766 | 0.768 |
| 362T150-54 | 0.0566 | 0.374 | 1.27 | 0.823 | 0.431 | 1.483 | 0.080 | 0.462 | 0.769 | 0.349 | 6.89 | 2480 | 0.735 | 0.325 | 9.74 | 3372 | 0.400 | 0.202 | -0.844 | 0.516 | 1.768 | 0.772 |
| 362T150-68 | 0.0713 | 0.471 | 1.60 | 1.050 | 0.542 | 1.492 | 0.099 | 0.459 | 1.034 | 0.480 | 9.49 | 3104 | 0.993 | 0.449 | 13.43 | 4703 | 0.799 | 0.257 | -0.836 | 0.511 | 1.771 | 0.777 |
| 362T150-97 | 0.1017 | 0.672 | 2.29 | 1.534 | 0.771 | 1.512 | 0.138 | 0.453 | 1.534 | 0.771 | 15.23 | 4370 | 1.534 | 0.733 | 21.94 | 6622 | 2.315 | 0.374 | -0.820 | 0.501 | 1.778 | 0.787 |
| 362T200-33 | 0.0346 | 0.264 | 0.90 | 0.619 | 0.328 | 1.532 | 0.110 | 0.645 | 0.464 | 0.190 | 3.76 | 1024 | | | | | 0.105 | 0.269 | -1.270 | 0.754 | 2.092 | 0.631 |
| 362T200-43 | 0.0451 | 0.343 | 1.17 | 0.808 | 0.427 | 1.534 | 0.142 | 0.643 | 0.649 | 0.270 | 5.34 | 1739 | | | | | 0.233 | 0.350 | -1.265 | 0.752 | 2.090 | 0.633 |
| 362T200-54 | 0.0566 | 0.431 | 1.47 | 1.024 | 0.536 | 1.541 | 0.177 | 0.640 | 0.879 | 0.372 | 7.35 | 2480 | 0.832 | 0.345 | 10.34 | 3372 | 0.460 | 0.442 | -1.259 | 0.748 | 2.091 | 0.637 |
| 362T200-68 | 0.0713 | 0.543 | 1.85 | 1.307 | 0.675 | 1.552 | 0.221 | 0.638 | 1.199 | 0.519 | 10.26 | 3104 | 1.138 | 0.480 | 14.37 | 4703 | 0.919 | 0.564 | -1.250 | 0.743 | 2.093 | 0.643 |
| 362T200-97 | 0.1017 | 0.773 | 2.63 | 1.917 | 0.963 | 1.575 | 0.308 | 0.631 | 1.915 | 0.867 | 17.14 | 4370 | 1.839 | 0.803 | 24.06 | 6622 | 2.666 | 0.825 | -1.232 | 0.732 | 2.097 | 0.655 |
| 362T250-43 | 0.0451 | 0.389 | 1.32 | 0.966 | 0.510 | 1.577 | 0.260 | 0.818 | 0.713 | 0.281 | 5.56 | 1739 | | | | | 0.263 | 0.641 | -1.702 | 0.990 | 2.460 | 0.521 |
| 362T250-54 | 0.0566 | 0.487 | 1.66 | 1.224 | 0.641 | 1.585 | 0.324 | 0.816 | 0.971 | 0.389 | 7.69 | 2480 | 0.914 | 0.360 | 10.77 | 3372 | 0.521 | 0.812 | -1.695 | 0.986 | 2.460 | 0.525 |
| 362T250-68 | 0.0713 | 0.614 | 2.09 | 1.565 | 0.808 | 1.597 | 0.406 | 0.813 | 1.337 | 0.546 | 10.79 | 3104 | 1.259 | 0.502 | 15.04 | 4703 | 1.040 | 1.038 | -1.686 | 0.980 | 2.460 | 0.530 |
| 362T250-97 | 0.1017 | 0.875 | 2.98 | 2.300 | 1.155 | 1.621 | 0.570 | 0.807 | 2.180 | 0.928 | 18.34 | 4370 | 2.069 | 0.851 | 25.49 | 6622 | 3.016 | 1.524 | -1.667 | 0.969 | 2.461 | 0.541 |

**NOTES** 1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

# Section Properties for Structural Tracks (Continued)

| Member | Design Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | Effective Properties 50 ksi | | | | Torsional Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area ($in^2$) | Weight (lb/ft) | Ix ($in^4$) | Sx ($in^3$) | Rx (in) | Iy ($in^4$) | Ry (in) | Ix ($in^4$) | Sx (in3) | Ma (in-k) | Vag (lb) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 400T125-43 | 0.0451 | 0.293 | 1.00 | 0.716 | 0.344 | 1.563 | 0.040 | 0.369 | 0.666 | 0.282 | 5.57 | 1739 | | | | | 0.198 | 0.122 | -0.626 | 0.394 | 1.724 | 0.868 |
| 400T125-54 | 0.0566 | 0.367 | 1.25 | 0.904 | 0.431 | 1.569 | 0.049 | 0.366 | 0.882 | 0.381 | 7.53 | 2739 | 0.849 | 0.359 | 10.74 | 3372 | 0.392 | 0.154 | -0.621 | 0.390 | 1.727 | 0.871 |
| 400T125-68 | 0.0713 | 0.462 | 1.57 | 1.150 | 0.541 | 1.577 | 0.061 | 0.363 | 1.150 | 0.517 | 10.22 | 3435 | 1.134 | 0.488 | 14.62 | 5205 | 0.783 | 0.194 | -0.614 | 0.386 | 1.731 | 0.874 |
| 400T125-97 | 0.1017 | 0.659 | 2.24 | 1.673 | 0.768 | 1.594 | 0.084 | 0.357 | 1.673 | 0.768 | 17.35* | 4842 | 1.673 | 0.768 | 23.00 | 7337 | 2.271 | 0.280 | -0.600 | 0.377 | 1.740 | 0.881 |
| 400T150-33 | 0.0346 | 0.242 | 0.82 | 0.622 | 0.300 | 1.603 | 0.051 | 0.460 | 0.519 | 0.208 | 4.12 | 940 | | | | | 0.097 | 0.155 | -0.821 | 0.507 | 1.859 | 0.805 |
| 400T150-43 | 0.0451 | 0.315 | 1.07 | 0.811 | 0.390 | 1.604 | 0.066 | 0.458 | 0.719 | 0.293 | 5.80 | 1739 | | | | | 0.214 | 0.200 | -0.817 | 0.504 | 1.857 | 0.807 |
| 400T150-54 | 0.0566 | 0.396 | 1.35 | 1.025 | 0.489 | 1.610 | 0.082 | 0.456 | 0.960 | 0.399 | 7.89 | 2739 | 0.918 | 0.374 | 11.19 | 3372 | 0.422 | 0.252 | -0.811 | 0.501 | 1.860 | 0.810 |
| 400T150-68 | 0.0713 | 0.498 | 1.69 | 1.306 | 0.615 | 1.619 | 0.102 | 0.453 | 1.286 | 0.548 | 10.82 | 3435 | 1.237 | 0.513 | 15.35 | 5205 | 0.844 | 0.320 | -0.804 | 0.496 | 1.864 | 0.814 |
| 400T150-97 | 0.1017 | 0.710 | 2.41 | 1.903 | 0.874 | 1.638 | 0.141 | 0.447 | 1.903 | 0.874 | 17.27 | 4842 | 1.903 | 0.832 | 24.92 | 7337 | 2.447 | 0.463 | -0.788 | 0.487 | 1.872 | 0.823 |
| 400T200-33 | 0.0346 | 0.277 | 0.94 | 0.768 | 0.371 | 1.666 | 0.113 | 0.639 | 0.581 | 0.220 | 4.34 | 940 | | | | | 0.110 | 0.336 | -1.229 | 0.737 | 2.166 | 0.678 |
| 400T200-43 | 0.0451 | 0.360 | 1.23 | 1.002 | 0.482 | 1.668 | 0.146 | 0.637 | 0.811 | 0.311 | 6.14 | 1739 | | | | | 0.244 | 0.436 | -1.224 | 0.734 | 2.164 | 0.680 |
| 400T200-54 | 0.0566 | 0.452 | 1.54 | 1.268 | 0.604 | 1.675 | 0.182 | 0.635 | 1.093 | 0.426 | 8.42 | 2739 | 1.037 | 0.397 | 11.88 | 3372 | 0.483 | 0.551 | -1.217 | 0.730 | 2.165 | 0.684 |
| 400T200-68 | 0.0713 | 0.569 | 1.94 | 1.617 | 0.761 | 1.685 | 0.227 | 0.632 | 1.485 | 0.591 | 11.68 | 3435 | 1.412 | 0.549 | 16.42 | 5205 | 0.965 | 0.702 | -1.209 | 0.725 | 2.168 | 0.689 |
| 400T200-97 | 0.1017 | 0.811 | 2.76 | 2.363 | 1.085 | 1.707 | 0.317 | 0.625 | 2.360 | 0.981 | 19.38 | 4842 | 2.268 | 0.911 | 27.28 | 7337 | 2.797 | 1.022 | -1.192 | 0.715 | 2.173 | 0.699 |
| 400T250-43 | 0.0451 | 0.405 | 1.38 | 1.193 | 0.573 | 1.715 | 0.268 | 0.813 | 0.888 | 0.324 | 6.40 | 1739 | | | | | 0.275 | 0.799 | -1.653 | 0.970 | 2.517 | 0.569 |
| 400T250-54 | 0.0566 | 0.509 | 1.73 | 1.511 | 0.720 | 1.723 | 0.335 | 0.811 | 1.205 | 0.445 | 8.80 | 2739 | 1.137 | 0.413 | 12.38 | 3372 | 0.543 | 1.011 | -1.646 | 0.966 | 2.517 | 0.572 |
| 400T250-68 | 0.0713 | 0.641 | 2.18 | 1.928 | 0.907 | 1.735 | 0.418 | 0.808 | 1.652 | 0.622 | 12.28 | 3435 | 1.559 | 0.574 | 17.19 | 5205 | 1.086 | 1.289 | -1.637 | 0.961 | 2.518 | 0.578 |
| 400T250-97 | 0.1017 | 0.913 | 3.11 | 2.823 | 1.296 | 1.758 | 0.587 | 0.802 | 2.679 | 1.048 | 20.72 | 4842 | 2.546 | 0.965 | 28.89 | 7337 | 3.148 | 1.886 | -1.618 | 0.950 | 2.521 | 0.588 |
| 550T125-33 | 0.0346 | 0.277 | 0.94 | 1.159 | 0.410 | 2.046 | 0.033 | 0.346 | 1.029 | 0.270 | 5.33 | 680 | | | | | 0.110 | 0.195 | -0.541 | 0.350 | 2.145 | 0.936 |
| 550T125-43 | 0.0451 | 0.360 | 1.23 | 1.510 | 0.533 | 2.047 | 0.043 | 0.344 | 1.428 | 0.416 | 8.23 | 1504 | | | | | 0.244 | 0.252 | -0.537 | 0.348 | 2.144 | 0.937 |
| 550T125-54 | 0.0566 | 0.452 | 1.54 | 1.903 | 0.668 | 2.052 | 0.053 | 0.342 | 1.862 | 0.597 | 11.80 | 2739 | 1.811 | 0.535 | 16.01 | 2980 | 0.483 | 0.315 | -0.532 | 0.345 | 2.147 | 0.939 |
| 550T125-68 | 0.0713 | 0.569 | 1.94 | 2.412 | 0.839 | 2.058 | 0.066 | 0.339 | 2.412 | 0.807 | 15.95 | 4347 | 2.379 | 0.769 | 23.02 | 5350 | 0.965 | 0.397 | -0.526 | 0.341 | 2.152 | 0.940 |
| 550T125-97 | 0.1017 | 0.811 | 2.76 | 3.483 | 1.190 | 2.072 | 0.090 | 0.333 | 3.483 | 1.190 | 26.87* | 6730 | 3.483 | 1.190 | 35.62 | 10197 | 2.797 | 0.564 | -0.514 | 0.333 | 2.161 | 0.943 |
| 550T150-33 | 0.0346 | 0.294 | 1.00 | 1.295 | 0.459 | 2.099 | 0.055 | 0.434 | 1.115 | 0.310 | 6.12 | 680 | | | | | 0.117 | 0.320 | -0.714 | 0.455 | 2.259 | 0.900 |
| 550T150-43 | 0.0451 | 0.383 | 1.30 | 1.688 | 0.596 | 2.099 | 0.072 | 0.432 | 1.516 | 0.468 | 9.25 | 1504 | | | | | 0.260 | 0.414 | -0.709 | 0.452 | 2.258 | 0.901 |
| 550T150-54 | 0.0566 | 0.480 | 1.63 | 2.128 | 0.747 | 2.105 | 0.089 | 0.430 | 2.005 | 0.628 | 12.41 | 2739 | 1.928 | 0.595 | 17.81 | 2980 | 0.513 | 0.519 | -0.704 | 0.449 | 2.261 | 0.903 |
| 550T150-68 | 0.0713 | 0.605 | 2.06 | 2.699 | 0.939 | 2.112 | 0.110 | 0.427 | 2.660 | 0.850 | 16.80 | 4347 | 2.569 | 0.804 | 24.07 | 5350 | 1.025 | 0.655 | -0.698 | 0.445 | 2.265 | 0.905 |
| 550T150-97 | 0.1017 | 0.862 | 2.93 | 3.904 | 1.333 | 2.128 | 0.153 | 0.421 | 3.904 | 1.333 | 26.35 | 6730 | 3.904 | 1.278 | 38.27 | 10197 | 2.973 | 0.937 | -0.684 | 0.436 | 2.275 | 0.909 |
| 550T200-33 | 0.0346 | 0.329 | 1.12 | 1.567 | 0.555 | 2.184 | 0.123 | 0.613 | 1.246 | 0.307 | 6.06 | 680 | | | | | 0.131 | 0.694 | -1.088 | 0.674 | 2.516 | 0.813 |
| 550T200-43 | 0.0451 | 0.428 | 1.46 | 2.043 | 0.722 | 2.185 | 0.160 | 0.611 | 1.690 | 0.495 | 9.79 | 1504 | | | | | 0.290 | 0.900 | -1.083 | 0.671 | 2.514 | 0.814 |
| 550T200-54 | 0.0566 | 0.537 | 1.83 | 2.578 | 0.905 | 2.191 | 0.199 | 0.609 | 2.253 | 0.669 | 13.21 | 2739 | 2.153 | 0.630 | 18.86 | 2980 | 0.573 | 1.133 | -1.077 | 0.668 | 2.517 | 0.817 |
| 550T200-68 | 0.0713 | 0.676 | 2.30 | 3.274 | 1.139 | 2.200 | 0.248 | 0.606 | 3.027 | 0.914 | 18.06 | 4347 | 2.894 | 0.857 | 25.67 | 5350 | 1.146 | 1.434 | -1.070 | 0.663 | 2.521 | 0.820 |
| 550T200-97 | 0.1017 | 0.964 | 3.28 | 4.746 | 1.621 | 2.219 | 0.347 | 0.600 | 4.735 | 1.483 | 29.30 | 6730 | 4.566 | 1.391 | 41.64 | 10197 | 3.323 | 2.067 | -1.055 | 0.653 | 2.529 | 0.826 |
| 550T250-43 | 0.0451 | 0.473 | 1.61 | 2.399 | 0.848 | 2.252 | 0.295 | 0.790 | 1.841 | 0.516 | 10.20 | 1504 | | | | | 0.321 | 1.643 | -1.484 | 0.899 | 2.810 | 0.721 |
| 550T250-54 | 0.0566 | 0.594 | 2.02 | 3.029 | 1.063 | 2.259 | 0.368 | 0.788 | 2.466 | 0.699 | 13.81 | 2739 | 2.346 | 0.657 | 19.66 | 2980 | 0.634 | 2.070 | -1.478 | 0.895 | 2.812 | 0.724 |
| 550T250-68 | 0.0713 | 0.748 | 2.54 | 3.849 | 1.339 | 2.269 | 0.460 | 0.785 | 3.338 | 0.960 | 18.97 | 4347 | 3.172 | 0.897 | 26.86 | 5350 | 1.267 | 2.627 | -1.470 | 0.890 | 2.815 | 0.727 |
| 550T250-97 | 0.1017 | 1.066 | 3.63 | 5.588 | 1.908 | 2.290 | 0.646 | 0.779 | 5.314 | 1.580 | 31.23 | 6730 | 5.073 | 1.470 | 44.01 | 10197 | 3.674 | 3.801 | -1.453 | 0.880 | 2.822 | 0.735 |
| 600T125-33 | 0.0346 | 0.294 | 1.00 | 1.428 | 0.465 | 2.204 | 0.034 | 0.339 | 1.258 | 0.297 | 5.87 | 622 | | | | | 0.117 | 0.238 | -0.516 | 0.337 | 2.289 | 0.949 |
| 600T125-43 | 0.0451 | 0.383 | 1.30 | 1.861 | 0.604 | 2.205 | 0.044 | 0.337 | 1.768 | 0.461 | 9.11 | 1377 | | | | | 0.260 | 0.307 | -0.513 | 0.335 | 2.288 | 0.950 |
| 600T125-54 | 0.0566 | 0.480 | 1.63 | 2.344 | 0.756 | 2.209 | 0.054 | 0.335 | 2.299 | 0.666 | 13.15 | 2728 | 2.241 | 0.592 | 17.73 | 2728 | 0.513 | 0.384 | -0.508 | 0.332 | 2.291 | 0.951 |
| 600T125-68 | 0.0713 | 0.605 | 2.06 | 2.969 | 0.950 | 2.215 | 0.067 | 0.332 | 2.969 | 0.916 | 18.09 | 4347 | 2.934 | 0.858 | 25.69 | 5350 | 1.025 | 0.483 | -0.503 | 0.329 | 2.296 | 0.952 |
| 600T125-97 | 0.1017 | 0.862 | 2.93 | 4.281 | 1.347 | 2.228 | 0.092 | 0.326 | 4.281 | 1.347 | 30.43* | 7359 | 4.281 | 1.347 | 40.33 | 10885 | 2.973 | 0.685 | -0.491 | 0.321 | 2.305 | 0.955 |
| 600T150-33 | 0.0346 | 0.311 | 1.06 | 1.590 | 0.517 | 2.260 | 0.057 | 0.426 | 1.334 | 0.303 | 5.99 | 622 | | | | | 0.124 | 0.390 | -0.684 | 0.439 | 2.399 | 0.919 |
| 600T150-43 | 0.0451 | 0.405 | 1.38 | 2.072 | 0.673 | 2.261 | 0.073 | 0.424 | 1.890 | 0.474 | 9.36 | 1377 | | | | | 0.275 | 0.504 | -0.680 | 0.437 | 2.398 | 0.920 |
| 600T150-54 | 0.0566 | 0.509 | 1.73 | 2.611 | 0.843 | 2.266 | 0.091 | 0.422 | 2.473 | 0.689 | 13.62 | 2728 | 2.400 | 0.609 | 18.24 | 2728 | 0.543 | 0.632 | -0.675 | 0.434 | 2.401 | 0.921 |
| 600T150-68 | 0.0713 | 0.641 | 2.18 | 3.309 | 1.059 | 2.273 | 0.113 | 0.419 | 3.262 | 0.963 | 19.03 | 4347 | 3.162 | 0.891 | 26.68 | 5350 | 1.086 | 0.797 | -0.669 | 0.430 | 2.406 | 0.923 |
| 600T150-97 | 0.1017 | 0.913 | 3.11 | 4.778 | 1.504 | 2.288 | 0.156 | 0.413 | 4.778 | 1.504 | 29.71 | 7359 | 4.778 | 1.444 | 43.23 | 10885 | 3.148 | 1.138 | -0.656 | 0.421 | 2.415 | 0.926 |
| 600T200-33 | 0.0346 | 0.346 | 1.18 | 1.913 | 0.622 | 2.352 | 0.126 | 0.604 | 1.542 | 0.333 | 6.59 | 622 | | | | | 0.138 | 0.847 | -1.048 | 0.655 | 2.645 | 0.843 |
| 600T200-43 | 0.0451 | 0.451 | 1.53 | 2.494 | 0.809 | 2.353 | 0.163 | 0.602 | 2.076 | 0.565 | 11.16 | 1377 | | | | | 0.305 | 1.098 | -1.044 | 0.652 | 2.643 | 0.844 |
| 600T200-54 | 0.0566 | 0.565 | 1.92 | 3.145 | 1.015 | 2.359 | 0.203 | 0.600 | 2.759 | 0.759 | 15.00 | 2728 | 2.641 | 0.717 | 21.48 | 2728 | 0.604 | 1.381 | -1.038 | 0.649 | 2.646 | 0.846 |
| 600T200-68 | 0.0713 | 0.712 | 2.42 | 3.990 | 1.277 | 2.367 | 0.254 | 0.597 | 3.696 | 1.034 | 20.42 | 4347 | 3.540 | 0.973 | 29.12 | 5350 | 1.206 | 1.746 | -1.031 | 0.644 | 2.650 | 0.849 |
| 600T200-97 | 0.1017 | 1.015 | 3.45 | 5.773 | 1.816 | 2.385 | 0.354 | 0.591 | 5.758 | 1.667 | 32.95 | 7359 | 5.558 | 1.568 | 46.94 | 10885 | 3.499 | 2.510 | -1.016 | 0.635 | 2.659 | 0.854 |
| 600T250-43 | 0.0451 | 0.496 | 1.69 | 2.916 | 0.946 | 2.425 | 0.303 | 0.781 | 2.269 | 0.563 | 11.13 | 1377 | | | | | 0.336 | 2.004 | -1.436 | 0.878 | 2.925 | 0.759 |
| 600T250-54 | 0.0566 | 0.622 | 2.12 | 3.678 | 1.187 | 2.432 | 0.377 | 0.779 | 3.014 | 0.793 | 15.68 | 2728 | 2.881 | 0.732 | 21.92 | 2728 | 0.664 | 2.523 | -1.430 | 0.874 | 2.927 | 0.761 |
| 600T250-68 | 0.0713 | 0.783 | 2.67 | 4.670 | 1.495 | 2.442 | 0.472 | 0.776 | 4.065 | 1.085 | 21.45 | 4347 | 3.871 | 1.017 | 30.46 | 5350 | 1.327 | 3.198 | -1.422 | 0.869 | 2.930 | 0.764 |
| 600T250-97 | 0.1017 | 1.116 | 3.80 | 6.767 | 2.129 | 2.462 | 0.662 | 0.770 | 6.441 | 1.775 | 35.08 | 7359 | 6.157 | 1.656 | 49.58 | 10885 | 3.849 | 4.616 | -1.406 | 0.859 | 2.938 | 0.771 |
| 800T125-33[1] | 0.0346 | 0.363 | 1.24 | 2.895 | 0.711 | 2.824 | 0.036 | 0.313 | 2.441 | 0.407 | 8.03 | 465 | | | | | 0.145 | 0.456 | -0.439 | 0.294 | 2.875 | 0.977 |
| 800T125-43 | 0.0451 | 0.473 | 1.61 | 3.773 | 0.924 | 2.824 | 0.046 | 0.311 | 3.484 | 0.640 | 12.65 | 1030 | | | | | 0.321 | 0.589 | -0.436 | 0.292 | 2.874 | 0.977 |
| 800T125-54 | 0.0566 | 0.594 | 2.02 | 4.745 | 1.158 | 2.827 | 0.057 | 0.309 | 4.668 | 0.940 | 18.58 | 2039 | 4.426 | 0.824 | 24.66 | 2039 | 0.634 | 0.735 | -0.432 | 0.289 | 2.877 | 0.977 |
| 800T125-68 | 0.0713 | 0.748 | 2.54 | 5.998 | 1.454 | 2.833 | 0.070 | 0.306 | 5.998 | 1.356 | 26.80 | 4087 | 5.956 | 1.216 | 36.39 | 4087 | 1.267 | 0.920 | -0.427 | 0.286 | 2.881 | 0.978 |
| 800T125-97 | 0.1017 | 1.066 | 3.63 | 8.613 | 2.062 | 2.843 | 0.096 | 0.301 | 8.613 | 2.062 | 40.74 | 8843 | 8.613 | 2.062 | 61.72 | 10885 | 3.674 | 1.296 | -0.417 | 0.279 | 2.889 | 0.979 |
| 800T150-33[1] | 0.0346 | 0.380 | 1.29 | 3.180 | 0.781 | 2.891 | 0.060 | 0.397 | 2.569 | 0.414 | 8.18 | 465 | | | | | 0.152 | 0.751 | -0.588 | 0.388 | 2.977 | 0.961 |
| 800T150-43 | 0.0451 | 0.496 | 1.69 | 4.144 | 1.015 | 2.891 | 0.077 | 0.395 | 3.689 | 0.655 | 12.95 | 1030 | | | | | 0.336 | 0.972 | -0.584 | 0.386 | 2.976 | 0.961 |
| 800T150-54 | 0.0566 | 0.622 | 2.12 | 5.214 | 1.272 | 2.896 | 0.096 | 0.393 | 4.976 | 0.969 | 19.15 | 2039 | 4.692 | 0.844 | 25.27 | 2039 | 0.664 | 1.215 | -0.580 | 0.383 | 2.979 | 0.962 |
| 800T150-68 | 0.0713 | 0.783 | 2.67 | 6.594 | 1.599 | 2.902 | 0.119 | 0.390 | 6.527 | 1.412 | 27.91 | 4087 | 6.361 | 1.255 | 37.58 | 4087 | 1.327 | 1.526 | -0.575 | 0.379 | 2.984 | 0.963 |
| 800T150-97 | 0.1017 | 1.116 | 3.80 | 9.479 | 2.269 | 2.914 | 0.165 | 0.384 | 9.479 | 2.269 | 44.83 | 8843 | 9.479 | 2.192 | 65.62 | 10885 | 3.849 | 2.162 | -0.564 | 0.372 | 2.993 | 0.965 |
| 800T200-33[1] | 0.0346 | 0.415 | 1.41 | 3.749 | 0.921 | 3.005 | 0.135 | 0.571 | 2.788 | 0.424 | 8.37 | 465 | | | | | 0.166 | 1.638 | -0.917 | 0.589 | 3.194 | 0.918 |
| 800T200-43 | 0.0451 | 0.541 | 1.84 | 4.887 | 1.197 | 3.006 | 0.175 | 0.569 | 4.043 | 0.676 | 13.35 | 1030 | | | | | 0.367 | 2.124 | -0.913 | 0.587 | 3.193 | 0.918 |
| 800T200-54 | 0.0566 | 0.679 | 2.31 | 6.152 | 1.501 | 3.011 | 0.218 | 0.567 | 5.505 | 1.009 | 19.93 | 2039 | 5.149 | 0.871 | 26.09 | 2039 | 0.725 | 2.664 | -0.908 | 0.584 | 3.196 | 0.919 |
| 800T200-68 | 0.0713 | 0.854 | 2.91 | 7.786 | 1.888 | 3.019 | 0.272 | 0.564 | 7.306 | 1.490 | 29.45 | 4087 | 7.051 | 1.310 | 39.22 | 4087 | 1.448 | 3.357 | -0.902 | 0.580 | 3.201 | 0.921 |
| 800T200-97 | 0.1017 | 1.218 | 4.15 | 11.212 | 2.683 | 3.034 | 0.379 | 0.558 | 11.176 | 2.491 | 49.22 | 8843 | 10.833 | 2.347 | 70.27 | 10885 | 4.200 | 4.792 | -0.889 | 0.571 | 3.210 | 0.923 |
| 800T250-43 | 0.0451 | 0.586 | 1.99 | 5.629 | 1.380 | 3.100 | 0.326 | 0.746 | 4.593 | 0.739 | 14.60 | 1030 | | | | | 0.397 | 3.877 | -1.274 | 0.801 | 3.433 | 0.862 |
| 800T250-54 | 0.0566 | 0.735 | 2.50 | 7.090 | 1.730 | 3.106 | 0.407 | 0.744 | 5.948 | 1.193 | 23.57 | 2039 | 5.816 | 0.959 | 28.71 | 2039 | 0.785 | 4.870 | -1.268 | 0.798 | 3.436 | 0.864 |
| 800T250-68 | 0.0713 | 0.926 | 3.15 | 8.978 | 2.177 | 3.114 | 0.509 | 0.741 | 7.917 | 1.648 | 32.57 | 4087 | 7.588 | 1.560 | 46.72 | 4087 | 1.569 | 6.151 | -1.261 | 0.793 | 3.441 | 0.866 |
| 800T250-97 | 0.1017 | 1.320 | 4.49 | 12.944 | 3.098 | 3.132 | 0.713 | 0.735 | 12.361 | 2.641 | 52.19 | 8843 | 11.872 | 2.487 | 74.47 | 10885 | 4.550 | 8.818 | -1.247 | 0.784 | 3.450 | 0.869 |

**NOTES**1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

# Section Properties for Structural Tracks (Continued)

| Member | Design Thickness (in) | Gross | | | | | | | Effective Properties 33 ksi | | | | Effective Properties 50 ksi | | | | Torsional Properties | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Sx (in3) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Ix (in4) | Sx (in3) | Ma (in-k) | Vag (lb) | Jx1000 (in4) | Cw (in6) | Xo (in) | m (in) | Ro (in) | Beta |
| 1000T125-43[1] | 0.0451 | 0.563 | 1.92 | 6.630 | 1.305 | 3.431 | 0.047 | 0.290 | 5.886 | 0.819 | 16.19 | 822 | | | | | 0.382 | 0.973 | -0.379 | 0.259 | 3.464 | 0.988 |
| 1000T125-54 | 0.0566 | 0.707 | 2.41 | 8.333 | 1.634 | 3.434 | 0.059 | 0.288 | 7.960 | 1.216 | 24.03 | 1628 | 7.479 | 1.055 | 31.59 | 1628 | 0.755 | 1.212 | -0.376 | 0.256 | 3.466 | 0.988 |
| 1000T125-68 | 0.0713 | 0.890 | 3.03 | 10.522 | 2.053 | 3.438 | 0.073 | 0.286 | 10.452 | 1.781 | 35.19 | 3261 | 10.155 | 1.575 | 47.15 | 3261 | 1.508 | 1.515 | -0.372 | 0.253 | 3.470 | 0.989 |
| 1000T125-97 | 0.1017 | 1.269 | 4.32 | 15.077 | 2.912 | 3.447 | 0.100 | 0.280 | 15.077 | 2.907 | 57.44 | 8843 | 15.077 | 2.753 | 82.42 | 9507 | 4.375 | 2.123 | -0.363 | 0.247 | 3.477 | 0.989 |
| 1000T150-43[1] | 0.0451 | 0.586 | 1.99 | 7.207 | 1.419 | 3.507 | 0.080 | 0.370 | 6.195 | 0.837 | 16.54 | 822 | | | | | 0.397 | 1.612 | -0.513 | 0.345 | 3.564 | 0.979 |
| 1000T150-54 | 0.0566 | 0.735 | 2.50 | 9.061 | 1.777 | 3.511 | 0.100 | 0.368 | 8.430 | 1.249 | 24.69 | 1628 | 7.880 | 1.079 | 32.29 | 1628 | 0.785 | 2.013 | -0.509 | 0.342 | 3.567 | 0.980 |
| 1000T150-68 | 0.0713 | 0.926 | 3.15 | 11.445 | 2.233 | 3.516 | 0.124 | 0.366 | 11.342 | 1.846 | 36.48 | 3261 | 10.774 | 1.621 | 48.53 | 3261 | 1.569 | 2.522 | -0.505 | 0.339 | 3.571 | 0.980 |
| 1000T150-97 | 0.1017 | 1.320 | 4.49 | 16.413 | 3.170 | 3.526 | 0.171 | 0.360 | 16.413 | 3.165 | 62.54 | 8843 | 16.413 | 2.902 | 86.90 | 9507 | 4.550 | 3.557 | -0.495 | 0.332 | 3.579 | 0.981 |
| 1000T200-43[1] | 0.0451 | 0.631 | 2.15 | 8.361 | 1.646 | 3.640 | 0.183 | 0.539 | 6.722 | 0.861 | 17.01 | 822 | | | | | 0.428 | 3.540 | -0.813 | 0.534 | 3.769 | 0.953 |
| 1000T200-54 | 0.0566 | 0.792 | 2.69 | 10.516 | 2.062 | 3.645 | 0.228 | 0.537 | 9.231 | 1.295 | 25.60 | 1628 | 8.560 | 1.111 | 33.26 | 1628 | 0.845 | 4.434 | -0.809 | 0.531 | 3.772 | 0.954 |
| 1000T200-68 | 0.0713 | 0.997 | 3.39 | 13.292 | 2.594 | 3.651 | 0.284 | 0.534 | 12.551 | 1.936 | 38.26 | 3261 | 11.820 | 1.684 | 50.42 | 3261 | 1.690 | 5.576 | -0.803 | 0.527 | 3.776 | 0.955 |
| 1000T200-97 | 0.1017 | 1.422 | 4.84 | 19.087 | 3.686 | 3.664 | 0.397 | 0.528 | 19.031 | 3.427 | 67.72 | 8843 | 18.583 | 3.081 | 92.25 | 9507 | 4.901 | 7.924 | -0.791 | 0.519 | 3.786 | 0.956 |
| 1000T250-43[1] | 0.0451 | 0.676 | 2.30 | 9.515 | 1.873 | 3.751 | 0.344 | 0.713 | 7.172 | 0.876 | 17.32 | 822 | | | | | 0.458 | 6.477 | -1.147 | 0.737 | 3.987 | 0.917 |
| 1000T250-54 | 0.0566 | 0.848 | 2.89 | 11.972 | 2.348 | 3.757 | 0.429 | 0.711 | 9.913 | 1.326 | 26.20 | 1628 | 9.141 | 1.132 | 33.89 | 1628 | 0.906 | 8.125 | -1.142 | 0.734 | 3.990 | 0.918 |
| 1000T250-68 | 0.0713 | 1.068 | 3.64 | 15.138 | 2.954 | 3.764 | 0.536 | 0.708 | 13.578 | 1.997 | 39.46 | 3261 | 12.708 | 1.726 | 51.68 | 3261 | 1.810 | 10.240 | -1.135 | 0.730 | 3.995 | 0.919 |
| 1000T250-97 | 0.1017 | 1.523 | 5.18 | 21.760 | 4.202 | 3.780 | 0.751 | 0.702 | 20.871 | 3.596 | 71.05 | 8843 | 20.254 | 3.201 | 95.84 | 9507 | 5.252 | 14.617 | -1.122 | 0.721 | 4.005 | 0.921 |
| 1200T125-54[1] | 0.0566 | 0.820 | 2.79 | 13.335 | 2.186 | 4.033 | 0.060 | 0.271 | 12.296 | 1.491 | 29.47 | 1354 | 11.460 | 1.286 | 38.51 | 1354 | 0.876 | 1.820 | -0.333 | 0.230 | 4.055 | 0.993 |
| 1200T125-68 | 0.0713 | 1.033 | 3.51 | 16.826 | 2.747 | 4.036 | 0.074 | 0.268 | 16.246 | 2.206 | 43.60 | 2713 | 15.686 | 1.934 | 57.90 | 2713 | 1.750 | 2.270 | -0.329 | 0.227 | 4.059 | 0.993 |
| 1200T125-97 | 0.1017 | 1.472 | 5.01 | 24.078 | 3.897 | 4.044 | 0.102 | 0.263 | 24.078 | 3.690 | 72.92 | 7902 | 23.751 | 3.442 | 103.06 | 7902 | 5.076 | 3.171 | -0.322 | 0.222 | 4.065 | 0.994 |
| 1200T150-54[1] | 0.0566 | 0.848 | 2.89 | 14.378 | 2.357 | 4.117 | 0.103 | 0.348 | 12.962 | 1.530 | 30.23 | 1354 | 12.020 | 1.313 | 39.31 | 1354 | 0.906 | 3.033 | -0.454 | 0.310 | 4.156 | 0.988 |
| 1200T150-68 | 0.0713 | 1.068 | 3.64 | 18.148 | 2.963 | 4.121 | 0.127 | 0.345 | 17.568 | 2.281 | 45.08 | 2713 | 16.566 | 1.987 | 59.48 | 2713 | 1.810 | 3.795 | -0.450 | 0.307 | 4.160 | 0.988 |
| 1200T150-97 | 0.1017 | 1.523 | 5.18 | 25.987 | 4.206 | 4.130 | 0.176 | 0.340 | 25.987 | 3.996 | 78.97 | 7902 | 25.719 | 3.616 | 108.27 | 7902 | 5.252 | 5.335 | -0.441 | 0.301 | 4.168 | 0.989 |
| 1200T200-54[1] | 0.0566 | 0.905 | 3.08 | 16.464 | 2.699 | 4.265 | 0.236 | 0.510 | 14.078 | 1.582 | 31.26 | 1354 | 12.962 | 1.350 | 40.41 | 1354 | 0.966 | 6.714 | -0.730 | 0.487 | 4.357 | 0.972 |
| 1200T200-68 | 0.0713 | 1.140 | 3.88 | 20.791 | 3.395 | 4.271 | 0.294 | 0.508 | 19.277 | 2.383 | 47.09 | 2713 | 18.026 | 2.058 | 61.62 | 2713 | 1.931 | 8.431 | -0.725 | 0.483 | 4.362 | 0.972 |
| 1200T200-97 | 0.1017 | 1.625 | 5.53 | 29.805 | 4.824 | 4.283 | 0.410 | 0.502 | 29.805 | 4.298 | 84.93 | 7902 | 28.959 | 3.819 | 114.35 | 7902 | 5.602 | 11.945 | -0.714 | 0.476 | 4.371 | 0.973 |
| 1200T250-54[1] | 0.0566 | 0.962 | 3.27 | 18.550 | 3.041 | 4.392 | 0.445 | 0.681 | 15.021 | 1.617 | 31.95 | 1354 | 13.756 | 1.374 | 41.14 | 1354 | 1.027 | 12.339 | -1.039 | 0.680 | 4.565 | 0.948 |
| 1200T250-68 | 0.0713 | 1.211 | 4.12 | 23.435 | 3.826 | 4.399 | 0.556 | 0.678 | 20.720 | 2.451 | 48.44 | 2713 | 19.255 | 2.106 | 63.04 | 2713 | 2.052 | 15.529 | -1.033 | 0.676 | 4.569 | 0.949 |
| 1200T250-97 | 0.1017 | 1.727 | 5.88 | 33.623 | 5.442 | 4.413 | 0.780 | 0.672 | 32.479 | 4.489 | 88.70 | 7902 | 31.310 | 3.954 | 118.37 | 7902 | 5.953 | 22.101 | -1.021 | 0.668 | 4.579 | 0.950 |

**NOTES** 1. Web-height to thickness ratio exceeds 200. Web Stiffeners are required at all support points and concentrated loads.

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# Interior Non-structural, Non - Composite Wall Heigh Tables Notes

1. Lateral loads have not been modified for strength checks nor have they been modified for deflection determination for 5, 7.5, & 10 psf loads.
2. Limiting heights based on continuous support of each flange over the full length of the stud.
3. Limiting heights are based on steel properties only (non-composite).
4. N

# Allowable Heights For Non-Axial Load Bearing Wall

| Section | Fy (ksi) | Spacing (in) oc | 5 psf | | | 7.5 psf | | | 10 psf | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | L/120 | L/240 | L/360 | L/120 | L/240 | L/360 | L/120 | L/240 | L/360 |
| 162S125-18 | 33 | 12 | 9′ 0″ | 7′ 8″ | 6′ 8″ | 7′ 4″ | 6′ 8″ | 5′ 10″ | 6′ 4″ | 6′ 1″ | 5′ 4″ |
| 162S125-18 | 33 | 16 | 7′ 9″ | 6′ 11″ | 6′ 1″ | 6′ 4″ | 6′ 1″ | 5′ 4″ | 5′ 6″ | 5′ 6″ | 4′ 10″ |
| 162S125-18 | 33 | 24 | 6′ 4″ | 6′ 1″ | 5′ 4″ | 5′ 2″ | 5′ 2″ | 4′ 8″ | 4′ 6″ | 4′ 6″ | 4′ 3″ |
| 162S125-27 | 33 | 12 | 11′ 3″ | 8′ 11″ | 7′ 10″ | 9′ 8″ | 7′ 10″ | 6′ 10″ | 8′ 4″ | 7′ 1″ | 6′ 3″ |
| 162S125-27 | 33 | 16 | 10′ 3″ | 8′ 2″ | 7′ 1″ | 8′ 4″ | 7′ 1″ | 6′ 3″ | 7′ 3″ | 6′ 5″ | 5′ 8″ |
| 162S125-27 | 33 | 24 | 8′ 4″ | 7′ 1″ | 6′ 3″ | 6′ 10″ | 6′ 3″ | 5′ 5″ | 5′ 11″ | 5′ 8″ | 4′ 11″ |
| 162S125-30 | 33 | 12 | 11′ 8″ | 9′ 3″ | 8′ 1″ | 10′ 2″ | 8′ 1″ | 7′ 1″ | 8′ 11″ | 7′ 4″ | 6′ 5″ |
| 162S125-30 | 33 | 16 | 10′ 7″ | 8′ 5″ | 7′ 4″ | 8′ 11″ | 7′ 4″ | 6′ 5″ | 7′ 9″ | 6′ 8″ | 5′ 10″ |
| 162S125-30 | 33 | 24 | 8′ 11″ | 7′ 4″ | 6′ 5″ | 7′ 3″ | 6′ 5″ | 5′ 7″ | 6′ 4″ | 5′ 10″ | 5′ 1″ |
| 162S125-33 | 33 | 12 | 12′ 0″ | 9′ 6″ | 8′ 4″ | 10′ 6″ | 8′ 4″ | 7′ 3″ | 9′ 6″ | 7′ 7″ | 6′ 7″ |
| 162S125-33 | 33 | 16 | 10′ 11″ | 8′ 8″ | 7′ 7″ | 9′ 6″ | 7′ 7″ | 6′ 7″ | 8′ 3″ | 6′ 11″ | 6′ 0″ |
| 162S125-33 | 33 | 24 | 9′ 6″ | 7′ 7″ | 6′ 7″ | 7′ 10″ | 6′ 7″ | 5′ 9″ | 6′ 9″ | 6′ 0″ | 5′ 3″ |
| 250S125-18 | 33 | 12 | 12′ 6″ | 10′ 6″ | 9′ 2″ | 10′ 3″ | 9′ 2″ | 8′ 1″ | 8′ 10″ | 8′ 4″ | 7′ 4″ |
| 250S125-18 | 33 | 16 | 10′ 10″ | 9′ 7″ | 8′ 4″ | 8′ 10″ | 8′ 4″ | 7′ 4″ | 7′ 8″ | 7′ 7″ | 6′ 8″ |
| 250S125-18 | 33 | 24 | 8′ 10″ | 8′ 4″ | 7′ 4″ | 7′ 3″ e | 7′ 3″ e | 6′ 5″ | 6′ 3″ e | 6′ 3″ e | 5′ 10″ e |
| 250S125-27 | 33 | 12 | 15′ 7″ | 12′ 4″ | 10′ 10″ | 13′ 1″ | 10′ 10″ | 9′ 5″ | 11′ 4″ | 9′ 10″ | 8′ 7″ |
| 250S125-27 | 33 | 16 | 13′ 10″ | 11′ 3″ | 9′ 10″ | 11′ 4″ | 9′ 10″ | 8′ 7″ | 9′ 10″ | 8′ 11″ | 7′ 10″ |
| 250S125-27 | 33 | 24 | 11′ 4″ | 9′ 10″ | 8′ 7″ | 9′ 3″ | 8′ 7″ | 7′ 6″ | 8′ 0″ | 7′ 10″ | 6′ 10″ |
| 250S125-30 | 33 | 12 | 16′ 1″ | 12′ 9″ | 11′ 2″ | 13′ 11″ | 11′ 2″ | 9′ 9″ | 12′ 0″ | 10′ 2″ | 8′ 10″ |
| 250S125-30 | 33 | 16 | 14′ 7″ | 11′ 7″ | 10′ 2″ | 12′ 0″ | 10′ 2″ | 8′ 10″ | 10′ 5″ | 9′ 2″ | 8′ 1″ |
| 250S125-30 | 33 | 24 | 12′ 0″ | 10′ 2″ | 8′ 10″ | 9′ 10″ | 8′ 10″ | 7′ 9″ | 8′ 6″ | 8′ 1″ | 7′ 0″ |
| 250S125-33 | 33 | 12 | 16′ 7″ | 13′ 2″ | 11′ 6″ | 14′ 6″ | 11′ 6″ | 10′ 1″ | 12′ 10″ | 10′ 6″ | 9′ 2″ |
| 250S125-33 | 33 | 16 | 15′ 1″ | 12′ 0″ | 10′ 6″ | 12′ 10″ | 10′ 6″ | 9′ 2″ | 11′ 2″ | 9′ 6″ | 8′ 4″ |
| 250S125-33 | 33 | 24 | 12′ 10″ | 10′ 6″ | 9′ 2″ | 10′ 6″ | 9′ 2″ | 8′ 0″ | 9′ 1″ | 8′ 4″ | 7′ 3″ |
| 362S125-18 | 33 | 12 | 14′ 0″ | 14′ 0″ | 12′ 6″ | 11′ 6″ | 11′ 6″ | 10′ 11″ | 9′ 11″ e | 9′ 11″ e | 9′ 11″ e |
| 362S125-18 | 33 | 16 | 12′ 2″ | 12′ 2″ | 11′ 4″ | 9′ 11″ e | 9′ 11″ e | 9′ 11″ e | 8′ 7″ e | 8′ 7″ e | 8′ 7″ e |
| 362S125-18 | 33 | 24 | 9′ 11″ e | 9′ 11″ e | 9′ 11″ e | 8′ 1″ e | 8′ 1″ e | 8′ 1″ e | 7′ 0″ e | 7′ 0″ e | 7′ 0″ e |
| 362S125-27 | 33 | 12 | 18′ 10″ | 16′ 6″ | 14′ 5″ | 15′ 5″ | 14′ 5″ | 12′ 7″ | 13′ 4″ | 13′ 1″ | 11′ 5″ |
| 362S125-27 | 33 | 16 | 16′ 4″ | 15′ 0″ | 13′ 1″ | 13′ 4″ | 13′ 1″ | 11′ 5″ | 11′ 7″ | 11′ 7″ | 10′ 5″ |
| 362S125-27 | 33 | 24 | 13′ 4″ | 13′ 1″ | 11′ 5″ | 10′ 11″ | 10′ 11″ | 10′ 0″ | 9′ 5″ | 9′ 5″ | 9′ 1″ |
| 362S125-30 | 33 | 12 | 20′ 3″ | 17′ 0″ | 14′ 10″ | 16′ 7″ | 14′ 10″ | 13′ 0″ | 14′ 4″ | 13′ 6″ | 11′ 10″ |
| 362S125-30 | 33 | 16 | 17′ 7″ | 15′ 6″ | 13′ 6″ | 14′ 4″ | 13′ 6″ | 11′ 10″ | 12′ 5″ | 12′ 3″ | 10′ 9″ |
| 362S125-30 | 33 | 24 | 14′ 4″ | 13′ 6″ | 11′ 10″ | 11′ 8″ | 11′ 8″ | 10′ 4″ | 10′ 2″ | 10′ 2″ | 9′ 4″ |
| 362S125-33 | 33 | 12 | 21′ 11″ | 17′ 7″ | 15′ 4″ | 17′ 10″ | 15′ 4″ | 13′ 5″ | 15′ 6″ | 14′ 0″ | 12′ 2″ |
| 362S125-33 | 33 | 16 | 18′ 11″ | 16′ 0″ | 14′ 0″ | 15′ 6″ | 14′ 0″ | 12′ 2″ | 13′ 5″ | 12′ 8″ | 11′ 1″ |
| 362S125-33 | 33 | 24 | 15′ 6″ | 14′ 0″ | 12′ 2″ | 12′ 8″ | 12′ 2″ | 10′ 8″ | 10′ 11″ | 10′ 11″ | 9′ 8″ |
| 400S125-18 | 33 | 12 | 14′ 9″ e | 14′ 9″ e | 13′ 6″ e | 12′ 1″ e | 12′ 1″ e | 11′ 9″ e | 10′ 5″ e | 10′ 5″ e | 10′ 5″ e |
| 400S125-18 | 33 | 16 | 12′ 10″ e | 12′ 10″ e | 12′ 3″ e | 10′ 5″ e | 10′ 5″ e | 10′ 5″ e | 9′ 1″ e | 9′ 1″ e | 9′ 1″ e |
| 400S125-18 | 33 | 24 | 10′ 5″ e | 10′ 5″ e | 10′ 5″ e | 8′ 6″ e | 8′ 6″ e | 8′ 6″ e | 7′ 5″ e | 7′ 5″ e | 7′ 5″ e |
| 400S125-27 | 33 | 12 | 19′ 11″ | 17′ 10″ | 15′ 7″ | 16′ 3″ | 15′ 7″ | 13′ 7″ | 14′ 1″ | 14′ 1″ | 12′ 4″ |
| 400S125-27 | 33 | 16 | 17′ 3″ | 16′ 2″ | 14′ 2″ | 14′ 1″ | 14′ 1″ | 12′ 4″ | 12′ 2″ | 12′ 2″ | 11′ 3″ |
| 400S125-27 | 33 | 24 | 14′ 1″ | 14′ 1″ | 12′ 4″ | 11′ 6″ | 11′ 6″ | 10′ 9″ | 9′ 11″ | 9′ 11″ | 9′ 10″ |
| 400S125-30 | 33 | 12 | 21′ 5″ | 18′ 5″ | 16′ 1″ | 17′ 6″ | 16′ 1″ | 14′ 0″ | 15′ 2″ | 14′ 7″ | 12′ 9″ |
| 400S125-30 | 33 | 16 | 18′ 6″ | 16′ 8″ | 14′ 7″ | 15′ 2″ | 14′ 7″ | 12′ 9″ | 13′ 1″ | 13′ 1″ | 11′ 7″ |
| 400S125-30 | 33 | 24 | 15′ 2″ | 14′ 7″ | 12′ 9″ | 12′ 4″ | 12′ 4″ | 11′ 2″ | 10′ 8″ | 10′ 8″ | 10′ 1″ |
| 400S125-33 | 33 | 12 | 23′ 2″ | 19′ 0″ | 16′ 7″ | 18′ 11″ | 16′ 7″ | 14′ 6″ | 16′ 4″ | 15′ 1″ | 13′ 2″ |
| 400S125-33 | 33 | 16 | 20′ 0″ | 17′ 3″ | 15′ 1″ | 16′ 4″ | 15′ 1″ | 13′ 2″ | 14′ 2″ | 13′ 9″ | 12′ 0″ |
| 400S125-33 | 33 | 24 | 16′ 4″ | 15′ 1″ | 13′ 2″ | 13′ 4″ | 13′ 2″ | 11′ 6″ | 11′ 7″ | 11′ 7″ | 10′ 6″ |
| 600S125-27 | 33 | 12 | 26′ 8″ e | 24′ 4″ e | 21′ 3″ e | 21′ 10″ e | 21′ 3″ e | 18′ 7″ e | 18′ 11″ e | 18′ 11″ e | 16′ 10″ e |
| 600S125-27 | 33 | 16 | 23′ 2″ e | 22′ 1″ e | 19′ 4″ e | 18′ 11″ e | 18′ 11″ e | 16′ 10″ e | 16′ 4″ e | 16′ 4″ e | 15′ 4″ e |
| 600S125-27 | 33 | 24 | 18′ 11″ e | 18′ 11″ e | 16′ 10″ e | 15′ 5″ e | 15′ 5″ e | 14′ 9″ e | 13′ 4″ e | 13′ 4″ e | 13′ 4″ e |
| 600S125-30 | 33 | 12 | 28′ 10″ | 25′ 2″ | 22′ 0″ | 23′ 6″ | 22′ 0″ | 19′ 3″ | 20′ 4″ | 20′ 0″ | 17′ 6″ |
| 600S125-30 | 33 | 16 | 24′ 11″ | 22′ 11″ | 20′ 0″ | 20′ 4″ | 20′ 0″ | 17′ 6″ | 17′ 8″ | 17′ 8″ | 15′ 10″ |
| 600S125-30 | 33 | 24 | 20′ 4″ | 20′ 0″ | 17′ 6″ | 16′ 8″ e | 16′ 8″ e | 15′ 3″ | 14′ 5″ e | 14′ 5″ e | 13′ 10″ e |
| 600S125-33 | 33 | 12 | 31′ 2″ | 26′ 2″ | 22′ 10″ | 25′ 6″ | 22′ 10″ | 19′ 11″ | 22′ 1″ | 20′ 9″ | 18′ 1″ |
| 600S125-33 | 33 | 16 | 27′ 0″ | 23′ 9″ | 20′ 9″ | 22′ 1″ | 20′ 9″ | 18′ 1″ | 19′ 1″ | 18′ 10″ | 16′ 6″ |
| 600S125-33 | 33 | 24 | 22′ 1″ | 20′ 9″ | 18′ 1″ | 18′ 0″ | 18′ 0″ | 15′ 10″ | 15′ 7″ e | 15′ 7″ e | 14′ 5″ |
| 800S125-30 | 33 | 12 | 33′ 8″ e | 31′ 5″ e | 27′ 5″ e | 27′ 6″ e | 27′ 5″ e | 24′ 0″ e | 23′ 10″ e | 23′ 10″ e | 21′ 9″ e |
| 800S125-30 | 33 | 16 | 29′ 2″ e | 28′ 7″ e | 24′ 11″ e | 23′ 10″ e | 23′ 10″ e | 21′ 9″ e | 20′ 7″ e | 20′ 7″ e | 19′ 10″ e |
| 800S125-30 | 33 | 24 | 23′ 10″ e | 23′ 10″ e | 21′ 9″ e | 19′ 5″ e | 19′ 5″ e | 19′ 0″ e | 16′ 10″ e | 16′ 10″ e | 16′ 10″ e |
| 800S125-33 | 33 | 12 | 36′ 7″ e | 32′ 8″ e | 28′ 6″ e | 29′ 10″ e | 28′ 6″ e | 24′ 11″ e | 25′ 10″ e | 25′ 10″ e | 22′ 8″ e |
| 800S125-33 | 33 | 16 | 31′ 8″ e | 29′ 8″ e | 25′ 11″ e | 25′ 10″ e | 25′ 10″ e | 22′ 8″ e | 22′ 5″ e | 22′ 5″ e | 20′ 7″ e |
| 800S125-33 | 33 | 24 | 25′ 10″ e | 25′ 10″ e | 22′ 8″ e | 21′ 1″ e | 21′ 1″ e | 19′ 9″ e | 18′ 3″ e | 18′ 3″ e | 18′ 0″ e |

**NOTES**

- "e'" Requires web stiffeners at end supports
- Strength Multiplier = 1.0
- Deflection Multiplier =1.0
- Studs considered unpunched for web crippling and shear
- Limiting heights based on continous support of each flange over full length stud.
- 1 span

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# Structural, Non-composite Wall Height Tables Notes

1. Lateral loads have not been modified for strength checks nor have they been modified for deflection determination for 5, 7.5, & 10 psf loads.
2. Limiting heights based on continuous support of each flange over the full length of the stud.
3. Limiting heights are based on steel properties only (non-composite).
4. Web crippling check based on 1 inch end bearing. Where listed, limiting heights are followed by an "e", web stiffeners are required.

# Allowable Heights For Non-Axial Load Bearing Walls

| Member | Fy | Spacing | 5 psf | | | 15 psf | | | 20 psf | | | 25psf | | | 30 psf | | | 40 psf | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Section | Fy (ksi) | (in) oc | L/120 | L/240 | L/360 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 250S137-33 | 33 | 12 | 17' 6" | 13' 10" | 12' 1" | 10' 10" | 9' 5" | 8' 0" | 9' 10" | 8' 7" | 7' 3" | 9' 1" | 8' 0" | 6' 9" | 8' 4" | 7' 6" | 6' 4" | 7' 2" | 6' 10" | 5' 9" |
| 250S137-33 | 33 | 16 | 15' 10" | 12' 7" | 11' 0" | 9' 10" | 8' 7" | 7' 3" | 8' 10" | 7' 10" | 6' 7" | 7' 11" | 7' 3" | 6' 1" | 7' 2" | 6' 10" | 5' 9" | 6' 3" | 6' 2" | 5' 3" |
| 250S137-33 | 33 | 24 | 13' 10" | 11' 0" | 9' 7" | 8' 4" | 7' 6" | 6' 4" | 7' 2" | 6' 10" | 5' 9" | 6' 5" | 6' 4" | 5' 4" | 5' 11" e | 5' 11" e | 5' 0" | 5' 1" e | 5' 1" e | 4' 7" e |
| 250S162-33 | 33 | 12 | 18' 4" | 14' 7" | 12' 9" | 11' 4" | 9' 11" | 8' 5" | 10' 4" | 9' 0" | 7' 7" | 9' 7" | 8' 5" | 7' 1" | 8' 11" | 7' 11" | 6' 8" | 7' 8" | 7' 2" | 6' 0" |
| 250S162-33 | 33 | 16 | 16' 8" | 13' 3" | 11' 7" | 10' 4" | 9' 0" | 7' 7" | 9' 5" | 8' 2" | 6' 11" | 8' 5" | 7' 7" | 6' 5" | 7' 8" | 7' 2" | 6' 0" | 6' 8" e | 6' 6" e | 5' 6" |
| 250S162-33 | 33 | 24 | 14' 7" | 11' 7" | 10' 1" | 8' 11" | 7' 11" | 6' 8" | 7' 8" | 7' 2" | 6' 0" | 6' 11" | 6' 8" | 5' 7" | 6' 3" e | 6' 3" e | 5' 3" | 5' 5" e | 5' 5" e | 4' 10" e |
| 250S137-43 | 33 | 12 | 19' 0" | 15' 1" | 13' 2" | 11' 9" | 10' 3" | 8' 8" | 10' 8" | 9' 4" | 7' 10" | 9' 11" | 8' 8" | 7' 4" | 9' 4" | 8' 2" | 6' 11" | 8' 6" | 7' 5" | 6' 3" |
| 250S137-43 | 33 | 16 | 17' 3" | 13' 8" | 11' 11" | 10' 8" | 9' 4" | 7' 10" | 9' 9" | 8' 6" | 7' 2" | 9' 0" | 7' 10" | 6' 8" | 8' 6" | 7' 5" | 6' 3" | 7' 6" | 6' 9" | 5' 8" |
| 250S137-43 | 33 | 24 | 15' 1" | 11' 11" | 10' 5" | 9' 4" | 8' 2" | 6' 11" | 8' 6" | 7' 5" | 6' 3" | 7' 9" | 6' 11" | 5' 10" | 7' 1" | 6' 6" | 5' 6" | 6' 2" | 5' 11" | 5' 0" |
| 250S162-43 | 33 | 12 | 19' 11" | 15' 10" | 13' 10" | 12' 4" | 10' 10" | 9' 1" | 11' 3" | 9' 10" | 8' 3" | 10' 5" | 9' 1" | 7' 8" | 9' 10" | 8' 7" | 7' 3" | 8' 11" | 7' 9" | 6' 7" |
| 250S162-43 | 33 | 16 | 18' 1" | 14' 4" | 12' 7" | 11' 3" | 9' 10" | 8' 3" | 10' 2" | 8' 11" | 7' 6" | 9' 6" | 8' 3" | 7' 0" | 8' 11" | 7' 9" | 6' 7" | 8' 1" | 7' 1" | 6' 0" |
| 250S162-43 | 33 | 24 | 15' 10" | 12' 7" | 11' 0" | 9' 10" | 8' 7" | 7' 3" | 8' 11" | 7' 9" | 6' 7" | 8' 3" | 7' 3" | 6' 1" | 7' 7" | 6' 10" | 5' 9" | 6' 7" | 6' 2" | 5' 3" |
| 250S137-54 | 50 | 12 | 20' 3" | 16' 1" | 14' 1" | 12' 7" | 11' 0" | 9' 3" | 11' 5" | 10' 0" | 8' 5" | 10' 7" | 9' 3" | 7' 10" | 10' 0" | 8' 9" | 7' 4" | 9' 1" | 7' 11" | 6' 8" |
| 250S137-54 | 50 | 16 | 18' 5" | 14' 8" | 12' 9" | 11' 5" | 10' 0" | 8' 5" | 10' 5" | 9' 1" | 7' 8" | 9' 8" | 8' 5" | 7' 1" | 9' 1" | 7' 11" | 6' 8" | 8' 3" | 7' 2" | 6' 1" |
| 250S137-54 | 50 | 24 | 16' 1" | 12' 9" | 11' 2" | 10' 0" | 8' 9" | 7' 4" | 9' 1" | 7' 11" | 6' 8" | 8' 5" | 7' 4" | 6' 2" | 7' 11" | 6' 11" | 5' 10" | 7' 2" | 6' 3" | 5' 4" |
| 250S162-54 | 50 | 12 | 21' 4" | 16' 11" | 14' 9" | 13' 3" | 11' 7" | 9' 9" | 12' 0" | 10' 6" | 8' 10" | 11' 2" | 9' 9" | 8' 3" | 10' 6" | 9' 2" | 7' 9" | 9' 6" | 8' 4" | 7' 0" |
| 250S162-54 | 50 | 16 | 19' 4" | 15' 5" | 13' 5" | 12' 0" | 10' 6" | 8' 10" | 10' 11" | 9' 6" | 8' 0" | 10' 2" | 8' 10" | 7' 6" | 9' 6" | 8' 4" | 7' 0" | 8' 8" | 7' 7" | 6' 5" |
| 250S162-54 | 50 | 24 | 16' 11" | 13' 5" | 11' 9" | 10' 6" | 9' 2" | 7' 9" | 9' 6" | 8' 4" | 7' 0" | 8' 10" | 7' 9" | 6' 6" | 8' 4" | 7' 3" | 6' 2" | 7' 7" | 6' 7" | 5' 7" |
| 250S137-68 | 50 | 12 | 21' 8" | 17' 2" | 15' 0" | 13' 5" | 11' 9" | 9' 11" | 12' 2" | 10' 8" | 9' 0" | 11' 4" | 9' 11" | 8' 4" | 10' 8" | 9' 4" | 7' 10" | 9' 8" | 8' 5" | 7' 1" |
| 250S137-68 | 50 | 16 | 19' 8" | 15' 7" | 13' 7" | 12' 2" | 10' 8" | 9' 0" | 11' 1" | 9' 8" | 8' 2" | 10' 3" | 9' 0" | 7' 7" | 9' 8" | 8' 5" | 7' 1" | 8' 9" | 7' 8" | 6' 6" |
| 250S137-68 | 50 | 24 | 17' 2" | 13' 7" | 11' 11" | 10' 8" | 9' 4" | 7' 10" | 9' 8" | 8' 5" | 7' 1" | 9' 0" | 7' 10" | 6' 7" | 8' 5" | 7' 5" | 6' 3" | 7' 8" | 6' 8" | 5' 8" |
| 250S162-68 | 50 | 12 | 22' 9" | 18' 1" | 15' 9" | 14' 1" | 12' 4" | 10' 5" | 12' 10" | 11' 2" | 9' 5" | 11' 11" | 10' 5" | 8' 9" | 11' 2" | 9' 9" | 8' 3" | 10' 2" | 8' 11" | 7' 6" |
| 250S162-68 | 50 | 16 | 20' 8" | 16' 5" | 14' 4" | 12' 10" | 11' 2" | 9' 5" | 11' 8" | 10' 2" | 8' 7" | 10' 10" | 9' 5" | 8' 0" | 10' 2" | 8' 11" | 7' 6" | 9' 3" | 8' 1" | 6' 10" |
| 250S162-68 | 50 | 24 | 18' 1" | 14' 4" | 12' 6" | 11' 2" | 9' 9" | 8' 3" | 10' 2" | 8' 11" | 7' 6" | 9' 5" | 8' 3" | 7' 0" | 8' 11" | 7' 9" | 6' 7" | 8' 1" | 7' 1" | 5' 11" |
| 250S137-97 | 50 | 12 | 23' 8" | 18' 10" | 16' 5" | 14' 8" | 12' 10" | 10' 10" | 13' 4" | 11' 8" | 9' 10" | 12' 5" | 10' 10" | 9' 1" | 11' 8" | 10' 2" | 8' 7" | 10' 7" | 9' 3" | 7' 10" |
| 250S137-97 | 50 | 16 | 21' 6" | 17' 1" | 14' 11" | 13' 4" | 11' 8" | 9' 10" | 12' 1" | 10' 7" | 8' 11" | 11' 3" | 9' 10" | 8' 3" | 10' 7" | 9' 3" | 7' 10" | 9' 7" | 8' 5" | 7' 1" |
| 250S137-97 | 50 | 24 | 18' 10" | 14' 11" | 13' 0" | 11' 8" | 10' 2" | 8' 7" | 10' 7" | 9' 3" | 7' 10" | 9' 10" | 8' 7" | 7' 3" | 9' 3" | 8' 1" | 6' 10" | 8' 5" | 7' 4" | 6' 2" |
| 250S162-97 | 50 | 12 | 25' 0" | 19' 10" | 17' 4" | 15' 6" | 13' 6" | 11' 5" | 14' 1" | 12' 4" | 10' 5" | 13' 1" | 11' 5" | 9' 8" | 12' 4" | 10' 9" | 9' 1" | 11' 2" | 9' 9" | 8' 3" |
| 250S162-97 | 50 | 16 | 22' 9" | 18' 0" | 15' 9" | 14' 1" | 12' 4" | 10' 5" | 12' 10" | 11' 2" | 9' 5" | 11' 11" | 10' 5" | 8' 9" | 11' 2" | 9' 9" | 8' 3" | 10' 2" | 8' 10" | 7' 6" |
| 250S162-97 | 50 | 24 | 19' 10" | 15' 9" | 13' 9" | 12' 4" | 10' 9" | 9' 1" | 11' 2" | 9' 9" | 8' 3" | 10' 5" | 9' 1" | 7' 8" | 9' 9" | 8' 6" | 7' 2" | 8' 10" | 7' 9" | 6' 6" |
| 350S137-33 | 33 | 12 | 22' 7" | 17' 11" | 15' 8" | 14' 0" | 12' 3" | 10' 4" | 12' 2" | 11' 2" | 9' 5" | 10' 10" | 10' 4" | 8' 9" | 9' 11" | 9' 9" | 8' 2" | 8' 7" e | 8' 7" e | 7' 5" |
| 350S137-33 | 33 | 16 | 20' 7" | 16' 4" | 14' 3" | 12' 2" | 11' 2" | 9' 5" | 10' 6" | 10' 1" | 8' 6" | 9' 5" | 9' 5" | 7' 11" | 8' 7" e | 8' 7" e | 7' 5" | 7' 5" e | 7' 5" e | 6' 9" e |
| 350S137-33 | 33 | 24 | 17' 2" | 14' 3" | 12' 5" | 9' 11" | 9' 9" | 8' 2" | 8' 7" e | 8' 7" e | 7' 5" | 7' 8" e | 7' 8" e | 6' 11" e | 7' 0" e | 7' 0" e | 6' 6" e | 6' 1" e | 6' 1" e | 5' 11" e |
| 350S162-33 | 33 | 12 | 23' 9" | 18' 10" | 16' 5" | 14' 8" | 12' 10" | 10' 10" | 13' 0" | 11' 8" | 9' 10" | 11' 8" | 10' 10" | 9' 2" | 10' 8" | 10' 2" | 8' 7" | 9' 2" e | 9' 2" e | 7' 10" |
| 350S162-33 | 33 | 16 | 21' 7" | 17' 1" | 14' 11" | 13' 0" | 11' 8" | 9' 10" | 11' 3" | 10' 7" | 8' 11" | 10' 1" e | 9' 10" | 8' 4" | 9' 2" e | 9' 2" e | 7' 10" | 8' 0" e | 8' 0" e | 7' 1" e |
| 350S162-33 | 33 | 24 | 18' 5" | 14' 11" | 13' 1" | 10' 8" | 10' 2" | 8' 7" | 9' 2" e | 9' 2" e | 7' 10" | 8' 3" e | 8' 3" e | 7' 3" e | 7' 6" e | 7' 6" e | 6' 10" e | 6' 6" e | 6' 6" e | 6' 2" e |
| 350S137-43 | 33 | 12 | 24' 7" | 19' 6" | 17' 1" | 15' 3" | 13' 4" | 11' 3" | 13' 10" | 12' 1" | 10' 2" | 12' 9" | 11' 3" | 9' 6" | 11' 7" | 10' 7" | 8' 11" | 10' 1" | 9' 7" | 8' 1" |
| 350S137-43 | 33 | 16 | 22' 4" | 17' 9" | 15' 6" | 13' 10" | 12' 1" | 10' 2" | 12' 4" | 11' 0" | 9' 3" | 11' 0" | 10' 2" | 8' 7" | 10' 1" | 9' 7" | 8' 1" | 8' 9" | 8' 9" | 7' 4" |
| 350S137-43 | 33 | 24 | 19' 6" | 15' 6" | 13' 6" | 11' 7" | 10' 7" | 8' 11" | 10' 1" | 9' 7" | 8' 1" | 9' 0" | 8' 11" | 7' 6" | 8' 3" | 8' 3" | 7' 1" | 7' 1" e | 7' 1" e | 6' 5" |
| 350S162-43 | 33 | 12 | 25' 10" | 20' 6" | 17' 11" | 16' 0" | 14' 0" | 11' 9" | 14' 6" | 12' 8" | 10' 8" | 13' 6" | 11' 9" | 9' 11" | 12' 6" | 11' 1" | 9' 4" | 10' 10" | 10' 1" | 8' 6" |
| 350S162-43 | 33 | 16 | 23' 5" | 18' 7" | 16' 3" | 14' 6" | 12' 8" | 10' 8" | 13' 2" | 11' 6" | 9' 9" | 11' 10" | 10' 8" | 9' 0" | 10' 10" | 10' 1" | 8' 6" | 9' 5" | 9' 2" | 7' 9" |
| 350S162-43 | 33 | 24 | 20' 6" | 16' 3" | 14' 2" | 12' 6" | 11' 1" | 9' 4" | 10' 10" | 10' 1" | 8' 6" | 9' 8" | 9' 4" | 7' 11" | 8' 10" | 8' 10" | 7' 5" | 7' 8" e | 7' 8" e | 6' 9" |
| 350S137-54 | 50 | 12 | 26' 4" | 20' 11" | 18' 3" | 16' 4" | 14' 3" | 12' 0" | 14' 10" | 12' 11" | 10' 11" | 13' 9" | 12' 0" | 10' 2" | 12' 11" | 11' 4" | 9' 7" | 11' 9" | 10' 3" | 8' 8" |
| 350S137-54 | 50 | 16 | 23' 11" | 19' 0" | 16' 7" | 14' 10" | 12' 11" | 10' 11" | 13' 6" | 11' 9" | 9' 11" | 12' 6" | 10' 11" | 9' 3" | 11' 9" | 10' 3" | 8' 8" | 10' 8" | 9' 4" | 7' 11" |
| 350S137-54 | 50 | 24 | 20' 11" | 16' 7" | 14' 6" | 12' 11" | 11' 4" | 9' 7" | 11' 9" | 10' 3" | 8' 8" | 10' 11" | 9' 7" | 8' 1" | 10' 3" | 9' 0" | 7' 7" | 9' 4" | 8' 2" | 6' 11" |
| 350S162-54 | 50 | 12 | 27' 8" | 21' 11" | 19' 2" | 17' 1" | 15' 0" | 12' 7" | 15' 7" | 13' 7" | 11' 6" | 14' 5" | 12' 7" | 10' 8" | 13' 7" | 11' 10" | 10' 0" | 12' 4" | 10' 9" | 9' 1" |
| 350S162-54 | 50 | 16 | 25' 1" | 19' 11" | 17' 5" | 15' 7" | 13' 7" | 11' 6" | 14' 2" | 12' 4" | 10' 5" | 13' 1" | 11' 6" | 9' 8" | 12' 4" | 10' 9" | 9' 1" | 11' 3" | 9' 10" | 8' 3" |
| 350S162-54 | 50 | 24 | 21' 11" | 17' 5" | 15' 2" | 13' 7" | 11' 10" | 10' 0" | 12' 4" | 10' 9" | 9' 1" | 11' 6" | 10' 0" | 8' 5" | 10' 9" | 9' 5" | 7' 11" | 9' 10" | 8' 7" | 7' 3" |
| 350S137-68 | 50 | 12 | 28' 2" | 22' 4" | 19' 6" | 17' 5" | 15' 3" | 12' 10" | 15' 10" | 13' 10" | 11' 8" | 14' 8" | 12' 10" | 10' 10" | 13' 10" | 12' 1" | 10' 2" | 12' 7" | 11' 0" | 9' 3" |
| 350S137-68 | 50 | 16 | 25' 7" | 20' 3" | 17' 9" | 15' 10" | 13' 10" | 11' 8" | 14' 5" | 12' 7" | 10' 7" | 13' 4" | 11' 8" | 9' 10" | 12' 7" | 11' 0" | 9' 3" | 11' 5" | 10' 0" | 8' 5" |
| 350S137-68 | 50 | 24 | 22' 4" | 17' 9" | 15' 6" | 13' 10" | 12' 1" | 10' 2" | 12' 7" | 11' 0" | 9' 3" | 11' 8" | 10' 2" | 8' 7" | 11' 0" | 9' 7" | 8' 1" | 10' 0" | 8' 9" | 7' 4" |
| 350S162-68 | 50 | 12 | 29' 7" | 23' 5" | 20' 6" | 18' 4" | 16' 0" | 13' 6" | 16' 8" | 14' 6" | 12' 3" | 15' 5" | 13' 6" | 11' 5" | 14' 6" | 12' 8" | 10' 9" | 13' 3" | 11' 6" | 9' 9" |
| 350S162-68 | 50 | 16 | 26' 10" | 21' 4" | 18' 7" | 16' 8" | 14' 6" | 12' 3" | 15' 1" | 13' 3" | 11' 2" | 14' 0" | 12' 3" | 10' 4" | 13' 3" | 11' 6" | 9' 9" | 12' 0" | 10' 6" | 8' 10" |
| 350S162-68 | 50 | 24 | 23' 5" | 18' 7" | 16' 3" | 14' 6" | 12' 8" | 10' 9" | 13' 3" | 11' 6" | 9' 9" | 12' 3" | 10' 9" | 9' 0" | 11' 6" | 10' 1" | 8' 6" | 10' 6" | 9' 2" | 7' 9" |
| 350S137-97 | 50 | 12 | 30' 11" | 24' 7" | 21' 5" | 19' 2" | 16' 9" | 14' 2" | 17' 5" | 15' 3" | 12' 10" | 16' 2" | 14' 2" | 11' 11" | 15' 3" | 13' 4" | 11' 3" | 13' 10" | 12' 1" | 10' 2" |
| 350S137-97 | 50 | 16 | 28' 1" | 22' 4" | 19' 6" | 17' 5" | 15' 3" | 12' 10" | 15' 10" | 13' 10" | 11' 8" | 14' 8" | 12' 10" | 10' 10" | 13' 10" | 12' 1" | 10' 2" | 12' 7" | 11' 0" | 9' 3" |
| 350S137-97 | 50 | 24 | 24' 7" | 19' 6" | 17' 0" | 15' 3" | 13' 4" | 11' 3" | 13' 10" | 12' 1" | 10' 2" | 12' 10" | 11' 3" | 9' 6" | 12' 1" | 10' 7" | 8' 11" | 11' 0" | 9' 7" | 8' 1" |
| 350S162-97 | 50 | 12 | 32' 7" | 25' 10" | 22' 7" | 20' 2" | 17' 8" | 14' 11" | 18' 4" | 16' 0" | 13' 6" | 17' 0" | 14' 11" | 12' 7" | 16' 0" | 14' 0" | 11' 10" | 14' 7" | 12' 9" | 10' 9" |
| 350S162-97 | 50 | 16 | 29' 7" | 23' 6" | 20' 6" | 18' 4" | 16' 0" | 13' 6" | 16' 8" | 14' 7" | 12' 3" | 15' 6" | 13' 6" | 11' 5" | 14' 7" | 12' 9" | 10' 9" | 13' 3" | 11' 7" | 9' 9" |
| 350S162-97 | 50 | 24 | 25' 10" | 20' 6" | 17' 11" | 16' 0" | 14' 0" | 11' 10" | 14' 7" | 12' 9" | 10' 9" | 13' 6" | 11' 10" | 10' 0" | 12' 9" | 11' 1" | 9' 5" | 11' 7" | 10' 1" | 8' 6" |
| 362S137-33 | 33 | 12 | 23' 3" | 18' 5" | 16' 1" | 14' 3" | 12' 7" | 10' 7" | 12' 4" | 11' 5" | 9' 8" | 11' 1" | 10' 7" | 8' 11" | 10' 1" | 10' 0" | 8' 5" | 8' 9" e | 8' 9" e | 7' 8" |
| 362S137-33 | 33 | 16 | 21' 1" | 16' 9" | 14' 8" | 12' 4" | 11' 5" | 9' 8" | 10' 9" | 10' 5" | 8' 9" | 9' 7" | 9' 7" | 8' 2" | 8' 9" e | 8' 9" e | 7' 8" | 7' 7" e | 7' 7" e | 6' 11" e |
| 362S137-33 | 33 | 24 | 17' 6" | 14' 8" | 12' 10" | 10' 1" | 10' 0" | 8' 5" | 8' 9" e | 8' 9" e | 7' 8" | 7' 10" e | 7' 10" e | 7' 1" e | 7' 2" e | 7' 2" e | 6' 8" e | 6' 2" e | 6' 2" e | 6' 1" e |
| 362S162-33 | 33 | 12 | 24' 4" | 19' 4" | 16' 11" | 15' 1" | 13' 2" | 11' 1" | 13' 3" | 12' 0" | 10' 1" | 11' 11" | 11' 1" | 9' 5" | 10' 10" | 10' 6" | 8' 10" | 9' 5" e | 9' 5" e | 8' 0" |
| 362S162-33 | 33 | 16 | 22' 2" | 17' 7" | 15' 4" | 13' 3" | 12' 0" | 10' 1" | 11' 6" | 10' 11" | 9' 2" | 10' 3" e | 10' 1" e | 8' 6" | 9' 5" e | 9' 5" e | 8' 0" | 8' 2" e | 8' 2" e | 7' 3" e |
| 362S162-33 | 33 | 24 | 18' 9" | 15' 4" | 13' 5" | 10' 10" | 10' 6" | 8' 10" | 9' 5" e | 9' 5" e | 8' 0" | 8' 5" e | 8' 5" e | 7' 5" e | 7' 8" e | 7' 8" e | 7' 0" e | 6' 8" e | 6' 8" e | 6' 4" e |
| 362S200-33 | 33 | 12 | 25' 8" | 20' 5" | 17' 10" | 15' 11" | 13' 11" | 11' 9" | 13' 11" | 12' 8" | 10' 8" | 12' 5" | 11' 9" | 9' 11" | 11' 4" e | 11' 1" e | 9' 4" | 9' 10" e | 9' 10" e | 8' 6" e |
| 362S200-33 | 33 | 16 | 23' 4" | 18' 6" | 16' 2" | 13' 11" | 12' 8" | 10' 8" | 12' 1" | 11' 6" | 9' 8" | 10' 9" e | 10' 8" e | 9' 0" | 9' 10" e | 9' 10" e | 8' 6" e | 8' 6" e | 8' 6" e | 7' 8" e |
| 362S200-33 | 33 | 24 | 19' 8" | 16' 2" | 14' 2" | 11' 4" e | 11' 1" e | 9' 4" | 9' 10" e | 9' 10" e | 8' 6" e | 8' 10" e | 8' 10" e | 7' 10" e | 8' 0" e | 8' 0" e | 7' 5" e | 7' 0" e | 7' 0" e | 6' 9" e |
| 362S137-43 | 33 | 12 | 25' 3" | 20' 1" | 17' 6" | 15' 8" | 13' 8" | 11' 7" | 14' 3" | 12' 5" | 10' 6" | 13' 0" | 11' 7" | 9' 9" | 11' 10" | 10' 10" | 9' 2" | 10' 3" | 9' 10" | 8' 4" |
| 362S137-43 | 33 | 16 | 23' 0" | 18' 3" | 15' 11" | 14' 3" | 12' 5" | 10' 6" | 12' 7" | 11' 4" | 9' 6" | 11' 3" | 10' 6" | 8' 10" | 10' 3" | 9' 10" | 8' 4" | 8' 11" | 8' 11" | 7' 7" |
| 362S137-43 | 33 | 24 | 20' 1" | 15' 11" | 13' 11" | 11' 10" | 10' 10" | 9' 2" | 10' 3" | 9' 10" | 8' 4" | 9' 2" | 9' 2" | 7' 9" | 8' 5" | 8' 5" | 7' 3" | 7' 3" e | 7' 3" e | 6' 7" |
| 362S162-43 | 33 | 12 | 26' 6" | 21' 0" | 18' 4" | 16' 5" | 14' 4" | 12' 1" | 14' 11" | 13' 0" | 11' 0" | 13' 10" | 12' 1" | 10' 2" | 12' 9" | 11' 5" | 9' 7" | 11' 1" | 10' 4" | 8' 9" |
| 362S162-43 | 33 | 16 | 24' 1" | 19' 1" | 16' 8" | 14' 11" | 13' 0" | 11' 0" | 13' 7" | 11' 10" | 10' 0" | 12' 1" | 11' 0" | 9' 3" | 11' 1" | 10' 4" | 8' 9" | 9' 7" | 9' 5" | 7' 11" |
| 362S162-43 | 33 | 24 | 21' 0" | 16' 8" | 14' 7" | 12' 9" | 11' 5" | 9' 7" | 11' 1" | 10' 4" | 8' 9" | 9' 11" | 9' 7" | 8' 1" | 9' 0" | 9' 0" | 7' 7" | 7' 10" e | 7' 10" e | 6' 11" e |
| 362S200-43 | 33 | 12 | 28' 0" | 22' 3" | 19' 5" | 17' 4" | 15' 2" | 12' 9" | 15' 9" | 13' 9" | 11' 7" | 14' 8" | 12' 9" | 10' 9" | 13' 8" | 12' 0" | 10' 2" | 11' 10" | 10' 11" | 9' 3" |
| 362S200-43 | 33 | 16 | 25' 5" | 20' 2" | 17' 8" | 15' 9" | 13' 9" | 11' 7" | 14' 4" | 12' 6" | 10' 7" | 13' 0" | 11' 7" | 9' 10" | 11' 10" | 10' 11" | 9' 3" | 10' 3" | 9' 11" | 8' 4" |
| 362S200-43 | 33 | 24 | 22' 3" | 17' 8" | 15' 5" | 13' 8" | 12' 0" | 10' 2" | 11' 10" | 10' 11" | 9' 3" | 10' 7" | 10' 2" | 8' 7" | 9' 8" e | 9' 7" e | 8' 1" | 8' 5" e | 8' 5" e | 7' 4" e |

**NOTES**

- "e'" Requires web stiffeners at end supports
- Strength Multiplier = 1.0
- Deflection Multiplier =1.0
- Studs considered unpunched for web crippling and shear
- Limiting heights based on continous support of each flange over full length stud.
- 1 span

# Allowable Heights for Non-Axial Load Bearings Walls (Continued)

| Member | Fy | Spacing | 5 psf | | | 15 psf | | | 20 psf | | | 25psf | | | 30 psf | | | 40 psf | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Section | Fy (ksi) | (in) oc | L/120 | L/240 | L/360 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 350S137-54 | 50 | 12 | 26′ 4″ | 20′ 11″ | 18′ 3″ | 16′ 4″ | 14′ 3″ | 12′ 0″ | 14′ 10″ | 12′ 11″ | 10′ 11″ | 13′ 9″ | 12′ 0″ | 10′ 2″ | 12′ 11″ | 11′ 4″ | 9′ 7″ | 11′ 9″ | 10′ 3″ | 8′ 8″ |
| 350S137-54 | 50 | 16 | 23′ 11″ | 19′ 0″ | 16′ 7″ | 14′ 10″ | 12′ 11″ | 10′ 11″ | 13′ 6″ | 11′ 9″ | 9′ 11″ | 12′ 6″ | 10′ 11″ | 9′ 3″ | 11′ 9″ | 10′ 3″ | 8′ 8″ | 10′ 8″ | 9′ 4″ | 7′ 11″ |
| 350S137-54 | 50 | 24 | 20′ 11″ | 16′ 7″ | 14′ 6″ | 12′ 11″ | 11′ 4″ | 9′ 7″ | 11′ 9″ | 10′ 3″ | 8′ 8″ | 10′ 11″ | 9′ 7″ | 8′ 1″ | 10′ 3″ | 9′ 0″ | 7′ 7″ | 9′ 4″ | 8′ 2″ | 6′ 11″ |
| 350S162-54 | 50 | 12 | 27′ 8″ | 21′ 11″ | 19′ 2″ | 17′ 1″ | 15′ 0″ | 12′ 7″ | 15′ 7″ | 13′ 7″ | 11′ 6″ | 14′ 5″ | 12′ 7″ | 10′ 8″ | 13′ 7″ | 11′ 10″ | 10′ 0″ | 12′ 4″ | 10′ 9″ | 9′ 1″ |
| 350S162-54 | 50 | 16 | 25′ 1″ | 19′ 11″ | 17′ 5″ | 15′ 7″ | 13′ 7″ | 11′ 6″ | 14′ 2″ | 12′ 4″ | 10′ 5″ | 13′ 1″ | 11′ 6″ | 9′ 8″ | 12′ 4″ | 10′ 9″ | 9′ 1″ | 11′ 3″ | 9′ 10″ | 8′ 3″ |
| 350S162-54 | 50 | 24 | 21′ 11″ | 17′ 5″ | 15′ 2″ | 13′ 7″ | 11′ 10″ | 10′ 0″ | 12′ 4″ | 10′ 9″ | 9′ 1″ | 11′ 6″ | 10′ 0″ | 8′ 5″ | 10′ 9″ | 9′ 5″ | 7′ 11″ | 9′ 10″ | 8′ 7″ | 7′ 3″ |
| 350S137-68 | 50 | 12 | 28′ 2″ | 22′ 4″ | 19′ 6″ | 17′ 5″ | 15′ 3″ | 12′ 10″ | 15′ 10″ | 13′ 10″ | 11′ 8″ | 14′ 8″ | 12′ 10″ | 10′ 10″ | 13′ 10″ | 12′ 1″ | 10′ 2″ | 12′ 7″ | 11′ 0″ | 9′ 3″ |
| 350S137-68 | 50 | 16 | 25′ 7″ | 20′ 3″ | 17′ 9″ | 15′ 10″ | 13′ 10″ | 11′ 8″ | 14′ 5″ | 12′ 7″ | 10′ 7″ | 13′ 4″ | 11′ 8″ | 9′ 10″ | 12′ 7″ | 11′ 0″ | 9′ 3″ | 11′ 5″ | 10′ 0″ | 8′ 5″ |
| 350S137-68 | 50 | 24 | 22′ 4″ | 17′ 9″ | 15′ 6″ | 13′ 10″ | 12′ 1″ | 10′ 2″ | 12′ 7″ | 11′ 0″ | 9′ 3″ | 11′ 8″ | 10′ 2″ | 8′ 7″ | 11′ 0″ | 9′ 7″ | 8′ 1″ | 10′ 0″ | 8′ 9″ | 7′ 4″ |
| 350S162-68 | 50 | 12 | 29′ 7″ | 23′ 5″ | 20′ 6″ | 18′ 4″ | 16′ 0″ | 13′ 6″ | 16′ 8″ | 14′ 6″ | 12′ 3″ | 15′ 5″ | 13′ 6″ | 11′ 5″ | 14′ 6″ | 12′ 8″ | 10′ 9″ | 13′ 3″ | 11′ 6″ | 9′ 9″ |
| 350S162-68 | 50 | 16 | 26′ 10″ | 21′ 4″ | 18′ 7″ | 16′ 8″ | 14′ 6″ | 12′ 3″ | 15′ 1″ | 13′ 3″ | 11′ 2″ | 14′ 0″ | 12′ 3″ | 10′ 4″ | 13′ 3″ | 11′ 6″ | 9′ 9″ | 12′ 0″ | 10′ 6″ | 8′ 10″ |
| 350S162-68 | 50 | 24 | 23′ 5″ | 18′ 7″ | 16′ 3″ | 14′ 6″ | 12′ 8″ | 10′ 9″ | 13′ 3″ | 11′ 6″ | 9′ 9″ | 12′ 3″ | 10′ 9″ | 9′ 0″ | 11′ 6″ | 10′ 1″ | 8′ 6″ | 10′ 6″ | 9′ 2″ | 7′ 9″ |
| 350S137-97 | 50 | 12 | 30′ 11″ | 24′ 7″ | 21′ 5″ | 19′ 2″ | 16′ 9″ | 14′ 2″ | 17′ 5″ | 15′ 3″ | 12′ 10″ | 16′ 2″ | 14′ 2″ | 11′ 11″ | 15′ 3″ | 13′ 4″ | 11′ 3″ | 13′ 10″ | 12′ 1″ | 10′ 2″ |
| 350S137-97 | 50 | 16 | 28′ 1″ | 22′ 4″ | 19′ 6″ | 17′ 5″ | 15′ 3″ | 12′ 10″ | 15′ 10″ | 13′ 10″ | 11′ 8″ | 14′ 8″ | 12′ 10″ | 10′ 10″ | 13′ 10″ | 12′ 1″ | 10′ 2″ | 12′ 7″ | 11′ 0″ | 9′ 3″ |
| 350S137-97 | 50 | 24 | 24′ 7″ | 19′ 6″ | 17′ 0″ | 15′ 3″ | 13′ 4″ | 11′ 3″ | 13′ 10″ | 12′ 1″ | 10′ 2″ | 12′ 10″ | 11′ 3″ | 9′ 6″ | 12′ 1″ | 10′ 7″ | 8′ 11″ | 11′ 0″ | 9′ 7″ | 8′ 1″ |
| 350S162-97 | 50 | 12 | 32′ 7″ | 25′ 10″ | 22′ 7″ | 20′ 2″ | 17′ 8″ | 14′ 11″ | 18′ 4″ | 16′ 0″ | 13′ 6″ | 17′ 0″ | 14′ 11″ | 12′ 7″ | 16′ 0″ | 14′ 0″ | 11′ 10″ | 14′ 7″ | 12′ 9″ | 10′ 9″ |
| 350S162-97 | 50 | 16 | 29′ 7″ | 23′ 6″ | 20′ 6″ | 18′ 4″ | 16′ 0″ | 13′ 6″ | 16′ 8″ | 14′ 7″ | 12′ 3″ | 15′ 6″ | 13′ 6″ | 11′ 5″ | 14′ 7″ | 12′ 9″ | 10′ 9″ | 13′ 3″ | 11′ 7″ | 9′ 9″ |
| 350S162-97 | 50 | 24 | 25′ 10″ | 20′ 6″ | 17′ 11″ | 16′ 0″ | 14′ 0″ | 11′ 10″ | 14′ 7″ | 12′ 9″ | 10′ 9″ | 13′ 6″ | 11′ 10″ | 10′ 0″ | 12′ 9″ | 11′ 1″ | 9′ 5″ | 11′ 7″ | 10′ 1″ | 8′ 6″ |
| 362S137-33 | 33 | 12 | 23′ 3″ | 18′ 5″ | 16′ 1″ | 14′ 3″ | 12′ 7″ | 10′ 7″ | 12′ 4″ | 11′ 5″ | 9′ 8″ | 11′ 1″ | 10′ 7″ | 8′ 11″ | 10′ 1″ | 10′ 0″ | 8′ 5″ | 8′ 9″ e | 8′ 9″ e | 7′ 8″ |
| 362S137-33 | 33 | 16 | 21′ 1″ | 16′ 9″ | 14′ 8″ | 12′ 4″ | 11′ 5″ | 9′ 8″ | 10′ 9″ | 10′ 5″ | 8′ 9″ | 9′ 7″ | 9′ 7″ | 8′ 2″ | 8′ 9″ e | 8′ 9″ e | 7′ 8″ | 7′ 7″ e | 7′ 7″ e | 6′ 11″ e |
| 362S137-33 | 33 | 24 | 17′ 6″ | 14′ 8″ | 12′ 10″ | 10′ 1″ | 10′ 0″ | 8′ 5″ | 8′ 9″ e | 8′ 9″ e | 7′ 8″ | 7′ 10″ e | 7′ 10″ e | 7′ 1″ e | 7′ 2″ e | 7′ 2″ e | 6′ 8″ e | 6′ 2″ e | 6′ 2″ e | 6′ 1″ e |
| 362S162-33 | 33 | 12 | 24′ 4″ | 19′ 4″ | 16′ 11″ | 15′ 1″ | 13′ 2″ | 11′ 1″ | 13′ 3″ | 12′ 0″ | 10′ 1″ | 11′ 11″ | 11′ 1″ | 9′ 5″ | 10′ 10″ | 10′ 6″ | 8′ 10″ | 9′ 5″ e | 9′ 5″ e | 8′ 0″ |
| 362S162-33 | 33 | 16 | 22′ 2″ | 17′ 7″ | 15′ 4″ | 13′ 3″ | 12′ 0″ | 10′ 1″ | 11′ 6″ | 10′ 11″ | 9′ 2″ | 10′ 3″ e | 10′ 1″ e | 8′ 6″ | 9′ 5″ e | 9′ 5″ e | 8′ 0″ | 8′ 2″ e | 8′ 2″ e | 7′ 3″ e |
| 362S162-33 | 33 | 24 | 18′ 9″ | 15′ 4″ | 13′ 5″ | 10′ 10″ | 10′ 6″ | 8′ 10″ | 9′ 5″ e | 9′ 5″ e | 8′ 0″ | 8′ 5″ e | 8′ 5″ e | 7′ 5″ e | 7′ 8″ e | 7′ 8″ e | 7′ 0″ e | 6′ 8″ e | 6′ 8″ e | 6′ 4″ e |
| 362S200-33 | 33 | 12 | 25′ 8″ | 20′ 5″ | 17′ 10″ | 15′ 11″ | 13′ 11″ | 11′ 9″ | 13′ 11″ | 12′ 8″ | 10′ 8″ | 12′ 5″ | 11′ 9″ | 9′ 11″ | 11′ 4″ e | 11′ 1″ e | 9′ 4″ | 9′ 10″ e | 9′ 10″ e | 8′ 6″ e |
| 362S200-33 | 33 | 16 | 23′ 4″ | 18′ 6″ | 16′ 2″ | 13′ 11″ | 12′ 8″ | 10′ 8″ | 12′ 1″ | 11′ 6″ | 9′ 8″ | 10′ 9″ e | 10′ 8″ e | 9′ 0″ | 9′ 10″ e | 9′ 10″ e | 8′ 6″ e | 8′ 6″ e | 8′ 6″ e | 7′ 8″ e |
| 362S200-33 | 33 | 24 | 19′ 8″ | 16′ 2″ | 14′ 2″ | 11′ 4″ e | 11′ 1″ e | 9′ 4″ | 9′ 10″ e | 9′ 10″ e | 8′ 6″ e | 8′ 10″ e | 8′ 10″ e | 7′ 10″ e | 8′ 0″ e | 8′ 0″ e | 7′ 5″ e | 7′ 0″ e | 7′ 0″ e | 6′ 9″ e |
| 362S137-43 | 33 | 12 | 25′ 3″ | 20′ 1″ | 17′ 6″ | 15′ 8″ | 13′ 8″ | 11′ 7″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 13′ 0″ | 11′ 7″ | 9′ 9″ | 11′ 10″ | 10′ 10″ | 9′ 2″ | 10′ 3″ | 9′ 10″ | 8′ 4″ |
| 362S137-43 | 33 | 16 | 23′ 0″ | 18′ 3″ | 15′ 11″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 12′ 7″ | 11′ 4″ | 9′ 6″ | 11′ 3″ | 10′ 6″ | 8′ 10″ | 10′ 3″ | 9′ 10″ | 8′ 4″ | 8′ 11″ | 8′ 11″ | 7′ 7″ |
| 362S137-43 | 33 | 24 | 20′ 1″ | 15′ 11″ | 13′ 11″ | 11′ 10″ | 10′ 10″ | 9′ 2″ | 10′ 3″ | 9′ 10″ | 8′ 4″ | 9′ 2″ | 9′ 2″ | 7′ 9″ | 8′ 5″ | 8′ 5″ | 7′ 3″ | 7′ 3″ e | 7′ 3″ e | 6′ 7″ |
| 362S162-43 | 33 | 12 | 26′ 6″ | 21′ 0″ | 18′ 4″ | 16′ 5″ | 14′ 4″ | 12′ 1″ | 14′ 11″ | 13′ 0″ | 11′ 0″ | 13′ 10″ | 12′ 1″ | 10′ 2″ | 12′ 9″ | 11′ 5″ | 9′ 7″ | 11′ 1″ | 10′ 4″ | 8′ 9″ |
| 362S162-43 | 33 | 16 | 24′ 1″ | 19′ 1″ | 16′ 8″ | 14′ 11″ | 13′ 0″ | 11′ 0″ | 13′ 7″ | 11′ 10″ | 10′ 0″ | 12′ 1″ | 11′ 0″ | 9′ 3″ | 11′ 1″ | 10′ 4″ | 8′ 9″ | 9′ 7″ | 9′ 5″ | 7′ 11″ |
| 362S162-43 | 33 | 24 | 21′ 0″ | 16′ 8″ | 14′ 7″ | 12′ 9″ | 11′ 5″ | 9′ 7″ | 11′ 1″ | 10′ 4″ | 8′ 9″ | 9′ 11″ | 9′ 7″ | 8′ 1″ | 9′ 0″ | 9′ 0″ | 7′ 7″ | 7′ 10″ e | 7′ 10″ e | 6′ 11″ e |
| 362S200-43 | 33 | 12 | 28′ 0″ | 22′ 3″ | 19′ 5″ | 17′ 4″ | 15′ 2″ | 12′ 9″ | 15′ 9″ | 13′ 9″ | 11′ 7″ | 14′ 8″ | 12′ 9″ | 10′ 9″ | 13′ 8″ | 12′ 0″ | 10′ 2″ | 11′ 10″ | 10′ 11″ | 9′ 3″ |
| 362S200-43 | 33 | 16 | 25′ 5″ | 20′ 2″ | 17′ 8″ | 15′ 9″ | 13′ 9″ | 11′ 7″ | 14′ 4″ | 12′ 6″ | 10′ 7″ | 13′ 0″ | 11′ 7″ | 9′ 10″ | 11′ 10″ | 10′ 11″ | 9′ 3″ | 10′ 3″ | 9′ 11″ | 8′ 4″ |
| 362S200-43 | 33 | 24 | 22′ 3″ | 17′ 8″ | 15′ 5″ | 13′ 8″ | 12′ 0″ | 10′ 2″ | 11′ 10″ | 10′ 11″ | 9′ 3″ | 10′ 7″ | 10′ 2″ | 8′ 7″ | 9′ 8″ e | 9′ 7″ e | 8′ 1″ | 8′ 5″ e | 8′ 5″ e | 7′ 4″ e |
| 362S137-54 | 50 | 12 | 27′ 1″ | 21′ 6″ | 18′ 9″ | 16′ 9″ | 14′ 8″ | 12′ 4″ | 15′ 3″ | 13′ 4″ | 11′ 3″ | 14′ 2″ | 12′ 4″ | 10′ 5″ | 13′ 4″ | 11′ 8″ | 9′ 10″ | 12′ 1″ | 10′ 7″ | 8′ 11″ |
| 362S137-54 | 50 | 16 | 24′ 7″ | 19′ 6″ | 17′ 1″ | 15′ 3″ | 13′ 4″ | 11′ 3″ | 13′ 10″ | 12′ 1″ | 10′ 2″ | 12′ 10″ | 11′ 3″ | 9′ 6″ | 12′ 1″ | 10′ 7″ | 8′ 11″ | 11′ 0″ | 9′ 7″ | 8′ 1″ |
| 362S137-54 | 50 | 24 | 21′ 6″ | 17′ 1″ | 14′ 11″ | 13′ 4″ | 11′ 8″ | 9′ 10″ | 12′ 1″ | 10′ 7″ | 8′ 11″ | 11′ 3″ | 9′ 10″ | 8′ 3″ | 10′ 7″ | 9′ 3″ | 7′ 9″ | 9′ 7″ | 8′ 5″ | 7′ 1″ |
| 362S162-54 | 50 | 12 | 28′ 5″ | 22′ 6″ | 19′ 8″ | 17′ 7″ | 15′ 4″ | 13′ 0″ | 16′ 0″ | 14′ 0″ | 11′ 9″ | 14′ 10″ | 13′ 0″ | 10′ 11″ | 14′ 0″ | 12′ 2″ | 10′ 3″ | 12′ 8″ | 11′ 1″ | 9′ 4″ |
| 362S162-54 | 50 | 16 | 25′ 10″ | 20′ 6″ | 17′ 11″ | 16′ 0″ | 14′ 0″ | 11′ 9″ | 14′ 6″ | 12′ 8″ | 10′ 8″ | 13′ 6″ | 11′ 9″ | 9′ 11″ | 12′ 8″ | 11′ 1″ | 9′ 4″ | 11′ 6″ | 10′ 1″ | 8′ 6″ |
| 362S162-54 | 50 | 24 | 22′ 6″ | 17′ 11″ | 15′ 7″ | 14′ 0″ | 12′ 2″ | 10′ 3″ | 12′ 8″ | 11′ 1″ | 9′ 4″ | 11′ 9″ | 10′ 3″ | 8′ 8″ | 11′ 1″ | 9′ 8″ | 8′ 2″ | 10′ 1″ | 8′ 10″ | 7′ 5″ |
| 362S200-54 | 50 | 12 | 30′ 0″ | 23′ 10″ | 20′ 10″ | 18′ 7″ | 16′ 3″ | 13′ 8″ | 16′ 11″ | 14′ 9″ | 12′ 5″ | 15′ 8″ | 13′ 8″ | 11′ 7″ | 14′ 9″ | 12′ 11″ | 10′ 10″ | 13′ 5″ | 11′ 9″ | 9′ 11″ |
| 362S200-54 | 50 | 16 | 27′ 3″ | 21′ 8″ | 18′ 11″ | 16′ 11″ | 14′ 9″ | 12′ 5″ | 15′ 4″ | 13′ 5″ | 11′ 4″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 13′ 5″ | 11′ 9″ | 9′ 11″ | 12′ 2″ | 10′ 8″ | 9′ 0″ |
| 362S200-54 | 50 | 24 | 23′ 10″ | 18′ 11″ | 16′ 6″ | 14′ 9″ | 12′ 11″ | 10′ 10″ | 13′ 5″ | 11′ 9″ | 9′ 11″ | 12′ 5″ | 10′ 10″ | 9′ 2″ | 11′ 9″ | 10′ 3″ | 8′ 8″ | 10′ 8″ | 9′ 4″ | 7′ 10″ |
| 362S137-68 | 50 | 12 | 28′ 11″ | 22′ 11″ | 20′ 1″ | 17′ 11″ | 15′ 8″ | 13′ 2″ | 16′ 3″ | 14′ 3″ | 12′ 0″ | 15′ 1″ | 13′ 2″ | 11′ 2″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 12′ 11″ | 11′ 4″ | 9′ 6″ |
| 362S137-68 | 50 | 16 | 26′ 3″ | 20′ 10″ | 18′ 3″ | 16′ 3″ | 14′ 3″ | 12′ 0″ | 14′ 10″ | 12′ 11″ | 10′ 11″ | 13′ 9″ | 12′ 0″ | 10′ 1″ | 12′ 11″ | 11′ 4″ | 9′ 6″ | 11′ 9″ | 10′ 3″ | 8′ 8″ |
| 362S137-68 | 50 | 24 | 22′ 11″ | 18′ 3″ | 15′ 11″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 12′ 11″ | 11′ 4″ | 9′ 6″ | 12′ 0″ | 10′ 6″ | 8′ 10″ | 11′ 4″ | 9′ 10″ | 8′ 4″ | 10′ 3″ | 9′ 0″ | 7′ 7″ |
| 362S162-68 | 50 | 12 | 30′ 4″ | 24′ 1″ | 21′ 1″ | 18′ 10″ | 16′ 5″ | 13′ 10″ | 17′ 1″ | 14′ 11″ | 12′ 7″ | 15′ 11″ | 13′ 10″ | 11′ 8″ | 14′ 11″ | 13′ 1″ | 11′ 0″ | 13′ 7″ | 11′ 10″ | 10′ 0″ |
| 362S162-68 | 50 | 16 | 27′ 7″ | 21′ 11″ | 19′ 2″ | 17′ 1″ | 14′ 11″ | 12′ 7″ | 15′ 6″ | 13′ 7″ | 11′ 5″ | 14′ 5″ | 12′ 7″ | 10′ 8″ | 13′ 7″ | 11′ 10″ | 10′ 0″ | 12′ 4″ | 10′ 9″ | 9′ 1″ |
| 362S162-68 | 50 | 24 | 24′ 1″ | 19′ 2″ | 16′ 9″ | 14′ 11″ | 13′ 1″ | 11′ 0″ | 13′ 7″ | 11′ 10″ | 10′ 0″ | 12′ 7″ | 11′ 0″ | 9′ 3″ | 11′ 10″ | 10′ 4″ | 8′ 9″ | 10′ 9″ | 9′ 5″ | 7′ 11″ |
| 362S200-68 | 50 | 12 | 32′ 2″ | 25′ 6″ | 22′ 3″ | 19′ 11″ | 17′ 5″ | 14′ 8″ | 18′ 1″ | 15′ 10″ | 13′ 4″ | 16′ 10″ | 14′ 8″ | 12′ 5″ | 15′ 10″ | 13′ 10″ | 11′ 8″ | 14′ 4″ | 12′ 7″ | 10′ 7″ |
| 362S200-68 | 50 | 16 | 29′ 2″ | 23′ 2″ | 20′ 3″ | 18′ 1″ | 15′ 10″ | 13′ 4″ | 16′ 5″ | 14′ 4″ | 12′ 1″ | 15′ 3″ | 13′ 4″ | 11′ 3″ | 14′ 4″ | 12′ 7″ | 10′ 7″ | 13′ 1″ | 11′ 5″ | 9′ 7″ |
| 362S200-68 | 50 | 24 | 25′ 6″ | 20′ 3″ | 17′ 8″ | 15′ 10″ | 13′ 10″ | 11′ 8″ | 14′ 4″ | 12′ 7″ | 10′ 7″ | 13′ 4″ | 11′ 8″ | 9′ 10″ | 12′ 7″ | 11′ 0″ | 9′ 3″ | 11′ 5″ | 9′ 11″ | 8′ 5″ |
| 362S137-97 | 50 | 12 | 31′ 10″ | 25′ 3″ | 22′ 1″ | 19′ 9″ | 17′ 3″ | 14′ 6″ | 17′ 11″ | 15′ 8″ | 13′ 2″ | 16′ 8″ | 14′ 6″ | 12′ 3″ | 15′ 8″ | 13′ 8″ | 11′ 6″ | 14′ 3″ | 12′ 5″ | 10′ 6″ |
| 362S137-97 | 50 | 16 | 28′ 11″ | 22′ 11″ | 20′ 1″ | 17′ 11″ | 15′ 8″ | 13′ 2″ | 16′ 3″ | 14′ 3″ | 12′ 0″ | 15′ 1″ | 13′ 2″ | 11′ 2″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 12′ 11″ | 11′ 3″ | 9′ 6″ |
| 362S137-97 | 50 | 24 | 25′ 3″ | 20′ 1″ | 17′ 6″ | 15′ 8″ | 13′ 8″ | 11′ 6″ | 14′ 3″ | 12′ 5″ | 10′ 6″ | 13′ 2″ | 11′ 6″ | 9′ 9″ | 12′ 5″ | 10′ 10″ | 9′ 2″ | 11′ 3″ | 9′ 10″ | 8′ 4″ |
| 362S162-97 | 50 | 12 | 33′ 6″ | 26′ 7″ | 23′ 3″ | 20′ 9″ | 18′ 2″ | 15′ 4″ | 18′ 10″ | 16′ 6″ | 13′ 11″ | 17′ 6″ | 15′ 4″ | 12′ 11″ | 16′ 6″ | 14′ 5″ | 12′ 2″ | 15′ 0″ | 13′ 1″ | 11′ 0″ |
| 362S162-97 | 50 | 16 | 30′ 5″ | 24′ 2″ | 21′ 1″ | 18′ 10″ | 16′ 6″ | 13′ 11″ | 17′ 2″ | 15′ 0″ | 12′ 8″ | 15′ 11″ | 13′ 11″ | 11′ 9″ | 15′ 0″ | 13′ 1″ | 11′ 0″ | 13′ 7″ | 11′ 11″ | 10′ 0″ |
| 362S162-97 | 50 | 24 | 26′ 7″ | 21′ 1″ | 18′ 5″ | 16′ 6″ | 14′ 5″ | 12′ 2″ | 15′ 0″ | 13′ 1″ | 11′ 0″ | 13′ 11″ | 12′ 2″ | 10′ 3″ | 13′ 1″ | 11′ 5″ | 9′ 8″ | 11′ 11″ | 10′ 5″ | 8′ 9″ |
| 362S200-97 | 50 | 12 | 35′ 6″ | 28′ 2″ | 24′ 8″ | 22′ 0″ | 19′ 3″ | 16′ 3″ | 20′ 0″ | 17′ 6″ | 14′ 9″ | 18′ 7″ | 16′ 3″ | 13′ 8″ | 17′ 6″ | 15′ 3″ | 12′ 11″ | 15′ 11″ | 13′ 10″ | 11′ 8″ |
| 362S200-97 | 50 | 16 | 32′ 3″ | 25′ 8″ | 22′ 5″ | 20′ 0″ | 17′ 6″ | 14′ 9″ | 18′ 2″ | 15′ 11″ | 13′ 5″ | 16′ 11″ | 14′ 9″ | 12′ 5″ | 15′ 11″ | 13′ 10″ | 11′ 8″ | 14′ 5″ | 12′ 7″ | 10′ 8″ |
| 362S200-97 | 50 | 24 | 28′ 2″ | 22′ 5″ | 19′ 7″ | 17′ 6″ | 15′ 3″ | 12′ 11″ | 15′ 11″ | 13′ 10″ | 11′ 8″ | 14′ 9″ | 12′ 11″ | 10′ 10″ | 13′ 10″ | 12′ 1″ | 10′ 3″ | 12′ 7″ | 11′ 0″ | 9′ 3″ |
| 400S137-33 | 33 | 12 | 25′ 1″ | 19′ 11″ | 17′ 5″ | 15′ 1″ | 13′ 7″ | 11′ 6″ | 13′ 1″ | 12′ 4″ | 10′ 5″ | 11′ 8″ | 11′ 6″ | 9′ 8″ | 10′ 8″ | 10′ 8″ | 9′ 1″ | 9′ 3″ e | 9′ 3″ e | 8′ 3″ e |
| 400S137-33 | 33 | 16 | 22′ 7″ | 18′ 1″ | 15′ 10″ | 13′ 1″ | 12′ 4″ | 10′ 5″ | 11′ 4″ | 11′ 3″ | 9′ 6″ | 10′ 1″ e | 10′ 1″ e | 8′ 9″ | 9′ 3″ e | 9′ 3″ e | 8′ 3″ e | 8′ 0″ e | 8′ 0″ e | 7′ 6″ e |
| 400S137-33 | 33 | 24 | 18′ 6″ | 15′ 10″ | 13′ 10″ | 10′ 8″ | 10′ 8″ | 9′ 1″ | 9′ 3″ e | 9′ 3″ e | 8′ 3″ e | 8′ 3″ e | 8′ 3″ e | 7′ 8″ e | 7′ 6″ e | 7′ 6″ e | 7′ 3″ e | 6′ 6″ e | 6′ 6″ e | 6′ 6″ e |
| 400S162-33 | 33 | 12 | 26′ 3″ | 20′ 10″ | 18′ 3″ | 16′ 2″ | 14′ 3″ | 12′ 0″ | 14′ 0″ | 12′ 11″ | 10′ 11″ | 12′ 7″ | 12′ 0″ | 10′ 1″ | 11′ 5″ e | 11′ 4″ e | 9′ 6″ | 9′ 11″ e | 9′ 11″ e | 8′ 8″ e |
| 400S162-33 | 33 | 16 | 23′ 11″ | 18′ 11″ | 16′ 7″ | 14′ 0″ | 12′ 11″ | 10′ 11″ | 12′ 2″ | 11′ 9″ | 9′ 11″ | 10′ 10″ e | 10′ 10″ e | 9′ 2″ | 9′ 11″ e | 9′ 11″ e | 8′ 8″ e | 8′ 7″ e | 8′ 7″ e | 7′ 10″ e |
| 400S162-33 | 33 | 24 | 19′ 10″ | 16′ 7″ | 14′ 6″ | 11′ 5″ e | 11′ 4″ e | 9′ 6″ | 9′ 11″ e | 9′ 11″ e | 8′ 8″ e | 8′ 10″ e | 8′ 10″ e | 8′ 0″ e | 8′ 1″ e | 8′ 1″ e | 7′ 7″ e | 7′ 0″ e | 7′ 0″ e | 6′ 10″ e |
| 400S200-33 | 33 | 12 | 27′ 9″ | 22′ 0″ | 19′ 3″ | 17′ 0″ | 15′ 0″ | 12′ 8″ | 14′ 9″ | 13′ 8″ | 11′ 6″ | 13′ 2″ e | 12′ 8″ | 10′ 8″ | 12′ 0″ e | 11′ 11″ e | 10′ 1″ | 10′ 5″ e | 10′ 5″ e | 9′ 2″ e |
| 400S200-33 | 33 | 16 | 25′ 2″ | 20′ 0″ | 17′ 6″ | 14′ 9″ | 13′ 8″ | 11′ 6″ | 12′ 9″ e | 12′ 5″ e | 10′ 5″ | 11′ 5″ e | 11′ 5″ e | 9′ 8″ | 10′ 5″ e | 10′ 5″ e | 9′ 2″ e | 9′ 0″ e | 9′ 0″ e | 8′ 4″ e |
| 400S200-33 | 33 | 24 | 20′ 10″ | 17′ 6″ | 15′ 3″ | 12′ 0″ e | 11′ 11″ e | 10′ 1″ | 10′ 5″ e | 10′ 5″ e | 9′ 2″ e | 9′ 4″ e | 9′ 4″ e | 8′ 6″ e | 8′ 6″ e | 8′ 6″ e | 8′ 0″ e | 7′ 4″ e | 7′ 4″ e | 7′ 3″ e |
| 400S137-43 | 33 | 12 | 27′ 4″ | 21′ 8″ | 18′ 11″ | 16′ 11″ | 14′ 9″ | 12′ 6″ | 15′ 4″ | 13′ 5″ | 11′ 4″ | 13′ 9″ | 12′ 6″ | 10′ 6″ | 12′ 7″ | 11′ 9″ | 9′ 11″ | 10′ 10″ | 10′ 8″ | 9′ 0″ |
| 400S137-43 | 33 | 16 | 24′ 10″ | 19′ 8″ | 17′ 2″ | 15′ 4″ | 13′ 5″ | 11′ 4″ | 13′ 4″ | 12′ 2″ | 10′ 4″ | 11′ 11″ | 11′ 4″ | 9′ 7″ | 10′ 10″ | 10′ 8″ | 9′ 0″ | 9′ 5″ | 9′ 5″ | 8′ 2″ |
| 400S137-43 | 33 | 24 | 21′ 8″ | 17′ 2″ | 15′ 0″ | 12′ 7″ | 11′ 9″ | 9′ 11″ | 10′ 10″ | 10′ 8″ | 9′ 0″ | 9′ 9″ | 9′ 9″ | 8′ 4″ | 8′ 11″ | 8′ 11″ | 7′ 10″ | 7′ 8″ e | 7′ 8″ e | 7′ 2″ e |
| 400S162-43 | 33 | 12 | 28′ 7″ | 22′ 8″ | 19′ 10″ | 17′ 9″ | 15′ 6″ | 13′ 1″ | 16′ 1″ | 14′ 1″ | 11′ 10″ | 14′ 10″ | 13′ 1″ | 11′ 0″ | 13′ 6″ | 12′ 3″ | 10′ 4″ | 11′ 9″ | 11′ 2″ | 9′ 5″ |
| 400S162-43 | 33 | 16 | 26′ 0″ | 20′ 7″ | 18′ 0″ | 16′ 1″ | 14′ 1″ | 11′ 10″ | 14′ 4″ | 12′ 9″ | 10′ 9″ | 12′ 10″ | 11′ 10″ | 10′ 0″ | 11′ 9″ | 11′ 2″ | 9′ 5″ | 10′ 2″ | 10′ 2″ | 8′ 7″ |
| 400S162-43 | 33 | 24 | 22′ 8″ | 18′ 0″ | 15′ 9″ | 13′ 6″ | 12′ 3″ | 10′ 4″ | 11′ 9″ | 11′ 2″ | 9′ 5″ | 10′ 6″ | 10′ 4″ | 8′ 9″ | 9′ 7″ e | 9′ 7″ e | 8′ 3″ | 8′ 3″ e | 8′ 3″ e | 7′ 6″ e |
| 400S200-43 | 33 | 12 | 30′ 2″ | 23′ 11″ | 20′ 11″ | 18′ 8″ | 16′ 4″ | 13′ 9″ | 17′ 0″ | 14′ 10″ | 12′ 6″ | 15′ 9″ | 13′ 9″ | 11′ 7″ | 14′ 6″ | 13′ 0″ | 10′ 11″ | 12′ 7″ | 11′ 9″ | 9′ 11″ |
| 400S200-43 | 33 | 16 | 27′ 5″ | 21′ 9″ | 19′ 0″ | 17′ 0″ | 14′ 10″ | 12′ 6″ | 15′ 4″ | 13′ 6″ | 11′ 4″ | 13′ 9″ | 12′ 6″ | 10′ 7″ | 12′ 7″ | 11′ 9″ | 9′ 11″ | 10′ 10″ e | 10′ 8″ e | 9′ 0″ |
| 400S200-43 | 33 | 24 | 23′ 11″ | 19′ 0″ | 16′ 7″ | 14′ 6″ | 13′ 0″ | 10′ 11″ | 12′ 7″ | 11′ 9″ | 9′ 11″ | 11′ 3″ e | 10′ 11″ | 9′ 3″ | 10′ 3″ e | 10′ 3″ e | 8′ 8″ | 8′ 10″ e | 8′ 10″ e | 7′ 11″ e |

**NOTES**

- "e'" Requires web stiffeners at end supports
- Strength Multiplier = 1.0
- Deflection Multiplier =1.0
- Studs considered unpunched for web crippling and shear
- Limiting heights based on continous support of each flange over full length stud.
- 1 span

# Allowable Heights For Non-Axial Load Bearing Wall (Continued)

| Member | Fy | Spacing | 5 psf | | | 15 psf | | | 20 psf | | | 25psf | | | 30 psf | | | 40 psf | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Section | Fy (ksi) | (in) oc | L/120 | L/240 | L/360 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 600S137-68 | 50 | 12 | 43' 4" | 34' 4" | 30' 0" | 26' 10" | 23' 5" | 19' 9" | 24' 5" | 21' 4" | 18' 0" | 22' 8" | 19' 9" | 16' 8" | 21' 4" | 18' 7" | 15' 8" | 19' 4" | 16' 11" | 14' 3" |
| 600S137-68 | 50 | 16 | 39' 4" | 31' 3" | 27' 3" | 24' 5" | 21' 4" | 18' 0" | 22' 2" | 19' 4" | 16' 4" | 20' 7" | 18' 0" | 15' 2" | 19' 4" | 16' 11" | 14' 3" | 17' 7" | 15' 4" | 12' 11" |
| 600S137-68 | 50 | 24 | 34' 4" | 27' 3" | 23' 10" | 21' 4" | 18' 7" | 15' 8" | 19' 4" | 16' 11" | 14' 3" | 18' 0" | 15' 8" | 13' 3" | 16' 11" | 14' 9" | 12' 5" | 15' 4" | 13' 5" | 11' 4" |
| 600S162-68 | 50 | 12 | 45' 3" | 35' 11" | 31' 4" | 28' 0" | 24' 6" | 20' 8" | 25' 6" | 22' 3" | 18' 9" | 23' 8" | 20' 8" | 17' 5" | 22' 3" | 19' 5" | 16' 5" | 20' 2" | 17' 8" | 14' 11" |
| 600S162-68 | 50 | 16 | 41' 1" | 32' 7" | 28' 6" | 25' 6" | 22' 3" | 18' 9" | 23' 2" | 20' 2" | 17' 1" | 21' 6" | 18' 9" | 15' 10" | 20' 2" | 17' 8" | 14' 11" | 18' 4" | 16' 0" | 13' 6" |
| 600S162-68 | 50 | 24 | 35' 11" | 28' 6" | 24' 11" | 22' 3" | 19' 5" | 16' 5" | 20' 2" | 17' 8" | 14' 11" | 18' 9" | 16' 5" | 13' 10" | 17' 8" | 15' 5" | 13' 0" | 16' 0" | 14' 0" | 11' 10" |
| 600S200-68 | 50 | 12 | 47' 7" | 37' 9" | 33' 0" | 29' 6" | 25' 9" | 21' 9" | 26' 9" | 23' 5" | 19' 9" | 24' 10" | 21' 9" | 18' 4" | 23' 5" | 20' 5" | 17' 3" | 21' 3" | 18' 7" | 15' 8" |
| 600S200-68 | 50 | 16 | 43' 2" | 34' 3" | 29' 11" | 26' 9" | 23' 5" | 19' 9" | 24' 4" | 21' 3" | 17' 11" | 22' 7" | 19' 9" | 16' 8" | 21' 3" | 18' 7" | 15' 8" | 19' 4" | 16' 10" | 14' 3" |
| 600S200-68 | 50 | 24 | 37' 9" | 29' 11" | 26' 2" | 23' 5" | 20' 5" | 17' 3" | 21' 3" | 18' 7" | 15' 8" | 19' 9" | 17' 3" | 14' 6" | 18' 7" | 16' 3" | 13' 8" | 16' 10" | 14' 9" | 12' 5" |
| 600S137-97 | 50 | 12 | 47' 11" | 38' 0" | 33' 2" | 29' 8" | 25' 11" | 21' 10" | 27' 0" | 23' 7" | 19' 10" | 25' 0" | 21' 10" | 18' 5" | 23' 7" | 20' 7" | 17' 4" | 21' 5" | 18' 8" | 15' 9" |
| 600S137-97 | 50 | 16 | 43' 6" | 34' 6" | 30' 2" | 27' 0" | 23' 7" | 19' 10" | 24' 6" | 21' 5" | 18' 1" | 22' 9" | 19' 10" | 16' 9" | 21' 5" | 18' 8" | 15' 9" | 19' 5" | 17' 0" | 14' 4" |
| 600S137-97 | 50 | 24 | 38' 0" | 30' 2" | 26' 4" | 23' 7" | 20' 7" | 17' 4" | 21' 5" | 18' 8" | 15' 9" | 19' 10" | 17' 4" | 14' 8" | 18' 8" | 16' 4" | 13' 9" | 17' 0" | 14' 10" | 12' 6" |
| 600S162-97 | 50 | 12 | 50' 1" | 39' 9" | 34' 9" | 31' 1" | 27' 2" | 22' 11" | 28' 3" | 24' 8" | 20' 9" | 26' 2" | 22' 11" | 19' 4" | 24' 8" | 21' 6" | 18' 2" | 22' 5" | 19' 7" | 16' 6" |
| 600S162-97 | 50 | 16 | 45' 6" | 36' 2" | 31' 7" | 28' 3" | 24' 8" | 20' 9" | 25' 8" | 22' 5" | 18' 11" | 23' 10" | 20' 9" | 17' 6" | 22' 5" | 19' 7" | 16' 6" | 20' 4" | 17' 9" | 15' 0" |
| 600S162-97 | 50 | 24 | 39' 9" | 31' 7" | 27' 7" | 24' 8" | 21' 6" | 18' 2" | 22' 5" | 19' 7" | 16' 6" | 20' 9" | 18' 2" | 15' 4" | 19' 7" | 17' 1" | 14' 5" | 17' 9" | 15' 6" | 13' 1" |
| 600S200-97 | 50 | 12 | 52' 10" | 41' 11" | 36' 7" | 32' 9" | 28' 7" | 24' 1" | 29' 9" | 26' 0" | 21' 11" | 27' 7" | 24' 1" | 20' 4" | 26' 0" | 22' 8" | 19' 2" | 23' 7" | 20' 7" | 17' 5" |
| 600S200-97 | 50 | 16 | 48' 0" | 38' 1" | 33' 3" | 29' 9" | 26' 0" | 21' 11" | 27' 0" | 23' 7" | 19' 11" | 25' 1" | 21' 11" | 18' 6" | 23' 7" | 20' 7" | 17' 5" | 21' 5" | 18' 9" | 15' 10" |
| 600S200-97 | 50 | 24 | 41' 11" | 33' 3" | 29' 1" | 26' 0" | 22' 8" | 19' 2" | 23' 7" | 20' 7" | 17' 5" | 21' 11" | 19' 2" | 16' 2" | 20' 7" | 18' 0" | 15' 2" | 18' 9" | 16' 4" | 13' 10" |
| 800S137-33 | 33 | 12 | 40' 6" e | 34' 0" e | 29' 8" e | 23' 5" e | 23' 2" e | 19' 7" e | 20' 3" e | 20' 3" e | 17' 9" e | 18' 1" e | 18' 1" e | 16' 6" e | 16' 6" e | 16' 6" e | 15' 6" e | 14' 4" e | 14' 4" e | 14' 1" e |
| 800S137-33 | 33 | 16 | 35' 1" e | 30' 11" e | 27' 0" e | 20' 3" e | 20' 3" e | 17' 9" e | 17' 6" e | 17' 6" e | 16' 2" e | 15' 8" e | 15' 8" e | 15' 0" e | 14' 4" e | 14' 4" e | 14' 1" e | 12' 5" e | 12' 5" e | 12' 5" e |
| 800S137-33 | 33 | 24 | 28' 8" e | 27' 0" e | 23' 7" e | 16' 6" e | 16' 6" e | 15' 6" e | 14' 4" e | 14' 4" e | 14' 1" e | 12' 10" e | 12' 10" e | 12' 10" e | 11' 8" e | 11' 8" e | 11' 8" e | 10' 1" e | 10' 1" e | 10' 1" e |
| 800S162-33 | 33 | 12 | 43' 3" e | 35' 5" e | 30' 11" e | 25' 0" e | 24' 2" e | 20' 4" e | 21' 7" e | 21' 7" e | 18' 6" e | 19' 4" e | 19' 4" e | 17' 2" e | 17' 8" e | 17' 8" e | 16' 2" e | 15' 3" e | 15' 3" e | 14' 8" e |
| 800S162-33 | 33 | 16 | 37' 5" e | 32' 2" e | 28' 1" e | 21' 7" e | 21' 7" e | 18' 6" e | 18' 9" e | 18' 9" e | 16' 10" e | 16' 9" e | 16' 9" e | 15' 7" e | 15' 3" e | 15' 3" e | 14' 8" e | 13' 3" e | 13' 3" e | 13' 3" e |
| 800S162-33 | 33 | 24 | 30' 7" e | 28' 1" e | 24' 7" e | 17' 8" e | 17' 8" e | 16' 2" e | 15' 3" e | 15' 3" e | 14' 8" e | 13' 8" e | 13' 8" e | 13' 8" e | 12' 6" e | 12' 6" e | 12' 6" e | 10' 10" e | 10' 10" e | 10' 10" e |
| 800S200-33 | 33 | 12 | 46' 4" e | 37' 9" e | 33' 0" e | 26' 9" e | 25' 9" e | 21' 8" e | 23' 2" e | 23' 2" e | 19' 9" e | 20' 9" e | 20' 9" e | 18' 4" e | 18' 11" e | 18' 11" e | 17' 3" e | 16' 5" e | 16' 5" e | 15' 8" e |
| 800S200-33 | 33 | 16 | 40' 2" e | 34' 3" e | 29' 11" e | 23' 2" e | 23' 2" e | 19' 9" e | 20' 1" e | 20' 1" e | 17' 11" e | 17' 11" e | 17' 11" e | 16' 8" e | 16' 5" e | 16' 5" e | 15' 8" e | 14' 2" e | 14' 2" e | 14' 2" e |
| 800S200-33 | 33 | 24 | 32' 9" e | 29' 11" e | 26' 2" e | 18' 11" e | 18' 11" e | 17' 3" e | 16' 5" e | 16' 5" e | 15' 8" e | 14' 8" e | 14' 8" e | 14' 6" e | 13' 5" e | 13' 5" e | 13' 5" e | 11' 7" e | 11' 7" e | 11' 7" e |
| 800S137-43 | 33 | 12 | 47' 2" | 37' 5" | 32' 8" | 28' 1" | 25' 6" | 21' 6" | 24' 3" | 23' 2" | 19' 7" | 21' 9" e | 21' 6" e | 18' 2" | 19' 10" e | 19' 10" e | 17' 1" e | 17' 2" e | 17' 2" e | 15' 6" e |
| 800S137-43 | 33 | 16 | 42' 1" | 34' 0" | 29' 9" | 24' 3" | 23' 2" | 19' 7" | 21' 0" e | 21' 0" e | 17' 9" | 18' 10" e | 18' 10" e | 16' 6" e | 17' 2" e | 17' 2" e | 15' 6" e | 14' 10" e | 14' 10" e | 14' 1" e |
| 800S137-43 | 33 | 24 | 34' 4" | 29' 9" | 25' 11" | 19' 10" e | 19' 10" e | 17' 1" e | 17' 2" e | 17' 2" e | 15' 6" e | 15' 4" e | 15' 4" e | 14' 5" e | 14' 0" e | 14' 0" e | 13' 7" e | 12' 2" e | 12' 2" e | 12' 2" e |
| 800S162-43 | 33 | 12 | 49' 1" | 38' 11" | 34' 0" | 29' 11" | 26' 7" | 22' 5" | 25' 11" e | 24' 2" | 20' 4" | 23' 2" e | 22' 5" e | 18' 11" | 21' 2" e | 21' 1" e | 17' 9" e | 18' 4" e | 18' 4" e | 16' 2" e |
| 800S162-43 | 33 | 16 | 44' 7" | 35' 4" | 30' 11" | 25' 11" e | 24' 2" | 20' 4" | 22' 5" e | 21' 11" e | 18' 6" | 20' 1" e | 20' 1" e | 17' 2" e | 18' 4" e | 18' 4" e | 16' 2" e | 15' 10" e | 15' 10" e | 14' 8" e |
| 800S162-43 | 33 | 24 | 36' 8" | 30' 11" | 27' 0" | 21' 2" e | 21' 1" e | 17' 9" e | 18' 4" e | 18' 4" e | 16' 2" e | 16' 5" e | 16' 5" e | 15' 0" e | 15' 0" e | 15' 0" e | 14' 1" e | 12' 11" e | 12' 11" e | 12' 10" e |
| 800S200-43 | 33 | 12 | 51' 10" | 41' 1" | 35' 11" | 32' 1" | 28' 1" | 23' 8" | 29' 2" e | 25' 6" e | 21' 6" | 26' 1" e | 23' 8" e | 19' 11" e | 23' 10" e | 22' 3" e | 18' 9" e | 20' 8" e | 20' 3" e | 17' 1" e |
| 800S200-43 | 33 | 16 | 47' 1" | 37' 4" | 32' 8" | 29' 2" e | 25' 6" e | 21' 6" | 25' 3" e | 23' 2" e | 19' 6" e | 22' 7" e | 21' 6" e | 18' 2" e | 20' 8" e | 20' 3" e | 17' 1" e | 17' 10" e | 17' 10" e | 15' 6" e |
| 800S200-43 | 33 | 24 | 41' 1" | 32' 8" | 28' 6" | 23' 10" e | 22' 3" e | 18' 9" e | 20' 8" e | 20' 3" e | 17' 1" e | 18' 5" e | 18' 5" e | 15' 10" e | 16' 10" e | 16' 10" e | 14' 11" e | 14' 7" e | 14' 7" e | 13' 6" e |
| 800S137-54 | 50 | 12 | 50' 9" | 40' 3" | 35' 2" | 31' 5" | 27' 5" | 23' 2" | 28' 7" | 24' 11" | 21' 0" | 26' 6" | 23' 2" | 19' 6" | 24' 11" | 21' 10" | 18' 5" | 22' 8" | 19' 10" | 16' 8" |
| 800S137-54 | 50 | 16 | 46' 1" | 36' 7" | 31' 11" | 28' 7" | 24' 11" | 21' 0" | 25' 11" | 22' 8" | 19' 1" | 24' 1" | 21' 0" | 17' 9" | 22' 8" | 19' 10" | 16' 8" | 20' 2" | 18' 0" | 15' 2" |
| 800S137-54 | 50 | 24 | 40' 3" | 31' 11" | 27' 11" | 24' 11" | 21' 10" | 18' 5" | 22' 8" | 19' 10" | 16' 8" | 20' 10" | 18' 5" | 15' 6" | 19' 0" | 17' 4" | 14' 7" | 16' 5" e | 15' 9" e | 13' 3" |
| 800S162-54 | 50 | 12 | 52' 9" | 41' 10" | 36' 7" | 32' 8" | 28' 7" | 24' 1" | 29' 9" | 25' 11" | 21' 11" | 27' 7" | 24' 1" | 20' 4" | 25' 11" | 22' 8" | 19' 1" | 23' 7" | 20' 7" | 17' 4" |
| 800S162-54 | 50 | 16 | 47' 11" | 38' 1" | 33' 3" | 29' 9" | 25' 11" | 21' 11" | 27' 0" | 23' 7" | 19' 11" | 25' 1" | 21' 11" | 18' 6" | 23' 7" | 20' 7" | 17' 4" | 21' 5" | 18' 9" | 15' 9" |
| 800S162-54 | 50 | 24 | 41' 10" | 33' 3" | 29' 0" | 25' 11" | 22' 8" | 19' 1" | 23' 7" | 20' 7" | 17' 4" | 21' 11" | 19' 1" | 16' 2" | 20' 3" e | 18' 0" | 15' 2" | 17' 6" e | 16' 4" e | 13' 9" |
| 800S200-54 | 50 | 12 | 55' 8" | 44' 2" | 38' 7" | 34' 6" | 30' 2" | 25' 5" | 31' 4" | 27' 5" | 23' 1" | 29' 1" | 25' 5" | 21' 5" | 27' 5" | 23' 11" | 20' 2" | 24' 10" | 21' 9" | 18' 4" |
| 800S200-54 | 50 | 16 | 50' 7" | 40' 2" | 35' 1" | 31' 4" | 27' 5" | 23' 1" | 28' 6" | 24' 10" | 21' 0" | 26' 5" | 23' 1" | 19' 6" | 24' 10" | 21' 9" | 18' 4" | 22' 7" e | 19' 9" | 16' 8" |
| 800S200-54 | 50 | 24 | 44' 2" | 35' 1" | 30' 8" | 27' 5" | 23' 11" | 20' 2" | 24' 10" | 21' 9" | 18' 4" | 23' 1" e | 20' 2" | 17' 0" | 21' 9" e | 19' 0" | 16' 0" | 19' 4" e | 17' 3" e | 14' 7" e |
| 800S137-68 | 50 | 12 | 54' 10" | 43' 6" | 38' 0" | 34' 0" | 29' 8" | 25' 0" | 30' 10" | 27' 0" | 22' 9" | 28' 8" | 25' 0" | 21' 1" | 27' 0" | 23' 7" | 19' 10" | 24' 6" | 21' 5" | 18' 1" |
| 800S137-68 | 50 | 16 | 49' 10" | 39' 6" | 34' 6" | 30' 10" | 27' 0" | 22' 9" | 28' 1" | 24' 6" | 20' 8" | 26' 0" | 22' 9" | 19' 2" | 24' 6" | 21' 5" | 18' 1" | 22' 3" | 19' 5" | 16' 5" |
| 800S137-68 | 50 | 24 | 43' 6" | 34' 6" | 30' 2" | 27' 0" | 23' 7" | 19' 10" | 24' 6" | 21' 5" | 18' 1" | 22' 9" | 19' 10" | 16' 9" | 21' 5" | 18' 8" | 15' 9" | 19' 2" | 17' 0" | 14' 4" |
| 800S162-68 | 50 | 12 | 57' 0" | 45' 3" | 39' 6" | 35' 4" | 30' 10" | 26' 0" | 32' 1" | 28' 1" | 23' 8" | 29' 10" | 26' 0" | 22' 0" | 28' 1" | 24' 6" | 20' 8" | 25' 6" | 22' 3" | 18' 9" |
| 800S162-68 | 50 | 16 | 51' 10" | 41' 1" | 35' 11" | 32' 1" | 28' 1" | 23' 8" | 29' 2" | 25' 6" | 21' 6" | 27' 1" | 23' 8" | 19' 11" | 25' 6" | 22' 3" | 18' 9" | 23' 2" | 20' 3" | 17' 1" |
| 800S162-68 | 50 | 24 | 45' 3" | 35' 11" | 31' 5" | 28' 1" | 24' 6" | 20' 8" | 25' 6" | 22' 3" | 18' 9" | 23' 8" | 20' 8" | 17' 5" | 22' 3" | 19' 5" | 16' 5" | 20' 3" | 17' 8" | 14' 11" |
| 800S200-68 | 50 | 12 | 59' 9" | 47' 5" | 41' 5" | 37' 0" | 32' 4" | 27' 4" | 33' 8" | 29' 5" | 24' 10" | 31' 3" | 27' 4" | 23' 0" | 29' 5" | 25' 8" | 21' 8" | 26' 9" | 23' 4" | 19' 8" |
| 800S200-68 | 50 | 16 | 54' 4" | 43' 1" | 37' 8" | 33' 8" | 29' 5" | 24' 10" | 30' 7" | 26' 9" | 22' 6" | 28' 5" | 24' 10" | 20' 11" | 26' 9" | 23' 4" | 19' 8" | 24' 3" | 21' 2" | 17' 11" |
| 800S200-68 | 50 | 24 | 47' 5" | 37' 8" | 32' 11" | 29' 5" | 25' 8" | 21' 8" | 26' 9" | 23' 4" | 19' 8" | 24' 10" | 21' 8" | 18' 3" | 23' 4" | 20' 5" | 17' 2" | 21' 2" | 18' 6" | 15' 7" |
| 800S137-97 | 50 | 12 | 60' 10" | 48' 4" | 42' 2" | 37' 9" | 32' 11" | 27' 10" | 34' 3" | 29' 11" | 25' 3" | 31' 10" | 27' 10" | 23' 5" | 29' 11" | 26' 2" | 22' 1" | 27' 2" | 23' 9" | 20' 1" |
| 800S137-97 | 50 | 16 | 55' 4" | 43' 11" | 38' 4" | 34' 3" | 29' 11" | 25' 3" | 31' 2" | 27' 2" | 22' 11" | 28' 11" | 25' 3" | 21' 4" | 27' 2" | 23' 9" | 20' 1" | 24' 9" | 21' 7" | 18' 3" |
| 800S137-97 | 50 | 24 | 48' 4" | 38' 4" | 33' 6" | 29' 11" | 26' 2" | 22' 1" | 27' 2" | 23' 9" | 20' 1" | 25' 3" | 22' 1" | 18' 7" | 23' 9" | 20' 9" | 17' 6" | 21' 7" | 18' 10" | 15' 11" |
| 800S162-97 | 50 | 12 | 63' 5" | 50' 4" | 43' 11" | 39' 3" | 34' 4" | 28' 11" | 35' 8" | 31' 2" | 26' 4" | 33' 2" | 28' 11" | 24' 5" | 31' 2" | 27' 3" | 23' 0" | 28' 4" | 24' 9" | 20' 10" |
| 800S162-97 | 50 | 16 | 57' 7" | 45' 9" | 39' 11" | 35' 8" | 31' 2" | 26' 4" | 32' 5" | 28' 4" | 23' 11" | 30' 1" | 26' 4" | 22' 2" | 28' 4" | 24' 9" | 20' 10" | 25' 9" | 22' 6" | 19' 0" |
| 800S162-97 | 50 | 24 | 50' 4" | 39' 11" | 34' 11" | 31' 2" | 27' 3" | 23' 0" | 28' 4" | 24' 9" | 20' 10" | 26' 4" | 23' 0" | 19' 5" | 24' 9" | 21' 7" | 18' 3" | 22' 6" | 19' 8" | 16' 7" |
| 800S200-97 | 50 | 12 | 66' 6" | 52' 9" | 46' 1" | 41' 2" | 36' 0" | 30' 4" | 37' 5" | 32' 8" | 27' 7" | 34' 9" | 30' 4" | 25' 7" | 32' 8" | 28' 7" | 24' 1" | 29' 9" | 25' 11" | 21' 11" |
| 800S200-97 | 50 | 16 | 60' 5" | 47' 11" | 41' 11" | 37' 5" | 32' 8" | 27' 7" | 34' 0" | 29' 9" | 25' 1" | 31' 7" | 27' 7" | 23' 3" | 29' 9" | 25' 11" | 21' 11" | 27' 0" | 23' 7" | 19' 11" |
| 800S200-97 | 50 | 24 | 52' 9" | 41' 11" | 36' 7" | 32' 8" | 28' 7" | 24' 1" | 29' 9" | 25' 11" | 21' 11" | 27' 7" | 24' 1" | 20' 4" | 25' 11" | 22' 8" | 19' 1" | 23' 7" | 20' 7" | 17' 5" |

**NOTES**

- "e" Requires web stiffeners at end supports
- Strength Multiplier = 1.0
- Deflection Multiplier =1.0 for 5psf
- Deflection Multiplier = 0.7 for 15 psf and greater
- Studs considered unpunched for web crippling and shear
- 1 span

# Combined Loading Allowable Axial Load Table Notes

1. Allowable axial loads listed in kips (1 kip = 1000 lbs.)
2. Allowable axial loads determined in accordance with section C5 of the NASPEC, with section D4 used for treatment of the punch-outs.
3. Listed lateral pressures and axial loads have not been modified for strength checks based on wind/earthquake or multiple transient loads

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.95 | 1.37 | 1.90 | 2.54 | 3.99 | 1.20 | 1.70 | 2.31 | 3.00 | 4.53 |
| | 16 | 0.87 | 1.30 | 1.85 | 2.48 | 3.91 | 1.11 | 1.62 | 2.25 | 2.94 | 4.45 |
| | 24 | 0.73[7] | 1.16 | 1.74 | 2.36 | 3.76 | 0.96 | 1.47 | 2.13 | 2.81 | 4.30 |
| 9 | 12 | 0.80 | 1.18 | 1.66 | 2.21 | 3.39 | 1.02 | 1.47 | 2.01 | 2.61 | 3.88 |
| | 16 | 0.72[7] | 1.10 | 1.60 | 2.14 | 3.30 | 0.92 | 1.37 | 1.94 | 2.53 | 3.80 |
| | 24 | 0.57[6] | 0.94[6] | 1.47[7] | 2.00 | 3.14 | 0.75[6] | 1.20[7] | 1.80 | 2.39 | 3.63 |
| 10 | 12 | 0.67[7] | 1.00 | 1.44 | 1.90 | 2.87 | 0.84 | 1.24 | 1.73 | 2.25 | 3.32 |
| | 16 | 0.58[6] | 0.91[7] | 1.36 | 1.82 | 2.78 | 0.74[6] | 1.14[7] | 1.65 | 2.17 | 3.23 |
| | 24 | 0.42[3] | 0.74[6] | 1.23[6] | 1.68[7] | 2.60 | 0.57[6] | 0.96[6] | 1.51[6] | 2.01[7] | 3.05 |
| 12 | 12 | 0.43[6] | 0.69[6] | 1.05[6] | 1.39[7] | 2.06 | 0.56[6] | 0.86[6] | 1.27[7] | 1.66 | 2.43 |
| | 16 | 0.34[3] | 0.59[3] | 0.97[6] | 1.31[6] | 1.96[7] | 0.46[3] | 0.76[6] | 1.18[6] | 1.57[7] | 2.33 |
| | 24 | 0.18[2] | 0.43[2] | 0.82[3] | 1.15[3] | 1.78[6] | 0.28[2] | 0.58[3] | 1.03[3] | 1.40[6] | 2.14[6] |
| 14 | 12 | 0.26[2] | 0.46[3] | 0.76[6] | 1.01[6] | 1.5[6] | 0.35[3] | 0.59[3] | 0.93[6] | 1.22[6] | 1.79[7] |
| | 16 | 0.17[2] | 0.37[2] | 0.68[3] | 0.93[3] | 1.4[6] | 0.26[2] | 0.49[3] | 0.84[3] | 1.13[6] | 1.69[6] |
| | 24 | 0.02[1] | 0.21[2] | 0.54[2] | 0.78[2] | 1.23[3] | 0.09[2] | 0.32[2] | 0.69[2] | 0.97[3] | 1.51[3] |
| 16 | 12 | 0.15[2] | 0.30[2] | 0.55[3] | 0.74[3] | 1.11[6] | 0.21[2] | 0.40[2] | 0.68[3] | 0.91[3] | 1.34[6] |
| | 16 | 0.06[1] | 0.22[2] | 0.47[2] | 0.66[2] | 1.02[3] | 0.12[2] | 0.31[2] | 0.59[2] | 0.82[3] | 1.25[3] |
| | 24 | 0.00[1] | 0.07[1] | 0.34[2] | 0.52[2] | 0.86[2] | 0.00[1] | 0.15[1] | 0.45[2] | 0.67[2] | 1.08[2] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162 mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.44 | 2.07 | 3.16 | 4.13 | 5.98 | 1.81 | 2.56 | 3.97 | 5.08 | 7.48 |
| | 16 | 1.37 | 1.99 | 3.10 | 4.06 | 5.92 | 1.74 | 2.48 | 3.90 | 5.01 | 7.41 |
| | 24 | 1.23 | 1.85 | 2.97 | 3.93 | 5.80 | 1.58 | 2.32 | 3.76 | 4.87 | 7.27 |
| 9 | 12 | 1.33 | 1.93 | 2.92 | 3.82 | 5.84 | 1.67 | 2.38 | 3.65 | 4.67 | 6.88 |
| | 16 | 1.24 | 1.84 | 2.84 | 3.74 | 5.76 | 1.57 | 2.28 | 3.56 | 4.58 | 6.79 |
| | 24 | 1.07 | 1.66 | 2.69 | 3.58 | 5.60 | 1.39 | 2.09 | 3.39 | 4.41 | 6.62 |
| 10 | 12 | 1.20 | 1.77 | 2.64 | 3.47 | 5.29 | 1.51 | 2.18 | 3.29 | 4.23 | 6.22 |
| | 16 | 1.10 | 1.66 | 2.55 | 3.37 | 5.19 | 1.40 | 2.07 | 3.19 | 4.12 | 6.12 |
| | 24 | 0.91[7] | 1.45 | 2.37 | 3.18 | 5.00 | 1.19 | 1.84 | 2.99 | 3.92 | 5.92 |
| 12 | 12 | 0.93 | 1.41 | 2.09 | 2.73 | 4.12 | 1.18 | 1.75 | 2.56 | 3.31 | 4.86 |
| | 16 | 0.80[7] | 1.28 | 1.97 | 2.61 | 4.00 | 1.04[7] | 1.61 | 2.44 | 3.18 | 4.73 |
| | 24 | 0.58[6] | 1.03[6] | 1.76[7] | 2.39 | 3.77 | 0.79[6] | 1.34[6] | 2.21 | 2.94 | 4.50 |
| 14 | 12 | 0.66[6] | 1.06[7] | 1.60 | 2.10 | 3.15 | 0.86[6] | 1.33 | 1.95 | 2.54 | 3.75 |
| | 16 | 0.53 | 0.91[6] | 1.47[6] | 1.97 | 3.02 | 0.71[6] | 1.17[6] | 1.82[7] | 2.40 | 3.61 |
| | 24 | 0.30[3] | 0.65[3] | 1.25[6] | 1.74[6] | 2.79[7] | 0.46[3] | 0.89[6] | 1.58[6] | 2.16[6] | 3.36 |
| 16 | 12 | 0.45[3] | 0.75[6] | 1.20[6] | 1.60[7] | 2.42 | 0.59[6] | 0.96[6] | 1.48[7] | 1.95 | 2.90 |
| | 16 | 0.32[3] | 0.61[3] | 1.08[6] | 1.47[6] | 2.29[7] | 0.45[3] | 0.80[6] | 1.35[6] | 1.81[6] | 2.77 |
| | 24 | 0.09[2] | 0.36[2] | 0.87[3] | 1.24[3] | 2.06[6] | 0.21[2] | 0.54[3] | 1.12[3] | 1.57[6] | 2.52[6] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 362S137-mils (Fy) | | | | | 362S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.49 | 2.14 | 3.32 | 4.37 | 6.12 | 1.87 | 2.65 | 4.15 | 5.38 | 7.90 |
| | 16 | 1.42 | 2.07 | 3.26 | 4.30 | 6.06 | 1.80 | 2.57 | 4.08 | 5.31 | 7.83 |
| | 24 | 1.29 | 1.93 | 3.13 | 4.17 | 5.95 | 1.65 | 2.42 | 3.94 | 5.17 | 7.70 |
| 9 | 12 | 1.38 | 2.01 | 3.11 | 4.07 | 6.05 | 1.74 | 2.48 | 3.86 | 4.99 | 7.32 |
| | 16 | 1.30 | 1.92 | 3.02 | 3.99 | 5.97 | 1.64 | 2.38 | 3.77 | 4.90 | 7.23 |
| | 24 | 1.13 | 1.74 | 2.87 | 3.82 | 5.81 | 1.46 | 2.19 | 3.60 | 4.72 | 7.06 |
| 10 | 12 | 1.26 | 1.85 | 2.85 | 3.73 | 5.67 | 1.58 | 2.29 | 3.53 | 4.55 | 6.67 |
| | 16 | 1.16 | 1.75 | 2.75 | 3.63 | 5.57 | 1.47 | 2.17 | 3.42 | 4.44 | 6.57 |
| | 24 | 0.96 | 1.54 | 2.57 | 3.44 | 5.38 | 1.26 | 1.95 | 3.22 | 4.23 | 6.37 |
| 12 | 12 | 0.99 | 1.51 | 2.27 | 2.97 | 4.48 | 1.25 | 1.87 | 2.79 | 3.60 | 5.29 |
| | 16 | 0.86 | 1.37 | 2.15 | 2.85 | 4.36 | 1.11 | 1.72 | 2.66 | 3.47 | 5.16 |
| | 24 | 0.63 | 1.12 | 1.93 | 2.62 | 4.13 | 0.86 | 1.44 | 2.42 | 3.22 | 4.92 |
| 14 | 12 | 0.72 | 1.15 | 1.75 | 2.30 | 3.45 | 0.93 | 1.44 | 2.14 | 2.78 | 4.10 |
| | 16 | 0.59 | 1.00 | 1.62 | 2.16 | 3.32 | 0.78 | 1.28 | 2.00 | 2.64 | 3.95 |
| | 24 | 0.34 | 0.73 | 1.39 | 1.92 | 3.07 | 0.52 | 0.99 | 1.75 | 2.38 | 3.69 |
| 16 | 12 | 0.50 | 0.83 | 1.33 | 1.76 | 2.66 | 0.65 | 1.06 | 1.63 | 2.14 | 3.18 |
| | 16 | 0.36 | 0.68 | 1.20 | 1.63 | 2.53 | 0.51 | 0.90 | 1.49 | 2.00 | 3.04 |
| | 24 | 0.12 | 0.42 | 0.97 | 1.39 | 2.28 | 0.25 | 0.62 | 1.25 | 1.74 | 2.78 |

| Wall | Spacing | 362S200-mils (Fy) | | | | | 362S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.25 | 3.28 | 5.18 | 6.68 | 9.57 | 3.71 | 5.82 | 7.76 | 11.05 |
| | 16 | 2.17 | 3.20 | 5.10 | 6.60 | 9.50 | 3.62 | 5.73 | 7.67 | 10.98 |
| | 24 | 2.01 | 3.03 | 4.94 | 6.45 | 9.36 | 3.45 | 5.56 | 7.50 | 10.83 |
| 9 | 12 | 2.10 | 3.07 | 4.79 | 6.17 | 8.84 | 3.52 | 5.46 | 7.17 | 10.24 |
| | 16 | 2.00 | 2.96 | 4.69 | 6.07 | 8.75 | 3.40 | 5.35 | 7.06 | 10.14 |
| | 24 | 1.80 | 2.76 | 4.49 | 5.88 | 8.58 | 3.18 | 5.14 | 6.85 | 9.96 |
| 10 | 12 | 1.93 | 2.84 | 4.37 | 5.61 | 8.06 | 3.29 | 5.08 | 6.54 | 9.36 |
| | 16 | 1.81 | 2.71 | 4.25 | 5.49 | 7.95 | 3.15 | 4.95 | 6.40 | 9.25 |
| | 24 | 1.57 | 2.47 | 4.01 | 5.27 | 7.74 | 2.89 | 4.69 | 6.15 | 9.03 |
| 12 | 12 | 1.56 | 2.32 | 3.45 | 4.44 | 6.42 | 2.74 | 4.06 | 5.21 | 7.53 |
| | 16 | 1.40 | 2.16 | 3.30 | 4.30 | 6.28 | 2.55 | 3.90 | 5.05 | 7.38 |
| | 24 | 1.12 | 1.86 | 3.03 | 4.03 | 6.02 | 2.22 | 3.59 | 4.74 | 7.11 |
| 14 | 12 | 1.18 | 1.81 | 2.64 | 3.43 | 5.00 | 2.15 | 3.12 | 4.05 | 5.91 |
| | 16 | 1.01 | 1.63 | 2.48 | 3.27 | 4.84 | 1.95 | 2.94 | 3.87 | 5.75 |
| | 24 | 0.70 | 1.31 | 2.19 | 2.99 | 4.56 | 1.59 | 2.62 | 3.54 | 5.45 |
| 16 | 12 | 0.84 | 1.36 | 2.01 | 2.66 | 3.91 | 1.63 | 2.40 | 3.15 | 4.67 |
| | 16 | 0.67 | 1.18 | 1.86 | 2.50 | 3.76 | 1.42 | 2.22 | 2.97 | 4.50 |
| | 24 | 0.38 | 0.86 | 1.58 | 2.21 | 3.47 | 1.06 | 1.90 | 2.64 | 4.19 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 400S137-mils (Fy) | | | | | 400S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.61 | 2.31 | 3.67 | 4.98 | 6.49 | 2.03 | 2.87 | 4.62 | 6.18 | 9.12 |
| | 16 | 1.55 | 2.25 | 3.61 | 4.91 | 6.44 | 1.96 | 2.80 | 4.55 | 6.11 | 9.05 |
| | 24 | 1.42 | 2.12 | 3.49 | 4.78 | 6.34 | 1.82 | 2.66 | 4.42 | 5.97 | 8.92 |
| 9 | 12 | 1.52 | 2.20 | 3.49 | 4.79 | 6.43 | 1.91 | 2.72 | 4.37 | 5.85 | 8.60 |
| | 16 | 1.44 | 2.12 | 3.42 | 4.70 | 6.37 | 1.82 | 2.63 | 4.28 | 5.76 | 8.52 |
| | 24 | 1.28 | 1.95 | 3.27 | 4.54 | 6.23 | 1.65 | 2.46 | 4.11 | 5.59 | 8.35 |
| 10 | 12 | 1.41 | 2.07 | 3.28 | 4.49 | 6.36 | 1.77 | 2.56 | 4.08 | 5.47 | 8.00 |
| | 16 | 1.31 | 1.97 | 3.19 | 4.38 | 6.27 | 1.67 | 2.45 | 3.97 | 5.36 | 7.90 |
| | 24 | 1.12 | 1.77 | 3.00 | 4.18 | 6.09 | 1.46 | 2.23 | 3.77 | 5.14 | 7.69 |
| 12 | 12 | 1.16 | 1.76 | 2.77 | 3.75 | 5.64 | 1.46 | 2.17 | 3.41 | 4.54 | 6.65 |
| | 16 | 1.03 | 1.62 | 2.64 | 3.61 | 5.51 | 1.32 | 2.02 | 3.27 | 4.39 | 6.51 |
| | 24 | 0.80 | 1.36 | 2.40 | 3.35 | 5.25 | 1.06 | 1.74 | 3.01 | 4.12 | 6.24 |
| 14 | 12 | 0.90 | 1.41 | 2.22 | 2.96 | 4.44 | 1.14 | 1.75 | 2.71 | 3.57 | 5.25 |
| | 16 | 0.75 | 1.25 | 2.08 | 2.80 | 4.29 | 0.98 | 1.58 | 2.55 | 3.41 | 5.09 |
| | 24 | 0.49 | 0.96 | 1.81 | 2.52 | 4.01 | 0.70 | 1.26 | 2.27 | 3.10 | 4.80 |
| 16 | 12 | 0.65 | 1.08 | 1.74 | 2.30 | 3.47 | 0.84 | 1.35 | 2.12 | 2.78 | 4.12 |
| | 16 | 0.50 | 0.91 | 1.59 | 2.14 | 3.31 | 0.68 | 1.17 | 1.96 | 2.61 | 3.96 |
| | 24 | 0.23 | 0.61 | 1.32 | 1.86 | 3.03 | 0.39 | 0.85 | 1.67 | 2.31 | 3.66 |

| Wall | Spacing | 400S200-mils (Fy) | | | | | 400S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.42 | 3.55 | 5.77 | 7.63 | 11.06 | 3.96 | 6.27 | 8.67 | 12.78 |
| | 16 | 2.34 | 3.48 | 5.70 | 7.56 | 10.99 | 3.88 | 6.19 | 8.59 | 12.71 |
| | 24 | 2.19 | 3.32 | 5.54 | 7.41 | 10.85 | 3.72 | 6.04 | 8.43 | 12.57 |
| 9 | 12 | 2.28 | 3.37 | 5.43 | 7.19 | 10.39 | 3.79 | 6.03 | 8.28 | 12.02 |
| | 16 | 2.19 | 3.27 | 5.33 | 7.10 | 10.30 | 3.69 | 5.93 | 8.17 | 11.93 |
| | 24 | 2.00 | 3.08 | 5.14 | 6.91 | 10.13 | 3.48 | 5.73 | 7.96 | 11.74 |
| 10 | 12 | 2.13 | 3.16 | 5.04 | 6.70 | 9.65 | 3.60 | 5.70 | 7.78 | 11.18 |
| | 16 | 2.01 | 3.04 | 4.92 | 6.58 | 9.54 | 3.47 | 5.57 | 7.64 | 11.07 |
| | 24 | 1.79 | 2.81 | 4.69 | 6.34 | 9.33 | 3.22 | 5.33 | 7.38 | 10.84 |
| 12 | 12 | 1.79 | 2.69 | 4.19 | 5.57 | 8.03 | 3.14 | 4.92 | 6.50 | 9.36 |
| | 16 | 1.63 | 2.53 | 4.03 | 5.41 | 7.88 | 2.96 | 4.74 | 6.32 | 9.20 |
| | 24 | 1.35 | 2.22 | 3.74 | 5.11 | 7.59 | 2.62 | 4.41 | 5.97 | 8.90 |
| 14 | 12 | 1.43 | 2.19 | 3.32 | 4.39 | 6.37 | 2.58 | 3.92 | 5.15 | 7.51 |
| | 16 | 1.25 | 2.00 | 3.14 | 4.21 | 6.20 | 2.37 | 3.71 | 4.95 | 7.32 |
| | 24 | 0.92 | 1.65 | 2.82 | 3.88 | 5.89 | 1.98 | 3.35 | 4.57 | 6.98 |
| 16 | 12 | 1.07 | 1.71 | 2.60 | 3.42 | 5.03 | 2.04 | 3.07 | 4.04 | 5.96 |
| | 16 | 0.89 | 1.51 | 2.41 | 3.24 | 4.85 | 1.81 | 2.86 | 3.82 | 5.76 |
| | 24 | 0.56 | 1.16 | 2.09 | 2.91 | 4.52 | 1.41 | 2.49 | 3.44 | 5.41 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

CEMCO
Steel Framing and Metal Lath

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 550S137-mils (Fy) | | | | | 550S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | - 68 (50) | -97 (50) |
| 8 | 12 | 1.80 | 2.54 | 3.88 | 5.11 | 7.53 | 2.41 | 3.39 | 5.64 | 7.47 | 11.32 |
| | 16 | 1.76 | 2.50 | 3.85 | 5.08 | 7.50 | 2.37 | 3.35 | 5.60 | 7.42 | 11.28 |
| | 24 | 1.69 | 2.43 | 3.79 | 5.02 | 7.44 | 2.28 | 3.27 | 5.52 | 7.34 | 11.19 |
| 9 | 12 | 1.76 | 2.51 | 3.85 | 5.08 | 7.50 | 2.35 | 3.33 | 5.58 | 7.43 | 11.27 |
| | 16 | 1.72 | 2.46 | 3.81 | 5.04 | 7.46 | 2.30 | 3.27 | 5.52 | 7.37 | 11.22 |
| | 24 | 1.62 | 2.37 | 3.74 | 4.97 | 7.38 | 2.19 | 3.16 | 5.42 | 7.26 | 11.10 |
| 10 | 12 | 1.73 | 2.47 | 3.82 | 5.05 | 7.47 | 2.28 | 3.25 | 5.44 | 7.36 | 11.22 |
| | 16 | 1.67 | 2.41 | 3.77 | 5.00 | 7.41 | 2.21 | 3.18 | 5.37 | 7.30 | 11.14 |
| | 24 | 1.55 | 2.30 | 3.67 | 4.90 | 7.31 | 2.07 | 3.04 | 5.24 | 7.16 | 10.99 |
| 12 | 12 | 1.63 | 2.38 | 3.73 | 4.96 | 7.37 | 2.10 | 3.04 | 5.08 | 6.90 | 11.04 |
| | 16 | 1.55 | 2.29 | 3.66 | 4.88 | 7.29 | 2.00 | 2.94 | 4.98 | 6.79 | 10.91 |
| | 24 | 1.37 | 2.12 | 3.51 | 4.73 | 7.12 | 1.81 | 2.75 | 4.79 | 6.59 | 10.66 |
| 14 | 12 | 1.50 | 2.26 | 3.62 | 4.83 | 7.23 | 1.88 | 2.77 | 4.59 | 6.26 | 10.00 |
| | 16 | 1.38 | 2.13 | 3.50 | 4.72 | 7.10 | 1.74 | 2.64 | 4.46 | 6.12 | 9.83 |
| | 24 | 1.16 | 1.90 | 3.29 | 4.49 | 6.85 | 1.49 | 2.38 | 4.21 | 5.84 | 9.49 |
| 16 | 12 | 1.30 | 2.01 | 3.30 | 4.59 | 7.01 | 1.62 | 2.45 | 4.02 | 5.50 | 8.76 |
| | 16 | 1.15 | 1.86 | 3.16 | 4.43 | 6.82 | 1.46 | 2.28 | 3.86 | 5.32 | 8.54 |
| | 24 | 0.88 | 1.58 | 2.89 | 4.13 | 6.47 | 1.16 | 1.98 | 3.56 | 4.98 | 8.12 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 600S137-mils (Fy) | | | | | 600S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.78 | 2.52 | 3.82 | 5.06 | 7.54 | 2.44 | 3.41 | 5.63 | 7.46 | 11.39 |
| | 16 | 1.74 | 2.48 | 3.79 | 5.03 | 7.52 | 2.40 | 3.38 | 5.59 | 7.42 | 11.35 |
| | 24 | 1.67 | 2.41 | 3.73 | 4.97 | 7.46 | 2.32 | 3.30 | 5.52 | 7.35 | 11.28 |
| 9 | 12 | 1.75 | 2.49 | 3.79 | 5.03 | 7.52 | 2.41 | 3.38 | 5.59 | 7.42 | 11.35 |
| | 16 | 1.70 | 2.44 | 3.76 | 4.99 | 7.48 | 2.36 | 3.33 | 5.55 | 7.38 | 11.31 |
| | 24 | 1.61 | 2.35 | 3.68 | 4.91 | 7.41 | 2.26 | 3.24 | 5.46 | 7.29 | 11.21 |
| 10 | 12 | 1.71 | 2.45 | 3.76 | 5.00 | 7.49 | 2.37 | 3.34 | 5.56 | 7.38 | 11.31 |
| | 16 | 1.66 | 2.39 | 3.72 | 4.95 | 7.44 | 2.30 | 3.28 | 5.50 | 7.33 | 11.25 |
| | 24 | 1.54 | 2.28 | 3.62 | 4.85 | 7.36 | 2.18 | 3.16 | 5.39 | 7.21 | 11.12 |
| 12 | 12 | 1.63 | 2.36 | 3.69 | 4.92 | 7.41 | 2.22 | 3.19 | 5.39 | 7.28 | 11.19 |
| | 16 | 1.54 | 2.28 | 3.61 | 4.84 | 7.34 | 2.13 | 3.10 | 5.30 | 7.19 | 11.09 |
| | 24 | 1.38 | 2.11 | 3.47 | 4.70 | 7.21 | 1.95 | 2.93 | 5.13 | 7.01 | 10.89 |
| 14 | 12 | 1.52 | 2.25 | 3.58 | 4.81 | 7.31 | 2.03 | 2.97 | 5.00 | 6.81 | 10.96 |
| | 16 | 1.40 | 2.13 | 3.48 | 4.70 | 7.20 | 1.91 | 2.85 | 4.88 | 6.68 | 10.80 |
| | 24 | 1.18 | 1.90 | 3.27 | 4.49 | 7.00 | 1.67 | 2.61 | 4.64 | 6.43 | 10.49 |
| 16 | 12 | 1.38 | 2.11 | 3.44 | 4.66 | 7.15 | 1.80 | 2.69 | 4.49 | 6.15 | 9.89 |
| | 16 | 1.23 | 1.95 | 3.30 | 4.50 | 7.00 | 1.65 | 2.54 | 4.34 | 5.98 | 9.68 |
| | 24 | 0.95 | 1.65 | 3.02 | 4.22 | 6.71 | 1.36 | 2.25 | 4.05 | 5.66 | 9.28 |

| Wall | Spacing | 600S200-mils (Fy) | | | | | 600S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.88 | 4.33 | 7.48 | 9.99 | 15.65 | 4.67 | 7.66 | 11.06 | 18.28 |
| | 16 | 2.84 | 4.28 | 7.43 | 9.94 | 15.60 | 4.62 | 7.61 | 11.01 | 18.23 |
| | 24 | 2.75 | 4.19 | 7.34 | 9.86 | 15.51 | 4.53 | 7.53 | 10.91 | 18.13 |
| 9 | 12 | 2.82 | 4.25 | 7.33 | 9.81 | 15.39 | 4.59 | 7.53 | 10.86 | 17.93 |
| | 16 | 2.77 | 4.19 | 7.28 | 9.76 | 15.33 | 4.53 | 7.47 | 10.80 | 17.86 |
| | 24 | 2.66 | 4.07 | 7.16 | 9.64 | 15.21 | 4.41 | 7.36 | 10.67 | 17.73 |
| 10 | 12 | 2.76 | 4.15 | 7.16 | 9.60 | 15.07 | 4.50 | 7.37 | 10.62 | 17.50 |
| | 16 | 2.69 | 4.08 | 7.09 | 9.53 | 14.99 | 4.43 | 7.30 | 10.54 | 17.42 |
| | 24 | 2.56 | 3.94 | 6.94 | 9.39 | 14.84 | 4.28 | 7.16 | 10.38 | 17.25 |
| 12 | 12 | 2.59 | 3.91 | 6.71 | 9.04 | 14.21 | 4.28 | 6.98 | 10.02 | 16.43 |
| | 16 | 2.49 | 3.81 | 6.60 | 8.93 | 14.10 | 4.17 | 6.87 | 9.90 | 16.30 |
| | 24 | 2.30 | 3.60 | 6.38 | 8.72 | 13.86 | 3.95 | 6.66 | 9.66 | 16.05 |
| 14 | 12 | 2.38 | 3.61 | 6.12 | 8.30 | 13.08 | 3.99 | 6.51 | 9.29 | 15.09 |
| | 16 | 2.24 | 3.46 | 5.97 | 8.15 | 12.92 | 3.84 | 6.36 | 9.12 | 14.91 |
| | 24 | 1.99 | 3.19 | 5.68 | 7.87 | 12.59 | 3.55 | 6.08 | 8.79 | 14.56 |
| 16 | 12 | 2.12 | 3.25 | 5.44 | 7.43 | 11.75 | 3.66 | 6.02 | 8.48 | 13.56 |
| | 16 | 1.96 | 3.07 | 5.26 | 7.25 | 11.53 | 3.47 | 5.83 | 8.26 | 13.32 |
| | 24 | 1.65 | 2.73 | 4.90 | 6.89 | 11.11 | 3.10 | 5.46 | 7.83 | 12.87 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 800S137-mils (Fy) | | | | | 800S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.72 | 2.44 | 3.57 | 4.75 | 7.21 | 2.40 | 3.36 | 5.44 | 7.25 | 11.26 |
| | 16 | 1.70 | 2.41 | 3.56 | 4.73 | 7.19 | 2.37 | 3.33 | 5.42 | 7.23 | 11.23 |
| | 24 | 1.65 | 2.36 | 3.52 | 4.69 | 7.16 | 2.31 | 3.28 | 5.37 | 7.18 | 11.18 |
| 9 | 12 | 1.70 | 2.42 | 3.56 | 4.73 | 7.20 | 2.38 | 3.34 | 5.42 | 7.23 | 11.23 |
| | 16 | 1.67 | 2.39 | 3.53 | 4.71 | 7.17 | 2.34 | 3.30 | 5.39 | 7.20 | 11.20 |
| | 24 | 1.61 | 2.33 | 3.49 | 4.66 | 7.12 | 2.27 | 3.23 | 5.32 | 7.14 | 11.13 |
| 10 | 12 | 1.68 | 2.39 | 3.54 | 4.72 | 7.18 | 2.35 | 3.31 | 5.40 | 7.21 | 11.21 |
| | 16 | 1.64 | 2.36 | 3.51 | 4.69 | 7.15 | 2.30 | 3.26 | 5.35 | 7.17 | 11.16 |
| | 24 | 1.57 | 2.28 | 3.45 | 4.63 | 7.09 | 2.21 | 3.17 | 5.27 | 7.09 | 11.08 |
| 12 | 12 | 1.63 | 2.34 | 3.50 | 4.67 | 7.13 | 2.28 | 3.24 | 5.33 | 7.15 | 11.14 |
| | 16 | 1.57 | 2.29 | 3.45 | 4.63 | 7.09 | 2.21 | 3.18 | 5.27 | 7.09 | 11.07 |
| | 24 | 1.46 | 2.18 | 3.37 | 4.54 | 7.00 | 2.08 | 3.04 | 5.15 | 6.96 | 10.94 |
| 14 | 12 | 1.56 | 2.28 | 3.44 | 4.62 | 7.08 | 2.20 | 3.16 | 5.26 | 7.07 | 11.05 |
| | 16 | 1.48 | 2.20 | 3.38 | 4.56 | 7.01 | 2.10 | 3.07 | 5.17 | 6.98 | 10.96 |
| | 24 | 1.33 | 2.05 | 3.26 | 4.44 | 6.88 | 1.92 | 2.88 | 5.00 | 6.81 | 10.77 |
| 16 | 12 | 1.48 | 2.20 | 3.38 | 4.55 | 7.00 | 2.10 | 3.06 | 5.16 | 6.96 | 10.93 |
| | 16 | 1.38 | 2.10 | 3.29 | 4.47 | 6.92 | 1.97 | 2.94 | 5.04 | 6.85 | 10.80 |
| | 24 | 1.18 | 1.90 | 3.13 | 4.31 | 6.74 | 1.73 | 2.69 | 4.81 | 6.61 | 10.54 |

| Wall | Spacing | 800S200-mils (Fy) | | | | | 800S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.98 | 4.49 | 7.76 | 10.30 | 15.98 | 4.91 | 8.19 | 11.82 | 19.78 |
| | 16 | 2.94 | 4.46 | 7.73 | 10.27 | 15.96 | 4.88 | 8.16 | 11.78 | 19.75 |
| | 24 | 2.88 | 4.40 | 7.67 | 10.22 | 15.90 | 4.81 | 8.09 | 11.72 | 19.68 |
| 9 | 12 | 2.95 | 4.47 | 7.74 | 10.28 | 15.96 | 4.87 | 8.12 | 11.74 | 19.67 |
| | 16 | 2.91 | 4.43 | 7.70 | 10.24 | 15.92 | 4.83 | 8.08 | 11.70 | 19.62 |
| | 24 | 2.83 | 4.35 | 7.62 | 10.17 | 15.85 | 4.75 | 8.01 | 11.62 | 19.53 |
| 10 | 12 | 2.92 | 4.44 | 7.71 | 10.25 | 15.93 | 4.82 | 8.05 | 11.66 | 19.52 |
| | 16 | 2.87 | 4.39 | 7.66 | 10.20 | 15.88 | 4.77 | 8.00 | 11.60 | 19.47 |
| | 24 | 2.77 | 4.29 | 7.56 | 10.11 | 15.79 | 4.67 | 7.90 | 11.49 | 19.36 |
| 12 | 12 | 2.85 | 4.37 | 7.63 | 10.18 | 15.85 | 4.70 | 7.85 | 11.42 | 19.14 |
| | 16 | 2.77 | 4.29 | 7.56 | 10.11 | 15.78 | 4.62 | 7.77 | 11.34 | 19.06 |
| | 24 | 2.62 | 4.15 | 7.41 | 9.98 | 15.63 | 4.47 | 7.63 | 11.18 | 18.89 |
| 14 | 12 | 2.72 | 4.22 | 7.42 | 10.02 | 15.75 | 4.53 | 7.57 | 11.04 | 18.50 |
| | 16 | 2.62 | 4.12 | 7.32 | 9.92 | 15.64 | 4.43 | 7.47 | 10.92 | 18.39 |
| | 24 | 2.42 | 3.93 | 7.11 | 9.73 | 15.43 | 4.22 | 7.27 | 10.70 | 18.15 |
| 16 | 12 | 2.56 | 4.01 | 7.03 | 9.53 | 15.19 | 4.33 | 7.21 | 10.49 | 17.54 |
| | 16 | 2.43 | 3.88 | 6.89 | 9.40 | 15.04 | 4.19 | 7.08 | 10.34 | 17.38 |
| | 24 | 2.17 | 3.63 | 6.62 | 9.14 | 14.75 | 3.92 | 6.82 | 10.04 | 17.06 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 5psf lateral load

| Wall | Spacing | 1000S162-mils (Fy) | | | | 1000S200-mils (Fy) | | | | 1000S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 3.28 | 5.21 | 6.96 | 10.86 | 4.45 | 7.61 | 10.11 | 15.78 | 4.97 | 8.28 | 11.93 | 19.92 |
| | 16 | 3.26 | 5.19 | 6.94 | 10.84 | 4.42 | 7.58 | 10.09 | 15.76 | 4.94 | 8.25 | 11.90 | 19.89 |
| | 24 | 3.22 | 5.16 | 6.91 | 10.81 | 4.37 | 7.53 | 10.04 | 15.71 | 4.89 | 8.20 | 11.86 | 19.85 |
| 9 | 12 | 3.27 | 5.20 | 6.94 | 10.85 | 4.42 | 7.59 | 10.09 | 15.76 | 4.95 | 8.26 | 11.91 | 19.90 |
| | 16 | 3.24 | 5.17 | 6.92 | 10.82 | 4.39 | 7.55 | 10.06 | 15.73 | 4.91 | 8.22 | 11.88 | 19.87 |
| | 24 | 3.19 | 5.13 | 6.88 | 10.78 | 4.33 | 7.49 | 10.00 | 15.67 | 4.85 | 8.16 | 11.82 | 19.80 |
| 10 | 12 | 3.25 | 5.18 | 6.93 | 10.83 | 4.40 | 7.56 | 10.07 | 15.74 | 4.92 | 8.23 | 11.89 | 19.87 |
| | 16 | 3.21 | 5.15 | 6.90 | 10.80 | 4.36 | 7.52 | 10.03 | 15.70 | 4.88 | 8.19 | 11.85 | 19.84 |
| | 24 | 3.15 | 5.09 | 6.84 | 10.74 | 4.28 | 7.44 | 9.95 | 15.62 | 4.80 | 8.11 | 11.77 | 19.76 |
| 12 | 12 | 3.20 | 5.14 | 6.89 | 10.79 | 4.34 | 7.50 | 10.01 | 15.68 | 4.87 | 8.18 | 11.83 | 19.82 |
| | 16 | 3.15 | 5.09 | 6.84 | 10.74 | 4.28 | 7.44 | 9.96 | 15.62 | 4.81 | 8.12 | 11.77 | 19.76 |
| | 24 | 3.05 | 5.01 | 6.76 | 10.66 | 4.17 | 7.33 | 9.85 | 15.51 | 4.68 | 8.00 | 11.66 | 19.64 |
| 14 | 12 | 3.14 | 5.09 | 6.84 | 10.73 | 4.27 | 7.43 | 9.94 | 15.61 | 4.77 | 8.06 | 11.73 | 19.74 |
| | 16 | 3.08 | 5.03 | 6.78 | 10.67 | 4.19 | 7.35 | 9.87 | 15.53 | 4.69 | 7.98 | 11.65 | 19.66 |
| | 24 | 2.94 | 4.91 | 6.66 | 10.55 | 4.03 | 7.18 | 9.71 | 15.37 | 4.52 | 7.82 | 11.49 | 19.49 |
| 16 | 12 | 3.08 | 5.02 | 6.77 | 10.67 | 4.19 | 7.34 | 9.86 | 15.52 | 4.64 | 7.85 | 11.49 | 19.42 |
| | 16 | 2.98 | 4.94 | 6.70 | 10.59 | 4.08 | 7.23 | 9.75 | 15.41 | 4.53 | 7.74 | 11.38 | 19.31 |
| | 24 | 2.81 | 4.78 | 6.54 | 10.42 | 3.86 | 7.01 | 9.54 | 15.19 | 4.31 | 7.53 | 11.17 | 19.09 |

| Wall | Spacing | 1200S162-mils (Fy) | | | 1200S200-mils (Fy) | | | | 1200S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 5.21 | 6.96 | 10.86 | 4.45 | 7.61 | 10.11 | 15.78 | 4.97 | 8.28 | 11.93 | 19.92 |
| | 16 | 5.19 | 6.94 | 10.84 | 4.42 | 7.58 | 10.09 | 15.76 | 4.94 | 8.25 | 11.90 | 19.89 |
| | 24 | 5.16 | 6.91 | 10.81 | 4.37 | 7.53 | 10.04 | 15.71 | 4.89 | 8.20 | 11.86 | 19.85 |
| 9 | 12 | 5.20 | 6.94 | 10.85 | 4.42 | 7.59 | 10.09 | 15.76 | 4.95 | 8.26 | 11.91 | 19.90 |
| | 16 | 5.17 | 6.92 | 10.82 | 4.39 | 7.55 | 10.06 | 15.73 | 4.91 | 8.22 | 11.88 | 19.87 |
| | 24 | 5.13 | 6.88 | 10.78 | 4.33 | 7.49 | 10.00 | 15.67 | 4.85 | 8.16 | 11.82 | 19.80 |
| 10 | 12 | 5.18 | 6.93 | 10.83 | 4.40 | 7.56 | 10.07 | 15.74 | 4.92 | 8.23 | 11.89 | 19.87 |
| | 16 | 5.15 | 6.90 | 10.80 | 4.36 | 7.52 | 10.03 | 15.70 | 4.88 | 8.19 | 11.85 | 19.84 |
| | 24 | 5.09 | 6.84 | 10.74 | 4.28 | 7.44 | 9.95 | 15.62 | 4.80 | 8.11 | 11.77 | 19.76 |
| 12 | 12 | 5.14 | 6.89 | 10.79 | 4.34 | 7.50 | 10.01 | 15.68 | 4.87 | 8.18 | 11.83 | 19.82 |
| | 16 | 5.09 | 6.84 | 10.74 | 4.28 | 7.44 | 9.96 | 15.62 | 4.81 | 8.12 | 11.77 | 19.76 |
| | 24 | 5.01 | 6.76 | 10.66 | 4.17 | 7.33 | 9.85 | 15.51 | 4.68 | 8.00 | 11.66 | 19.64 |
| 14 | 12 | 5.09 | 6.84 | 10.73 | 4.27 | 7.43 | 9.94 | 15.61 | 4.77 | 8.06 | 11.73 | 19.74 |
| | 16 | 5.03 | 6.78 | 10.67 | 4.19 | 7.35 | 9.87 | 15.53 | 4.69 | 7.98 | 11.65 | 19.66 |
| | 24 | 4.91 | 6.66 | 10.55 | 4.03 | 7.18 | 9.71 | 15.37 | 4.52 | 7.82 | 11.49 | 19.49 |
| 16 | 12 | 5.02 | 6.77 | 10.67 | 4.19 | 7.34 | 9.86 | 15.52 | 4.64 | 7.85 | 11.49 | 19.42 |
| | 16 | 4.94 | 6.70 | 10.59 | 4.08 | 7.23 | 9.75 | 15.41 | 4.53 | 7.74 | 11.38 | 19.31 |
| | 24 | 4.78 | 6.54 | 10.42 | 3.86 | 7.01 | 9.54 | 15.19 | 4.31 | 7.53 | 11.17 | 19.09 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.55[6] | 0.97 | 1.58 | 2.19 | 3.55 | 0.75[7] | 1.26 | 1.96 | 2.63 | 4.10 |
| | 16 | 0.37[6] | 0.79[6] | 1.43[7] | 2.03 | 3.35 | 0.56[6] | 1.06[7] | 1.80 | 2.47 | 3.90 |
| | 24 | 0.07[3] | 0.47[6] | 1.17[6] | 1.74[6] | 2.99 | 0.22[3] | 0.71[6] | 1.51[6] | 2.16[7] | 3.54 |
| 9 | 12 | 0.36[6] | 0.73[6] | 1.30[6] | 1.81 | 2.91 | 0.53[6] | 0.97[7] | 1.61 | 2.19 | 3.40 |
| | 16 | 0.18[3] | 0.54[6] | 1.14[6] | 1.64[6] | 2.70 | 0.33[6] | 0.77[6] | 1.44[6] | 2.01[7] | 3.19 |
| | 24 | 0.00[2] | 0.21[3] | 0.85[3] | 1.33[6] | 2.32[6] | 0.00[3] | 0.41[3] | 1.13[6] | 1.68[6] | 2.81[7] |
| 10 | 12 | 0.21[3] | 0.53[6] | 1.04[6] | 1.48[6] | 2.36 | 0.34[3] | 0.72[6] | 1.31[6] | 1.80[7] | 2.81 |
| | 16 | 0.03[2] | 0.34[3] | 0.88[3] | 1.30[6] | 2.15[6] | 0.14[3] | 0.52[3] | 1.13[6] | 1.61[6] | 2.59[7] |
| | 24 | 0.00[2] | 0.01[2] | 0.59[2] | 0.99[3] | 1.78[6] | 0.00[2] | 0.16[2] | 0.81[3] | 1.27[3] | 2.2[6] |
| 12 | 12 | 0.00[2] | 0.22[2] | 0.64[3] | 0.95[3] | 1.55[6] | 0.06[2] | 0.35[3] | 0.83[3] | 1.19[6] | 1.90[6] |
| | 16 | 0.00[2] | 0.03[2] | 0.48[2] | 0.78[3] | 1.35[3] | 0.00[2] | 0.15[2] | 0.65[3] | 1.00[3] | 1.68[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.20[2] | 0.48[2] | 1.00[2] | 0.00[1] | 0.00[2] | 0.35[2] | 0.67[2] | 1.31[3] |
| 14 | 12 | 0.00[1] | 0.01[2] | 0.36[2] | 0.59[2] | 1.02[3] | 0.00[2] | 0.11[2] | 0.50[2] | 0.77[3] | 1.28[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.21[2] | 0.43[2] | 0.83[2] | 0.00[1] | 0.00[2] | 0.33[2] | 0.59[2] | 1.08[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.15[1] | 0.52[2] | 0.00[1] | 0.00[1] | 0.05[1] | 0.29[2] | 0.74[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.18[1] | 0.35[2] | 0.66[2] | 0.00[1] | 0.00[1] | 0.27[2] | 0.48[2] | 0.86[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.04[1] | 0.20[1] | 0.49[2] | 0.00[1] | 0.00[1] | 0.12[1] | 0.32[2] | 0.68[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.21[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.04[1] | 0.37[1] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.04 | 1.64 | 2.79 | 3.74 | 5.63 | 1.37 | 2.10 | 3.56 | 4.66 | 7.08 |
| | 16 | 0.85 | 1.45 | 2.61 | 3.56 | 5.46 | 1.16 | 1.89 | 3.36 | 4.46 | 6.88 |
| | 24 | 0.50[7] | 1.07 | 2.27 | 3.21 | 5.12 | 0.78 | 1.49 | 2.99 | 4.08 | 6.51 |
| 9 | 12 | 0.84 | 1.41 | 2.46 | 3.35 | 5.36 | 1.13 | 1.82 | 3.14 | 4.16 | 6.38 |
| | 16 | 0.62[7] | 1.18 | 2.25 | 3.13 | 5.14 | 0.90 | 1.57 | 2.91 | 3.92 | 6.14 |
| | 24 | 0.23[6] | 0.75[6] | 1.86[7] | 2.71 | 4.71 | 0.46[6] | 1.11[7] | 2.48 | 3.48 | 5.70 |
| 10 | 12 | 0.64[7] | 1.17 | 2.12 | 2.92 | 4.73 | 0.90 | 1.53 | 2.71 | 3.63 | 5.64 |
| | 16 | 0.4[6] | 0.91[7] | 1.89 | 2.67 | 4.47 | 0.64[6] | 1.25 | 2.45 | 3.37 | 5.37 |
| | 24 | 0.00[3] | 0.44[6] | 1.46[6] | 2.21[7] | 4.00 | 0.17[6] | 0.74[6] | 1.99[7] | 2.88 | 4.87 |
| 12 | 12 | 0.28[6] | 0.70[6] | 1.48[7] | 2.09 | 3.46 | 0.47[6] | 0.98[6] | 1.90[7] | 2.62 | 4.17 |
| | 16 | 0.02[3] | 0.41[6] | 1.22[6] | 1.82[6] | 3.18 | 0.18[3] | 0.67[6] | 1.62[6] | 2.33[7] | 3.88 |
| | 24 | 0.00[2] | 0.00[3] | 0.77[3] | 1.34[6] | 2.68[6] | 0.00[2] | 0.13[3] | 1.13[3] | 1.81[6] | 3.34[6] |
| 14 | 12 | 0.00[3] | 0.32[3] | 0.96[6] | 1.43[6] | 2.48[7] | 0.13[3] | 0.53[3] | 1.27[6] | 1.83[6] | 3.03 |
| | 16 | 0.00[2] | 0.04[2] | 0.71[3] | 1.16[3] | 2.20[6] | 0.00[2] | 0.22[3] | 1.00[3] | 1.54[6] | 2.73[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.28[2] | 0.70[2] | 1.71[3] | 0.00[2] | 0.00[2] | 0.53[2] | 1.04[3] | 2.21[6] |
| 16 | 12 | 0.00[2] | 0.05[2] | 0.59[3] | 0.95[3] | 1.76[6] | 0.00[2] | 0.20[2] | 0.82[3] | 1.26[6] | 2.20[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.35[2] | 0.70[2] | 1.50[3] | 0.00[2] | 0.00[2] | 0.57[2] | 0.98[3] | 1.91[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.26[2] | 1.05[2] | 0.00[1] | 0.00[2] | 0.13[2] | 0.51[2] | 1.42[3] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 362S137-mils (Fy) | | | | | 362S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.09 | 1.72 | 2.95 | 3.98 | 5.78 | 1.44 | 2.20 | 3.74 | 4.96 | 7.50 |
| | 16 | 0.91 | 1.53 | 2.77 | 3.80 | 5.61 | 1.23 | 1.99 | 3.55 | 4.76 | 7.31 |
| | 24 | 0.56[7] | 1.16 | 2.43 | 3.44 | 5.30 | 0.85 | 1.59 | 3.17 | 4.38 | 6.93 |
| 9 | 12 | 0.90 | 1.49 | 2.64 | 3.59 | 5.58 | 1.21 | 1.93 | 3.35 | 4.47 | 6.82 |
| | 16 | 0.68 | 1.26 | 2.43 | 3.37 | 5.37 | 0.97 | 1.68 | 3.12 | 4.23 | 6.58 |
| | 24 | 0.28[6] | 0.83[7] | 2.03 | 2.94 | 4.95 | 0.53[6] | 1.21 | 2.68 | 3.77 | 6.13 |
| 10 | 12 | 0.70[7] | 1.25 | 2.31 | 3.16 | 5.10 | 0.97 | 1.64 | 2.94 | 3.94 | 6.08 |
| | 16 | 0.46[6] | 0.99[7] | 2.07 | 2.91 | 4.84 | 0.71[7] | 1.36 | 2.67 | 3.66 | 5.81 |
| | 24 | 0.02[3] | 0.51[6] | 1.62[6] | 2.44[7] | 4.35 | 0.23[6] | 0.84[6] | 2.18[7] | 3.15 | 5.30 |
| 12 | 12 | 0.33[6] | 0.78[6] | 1.63[7] | 2.30 | 3.80 | 0.53[6] | 1.08[7] | 2.10 | 2.88 | 4.58 |
| | 16 | 0.06[3] | 0.48[6] | 1.36[6] | 2.02[7] | 3.51 | 0.24[3] | 0.76[6] | 1.81[6] | 2.58[7] | 4.27 |
| | 24 | 0.00[2] | 0.00[3] | 0.89[3] | 1.51[6] | 2.99[6] | 0.00[2] | 0.20[3] | 1.29[6] | 2.03[6] | 3.70[7] |
| 14 | 12 | 0.03[3] | 0.38[3] | 1.08[6] | 1.6[6] | 2.74[7] | 0.18[3] | 0.61[6] | 1.42[6] | 2.03[6] | 3.35 |
| | 16 | 0.00[2] | 0.08[3] | 0.82[3] | 1.31[6] | 2.45[6] | 0.00[2] | 0.29[3] | 1.14[3] | 1.73[6] | 3.03[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.35[2] | 0.82[3] | 1.94[3] | 0.00[2] | 0.00[2] | 0.64[2] | 1.19[3] | 2.48[6] |
| 16 | 12 | 0.00[2] | 0.09[2] | 0.68[3] | 1.07[3] | 1.97[6] | 0.00[2] | 0.26[3] | 0.93[3] | 1.41[6] | 2.44[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.42[2] | 0.80[3] | 1.69[3] | 0.00[2] | 0.00[2] | 0.66[2] | 1.12[3] | 2.14[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.34[2] | 1.21[2] | 0.00[1] | 0.00[2] | 0.19[2] | 0.62[2] | 1.62[3] |

| Wall | Spacing | 362S200-mils (Fy) | | | | | 362S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.77 | 2.79 | 4.71 | 6.22 | 9.15 | 3.19 | 5.32 | 7.25 | 10.62 |
| | 16 | 1.55 | 2.56 | 4.49 | 6.01 | 8.95 | 2.95 | 5.08 | 7.01 | 10.41 |
| | 24 | 1.13 | 2.13 | 4.06 | 5.58 | 8.55 | 2.48 | 4.62 | 6.53 | 9.99 |
| 9 | 12 | 1.51 | 2.47 | 4.21 | 5.60 | 8.32 | 2.87 | 4.84 | 6.54 | 9.69 |
| | 16 | 1.25 | 2.19 | 3.94 | 5.34 | 8.07 | 2.57 | 4.55 | 6.24 | 9.43 |
| | 24 | 0.77[7] | 1.68 | 3.44 | 4.84 | 7.59 | 2.01 | 4.00 | 5.68 | 8.92 |
| 10 | 12 | 1.25 | 2.13 | 3.69 | 4.95 | 7.44 | 2.51 | 4.33 | 5.79 | 8.71 |
| | 16 | 0.95 | 1.82 | 3.38 | 4.65 | 7.15 | 2.17 | 3.99 | 5.45 | 8.40 |
| | 24 | 0.42[6] | 1.25[7] | 2.83 | 4.09 | 6.60 | 1.54 | 3.37 | 4.82 | 7.82 |
| 12 | 12 | 0.74[6] | 1.46 | 2.65 | 3.66 | 5.66 | 1.77 | 3.17 | 4.32 | 6.72 |
| | 16 | 0.41[6] | 1.11[6] | 2.32[7] | 3.32 | 5.32 | 1.37[7] | 2.79 | 3.93 | 6.35 |
| | 24 | 0.00[3] | 0.49[6] | 1.73[6] | 2.72[6] | 4.72 | 0.67[6] | 2.12[6] | 3.25[7] | 5.69 |
| 14 | 12 | 0.32[3] | 0.90[6] | 1.82[6] | 2.61[7] | 4.19 | 1.12[6] | 2.20[7] | 3.11 | 5.03 |
| | 16 | 0.00[3] | 0.54[3] | 1.49[6] | 2.28[6] | 3.85[7] | 0.71[6] | 1.82[6] | 2.72[7] | 4.66 |
| | 24 | 0.00[2] | 0.00[2] | 0.92[3] | 1.69[3] | 3.24[6] | 0.01[3] | 1.17[3] | 2.05[6] | 3.99[6] |
| 16 | 12 | 0.01[2] | 0.46[3] | 1.22[6] | 1.85[6] | 3.10[7] | 0.61[3] | 1.49[6] | 2.22[6] | 3.77 |
| | 16 | 0.00[2] | 0.12[2] | 0.91[3] | 1.53[3] | 2.77[6] | 0.22[3] | 1.14[3] | 1.85[6] | 3.41[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.38[2] | 0.97[2] | 2.20[3] | 0.00[2] | 0.53[2] | 1.21[3] | 2.77[6] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 400S137-mils (Fy) | | | | | 400S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.24 | 1.92 | 3.32 | 4.60 | 6.20 | 1.62 | 2.45 | 4.22 | 5.77 | 8.73 |
| | 16 | 1.06 | 1.74 | 3.14 | 4.41 | 6.05 | 1.42 | 2.25 | 4.04 | 5.57 | 8.54 |
| | 24 | 0.72 | 1.38 | 2.81 | 4.06 | 5.77 | 1.05 | 1.86 | 3.67 | 5.18 | 8.17 |
| 9 | 12 | 1.05 | 1.71 | 3.05 | 4.30 | 6.04 | 1.40 | 2.20 | 3.87 | 5.33 | 8.11 |
| | 16 | 0.84 | 1.49 | 2.83 | 4.07 | 5.84 | 1.17 | 1.95 | 3.64 | 5.08 | 7.87 |
| | 24 | 0.44[7] | 1.06 | 2.43 | 3.63 | 5.47 | 0.73[7] | 1.49 | 3.20 | 4.61 | 7.41 |
| 10 | 12 | 0.86 | 1.49 | 2.74 | 3.89 | 5.83 | 1.17 | 1.93 | 3.48 | 4.83 | 7.40 |
| | 16 | 0.62[7] | 1.22 | 2.49 | 3.62 | 5.59 | 0.90 | 1.64 | 3.21 | 4.54 | 7.12 |
| | 24 | 0.17[6] | 0.74[6] | 2.03[7] | 3.11 | 5.12 | 0.41[6] | 1.12[7] | 2.70 | 3.99 | 6.58 |
| 12 | 12 | 0.48[6] | 1.01[7] | 2.08 | 2.99 | 4.90 | 0.72[7] | 1.37 | 2.65 | 3.73 | 5.87 |
| | 16 | 0.19[6] | 0.70[6] | 1.78[7] | 2.67 | 4.57 | 0.41[6] | 1.03[6] | 2.33[7] | 3.38 | 5.52 |
| | 24 | 0.00[3] | 0.14[3] | 1.25[6] | 2.09[6] | 3.98[7] | 0.00[3] | 0.43[6] | 1.75[6] | 2.76[6] | 4.88 |
| 14 | 12 | 0.15[3] | 0.58[6] | 1.46[6] | 2.15[7] | 3.64 | 0.33[6] | 0.86[6] | 1.89[6] | 2.70 | 4.40 |
| | 16 | 0.00[3] | 0.25[3] | 1.15[6] | 1.82[6] | 3.30[7] | 0.01[3] | 0.50[6] | 1.56[6] | 2.35[6] | 4.04 |
| | 24 | 0.00[2] | 0.00[2] | 0.62[3] | 1.24[3] | 2.7[6] | 0.00[2] | 0.00[3] | 0.98[3] | 1.72[6] | 3.40[6] |
| 16 | 12 | 0.00[2] | 0.23[3] | 0.97[3] | 1.49[6] | 2.66[6] | 0.03[3] | 0.44[3] | 1.30[6] | 1.92[6] | 3.26[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.67[3] | 1.17[3] | 2.34[6] | 0.00[2] | 0.09[3] | 0.98[3] | 1.58[6] | 2.91[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.16[2] | 0.62[2] | 1.77[3] | 0.00[2] | 0.00[2] | 0.42[2] | 0.98[3] | 2.30[3] |

| Wall | Spacing | 400S200-mils (Fy) | | | | | 400S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.97 | 3.10 | 5.32 | 7.19 | 10.65 | 3.48 | 5.81 | 8.19 | 12.36 |
| | 16 | 1.76 | 2.88 | 5.10 | 6.97 | 10.45 | 3.25 | 5.59 | 7.95 | 12.15 |
| | 24 | 1.35 | 2.46 | 4.68 | 6.55 | 10.06 | 2.81 | 5.16 | 7.49 | 11.73 |
| 9 | 12 | 1.73 | 2.80 | 4.86 | 6.63 | 9.87 | 3.19 | 5.44 | 7.65 | 11.47 |
| | 16 | 1.47 | 2.53 | 4.59 | 6.36 | 9.62 | 2.90 | 5.16 | 7.35 | 11.21 |
| | 24 | 0.99 | 2.03 | 4.09 | 5.84 | 9.14 | 2.36 | 4.62 | 6.78 | 10.70 |
| 10 | 12 | 1.47 | 2.48 | 4.36 | 6.01 | 9.01 | 2.86 | 4.98 | 7.01 | 10.51 |
| | 16 | 1.18 | 2.17 | 4.05 | 5.69 | 8.71 | 2.52 | 4.64 | 6.65 | 10.19 |
| | 24 | 0.64[7] | 1.59 | 3.47 | 5.09 | 8.14 | 1.90 | 4.02 | 5.98 | 9.59 |
| 12 | 12 | 0.96[6] | 1.81 | 3.33 | 4.69 | 7.19 | 2.17 | 3.95 | 5.50 | 8.47 |
| | 16 | 0.61[6] | 1.44[7] | 2.96 | 4.31 | 6.82 | 1.75 | 3.54 | 5.07 | 8.07 |
| | 24 | 0.00[3] | 0.78[6] | 2.31[6] | 3.62[7] | 6.14 | 1.01[6] | 2.80[7] | 4.29 | 7.33 |
| 14 | 12 | 0.50[6] | 1.21[6] | 2.39[7] | 3.44 | 5.45 | 1.48[7] | 2.87 | 4.07 | 6.51 |
| | 16 | 0.14[3] | 0.81[6] | 2.01[6] | 3.05[7] | 5.06 | 1.03[6] | 2.44[7] | 3.62 | 6.08 |
| | 24 | 0.00[2] | 0.13[3] | 1.36[3] | 2.36[6] | 4.37[6] | 0.26[3] | 1.69[6] | 2.83[6] | 5.31[7] |
| 16 | 12 | 0.14[3] | 0.71[6] | 1.67[6] | 2.48[6] | 4.09 | 0.90[6] | 2.01[6] | 2.95[7] | 4.93 |
| | 16 | 0.00[2] | 0.32[3] | 1.30[3] | 2.10[6] | 3.71[6] | 0.46[3] | 1.60[6] | 2.52[6] | 4.51[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.68[2] | 1.45[3] | 3.04[6] | 0.00[2] | 0.89[3] | 1.77[3] | 3.76[6] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 550S137-mils (Fy) | | | | | 550S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.58 | 2.33 | 3.70 | 4.93 | 7.35 | 2.15 | 3.14 | 5.41 | 7.22 | 11.06 |
| | 16 | 1.47 | 2.22 | 3.61 | 4.84 | 7.25 | 2.02 | 3.02 | 5.29 | 7.10 | 10.93 |
| | 24 | 1.26 | 2.02 | 3.44 | 4.67 | 7.07 | 1.77 | 2.77 | 5.06 | 6.86 | 10.67 |
| 9 | 12 | 1.48 | 2.24 | 3.62 | 4.85 | 7.26 | 2.02 | 3.00 | 5.27 | 7.11 | 10.93 |
| | 16 | 1.35 | 2.10 | 3.51 | 4.74 | 7.14 | 1.86 | 2.85 | 5.12 | 6.95 | 10.76 |
| | 24 | 1.08 | 1.84 | 3.29 | 4.51 | 6.90 | 1.54 | 2.54 | 4.82 | 6.64 | 10.42 |
| 10 | 12 | 1.38 | 2.13 | 3.53 | 4.75 | 7.15 | 1.87 | 2.85 | 5.05 | 6.95 | 10.77 |
| | 16 | 1.21 | 1.97 | 3.39 | 4.61 | 7.00 | 1.67 | 2.65 | 4.87 | 6.75 | 10.55 |
| | 24 | 0.89 | 1.65 | 3.11 | 4.32 | 6.69 | 1.29 | 2.28 | 4.50 | 6.36 | 10.11 |
| 12 | 12 | 1.13 | 1.88 | 3.29 | 4.50 | 6.88 | 1.53 | 2.47 | 4.52 | 6.29 | 10.30 |
| | 16 | 0.90 | 1.64 | 3.08 | 4.29 | 6.64 | 1.26 | 2.20 | 4.25 | 6.00 | 9.96 |
| | 24 | 0.46[6] | 1.20[7] | 2.68 | 3.86 | 6.18 | 0.76[6] | 1.69 | 3.74 | 5.45 | 9.29 |
| 14 | 12 | 0.84[7] | 1.58 | 2.99 | 4.17 | 6.50 | 1.14 | 2.02 | 3.86 | 5.45 | 9.00 |
| | 16 | 0.55[6] | 1.27[7] | 2.70 | 3.87 | 6.16 | 0.82[6] | 1.69 | 3.52 | 5.08 | 8.55 |
| | 24 | 0.02[3] | 0.72[7] | 2.18[6] | 3.30[7] | 5.52 | 0.24[6] | 1.08[6] | 2.91[7] | 4.40 | 7.72 |
| 16 | 12 | 0.52[6] | 1.19[7] | 2.52 | 3.71 | 5.98 | 0.77[6] | 1.56[7] | 3.14 | 4.53 | 7.55 |
| | 16 | 0.20[3] | 0.85[6] | 2.18[6] | 3.33[7] | 5.54 | 0.41[6] | 1.18[6] | 2.77[7] | 4.10 | 7.03 |
| | 24 | 0.00[2] | 0.23[3] | 1.58[6] | 2.65[6] | 4.74[7] | 0.00[3] | 0.51[3] | 2.10[6] | 3.35[6] | 6.10[7] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 600S137-mils (Fy) | | | | | 600S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.57 | 2.31 | 3.65 | 4.88 | 7.38 | 2.21 | 3.19 | 5.42 | 7.25 | 11.17 |
| | 16 | 1.46 | 2.20 | 3.56 | 4.79 | 7.30 | 2.10 | 3.08 | 5.32 | 7.15 | 11.06 |
| | 24 | 1.25 | 1.99 | 3.39 | 4.62 | 7.14 | 1.87 | 2.87 | 5.12 | 6.94 | 10.83 |
| 9 | 12 | 1.48 | 2.22 | 3.57 | 4.80 | 7.31 | 2.11 | 3.10 | 5.33 | 7.15 | 11.06 |
| | 16 | 1.34 | 2.08 | 3.46 | 4.69 | 7.21 | 1.97 | 2.96 | 5.20 | 7.02 | 10.91 |
| | 24 | 1.08 | 1.82 | 3.23 | 4.47 | 7.00 | 1.68 | 2.68 | 4.94 | 6.75 | 10.62 |
| 10 | 12 | 1.38 | 2.11 | 3.48 | 4.71 | 7.22 | 2.00 | 2.99 | 5.22 | 7.04 | 10.93 |
| | 16 | 1.21 | 1.95 | 3.34 | 4.57 | 7.09 | 1.82 | 2.81 | 5.06 | 6.87 | 10.74 |
| | 24 | 0.89 | 1.63 | 3.06 | 4.29 | 6.83 | 1.47 | 2.47 | 4.73 | 6.53 | 10.37 |
| 12 | 12 | 1.14 | 1.87 | 3.26 | 4.48 | 7.00 | 1.70 | 2.68 | 4.88 | 6.74 | 10.59 |
| | 16 | 0.91 | 1.63 | 3.05 | 4.27 | 6.80 | 1.45 | 2.43 | 4.64 | 6.48 | 10.29 |
| | 24 | 0.47[6] | 1.18 | 2.65 | 3.86 | 6.41 | 0.98 | 1.96 | 4.17 | 5.98 | 9.73 |
| 14 | 12 | 0.86 | 1.57 | 2.98 | 4.18 | 6.70 | 1.34 | 2.28 | 4.31 | 6.06 | 10.05 |
| | 16 | 0.57[6] | 1.27 | 2.69 | 3.89 | 6.42 | 1.03 | 1.96 | 3.99 | 5.72 | 9.63 |
| | 24 | 0.03[6] | 0.69[6] | 2.17[7] | 3.33 | 5.87 | 0.46[6] | 1.37[7] | 3.40 | 5.06 | 8.83 |
| 16 | 12 | 0.57[6] | 1.25 | 2.64 | 3.81 | 6.31 | 0.98[7] | 1.84 | 3.65 | 5.22 | 8.73 |
| | 16 | 0.22[6] | 0.87[6] | 2.28[7] | 3.43 | 5.92 | 0.62[6] | 1.47[7] | 3.27 | 4.80 | 8.21 |
| | 24 | 0.00[3] | 0.20[6] | 1.64[6] | 2.74[6] | 5.21 | 0.00[3] | 0.80[6] | 2.60[6] | 4.05[7] | 7.28 |

| Wall | Spacing | 600S200-mils (Fy) | | | | | 600S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.63 | 4.06 | 7.20 | 9.73 | 15.37 | 4.39 | 7.40 | 10.77 | 17.98 |
| | 16 | 2.50 | 3.92 | 7.07 | 9.60 | 15.23 | 4.25 | 7.27 | 10.62 | 17.83 |
| | 24 | 2.26 | 3.65 | 6.80 | 9.35 | 14.96 | 3.98 | 7.01 | 10.32 | 17.53 |
| 9 | 12 | 2.50 | 3.90 | 6.98 | 9.48 | 15.03 | 4.24 | 7.19 | 10.48 | 17.54 |
| | 16 | 2.34 | 3.73 | 6.81 | 9.32 | 14.85 | 4.06 | 7.02 | 10.29 | 17.34 |
| | 24 | 2.03 | 3.39 | 6.47 | 8.99 | 14.49 | 3.72 | 6.69 | 9.91 | 16.95 |
| 10 | 12 | 2.36 | 3.72 | 6.72 | 9.18 | 14.61 | 4.06 | 6.95 | 10.14 | 17.00 |
| | 16 | 2.16 | 3.51 | 6.50 | 8.97 | 14.38 | 3.85 | 6.74 | 9.90 | 16.76 |
| | 24 | 1.79 | 3.10 | 6.08 | 8.57 | 13.93 | 3.42 | 6.33 | 9.43 | 16.27 |
| 12 | 12 | 2.02 | 3.30 | 6.07 | 8.42 | 13.52 | 3.64 | 6.36 | 9.31 | 15.68 |
| | 16 | 1.75 | 3.00 | 5.76 | 8.12 | 13.18 | 3.33 | 6.06 | 8.96 | 15.31 |
| | 24 | 1.24 | 2.44 | 5.17 | 7.54 | 12.53 | 2.75 | 5.49 | 8.30 | 14.61 |
| 14 | 12 | 1.63 | 2.79 | 5.27 | 7.46 | 12.12 | 3.14 | 5.67 | 8.32 | 14.05 |
| | 16 | 1.29 | 2.42 | 4.88 | 7.07 | 11.66 | 2.75 | 5.28 | 7.86 | 13.56 |
| | 24 | 0.67[6] | 1.72 | 4.15 | 6.34 | 10.81 | 2.01 | 4.54 | 7.01 | 12.64 |
| 16 | 12 | 1.22 | 2.25 | 4.41 | 6.39 | 10.52 | 2.60 | 4.95 | 7.24 | 12.24 |
| | 16 | 0.83[6] | 1.82 | 3.95 | 5.93 | 9.97 | 2.13 | 4.47 | 6.69 | 11.64 |
| | 24 | 0.13[6] | 1.03[6] | 3.13[7] | 5.08 | 8.96 | 1.28[6] | 3.60[7] | 5.68 | 10.55 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 800S137-mils (Fy) | | | | | 800S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.58 | 2.29 | 3.46 | 4.64 | 7.10 | 2.23 | 3.19 | 5.29 | 7.10 | 11.10 |
| | 16 | 1.51 | 2.23 | 3.41 | 4.58 | 7.04 | 2.14 | 3.11 | 5.21 | 7.03 | 11.02 |
| | 24 | 1.36 | 2.09 | 3.30 | 4.48 | 6.93 | 1.96 | 2.94 | 5.06 | 6.88 | 10.86 |
| 9 | 12 | 1.52 | 2.24 | 3.42 | 4.59 | 7.05 | 2.15 | 3.12 | 5.23 | 7.04 | 11.03 |
| | 16 | 1.43 | 2.15 | 3.34 | 4.52 | 6.98 | 2.04 | 3.01 | 5.13 | 6.94 | 10.92 |
| | 24 | 1.25 | 1.97 | 3.20 | 4.38 | 6.83 | 1.82 | 2.79 | 4.94 | 6.75 | 10.72 |
| 10 | 12 | 1.45 | 2.17 | 3.36 | 4.54 | 7.00 | 2.07 | 3.04 | 5.15 | 6.97 | 10.95 |
| | 16 | 1.34 | 2.06 | 3.27 | 4.45 | 6.91 | 1.93 | 2.90 | 5.03 | 6.85 | 10.82 |
| | 24 | 1.12 | 1.84 | 3.10 | 4.28 | 6.72 | 1.66 | 2.64 | 4.79 | 6.61 | 10.56 |
| 12 | 12 | 1.30 | 2.02 | 3.24 | 4.41 | 6.86 | 1.87 | 2.85 | 4.97 | 6.79 | 10.75 |
| | 16 | 1.13 | 1.86 | 3.11 | 4.29 | 6.73 | 1.68 | 2.65 | 4.79 | 6.61 | 10.55 |
| | 24 | 0.82 | 1.54 | 2.85 | 4.03 | 6.46 | 1.29 | 2.26 | 4.44 | 6.25 | 10.17 |
| 14 | 12 | 1.11 | 1.83 | 3.08 | 4.26 | 6.69 | 1.64 | 2.61 | 4.75 | 6.55 | 10.49 |
| | 16 | 0.89 | 1.61 | 2.90 | 4.08 | 6.51 | 1.37 | 2.34 | 4.50 | 6.30 | 10.21 |
| | 24 | 0.47 | 1.19 | 2.55 | 3.73 | 6.13 | 0.86 | 1.83 | 4.01 | 5.81 | 9.67 |
| 16 | 12 | 0.90 | 1.61 | 2.89 | 4.07 | 6.48 | 1.37 | 2.33 | 4.47 | 6.27 | 10.16 |
| | 16 | 0.62 | 1.33 | 2.65 | 3.83 | 6.23 | 1.03 | 1.99 | 4.14 | 5.93 | 9.78 |
| | 24 | 0.10[6] | 0.80 | 2.20 | 3.37 | 5.74 | 0.39[7] | 1.34 | 3.51 | 5.29 | 9.06 |

| Wall | Spacing | 800S200-mils (Fy) | | | | | 800S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.79 | 4.31 | 7.58 | 10.14 | 15.81 | 4.72 | 8.00 | 11.62 | 19.58 |
| | 16 | 2.69 | 4.22 | 7.49 | 10.05 | 15.72 | 4.62 | 7.91 | 11.52 | 19.48 |
| | 24 | 2.50 | 4.04 | 7.31 | 9.89 | 15.55 | 4.43 | 7.72 | 11.32 | 19.27 |
| 9 | 12 | 2.71 | 4.24 | 7.50 | 10.06 | 15.73 | 4.62 | 7.89 | 11.49 | 19.40 |
| | 16 | 2.59 | 4.12 | 7.39 | 9.96 | 15.62 | 4.50 | 7.77 | 11.36 | 19.27 |
| | 24 | 2.35 | 3.89 | 7.16 | 9.75 | 15.40 | 4.26 | 7.53 | 11.10 | 19.01 |
| 10 | 12 | 2.62 | 4.15 | 7.41 | 9.98 | 15.64 | 4.51 | 7.75 | 11.33 | 19.19 |
| | 16 | 2.47 | 4.01 | 7.27 | 9.85 | 15.50 | 4.36 | 7.61 | 11.17 | 19.03 |
| | 24 | 2.17 | 3.72 | 6.98 | 9.58 | 15.22 | 4.06 | 7.31 | 10.85 | 18.70 |
| 12 | 12 | 2.40 | 3.94 | 7.19 | 9.77 | 15.42 | 4.25 | 7.41 | 10.94 | 18.64 |
| | 16 | 2.19 | 3.73 | 6.98 | 9.57 | 15.20 | 4.03 | 7.20 | 10.70 | 18.40 |
| | 24 | 1.76 | 3.32 | 6.55 | 9.18 | 14.77 | 3.59 | 6.77 | 10.23 | 17.90 |
| 14 | 12 | 2.12 | 3.64 | 6.81 | 9.44 | 15.11 | 3.92 | 6.97 | 10.37 | 17.80 |
| | 16 | 1.84 | 3.35 | 6.51 | 9.16 | 14.80 | 3.62 | 6.68 | 10.04 | 17.45 |
| | 24 | 1.28 | 2.80 | 5.93 | 8.60 | 14.19 | 3.04 | 6.10 | 9.40 | 16.77 |
| 16 | 12 | 1.80 | 3.25 | 6.23 | 8.77 | 14.32 | 3.53 | 6.43 | 9.61 | 16.60 |
| | 16 | 1.44 | 2.90 | 5.85 | 8.40 | 13.90 | 3.15 | 6.05 | 9.19 | 16.14 |
| | 24 | 0.76 | 2.21 | 5.12 | 7.69 | 13.10 | 2.43 | 5.33 | 8.37 | 15.26 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 15psf lateral load

| Wall | Spacing | 1000S162-mils (Fy) | | | | 1000S200-mils (Fy) | | | | 1000S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 3.16 | 5.10 | 6.85 | 10.75 | 4.29 | 7.46 | 9.97 | 15.64 | 4.81 | 8.13 | 11.78 | 19.77 |
| | 16 | 3.09 | 5.05 | 6.80 | 10.70 | 4.22 | 7.38 | 9.90 | 15.57 | 4.74 | 8.05 | 11.71 | 19.70 |
| | 24 | 2.97 | 4.94 | 6.69 | 10.59 | 4.06 | 7.23 | 9.76 | 15.42 | 4.58 | 7.91 | 11.57 | 19.56 |
| 9 | 12 | 3.10 | 5.06 | 6.81 | 10.71 | 4.23 | 7.39 | 9.91 | 15.58 | 4.75 | 8.07 | 11.72 | 19.71 |
| | 16 | 3.02 | 4.99 | 6.74 | 10.63 | 4.13 | 7.30 | 9.82 | 15.49 | 4.65 | 7.97 | 11.63 | 19.62 |
| | 24 | 2.86 | 4.84 | 6.60 | 10.49 | 3.94 | 7.11 | 9.64 | 15.30 | 4.45 | 7.78 | 11.44 | 19.44 |
| 10 | 12 | 3.05 | 5.00 | 6.76 | 10.65 | 4.16 | 7.32 | 9.84 | 15.51 | 4.68 | 8.00 | 11.65 | 19.64 |
| | 16 | 2.95 | 4.92 | 6.67 | 10.56 | 4.04 | 7.20 | 9.73 | 15.39 | 4.55 | 7.88 | 11.54 | 19.53 |
| | 24 | 2.74 | 4.74 | 6.50 | 10.39 | 3.79 | 6.96 | 9.51 | 15.17 | 4.31 | 7.64 | 11.31 | 19.30 |
| 12 | 12 | 2.91 | 4.88 | 6.63 | 10.53 | 3.99 | 7.15 | 9.68 | 15.34 | 4.50 | 7.83 | 11.48 | 19.47 |
| | 16 | 2.76 | 4.75 | 6.51 | 10.40 | 3.81 | 6.98 | 9.52 | 15.17 | 4.33 | 7.66 | 11.31 | 19.30 |
| | 24 | 2.47 | 4.50 | 6.26 | 10.14 | 3.46 | 6.63 | 9.19 | 14.83 | 3.97 | 7.31 | 10.97 | 18.95 |
| 14 | 12 | 2.74 | 4.73 | 6.49 | 10.37 | 3.78 | 6.94 | 9.48 | 15.13 | 4.28 | 7.58 | 11.25 | 19.25 |
| | 16 | 2.54 | 4.55 | 6.31 | 10.19 | 3.54 | 6.69 | 9.25 | 14.89 | 4.03 | 7.34 | 11.01 | 19.00 |
| | 24 | 2.15 | 4.20 | 5.97 | 9.82 | 3.06 | 6.21 | 8.79 | 14.42 | 3.55 | 6.87 | 10.53 | 18.52 |
| 16 | 12 | 2.54 | 4.55 | 6.30 | 10.17 | 3.54 | 6.68 | 9.23 | 14.86 | 3.99 | 7.21 | 10.84 | 18.76 |
| | 16 | 2.28 | 4.31 | 6.07 | 9.93 | 3.22 | 6.36 | 8.92 | 14.54 | 3.67 | 6.90 | 10.53 | 18.43 |
| | 24 | 1.77 | 3.85 | 5.62 | 9.45 | 2 60 | 5.72 | 8.31 | 13.90 | 3.05 | 6.29 | 9.90 | 17.77 |

| Wall | Spacing | 1200S162-mils (Fy) | | | 1200S200-mils (Fy) | | | 1200S250-mils (Fy) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 4.88 | 6.55 | 10.30 | 7.31 | 9.77 | 15.36 | 8.09 | 11.74 | 19.72 |
| | 16 | 4.84 | 6.51 | 10.26 | 7.25 | 9.72 | 15.30 | 8.03 | 11.68 | 19.65 |
| | 24 | 4.75 | 6.43 | 10.17 | 7.13 | 9.61 | 15.19 | 7.90 | 11.55 | 19.52 |
| 9 | 12 | 4.84 | 6.52 | 10.26 | 7.26 | 9.73 | 15.31 | 8.04 | 11.69 | 19.66 |
| | 16 | 4.79 | 6.47 | 10.21 | 7.19 | 9.66 | 15.24 | 7.96 | 11.61 | 19.58 |
| | 24 | 4.68 | 6.36 | 10.10 | 7.04 | 9.52 | 15.10 | 7.80 | 11.44 | 19.41 |
| 10 | 12 | 4.81 | 6.48 | 10.22 | 7.21 | 9.68 | 15.26 | 7.98 | 11.63 | 19.60 |
| | 16 | 4.74 | 6.42 | 10.16 | 7.11 | 9.59 | 15.17 | 7.88 | 11.52 | 19.49 |
| | 24 | 4.60 | 6.29 | 10.03 | 6.93 | 9.41 | 15.00 | 7.68 | 11.32 | 19.29 |
| 12 | 12 | 4.71 | 6.39 | 10.13 | 7.08 | 9.55 | 15.14 | 7.84 | 11.48 | 19.45 |
| | 16 | 4.62 | 6.30 | 10.04 | 6.94 | 9.43 | 15.01 | 7.70 | 11.33 | 19.30 |
| | 24 | 4.42 | 6.11 | 9.84 | 6.67 | 9.17 | 14.75 | 7.41 | 11.03 | 18.99 |
| 14 | 12 | 4.60 | 6.28 | 10.02 | 6.92 | 9.40 | 14.99 | 7.67 | 11.30 | 19.27 |
| | 16 | 4.47 | 6.15 | 9.89 | 6.73 | 9.23 | 14.81 | 7.47 | 11.09 | 19.05 |
| | 24 | 4.20 | 5.89 | 9.62 | 6.35 | 8.87 | 14.45 | 7.07 | 10.67 | 18.62 |
| 16 | 12 | 4.47 | 6.15 | 9.89 | 6.73 | 9.22 | 14.80 | 7.47 | 11.09 | 19.04 |
| | 16 | 4.29 | 5.98 | 9.71 | 6.48 | 8.99 | 14.56 | 7.20 | 10.81 | 18.75 |
| | 24 | 3.94 | 5.64 | 9.36 | 5.98 | 8.52 | 14.09 | 6.68 | 10.25 | 18.18 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.37[6] | 0.79[6] | 1.43[7] | 2.03 | 3.35 | 0.56[6] | 1.06[7] | 1.80 | 2.47 | 3.90 |
| | 16 | 0.17[3] | 0.57[6] | 1.25[6] | 1.84[7] | 3.11 | 0.32[6] | 0.83[6] | 1.60[7] | 2.26 | 3.66 |
| | 24 | 0.00[2] | 0.19[3] | 0.92[3] | 1.48[6] | 2.66[6] | 0.00[3] | 0.40[3] | 1.24[6] | 1.87[6] | 3.21[7] |
| 9 | 12 | 0.18[3] | 0.54[6] | 1.14[6] | 1.64[6] | 2.70 | 0.33[6] | 0.77[6] | 1.44[6] | 2.01[7] | 3.19 |
| | 16 | 0.00[2] | 0.32[3] | 0.94[6] | 1.43[6] | 2.44[6] | 0.09[3] | 0.52[3] | 1.23[6] | 1.78[6] | 2.93[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.60[3] | 1.06[3] | 1.99[6] | 0.00[2] | 0.09[2] | 0.86[3] | 1.38[3] | 2.46[6] |
| 10 | 12 | 0.03[2] | 0.34[3] | 0.88[3] | 1.30[6] | 2.15[6] | 0.14[3] | 0.52[3] | 1.13[6] | 1.61[6] | 2.59[7] |
| | 16 | 0.00[2] | 0.11[2] | 0.68[3] | 1.09[3] | 1.90[6] | 0.00[2] | 0.27[3] | 0.91[3] | 1.38[6] | 2.32[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.33[2] | 0.71[2] | 1.45[3] | 0.00[2] | 0.00[2] | 0.54[2] | 0.98[3] | 1.86[3] |
| 12 | 12 | 0.00[2] | 0.03[2] | 0.48[2] | 0.78[3] | 1.35[3] | 0.00[2] | 0.15[2] | 0.65[3] | 1.00[3] | 1.68[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.28[2] | 0.57[2] | 1.11[3] | 0.00[1] | 0.00[2] | 0.44[2] | 0.78[2] | 1.43[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.22[2] | 0.70[2] | 0.00[1] | 0.00[1] | 0.09[2] | 0.39[2] | 0.99[2] |
| 14 | 12 | 0.00[1] | 0.00[1] | 0.21[2] | 0.43[2] | 0.83[2] | 0.00[1] | 0.00[2] | 0.33[2] | 0.59[2] | 1.08[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.03[1] | 0.24[1] | 0.62[2] | 0.00[1] | 0.00[1] | 0.14[1] | 0.38[2] | 0.84[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.25[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.03[1] | 0.44[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.04[1] | 0.20[1] | 0.49[2] | 0.00[1] | 0.00[1] | 0.12[1] | 0.32[2] | 0.68[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.03[1] | 0.30[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.13[1] | 0.46[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | .0 00[1] | 0.10[1] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.85 | 1.45 | 2.61 | 3.56 | 5.46 | 1.16 | 1.89 | 3.36 | 4.46 | 6.88 |
| | 16 | 0.62 | 1.20 | 2.38 | 3.32 | 5.23 | 0.90 | 1.62 | 3.11 | 4.21 | 6.63 |
| | 24 | 0.18[6] | 0.73[7] | 1.96 | 2.87 | 4.80 | 0.43[6] | 1.11[7] | 2.64 | 3.72 | 6.15 |
| 9 | 12 | 0.62[7] | 1.18 | 2.25 | 3.13 | 5.14 | 0.90 | 1.57 | 2.91 | 3.92 | 6.14 |
| | 16 | 0.36[6] | 0.89[7] | 1.99 | 2.85 | 4.85 | 0.60[6] | 1.26 | 2.62 | 3.62 | 5.84 |
| | 24 | 0.00[3] | 0.36[6] | 1.51[6] | 2.33[7] | 4.31 | 0.07[6] | 0.69[6] | 2.08[7] | 3.06 | 5.28 |
| 10 | 12 | 0.40[6] | 0.91[7] | 1.89 | 2.67 | 4.47 | 0.64[6] | 1.25 | 2.45 | 3.37 | 5.37 |
| | 16 | 0.11[6] | 0.59[6] | 1.60[6] | 2.36[7] | 4.15 | 0.32[6] | 0.91[6] | 2.14[7] | 3.03 | 5.03 |
| | 24 | 0.00[3] | 0.02[3] | 1.08[6] | 1.80[6] | 3.56[7] | 0.00[3] | 0.29[6] | 1.56[6] | 2.43[6] | 4.41 |
| 12 | 12 | 0.02[3] | 0.41[6] | 1.22[6] | 1.82[6] | 3.18 | 0.18[3] | 0.67[6] | 1.62[6] | 2.33[7] | 3.88 |
| | 16 | 0.00[2] | 0.07[3] | 0.91[3] | 1.49[6] | 2.84[6] | 0.00[3] | 0.30[3] | 1.29[6] | 1.97[6] | 3.51[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.38[2] | 0.91[3] | 2.23[6] | 0.00[2] | 0.00[2] | 0.7[3] | 1.35[3] | 2.86[6] |
| 14 | 12 | 0.00[2] | 0.04[2] | 0.71[3] | 1.16[3] | 2.20[6] | 0.00[2] | 0.22[3] | 1.00[3] | 1.54[6] | 2.73[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.41[2] | 0.84[3] | 1.87[3] | 0.00[2] | 0.00[2] | 0.68[3] | 1.20[3] | 2.37[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.29[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.13[2] | 0.60[2] | 1.75[3] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.35[2] | 0.70[2] | 1.50[3] | 0.00[2] | 0.00[2] | 0.57[2] | 0.98[3] | 1.91[6] |
| | 16 | 0.00[1] | 0.00[1] | 0.07[2] | 0.40[2] | 1.19[2] | 0.00[1] | 0.00[2] | 0.26[2] | 0.66[2] | 1.58[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.66[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.11[2] | 0.99[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 362S137-mils (Fy) | | | | | 362S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.91 | 1.53 | 2.77 | 3.80 | 5.61 | 0.91 | 1.53 | 2.77 | 3.80 | 5.61 |
| | 16 | 0.67 | 1.28 | 2.54 | 3.56 | 5.40 | 0.67 | 1.28 | 2.54 | 3.56 | 5.40 |
| | 24 | 0.24[6] | 0.81[7] | 2.11 | 3.10 | 4.99 | 0.24[6] | 0.81[7] | 2.11 | 3.10 | 4.99 |
| 9 | 12 | 0.68 | 1.26 | 2.43 | 3.37 | 5.37 | 0.68 | 1.26 | 2.43 | 3.37 | 5.37 |
| | 16 | 0.41[6] | 0.97[7] | 2.16 | 3.08 | 5.09 | 0.41[6] | 0.97[7] | 2.16 | 3.08 | 5.09 |
| | 24 | 0.00[6] | 0.44[6] | 1.66[6] | 2.55[7] | 4.56 | 0.00[6] | 0.44[6] | 1.66[6] | 2.55[7] | 4.56 |
| 10 | 12 | 0.46[6] | 0.99[7] | 2.07 | 2.91 | 4.84 | 0.46[6] | 0.99[7] | 2.07 | 2.91 | 4.84 |
| | 16 | 0.16[6] | 0.66[6] | 1.77[7] | 2.59 | 4.51 | 0.16[6] | 0.66[6] | 1.77[7] | 2.59 | 4.51 |
| | 24 | 0.00[3] | 0.09[3] | 1.22[6] | 2.01[6] | 3.91[7] | 0.00[3] | 0.09[3] | 1.22[6] | 2.01[6] | 3.91[7] |
| 12 | 12 | 0.06[3] | 0.48[6] | 1.36[6] | 2.02[7] | 3.51 | 0.06[3] | 0.48[6] | 1.36[6] | 2.02[7] | 3.51 |
| | 16 | 0.00[2] | 0.13[3] | 1.04[6] | 1.67[6] | 3.15[6] | 0.00[2] | 0.13[3] | 1.04[6] | 1.67[6] | 3.15[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.48[3] | 1.06[3] | 2.52[6] | 0.00[2] | 0.00[2] | 0.48[3] | 1.06[3] | 2.52[6] |
| 14 | 12 | 0.00[2] | 0.08[3] | 0.82[3] | 1.31[6] | 2.45[6] | 0.00[2] | 0.08[3] | 0.82[3] | 1.31[6] | 2.45[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.50[2] | 0.97[3] | 2.1[6] | 0.00[2] | 0.00[2] | 0.50[2] | 0.97[3] | 2.1[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.39[2] | 1.49[3] | 0.00[1] | 0.00[2] | 0.00[2] | 0.39[2] | 1.49[3] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.42[2] | 0.80[3] | 1.69[3] | 0.00[2] | 0.00[2] | 0.42[2] | 0.80[3] | 1.69[3] |
| | 16 | 0.00[1] | 0.00[2] | 0.13[2] | 0.49[2] | 1.36[3] | 0.00[1] | 0.00[2] | 0.13[2] | 0.49[2] | 1.36[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.80[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.80[2] |

| Wall | Spacing | 362S200-mils (Fy) | | | | | 362S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.91 | 1.53 | 2.77 | 3.80 | 5.61 | 2.95 | 5.08 | 7.01 | 10.41 |
| | 16 | 0.67 | 1.28 | 2.54 | 3.56 | 5.40 | 2.63 | 4.77 | 6.69 | 10.13 |
| | 24 | 0.24[6] | 0.81[7] | 2.11 | 3.10 | 4.99 | 2.03 | 4.19 | 6.08 | 9.59 |
| 9 | 12 | 0.68 | 1.26 | 2.43 | 3.37 | 5.37 | 2.57 | 4.55 | 6.24 | 9.43 |
| | 16 | 0.41[6] | 0.97[7] | 2.16 | 3.08 | 5.09 | 2.19 | 4.18 | 5.86 | 9.09 |
| | 24 | 0.00[6] | 0.44[6] | 1.66[6] | 2.55[7] | 4.56 | 1.49 | 3.49 | 5.15 | 8.44 |
| 10 | 12 | 0.46[6] | 0.99[7] | 2.07 | 2.91 | 4.84 | 2.17 | 3.99 | 5.45 | 8.40 |
| | 16 | 0.16[6] | 0.66[6] | 1.77[7] | 2.59 | 4.51 | 1.74 | 3.57 | 5.02 | 8.01 |
| | 24 | 0.00[3] | 0.09[3] | 1.22[6] | 2.01[6] | 3.91[7] | 0.97 | 2.81[7] | 4.24 | 7.28 |
| 12 | 12 | 0.06[3] | 0.48[6] | 1.36[6] | 2.02[7] | 3.51 | 1.37 | 2.79 | 3.93 | 6.35 |
| | 16 | 0.00[2] | 0.13[3] | 1.04[6] | 1.67[6] | 3.15[6] | 0.89 | 2.33[6] | 3.47 | 5.91 |
| | 24 | 0.00[2] | 0.00[2] | 0.48[3] | 1.06[3] | 2.52[6] | 0.06 | 1.53[6] | 2.64[6] | 5.10[7] |
| 14 | 12 | 0.00[2] | 0.08[3] | 0.82[3] | 1.31[6] | 2.45[6] | 0.71 | 1.82[6] | 2.72[7] | 4.66 |
| | 16 | 0.00[2] | 0.00[2] | 0.50[2] | 0.97[3] | 2.1[6] | 0.23 | 1.38[6] | 2.26[6] | 4.20[7] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.39[2] | 1.49[3] | 0.00 | 0.61[3] | 1.46[3] | 3.40[6] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.42[2] | 0.80[3] | 1.69[3] | 0.22 | 1.14[3] | 1.85[6] | 3.41[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.13[2] | 0.49[2] | 1.36[3] | 0.00 | 0.72[3] | 1.41[3] | 2.97[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.80[2] | 0.00 | 0.00[2] | 0.66[2] | 2.21[3] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 400S137-mils (Fy) | | | | | 400S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.06 | 1.74 | 3.14 | 4.41 | 6.05 | 1.42 | 2.25 | 4.04 | 5.57 | 8.54 |
| | 16 | 0.83 | 1.50 | 2.92 | 4.18 | 5.86 | 1.17 | 1.99 | 3.79 | 5.31 | 8.30 |
| | 24 | 0.40[7] | 1.04 | 2.50 | 3.72 | 5.49 | 0.70 | 1.50 | 3.32 | 4.81 | 7.82 |
| 9 | 12 | 0.84 | 1.49 | 2.83 | 4.07 | 5.84 | 1.17 | 1.95 | 3.64 | 5.08 | 7.87 |
| | 16 | 0.57[7] | 1.20 | 2.56 | 3.77 | 5.60 | 0.87 | 1.64 | 3.34 | 4.76 | 7.56 |
| | 24 | 0.07[6] | 0.67[6] | 2.06 | 3.21 | 5.12 | 0.33[6] | 1.07[7] | 2.78 | 4.16 | 6.98 |
| 10 | 12 | 0.62[7] | 1.22 | 2.49 | 3.62 | 5.59 | 0.90 | 1.64 | 3.21 | 4.54 | 7.12 |
| | 16 | 0.31[6] | 0.89[7] | 2.18 | 3.28 | 5.27 | 0.57[6] | 1.29 | 2.87 | 4.17 | 6.75 |
| | 24 | 0.00[3] | 0.30[6] | 1.61[6] | 2.65[7] | 4.68 | 0.00[6] | 0.64[6] | 2.24[7] | 3.48 | 6.08 |
| 12 | 12 | 0.19[6] | 0.70[6] | 1.78[7] | 2.67 | 4.57 | 0.41[6] | 1.03[6] | 2.33[7] | 3.38 | 5.52 |
| | 16 | 0.00[3] | 0.32[6] | 1.42[6] | 2.27[6] | 4.17 | 0.04[3] | 0.62[6] | 1.94[6] | 2.96[7] | 5.09 |
| | 24 | 0.00[2] | 0.00[3] | 0.79[3] | 1.58[6] | 3.45[6] | 0.00[2] | 0.00[3] | 1.25[3] | 2.20[6] | 4.32[6] |
| 14 | 12 | 0.00[3] | 0.25[3] | 1.15[6] | 1.82[6] | 3.30[7] | 0.01[3] | 0.50[6] | 1.56[6] | 2.35[6] | 4.04 |
| | 16 | 0.00[2] | 0.00[2] | 0.79[3] | 1.42[3] | 2.90[6] | 0.00[2] | 0.08[3] | 1.16[3] | 1.92[6] | 3.60[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.16[2] | 0.73[2] | 2.19[3] | 0.00[2] | 0.00[2] | 0.48[2] | 1.18[3] | 2.84[6] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.67[3] | 1.17[3] | 2.34[6] | 0.00[2] | 0.09[3] | 0.98[3] | 1.58[6] | 2.91[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.32[2] | 0.80[3] | 1.95[3] | 0.00[2] | 0.00[2] | 0.60[2] | 1.17[3] | 2.49[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.15[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.00[2] | 0.48[2] | 1.77[3] |

| Wall | Spacing | 400S200-mils (Fy) | | | | | 400S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.42 | 2.25 | 4.04 | 5.57 | 8.54 | 3.25 | 5.59 | 7.95 | 12.15 |
| | 16 | 1.17 | 1.99 | 3.79 | 5.31 | 8.30 | 2.95 | 5.30 | 7.64 | 11.87 |
| | 24 | 0.70 | 1.50 | 3.32 | 4.81 | 7.82 | 2.38 | 4.74 | 7.04 | 11.33 |
| 9 | 12 | 1.17 | 1.95 | 3.64 | 5.08 | 7.87 | 2.90 | 5.16 | 7.35 | 11.21 |
| | 16 | 0.87 | 1.64 | 3.34 | 4.76 | 7.56 | 2.54 | 4.80 | 6.97 | 10.87 |
| | 24 | 0.33[6] | 1.07[7] | 2.78 | 4.16 | 6.98 | 1.85 | 4.12 | 6.24 | 10.20 |
| 10 | 12 | 0.90 | 1.64 | 3.21 | 4.54 | 7.12 | 2.52 | 4.64 | 6.65 | 10.19 |
| | 16 | 0.57[6] | 1.29 | 2.87 | 4.17 | 6.75 | 2.10 | 4.22 | 6.19 | 9.78 |
| | 24 | 0.00[6] | 0.64[6] | 2.24[7] | 3.48 | 6.08 | 1.33[7] | 3.44 | 5.35 | 9.01 |
| 12 | 12 | 0.41[6] | 1.03[6] | 2.33[7] | 3.38 | 5.52 | 1.75 | 3.54 | 5.07 | 8.07 |
| | 16 | 0.04[3] | 0.62[6] | 1.94[6] | 2.96[7] | 5.09 | 1.25[6] | 3.03 | 4.54 | 7.57 |
| | 24 | 0.00[2] | 0.00[3] | 1.25[3] | 2.20[6] | 4.32[6] | 0.36[6] | 2.14[6] | 3.59[7] | 6.66 |
| 14 | 12 | 0.01[3] | 0.50[6] | 1.56[6] | 2.35[6] | 4.04 | 1.03[6] | 2.44[7] | 3.62 | 6.08 |
| | 16 | 0.00[2] | 0.08[3] | 1.16[3] | 1.92[6] | 3.60[6] | 0.51[6] | 1.93[6] | 3.08[6] | 5.55 |
| | 24 | 0.00[2] | 0.00[2] | 0.48[2] | 1.18[3] | 2.84[6] | 0.00[3] | 1.04[3] | 2.15[6] | 4.63[6] |
| 16 | 12 | 0.00[2] | 0.09[3] | 0.98[3] | 1.58[6] | 2.91[6] | 0.46[3] | 1.60[6] | 2.52[6] | 4.51[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.60[2] | 1.17[3] | 2.49[6] | 0.00[3] | 1.11[3] | 2.00[6] | 4.00[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.48[2] | 1.77[3] | 0.00[2] | 0.27[2] | 1.12[3] | 3.11[3] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 550S137-mils (Fy) | | | | | 550S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.47 | 2.22 | 3.61 | 4.84 | 7.25 | 2.02 | 3.02 | 5.29 | 7.10 | 10.93 |
| | 16 | 1.33 | 2.09 | 3.50 | 4.73 | 7.13 | 1.85 | 2.85 | 5.13 | 6.94 | 10.76 |
| | 24 | 1.05 | 1.82 | 3.27 | 4.49 | 6.89 | 1.52 | 2.53 | 4.83 | 6.63 | 10.41 |
| 9 | 12 | 1.35 | 2.10 | 3.51 | 4.74 | 7.14 | 1.86 | 2.85 | 5.12 | 6.95 | 10.76 |
| | 16 | 1.17 | 1.93 | 3.36 | 4.58 | 6.98 | 1.64 | 2.64 | 4.92 | 6.74 | 10.53 |
| | 24 | 0.82 | 1.59 | 3.07 | 4.28 | 6.66 | 1.23 | 2.24 | 4.53 | 6.33 | 10.08 |
| 10 | 12 | 1.21 | 1.97 | 3.39 | 4.61 | 7.00 | 1.67 | 2.65 | 4.87 | 6.75 | 10.55 |
| | 16 | 0.99 | 1.75 | 3.20 | 4.42 | 6.80 | 1.42 | 2.40 | 4.62 | 6.49 | 10.26 |
| | 24 | 0.58 | 1.34 | 2.84 | 4.04 | 6.40 | 0.93 | 1.91 | 4.14 | 5.98 | 9.69 |
| 12 | 12 | 0.90 | 1.64 | 3.08 | 4.29 | 6.64 | 1.26 | 2.20 | 4.25 | 6.00 | 9.96 |
| | 16 | 0.60[7] | 1.35 | 2.81 | 4.00 | 6.33 | 0.92[7] | 1.86 | 3.91 | 5.63 | 9.51 |
| | 24 | 0.06[6] | 0.79[6] | 2.30[7] | 3.46 | 5.74 | 0.30[6] | 1.22[7] | 3.27 | 4.93 | 8.67 |
| 14 | 12 | 0.55[6] | 1.27[7] | 2.70 | 3.87 | 6.16 | 0.82[6] | 1.69 | 3.52 | 5.08 | 8.55 |
| | 16 | 0.19[6] | 0.90[6] | 2.35[7] | 3.49 | 5.73 | 0.42[6] | 1.28[6] | 3.11[7] | 4.62 | 7.99 |
| | 24 | 0.00[3] | 0.21[3] | 1.70[6] | 2.79[6] | 4.93[7] | 0.00[3] | 0.53[6] | 2.35[6] | 3.78[6] | 6.96 |
| 16 | 12 | 0.20[3] | 0.85[6] | 2.18[6] | 3.33[7] | 5.54 | 0.41[6] | 1.18[6] | 2.77[7] | 4.10 | 7.03 |
| | 16 | 0.00[3] | 0.43[3] | 1.77[6] | 2.87[6] | 4.99[7] | 0.00[3] | 0.73[6] | 2.31[6] | 3.59[6] | 6.40 |
| | 24 | 0.00[2] | 0.00[2] | 1.05[3] | 2.05[3] | 4.03[6] | 0.00[2] | 0.00[6] | 1.50[3] | 2.69[6] | 5.29[6] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 600S137-mils (Fy) | | | | | 600S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.46 | 2.20 | 3.56 | 4.79 | 7.30 | 2.10 | 3.08 | 5.32 | 7.15 | 11.06 |
| | 16 | 1.32 | 2.06 | 3.44 | 4.68 | 7.20 | 1.95 | 2.94 | 5.19 | 7.01 | 10.91 |
| | 24 | 1.05 | 1.79 | 3.21 | 4.45 | 6.99 | 1.65 | 2.66 | 4.92 | 6.74 | 10.61 |
| 9 | 12 | 1.34 | 2.08 | 3.46 | 4.69 | 7.21 | 1.97 | 2.96 | 5.20 | 7.02 | 10.91 |
| | 16 | 1.17 | 1.91 | 3.31 | 4.54 | 7.07 | 1.77 | 2.77 | 5.03 | 6.84 | 10.72 |
| | 24 | 0.83 | 1.56 | 3.02 | 4.24 | 6.80 | 1.40 | 2.41 | 4.69 | 6.49 | 10.34 |
| 10 | 12 | 1.21 | 1.95 | 3.34 | 4.57 | 7.09 | 1.82 | 2.81 | 5.06 | 6.87 | 10.74 |
| | 16 | 1.00 | 1.73 | 3.15 | 4.38 | 6.92 | 1.58 | 2.58 | 4.84 | 6.64 | 10.50 |
| | 24 | 0.58 | 1.31 | 2.79 | 4.01 | 6.58 | 1.13 | 2.14 | 4.41 | 6.20 | 10.01 |
| 12 | 12 | 0.91 | 1.63 | 3.05 | 4.27 | 6.80 | 1.45 | 2.43 | 4.64 | 6.48 | 10.29 |
| | 16 | 0.61 | 1.33 | 2.78 | 3.99 | 6.54 | 1.13 | 2.11 | 4.32 | 6.14 | 9.91 |
| | 24 | 0.06[6] | 0.76[7] | 2.27 | 3.46 | 6.03 | 0.53[6] | 1.51 | 3.72 | 5.49 | 9.18 |
| 14 | 12 | 0.57[6] | 1.27 | 2.69 | 3.89 | 6.42 | 1.03 | 1.96 | 3.99 | 5.72 | 9.63 |
| | 16 | 0.20[6] | 0.88[7] | 2.34 | 3.51 | 6.05 | 0.65[6] | 1.56[7] | 3.59 | 5.28 | 9.09 |
| | 24 | 0.00[3] | 0.17[6] | 1.67[6] | 2.81[7] | 5.35 | 0.00[6] | 0.83[6] | 2.85[6] | 4.46 | 8.09 |
| 16 | 12 | 0.22[6] | 0.87[6] | 2.28[7] | 3.43 | 5.92 | 0.62[6] | 1.47[7] | 3.27 | 4.80 | 8.21 |
| | 16 | 0.00[3] | 0.41[6] | 1.84[6] | 2.96[7] | 5.44 | 0.19[6] | 1.01[6] | 2.81[6] | 4.29 | 7.58 |
| | 24 | 0.00[2] | 0.00 | 1.05[3] | 2.11[6] | 4.56[6] | 0.00[3] | 0.20[3] | 1.98[6] | 3.36[6] | 6.44[7] |

| Wall | Spacing | 600S200-mils (Fy) | | | | | 600S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.50 | 3.92 | 7.07 | 9.60 | 15.23 | 4.25 | 7.27 | 10.62 | 17.83 |
| | 16 | 2.34 | 3.74 | 6.89 | 9.43 | 15.05 | 4.07 | 7.09 | 10.42 | 17.63 |
| | 24 | 2.01 | 3.39 | 6.53 | 9.10 | 14.69 | 3.71 | 6.75 | 10.03 | 17.23 |
| 9 | 12 | 2.34 | 3.73 | 6.81 | 9.32 | 14.85 | 4.06 | 7.02 | 10.29 | 17.34 |
| | 16 | 2.14 | 3.51 | 6.58 | 9.10 | 14.61 | 3.83 | 6.80 | 10.04 | 17.08 |
| | 24 | 1.73 | 3.06 | 6.13 | 8.67 | 14.14 | 3.38 | 6.37 | 9.54 | 16.57 |
| 10 | 12 | 2.16 | 3.51 | 6.50 | 8.97 | 14.38 | 3.85 | 6.74 | 9.90 | 16.76 |
| | 16 | 1.91 | 3.24 | 6.22 | 8.70 | 14.08 | 3.56 | 6.47 | 9.59 | 16.43 |
| | 24 | 1.42 | 2.70 | 5.67 | 8.17 | 13.49 | 3.01 | 5.93 | 8.97 | 15.79 |
| 12 | 12 | 1.75 | 3.00 | 5.76 | 8.12 | 13.18 | 3.33 | 6.06 | 8.96 | 15.31 |
| | 16 | 1.41 | 2.62 | 5.36 | 7.73 | 12.74 | 2.94 | 5.67 | 8.52 | 14.84 |
| | 24 | 0.76[7] | 1.90 | 4.61 | 6.99 | 11.90 | 2.19 | 4.94 | 7.66 | 13.93 |
| 14 | 12 | 1.29 | 2.42 | 4.88 | 7.07 | 11.66 | 2.75 | 5.28 | 7.86 | 13.56 |
| | 16 | 0.87[7] | 1.95 | 4.38 | 6.58 | 11.09 | 2.25 | 4.78 | 7.28 | 12.94 |
| | 24 | 0.1[6] | 1.08[6] | 3.47[7] | 5.65 | 10.01 | 1.33[7] | 3.86 | 6.21 | 11.77 |
| 16 | 12 | 0.83[6] | 1.82 | 3.95 | 5.93 | 9.97 | 2.13 | 4.47 | 6.69 | 11.64 |
| | 16 | 0.35[6] | 1.28[6] | 3.40[7] | 5.35 | 9.29 | 1.55[7] | 3.88 | 6.00 | 10.90 |
| | 24 | 0.00[3] | 0.32[6] | 2 39[6] | 4.32[6] | 8.05 | 0.51[6] | 2.81[6] | 4.78[6] | 9.55 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 800S137-mils (Fy) | | | | | 800S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.51 | 2.23 | 3.41 | 4.58 | 7.04 | 2.14 | 3.11 | 5.21 | 7.03 | 11.02 |
| | 16 | 1.41 | 2.13 | 3.33 | 4.51 | 6.97 | 2.02 | 2.99 | 5.11 | 6.93 | 10.91 |
| | 24 | 1.22 | 1.95 | 3.18 | 4.37 | 6.82 | 1.79 | 2.77 | 4.91 | 6.73 | 10.70 |
| 9 | 12 | 1.43 | 2.15 | 3.34 | 4.52 | 6.98 | 2.04 | 3.01 | 5.13 | 6.94 | 10.92 |
| | 16 | 1.31 | 2.03 | 3.25 | 4.43 | 6.88 | 1.89 | 2.87 | 5.00 | 6.82 | 10.79 |
| | 24 | 1.07 | 1.80 | 3.06 | 4.25 | 6.69 | 1.60 | 2.58 | 4.74 | 6.56 | 10.51 |
| 10 | 12 | 1.34 | 2.06 | 3.27 | 4.45 | 6.91 | 1.93 | 2.90 | 5.03 | 6.85 | 10.82 |
| | 16 | 1.19 | 1.92 | 3.16 | 4.34 | 6.78 | 1.75 | 2.72 | 4.87 | 6.69 | 10.64 |
| | 24 | 0.90 | 1.63 | 2.92 | 4.11 | 6.54 | 1.39 | 2.37 | 4.55 | 6.37 | 10.30 |
| 12 | 12 | 1.13 | 1.86 | 3.11 | 4.29 | 6.73 | 1.68 | 2.65 | 4.79 | 6.61 | 10.55 |
| | 16 | 0.92 | 1.65 | 2.93 | 4.12 | 6.55 | 1.41 | 2.39 | 4.56 | 6.37 | 10.30 |
| | 24 | 0.51 | 1.23 | 2.60 | 3.78 | 6.20 | 0.91 | 1.89 | 4.09 | 5.91 | 9.79 |
| 14 | 12 | 0.89 | 1.61 | 2.90 | 4.08 | 6.51 | 1.37 | 2.34 | 4.50 | 6.30 | 10.21 |
| | 16 | 0.61 | 1.33 | 2.66 | 3.84 | 6.26 | 1.03 | 2.00 | 4.17 | 5.98 | 9.85 |
| | 24 | 0.07[7] | 0.78 | 2.21 | 3.39 | 5.77 | 0.37[7] | 1.33 | 3.54 | 5.34 | 9.14 |
| 16 | 12 | 0.62 | 1.33 | 2.65 | 3.83 | 6.23 | 1.03 | 1.99 | 4.14 | 5.93 | 9.78 |
| | 16 | 0.27[7] | 0.97 | 2.35 | 3.52 | 5.90 | 0.6[7] | 1.55 | 3.72 | 5.50 | 9.29 |
| | 24 | 0.00[6] | 0.30[6] | 1.76[7] | 2.93 | 5.25 | 0.00[6] | 0.72[7] | 2.91 | 4.67 | 8.36 |

| Wall | Spacing | 800S200-mils (Fy) | | | | | 800S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.69 | 4.22 | 7.49 | 10.05 | 15.72 | 4.62 | 7.91 | 11.52 | 19.48 |
| | 16 | 2.57 | 4.10 | 7.37 | 9.95 | 15.61 | 4.49 | 7.79 | 11.38 | 19.34 |
| | 24 | 2.32 | 3.86 | 7.14 | 9.73 | 15.38 | 4.24 | 7.54 | 11.12 | 19.07 |
| 9 | 12 | 2.59 | 4.12 | 7.39 | 9.96 | 15.62 | 4.50 | 7.77 | 11.36 | 19.27 |
| | 16 | 2.43 | 3.97 | 7.24 | 9.82 | 15.47 | 4.34 | 7.61 | 11.19 | 19.10 |
| | 24 | 2.11 | 3.66 | 6.93 | 9.54 | 15.18 | 4.01 | 7.30 | 10.85 | 18.75 |
| 10 | 12 | 2.47 | 4.01 | 7.27 | 9.85 | 15.50 | 4.36 | 7.61 | 11.17 | 19.03 |
| | 16 | 2.27 | 3.82 | 7.08 | 9.67 | 15.31 | 4.16 | 7.41 | 10.96 | 18.81 |
| | 24 | 1.88 | 3.44 | 6.70 | 9.32 | 14.94 | 3.76 | 7.02 | 10.54 | 18.37 |
| 12 | 12 | 2.19 | 3.73 | 6.98 | 9.57 | 15.20 | 4.03 | 7.20 | 10.70 | 18.40 |
| | 16 | 1.90 | 3.45 | 6.69 | 9.31 | 14.92 | 3.74 | 6.91 | 10.39 | 18.07 |
| | 24 | 1.35 | 2.91 | 6.13 | 8.79 | 14.35 | 3.17 | 6.35 | 9.77 | 17.42 |
| 14 | 12 | 1.84 | 3.35 | 6.51 | 9.16 | 14.80 | 3.62 | 6.68 | 10.04 | 17.45 |
| | 16 | 1.46 | 2.98 | 6.12 | 8.79 | 14.39 | 3.23 | 6.29 | 9.61 | 16.99 |
| | 24 | 0.75 | 2.27 | 5.37 | 8.06 | 13.59 | 2.48 | 5.55 | 8.78 | 16.10 |
| 16 | 12 | 1.44 | 2.90 | 5.85 | 8.40 | 13.90 | 3.15 | 6.05 | 9.19 | 16.14 |
| | 16 | 0.98 | 2.44 | 5.36 | 7.93 | 13.36 | 2.67 | 5.57 | 8.64 | 15.55 |
| | 24 | 0.12[6] | 1.57 | 4.44 | 7.02 | 12.32 | 1.74 | 4.64 | 7.60 | 14.41 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 20psf lateral load

| Wall | Spacing | 1000S162-mils (Fy) | | | | 1000S200-mils (Fy) | | | | 1000S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 3.09 | 5.05 | 6.80 | 10.70 | 4.22 | 7.38 | 9.90 | 15.57 | 4.74 | 8.05 | 11.71 | 19.70 |
| | 16 | 3.01 | 4.97 | 6.73 | 10.62 | 4.11 | 7.28 | 9.81 | 15.47 | 4.63 | 7.96 | 11.61 | 19.61 |
| | 24 | 2.84 | 4.83 | 6.58 | 10.47 | 3.91 | 7.08 | 9.62 | 15.28 | 4.43 | 7.76 | 11.42 | 19.41 |
| 9 | 12 | 3.02 | 4.99 | 6.74 | 10.63 | 4.13 | 7.30 | 9.82 | 15.49 | 4.65 | 7.97 | 11.63 | 19.62 |
| | 16 | 2.92 | 4.89 | 6.65 | 10.54 | 4.00 | 7.17 | 9.70 | 15.36 | 4.52 | 7.85 | 11.51 | 19.50 |
| | 24 | 2.70 | 4.70 | 6.46 | 10.35 | 3.74 | 6.92 | 9.46 | 15.12 | 4.26 | 7.60 | 11.26 | 19.25 |
| 10 | 12 | 2.95 | 4.92 | 6.67 | 10.56 | 4.04 | 7.20 | 9.73 | 15.39 | 4.55 | 7.88 | 11.54 | 19.53 |
| | 16 | 2.81 | 4.80 | 6.56 | 10.45 | 3.88 | 7.04 | 9.58 | 15.24 | 4.39 | 7.72 | 11.38 | 19.37 |
| | 24 | 2.55 | 4.57 | 6.33 | 10.21 | 3.55 | 6.73 | 9.28 | 14.94 | 4.06 | 7.41 | 11.07 | 19.06 |
| 12 | 12 | 2.76 | 4.75 | 6.51 | 10.40 | 3.81 | 6.98 | 9.52 | 15.17 | 4.33 | 7.66 | 11.31 | 19.30 |
| | 16 | 2.57 | 4.58 | 6.34 | 10.22 | 3.58 | 6.74 | 9.30 | 14.95 | 4.09 | 7.43 | 11.08 | 19.07 |
| | 24 | 2.18 | 4.24 | 6.01 | 9.88 | 3.12 | 6.28 | 8.86 | 14.50 | 3.62 | 6.97 | 10.63 | 18.61 |
| 14 | 12 | 2.54 | 4.55 | 6.31 | 10.19 | 3.54 | 6.69 | 9.25 | 14.89 | 4.03 | 7.34 | 11.01 | 19.00 |
| | 16 | 2.28 | 4.32 | 6.08 | 9.94 | 3.22 | 6.37 | 8.94 | 14.57 | 3.71 | 7.02 | 10.69 | 18.68 |
| | 24 | 1.76 | 3.86 | 5.62 | 9.47 | 2.60 | 5.74 | 8.34 | 13.95 | 3.07 | 6.40 | 10.06 | 18.04 |
| 16 | 12 | 2.28 | 4.31 | 6.07 | 9.93 | 3.22 | 6.36 | 8.92 | 14.54 | 3.67 | 6.90 | 10.53 | 18.43 |
| | 16 | 1.94 | 4.01 | 5.77 | 9.61 | 2.81 | 5.93 | 8.51 | 14.11 | 3.25 | 6.49 | 10.11 | 17.99 |
| | 24 | 1.28 | 3.40 | 5.17 | 8.97 | 2.00 | 5.10 | 7.71 | 13.27 | 2.44 | 5.69 | 9.29 | 17.13 |

| Wall | Spacing | 1200S162-mils (Fy) | | | 1200S200-mils (Fy) | | | 1200S250-mils (Fy) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 4.84 | 6.51 | 10.26 | 7.25 | 9.72 | 15.30 | 8.03 | 11.68 | 19.65 |
| | 16 | 4.78 | 6.46 | 10.20 | 7.17 | 9.64 | 15.23 | 7.95 | 11.59 | 19.56 |
| | 24 | 4.67 | 6.35 | 10.09 | 7.02 | 9.50 | 15.08 | 7.78 | 11.42 | 19.39 |
| 9 | 12 | 4.79 | 6.47 | 10.21 | 7.19 | 9.66 | 15.24 | 7.96 | 11.61 | 19.58 |
| | 16 | 4.72 | 6.40 | 10.14 | 7.09 | 9.56 | 15.15 | 7.85 | 11.49 | 19.47 |
| | 24 | 4.57 | 6.26 | 10.00 | 6.89 | 9.38 | 14.96 | 7.64 | 11.27 | 19.24 |
| 10 | 12 | 4.74 | 6.42 | 10.16 | 7.11 | 9.59 | 15.17 | 7.88 | 11.52 | 19.49 |
| | 16 | 4.65 | 6.33 | 10.07 | 6.99 | 9.47 | 15.06 | 7.75 | 11.39 | 19.36 |
| | 24 | 4.47 | 6.16 | 9.89 | 6.74 | 9.24 | 14.83 | 7.48 | 11.11 | 19.08 |
| 12 | 12 | 4.62 | 6.30 | 10.04 | 6.94 | 9.43 | 15.01 | 7.70 | 11.33 | 19.30 |
| | 16 | 4.49 | 6.17 | 9.91 | 6.76 | 9.26 | 14.84 | 7.50 | 11.13 | 19.09 |
| | 24 | 4.23 | 5.92 | 9.65 | 6.40 | 8.92 | 14.50 | 7.12 | 10.73 | 18.68 |
| 14 | 12 | 4.47 | 6.15 | 9.89 | 6.73 | 9.23 | 14.81 | 7.47 | 11.09 | 19.05 |
| | 16 | 4.29 | 5.98 | 9.71 | 6.48 | 8.99 | 14.57 | 7.20 | 10.81 | 18.77 |
| | 24 | 3.93 | 5.63 | 9.36 | 5.98 | 8.52 | 14.10 | 6.67 | 10.26 | 18.20 |
| 16 | 12 | 4.29 | 5.98 | 9.71 | 6.48 | 8.99 | 14.56 | 7.20 | 10.81 | 18.75 |
| | 16 | 4.06 | 5.75 | 9.47 | 6.15 | 8.68 | 14.25 | 6.85 | 10.43 | 18.37 |
| | 24 | 3.59 | 5.30 | 9.01 | 5.49 | 8.06 | 13.62 | 6.15 | 9.70 | 17.61 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33(33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.22[3] | 0.63[6] | 1.30[6] | 1.89[6] | 3.17 | 0.38[6] | 0.88[6] | 1.65[7] | 2.31 | 3.72 |
| | 16 | 0.00[3] | 0.37[3] | 1.08[6] | 1.65[6] | 2.88[7] | 0.11[3] | 0.61[6] | 1.42[6] | 2.06[6] | 3.42 |
| | 24 | 0.00[2] | 0.00[2] | 0.70[3] | 1.23[3] | 2.36[6] | 0.00[2] | 0.12[3] | 1.00[3] | 1.61[6] | 2.90[6] |
| 9 | 12 | 0.02[3] | 0.37[3] | 0.99[6] | 1.48[6] | 2.50[7] | 0.14[3] | 0.58[6] | 1.28[6] | 1.84[6] | 2.99 |
| | 16 | 0.00[2] | 0.11[3] | 0.76[3] | 1.24[3] | 2.21[6] | 0.00[2] | 0.30[3] | 1.04[3] | 1.58[6] | 2.69[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.37[2] | 0.81[2] | 1.69[3] | 0.00[2] | 0.00[2] | 0.60[2] | 1.11[3] | 2.15[6] |
| 10 | 12 | 0.00[2] | 0.16[2] | 0.73[3] | 1.14[3] | 1.96[6] | 0.00[2] | 0.33[3] | 0.97[3] | 1.44[6] | 2.39[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.50[2] | 0.89[3] | 1.66[3] | 0.00[2] | 0.05[2] | 0.72[3] | 1.17[3] | 2.08[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.10[2] | 0.46[2] | 1.16[2] | 0.00[1] | 0.00[2] | 0.29[2] | 0.71[2] | 1.55[3] |
| 12 | 12 | 0.00[1] | 0.00[2] | 0.33[2] | 0.62[2] | 1.17[3] | 0.00[2] | 0.00[2] | 0.49[2] | 0.83[2] | 1.49[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.11[2] | 0.39[2] | 0.90[2] | 0.00[1] | 0.00[1] | 0.26[2] | 0.58[2] | 1.20[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.43[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.14[1] | 0.70[2] |
| 14 | 12 | 0.00[1] | 0.00[1] | 0.07[1] | 0.28[2] | 0.67[2] | 0.00[1] | 0.00[1] | 0.19[2] | 0.43[2] | 0.90[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.07[1] | 0.42[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.20[1] | 0.63[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.18[1] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.07[1] | 0.34[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.17[1] | 0.51[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.12[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.27[1] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.67 | 1.26 | 2.44 | 3.38 | 5.29 | 0.97 | 1.68 | 3.17 | 4.27 | 6.69 |
| | 16 | 0.39[6] | 0.96 | 2.17 | 3.09 | 5.02 | 0.66[7] | 1.36 | 2.87 | 3.96 | 6.39 |
| | 24 | 0.00[6] | 0.40[6] | 1.66[7] | 2.56 | 4.50 | 0.09[6] | 0.76[6] | 2.30[7] | 3.38 | 5.81 |
| 9 | 12 | 0.42[6] | 0.96[7] | 2.06 | 2.91 | 4.92 | 0.67[7] | 1.33 | 2.69 | 3.70 | 5.92 |
| | 16 | 0.11[6] | 0.61[6] | 1.74[7] | 2.58 | 4.58 | 0.33[6] | 0.96[7] | 2.34 | 3.34 | 5.56 |
| | 24 | 0.00[3] | 0.00[3] | 1.17[6] | 1.97[6] | 3.94[7] | 0.00[3] | 0.29[7] | 1.71[6] | 2.68[7] | 4.88 |
| 10 | 12 | 0.18[6] | 0.66[6] | 1.67[7] | 2.43 | 4.23 | 0.39[6] | 0.99[6] | 2.21 | 3.11 | 5.11 |
| | 16 | 0.00[3] | 0.29[6] | 1.33[6] | 2.07[6] | 3.85 | 0.02[3] | 0.59[6] | 1.84[6] | 2.72[7] | 4.71 |
| | 24 | 0.00[2] | 0.00[3] | 0.72[3] | 1.42[6] | 3.16[6] | 0.00[2] | 0.00[3] | 1.17[6] | 2.02[6] | 3.98[6] |
| 12 | 12 | 0.00[2] | 0.15[3] | 0.99[6] | 1.57[6] | 2.92[6] | 0.00[3] | 0.39[3] | 1.37[6] | 2.06[6] | 3.6[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.64[3] | 1.19[3] | 2.53[6] | 0.00[2] | 0.00[3] | 0.99[3] | 1.65[6] | 3.18[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.02[2] | 0.53[2] | 1.83[3] | 0.00[2] | 0.00[2] | 0.32[2] | 0.94[3] | 2.43[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.49[2] | 0.92[3] | 1.95[6] | 0.00[2] | 0.00[2] | 0.76[3] | 1.28[3] | 2.46[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.15[2] | 0.56[2] | 1.57[3] | 0.00[2] | 0.00[2] | 0.39[2] | 0.89[3] | 2.05[3] |
| | 24 | 000[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.91[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.21[2] | 1.34[2] |
| 16 | 12 | 0.00[1] | 0.00[2] | 0.14[2] | 0.47[2] | 1.26[3] | 0.00[1] | 0.00[2] | 0.34[2] | 0.73[2] | 1.66[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.13[2] | 0.91[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.37[2] | 1.27[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.31[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.61[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.22[3] | 0.63[6] | 1.30[6] | 1.89[6] | 3.17 | 0.38[6] | 0.88[6] | 1.65[7] | 2.31 | 3.72 |
| | 16 | 0.00[3] | 0.37[3] | 1.08[6] | 1.65[6] | 2.88[7] | 0.11[3] | 0.61[6] | 1.42[6] | 2.06[6] | 3.42 |
| | 24 | 0.00[2] | 0.00[2] | 0.70[3] | 1.23[3] | 2.36[6] | 0.00[2] | 0.12[3] | 1.00[3] | 1.61[6] | 2.90[6] |
| 9 | 12 | 0.02[3] | 0.37[3] | 0.99[6] | 1.48[6] | 2.50[7] | 0.14[3] | 0.58[6] | 1.28[6] | 1.84[6] | 2.99 |
| | 16 | 0.00[2] | 0.11[3] | 0.76[3] | 1.24[3] | 2.21[6] | 0.00[2] | 0.30[3] | 1.04[3] | 1.58[6] | 2.69[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.37[2] | 0.81[2] | 1.69[3] | 0.00[2] | 0.00[2] | 0.60[2] | 1.11[3] | 2.15[6] |
| 10 | 12 | 0.00[2] | 0.16[2] | 0.73[3] | 1.14[3] | 1.96[6] | 0.00[2] | 0.33[3] | 0.97[3] | 1.44[6] | 2.39[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.50[2] | 0.89[3] | 1.66[3] | 0.00[2] | 0.05[2] | 0.72[3] | 1.17[3] | 2.08[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.10[2] | 0.46[2] | 1.16[2] | 0.00[1] | 0.00[2] | 0.29[2] | 0.71[2] | 1.55[3] |
| 12 | 12 | 0.00[1] | 0.00[2] | 0.33[2] | 0.62[2] | 1.17[3] | 0.00[2] | 0.00[2] | 0.49[2] | 0.83[2] | 1.49[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.11[2] | 0.39[2] | 0.90[2] | 0.00[1] | 0.00[1] | 0.26[2] | 0.58[2] | 1.20[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.43[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.14[1] | 0.70[2] |
| 14 | 12 | 0.00[1] | 0.00[1] | 0.07[1] | 0.28[2] | 0.67[2] | 0.00[1] | 0.00[1] | 0.19[2] | 0.43[2] | 0.90[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.07[1] | 0.42[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.20[1] | 0.63[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.18[1] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.07[1] | 0.34[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.17[1] | 0.51[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.12[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.27[1] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.67 | 1.26 | 2.44 | 3.38 | 5.29 | 0.97 | 1.68 | 3.17 | 4.27 | 6.69 |
| | 16 | 0.39[6] | 0.96 | 2.17 | 3.09 | 5.02 | 0.66[7] | 1.36 | 2.87 | 3.96 | 6.39 |
| | 24 | 0.00[6] | 0.40[6] | 1.66[7] | 2.56 | 4.50 | 0.09[6] | 0.76[6] | 2.30[7] | 3.38 | 5.81 |
| 9 | 12 | 0.42[6] | 0.96[7] | 2.06 | 2.91 | 4.92 | 0.67[7] | 1.33 | 2.69 | 3.70 | 5.92 |
| | 16 | 0.11[6] | 0.61[6] | 1.74[7] | 2.58 | 4.58 | 0.33[6] | 0.96[7] | 2.34 | 3.34 | 5.56 |
| | 24 | 0.00[3] | 0.00[3] | 1.17[6] | 1.97[6] | 3.94[7] | 0.00[3] | 0.29[7] | 1.71[6] | 2.68[7] | 4.88 |
| 10 | 12 | 0.18[6] | 0.66[6] | 1.67[7] | 2.43 | 4.23 | 0.39[6] | 0.99[6] | 2.21 | 3.11 | 5.11 |
| | 16 | 0.00[3] | 0.29[6] | 1.33[6] | 2.07[6] | 3.85 | 0.02[3] | 0.59[6] | 1.84[6] | 2.72[7] | 4.71 |
| | 24 | 0.00[2] | 0.00[3] | 0.72[3] | 1.42[6] | 3.16[6] | 0.00[2] | 0.00[3] | 1.17[6] | 2.02[6] | 3.98[6] |
| 12 | 12 | 0.00[2] | 0.15[3] | 0.99[6] | 1.57[6] | 2.92[6] | 0.00[3] | 0.39[3] | 1.37[6] | 2.06[6] | 3.6[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.64[3] | 1.19[3] | 2.53[6] | 0.00[2] | 0.00[3] | 0.99[3] | 1.65[6] | 3.18[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.02[2] | 0.53[2] | 1.83[3] | 0.00[2] | 0.00[2] | 0.32[2] | 0.94[3] | 2.43[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.49[2] | 0.92[3] | 1.95[6] | 0.00[2] | 0.00[2] | 0.76[3] | 1.28[3] | 2.46[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.15[2] | 0.56[2] | 1.57[3] | 0.00[2] | 0.00[2] | 0.39[2] | 0.89[3] | 2.05[3] |
| | 24 | 000[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.91[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.21[2] | 1.34[2] |
| 16 | 12 | 0.00[1] | 0.00[2] | 0.14[2] | 0.47[2] | 1.26[3] | 0.00[1] | 0.00[2] | 0.34[2] | 0.73[2] | 1.66[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.13[2] | 0.91[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.37[2] | 1.27[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.31[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.61[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 400S137-mils (Fy) | | | | | 400S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.89 | 1.56 | 2.98 | 4.24 | 5.91 | 1.23 | 2.05 | 3.85 | 5.37 | 8.36 |
| | 16 | 0.61 | 1.27 | 2.71 | 3.94 | 5.68 | 0.93 | 1.74 | 3.55 | 5.06 | 8.05 |
| | 24 | 0.10[6] | 0.72[7] | 2.19 | 3.39 | 5.22 | 0.37[7] | 1.15 | 2.98 | 4.45 | 7.47 |
| 9 | 12 | 0.64 | 1.27 | 2.63 | 3.84 | 5.66 | 0.94 | 1.72 | 3.41 | 4.84 | 7.64 |
| | 16 | 0.32[6] | 0.93[7] | 2.31 | 3.49 | 5.35 | 0.59[7] | 1.35 | 3.06 | 4.45 | 7.26 |
| | 24 | 0.00[6] | 0.29[6] | 1.70[6] | 2.82[7] | 4.78 | 0.00[6] | 0.66[6] | 2.39[7] | 3.73 | 6.56 |
| 10 | 12 | 0.39[6] | 0.97[7] | 2.26 | 3.36 | 5.35 | 0.65[7] | 1.38 | 2.95 | 4.26 | 6.84 |
| | 16 | 0.03[6] | 0.59[6] | 1.89[7] | 2.95 | 4.97 | 0.26[6] | 0.96[7] | 2.54 | 3.82 | 6.41 |
| | 24 | 0.00[3] | 0.00[3] | 1.22[6] | 2.21[6] | 4.27[7] | 0.00[3] | 0.20[6] | 1.81[6] | 3.01[7] | 5.60 |
| 12 | 12 | 0.00[3] | 0.41[6] | 1.51[6] | 2.37[7] | 4.26 | 0.13[6] | 0.72[6] | 2.03[6] | 3.06[7] | 5.19 |
| | 16 | 0.00[2] | 0.00[3] | 1.09[6] | 1.91[6] | 3.79[7] | 0.00[3] | 0.25[3] | 1.58[6] | 2.56[6] | 4.69[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.37[3] | 1.11[3] | 2.96[6] | 0.00[2] | 0.00[2] | 0.78[3] | 1.70[3] | 3.79[6] |
| 14 | 12 | 0.00[2] | 0.00[3] | 0.87[3] | 1.52[6] | 2.99[6] | 0.00[2] | 0.18[3] | 1.26[6] | 2.02[6] | 3.71[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.46[2] | 1.06[3] | 2.53[6] | 0.00[2] | 0.00[2] | 0.81[3] | 1.54[3] | 3.20[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.28[2] | 1.72[3] | 0.00[1] | 0.00[2] | 0.03[2] | 0.70[2] | 2.33[3] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.40[2] | 0.89[3] | 2.05[3] | 0.00[2] | 0.00[2] | 0.68[3] | 1.27[3] | 2.59[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.00[2] | 0.46[2] | 1.61[3] | 0.00[1] | 0.00[2] | 0.25[2] | 0.81[2] | 2.12[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.85[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.02[2] | 1.30[2] |

| Wall | Spacing | 400S200-mils (Fy) | | | | | 400S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.55 | 2.67 | 4.89 | 6.76 | 10.25 | 3.03 | 5.37 | 7.72 | 11.94 |
| | 16 | 1.22 | 2.32 | 4.55 | 6.41 | 9.93 | 2.66 | 5.02 | 7.34 | 11.60 |
| | 24 | 0.60[7] | 1.67 | 3.89 | 5.75 | 9.31 | 1.97 | 4.34 | 6.61 | 10.94 |
| 9 | 12 | 1.23 | 2.28 | 4.34 | 6.10 | 9.38 | 2.63 | 4.89 | 7.06 | 10.95 |
| | 16 | 0.84 | 1.87 | 3.92 | 5.68 | 8.98 | 2.19 | 4.45 | 6.60 | 10.53 |
| | 24 | 0.14[6] | 1.12[7] | 3.16 | 4.89 | 8.23 | 1.38 | 3.64 | 5.72 | 9.73 |
| 10 | 12 | 0.90 | 1.87 | 3.75 | 5.39 | 8.42 | 2.20 | 4.32 | 6.31 | 9.88 |
| | 16 | 0.47[6] | 1.41[7] | 3.29 | 4.91 | 7.96 | 1.70 | 3.82 | 5.76 | 9.39 |
| | 24 | 0.00[6] | 0.58[6] | 2.45[6] | 4.03[7] | 7.10 | 0.80[6] | 2.90[7] | 4.77 | 8.47 |
| 12 | 12 | 0.30[6] | 1.10[6] | 2.62[7] | 3.95 | 6.47 | 1.37[7] | 3.16 | 4.66 | 7.69 |
| | 16 | 0.00[3] | 0.58[6] | 2.11[6] | 3.41[7] | 5.93 | 0.79[6] | 2.57[7] | 4.05 | 7.10 |
| | 24 | 0.00[2] | 0.00[3] | 1.20[3] | 2.45[6] | 4.96[6] | 0.00[3] | 1.54[6] | 2.95[6] | 6.04[7] |
| 14 | 12 | 0.00[3] | 0.46[3] | 1.67[6] | 2.69[6] | 4.7[7] | 0.63[6] | 2.05[6] | 3.21[7] | 5.68 |
| | 16 | 0.00[2] | 0.00[3] | 1.16[3] | 2.15[7] | 4.15[6] | 0.03[3] | 1.47[6] | 2.60[6] | 5.07[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.28[2] | 1.23[3] | 3.20[3] | 0.00[2] | 0.46[3] | 1.53[3] | 4.01[6] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.97[3] | 1.76[3] | 3.36[6] | 0.07[3] | 1.23[3] | 2.13[6] | 4.12[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.49[2] | 1.26[3] | 2.84[3] | 0.00[2] | 0.67[3] | 1.54[3] | 3.54[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.39[2] | 1.93[2] | 0.00[2] | 0.00[2] | 0.55[2] | 2.53[3] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 550S137-mils (Fy) | | | | | 550S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.36 | 2.12 | 3.53 | 4.76 | 7.16 | 1.89 | 2.89 | 5.17 | 6.98 | 10.80 |
| | 16 | 1.19 | 1.95 | 3.38 | 4.61 | 7.01 | 1.68 | 2.69 | 4.98 | 6.78 | 10.58 |
| | 24 | 0.85 | 1.62 | 3.10 | 4.32 | 6.70 | 1.28 | 2.29 | 4.60 | 6.39 | 10.16 |
| 9 | 12 | 1.21 | 1.97 | 3.40 | 4.62 | 7.02 | 1.70 | 2.69 | 4.97 | 6.79 | 10.59 |
| | 16 | 0.99 | 1.76 | 3.21 | 4.43 | 6.82 | 1.44 | 2.44 | 4.72 | 6.53 | 10.31 |
| | 24 | 0.57 | 1.34 | 2.85 | 4.06 | 6.43 | 0.93 | 1.94 | 4.24 | 6.03 | 9.76 |
| 10 | 12 | 1.05 | 1.81 | 3.25 | 4.46 | 6.85 | 1.48 | 2.46 | 4.68 | 6.55 | 10.33 |
| | 16 | 0.78 | 1.54 | 3.02 | 4.23 | 6.59 | 1.17 | 2.15 | 4.38 | 6.23 | 9.97 |
| | 24 | 0.28[6] | 1.04 | 2.57 | 3.77 | 6.10 | 0.58[7] | 1.56 | 3.80 | 5.61 | 9.28 |
| 12 | 12 | 0.67[7] | 1.42 | 2.88 | 4.07 | 6.41 | 1.00 | 1.94 | 3.99 | 5.72 | 9.62 |
| | 16 | 0.32[6] | 1.06[7] | 2.55 | 3.73 | 6.03 | 0.60[6] | 1.53 | 3.58 | 5.27 | 9.08 |
| | 24 | 0.00[3] | 0.39[6] | 1.94[6] | 3.08[7] | 5.32 | 0.00[6] | 0.77[6] | 2.82[7] | 4.44 | 8.07 |
| 14 | 12 | 0.28[6] | 0.99[6] | 2.43[7] | 3.58 | 5.83 | 0.52[6] | 1.38[7] | 3.21 | 4.73 | 8.13 |
| | 16 | 0.00[3] | 0.54[6] | 2.01[6] | 3.13[7] | 5.32 | 0.06[3] | 0.89[6] | 2.72[6] | 4.19[7] | 7.46 |
| | 24 | 0.00[2] | 0.00[3] | 1.25[3] | 2.3[6] | 4.39[6] | 0.00[2] | 0.02[3] | 1.83[6] | 3.21[6] | 6.26 |
| 16 | 12 | 0.00[3] | 0.53[6] | 1.87[6] | 2.98[6] | 5.12 | 0.08[3] | 0.83[6] | 2.42[6] | 3.72[7] | 6.56 |
| | 16 | 0.00[2] | 0.04[3] | 1.39[3] | 2.44[6] | 4.50[6] | 0.00[3] | 0.31[3] | 1.89[6] | 3.12[6] | 5.82 |
| | 24 | 0.00[2] | 0.00[2] | 0.56[2] | 1.50[3] | 3.39[6] | 0.00[2] | 0.00[2] | 0.96[3] | 2.08[3] | 4.55 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 600S137-mils (Fy) | | | | | 600S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.36 | 2.10 | 3.47 | 4.71 | 7.22 | 1.98 | 2.98 | 5.22 | 7.04 | 10.94 |
| | 16 | 1.19 | 1.93 | 3.33 | 4.56 | 7.09 | 1.80 | 2.80 | 5.06 | 6.87 | 10.76 |
| | 24 | 0.85 | 1.59 | 3.04 | 4.27 | 6.83 | 1.43 | 2.44 | 4.73 | 6.53 | 10.39 |
| 9 | 12 | 1.21 | 1.95 | 3.34 | 4.58 | 7.10 | 1.82 | 2.82 | 5.07 | 6.88 | 10.77 |
| | 16 | 1.00 | 1.73 | 3.16 | 4.39 | 6.93 | 1.59 | 2.59 | 4.86 | 6.66 | 10.53 |
| | 24 | 0.58 | 1.31 | 2.80 | 4.03 | 6.59 | 1.13 | 2.15 | 4.44 | 6.23 | 10.05 |
| 10 | 12 | 1.05 | 1.79 | 3.20 | 4.43 | 6.96 | 1.64 | 2.64 | 4.89 | 6.70 | 10.56 |
| | 16 | 0.79 | 1.52 | 2.97 | 4.20 | 6.75 | 1.36 | 2.36 | 4.62 | 6.42 | 10.25 |
| | 24 | 0.29[7] | 1.01 | 2.53 | 3.74 | 6.32 | 0.81 | 1.82 | 4.10 | 5.87 | 9.65 |
| 12 | 12 | 0.69 | 1.40 | 2.85 | 4.06 | 6.61 | 1.21 | 2.19 | 4.40 | 6.22 | 10.01 |
| | 16 | 0.33[7] | 1.04 | 2.52 | 3.72 | 6.28 | 0.82[7] | 1.80 | 4.02 | 5.81 | 9.54 |
| | 24 | 0.00[6] | 0.35[6] | 1.90[7] | 3.08 | 5.66 | 0.11[6] | 1.08[7] | 3.29 | 5.03 | 8.66 |
| 14 | 12 | 0.29[7] | 0.97[7] | 2.42 | 3.61 | 6.14 | 0.74[6] | 1.66 | 3.69 | 5.39 | 9.22 |
| | 16 | 0.00[6] | 0.51[6] | 2.00[7] | 3.16 | 5.70 | 0.28[6] | 1.19[6] | 3.21[7] | 4.86 | 8.58 |
| | 24 | 0.00[3] | 0.00[3] | 1.21[6] | 2.32[6] | 4.86[7] | 0.00[3] | 0.32[6] | 2.34[6] | 3.89[6] | 7.39 |
| 16 | 12 | 0.00[3] | 0.52[6] | 1.95[6] | 3.07[7] | 5.56 | 0.29[6] | 1.13[6] | 2.93[7] | 4.41 | 7.74 |
| | 16 | 0.00[3] | 0.00[3] | 1.44 | 2.52[6] | 4.99[7] | 0.00[3] | 0.59[6] | 2.39[6] | 3.81[6] | 6.99 |
| | 24 | 0.00[2] | 0.00[2] | 0.52[3] | 1.53[3] | 3.95[6] | 0.00[2] | 0.00[3] | 1.42[3] | 2.73[6] | 5.67[6] |

| Wall | Spacing | 600S200-mils (Fy) | | | | | 600S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.38 | 3.79 | 6.93 | 9.47 | 15.10 | 4.12 | 7.14 | 10.47 | 17.68 |
| | 16 | 2.17 | 3.57 | 6.71 | 9.26 | 14.87 | 3.89 | 6.92 | 10.23 | 17.43 |
| | 24 | 1.77 | 3.13 | 6.27 | 8.85 | 14.41 | 3.45 | 6.50 | 9.74 | 16.94 |
| 9 | 12 | 2.19 | 3.56 | 6.64 | 9.15 | 14.67 | 3.89 | 6.86 | 10.10 | 17.15 |
| | 16 | 1.93 | 3.28 | 6.35 | 8.88 | 14.37 | 3.61 | 6.58 | 9.79 | 16.83 |
| | 24 | 1.43 | 2.74 | 5.80 | 8.35 | 13.79 | 3.05 | 6.05 | 9.17 | 16.19 |
| 10 | 12 | 1.97 | 3.31 | 6.29 | 8.77 | 14.16 | 3.63 | 6.54 | 9.66 | 16.51 |
| | 16 | 1.66 | 2.97 | 5.94 | 8.44 | 13.78 | 3.29 | 6.20 | 9.28 | 16.11 |
| | 24 | 1.07 | 2.31 | 5.26 | 7.78 | 13.06 | 2.61 | 5.54 | 8.53 | 15.32 |
| 12 | 12 | 1.49 | 2.71 | 5.46 | 7.83 | 12.85 | 3.04 | 5.77 | 8.63 | 14.96 |
| | 16 | 1.08 | 2.26 | 4.98 | 7.36 | 12.31 | 2.56 | 5.30 | 8.08 | 14.38 |
| | 24 | 0.30[6] | 1.40[7] | 4.08 | 6.46 | 11.29 | 1.66 | 4.41 | 7.05 | 13.27 |
| 14 | 12 | 0.97[7] | 2.06 | 4.51 | 6.70 | 11.23 | 2.37 | 4.90 | 7.43 | 13.09 |
| | 16 | 0.47[6] | 1.50[7] | 3.92 | 6.10 | 10.54 | 1.78 | 4.31 | 6.73 | 12.34 |
| | 24 | 0.00[3] | 0.49[6] | 2.85[6] | 5.01[7] | 9.25 | 0.70[6] | 3.21[7] | 5.46 | 10.95 |
| 16 | 12 | 0.47[6] | 1.41[6] | 3.53 | 5.49 | 9.45 | 1.69[7] | 4.02 | 6.17 | 11.08 |
| | 16 | 0.00[3] | 0.78[6] | 2.88[6] | 4.82[7] | 8.65 | 1.01[6] | 3.33[7] | 5.37 | 10.20 |
| | 24 | 0.00[2] | 0.00[3] | 1.72[6] | 3.62[6] | 7.22[7] | 0.00[3] | 2.09[6] | 3.94[6] | 8.63[7] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 800S137-mils (Fy) | | | | | 800S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.43 | 2.16 | 3.35 | 4.53 | 6.99 | 2.05 | 3.02 | 5.14 | 6.95 | 10.94 |
| | 16 | 1.32 | 2.04 | 3.26 | 4.44 | 6.89 | 1.91 | 2.88 | 5.01 | 6.83 | 10.80 |
| | 24 | 1.08 | 1.81 | 3.07 | 4.26 | 6.70 | 1.62 | 2.60 | 4.76 | 6.58 | 10.54 |
| 9 | 12 | 1.34 | 2.06 | 3.27 | 4.45 | 6.91 | 1.93 | 2.90 | 5.03 | 6.85 | 10.82 |
| | 16 | 1.19 | 1.91 | 3.16 | 4.34 | 6.79 | 1.75 | 2.72 | 4.87 | 6.69 | 10.65 |
| | 24 | 0.89 | 1.62 | 2.92 | 4.11 | 6.54 | 1.38 | 2.37 | 4.55 | 6.37 | 10.31 |
| 10 | 12 | 1.23 | 1.95 | 3.19 | 4.37 | 6.81 | 1.79 | 2.77 | 4.91 | 6.73 | 10.69 |
| | 16 | 1.04 | 1.77 | 3.04 | 4.22 | 6.66 | 1.57 | 2.55 | 4.71 | 6.53 | 10.47 |
| | 24 | 0.68 | 1.41 | 2.75 | 3.94 | 6.36 | 1.12 | 2.11 | 4.31 | 6.13 | 10.05 |
| 12 | 12 | 0.97 | 1.70 | 2.98 | 4.16 | 6.59 | 1.48 | 2.46 | 4.62 | 6.43 | 10.36 |
| | 16 | 0.71 | 1.44 | 2.76 | 3.95 | 6.37 | 1.16 | 2.14 | 4.32 | 6.14 | 10.04 |
| | 24 | 0.21 | 0.93 | 2.35 | 3.53 | 5.93 | 0.54 | 1.52 | 3.75 | 5.56 | 9.41 |
| 14 | 12 | 0.68 | 1.40 | 2.72 | 3.90 | 6.32 | 1.11 | 2.08 | 4.25 | 6.06 | 9.94 |
| | 16 | 0.34 | 1.05 | 2.43 | 3.61 | 6.01 | 0.69 | 1.66 | 3.85 | 5.65 | 9.49 |
| | 24 | 0.00[6] | 0.39[7] | 1.87 | 3.05 | 5.41 | 0.00[6] | 0.85 | 3.09 | 4.87 | 8.62 |
| 16 | 12 | 0.36[7] | 1.06 | 2.43 | 3.60 | 5.98 | 0.71 | 1.66 | 3.82 | 5.61 | 9.41 |
| | 16 | 0.00[6] | 0.63[7] | 2.05 | 3.22 | 5.57 | 0.19[6] | 1.13 | 3.31 | 5.08 | 8.82 |
| | 24 | 0.00[3] | 0.00[6] | 1.34[6] | 2.50[7] | 4.79 | 0.00[6] | 0.14[6] | 2.34[7] | 4.08 | 7.68 |

| Wall | Spacing | 800S200-mils (Fy) | | | | | 800S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54(50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.60 | 4.13 | 7.40 | 9.97 | 15.64 | 4.52 | 7.82 | 11.42 | 19.37 |
| | 16 | 2.44 | 3.98 | 7.25 | 9.84 | 15.49 | 4.36 | 7.66 | 11.25 | 19.21 |
| | 24 | 2.13 | 3.69 | 6.96 | 9.56 | 15.21 | 4.05 | 7.36 | 10.92 | 18.87 |
| 9 | 12 | 2.47 | 4.01 | 7.27 | 9.85 | 15.51 | 4.38 | 7.65 | 11.23 | 19.14 |
| | 16 | 2.27 | 3.82 | 7.08 | 9.68 | 15.32 | 4.17 | 7.46 | 11.02 | 18.92 |
| | 24 | 1.87 | 3.44 | 6.70 | 9.33 | 14.95 | 3.77 | 7.07 | 10.60 | 18.49 |
| 10 | 12 | 2.32 | 3.86 | 7.13 | 9.72 | 15.36 | 4.21 | 7.46 | 11.01 | 18.86 |
| | 16 | 2.07 | 3.63 | 6.89 | 9.49 | 15.13 | 3.96 | 7.22 | 10.75 | 18.59 |
| | 24 | 1.59 | 3.16 | 6.42 | 9.06 | 14.66 | 3.46 | 6.73 | 10.22 | 18.05 |
| 12 | 12 | 1.97 | 3.52 | 6.76 | 9.37 | 14.99 | 3.81 | 6.98 | 10.47 | 18.15 |
| | 16 | 1.63 | 3.18 | 6.41 | 9.05 | 14.63 | 3.45 | 6.63 | 10.08 | 17.74 |
| | 24 | 0.95 | 2.52 | 5.72 | 8.40 | 13.93 | 2.75 | 5.94 | 9.32 | 16.94 |
| 14 | 12 | 1.55 | 3.08 | 6.22 | 8.88 | 14.49 | 3.33 | 6.39 | 9.72 | 17.10 |
| | 16 | 1.10 | 2.62 | 5.74 | 8.42 | 13.99 | 2.85 | 5.92 | 9.19 | 16.54 |
| | 24 | 0.24[7] | 1.76 | 4.83 | 7.54 | 13.01 | 1.94 | 5.01 | 8.17 | 15.44 |
| 16 | 12 | 1.09 | 2.55 | 5.48 | 8.04 | 13.50 | 2.79 | 5.69 | 8.78 | 15.69 |
| | 16 | 0.54[7] | 1.99 | 4.89 | 7.47 | 12.83 | 2.19 | 5.09 | 8.11 | 14.97 |
| | 24 | 0.00[6] | 0.95[6] | 3.78 | 6.37 | 11.57 | 1.09[7] | 3.98 | 6.85 | 13.59 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 25psf lateral load

| Wall | Spacing | 1000S162-mils (Fy) | | | | 1000S200-mils (Fy) | | | | 1000S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 3.03 | 4.99 | 6.74 | 10.64 | 4.14 | 7.31 | 9.83 | 15.50 | 4.66 | 7.98 | 11.64 | 19.63 |
| | 16 | 2.92 | 4.90 | 6.65 | 10.55 | 4.01 | 7.18 | 9.71 | 15.38 | 4.53 | 7.86 | 11.52 | 19.51 |
| | 24 | 2.71 | 4.72 | 6.48 | 10.36 | 3.76 | 6.93 | 9.48 | 15.14 | 4.27 | 7.61 | 11.28 | 19.27 |
| 9 | 12 | 2.94 | 4.91 | 6.67 | 10.56 | 4.03 | 7.20 | 9.73 | 15.40 | 4.55 | 7.88 | 11.54 | 19.53 |
| | 16 | 2.81 | 4.80 | 6.56 | 10.45 | 3.87 | 7.04 | 9.58 | 15.24 | 4.39 | 7.72 | 11.38 | 19.37 |
| | 24 | 2.54 | 4.56 | 6.33 | 10.21 | 3.55 | 6.73 | 9.28 | 14.94 | 4.06 | 7.41 | 11.07 | 19.07 |
| 10 | 12 | 2.85 | 4.83 | 6.59 | 10.48 | 3.92 | 7.08 | 9.62 | 15.28 | 4.43 | 7.76 | 11.42 | 19.41 |
| | 16 | 2.68 | 4.68 | 6.44 | 10.33 | 3.71 | 6.89 | 9.43 | 15.09 | 4.23 | 7.57 | 11.23 | 19.22 |
| | 24 | 2.35 | 4.39 | 6.16 | 10.04 | 3.32 | 6.49 | 9.06 | 14.71 | 3.82 | 7.18 | 10.84 | 18.83 |
| 12 | 12 | 2.62 | 4.62 | 6.38 | 10.27 | 3.64 | 6.80 | 9.35 | 15.00 | 4.15 | 7.48 | 11.14 | 19.12 |
| | 16 | 2.38 | 4.41 | 6.18 | 10.05 | 3.35 | 6.51 | 9.08 | 14.72 | 3.85 | 7.20 | 10.86 | 18.84 |
| | 24 | 1.90 | 3.99 | 5.76 | 9.62 | 2.77 | 5.94 | 8.53 | 14.16 | 3.27 | 6.63 | 10.29 | 18.27 |
| 14 | 12 | 2.34 | 4.38 | 6.14 | 10.00 | 3.30 | 6.45 | 9.02 | 14.65 | 3.79 | 7.10 | 10.77 | 18.76 |
| | 16 | 2.02 | 4.09 | 5.85 | 9.70 | 2.91 | 6.05 | 8.64 | 14.26 | 3.39 | 6.71 | 10.38 | 18.36 |
| | 24 | 1.38 | 3.51 | 5.29 | 9.11 | 2.14 | 5.27 | 7.89 | 13.48 | 2.60 | 5.94 | 9.60 | 17.56 |
| 16 | 12 | 2.02 | 4.08 | 5.84 | 9.69 | 2.91 | 6.04 | 8.61 | 14.22 | 3.36 | 6.59 | 10.21 | 18.10 |
| | 16 | 1.60 | 3.70 | 5.47 | 9.29 | 2.40 | 5.51 | 8.11 | 13.69 | 2.85 | 6.09 | 9.70 | 17.56 |
| | 24 | 0.79 | 2.96 | 4.73 | 8.50 | 1.42 | 4.50 | 7.13 | 12.66 | 1.85 | 5.10 | 8.69 | 16.50 |

| Wall | Spacing | 1200S162-mils (Fy) | | | 1200S200-mils (Fy) | | | 1200S250-mils (Fy) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 4.79 | 6.47 | 10.21 | 7.19 | 9.66 | 15.25 | 7.97 | 11.61 | 19.58 |
| | 16 | 4.72 | 6.40 | 10.14 | 7.09 | 9.57 | 15.16 | 7.86 | 11.50 | 19.48 |
| | 24 | 4.58 | 6.26 | 10.00 | 6.90 | 9.39 | 14.97 | 7.65 | 11.29 | 19.26 |
| 9 | 12 | 4.74 | 6.41 | 10.16 | 7.11 | 9.59 | 15.17 | 7.88 | 11.52 | 19.49 |
| | 16 | 4.65 | 6.33 | 10.07 | 6.99 | 9.47 | 15.06 | 7.75 | 11.38 | 19.35 |
| | 24 | 4.47 | 6.15 | 9.89 | 6.74 | 9.24 | 14.82 | 7.48 | 11.11 | 19.08 |
| 10 | 12 | 4.67 | 6.35 | 10.09 | 7.02 | 9.50 | 15.09 | 7.78 | 11.42 | 19.39 |
| | 16 | 4.56 | 6.24 | 9.98 | 6.86 | 9.36 | 14.94 | 7.62 | 11.25 | 19.22 |
| | 24 | 4.34 | 6.03 | 9.76 | 6.55 | 9.07 | 14.65 | 7.28 | 10.90 | 18.87 |
| 12 | 12 | 4.52 | 6.20 | 9.94 | 6.80 | 9.30 | 14.88 | 7.55 | 11.18 | 19.14 |
| | 16 | 4.36 | 6.04 | 9.78 | 6.58 | 9.09 | 14.67 | 7.31 | 10.93 | 18.89 |
| | 24 | 4.03 | 5.73 | 9.46 | 6.13 | 8.66 | 14.24 | 6.83 | 10.42 | 18.38 |
| 14 | 12 | 4.33 | 6.02 | 9.75 | 6.54 | 9.05 | 14.63 | 7.27 | 10.88 | 18.84 |
| | 16 | 4.11 | 5.80 | 9.53 | 6.23 | 8.76 | 14.33 | 6.94 | 10.53 | 18.48 |
| | 24 | 3.67 | 5.37 | 9.09 | 5.61 | 8.18 | 13.75 | 6.28 | 9.84 | 17.78 |
| 16 | 12 | 4.12 | 5.81 | 9.53 | 6.23 | 8.75 | 14.33 | 6.94 | 10.53 | 18.47 |
| | 16 | 3.82 | 5.52 | 9.24 | 5.82 | 8.37 | 13.93 | 6.50 | 10.07 | 17.99 |
| | 24 | 3.25 | 4.96 | 8.66 | 5.01 | 7.60 | 13.15 | 5 64 | 9 16 | 17 05 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.07[3] | 0.47[6] | 1.17[6] | 1.74[6] | 2.99 | 0.22[3] | 0.71[6] | 1.51[6] | 2.16[7] | 3.54 |
| | 16 | 0.00[2] | 0.19[3] | 0.92[3] | 1.48[6] | 2.66[6] | 0.00[3] | 0.40[3] | 1.24[6] | 1.8[6] | 3.21[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.49[2] | 1.00[3] | 2.08[6] | 0.00[2] | 0.00[2] | 0.77[3] | 1.36[3] | 2.61[6] |
| 9 | 12 | 0.00[2] | 0.21[3] | 0.85[3] | 1.33[6] | 2.32[6] | 0.00[3] | 0.41[3] | 1.13[6] | 1.68[6] | 2.81[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.60[3] | 1.06[3] | 1.99[6] | 0.00[2] | 0.09[2] | 0.86[3] | 1.38[3] | 2.46[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.15[2] | 0.57[2] | 1.41[3] | 0.00[2] | 0.00[2] | 0.37[2] | 0.86[2] | 1.85[3] |
| 10 | 12 | 0.00[2] | 0.01[2] | 0.59[2] | 0.99[3] | 1.78[6] | 0.00[2] | 0.16[2] | 0.81[3] | 1.27[3] | 2.20[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.33[2] | 0.71[2] | 1.45[3] | 0.00[2] | 0.00[2] | 0.54[2] | 0.98[3] | 1.86[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.23[2] | 0.89[2] | 0.00[1] | 0.00[1] | 0.06[2] | 0.46[2] | 1.26[2] |
| 12 | 12 | 0.00[1] | 0.00[1] | 0.20[2] | 0.48[2] | 1.00[2] | 0.00[1] | 0.00[2] | 0.35[2] | 0.67[2] | 1.31[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.22[2] | 0.70[2] | 0.00[1] | 0.00[1] | 0.09[2] | 0.39[2] | 0.99[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.19[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.43[2] |
| 14 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.15[1] | 0.52[2] | 0.00[1] | 0.00[1] | 0.05[1] | 0.29[2] | 0.74[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.25[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.03[1] | 0.44[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.21[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.04[1] | 0.37[1] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.10[1] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.50[7] | 1.07 | 2.27 | 3.21 | 5.12 | 0.78 | 1.49 | 2.99 | 4.08 | 6.51 |
| | 16 | 0.18[6] | 0.73[7] | 1.96 | 2.87 | 4.80 | 0.43[6] | 1.11[7] | 2.64 | 3.72 | 6.15 |
| | 24 | 0.00[3] | 0.10[6] | 1.37[6] | 2.25[7] | 4.20 | 0.00[6] | 0.42[6] | 1.99[6] | 3.05 | 5.47 |
| 9 | 12 | 0.23[6] | 0.75[6] | 1.86[7] | 2.71 | 4.71 | 0.46[6] | 1.11[7] | 2.48 | 3.48 | 5.70 |
| | 16 | 0.00[3] | 0.36[6] | 1.51[6] | 2.33[7] | 4.31 | 0.07[6] | 0.69[6] | 2.08[7] | 3.06 | 5.28 |
| | 24 | 0.00[2] | 0.00[3] | 0.86[3] | 1.63[6] | 3.58[6] | 0.00[3] | 0.00[3] | 1.37[6] | 2.31[6] | 4.5[7] |
| 10 | 12 | 0.00[3] | 0.44[6] | 1.46[6] | 2.21[7] | 4.00 | 0.17[6] | 0.74[6] | 1.99[7] | 2.88 | 4.87 |
| | 16 | 0.00[3] | 0.02[2] | 1.08[6] | 1.80[6] | 3.56[7] | 0.00[3] | 0.29[6] | 1.56[6] | 2.43[6] | 4.41 |
| | 24 | 0.00[2] | 0.00[2] | 0.40[3] | 1.07[3] | 2.78[6] | 0.00[2] | 0.00[3] | 0.81[3] | 1.63[6] | 3.58[6] |
| 12 | 12 | 0.00[2] | 0.00[3] | 0.77[3] | 1.34[6] | 2.68[7] | 0.00[2] | 0.13[3] | 1.13[3] | 1.81[6] | 3.34[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.38[2] | 0.91[3] | 2.23[6] | 0.00[2] | 0.00[2] | 0.70[3] | 1.35[3] | 2.86[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.18[2] | 1.45[3] | 0.00[1] | 0.00[2] | 0.00[2] | 0.56[2] | 2.03[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.28[2] | 0.70[2] | 1.71[3] | 0.00[2] | 0.00[2] | 0.53[2] | 1.04[3] | 2.21[6] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[2] | 0.29[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.13[2] | 0.60[2] | 1.75[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.56[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.96[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[2] | 0.26[2] | 1.05[2] | 0.00[1] | 0.00[2] | 0.13[2] | 0.51[2] | 1.42[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.66[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.11[2] | 0.99[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.27[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 362S137-mils (Fy) | | | | | 362S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.56[7] | 1.16 | 2.43 | 3.44 | 5.30 | 0.85 | 1.59 | 3.17 | 4.38 | 6.93 |
| | 16 | 0.24[6] | 0.81[7] | 2.11 | 3.10 | 4.99 | 0.50[7] | 1.21 | 2.82 | 4.01 | 6.57 |
| | 24 | 0.00[3] | 0.18[6] | 1.52[6] | 2.47[7] | 4.40 | 0.00[6] | 0.52[6] | 2.16[7] | 3.32 | 5.89 |
| 9 | 12 | 0.28[6] | 0.83[7] | 2.03 | 2.94 | 4.95 | 0.53[6] | 1.21 | 2.68 | 3.77 | 6.13 |
| | 16 | 0.00[6] | 0.44[6] | 1.66[6] | 2.55[7] | 4.56 | 0.13[6] | 0.78[6] | 2.27[7] | 3.34 | 5.71 |
| | 24 | 0.00[3] | 0.00[3] | 0.99[6] | 1.84[6] | 3.83[7] | 0.00[3] | 0.02[6] | 1.54[6] | 2.57[6] | 4.91 |
| 10 | 12 | 0.02[3] | 0.51[6] | 1.62[6] | 2.44[7] | 4.35 | 0.23[6] | 0.84[6] | 2.18[7] | 3.15 | 5.30 |
| | 16 | 0.00[3] | 0.09[3] | 1.22[6] | 2.01[6] | 3.91[7] | 0.00[3] | 0.38[6] | 1.74[6] | 2.69[7] | 4.82 |
| | 24 | 0.00[2] | 0.00[2] | 0.51[3] | 1.25[3] | 3.10[6] | 0.00[2] | 0.00[3] | 0.96[3] | 1.86[6] | 3.96[6] |
| 12 | 12 | 0.00[2] | 0.00[3] | 0.89[3] | 1.51[6] | 2.99[6] | 0.00[2] | 0.20[3] | 1.29[6] | 2.03[6] | 3.70[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.48[3] | 1.06[3] | 2.52[6] | 0.00[2] | 0.00[2] | 0.84[3] | 1.55[3] | 3.20[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.29[2] | 1.70[3] | 0.00[1] | 0.00[2] | 0.05[2] | 0.71[2] | 2.32[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.35[2] | 0.82[3] | 1.94[3] | 0.00[2] | 0.00[2] | 0.64[2] | 1.19[3] | 2.48[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.00[2] | 0.39[2] | 1.49[3] | 0.00[1] | 0.00[2] | 0.21[2] | 0.73[2] | 2.00[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.72[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.16[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[2] | 0.34[2] | 1.21[2] | 0.00[1] | 0.00[2] | 0.19[2] | 0.62[2] | 1.62[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.80[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.19[2] | 1.17[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.09[1] | 0.00[1] | 000[1] | 0.00[1] | 0.00[1] | 0.40[2] |

| Wall | Spacing | 362S200-mils (Fy) | | | | | 362S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.13 | 2.13 | 4.06 | 5.58 | 8.55 | 2.48 | 4.62 | 6.53 | 9.99 |
| | 16 | 0.74[7] | 1.71 | 3.65 | 5.18 | 8.17 | 2.03 | 4.19 | 6.08 | 9.59 |
| | 24 | 0.02[6] | 0.95[7] | 2.89 | 4.42 | 7.44 | 1.21[7] | 3.37 | 5.23 | 8.82 |
| 9 | 12 | 0.77[7] | 1.68 | 3.44 | 4.84 | 7.59 | 2.01 | 4.00 | 5.68 | 8.92 |
| | 16 | 0.32[6] | 1.21[7] | 2.97 | 4.37 | 7.14 | 1.49 | 3.49 | 5.15 | 8.44 |
| | 24 | 0.00[3] | 0.37[6] | 2.12[6] | 3.51[7] | 6.29 | 0.56[6] | 2.56[7] | 4.18 | 7.54 |
| 10 | 12 | 0.42[6] | 1.25[7] | 2.83 | 4.09 | 6.60 | 1.54 | 3.37 | 4.82 | 7.82 |
| | 16 | 0.00[6] | 0.74[6] | 2.32[6] | 3.58[7] | 6.10 | 0.97[6] | 2.81[7] | 4.24 | 7.28 |
| | 24 | 0.00[3] | 0.00[3] | 1.43[6] | 2.66[6] | 5.17[7] | 0.00[6] | 1.80[6] | 3.20[6] | 6.28 |
| 12 | 12 | 0.00[3] | 0.49[6] | 1.73[6] | 2.72[6] | 4.72 | 0.67[6] | 2.12[6] | 3.25[7] | 5.69 |
| | 16 | 0.00[2] | 0.00[3] | 1.21[3] | 2.19[6] | 4.17[6] | 0.06[3] | 1.53[6] | 2.64[6] | 5.1[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.31[2] | 1.26[3] | 3.21[6] | 0.00[2] | 0.51[3] | 1.57[3] | 4.04[6] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.92[3] | 1.69[3] | 3.24[6] | 0.01[3] | 1.17[3] | 2.05[6] | 3.99[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.43[2] | 1.18[3] | 2.71[3] | 0.00[2] | 0.61[3] | 1.46[3] | 3.4[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.31[2] | 1.80[2] | 0.00[2] | 0.00[2] | 0.45[2] | 2.38[3] |
| 16 | 12 | 0.00[1] | 0.00[2] | 0.38[2] | 0.97[2] | 2.20[3] | 0.00[2] | 0.53[2] | 1.21[3] | 2.77[6] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[2] | 0.50[2] | 1.70[2] | 0.00[2] | 0.00[2] | 0.66[2] | 2.21[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.85[2] | 0.00[1] | 0 00[1] | 0 00[2] | 1.25[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 362S137-mils (Fy) | | | | | 362S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.56[7] | 1.16 | 2.43 | 3.44 | 5.30 | 0.85 | 1.59 | 3.17 | 4.38 | 6.93 |
| | 16 | 0.24[6] | 0.81[7] | 2.11 | 3.10 | 4.99 | 0.50[7] | 1.21 | 2.82 | 4.01 | 6.57 |
| | 24 | 0.00[3] | 0.18[6] | 1.52[6] | 2.47[7] | 4.40 | 0.00[6] | 0.52[6] | 2.16[7] | 3.32 | 5.89 |
| 9 | 12 | 0.28[6] | 0.83[7] | 2.03 | 2.94 | 4.95 | 0.53[6] | 1.21 | 2.68 | 3.77 | 6.13 |
| | 16 | 0.00[6] | 0.44[6] | 1.66[6] | 2.55[7] | 4.56 | 0.13[6] | 0.78[6] | 2.27[7] | 3.34 | 5.71 |
| | 24 | 0.00[3] | 0.00[3] | 0.99[6] | 1.84[6] | 3.83[7] | 0.00[3] | 0.02[6] | 1.54[6] | 2.57[6] | 4.91 |
| 10 | 12 | 0.02[3] | 0.51[6] | 1.62[6] | 2.44[7] | 4.35 | 0.23[6] | 0.84[6] | 2.18[7] | 3.15 | 5.30 |
| | 16 | 0.00[3] | 0.09[3] | 1.22[6] | 2.01[6] | 3.91[7] | 0.00[3] | 0.38[6] | 1.74[6] | 2.69[7] | 4.82 |
| | 24 | 0.00[2] | 0.00[2] | 0.51[3] | 1.25[3] | 3.10[6] | 0.00[2] | 0.00[3] | 0.96[3] | 1.86[6] | 3.96[6] |
| 12 | 12 | 0.00[2] | 0.00[3] | 0.89[3] | 1.51[6] | 2.99[6] | 0.00[2] | 0.20[3] | 1.29[6] | 2.03[6] | 3.70[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.48[3] | 1.06[3] | 2.52[6] | 0.00[2] | 0.00[2] | 0.84[3] | 1.55[3] | 3.20[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.29[2] | 1.70[3] | 0.00[1] | 0.00[2] | 0.05[2] | 0.71[2] | 2.32[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.35[2] | 0.82[3] | 1.94[3] | 0.00[2] | 0.00[2] | 0.64[2] | 1.19[3] | 2.48[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.00[2] | 0.39[2] | 1.49[3] | 0.00[1] | 0.00[2] | 0.21[2] | 0.73[2] | 2.00[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.72[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.16[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[2] | 0.34[2] | 1.21[2] | 0.00[1] | 0.00[2] | 0.19[2] | 0.62[2] | 1.62[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.80[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.19[2] | 1.17[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.09[1] | 0.00[1] | 000[1] | 0.00[1] | 0.00[1] | 0.40[2] |

| Wall | Spacing | 362S200-mils (Fy) | | | | | 362S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.13 | 2.13 | 4.06 | 5.58 | 8.55 | 2.48 | 4.62 | 6.53 | 9.99 |
| | 16 | 0.74[7] | 1.71 | 3.65 | 5.18 | 8.17 | 2.03 | 4.19 | 6.08 | 9.59 |
| | 24 | 0.02[6] | 0.95[7] | 2.89 | 4.42 | 7.44 | 1.21[7] | 3.37 | 5.23 | 8.82 |
| 9 | 12 | 0.77[7] | 1.68 | 3.44 | 4.84 | 7.59 | 2.01 | 4.00 | 5.68 | 8.92 |
| | 16 | 0.32[6] | 1.21[7] | 2.97 | 4.37 | 7.14 | 1.49 | 3.49 | 5.15 | 8.44 |
| | 24 | 0.00[3] | 0.37[6] | 2.12[6] | 3.51[7] | 6.29 | 0.56[6] | 2.56[7] | 4.18 | 7.54 |
| 10 | 12 | 0.42[6] | 1.25[7] | 2.83 | 4.09 | 6.60 | 1.54 | 3.37 | 4.82 | 7.82 |
| | 16 | 0.00[6] | 0.74[6] | 2.32[6] | 3.58[7] | 6.10 | 0.97[6] | 2.81[7] | 4.24 | 7.28 |
| | 24 | 0.00[3] | 0.00[3] | 1.43[6] | 2.66[6] | 5.17[7] | 0.00[6] | 1.80[6] | 3.20[6] | 6.28 |
| 12 | 12 | 0.00[3] | 0.49[6] | 1.73[6] | 2.72[6] | 4.72 | 0.67[6] | 2.12[6] | 3.25[7] | 5.69 |
| | 16 | 0.00[2] | 0.00[3] | 1.21[3] | 2.19[6] | 4.17[6] | 0.06[3] | 1.53[6] | 2.64[6] | 5.1[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.31[2] | 1.26[3] | 3.21[6] | 0.00[2] | 0.51[3] | 1.57[3] | 4.04[6] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.92[3] | 1.69[3] | 3.24[6] | 0.01[3] | 1.17[3] | 2.05[6] | 3.99[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.43[2] | 1.18[3] | 2.71[3] | 0.00[2] | 0.61[3] | 1.46[3] | 3.4[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.31[2] | 1.80[2] | 0.00[2] | 0.00[2] | 0.45[2] | 2.38[3] |
| 16 | 12 | 0.00[1] | 0.00[2] | 0.38[2] | 0.97[2] | 2.20[3] | 0.00[2] | 0.53[2] | 1.21[3] | 2.77[6] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[2] | 0.50[2] | 1.70[2] | 0.00[2] | 0.00[2] | 0.66[2] | 2.21[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.85[2] | 0.00[1] | 0 00[1] | 0 00[2] | 1.25[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 400S137-mils (Fy) | | | | | 400S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43(33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.72 | 1.38 | 2.81 | 4.06 | 5.77 | 1.05 | 1.86 | 3.67 | 5.18 | 8.17 |
| | 16 | 0.40[7] | 1.04 | 2.50 | 3.72 | 5.49 | 0.70 | 1.50 | 3.32 | 4.81 | 7.82 |
| | 24 | 0.00[6] | 0.41[6] | 1.90[7] | 3.07 | 4.96 | 0.05[6] | 0.81[7] | 2.66 | 4.10 | 7.13 |
| 9 | 12 | 0.44[7] | 1.06 | 2.43 | 3.63 | 5.47 | 0.73[7] | 1.49 | 3.20 | 4.61 | 7.41 |
| | 16 | 0.07[6] | 0.67[6] | 2.06 | 3.21 | 5.12 | 0.33[6] | 1.07[7] | 2.78 | 4.16 | 6.98 |
| | 24 | 0.00[3] | 0.00[6] | 1.37[6] | 2.45[6] | 4.45 | 0.00[3] | 0.28[6] | 2.02[6] | 3.33[7] | 6.16 |
| 10 | 12 | 0.17[6] | 0.74[6] | 2.03[7] | 3.11 | 5.12 | 0.41[6] | 1.12[7] | 2.70 | 3.99 | 6.58 |
| | 16 | 0.00[3] | 0.30[6] | 1.61[6] | 2.65[7] | 4.68 | 0.00[6] | 0.64[6] | 2.24[7] | 3.48 | 6.08 |
| | 24 | 0.00[2] | 0.00[3] | 0.85[3] | 1.80[6] | 3.88[6] | 0.00[3] | 0.00[3] | 1.40[6] | 2.57[6] | 5.16[7] |
| 12 | 12 | 0.00[3] | 0.14[3] | 1.25[6] | 2.09[6] | 3.98[7] | 0.00[3] | 0.43[6] | 1.75[6] | 2.76[6] | 4.88 |
| | 16 | 0.00[2] | 0.00[3] | 0.79[3] | 1.58[6] | 3.45[6] | 0.00[2] | 0.00[3] | 1.25[3] | 2.20[6] | 4.32[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.00[2] | 0.68[3] | 2.51[3] | 0.00[2] | 0.00[2] | 0.36[2] | 1.23[3] | 3.31[6] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.62[3] | 1.24[3] | 2.70[6] | 0.00[2] | 0.00[3] | 0.98[3] | 1.72[6] | 3.40[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.16[2] | 0.73[2] | 2.19[3] | 0.00[2] | 0.00[2] | 0.48[2] | 1.18[3] | 2.84[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.00[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.00[2] | 0.25[2] | 1.86[3] |
| 16 | 12 | 0.00[1] | 0.00[2] | 0.16[2] | 0.62[2] | 1.77[3] | 0.00[2] | 0.00[2] | 0.42[2] | 0.98[3] | 2.30[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[2] | 0.15[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.00[2] | 0.48[2] | 1.77[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.46[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.86[2] |

| Wall | Spacing | 400S200-mils (Fy) | | | | | 400S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.35 | 2.46 | 4.68 | 6.55 | 10.06 | 2.81 | 5.16 | 7.49 | 11.73 |
| | 16 | 0.97 | 2.06 | 4.28 | 6.14 | 9.68 | 2.38 | 4.74 | 7.04 | 11.33 |
| | 24 | 0.26[6] | 1.30 | 3.52 | 5.37 | 8.95 | 1.58 | 3.95 | 6.19 | 10.55 |
| 9 | 12 | 0.99 | 2.03 | 4.09 | 5.84 | 9.14 | 2.36 | 4.62 | 6.78 | 10.70 |
| | 16 | 0.55[7] | 1.56 | 3.61 | 5.35 | 8.67 | 1.85 | 4.12 | 6.24 | 10.20 |
| | 24 | 0.00[6] | 0.7[6] | 2.73[7] | 4.45 | 7.80 | 0.92[7] | 3.18 | 5.22 | 9.27 |
| 10 | 12 | 0.64[7] | 1.59 | 3.47 | 5.09 | 8.14 | 1.90 | 4.02 | 5.98 | 9.59 |
| | 16 | 0.15[6] | 1.07[6] | 2.94 | 4.54 | 7.61 | 1.33[7] | 3.44 | 5.35 | 9.01 |
| | 24 | 0.00[3] | 0.13[6] | 1.98[6] | 3.54[6] | 6.62 | 0.30[6] | 2.39[6] | 4.22[7] | 7.94 |
| 12 | 12 | 0.00[3] | 0.78[6] | 2.31[6] | 3.62[7] | 6.14 | 1.01[6] | 2.80[7] | 4.29 | 7.33 |
| | 16 | 0.00[3] | 0.20[3] | 1.73[6] | 3.00[6] | 5.52[7] | 0.36[6] | 2.14[6] | 3.59[7] | 6.66 |
| | 24 | 0.00[2] | 0.00[2] | 0.71[3] | 1.93[3] | 4.42[6] | 0.00[3] | 0.99[3] | 2.36[6] | 5.46[6] |
| 14 | 12 | 0.00[2] | 0.13[3] | 1.36[3] | 2.36[6] | 4.37[6] | 0.26[3] | 1.69[6] | 2.83[6] | 5.31[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.79[3] | 1.76[3] | 3.75[6] | 0.00[3] | 1.04[3] | 2.15[6] | 4.63[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.74[2] | 2.68[3] | 0.00[2] | 0.00[2] | 0.97[3] | 3.44[3] |
| 16 | 12 | 0.00[2] | 0.00[2] | 0.68[2] | 1.45[3] | 3.04[6] | 0.00[2] | 0.89[3] | 1.77[3] | 3.76[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.14[2] | 0.89[2] | 2.46[3] | 0.00[2] | 0.27[2] | 1.12[3] | 3.11[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.46[2] | 0.00[1] | 0.00[2] | 0.02[2] | 1.99[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 550S137-mils (Fy) | | | | | 550S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.26 | 2.02 | 3.44 | 4.67 | 7.07 | 1.77 | 2.77 | 5.06 | 6.86 | 10.67 |
| | 16 | 1.05 | 1.82 | 3.27 | 4.49 | 6.89 | 1.52 | 2.53 | 4.83 | 6.63 | 10.41 |
| | 24 | 0.64 | 1.42 | 2.93 | 4.15 | 6.52 | 1.04 | 2.06 | 4.38 | 6.16 | 9.91 |
| 9 | 12 | 1.08 | 1.84 | 3.29 | 4.51 | 6.90 | 1.54 | 2.54 | 4.82 | 6.64 | 10.42 |
| | 16 | 0.82 | 1.59 | 3.07 | 4.28 | 6.66 | 1.23 | 2.24 | 4.53 | 6.33 | 10.08 |
| | 24 | 0.33[7] | 1.10 | 2.64 | 3.84 | 6.19 | 0.65 | 1.65 | 3.96 | 5.74 | 9.43 |
| 10 | 12 | 0.89 | 1.65 | 3.11 | 4.32 | 6.69 | 1.29 | 2.28 | 4.50 | 6.36 | 10.11 |
| | 16 | 0.58 | 1.34 | 2.84 | 4.04 | 6.40 | 0.93 | 1.91 | 4.14 | 5.98 | 9.69 |
| | 24 | 0.00[6] | 0.75[7] | 2.31 | 3.50 | 5.81 | 0.24[6] | 1.22[7] | 3.46 | 5.24 | 8.87 |
| 12 | 12 | 0.46[6] | 1.20[7] | 2.68 | 3.86 | 6.18 | 0.76[7] | 1.69 | 3.74 | 5.45 | 9.29 |
| | 16 | 0.06[6] | 0.79[6] | 2.30[7] | 3.46 | 5.74 | 0.30[6] | 1.22[7] | 3.27 | 4.93 | 8.67 |
| | 24 | 0.00[3] | 0.02[3] | 1.59[6] | 2.71 | 4.91 | 0.00[3] | 0.35[6] | 2.39[6] | 3.97[7] | 7.50 |
| 14 | 12 | 0.02[3] | 0.72[6] | 2.18[6] | 3.30 | 5.52 | 0.24[6] | 1.08[6] | 2.91[7] | 4.40 | 7.72 |
| | 16 | 0.00[3] | 0.21[3] | 1.70[6] | 2.79 | 4.93[7] | 0.00[3] | 0.53[6] | 2.35[6] | 3.78[6] | 6.96 |
| | 24 | 0.00[2] | 0.00[2] | 0.83[3] | 1.85 | 3.87[6] | 0.00[2] | 0.00[3] | 1.35[3] | 2.67[6] | 5.60[6] |
| 16 | 12 | 0.00[2] | 0.23[3] | 1.58[6] | 2.65 | 4.74[7] | 0.00[3] | 0.51[3] | 2.10[6] | 3.35[6] | 6.10[7] |
| | 16 | 0.00[2] | 0.00[2] | 1.05[3] | 2.05 | 4.03[6] | 0.00[2] | 0.00[3] | 1.50[3] | 2.69[6] | 5.29[6] |
| | 24 | 0.00[1] | 0 00[2] | 0.11[2] | 1.00 | 2 79[3] | 0.00[2] | Q 00[2] | 0.46[2] | 1.52[3] | 3.86[3] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 600S137-mils (Fy) | | | | | 600S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.25 | 1.99 | 3.39 | 4.62 | 7.14 | 1.87 | 2.87 | 5.12 | 6.94 | 10.83 |
| | 16 | 1.05 | 1.79 | 3.21 | 4.45 | 6.99 | 1.65 | 2.66 | 4.92 | 6.74 | 10.61 |
| | 24 | 0.65 | 1.39 | 2.87 | 4.10 | 6.67 | 1.21 | 2.24 | 4.53 | 6.33 | 10.17 |
| 9 | 12 | 1.08 | 1.82 | 3.23 | 4.47 | 7.00 | 1.68 | 2.68 | 4.94 | 6.75 | 10.62 |
| | 16 | 0.83 | 1.56 | 3.02 | 4.24 | 6.80 | 1.40 | 2.41 | 4.69 | 6.49 | 10.34 |
| | 24 | 0.33 | 1.06 | 2.59 | 3.81 | 6.39 | 0.86 | 1.89 | 4.19 | 5.97 | 9.77 |
| 10 | 12 | 0.89 | 1.63 | 3.06 | 4.29 | 6.83 | 1.47 | 2.47 | 4.73 | 6.53 | 10.37 |
| | 16 | 0.58 | 1.31 | 2.79 | 4.01 | 6.58 | 1.13 | 2.14 | 4.41 | 6.20 | 10.01 |
| | 24 | 0.00[6] | 0.71 | 2.27 | 3.48 | 6.07 | 0.49[7] | 1.51 | 3.80 | 5.56 | 9.30 |
| 12 | 12 | 0.47[7] | 1.18 | 2.65 | 3.86 | 6.41 | 0.98 | 1.96 | 4.17 | 5.98 | 9.73 |
| | 16 | 0.06[6] | 0.76[7] | 2.27 | 3.46 | 6.03 | 0.53[6] | 1.51 | 3.72 | 5.49 | 9.18 |
| | 24 | 0.00[3] | 0.00[6] | 1.55[6] | 2.71[7] | 5.30 | 0.00[6] | 0.67[6] | 2.88[7] | 4.58 | 8.14 |
| 14 | 12 | 0.03[6] | 0.69[6] | 2.17[7] | 3.33 | 5.87 | 0.46[6] | 1.37[7] | 3.40 | 5.06 | 8.83 |
| | 16 | 0.00[3] | 0.17[6] | 1.67[6] | 2.81[7] | 5.35 | 0.00[6] | 0.83[6] | 2.85[6] | 4.46 | 8.09 |
| | 24 | 0.00[2] | 0.00[3] | 0.78[3] | 1.86[6] | 4.38[6] | 0.00[3] | 0.00[3] | 1.85[6] | 3.35[6] | 6.74[7] |
| 16 | 12 | 0.00[3] | 0.20[6] | 1.64[6] | 2.74[6] | 5.21 | 0.00[3] | 0.80[6] | 2.60[6] | 4.05[7] | 7.28 |
| | 16 | 0.00[2] | 0.00[3] | 1.05[3] | 2.11[6] | 4.56[6] | 0.00[3] | 0.20[3] | 1.98[6] | 3.36[6] | 6.44[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.03[2] | 1.00[3] | 3.38[6] | 0.00[2] | 0.00[2] | 0.91[3] | 2.15[3] | 4.95[6] |

| Wall | Spacing | 600S200-mils (Fy) | | | | | 600S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.26 | 3.65 | 6.80 | 9.35 | 14.96 | 3.98 | 7.01 | 10 32 | 17.53 |
| | 16 | 2.01 | 3.39 | 6.53 | 9.10 | 14.69 | 3.71 | 6.75 | 10.03 | 17.23 |
| | 24 | 1.53 | 2.88 | 6.01 | 8.60 | 14.14 | 3.18 | 6.24 | 9.46 | 16.64 |
| 9 | 12 | 2.03 | 3.39 | 6.47 | 8.99 | 14.49 | 3.72 | 6.69 | 9.91 | 16.95 |
| | 16 | 1.73 | 3.06 | 6.13 | 8.67 | 14.14 | 3.38 | 6.37 | 9.54 | 16.57 |
| | 24 | 1.14 | 2.42 | 5.47 | 8.04 | 13.45 | 2.72 | 5.73 | 8.81 | 15.82 |
| 10 | 12 | 1.79 | 3.10 | 6.08 | 8.57 | 13.93 | 3.42 | 6.33 | 9.43 | 16.27 |
| | 16 | 1.42 | 2.70 | 5.67 | 8.17 | 13.49 | 3.01 | 5.93 | 8.97 | 15.79 |
| | 24 | 0.72 | 1.93 | 4.87 | 7.40 | 12.63 | 2.22 | 5.16 | 8.09 | 14.86 |
| 12 | 12 | 1.24 | 2.44 | 5.17 | 7.54 | 12.53 | 2.75 | 5.49 | 8.30 | 14.61 |
| | 16 | 0.76[7] | 1.90 | 4.61 | 6.99 | 11.90 | 2.19 | 4.94 | 7.66 | 13.93 |
| | 24 | 0.00[6] | 0.91[6] | 3.56 | 5.95 | 10.70 | 1.15[7] | 3.90 | 6.46 | 12.63 |
| 14 | 12 | 0.67[6] | 1.72 | 4.15 | 6.34 | 10.81 | 2.01 | 4.54 | 7.01 | 12.64 |
| | 16 | 0.10[6] | 1.08[6] | 3.47[7] | 5.65 | 10.01 | 1.33[7] | 3.86 | 6.21 | 11.77 |
| | 24 | 0.00[3] | 0.00[6] | 2.25[6] | 4.41[6] | 8.54 | 0.10[6] | 2.61[6] | 4.76[7] | 10.17 |
| 16 | 12 | 0.13[6] | 1.03[6] | 3.13[7] | 5.08 | 8.96 | 1.28[6] | 3.60[7] | 5.68 | 10.55 |
| | 16 | 0.00[3] | 0.32[6] | 2.39[6] | 4.32[6] | 8.05 | 0.51[6] | 2.81[6] | 4.78[7] | 9.55 |
| | 24 | 0.00[2] | 0.00[3] | 1.09[3] | 2.97[6] | 6.43[6] | 0.00[3] | 1.42[3] | 3.17[6] | 7.78[6] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 800S137-mils (Fy) | | | | | 800S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.36 | 2.09 | 3.30 | 4.48 | 6.93 | 1.96 | 2.94 | 5.06 | 6.88 | 10.86 |
| | 16 | 1.22 | 1.95 | 3.18 | 4.37 | 6.82 | 1.79 | 2.77 | 4.91 | 6.73 | 10.70 |
| | 24 | 0.94 | 1.67 | 2.96 | 4.15 | 6.59 | 1.44 | 2.43 | 4.61 | 6.43 | 10.38 |
| 9 | 12 | 1.25 | 1.97 | 3.20 | 4.38 | 6.83 | 1.82 | 2.79 | 4.94 | 6.75 | 10.72 |
| | 16 | 1.07 | 1.80 | 3.06 | 4.25 | 6.69 | 1.60 | 2.58 | 4.74 | 6.56 | 10.51 |
| | 24 | 0.71 | 1.45 | 2.78 | 3.97 | 6.40 | 1.17 | 2.16 | 4.36 | 6.18 | 10.11 |
| 10 | 12 | 1.12 | 1.84 | 3.10 | 4.28 | 6.72 | 1.66 | 2.64 | 4.79 | 6.61 | 10.56 |
| | 16 | 0.90 | 1.63 | 2.92 | 4.11 | 6.54 | 1.39 | 2.37 | 4.55 | 6.37 | 10.30 |
| | 24 | 0.46 | 1.20 | 2.58 | 3.76 | 6.18 | 0.86 | 1.85 | 4.08 | 5.90 | 9.79 |
| 12 | 12 | 0.82 | 1.54 | 2.85 | 4.03 | 6.46 | 1.29 | 2.26 | 4.44 | 6.25 | 10.17 |
| | 16 | 0.51 | 1.23 | 2.60 | 3.78 | 6.20 | 0.91 | 1.89 | 4.09 | 5.91 | 9.79 |
| | 24 | 0.00[6] | 0.63 | 2.10 | 3.29 | 5.67 | 0.18 | 1.16 | 3.41 | 5.22 | 9.04 |
| 14 | 12 | 0.47 | 1.19 | 2.55 | 3.73 | 6.13 | 0.86 | 1.83 | 4.01 | 5.81 | 9.67 |
| | 16 | 0.07[7] | 0.78 | 2.21 | 3.39 | 5.77 | 0.37[7] | 1.33 | 3.54 | 5.34 | 9.14 |
| | 24 | 0.00[6] | 0.01[6] | 1.55[7] | 2.72 | 5.05 | 0.00[6] | 0.38[7] | 2.64 | 4.42 | 8.12 |
| 16 | 12 | 0.10[6] | 0.80 | 2.20 | 3.37 | 5.74 | 0.39[7] | 1.34 | 3.51 | 5.29 | 9.06 |
| | 16 | 0.00[6] | 0.30[6] | 1.76[7] | 2.93 | 5.25 | 0.00[6] | 0.72[7] | 2.91 | 4.67 | 8.36 |
| | 24 | 0.00[3] | 0.00[6] | 0.94[6] | 2.08[6] | 4.33 | 0.00[3] | 0.00[7] | 1.80[6] | 3.51[7] | 7.03 |

| Wall | Spacing | 800S200-mils (Fy) | | | | | 800S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.50 | 4.04 | 7.31 | 9.89 | 15.55 | 4.43 | 7.72 | 11.32 | 19.27 |
| | 16 | 2.32 | 3.86 | 7.14 | 9.73 | 15.38 | 4.24 | 7.54 | 11.12 | 19.07 |
| | 24 | 1.94 | 3.51 | 6.78 | 9.40 | 15.03 | 3.85 | 7.17 | 10.72 | 18.67 |
| 9 | 12 | 2.35 | 3.89 | 7.16 | 9.75 | 15.40 | 4.26 | 7.53 | 11.10 | 19.01 |
| | 16 | 2.11 | 3.66 | 6.93 | 9.54 | 15.18 | 4.01 | 7.30 | 10.85 | 18.75 |
| | 24 | 1.64 | 3.21 | 6.48 | 9.12 | 14.73 | 3.53 | 6.83 | 10.35 | 18.23 |
| 10 | 12 | 2.17 | 3.72 | 6.98 | 9.58 | 15.22 | 4.06 | 7.31 | 10.85 | 18.70 |
| | 16 | 1.88 | 3.44 | 6.70 | 9.32 | 14.94 | 3.76 | 7.02 | 10.54 | 18.37 |
| | 24 | 1.31 | 2.89 | 6.13 | 8.80 | 14.38 | 3.17 | 6.45 | 9.91 | 17.72 |
| 12 | 12 | 1.76 | 3.32 | 6.55 | 9.18 | 14.77 | 3.59 | 6.77 | 10.23 | 17.90 |
| | 16 | 1.35 | 2.91 | 6.13 | 8.79 | 14.35 | 3.17 | 6.35 | 9.77 | 17.42 |
| | 24 | 0.56 | 2.13 | 5.32 | 8.02 | 13.52 | 2.34 | 5.54 | 8.87 | 16.46 |
| 14 | 12 | 1.28 | 2.80 | 5.93 | 8.60 | 14.19 | 3.04 | 6.10 | 9.40 | 16.77 |
| | 16 | 0.75 | 2.27 | 5.37 | 8.06 | 13.59 | 2.48 | 5.55 | 8.78 | 16.10 |
| | 24 | 0.00[6] | 1.26 | 4.30 | 7.03 | 12.43 | 1.41 | 4.48 | 7.58 | 14.81 |
| 16 | 12 | 0.76 | 2.21 | 5.12 | 7.69 | 13.10 | 2.43 | 5.33 | 8.37 | 15.26 |
| | 16 | 0.12[6] | 1.57 | 4.44 | 7.02 | 12.32 | 1.74 | 4.64 | 7.60 | 14.41 |
| | 24 | 0.00[6] | 0.37[6] | 3.15[7] | 5.75 | 10.85 | 0.46[6] | 3.34[7] | 6.13 | 12.79 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 30psf lateral load

| Wall | Spacing | 1000S162-mils (Fy) | | | | 1000S200-mils (Fy) | | | | 1000S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 2.97 | 4.94 | 6.69 | 10.59 | 4.06 | 7.23 | 9.76 | 15.42 | 4.58 | 7.91 | 11.57 | 19.56 |
| | 16 | 2.84 | 4.83 | 6.58 | 10.47 | 3.91 | 7.08 | 9.62 | 15.28 | 4.43 | 7.76 | 11.42 | 19.41 |
| | 24 | 2.59 | 4.61 | 6.37 | 10.25 | 3.60 | 6.78 | 9.34 | 15.00 | 4.12 | 7.47 | 11.13 | 19.13 |
| 9 | 12 | 2.86 | 4.84 | 6.60 | 10.49 | 3.94 | 7.11 | 9.64 | 15.30 | 4.45 | 7.78 | 11.44 | 19.44 |
| | 16 | 2.70 | 4.70 | 6.46 | 10.35 | 3.74 | 6.92 | 9.46 | 15.12 | 4.26 | 7.60 | 11.26 | 19.25 |
| | 24 | 2.38 | 4.42 | 6.19 | 10.07 | 3.36 | 6.54 | 9.11 | 14.76 | 3.86 | 7.22 | 10.89 | 18.88 |
| 10 | 12 | 2.74 | 4.74 | 6.50 | 10.39 | 3.79 | 6.96 | 9.51 | 15.17 | 4.31 | 7.64 | 11.31 | 19.30 |
| | 16 | 2.55 | 4.57 | 6.33 | 10.21 | 3.55 | 6.73 | 9.28 | 14.94 | 4.06 | 7.41 | 11.07 | 19.06 |
| | 24 | 2.15 | 4.22 | 5.99 | 9.86 | 3.08 | 6.26 | 8.84 | 14.49 | 3.58 | 6.95 | 10.62 | 18.61 |
| 12 | 12 | 2.47 | 4.50 | 6.26 | 10.14 | 3.46 | 6.63 | 9.19 | 14.83 | 3.97 | 7.31 | 10.97 | 18.95 |
| | 16 | 2.18 | 4.24 | 6.01 | 9.88 | 3.12 | 6.28 | 8.86 | 14.50 | 3.62 | 6.97 | 10.63 | 18.61 |
| | 24 | 1.62 | 3.74 | 5.52 | 9.36 | 2.43 | 5.60 | 8.21 | 13.83 | 2.92 | 6.30 | 9.96 | 17.93 |
| 14 | 12 | 2.15 | 4.20 | 5.97 | 9.82 | 3.06 | 6.21 | 8.79 | 14.42 | 3.55 | 6.87 | 10.53 | 18.52 |
| | 16 | 1.76 | 3.86 | 5.62 | 9.47 | 2.60 | 5.74 | 8.34 | 13.95 | 3.07 | 6.40 | 10.06 | 18.04 |
| | 24 | 1.00 | 3.18 | 4.95 | 8.76 | 1.68 | 4.81 | 7.45 | 13.02 | 2.14 | 5.49 | 9.14 | 17.09 |
| 16 | 12 | 1.77 | 3.85 | 5.62 | 9.45 | 2.60 | 5.72 | 8.31 | 13.90 | 3.05 | 6.29 | 9.90 | 17.77 |
| | 16 | 1.28 | 3.40 | 5.17 | 8.97 | 2.00 | 5.10 | 7.71 | 13.27 | 2.44 | 5.69 | 9.29 | 17.13 |
| | 24 | 0.32[7] | 2.53 | 4.29 | 8.04 | 0.86 | 3.92 | 6.56 | 12.05 | 1.28 | 4.53 | 8.10 | 15.88 |

| Wall | Spacing | 1200S162-mils (Fy) | | | 1200S200-mils (Fy) | | | 1200S250-mils (Fy) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 4.75 | 6.43 | 10.17 | 7.13 | 9.61 | 15.19 | 7.90 | 11.55 | 19.52 |
| | 16 | 4.67 | 6.35 | 10.09 | 7.02 | 9.50 | 15.08 | 7.78 | 11.42 | 19.39 |
| | 24 | 4.50 | 6.18 | 9.92 | 6.78 | 9.28 | 14.86 | 7.53 | 11.15 | 19.13 |
| 9 | 12 | 4.68 | 6.36 | 10.10 | 7.04 | 9.52 | 15.10 | 7.80 | 11.44 | 19.41 |
| | 16 | 4.57 | 6.26 | 10.00 | 6.89 | 9.38 | 14.96 | 7.64 | 11.27 | 19.24 |
| | 24 | 4.36 | 6.05 | 9.79 | 6.59 | 9.10 | 14.68 | 7.32 | 10.94 | 18.91 |
| 10 | 12 | 4.60 | 6.29 | 10.03 | 6.93 | 9.41 | 15.00 | 7.68 | 11.32 | 19.29 |
| | 16 | 4.47 | 6.16 | 9.89 | 6.74 | 9.24 | 14.83 | 7.48 | 11.11 | 19.08 |
| | 24 | 4.20 | 5.90 | 9.63 | 6.37 | 8.89 | 14.48 | 7.09 | 10.70 | 18.66 |
| 12 | 12 | 4.42 | 6.11 | 9.84 | 6.67 | 9.17 | 14.75 | 7.41 | 11.03 | 18.99 |
| | 16 | 4.23 | 5.92 | 9.65 | 6.40 | 8.92 | 14.50 | 7.12 | 10.73 | 18.68 |
| | 24 | 3.84 | 5.54 | 9.27 | 5.86 | 8.41 | 13.99 | 6.54 | 10.12 | 18.08 |
| 14 | 12 | 4.20 | 5.89 | 9.62 | 6.35 | 8.87 | 14.45 | 7.07 | 10.67 | 18.62 |
| | 16 | 3.93 | 5.63 | 9.36 | 5.98 | 8.52 | 14.10 | 6.67 | 10.26 | 18.20 |
| | 24 | 3.41 | 5.12 | 8.83 | 5.24 | 7.83 | 13.40 | 5.89 | 9.43 | 17.36 |
| 16 | 12 | 3.94 | 5.64 | 9.36 | 5.98 | 8.52 | 14.09 | 6.68 | 10.25 | 18.18 |
| | 16 | 3.59 | 5.30 | 9.01 | 5.49 | 8.06 | 13.62 | 6.15 | 9.70 | 17.61 |
| | 24 | 2.91 | 4.62 | 8.31 | 4.54 | 7.15 | 12.69 | 5.13 | 8.62 | 16.49 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 250S137-mils (Fy) | | | | | 250S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.00[2] | 0.19[3] | 0.92[3] | 1.48[6] | 2.66[6] | 0.00[3] | 0.4[3] | 1.24[6] | 1.87[6] | 3.21[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.62[3] | 1.15[3] | 2.26[6] | 0.00[2] | 0.03[3] | 0.92[3] | 1.53[6] | 2.8[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.1[2] | 0.58[2] | 1.56[3] | 0.00[2] | 0.00[2] | 0.35[2] | 0.91[3] | 2.07[3] |
| 9 | 12 | 0.00[2] | 0.00[2] | 0.6[3] | 1.06[3] | 1.99[6] | 0.00[2] | 0.09[2] | 0.86[3] | 1.38[3] | 2.46[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.29[2] | 0.73[2] | 1.59[3] | 0.00[2] | 0.00[2] | 0.52[2] | 1.03[3] | 2.05[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.15[2] | 0.90[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.40[2] | 1.32[2] |
| 10 | 12 | 0.00[1] | 0.00[2] | 0.33[2] | 0.71[2] | 1.45[3] | 0.00[2] | 0.00[2] | 0.54[2] | 0.98[3] | 1.86[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.03[2] | 0.38[2] | 1.07[2] | 0.00[1] | 0.00[2] | 0.21[3] | 0.62[2] | 1.45[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.40[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.02[2] | 0.74[2] |
| 12 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.22[2] | 0.70[2] | 0.00[1] | 0.00[1] | 0.09[2] | 0.39[2] | 0.99[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.35[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.06[1] | 0.61[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |
| 14 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.25[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.03[1] | 0.44[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.10[1] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.10[1] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |

| Wall | Spacing | 350S137-mils (Fy) | | | | | 350S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.18[6] | 0.73[7] | 1.96 | 2.87 | 4.80 | 0.43[6] | 1.11[7] | 2.64 | 3.72 | 6.15 |
| | 16 | 0.00[6] | 0.3[6] | 1.56[6] | 2.45[7] | 4.40 | 0.00[6] | 0.65[6] | 2.20[7] | 3.26 | 5.69 |
| | 24 | 0.00[3] | 0.00[33] | 0.83[6] | 1.68[6] | 3.64[7] | 0.00[3] | 0.00[3] | 1.39[6] | 2.42[6] | 4.84 |
| 9 | 12 | 0.00[3] | 0.36[6] | 1.51[6] | 2.33[7] | 4.31 | 0.07[6] | 0.69[6] | 2.08[7] | 3.06 | 5.28 |
| | 16 | 0.00[3] | 0.00[3] | 1.06[6] | 1.86[6] | 3.82[7] | 0.00[3] | 0.17[6] | 1.60[6] | 2.55[6] | 4.75 |
| | 24 | 0.00[2] | 0.00[2] | 0.28[3] | 1.01[3] | 2.92[6] | 0.00[2] | 0.00[3] | 0.72[3] | 1.63[6] | 3.80[6] |
| 10 | 12 | 0.00[3] | 0.02[3] | 1.08[6] | 1.80[6] | 3.56[7] | 0.00[3] | 0.29[6] | 1.56[6] | 2.43[6] | 4.41 |
| | 16 | 0.00[2] | 0.00[2] | 0.61[3] | 1.30[3] | 3.03[6] | 0.00[2] | 0.00[3] | 1.05[3] | 1.89[6] | 3.84[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.00[2] | 0.42[2] | 2.09[3] | 0.00[2] | 0.00[2] | 0.15[2] | 0.93[3] | 2.83[6] |
| 12 | 12 | 0.00[2] | 0.00[2] | 0.38[2] | 0.91[3] | 2.23[6] | 0.00[2] | 0.00[2] | 0.70[3] | 1.35[3] | 2.86[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.00[2] | 0.41[2] | 1.70[3] | 0.00[2] | 0.00[2] | 0.20[2] | 0.81[3] | 2.29[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.78[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.00[2] | 1.29[2] |
| 14 | 12 | 0.00[1] | 0.00[1] | 0.00[2] | 0.29[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.13[2] | 0.60[2] | 1.75[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.79[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.09[2] | 1.21[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.28[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.66[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.11[2] | 0.99[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.20[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.49[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 362S137-mils (Fy) | | | | | 362S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.24[6] | 0.81[7] | 2.11 | 3.10 | 4.99 | 0.5[7] | 1.21 | 2.82 | 4.01 | 6.57 |
| | 16 | 0.00[6] | 0.38[6] | 1.71[7] | 2.67 | 4.59 | 0.06[6] | 0.75[6] | 2.37[7] | 3.54 | 6.11 |
| | 24 | 0.00[3] | 0.00[3] | 0.97[6] | 1.88[6] | 3.85[7] | 0.00[3] | 0.00[6] | 1.56[6] | 2.68[6] | 5.25 |
| 9 | 12 | 0.00[6] | 0.44[6] | 1.66[6] | 2.55[7] | 4.56 | 0.13[6] | 0.78[6] | 2.27[7] | 3.34 | 5.71 |
| | 16 | 0.00[3] | 0.00[3] | 1.21[6] | 2.07[6] | 4.07[7] | 0.00[3] | 0.26[6] | 1.77[6] | 2.82[7] | 5.17 |
| | 24 | 0.00[2] | 0.00[2] | 0.39[3] | 1.19[3] | 3.17[7] | 0.00[2] | 0.00[3] | 0.87[3] | 1.86[6] | 4.19[6] |
| 10 | 12 | 0.00[3] | 0.09[3] | 1.22[6] | 2.01[6] | 3.91[6] | 0.00[3] | 0.38[6] | 1.74[6] | 2.69[7] | 4.82 |
| | 16 | 0.00[2] | 0.00[3] | 0.74[3] | 1.49[6] | 3.36[6] | 0.00[2] | 0.00[3] | 1.21[6] | 2.12[6] | 4.24[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.00[2] | 0.57[3] | 2.38[3] | 0.00[2] | 0.00[2] | 0.27[3] | 1.12[3] | 3.19[6] |
| 12 | 12 | 0.00[2] | 0.00[2] | 0.48[3] | 1.06[3] | 2.52[6] | 0.00[2] | 0.00[2] | 0.84[3] | 1.55[3] | 3.20[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.00[2] | 0.54[2] | 1.96[3] | 0.00[2] | 0.00[2] | 0.30[2] | 0.97[3] | 2.60[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.00[2] | 0.99[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.00[2] | 1.55[2] |
| 14 | 12 | 0.00[1] | 0.00[2] | 0.00[2] | 0.39[2] | 1.49[3] | 0.00[1] | 0.00[2] | 0.21[2] | 0.73[2] | 2.00[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.96[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.19[2] | 1.43[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.06[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.44[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.80[2] | 0.00[1] | 0.00[1] | 0.00[2] | 0.19[2] | 1.17[2] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.31[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.64[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] |

| Wall | Spacing | 362S200-mils (Fy) | | | | | 362S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.74[7] | 1.71 | 3.65 | 5.18 | 8.17 | 2.03 | 4.19 | 6.08 | 9.59 |
| | 16 | 0.25[6] | 1.20[7] | 3.14 | 4.67 | 7.68 | 1.47 | 3.64 | 5.50 | 9.07 |
| | 24 | 0.00[3] | 0.26[6] | 2.19[6] | 3.72[7] | 6.76 | 0.45[6] | 2.62[7] | 4.43 | 8.09 |
| 9 | 12 | 0.32[6] | 1.21[7] | 2.97 | 4.37 | 7.14 | 1.49 | 3.49 | 5.15 | 8.44 |
| | 16 | 0.00[6] | 0.64[6] | 2.40[6] | 3.79 | 6.57 | 0.86[6] | 2.86[7] | 4.49 | 7.83 |
| | 24 | 0.00[3] | 0.00[3] | 1.36[6] | 2.73[6] | 5.51[7] | 0.00[6] | 1.72[6] | 3.30[6] | 6.70 |
| 10 | 12 | 0.00[6] | 0.74[6] | 2.32[6] | 3.58[7] | 6.10 | 0.97[6] | 2.81[7] | 4.24 | 7.28 |
| | 16 | 0.00[3] | 0.13[3] | 1.71[6] | 2.95[6] | 5.47 | 0.28[6] | 2.12[6] | 3.54[7] | 6.60 |
| | 24 | 0.00[2] | 0.00[2] | 0.64[3] | 1.85[3] | 4.34[6] | 0.00[3] | 0.91[3] | 2.27[6] | 5.38[6] |
| 12 | 12 | 0.00[2] | 0.00[3] | 1.21[3] | 2.19[6] | 4.17[6] | 0.06[3] | 1.53[6] | 2.64[6] | 5.10[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.60[3] | 1.55[3] | 3.51[7] | 0.00[2] | 0.83[3] | 1.91[6] | 4.38[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.45[2] | 2.36[3] | 0.00[2] | 0.00[2] | 0.65[3] | 3.11[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.43[2] | 1.18[3] | 2.71[3] | 0.00[2] | 0.61[3] | 1.46[3] | 3.40[6] |
| | 16 | 0.00[1] | 0.00[2] | 0.00[2] | 0.58[2] | 2.08[3] | 0.00[2] | 0.00[2] | 0.77[2] | 2.71[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.00[2] | 0.00[1] | 0.00[2] | 0.00[2] | 1.50[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[2] | 0.50[2] | 1.70[2] | 0.00[2] | 0.00[2] | 0.66[2] | 2.21[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.12[2] | 0.00[1] | 0.00[2] | 0.02[2] | 1.55[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.11[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.43[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 400S137-mils (Fy) | | | | | 400S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | - 97 (50) |
| 8 | 12 | 0.40[7] | 1.04 | 2.50 | 3.72 | 5.49 | 0.70 | 1.50 | 3.32 | 4.81 | 7.82 |
| | 16 | 0.00[6] | 0.62[7] | 2.10 | 3.28 | 5.13 | 0.26[6] | 1.03 | 2.87 | 4.33 | 7.36 |
| | 24 | 0.00[3] | 0.00[6] | 1.35[6] | 2.47[7] | 4.45 | 0.00[6] | 0.18[6] | 2.04[7] | 3.44 | 6.48 |
| 9 | 12 | 0.07[6] | 0.67[6] | 2.06 | 3.21 | 5.12 | 0.33[6] | 1.07[7] | 2.78 | 4.16 | 6.98 |
| | 16 | 0.00[3] | 0.18[6] | 1.59[6] | 2.70[7] | 4.67 | 0.00[6] | 0.53[6] | 2.26[7] | 3.60 | 6.42 |
| | 24 | 0.00[2] | 0.00[3] | 0.74[6] | 1.75[6] | 3.82[7] | 0.00[3] | 0.00[3] | 1.32[6] | 2.57[6] | 5.39[7] |
| 10 | 12 | 0.00[3] | 0.30[6] | 1.61[6] | 2.65[7] | 4.68 | 0.00[6] | 0.64[6] | 2.24[7] | 3.48 | 6.08 |
| | 16 | 0.00[3] | 0.00[3] | 1.09[6] | 2.07[6] | 4.14[7] | 0.00[3] | 0.06[6] | 1.67[6] | 2.86[6] | 5.45 |
| | 24 | 0.00[2] | 0.00[2] | 0.18[3] | 1.05[3] | 3.15[6] | 0.00[2] | 0.00[3] | 0.66[3] | 1.75[6] | 4.32[6] |
| 12 | 12 | 0.00[2] | 0.00[3] | 0.79[3] | 1.58[6] | 3.45[6] | 0.00[2] | 0.00[3] | 1.25[3] | 2.20[6] | 4.32[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.23[2] | 0.96[3] | 2.81[6] | 0.00[2] | 0.00[2] | 0.64[3] | 1.53[3] | 3.63[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.00[2] | 1.69[3] | 0.00[1] | 0.00[2] | 0.00[2] | 0.38[2] | 2.42[3] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.16[2] | 0.73[2] | 2.19[3] | 0.00[2] | 0.00[2] | 0.48[2] | 1.18[3] | 2.84[6] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[2] | 0.14[2] | 1.57[2] | 0.00[1] | 0.00[2] | 0.00[2] | 0.55[2] | 2.17[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.51[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.02[2] |
| 16 | 12 | 0.00[1] | 0.00[1] | 0.00[2] | 0.15[2] | 1.29[2] | 0.00[1] | 0.00[2] | 0.00[2] | 0.48[2] | 1.77[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 0.72[2] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[2] | 1.15[2] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.09[2] |

| Wall | Spacing | 400S200-mils (Fy) | | | | | 400S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 0.97 | 2.06 | 4.28 | 6.14 | 9.68 | 2.38 | 4.74 | 7.04 | 11.33 |
| | 16 | 0.49[7] | 1.55 | 3.76 | 5.62 | 9.19 | 1.84 | 4.21 | 6.47 | 10.81 |
| | 24 | 0.00[6] | 0.61[6] | 2.80[7] | 4.64 | 8.25 | 0.83[7] | 3.21 | 5.39 | 9.81 |
| 9 | 12 | 0.55[7] | 1.56 | 3.61 | 5.35 | 8.67 | 1.85 | 4.12 | 6.24 | 10.20 |
| | 16 | 0.00[6] | 0.98[7] | 3.01 | 4.74 | 8.08 | 1.22[6] | 3.48 | 5.55 | 9.57 |
| | 24 | 0.00[3] | 0.00[6] | 1.93[6] | 3.62[7] | 6.98 | 0.07[6] | 2.32[6] | 4.29[7] | 8.39 |
| 10 | 12 | 0.15[6] | 1.07[6] | 2.94 | 4.54 | 7.61 | 1.33[7] | 3.44 | 5.35 | 9.01 |
| | 16 | 0.00[3] | 0.43[6] | 2.29[6] | 3.86[7] | 6.94 | 0.63[6] | 2.73[7] | 4.58 | 8.29 |
| | 24 | 0.00[2] | 0.00[3] | 1.13[7] | 2.64[6] | 5.71[7] | 0.00[3] | 1.46[6] | 3.19[6] | 6.97[7] |
| 12 | 12 | 0.00[3] | 0.20[3] | 1.73[6] | 3.00[6] | 5.52[7] | 0.36[6] | 2.14[6] | 3.59[7] | 6.66 |
| | 16 | 0.00[2] | 0.00[3] | 1.03[3] | 2.27[6] | 4.78[6] | 0.00[3] | 1.35[6] | 2.75[6] | 5.84[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.00[2] | 1.00[3] | 3.46[3] | 0.00[2] | 0.00[3] | 1.30[3] | 4.40[6] |
| 14 | 12 | 0.00[2] | 0.00[2] | 0.79[3] | 1.76[3] | 3.75[6] | 0.00[3] | 1.04[3] | 2.15[6] | 4.63[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.12[2] | 1.06[3] | 3.02[3] | 0.00[2] | 0.28[2] | 1.33[3] | 3.82[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.00[2] | 1.75[2] | 0.00[2] | 0.00[2] | 0.00[2] | 2.41[3] |
| 16 | 12 | 0.00[1] | 0.00[2] | 0.14[2] | 0.89[2] | 2.46[3] | 0.00[2] | 0.27[2] | 1.12[3] | 3.11[3] |
| | 16 | 0.00[1] | 0.00[1] | 0.00[2] | 0.24[2] | 1.77[2] | 0.00[2] | 0.00[2] | 0.37[2] | 2.35[3] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[1] | 0.00[1] | 0.60[2] | 0.00[1] | 0.00[1] | 0.00[2] | 1.03[2] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 550S137-mils (Fy) | | | | | 550S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.05 | 1.82 | 3.27 | 4.49 | 6.89 | 1.52 | 2.53 | 4.83 | 6.63 | 10.41 |
| | 16 | 0.78 | 1.55 | 3.04 | 4.26 | 6.64 | 1.19 | 2.21 | 4.53 | 6.32 | 10.08 |
| | 24 | 0.25[7] | 1.04 | 2.60 | 3.81 | 6.16 | 0.57 | 1.60 | 3.94 | 5.71 | 9.42 |
| 9 | 12 | 0.82 | 1.59 | 3.07 | 4.28 | 6.66 | 1.23 | 2.24 | 4.53 | 6.33 | 10.08 |
| | 16 | 0.49 | 1.26 | 2.78 | 3.99 | 6.35 | 0.84 | 1.85 | 4.15 | 5.93 | 9.65 |
| | 24 | 0.00[6] | 0.63[7] | 2.23 | 3.42 | 5.74 | 0.09[6] | 1.10 | 3.41 | 5.16 | 8.80 |
| 10 | 12 | 0.58 | 1.34 | 2.84 | 4.04 | 6.40 | 0.93 | 1.91 | 4.14 | 5.98 | 9.69 |
| | 16 | 0.18[6] | 0.94[7] | 2.49 | 3.68 | 6.01 | 0.46[7] | 1.45 | 3.68 | 5.49 | 9.14 |
| | 24 | 0.00[6] | 0.19[6] | 1.82[6] | 2.98[7] | 5.25 | 0.00[6] | 0.57[6] | 2.82[7] | 4.55 | 8.09 |
| 12 | 12 | 0.06[6] | 0.79[6] | 2.30[7] | 3.46 | 5.74 | 0.30[6] | 1.22[7] | 3.27 | 4.93 | 8.67 |
| | 16 | 0.00[3] | 0.27[6] | 1.82[6] | 2.95[7] | 5.18 | 0.00[3] | 0.63[6] | 2.67[6] | 4.28[7] | 7.88 |
| | 24 | 0.00[2] | 0.00[3] | 0.94[3] | 2.01[6] | 4.13[6] | 0.00[2] | 0.00[3] | 1.59[6] | 3.08[6] | 6.43[7] |
| 14 | 12 | 0.00[3] | 0.21[3] | 1.70[6] | 2.79[6] | 4.93[7] | 0.00[2] | 0.53[6] | 2.35[6] | 3.78[6] | 6.96 |
| | 16 | 0.00[2] | 0.00[3] | 1.11[3] | 2.15[6] | 4.21[6] | 0.00[2] | 0.00[3] | 1.67[3] | 3.02[6] | 6.03[6] |
| | 24 | 0.00[2] | 0.00[2] | 0.06[2] | 1.01[3] | 2.91[3] | 0.00[2] | 0.00[2] | 0.46[2] | 1.68[3] | 4.39[6] |
| 16 | 12 | 0.00[2] | 0.00[2] | 1.05[3] | 2.05[3] | 4.03[6] | 0.00[2] | 0.00[3] | 1.50[3] | 2.69[6] | 5.29[6] |
| | 16 | 0.00[2] | 0.00[2] | 0.41[2] | 1.33[3] | 3.18[3] | 0.00[2] | 0.00[2] | 0.79[2] | 1.89[3] | 4.31[6] |
| | 24 | 0.00[1] | 0.00[1] | 0.00[2] | 0.08[2] | 1.71[2] | 0.00[1] | 0.00[2] | 0.00[2] | 0.51[2] | 2.62[3] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 600S137-mils (Fy) | | | | | 600S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.05 | 1.79 | 3.21 | 4.45 | 6.99 | 1.65 | 2.66 | 4.92 | 6.74 | 10.61 |
| | 16 | 0.78 | 1.52 | 2.99 | 4.22 | 6.78 | 1.36 | 2.37 | 4.66 | 6.47 | 10.32 |
| | 24 | 0.26 | 1.00 | 2.54 | 3.77 | 6.36 | 0.79 | 1.82 | 4.15 | 5.93 | 9.74 |
| 9 | 12 | 0.83 | 1.56 | 3.02 | 4.24 | 6.80 | 1.40 | 2.41 | 4.69 | 6.49 | 10.34 |
| | 16 | 0.49 | 1.23 | 2.73 | 3.95 | 6.53 | 1.04 | 2.06 | 4.35 | 6.14 | 9.96 |
| | 24 | 0.00[6] | 0.58 | 2.17 | 3.38 | 6.00 | 0.35[7] | 1.38 | 3.70 | 5.46 | 9.22 |
| 10 | 12 | 0.58 | 1.31 | 2.79 | 4.01 | 6.58 | 1.13 | 2.14 | 4.41 | 6.20 | 10.01 |
| | 16 | 0.19[7] | 0.91 | 2.44 | 3.65 | 6.24 | 0.70 | 1.71 | 4.00 | 5.77 | 9.53 |
| | 24 | 0.00[6] | 0.14[6] | 1.76[7] | 2.96 | 5.58 | 0.00[6] | 0.90[7] | 3.21 | 4.94 | 8.61 |
| 12 | 12 | 0.06[6] | 0.76[7] | 2.27 | 3.46 | 6.03 | 0.53[6] | 1.51 | 3.72 | 5.49 | 9.18 |
| | 16 | 0.00[6] | 0.22[6] | 1.78[7] | 2.95 | 5.54 | 0.00[6] | 0.94[6] | 3.15[7] | 4.88 | 8.48 |
| | 24 | 0.00[3] | 0.00[3] | 0.87[6] | 2.00[6] | 4.60[7] | 0.00[3] | 0.00[6] | 2.10[6] | 3.73[6] | 7.17 |
| 14 | 12 | 0.00[3] | 0.17[6] | 1.67[6] | 2.81[7] | 5.35 | 0.00[6] | 0.83[6] | 2.85[6] | 4.46 | 8.09 |
| | 16 | 0.00[2] | 0.00[3] | 1.07[6] | 2.17[6] | 4.70[7] | 0.00[3] | 0.16[3] | 2.17[6] | 3.71[6] | 7.17 |
| | 24 | 0.00[2] | 0.00[2] | 0.00[3] | 0.99[3] | 3.49[6] | 0.00[2] | 0.00[2] | 0.95[3] | 2.35[6] | 5.51[6] |
| 16 | 12 | 0.00[2] | 0.00[3] | 1.05[3] | 2.11[6] | 4.56[6] | 0.00[3] | 0.20[3] | 1.98[6] | 3.36[6] | 6.44[7] |
| | 16 | 0.00[2] | 0.00[2] | 0.35[3] | 1.35[3] | 3.76[6] | 0.00[2] | 0.00[2] | 1.25[3] | 2.54[6] | 5.42[6] |
| | 24 | 0.00[1] | 0.00[2] | 0.00[2] | 0.01[2] | 2.34[3] | 0.00[2] | 0.00[2] | 0.00[2] | 1.09[3] | 3.64[3] |

| Wall | Spacing | 600S200-mils (Fy) | | | | | 600S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.01 | 3.39 | 6.53 | 9.10 | 14.69 | 3.71 | 6.75 | 10.03 | 17.23 |
| | 16 | 1.69 | 3.05 | 6.18 | 8.77 | 14.32 | 3.36 | 6.41 | 9.65 | 16.84 |
| | 24 | 1.07 | 2.37 | 5.49 | 8.11 | 13.61 | 2.67 | 5.75 | 8.89 | 16.06 |
| 9 | 12 | 1.73 | 3.06 | 6.13 | 8.67 | 14.14 | 3.38 | 6.37 | 9.54 | 16.57 |
| | 16 | 1.33 | 2.63 | 5.69 | 8.25 | 13.68 | 2.94 | 5.94 | 9.05 | 16.07 |
| | 24 | 0.57 | 1.80 | 4.83 | 7.43 | 12.77 | 2.08 | 5.11 | 8.10 | 15.08 |
| 10 | 12 | 1.42 | 2.70 | 5.67 | 8.17 | 13.49 | 3.01 | 5.93 | 8.97 | 15.79 |
| | 16 | 0.95 | 2.19 | 5.13 | 7.66 | 12.92 | 2.48 | 5.42 | 8.38 | 15.17 |
| | 24 | 0.06[6] | 1.20 | 4.11 | 6.66 | 11.80 | 1.46 | 4.41 | 7.23 | 13.96 |
| 12 | 12 | 0.76[7] | 1.90 | 4.61 | 6.99 | 11.90 | 2.19 | 4.94 | 7.66 | 13.93 |
| | 16 | 0.15[6] | 1.23[7] | 3.90 | 6.29 | 11.09 | 1.49 | 4.23 | 6.85 | 13.05 |
| | 24 | 0.00[3] | 0.00[6] | 2.60[6] | 4.98[7] | 9.58 | 0.19[6] | 2.93[7] | 5.33 | 11.41 |
| 14 | 12 | 0.10[6] | 1.08[6] | 3.47[7] | 5.65 | 10.01 | 1.33[7] | 3.86 | 6.21 | 11.77 |
| | 16 | 0.00[3] | 0.30[6] | 2.64[6] | 4.81[7] | 9.01 | 0.49[6] | 3.01[6] | 5.22 | 10.69 |
| | 24 | 0.00[2] | 0.00[3] | 1.16[3] | 3.28[6] | 7.22[6] | 0.00[3] | 1.47[6] | 3.44[6] | 8.72[7] |
| 16 | 12 | 0.00[3] | 0.32[6] | 2.39[6] | 4.32[6] | 8.05 | 0.51[6] | 2.81[6] | 4.78[7] | 9.55 |
| | 16 | 0.00[2] | 0.00[3] | 1.51[3] | 3.39[6] | 6.95[6] | 0.00[3] | 1.86[6] | 3.68[6] | 8.34[7] |
| | 24 | 0.00[2] | 0.00[2] | 0.00[2] | 1.77[3] | 5.01[6] | 0.00[2] | 0.19[3] | 1.76[3] | 6.21[6] |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 800S137-mils (Fy) | | | | | 800S162-mils (Fy) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97(50) | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 1.22 | 1.95 | 3.18 | 4.37 | 6.82 | 1.79 | 2.77 | 4.91 | 6.73 | 10.70 |
| | 16 | 1.03 | 1.76 | 3.04 | 4.22 | 6.67 | 1.56 | 2.54 | 4.71 | 6.53 | 10.49 |
| | 24 | 0.66 | 1.40 | 2.74 | 3.93 | 6.36 | 1.10 | 2.10 | 4.31 | 6.14 | 10.06 |
| 9 | 12 | 1.07 | 1.80 | 3.06 | 4.25 | 6.69 | 1.60 | 2.58 | 4.74 | 6.56 | 10.51 |
| | 16 | 0.83 | 1.56 | 2.87 | 4.06 | 6.50 | 1.31 | 2.30 | 4.49 | 6.31 | 10.24 |
| | 24 | 0.36 | 1.10 | 2.50 | 3.69 | 6.11 | 0.74 | 1.74 | 3.98 | 5.81 | 9.70 |
| 10 | 12 | 0.90 | 1.63 | 2.92 | 4.11 | 6.54 | 1.39 | 2.37 | 4.55 | 6.37 | 10.30 |
| | 16 | 0.61 | 1.34 | 2.69 | 3.88 | 6.30 | 1.03 | 2.02 | 4.23 | 6.05 | 9.96 |
| | 24 | 0.04 | 0.78 | 2.23 | 3.43 | 5.83 | 0.34 | 1.34 | 3.61 | 5.43 | 9.29 |
| 12 | 12 | 0.51 | 1.23 | 2.60 | 3.78 | 6.20 | 0.91 | 1.89 | 4.09 | 5.91 | 9.79 |
| | 16 | 0.11 | 0.83 | 2.26 | 3.45 | 5.84 | 0.41 | 1.40 | 3.64 | 5.45 | 9.29 |
| | 24 | 0.00[6] | 0.06[6] | 1.61 | 2.80 | 5.16 | 0.00[6] | 0.45 | 2.76 | 4.56 | 8.31 |
| 14 | 12 | 0.07[7] | 0.78 | 2.21 | 3.39 | 5.77 | 0.37[7] | 1.33 | 3.54 | 5.34 | 9.14 |
| | 16 | 0.00[6] | 0.26[7] | 1.76 | 2.94 | 5.29 | 0.00[6] | 0.69[7] | 2.94 | 4.72 | 8.45 |
| | 24 | 0.00[3] | 0.00[6] | 0.91[6] | 2.08[7] | 4.36 | 0.00[3] | 0.00[6] | 1.79[6] | 3.54 | 7.13 |
| 16 | 12 | 0.00[6] | 0.30[6] | 1.76[7] | 2.93 | 5.25 | 0.00[6] | 0.72[7] | 2.91 | 4.67 | 8.36 |
| | 16 | 0.00[3] | 0.00[6] | 1.21[6] | 2.36[7] | 4.63 | 0.00[3] | 0.00[6] | 2.16[6] | 3.88 | 7.46 |
| | 24 | 0.00[2] | 0.00[3] | 0.17[3] | 1.28[6] | 3.45[6] | 0.00[2] | 0.00[3] | 0.77[6] | 2.43[6] | 5.79[7] |

| Wall | Spacing | 800S200-mils (Fy) | | | | | 800S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -33 (33) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) |
| 8 | 12 | 2.32 | 3.86 | 7.14 | 9.73 | 15.38 | 4.24 | 7.54 | 11.12 | 19.07 |
| | 16 | 2.07 | 3.63 | 6.90 | 9.51 | 15.15 | 3.98 | 7.30 | 10.86 | 18.80 |
| | 24 | 1.58 | 3.16 | 6.43 | 9.08 | 14.69 | 3.48 | 6.81 | 10.33 | 18.26 |
| 9 | 12 | 2.11 | 3.66 | 6.93 | 9.54 | 15.18 | 4.01 | 7.30 | 10.85 | 18.75 |
| | 16 | 1.80 | 3.36 | 6.63 | 9.26 | 14.88 | 3.69 | 6.99 | 10.51 | 18.40 |
| | 24 | 1.18 | 2.77 | 6.03 | 8.71 | 14.29 | 3.05 | 6.37 | 9.85 | 17.72 |
| 10 | 12 | 1.88 | 3.44 | 6.70 | 9.32 | 14.94 | 3.76 | 7.02 | 10.54 | 18.37 |
| | 16 | 1.50 | 3.07 | 6.32 | 8.97 | 14.57 | 3.36 | 6.64 | 10.12 | 17.94 |
| | 24 | 0.75 | 2.34 | 5.58 | 8.28 | 13.83 | 2.58 | 5.88 | 9.29 | 17.08 |
| 12 | 12 | 1.35 | 2.91 | 6.13 | 8.79 | 14.35 | 3.17 | 6.35 | 9.77 | 17.42 |
| | 16 | 0.82 | 2.39 | 5.59 | 8.27 | 13.80 | 2.61 | 5.81 | 9.17 | 16.78 |
| | 24 | 0.00[7] | 1.38 | 4.53 | 7.28 | 12.71 | 1.54 | 4.74 | 7.99 | 15.53 |
| 14 | 12 | 0.75 | 2.27 | 5.37 | 8.06 | 13.59 | 2.48 | 5.55 | 8.78 | 16.10 |
| | 16 | 0.07[7] | 1.59 | 4.65 | 7.37 | 12.81 | 1.76 | 4.83 | 7.97 | 15.23 |
| | 24 | 0.00[6] | 0.32[6] | 3.29[7] | 6.04 | 11.32 | 0.40[7] | 3.46 | 6.44 | 13.57 |
| 16 | 12 | 0.12[6] | 1.57 | 4.44 | 7.02 | 12.32 | 1.74 | 4.64 | 7.60 | 14.41 |
| | 16 | 0.00[6] | 0.76[6] | 3.57[7] | 6.16 | 11.33 | 0.87[7] | 3.76 | 6.61 | 13.32 |
| | 24 | 0.00[3] | 0.00[6] | 1.98[6] | 4.57[6] | 9.48 | 0.00[6] | 2.14[6] | 4.77[7] | 11.28 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

# Allowable Combined Axial and Bending Loads 40psf lateral load

| Wall | Spacing | 1000S162-mils (Fy) | | | | 1000S200-mils (Fy) | | | | 1000S250-mils (Fy) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50) | -43 (33) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 2.84 | 4.83 | 6.58 | 10.47 | 3.91 | 7.08 | 9.62 | 15.28 | 4.43 | 7.76 | 11.42 | 19.41 |
| | 16 | 2.67 | 4.68 | 6.44 | 10.33 | 3.71 | 6.88 | 9.43 | 15.09 | 4.22 | 7.56 | 11.23 | 19.22 |
| | 24 | 2.33 | 4.39 | 6.15 | 10.03 | 3.30 | 6.49 | 9.06 | 14.72 | 3.81 | 7.17 | 10.84 | 18.84 |
| 9 | 12 | 2.70 | 4.70 | 6.46 | 10.35 | 3.74 | 6.92 | 9.46 | 15.12 | 4.26 | 7.60 | 11.26 | 19.25 |
| | 16 | 2.49 | 4.52 | 6.28 | 10.16 | 3.48 | 6.66 | 9.22 | 14.88 | 3.99 | 7.35 | 11.01 | 19.01 |
| | 24 | 2.06 | 4.15 | 5.92 | 9.79 | 2.97 | 6.16 | 8.75 | 14.40 | 3.47 | 6.85 | 10.52 | 18.52 |
| 10 | 12 | 2.55 | 4.57 | 6.33 | 10.21 | 3.55 | 6.73 | 9.28 | 14.94 | 4.06 | 7.41 | 11.07 | 19.06 |
| | 16 | 2.28 | 4.34 | 6.10 | 9.98 | 3.24 | 6.41 | 8.99 | 14.64 | 3.74 | 7.10 | 10.77 | 18.76 |
| | 24 | 1.76 | 3.88 | 5.65 | 9.51 | 2.61 | 5.79 | 8.40 | 14.04 | 3.10 | 6.48 | 10.16 | 18.15 |
| 12 | 12 | 2.18 | 4.24 | 6.01 | 9.88 | 3.12 | 6.28 | 8.86 | 14.50 | 3.62 | 6.97 | 10.63 | 18.61 |
| | 16 | 1.81 | 3.91 | 5.68 | 9.53 | 2.66 | 5.83 | 8.43 | 14.05 | 3.15 | 6.52 | 10.18 | 18.16 |
| | 24 | 1.06 | 3.25 | 5.03 | 8.85 | 1.76 | 4.93 | 7.57 | 13.17 | 2.24 | 5.63 | 9.29 | 17.26 |
| 14 | 12 | 1.76 | 3.86 | 5.62 | 9.47 | 2.60 | 5.74 | 8.34 | 13.95 | 3.07 | 6.40 | 10.06 | 18.04 |
| | 16 | 1.25 | 3.40 | 5.17 | 8.99 | 1.99 | 5.12 | 7.74 | 13.33 | 2.45 | 5.79 | 9.45 | 17.40 |
| | 24 | 0.27 | 2.51 | 4.29 | 8.06 | 0.80 | 3.91 | 6.58 | 12.11 | 1.24 | 4.60 | 8.24 | 16.15 |
| 16 | 12 | 1.28 | 3.40 | 5.17 | 8.97 | 2.00 | 5.10 | 7.71 | 13.27 | 2.44 | 5.69 | 9.29 | 17.13 |
| | 16 | 0.64 | 2.82 | 4.58 | 8.35 | 1.23 | 4.31 | 6.94 | 12.45 | 1.66 | 4.91 | 8.49 | 16.29 |
| | 24 | 0.00[6] | 1.69[7] | 3.45 | 7.13 | 0.00[6] | 2.78 | 5.44 | 10.87 | 0.17[7] | 3.42 | 6.95 | 14.67 |

| Wall | Spacing | 1200S162-mils (Fy) | | | 1200S200-mils (Fy) | | | 1200S250-mils (Fy) | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Ht. (ft) | (in) o.c. | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50) | -54 (50) | -68 (50) | -97 (50 |
| 8 | 12 | 4.67 | 6.35 | 10.09 | 7.02 | 9.50 | 15.08 | 7.78 | 11.42 | 19.39 |
| | 16 | 4.55 | 6.24 | 9.98 | 6.86 | 9.35 | 14.94 | 7.61 | 11.24 | 19.21 |
| | 24 | 4.33 | 6.02 | 9.75 | 6.54 | 9.06 | 14.64 | 7.27 | 10.89 | 18.87 |
| 9 | 12 | 4.57 | 6.26 | 10.00 | 6.89 | 9.38 | 14.96 | 7.64 | 11.27 | 19.24 |
| | 16 | 4.43 | 6.12 | 9.86 | 6.69 | 9.19 | 14.78 | 7.43 | 11.05 | 19.02 |
| | 24 | 4.14 | 5.84 | 9.57 | 6.29 | 8.82 | 14.40 | 7.00 | 10.61 | 18.58 |
| 10 | 12 | 4.47 | 6.16 | 9.89 | 6.74 | 9.24 | 14.83 | 7.48 | 11.11 | 19.08 |
| | 16 | 4.29 | 5.98 | 9.72 | 6.49 | 9.01 | 14.59 | 7.22 | 10.83 | 18.80 |
| | 24 | 3.94 | 5.64 | 9.37 | 6.00 | 8.55 | 14.13 | 6.69 | 10.29 | 18.25 |
| 12 | 12 | 4.23 | 5.92 | 9.65 | 6.40 | 8.92 | 14.50 | 7.12 | 10.73 | 18.68 |
| | 16 | 3.97 | 5.67 | 9.40 | 6.04 | 8.58 | 14.16 | 6.73 | 10.32 | 18.28 |
| | 24 | 3.45 | 5.17 | 8.89 | 5.32 | 7.91 | 13.48 | 5.97 | 9.53 | 17.47 |
| 14 | 12 | 3.93 | 5.63 | 9.36 | 5.98 | 8.52 | 14.10 | 6.67 | 10.26 | 18.20 |
| | 16 | 3.58 | 5.29 | 9.01 | 5.49 | 8.06 | 13.63 | 6.15 | 9.71 | 17.64 |
| | 24 | 2.88 | 4.61 | 8.31 | 4.52 | 7.14 | 12.70 | 5.11 | 8.62 | 16.52 |
| 16 | 12 | 3.59 | 5.30 | 9.01 | 5.49 | 8.06 | 13.62 | 6.15 | 9.70 | 17.61 |
| | 16 | 3.13 | 4.85 | 8.54 | 4.85 | 7.45 | 13.00 | 5.47 | 8.98 | 16.86 |
| | 24 | 2.23 | 3.96 | 7.63 | 3.60 | 6.26 | 11.77 | 4.13 | 7.56 | 15.39 |

**NOTES**

1. Deflection exceeds L/120
2. 2 Deflection exceeds L/240
3. 3 Deflection exceeds L/360
4. 6 Deflection exceeds L/600
5. 7 Deflection exceeds L/72
6. Axial Load Multiplier = 1
7. KyLy & KtLt = 48
8. Lateral Load Multiplier - Strength = 1
9. Lateral Load Multiplier - Deflection = 1.0

CEMCO
Steel Framing and Metal Lath

# Floor Joist Span Tables

## Allowable Floor Joist Span Table Notes

1. Spans are based on continuous support of each flange over the full length of the joist.
2. For two equal spans listed span is the distance from either end to the center support, with the joist continuous over the center support.
3. Joists must be braced against the rotation at all supports.
4. Shear and web crippling capacity have not been reduced for punchouts.
5. Web crippling check based on 3.5 inch end and interior bearing. Where listed allowable spans are followed by an "e", web stiffeners are required at end "i" web stiffeners required at interior support, and "a web stiffeners are required at all supports.
6. Total load deflection limited to L/240. Live load deflection limit as noted.
7. Alternate span live loading has been considered for two, equal span condition.

## Bridging Recommendations

Floor joist bridging may be spaced as indicated below, except where member design requires an alternate spacing.

| Span (ft) | Minimum Number of Rows |
|---|---|
| Up to 14 | 1 at mid span |
| 14 to 20 | 2 at 1/3 point |
| 20 to 26 | 3 at 1/4 point |

## Allowable Floor Joist Spans 10 psf Dead Load and 20 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 15′ 9″ | 13′ 9″ e | 11′ 3″ e | 15′ 11″ i | 13′ 9″ i | 11′ 3″ a | 14′ 4″ | 13′ 0″ e | 11′ 3″ e | 15′ 11″ i | 13′ 9″ i | 11′ 3″ a |
| 600S200-33 | 33 | 16′ 6″ e | 14′ 4″ e | 11′ 8″ e | 16′ 6″ i | 14′ 4″ i | 11′ 8″ a | 15′ 0″ | 13′ 8″ e | 11′ 8″ e | 16′ 6″ i | 14′ 4″ i | 11′ 8″ a |
| 600S162-43 | 33 | 17′ 2″ | 15′ 7″ | 13′ 7″ e | 19′ 3″ i | 16′ 8″ i | 13′ 7″ i | 15′ 7″ | 14′ 2″ | 12′ 5″ | 17′ 6″ i | 15′ 11″ i | 13′ 7″ i |
| 600S200-43 | 33 | 18′ 0″ | 16′ 5″ | 13′ 10″ e | 19′ 7″ i | 16′ 11″ i | 13′ 10″ i | 16′ 5″ | 14′ 11″ | 13′ 0″ | 18′ 5″ i | 16′ 9″ i | 13′ 10″ i |
| 600S250-43 | 33 | 18′ 11″ | 17′ 2″ | 14′ 2″ e | 20′ 1″ i | 17′ 5″ i | 14′ 2″ i | 17′ 2″ | 15′ 7″ | 13′ 7″ e | 19′ 3″ i | 17′ 5″ i | 14′ 2″ i |
| 600S162-54 | 50 | 18′ 5″ | 16′ 9″ | 14′ 7″ | 20′ 8″ | 18′ 9″ | 16′ 5″ i | 16′ 9″ | 15′ 2″ | 13′ 3″ | 18′ 9″ | 17′ 1″ | 14′ 11″ |
| 600S200-54 | 50 | 19′ 4″ | 17′ 7″ | 15′ 4″ | 21′ 9″ | 19′ 9″ | 17′ 3″ i | 17′ 7″ | 16′ 0″ | 14′ 0″ | 19′ 9″ | 17′ 11″ | 15′ 8″ i |
| 600S250-54 | 50 | 20′ 2″ | 18′ 4″ | 16′ 0″ | 22′ 8″ | 20′ 7″ i | 18′ 0″ i | 18′ 4″ | 16′ 8″ | 14′ 7″ | 20′ 7″ | 18′ 9″ | 16′ 4″ i |
| 600S300-54 | 50 | 21′ 2″ | 19′ 3″ | 16′ 9″ | 23′ 9″ | 21′ 7″ | 18′ 10″ i | 19′ 3″ | 17′ 6″ | 15′ 3″ | 21′ 7″ | 19′ 7″ | 17′ 2″ i |
| 600S162-68 | 50 | 19′ 9″ | 17′ 11″ | 15′ 8″ | 22′ 2″ | 20′ 2″ | 17′ 7″ | 17′ 11″ | 16′ 4″ | 14′ 3″ | 20′ 2″ | 18′ 4″ | 16′ 0″ |
| 600S200-68 | 50 | 20′ 9″ | 18′ 10″ | 16′ 6″ | 23′ 4″ | 21′ 2″ | 18′ 6″ | 18′ 10″ | 17′ 2″ | 15′ 0″ | 21′ 2″ | 19′ 3″ | 16′ 10″ |
| 600S250-68 | 50 | 21′ 9″ | 19′ 9″ | 17′ 3″ | 24′ 5″ | 22′ 3″ | 19′ 5″ | 19′ 9″ | 18′ 0″ | 15′ 8″ | 22′ 3″ | 20′ 2″ | 17′ 8″ |
| 600S300-68 | 50 | 22′ 11″ | 20′ 10″ | 18′ 3″ | 25′ 9″ | 23′ 5″ | 20′ 5″ | 20′ 10″ | 18′ 11″ | 16′ 7″ | 23′ 5″ | 21′ 3″ | 18′ 7″ |
| 600S162-97 | 50 | 21′ 11″ | 19′ 11″ | 17′ 4″ | 24′ 7″ | 22′ 4″ | 19′ 6″ | 19′ 11″ | 18′ 1″ | 15′ 9″ | 22′ 4″ | 20′ 3″ | 17′ 9″ |
| 600S200-97 | 50 | 23′ 1″ | 20′ 11″ | 18′ 4″ | 25′ 11″ | 23′ 6″ | 20′ 7″ | 20′ 11″ | 19′ 0″ | 16′ 8″ | 23′ 6″ | 21′ 4″ | 18′ 8″ |
| 600S250-97 | 50 | 24′ 3″ | 22′ 0″ | 19′ 3″ | 27′ 2″ | 24′ 8″ | 21′ 7″ | 22′ 0″ | 20′ 0″ | 17′ 6″ | 24′ 8″ | 22′ 5″ | 19′ 7″ |
| 600S300-97 | 50 | 25′ 7″ | 23′ 3″ | 20′ 3″ | 28′ 8″ | 26′ 1″ | 22′ 9″ | 23′ 3″ | 21′ 1″ | 18′ 5″ | 26′ 1″ | 23′ 8″ | 20′ 8″ |
| 800S162-33 | 33 | 17′ 8″ e | 15′ 3″ e | 12′ 6″ e | 17′ 8″ a | 14′ 6″ a | 10′ 9″ a | 17′ 8″ e | 15′ 3″ e | 12′ 6″ e | 17′ 8″ a | 14′ 6″ a | 10′ 9″ a |
| 800S200-33 | 33 | 18′ 11″ e | 16′ 5″ e | 13′ 5″ e | 18′ 5″ a | 15′ 1″ a | 11′ 2″ a | 18′ 10″ e | 16′ 5″ e | 13′ 5″ e | 18′ 5″ a | 15′ 1″ a | 11′ 2″ a |
| 800S162-43 | 33 | 21′ 2″ | 18′ 4″ | 15′ 0″ e | 21′ 2″ i | 18′ 4″ i | 15′ 0″ i | 19′ 6″ | 17′ 8″ | 15′ 0″ e | 21′ 2″ i | 18′ 4″ i | 15′ 0″ i |
| 800S200-43 | 33 | 22′ 8″ | 20′ 7″ e | 16′ 10″ e | 23′ 10″ i | 20′ 8″ i | 16′ 10″ i | 20′ 7″ | 18′ 8″ | 16′ 4″ e | 23′ 1″ i | 20′ 8″ i | 16′ 10″ i |
| 800S250-43 | 33 | 23′ 7″ | 20′ 10″ e | 17′ 0″ e | 24′ 0″ i | 20′ 10″ i | 17′ 0″ a | 21′ 5″ | 19′ 6″ e | 17′ 0″ e | 24′ 0″ i | 20′ 10″ i | 17′ 0″ a |
| 800S162-54 | 50 | 23′ 1″ | 20′ 11″ | 18′ 3″ | 25′ 10″ i | 23′ 6″ i | 20′ 3″ i | 20′ 11″ | 19′ 0″ | 16′ 7″ | 23′ 6″ | 21′ 4″ i | 18′ 8″ i |
| 800S200-54 | 50 | 24′ 4″ | 22′ 1″ | 19′ 4″ | 27′ 4″ | 24′ 10″ i | 21′ 8″ i | 22′ 1″ | 20′ 1″ | 17′ 6″ | 24′ 10″ | 22′ 6″ | 19′ 8″ i |
| 800S250-54 | 50 | 25′ 3″ | 22′ 11″ | 20′ 1″ | 28′ 4″ i | 25′ 9″ i | 22′ 6″ i | 22′ 11″ | 20′ 10″ | 18′ 3″ | 25′ 9″ | 23′ 5″ i | 20′ 5″ i |
| 800S300-54 | 50 | 26′ 5″ | 24′ 0″ | 21′ 0″ | 29′ 8″ i | 26′ 11″ i | 23′ 7″ i | 24′ 0″ | 21′ 10″ | 19′ 1″ | 26′ 11″ | 24′ 6″ i | 21′ 5″ i |
| 800S162-68 | 50 | 24′ 11″ | 22′ 8″ | 19′ 9″ | 28′ 0″ | 25′ 5″ | 22′ 2″ i | 22′ 8″ | 20′ 7″ | 18′ 0″ | 25′ 5″ | 23′ 1″ | 20′ 2″ |
| 800S200-68 | 50 | 26′ 1″ | 23′ 9″ | 20′ 9″ | 29′ 4″ | 26′ 8″ | 23′ 3″ i | 23′ 9″ | 21′ 7″ | 18′ 10″ | 26′ 8″ | 24′ 2″ | 21′ 2″ |
| 800S250-68 | 50 | 27′ 3″ | 24′ 9″ | 21′ 7″ | 30′ 7″ | 27′ 9″ | 24′ 3″ i | 24′ 9″ | 22′ 6″ | 19′ 8″ | 27′ 9″ | 25′ 3″ | 22′ 1″ |
| 800S300-68 | 50 | 28′ 8″ | 26′ 0″ | 22′ 9″ | 32′ 2″ | 29′ 3″ | 25′ 6″ i | 26′ 0″ | 23′ 8″ | 20′ 8″ | 29′ 3″ | 26′ 7″ | 23′ 2″ |
| 800S162-97 | 50 | 27′ 8″ | 25′ 2″ | 22′ 0″ | 31′ 1″ | 28′ 3″ | 24′ 8″ | 25′ 2″ | 22′ 10″ | 20′ 0″ | 28′ 3″ | 25′ 8″ | 22′ 5″ |
| 800S200-97 | 50 | 29′ 0″ | 26′ 5″ | 23′ 1″ | 32′ 7″ | 29′ 7″ | 25′ 11″ | 26′ 5″ | 24′ 0″ | 20′ 11″ | 29′ 7″ | 26′ 11″ | 23′ 6″ |
| 800S250-97 | 50 | 30′ 4″ | 27′ 7″ | 24′ 1″ | 34′ 1″ | 30′ 11″ | 27′ 1″ | 27′ 7″ | 25′ 1″ | 21′ 11″ | 30′ 11″ | 28′ 2″ | 24′ 7″ |
| 800S300-97 | 50 | 31′ 11″ | 29′ 0″ | 25′ 4″ | 35′ 10″ | 32′ 7″ | 28′ 6″ | 29′ 0″ | 26′ 4″ | 23′ 0″ | 32′ 7″ | 29′ 7″ | 25′ 10″ |
| 1000S162-43 | 33 | 23′ 11″ e | 20′ 9″ e | 16′ 11″ e | 23′ 11″ a | 20′ 9″ a | 16′ 5″ a | 23′ 1″ e | 20′ 9″ e | 16′ 11″ e | 23′ 11″ a | 20′ 9″ a | 16′ 5″ a |
| 1000S200-43 | 33 | 25′ 5″ e | 22′ 0″ e | 18′ 0″ e | 25′ 5″ a | 22′ 0″ a | 17′ 0″ a | 24′ 2″ e | 21′ 11″ e | 18′ 0″ e | 25′ 5″ a | 22′ 0″ a | 17′ 0″ a |
| 1000S250-43 | 33 | 26′ 8″ e | 23′ 1″ e | 18′ 10″ e | 26′ 8″ a | 23′ 1″ a | 17′ 6″ a | 25′ 7″ e | 23′ 1″ e | 18′ 10″ e | 26′ 8″ a | 23′ 1″ a | 17′ 6″ a |
| 1000S162-54 | 50 | 27′ 5″ | 24′ 10″ | 21′ 9″ | 30′ 9″ i | 27′ 11″ i | 22′ 10″ i | 24′ 10″ | 22′ 7″ | 19′ 9″ | 27′ 11″ i | 25′ 4″ i | 22′ 2″ i |
| 1000S200-54 | 50 | 28′ 8″ | 26′ 0″ | 22′ 9″ | 32′ 2″ i | 29′ 2″ i | 23′ 10″ i | 26′ 0″ | 23′ 8″ | 20′ 8″ | 29′ 3″ i | 26′ 7″ i | 23′ 2″ i |
| 1000S250-54 | 50 | 30′ 3″ | 27′ 6″ | 24′ 0″ | 33′ 11″ i | 30′ 7″ i | 25′ 0″ i | 27′ 6″ | 25′ 0″ | 21′ 10″ | 30′ 10″ i | 28′ 0″ i | 24′ 6″ i |
| 1000S300-54 | 50 | 31′ 6″ | 28′ 8″ | 25′ 0″ | 35′ 5″ i | 32′ 2″ i | 27′ 5″ i | 28′ 8″ | 26′ 0″ | 22′ 9″ | 32′ 2″ i | 29′ 3″ i | 25′ 6″ i |
| 1000S162-68 | 50 | 29′ 8″ | 27′ 0″ | 23′ 7″ | 33′ 4″ | 30′ 3″ i | 26′ 6″ i | 27′ 0″ | 24′ 6″ | 21′ 5″ | 30′ 3″ | 27′ 6″ | 24′ 0″ i |
| 1000S200-68 | 50 | 31′ 0″ | 28′ 2″ | 24′ 7″ | 34′ 10″ | 31′ 8″ i | 27′ 8″ i | 28′ 2″ | 25′ 7″ | 22′ 4″ | 31′ 8″ | 28′ 9″ | 25′ 1″ i |
| 1000S250-68 | 50 | 32′ 6″ | 29′ 7″ | 25′ 10″ | 36′ 6″ | 33′ 2″ i | 29′ 0″ i | 29′ 7″ | 26′ 10″ | 23′ 5″ | 33′ 2″ | 30′ 2″ | 26′ 4″ i |
| 1000S300-68 | 50 | 34′ 1″ | 31′ 0″ | 27′ 1″ | 38′ 3″ | 34′ 9″ i | 30′ 5″ i | 31′ 0″ | 28′ 2″ | 24′ 7″ | 34′ 9″ | 31′ 7″ | 27′ 7″ i |
| 1000S162-97 | 50 | 33′ 4″ | 30′ 4″ | 26′ 6″ | 37′ 5″ | 34′ 0″ | 29′ 9″ | 30′ 4″ | 27′ 6″ | 24′ 1″ | 34′ 0″ | 30′ 11″ | 27′ 0″ |
| 1000S200-97 | 50 | 34′ 10″ | 31′ 8″ | 27′ 8″ | 39′ 1″ | 35′ 6″ | 31′ 0″ | 31′ 8″ | 28′ 9″ | 25′ 1″ | 35′ 6″ | 32′ 3″ | 28′ 2″ |
| 1000S250-97 | 50 | 36′ 3″ | 32′ 11″ | 28′ 9″ | 40′ 9″ | 37′ 0″ | 32′ 4″ | 32′ 11″ | 29′ 11″ | 26′ 2″ | 37′ 0″ | 33′ 7″ | 29′ 4″ |
| 1000S300-97 | 50 | 38′ 1″ | 34′ 7″ | 30′ 3″ | 42′ 9″ | 38′ 10″ | 33′ 11″ | 34′ 7″ | 31′ 5″ | 27′ 5″ | 38′ 10″ | 35′ 3″ | 30′ 10″ |
| 1200S162-54 | 50 | 31′ 6″ e | 28′ 7″ e | 25′ 0″ e | 35′ 4″ a | 30′ 11″ a | 25′ 3″ a | 28′ 7″ e | 26′ 0″ e | 22′ 9″ e | 32′ 2″ a | 29′ 2″ a | 25′ 3″ a |
| 1200S200-54 | 50 | 32′ 11″ e | 29′ 11″ e | 26′ 2″ e | 37′ 0″ a | 32′ 2″ a | 26′ 1″ a | 29′ 11″ e | 27′ 2″ e | 23′ 9″ e | 33′ 7″ a | 30′ 6″ a | 26′ 1″ a |
| 1200S250-54 | 50 | 34′ 3″ e | 31′ 2″ e | 26′ 9″ e | 37′ 10″ a | 32′ 9″ a | 26′ 4″ a | 31′ 2″ e | 28′ 4″ e | 24′ 9″ e | 35′ 0″ a | 31′ 9″ a | 26′ 4″ a |
| 1200S300-54 | 50 | 36′ 6″ e | 33′ 2″ e | 29′ 0″ e | 41′ 0″ a | 36′ 9″ a | 28′ 3″ a | 33′ 2″ e | 30′ 2″ e | 26′ 4″ e | 37′ 3″ a | 33′ 10″ a | 28′ 3″ a |
| 1200S162-68 | 50 | 34′ 3″ | 31′ 1″ | 27′ 2″ | 38′ 5″ i | 34′ 11″ i | 29′ 8″ i | 31′ 1″ | 28′ 3″ | 24′ 8″ | 34′ 11″ | 31′ 9″ i | 27′ 9″ i |
| 1200S200-68 | 50 | 35′ 9″ | 32′ 5″ | 28′ 4″ | 40′ 1″ i | 36′ 5″ i | 31′ 5″ i | 32′ 5″ | 29′ 6″ | 25′ 9″ | 36′ 5″ | 33′ 1″ i | 28′ 11″ i |
| 1200S250-68 | 50 | 37′ 3″ | 33′ 10″ | 29′ 6″ | 41′ 9″ i | 37′ 11″ i | 31′ 8″ i | 33′ 10″ | 30′ 9″ | 26′ 10″ | 37′ 11″ | 34′ 6″ i | 30′ 2″ i |
| 1200S300-68 | 50 | 39′ 5″ | 35′ 10″ | 31′ 3″ | 44′ 3″ i | 40′ 2″ i | 35′ 1″ i | 35′ 10″ | 32′ 6″ | 28′ 5″ | 40′ 2″ | 36′ 6″ i | 31′ 11″ i |
| 1200S162-97 | 50 | 38′ 10″ | 35′ 3″ | 30′ 10″ | 43′ 7″ | 39′ 7″ | 34′ 7″ i | 35′ 3″ | 32′ 0″ | 28′ 0″ | 39′ 7″ | 36′ 0″ | 31′ 5″ |
| 1200S200-97 | 50 | 40′ 5″ | 36′ 8″ | 32′ 1″ | 45′ 4″ | 41′ 3″ | 36′ 0″ i | 36′ 8″ | 33′ 4″ | 29′ 2″ | 41′ 3″ | 37′ 5″ | 32′ 9″ |
| 1200S250-97 | 50 | 42′ 0″ | 38′ 2″ | 33′ 4″ | 47′ 1″ | 42′ 10″ | 37′ 5″ i | 38′ 2″ | 34′ 8″ | 30′ 3″ | 42′ 10″ | 38′ 11″ | 34′ 0″ |
| 1200S300-97 | 50 | 44′ 0″ | 40′ 0″ | 34′ 11″ | 49′ 5″ | 44′ 11″ | 39′ 3″ | 40′ 0″ | 36′ 4″ | 31′ 9″ | 44′ 11″ | 40′ 10″ | 35′ 8″ |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

CEMCO
Steel Framing and Metal Lath

# Allowable Floor Joist Spans 10 psf Dead Load and 30 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 13′ 9″ e | 11′ 11″ e | 9′ 9″ e | 13′ 9″ i | 11′ 11″ i | 9′ 5″ a | 12′ 6″ e | 11′ 4″ e | 9′ 9″ e | 13′ 9″ i | 11′ 11″ i | 9′ 5″ a |
| 600S200-33 | 33 | 14′ 4″ e | 12′ 5″ e | 10′ 1″ e | 14′ 4″ i | 12′ 5″ a | 9′ 8″ a | 13′ 1″ e | 11′ 11″ e | 10′ 1″ e | 14′ 4″ i | 12′ 5″ a | 9′ 8″ a |
| 600S162-43 | 33 | 15′ 0″ | 13′ 8″ | 11′ 9″ e | 16′ 8″ i | 14′ 5″ i | 11′ 9″ i | 13′ 8″ | 12′ 5″ | 10′ 10″ e | 15′ 4″ i | 13′ 11″ i | 11′ 9″ i |
| 600S200-43 | 33 | 15′ 9″ | 14′ 4″ | 12′ 0″ e | 16′ 11″ i | 14′ 8″ i | 12′ 0″ i | 14′ 4″ | 13′ 0″ | 11′ 4″ e | 16′ 1″ i | 14′ 7″ i | 12′ 0″ i |
| 600S250-43 | 33 | 16′ 6″ | 15′ 0″ e | 12′ 4″ e | 17′ 5″ i | 15′ 1″ i | 12′ 4″ i | 15′ 0″ | 13′ 7″ | 11′ 11″ e | 16′ 10″ i | 15′ 1″ i | 12′ 4″ i |
| 600S162-54 | 50 | 16′ 1″ | 14′ 7″ | 12′ 9″ | 18′ 1″ | 16′ 5″ | 14′ 4″ i | 14′ 7″ | 13′ 3″ | 11′ 7″ | 16′ 5″ | 14′ 11″ | 13′ 0″ i |
| 600S200-54 | 50 | 16′ 11″ | 15′ 4″ | 13′ 5″ | 19′ 0″ | 17′ 3″ i | 15′ 1″ i | 15′ 4″ | 14′ 0″ | 12′ 2″ | 17′ 3″ | 15′ 8″ | 13′ 8″ i |
| 600S250-54 | 50 | 17′ 8″ | 16′ 0″ | 14′ 0″ | 19′ 10″ | 18′ 0″ i | 15′ 9″ i | 16′ 0″ | 14′ 7″ | 12′ 9″ | 18′ 0″ | 16′ 4″ | 14′ 3″ i |
| 600S300-54 | 50 | 18′ 6″ | 16′ 9″ | 14′ 8″ | 20′ 9″ | 18′ 10″ i | 16′ 6″ i | 16′ 9″ | 15′ 3″ | 13′ 4″ | 18′ 10″ | 17′ 2″ | 15′ 0″ i |
| 600S162-68 | 50 | 17′ 3″ | 15′ 8″ | 13′ 8″ | 19′ 4″ | 17′ 7″ | 15′ 4″ | 15′ 8″ | 14′ 3″ | 12′ 5″ | 17′ 7″ | 16′ 0″ | 14′ 0″ |
| 600S200-68 | 50 | 18′ 2″ | 16′ 6″ | 14′ 5″ | 20′ 4″ | 18′ 6″ | 16′ 2″ | 16′ 6″ | 15′ 0″ | 13′ 1″ | 18′ 6″ | 16′ 10″ | 14′ 8″ |
| 600S250-68 | 50 | 19′ 0″ | 17′ 3″ | 15′ 1″ | 21′ 4″ | 19′ 5″ | 16′ 11″ i | 17′ 3″ | 15′ 8″ | 13′ 9″ | 19′ 5″ | 17′ 8″ | 15′ 5″ |
| 600S300-68 | 50 | 20′ 1″ | 18′ 3″ | 15′ 11″ | 22′ 6″ | 20′ 5″ | 17′ 10″ i | 18′ 3″ | 16′ 7″ | 14′ 6″ | 20′ 5″ | 18′ 7″ | 16′ 3″ |
| 600S162-97 | 50 | 19′ 1″ | 17′ 4″ | 15′ 2″ | 21′ 6″ | 19′ 6″ | 17′ 0″ | 17′ 4″ | 15′ 9″ | 13′ 9″ | 19′ 6″ | 17′ 9″ | 15′ 6″ |
| 600S200-97 | 50 | 20′ 2″ | 18′ 4″ | 16′ 0″ | 22′ 7″ | 20′ 7″ | 17′ 11″ | 18′ 4″ | 16′ 8″ | 14′ 6″ | 20′ 7″ | 18′ 8″ | 16′ 4″ |
| 600S250-97 | 50 | 21′ 2″ | 19′ 3″ | 16′ 9″ | 23′ 9″ | 21′ 7″ | 18′ 10″ | 19′ 3″ | 17′ 6″ | 15′ 3″ | 21′ 7″ | 19′ 7″ | 17′ 2″ |
| 600S300-97 | 50 | 22′ 4″ | 20′ 3″ | 17′ 9″ | 25′ 1″ | 22′ 9″ | 19′ 11″ | 20′ 3″ | 18′ 5″ | 16′ 1″ | 22′ 9″ | 20′ 8″ | 18′ 1″ |
| 800S162-33 | 33 | 15′ 3″ e | 13′ 3″ e | 10′ 10″ e | 14′ 6″ a | 11′ 9″ a | 8′ 8″ a | 15′ 3″ e | 13′ 3″ e | 10′ 10″ e | 14′ 6″ a | 11′ 9″ a | 8′ 8″ a |
| 800S200-33 | 33 | 16′ 5″ e | 14′ 2″ e | 11′ 7″ e | 15′ 1″ a | 12′ 2″ a | 8′ 11″ a | 16′ 5″ e | 14′ 2″ e | 11′ 7″ e | 15′ 1″ a | 12′ 2″ a | 8′ 11″ a |
| 800S162-43 | 33 | 18′ 4″ | 15′ 10″ e | 12′ 11″ e | 18′ 4″ i | 15′ 10″ i | 12′ 11″ a | 17′ 0″ | 15′ 5″ e | 12′ 11″ e | 18′ 4″ i | 15′ 10″ i | 12′ 11″ a |
| 800S200-43 | 33 | 19′ 9″ e | 17′ 10″ e | 14′ 7″ e | 20′ 8″ i | 17′ 10″ i | 14′ 7″ a | 18′ 0″ | 16′ 4″ e | 14′ 3″ e | 20′ 2″ i | 17′ 10″ i | 14′ 7″ a |
| 800S250-43 | 33 | 20′ 7″ e | 18′ 0″ e | 14′ 8″ e | 20′ 10″ i | 18′ 0″ i | 14′ 8″ a | 18′ 9″ | 17′ 0″ e | 14′ 8″ e | 20′ 10″ i | 18′ 0″ i | 14′ 8″ a |
| 800S162-54 | 50 | 20′ 2″ | 18′ 3″ | 16′ 0″ | 22′ 7″ i | 20′ 6″ i | 17′ 6″ i | 18′ 3″ | 16′ 7″ | 14′ 6″ | 20′ 6″ | 18′ 8″ i | 16′ 4″ i |
| 800S200-54 | 50 | 21′ 3″ | 19′ 4″ | 16′ 10″ | 23′ 10″ i | 21′ 8″ i | 18′ 11″ i | 19′ 4″ | 17′ 6″ | 15′ 4″ | 21′ 8″ | 19′ 8″ i | 17′ 2″ i |
| 800S250-54 | 50 | 22′ 1″ | 20′ 1″ | 17′ 6″ | 24′ 9″ i | 22′ 6″ i | 19′ 6″ i | 20′ 1″ | 18′ 3″ | 15′ 11″ | 22′ 6″ | 20′ 5″ i | 17′ 10″ i |
| 800S300-54 | 50 | 23′ 1″ | 21′ 0″ | 18′ 4″ | 25′ 11″ i | 23′ 7″ i | 20′ 7″ i | 21′ 0″ | 19′ 1″ | 16′ 8″ | 23′ 7″ | 21′ 5″ i | 18′ 8″ i |
| 800S162-68 | 50 | 21′ 9″ | 19′ 9″ | 17′ 3″ | 24′ 5″ | 22′ 2″ | 19′ 5″ i | 19′ 9″ | 18′ 0″ | 15′ 8″ | 22′ 2″ | 20′ 2″ | 17′ 7″ i |
| 800S200-68 | 50 | 22′ 10″ | 20′ 9″ | 18′ 1″ | 25′ 7″ | 23′ 3″ | 20′ 4″ i | 20′ 9″ | 18′ 10″ | 16′ 5″ | 23′ 3″ | 21′ 2″ | 18′ 6″ |
| 800S250-68 | 50 | 23′ 9″ | 21′ 7″ | 18′ 11″ | 26′ 8″ | 24′ 3″ i | 21′ 2″ i | 21′ 7″ | 19′ 8″ | 17′ 2″ | 24′ 3″ | 22′ 1″ | 19′ 3″ i |
| 800S300-68 | 50 | 25′ 0″ | 22′ 9″ | 19′ 10″ | 28′ 1″ | 25′ 6″ i | 22′ 4″ i | 22′ 9″ | 20′ 8″ | 18′ 1″ | 25′ 6″ | 23′ 2″ | 20′ 3″ i |
| 800S162-97 | 50 | 24′ 2″ | 22′ 0″ | 19′ 2″ | 27′ 2″ | 24′ 8″ | 21′ 7″ | 22′ 0″ | 20′ 0″ | 17′ 5″ | 24′ 8″ | 22′ 5″ | 19′ 7″ |
| 800S200-97 | 50 | 25′ 4″ | 23′ 1″ | 20′ 2″ | 28′ 6″ | 25′ 11″ | 22′ 7″ | 23′ 1″ | 20′ 11″ | 18′ 4″ | 25′ 11″ | 23′ 6″ | 20′ 6″ |
| 800S250-97 | 50 | 26′ 6″ | 24′ 1″ | 21′ 0″ | 29′ 9″ | 27′ 1″ | 23′ 7″ | 24′ 1″ | 21′ 11″ | 19′ 1″ | 27′ 1″ | 24′ 7″ | 21′ 6″ |
| 800S300-97 | 50 | 27′ 11″ | 25′ 4″ | 22′ 2″ | 31′ 4″ | 28′ 6″ | 24′ 10″ | 25′ 4″ | 23′ 0″ | 20′ 1″ | 28′ 6″ | 25′ 10″ | 22′ 7″ |
| 1000S162-43 | 33 | 20′ 9″ e | 17′ 11″ e | 14′ 8″ e | 20′ 9″ a | 17′ 10″ a | 13′ 4″ a | 20′ 2″ e | 17′ 11″ e | 14′ 8″ e | 20′ 9″ a | 17′ 10″ a | 13′ 4″ a |
| 1000S200-43 | 33 | 22′ 0″ e | 19′ 1″ e | 15′ 7″ e | 22′ 0″ a | 18′ 6″ a | 13′ 10″ a | 21′ 1″ e | 19′ 1″ e | 15′ 7″ e | 22′ 0″ a | 18′ 6″ a | 13′ 10″ a |
| 1000S250-43 | 33 | 23′ 1″ e | 20′ 0″ e | 16′ 4″ e | 23′ 1″ a | 19′ 0″ a | 14′ 2″ a | 22′ 4″ e | 20′ 0″ e | 16′ 4″ e | 23′ 1″ a | 19′ 0″ a | 14′ 2″ a |
| 1000S162-54 | 50 | 23′ 11″ | 21′ 9″ | 19′ 0″ | 26′ 10″ i | 24′ 3″ i | 19′ 10″ i | 21′ 9″ | 19′ 9″ | 17′ 3″ | 24′ 5″ i | 22′ 2″ i | 19′ 4″ i |
| 1000S200-54 | 50 | 25′ 0″ | 22′ 9″ | 19′ 10″ | 28′ 1″ i | 25′ 3″ i | 20′ 8″ i | 22′ 9″ | 20′ 8″ | 18′ 1″ | 25′ 6″ i | 23′ 2″ i | 20′ 3″ i |
| 1000S250-54 | 50 | 26′ 5″ | 24′ 0″ | 21′ 0″ | 29′ 8″ i | 26′ 6″ i | 21′ 8″ i | 24′ 0″ | 21′ 10″ | 19′ 1″ | 26′ 11″ i | 24′ 6″ i | 21′ 5″ i |
| 1000S300-54 | 50 | 27′ 7″ | 25′ 0″ | 21′ 10″ e | 30′ 11″ i | 28′ 1″ i | 23′ 7″ i | 25′ 0″ | 22′ 9″ | 19′ 10″ | 28′ 1″ i | 25′ 6″ i | 22′ 4″ i |
| 1000S162-68 | 50 | 25′ 11″ | 23′ 7″ | 20′ 7″ | 29′ 1″ | 26′ 6″ i | 23′ 1″ i | 23′ 7″ | 21′ 5″ | 18′ 8″ | 26′ 6″ | 24′ 0″ | 21′ 0″ i |
| 1000S200-68 | 50 | 27′ 1″ | 24′ 7″ | 21′ 6″ | 30′ 5″ | 27′ 8″ i | 24′ 2″ i | 24′ 7″ | 22′ 4″ | 19′ 7″ | 27′ 8″ | 25′ 1″ | 21′ 11″ i |
| 1000S250-68 | 50 | 28′ 5″ | 25′ 10″ | 22′ 7″ | 31′ 11″ | 29′ 0″ i | 25′ 4″ i | 25′ 10″ | 23′ 5″ | 20′ 6″ | 29′ 0″ | 26′ 4″ i | 23′ 0″ i |
| 1000S300-68 | 50 | 29′ 10″ | 27′ 1″ | 23′ 8″ | 33′ 5″ i | 30′ 5″ i | 26′ 7″ i | 27′ 1″ | 24′ 7″ | 21′ 6″ | 30′ 5″ | 27′ 7″ i | 24′ 1″ i |
| 1000S162-97 | 50 | 29′ 2″ | 26′ 6″ | 23′ 1″ | 32′ 8″ | 29′ 9″ | 26′ 0″ | 26′ 6″ | 24′ 1″ | 21′ 0″ | 29′ 9″ | 27′ 0″ | 23′ 7″ |
| 1000S200-97 | 50 | 30′ 5″ | 27′ 8″ | 24′ 2″ | 34′ 2″ | 31′ 0″ | 27′ 1″ | 27′ 8″ | 25′ 1″ | 21′ 11″ | 31′ 0″ | 28′ 2″ | 24′ 8″ |
| 1000S250-97 | 50 | 31′ 8″ | 28′ 9″ | 25′ 2″ | 35′ 7″ | 32′ 4″ | 28′ 3″ | 28′ 9″ | 26′ 2″ | 22′ 10″ | 32′ 4″ | 29′ 4″ | 25′ 8″ |
| 1000S300-97 | 50 | 33′ 3″ | 30′ 3″ | 26′ 5″ | 37′ 4″ | 33′ 11″ | 29′ 8″ | 30′ 3″ | 27′ 5″ | 24′ 0″ | 33′ 11″ | 30′ 10″ | 26′ 11″ |
| 1200S162-54 | 50 | 27′ 6″ e | 25′ 0″ e | 21′ 10″ e | 30′ 11″ a | 26′ 9″ a | 20′ 10″ a | 25′ 0″ e | 22′ 9″ e | 19′ 10″ e | 28′ 1″ a | 25′ 6″ a | 20′ 10″ a |
| 1200S200-54 | 50 | 28′ 9″ e | 26′ 2″ e | 22′ 9″ e | 32′ 2″ a | 27′ 10″ a | 21′ 4″ a | 26′ 2″ e | 23′ 9″ e | 20′ 9″ e | 29′ 4″ a | 26′ 8″ a | 21′ 4″ a |
| 1200S250-54 | 50 | 29′ 11″ e | 27′ 2″ e | 23′ 2″ e | 32′ 9″ a | 28′ 4″ a | 21′ 6″ a | 27′ 2″ e | 24′ 9″ e | 21′ 7″ e | 30′ 7″ a | 27′ 9″ a | 21′ 6″ a |
| 1200S300-54 | 50 | 31′ 11″ e | 29′ 0″ e | 25′ 4″ e | 35′ 10″ a | 30′ 8″ a | 22′ 11″ a | 29′ 0″ e | 26′ 4″ e | 23′ 0″ e | 32′ 6″ a | 29′ 7″ a | 22′ 11″ a |
| 1200S162-68 | 50 | 29′ 11″ | 27′ 2″ | 23′ 9″ | 33′ 7″ i | 30′ 6″ i | 25′ 8″ i | 27′ 2″ | 24′ 8″ | 21′ 7″ | 30′ 6″ | 27′ 9″ i | 24′ 3″ i |
| 1200S200-68 | 50 | 31′ 2″ | 28′ 4″ | 24′ 9″ | 35′ 0″ i | 31′ 10″ i | 27′ 2″ i | 28′ 4″ | 25′ 9″ | 22′ 6″ | 31′ 10″ | 28′ 11″ i | 25′ 3″ i |
| 1200S250-68 | 50 | 32′ 6″ | 29′ 6″ | 25′ 10″ | 36′ 6″ i | 33′ 2″ i | 27′ 5″ i | 29′ 6″ | 26′ 10″ | 23′ 5″ | 33′ 2″ i | 30′ 2″ i | 26′ 4″ i |
| 1200S300-68 | 50 | 34′ 5″ | 31′ 3″ | 27′ 4″ | 38′ 8″ i | 35′ 1″ i | 30′ 6″ i | 31′ 3″ | 28′ 5″ | 24′ 10″ | 35′ 1″ i | 31′ 11″ i | 27′ 10″ i |
| 1200S162-97 | 50 | 33′ 11″ | 30′ 10″ | 26′ 11″ | 38′ 1″ | 34′ 7″ | 30′ 2″ i | 30′ 10″ | 28′ 0″ | 24′ 5″ | 34′ 7″ | 31′ 5″ | 27′ 5″ |
| 1200S200-97 | 50 | 35′ 4″ | 32′ 1″ | 28′ 0″ | 39′ 8″ | 36′ 0″ | 31′ 5″ i | 32′ 1″ | 29′ 2″ | 25′ 5″ | 36′ 0″ | 32′ 9″ | 28′ 7″ |
| 1200S250-97 | 50 | 36′ 8″ | 33′ 4″ | 29′ 1″ | 41′ 2″ | 37′ 5″ | 32′ 8″ i | 33′ 4″ | 30′ 3″ | 26′ 5″ | 37′ 5″ | 34′ 0″ | 29′ 8″ |
| 1200S300-97 | 50 | 38′ 5″ | 34′ 11″ | 30′ 6″ | 43′ 2″ | 39′ 3″ | 34′ 3″ i | 34′ 11″ | 31′ 9″ | 27′ 9″ | 39′ 3″ | 35′ 8″ | 31′ 2″ |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

CEMCO
Steel Framing and Metal Lath

# Allowable Floor Joist Spans 10 psf Dead Load and 40 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 12′ 4″ e | 10′ 8″ e | 8′ 9″ e | 12′ 4″ i | 10′ 8″ a | 8′ 1″ a | 11′ 4″ e | 10′ 4″ e | 8′ 9″ e | 12′ 4″ i | 10′ 8″ a | 8′ 1″ a |
| 600S200-33 | 33 | 12′ 10″ e | 11′ 1″ e | 9′ 1″ e | 12′ 10″ a | 10′ 11″ a | 8′ 3″ a | 11′ 11″ e | 10′ 10″ e | 9′ 1″ e | 12′ 10″ a | 10′ 11″ a | 8′ 3″ a |
| 600S162-43 | 33 | 13′ 8″ | 12′ 5″ e | 10′ 7″ e | 14′ 11″ i | 12′ 11″ i | 10′ 7″ i | 12′ 5″ | 11′ 3″ | 9′ 10″ e | 13′ 11″ i | 12′ 8″ i | 10′ 7″ i |
| 600S200-43 | 33 | 14′ 4″ | 13′ 0″ e | 10′ 9″ e | 15′ 2″ i | 13′ 2″ i | 10′ 9″ a | 13′ 0″ | 11′ 10″ | 10′ 4″ e | 14′ 7″ i | 13′ 2″ i | 10′ 9″ a |
| 600S250-43 | 33 | 15′ 0″ | 13′ 6″ e | 11′ 0″ e | 15′ 7″ i | 13′ 6″ i | 11′ 0″ a | 13′ 7″ | 12′ 4″ e | 10′ 10″ e | 15′ 3″ i | 13′ 6″ i | 11′ 0″ a |
| 600S162-54 | 50 | 14′ 7″ | 13′ 3″ | 11′ 7″ | 16′ 5″ | 14′ 11″ i | 13′ 0″ i | 13′ 3″ | 12′ 1″ | 10′ 7″ | 14′ 11″ | 13′ 7″ | 11′ 10″ i |
| 600S200-54 | 50 | 15′ 4″ | 14′ 0″ | 12′ 2″ | 17′ 3″ | 15′ 8″ i | 13′ 8″ i | 14′ 0″ | 12′ 8″ | 11′ 1″ | 15′ 8″ | 14′ 3″ | 12′ 5″ i |
| 600S250-54 | 50 | 16′ 0″ | 14′ 7″ | 12′ 9″ | 18′ 0″ i | 16′ 4″ i | 14′ 3″ i | 14′ 7″ | 13′ 3″ | 11′ 7″ | 16′ 4″ | 14′ 10″ i | 13′ 0″ i |
| 600S300-54 | 50 | 16′ 9″ | 15′ 3″ | 13′ 4″ | 18′ 10″ i | 17′ 2″ i | 15′ 0″ i | 15′ 3″ | 13′ 10″ | 12′ 1″ | 17′ 2″ | 15′ 7″ i | 13′ 7″ 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″ |
| 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″ |
| 600S250-68 | 50 | 17′ 3″ | 15′ 8″ | 13′ 9″ | 19′ 5″ | 17′ 8″ | 15′ 5″ i | 15′ 8″ | 14′ 3″ | 12′ 6″ | 17′ 8″ | 16′ 0″ | 14′ 0″ i |
| 600S300-68 | 50 | 18′ 3″ | 16′ 7″ | 14′ 6″ | 20′ 5″ | 18′ 7″ | 16′ 3″ i | 16′ 7″ | 15′ 0″ | 13′ 2″ | 18′ 7″ | 16′ 11″ | 14′ 9″ 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″ |
| 600S200-97 | 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″ |
| 600S250-97 | 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″ |
| 600S300-97 | 50 | 20′ 3″ | 18′ 5″ | 16′ 1″ | 22′ 9″ | 20′ 8″ | 18′ 1″ | 18′ 5″ | 16′ 9″ | 14′ 8″ | 20′ 8″ | 18′ 10″ | 16′ 5″ |
| 800S162-33 | 33 | 13′ 8″ e | 11′ 10″ e | 9′ 6″ e | 12′ 4″ a | 10′ 0″ a | 7′ 3″ a | 13′ 8″ e | 11′ 10″ e | 9′ 6″ e | 12′ 4″ a | 10′ 0″ a | 7′ 3″ a |
| 800S200-33 | 33 | 14′ 8″ e | 12′ 8″ e | 9′ 6″ e | 12′ 9″ a | 10′ 4″ a | 7′ 6″ a | 14′ 8″ e | 12′ 8″ e | 9′ 6″ e | 12′ 9″ a | 10′ 4″ a | 7′ 6″ a |
| 800S162-43 | 33 | 16′ 5″ e | 14′ 2″ e | 11′ 7″ e | 16′ 5″ i | 14′ 2″ i | 11′ 7″ a | 15′ 5″ e | 14′ 0″ e | 11′ 7″ e | 16′ 5″ i | 14′ 2″ i | 11′ 7″ a |
| 800S200-43 | 33 | 18′ 0″ e | 16′ 0″ e | 13′ 1″ e | 18′ 5″ i | 16′ 0″ a | 12′ 7″ a | 16′ 4″ e | 14′ 10″ e | 12′ 11″ e | 18′ 4″ i | 16′ 0″ a | 12′ 7″ a |
| 800S250-43 | 33 | 18′ 7″ e | 16′ 1″ e | 13′ 2″ e | 18′ 7″ i | 16′ 1″ a | 12′ 7″ a | 17′ 0″ e | 15′ 6″ e | 13′ 2″ e | 18′ 7″ i | 16′ 1″ a | 12′ 7″ a |
| 800S162-54 | 50 | 18′ 3″ | 16′ 7″ | 14′ 6″ | 20′ 6″ i | 18′ 8″ i | 15′ 8″ i | 16′ 7″ | 15′ 1″ | 13′ 2″ | 18′ 8″ i | 16′ 11″ i | 14′ 10″ i |
| 800S200-54 | 50 | 19′ 4″ | 17′ 6″ | 15′ 4″ | 21′ 8″ i | 19′ 8″ i | 17′ 2″ i | 17′ 6″ | 15′ 11″ | 13′ 11″ | 19′ 8″ i | 17′ 11″ i | 15′ 7″ i |
| 800S250-54 | 50 | 20′ 1″ | 18′ 3″ | 15′ 11″ | 22′ 6″ i | 20′ 5″ i | 17′ 5″ i | 18′ 3″ | 16′ 7″ | 14′ 6″ | 20′ 5″ i | 18′ 7″ i | 16′ 3″ i |
| 800S300-54 | 50 | 21′ 0″ | 19′ 1″ | 16′ 8″ | 23′ 7″ i | 21′ 5″ i | 18′ 8″ i | 19′ 1″ | 17′ 4″ | 15′ 1″ | 21′ 5″ i | 19′ 5″ i | 17′ 0″ i |
| 800S162-68 | 50 | 19′ 9″ | 18′ 0″ | 15′ 8″ | 22′ 2″ | 20′ 2″ i | 17′ 7″ i | 18′ 0″ | 16′ 4″ | 14′ 3″ | 20′ 2″ | 18′ 4″ | 16′ 0″ i |
| 800S200-68 | 50 | 20′ 9″ | 18′ 10″ | 16′ 5″ | 23′ 3″ | 21′ 2″ i | 18′ 6″ i | 18′ 10″ | 17′ 1″ | 14′ 11″ | 21′ 2″ | 19′ 2″ | 16′ 9″ i |
| 800S250-68 | 50 | 21′ 7″ | 19′ 8″ | 17′ 2″ | 24′ 3″ | 22′ 1″ i | 19′ 3″ i | 19′ 8″ | 17′ 10″ | 15′ 7″ | 22′ 1″ | 20′ 0″ | 17′ 6″ i |
| 800S300-68 | 50 | 22′ 9″ | 20′ 8″ | 18′ 1″ | 25′ 6″ | 23′ 2″ i | 20′ 3″ i | 20′ 8″ | 18′ 9″ | 16′ 5″ | 23′ 2″ | 21′ 1″ | 18′ 5″ 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″ |
| 800S200-97 | 50 | 23′ 1″ | 20′ 11″ | 18′ 4″ | 25′ 11″ | 23′ 6″ | 20′ 6″ | 20′ 11″ | 19′ 0″ | 16′ 7″ | 23′ 6″ | 21′ 4″ | 18′ 8″ |
| 800S250-97 | 50 | 24′ 1″ | 21′ 11″ | 19′ 1″ | 27′ 1″ | 24′ 7″ | 21′ 6″ | 21′ 11″ | 19′ 11″ | 17′ 4″ | 24′ 7″ | 22′ 4″ | 19′ 6″ |
| 800S300-97 | 50 | 25′ 4″ | 23′ 0″ | 20′ 1″ | 28′ 6″ | 25′ 10″ | 22′ 7″ | 23′ 0″ | 20′ 11″ | 18′ 3″ | 25′ 10″ | 23′ 6″ | 20′ 6″ |
| 1000S162-43 | 33 | 18′ 6″ e | 16′ 1″ e | 13′ 1″ e | 18′ 6″ a | 15′ 3″ a | 11′ 4″ a | 18′ 4″ e | 16′ 1″ e | 13′ 1″ e | 18′ 6″ a | 15′ 3″ a | 11′ 4″ a |
| 1000S200-43 | 33 | 19′ 8″ e | 17′ 1″ e | 13′ 11″ e | 19′ 4″ a | 15′ 9″ a | 11′ 8″ a | 19′ 2″ e | 17′ 1″ e | 13′ 11″ e | 19′ 4″ a | 15′ 9″ a | 11′ 8″ a |
| 1000S250-43 | 33 | 20′ 8″ e | 17′ 10″ e | 14′ 7″ e | 19′ 11″ a | 16′ 2″ a | 12′ 0″ a | 20′ 4″ e | 17′ 10″ e | 14′ 7″ e | 19′ 11″ a | 16′ 2″ a | 12′ 0″ a |
| 1000S162-54 | 50 | 21′ 9″ | 19′ 9″ | 17′ 3″ e | 24′ 5″ i | 21′ 8″ i | 17′ 9″ i | 19′ 9″ | 17′ 11″ | 15′ 8″ | 22′ 2″ i | 20′ 2″ i | 17′ 7″ i |
| 1000S200-54 | 50 | 22′ 9″ | 20′ 8″ | 18′ 1″ e | 25′ 6″ i | 22′ 7″ i | 18′ 5″ i | 20′ 8″ | 18′ 9″ | 16′ 5″ | 23′ 2″ i | 21′ 1″ i | 18′ 5″ i |
| 1000S250-54 | 50 | 24′ 0″ | 21′ 10″ | 19′ 1″ e | 26′ 11″ i | 23′ 9″ i | 19′ 1″ i | 21′ 10″ | 19′ 10″ | 17′ 4″ e | 24′ 6″ i | 22′ 3″ i | 19′ 1″ i |
| 1000S300-54 | 50 | 25′ 0″ | 22′ 9″ | 19′ 10″ e | 28′ 1″ i | 25′ 6″ i | 20′ 2″ i | 22′ 9″ | 20′ 8″ | 18′ 1″ e | 25′ 6″ i | 23′ 2″ i | 20′ 2″ i |
| 1000S162-68 | 50 | 23′ 7″ | 21′ 5″ | 18′ 8″ | 26′ 6″ i | 24′ 0″ i | 20′ 9″ i | 21′ 5″ | 19′ 5″ | 17′ 0″ | 24′ 0″ | 21′ 10″ i | 19′ 1″ i |
| 1000S200-68 | 50 | 24′ 7″ | 22′ 4″ | 19′ 7″ | 27′ 8″ i | 25′ 1″ i | 21′ 11″ i | 22′ 4″ | 20′ 4″ | 17′ 9″ | 25′ 1″ | 22′ 10″ i | 19′ 11″ i |
| 1000S250-68 | 50 | 25′ 10″ | 23′ 5″ | 20′ 6″ | 29′ 0″ i | 26′ 4″ i | 23′ 0″ i | 23′ 5″ | 21′ 4″ | 18′ 7″ | 26′ 4″ | 23′ 11″ i | 20′ 11″ i |
| 1000S300-68 | 50 | 27′ 1″ | 24′ 7″ | 21′ 6″ | 30′ 5″ i | 27′ 7″ i | 24′ 1″ i | 24′ 7″ | 22′ 4″ | 19′ 6″ | 27′ 7″ | 25′ 1″ i | 21′ 11″ i |
| 1000S162-97 | 50 | 26′ 6″ | 24′ 1″ | 21′ 0″ | 29′ 9″ | 27′ 0″ | 23′ 7″ i | 24′ 1″ | 21′ 10″ | 19′ 1″ | 27′ 0″ | 24′ 6″ | 21′ 5″ |
| 1000S200-97 | 50 | 27′ 8″ | 25′ 1″ | 21′ 11″ | 31′ 0″ | 28′ 2″ | 24′ 8″ i | 25′ 1″ | 22′ 10″ | 19′ 11″ | 28′ 2″ | 25′ 7″ | 22′ 5″ |
| 1000S250-97 | 50 | 28′ 9″ | 26′ 2″ | 22′ 10″ | 32′ 4″ | 29′ 4″ | 25′ 8″ i | 26′ 2″ | 23′ 9″ | 20′ 9″ | 29′ 4″ | 26′ 8″ | 23′ 4″ |
| 1000S300-97 | 50 | 30′ 3″ | 27′ 5″ | 24′ 0″ | 33′ 11″ | 30′ 10″ | 26′ 11″ i | 27′ 5″ | 24′ 11″ | 21′ 9″ | 30′ 10″ | 28′ 0″ | 24′ 6″ |
| 1200S162-54 | 50 | 25′ 0″ e | 22′ 9″ e | 19′ 7″ e | 27′ 8″ a | 23′ 8″ a | 17′ 9″ a | 22′ 9″ e | 20′ 8″ e | 18′ 0″ e | 25′ 6″ a | 23′ 2″ a | 17′ 9″ a |
| 1200S200-54 | 50 | 26′ 2″ e | 23′ 9″ e | 20′ 4″ e | 28′ 9″ a | 24′ 3″ a | 18′ 2″ a | 23′ 9″ e | 21′ 7″ e | 18′ 10″ e | 26′ 8″ a | 24′ 3″ a | 18′ 2″ a |
| 1200S250-54 | 50 | 27′ 2″ e | 24′ 9″ e | 20′ 9″ e | 29′ 3″ a | 24′ 6″ a | 18′ 4″ a | 24′ 9″ e | 22′ 6″ e | 19′ 7″ e | 27′ 9″ a | 24′ 6″ a | 18′ 4″ a |
| 1200S300-54 | 50 | 29′ 0″ e | 26′ 4″ e | 23′ 0″ e | 32′ 1″ a | 26′ 2″ a | 19′ 5″ a | 26′ 4″ e | 23′ 11″ e | 20′ 11″ e | 29′ 7″ a | 26′ 2″ a | 19′ 5″ a |
| 1200S162-68 | 50 | 27′ 2″ | 24′ 8″ | 21′ 7″ | 30′ 6″ i | 27′ 9″ i | 23′ 0″ i | 24′ 8″ | 22′ 5″ | 19′ 7″ | 27′ 9″ i | 25′ 2″ i | 22′ 0″ i |
| 1200S200-68 | 50 | 28′ 4″ | 25′ 9″ | 22′ 6″ | 31′ 10″ i | 28′ 11″ i | 24′ 4″ i | 25′ 9″ | 23′ 5″ | 20′ 5″ | 28′ 11″ i | 26′ 3″ i | 22′ 11″ i |
| 1200S250-68 | 50 | 29′ 6″ | 26′ 10″ | 23′ 5″ | 33′ 2″ i | 30′ 0″ i | 24′ 6″ i | 26′ 10″ | 24′ 5″ | 21′ 4″ | 30′ 2″ i | 27′ 4″ i | 23′ 11″ i |
| 1200S300-68 | 50 | 31′ 3″ | 28′ 5″ | 24′ 10″ e | 35′ 1″ i | 31′ 11″ i | 27′ 4″ i | 28′ 5″ | 25′ 10″ | 22′ 7″ | 31′ 11″ i | 29′ 0″ i | 25′ 4″ i |
| 1200S162-97 | 50 | 30′ 10″ | 28′ 0″ | 24′ 5″ | 34′ 7″ | 31′ 5″ | 27′ 5″ i | 28′ 0″ | 25′ 5″ | 22′ 3″ | 31′ 5″ | 28′ 7″ | 24′ 11″ i |
| 1200S200-97 | 50 | 32′ 1″ | 29′ 2″ | 25′ 5″ | 36′ 0″ | 32′ 9″ | 28′ 7″ i | 29′ 2″ | 26′ 6″ | 23′ 1″ | 32′ 9″ | 29′ 9″ | 26′ 0″ i |
| 1200S250-97 | 50 | 33′ 4″ | 30′ 3″ | 26′ 5″ | 37′ 5″ | 34′ 0″ | 29′ 8″ i | 30′ 3″ | 27′ 6″ | 24′ 0″ | 34′ 0″ | 30′ 10″ | 27′ 0″ i |
| 1200S300-97 | 50 | 34′ 11″ | 31′ 9″ | 27′ 9″ | 39′ 3″ | 35′ 8″ | 31′ 2″ i | 31′ 9″ | 28′ 10″ | 25′ 2″ | 35′ 8″ | 32′ 5″ | 28′ 3″ i |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

CEMCO
Steel Framing and Metal Lath

# Allowable Floor Joist Spans 10 psf Dead Load and 50 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 11′ 3″ e | 9′ 9″ e | 8′ 0″ e | 11′ 3″ a | 9′ 5″ a | 7′ 1″ a | 10′ 7″ e | 9′ 7″ e | 8′ 0″ e | 11′ 3″ a | 9′ 5″ a | 7′ 1″ a |
| 600S200-33 | 33 | 11′ 8″ e | 10′ 1″ e | 8′ 3″ e | 11′ 8″ a | 9′ 8″ a | 7′ 2″ a | 11′ 1″ e | 10′ 0″ e | 8′ 3″ e | 11′ 8″ a | 9′ 8″ a | 7′ 2″ a |
| 600S162-43 | 33 | 12′ 8″ | 11′ 6″ e | 9′ 8″ e | 13′ 7″ i | 11′ 9″ i | 9′ 8″ a | 11′ 6″ | 10′ 5″ e | 9′ 1″ e | 12′ 11″ i | 11′ 9″ i | 9′ 8″ a |
| 600S200-43 | 33 | 13′ 3″ | 12′ 0″ e | 9′ 9″ e | 13′ 10″ i | 12′ 0″ i | 9′ 9″ a | 12′ 1″ | 11′ 0″ e | 9′ 7″ e | 13′ 7″ i | 12′ 0″ i | 9′ 9″ a |
| 600S250-43 | 33 | 13′ 11″ e | 12′ 4″ e | 10′ 0″ e | 14′ 2″ i | 12′ 4″ i | 10′ 0″ a | 12′ 8″ | 11′ 6″ e | 10′ 0″ e | 14′ 2″ i | 12′ 4″ i | 10′ 0″ a |
| 600S162-54 | 50 | 13′ 7″ | 12′ 4″ | 10′ 9″ | 15′ 3″ | 13′ 10″ i | 12′ 1″ i | 12′ 4″ | 11′ 2″ | 9′ 9″ | 13′ 10″ | 12′ 7″ i | 11′ 0″ i |
| 600S200-54 | 50 | 14′ 3″ | 13′ 0″ | 11′ 4″ | 16′ 0″ i | 14′ 7″ i | 12′ 9″ i | 13′ 0″ | 11′ 9″ | 10′ 3″ | 14′ 7″ | 13′ 3″ i | 11′ 7″ i |
| 600S250-54 | 50 | 14′ 11″ | 13′ 6″ | 11′ 10″ | 16′ 8″ i | 15′ 2″ i | 13′ 3″ i | 13′ 6″ | 12′ 3″ | 10′ 9″ | 15′ 2″ | 13′ 9″ i | 12′ 1″ i |
| 600S300-54 | 50 | 15′ 7″ | 14′ 2″ | 12′ 4″ | 17′ 6″ i | 15′ 11″ i | 13′ 11″ i | 14′ 2″ | 12′ 10″ | 11′ 3″ | 15′ 11″ | 14′ 5″ i | 12′ 7″ i |
| 600S162-68 | 50 | 14′ 7″ | 13′ 3″ | 11′ 7″ | 16′ 4″ | 14′ 10″ | 13′ 0″ i | 13′ 3″ | 12′ 0″ | 10′ 6″ | 14′ 10″ | 13′ 6″ | 11′ 9″ |
| 600S200-68 | 50 | 15′ 4″ | 13′ 11″ | 12′ 2″ | 17′ 2″ | 15′ 7″ | 13′ 8″ i | 13′ 11″ | 12′ 8″ | 11′ 0″ | 15′ 7″ | 14′ 2″ | 12′ 5″ |
| 600S250-68 | 50 | 16′ 1″ | 14′ 7″ | 12′ 9″ | 18′ 0″ | 16′ 4″ i | 14′ 4″ i | 14′ 7″ | 13′ 3″ | 11′ 7″ | 16′ 4″ | 14′ 10″ | 13′ 0″ i |
| 600S300-68 | 50 | 16′ 11″ | 15′ 4″ | 13′ 5″ | 19′ 0″ | 17′ 3″ i | 15′ 1″ i | 15′ 4″ | 14′ 0″ | 12′ 2″ | 17′ 3″ | 15′ 8″ | 13′ 8″ i |
| 600S162-97 | 50 | 16′ 2″ | 14′ 8″ | 12′ 10″ | 18′ 1″ | 16′ 5″ | 14′ 4″ | 14′ 8″ | 13′ 4″ | 11′ 8″ | 16′ 5″ | 14′ 11″ | 13′ 1″ |
| 600S200-97 | 50 | 17′ 0″ | 15′ 5″ | 13′ 6″ | 19′ 1″ | 17′ 4″ | 15′ 2″ | 15′ 5″ | 14′ 0″ | 12′ 3″ | 17′ 4″ | 15′ 9″ | 13′ 9″ |
| 600S250-97 | 50 | 17′ 10″ | 16′ 3″ | 14′ 2″ | 20′ 0″ | 18′ 2″ | 15′ 11″ | 16′ 3″ | 14′ 9″ | 12′ 10″ | 18′ 2″ | 16′ 6″ | 14′ 5″ |
| 600S300-97 | 50 | 18′ 10″ | 17′ 1″ | 14′ 11″ | 21′ 2″ | 19′ 3″ | 16′ 9″ | 17′ 1″ | 15′ 7″ | 13′ 7″ | 19′ 3″ | 17′ 5″ | 15′ 3″ |
| 800S162-33 | 33 | 12′ 6″ e | 10′ 10″ e | 7′ 11″ e | 10′ 9″ a | 8′ 8″ a | 6′ 3″ a | 12′ 6″ e | 10′ 10″ e | 7′ 11″ e | 10′ 9″ a | 8′ 8″ a | 6′ 3″ a |
| 800S200-33 | 33 | 13′ 5″ e | 11′ 7″ e | 7′ 11″ e | 11′ 2″ a | 8′ 11″ a | 6′ 4″ a | 13′ 5″ e | 11′ 7″ e | 7′ 11″ e | 11′ 2″ a | 8′ 11″ a | 6′ 4″ a |
| 800S162-43 | 33 | 15′ 0″ e | 12′ 11″ e | 10′ 7″ e | 15′ 0″ i | 12′ 11″ a | 10′ 3″ a | 14′ 4″ e | 12′ 11″ e | 10′ 7″ e | 15′ 0″ i | 12′ 11″ a | 10′ 3″ a |
| 800S200-43 | 33 | 16′ 8″ e | 14′ 7″ e | 11′ 11″ e | 16′ 10″ i | 14′ 7″ a | 11′ 0″ a | 15′ 2″ e | 13′ 9″ e | 11′ 11″ e | 16′ 10″ i | 14′ 7″ a | 11′ 0″ a |
| 800S250-43 | 33 | 17′ 0″ e | 14′ 8″ e | 12′ 0″ e | 17′ 0″ a | 14′ 8″ a | 11′ 1″ a | 15′ 10″ e | 14′ 4″ e | 12′ 0″ e | 17′ 0″ a | 14′ 8″ a | 11′ 1″ a |
| 800S162-54 | 50 | 17′ 0″ | 15′ 5″ | 13′ 6″ | 19′ 1″ i | 17′ 4″ i | 14′ 4″ i | 15′ 5″ | 14′ 0″ | 12′ 3″ | 17′ 4″ i | 15′ 9″ i | 13′ 9″ i |
| 800S200-54 | 50 | 17′ 11″ | 16′ 3″ | 14′ 3″ | 20′ 1″ i | 18′ 3″ i | 15′ 9″ i | 16′ 3″ | 14′ 9″ | 12′ 11″ | 18′ 3″ i | 16′ 7″ i | 14′ 6″ i |
| 800S250-54 | 50 | 18′ 7″ | 16′ 11″ | 14′ 9″ e | 20′ 11″ i | 19′ 0″ i | 15′ 11″ i | 16′ 11″ | 15′ 4″ | 13′ 5″ | 19′ 0″ i | 17′ 3″ i | 15′ 1″ i |
| 800S300-54 | 50 | 19′ 6″ | 17′ 8″ | 15′ 5″ e | 21′ 10″ i | 19′ 10″ i | 17′ 4″ i | 17′ 8″ | 16′ 1″ | 14′ 0″ | 19′ 10″ i | 18′ 1″ i | 15′ 9″ i |
| 800S162-68 | 50 | 18′ 4″ | 16′ 8″ | 14′ 7″ | 20′ 7″ | 18′ 9″ i | 16′ 4″ i | 16′ 8″ | 15′ 2″ | 13′ 3″ | 18′ 9″ | 17′ 0″ | 14′ 10″ i |
| 800S200-68 | 50 | 19′ 3″ | 17′ 6″ | 15′ 3″ | 21′ 7″ | 19′ 7″ i | 17′ 2″ i | 17′ 6″ | 15′ 11″ | 13′ 10″ | 19′ 7″ | 17′ 10″ | 15′ 7″ i |
| 800S250-68 | 50 | 20′ 1″ | 18′ 3″ | 15′ 11″ | 22′ 6″ i | 20′ 6″ i | 17′ 11″ i | 18′ 3″ | 16′ 7″ | 14′ 6″ | 20′ 6″ | 18′ 7″ i | 16′ 3″ i |
| 800S300-68 | 50 | 21′ 1″ | 19′ 2″ | 16′ 9″ | 23′ 8″ i | 21′ 6″ i | 18′ 10″ i | 19′ 2″ | 17′ 5″ | 15′ 3″ | 21′ 6″ | 19′ 7″ i | 17′ 1″ i |
| 800S162-97 | 50 | 20′ 5″ | 18′ 6″ | 16′ 2″ | 22′ 11″ | 20′ 10″ | 18′ 2″ | 18′ 6″ | 16′ 10″ | 14′ 9″ | 20′ 10″ | 18′ 11″ | 16′ 6″ |
| 800S200-97 | 50 | 21′ 5″ | 19′ 5″ | 17′ 0″ | 24′ 0″ | 21′ 10″ | 19′ 1″ | 19′ 5″ | 17′ 8″ | 15′ 5″ | 21′ 10″ | 19′ 10″ | 17′ 4″ |
| 800S250-97 | 50 | 22′ 4″ | 20′ 4″ | 17′ 9″ | 25′ 1″ | 22′ 10″ | 19′ 11″ | 20′ 4″ | 18′ 5″ | 16′ 1″ | 22′ 10″ | 20′ 9″ | 18′ 1″ |
| 800S300-97 | 50 | 23′ 6″ | 21′ 5″ | 18′ 8″ | 26′ 5″ | 24′ 0″ | 21′ 0″ i | 21′ 5″ | 19′ 5″ | 17′ 0″ | 24′ 0″ | 21′ 10″ | 19′ 1″ |
| 1000S162-43 | 33 | 16′ 11″ e | 14′ 8″ e | 11′ 11″ e | 16′ 5″ a | 13′ 4″ a | 9′ 11″ a | 16′ 11″ e | 14′ 8″ e | 11′ 11″ e | 16′ 5″ a | 13′ 4″ a | 9′ 11″ a |
| 1000S200-43 | 33 | 18′ 0″ e | 15′ 7″ e | 12′ 8″ e | 17′ 0″ a | 13′ 10″ a | 10′ 2″ a | 17′ 10″ e | 15′ 7″ e | 12′ 8″ e | 17′ 0″ a | 13′ 10″ a | 10′ 2″ a |
| 1000S250-43 | 33 | 18′ 10″ e | 16′ 4″ e | 13′ 4″ e | 17′ 6″ a | 14′ 2″ a | 10′ 5″ a | 18′ 10″ e | 16′ 4″ e | 13′ 4″ e | 17′ 6″ a | 14′ 2″ a | 10′ 5″ a |
| 1000S162-54 | 50 | 20′ 2″ | 18′ 4″ | 16′ 0″ e | 22′ 8″ i | 19′ 10″ i | 15′ 11″ i | 18′ 4″ | 16′ 8″ | 14′ 7″ e | 20′ 7″ i | 18′ 8″ i | 15′ 11″ i |
| 1000S200-54 | 50 | 21′ 1″ | 19′ 2″ | 16′ 9″ e | 23′ 8″ i | 20′ 8″ i | 16′ 4″ i | 19′ 2″ | 17′ 5″ | 15′ 3″ e | 21′ 6″ i | 19′ 7″ i | 16′ 4″ i |
| 1000S250-54 | 50 | 22′ 3″ | 20′ 3″ | 17′ 8″ e | 25′ 0″ i | 21′ 8″ i | 16′ 10″ i | 20′ 3″ | 18′ 5″ | 16′ 1″ e | 22′ 9″ i | 20′ 8″ i | 16′ 10″ i |
| 1000S300-54 | 50 | 23′ 3″ | 21′ 1″ e | 18′ 5″ e | 26′ 1″ i | 23′ 7″ i | 17′ 9″ i | 21′ 1″ | 19′ 2″ | 16′ 9″ e | 23′ 8″ i | 21′ 6″ i | 17′ 9″ i |
| 1000S162-68 | 50 | 21′ 11″ | 19′ 11″ | 17′ 4″ | 24′ 7″ i | 22′ 4″ i | 18′ 11″ i | 19′ 11″ | 18′ 1″ | 15′ 9″ | 22′ 4″ | 20′ 3″ i | 17′ 9″ i |
| 1000S200-68 | 50 | 22′ 10″ | 20′ 9″ | 18′ 2″ | 25′ 8″ i | 23′ 4″ i | 20′ 1″ i | 20′ 9″ | 18′ 10″ | 16′ 6″ | 23′ 4″ i | 21′ 2″ i | 18′ 6″ i |
| 1000S250-68 | 50 | 24′ 0″ | 21′ 9″ | 19′ 0″ | 26′ 11″ i | 24′ 5″ i | 21′ 4″ i | 21′ 9″ | 19′ 9″ | 17′ 3″ | 24′ 5″ i | 22′ 3″ i | 19′ 5″ i |
| 1000S300-68 | 50 | 25′ 2″ | 22′ 10″ | 19′ 11″ | 28′ 3″ i | 25′ 8″ i | 22′ 5″ i | 22′ 10″ | 20′ 9″ | 18′ 1″ | 25′ 8″ i | 23′ 3″ i | 20′ 4″ i |
| 1000S162-97 | 50 | 24′ 7″ | 22′ 4″ | 19′ 6″ | 27′ 7″ | 25′ 1″ | 21′ 11″ i | 22′ 4″ | 20′ 3″ | 17′ 9″ | 25′ 1″ | 22′ 9″ | 19′ 11″ |
| 1000S200-97 | 50 | 25′ 8″ | 23′ 4″ | 20′ 4″ | 28′ 10″ | 26′ 2″ | 22′ 10″ i | 23′ 4″ | 21′ 2″ | 18′ 6″ | 26′ 2″ | 23′ 9″ | 20′ 9″ |
| 1000S250-97 | 50 | 26′ 9″ | 24′ 3″ | 21′ 2″ | 30′ 0″ | 27′ 3″ | 23′ 10″ i | 24′ 3″ | 22′ 1″ | 19′ 3″ | 27′ 3″ | 24′ 9″ | 21′ 8″ |
| 1000S300-97 | 50 | 28′ 1″ | 25′ 6″ | 22′ 3″ | 31′ 6″ | 28′ 7″ | 25′ 0″ i | 25′ 6″ | 23′ 2″ | 20′ 3″ | 28′ 7″ | 26′ 0″ | 22′ 8″ |
| 1200S162-54 | 50 | 23′ 2″ e | 21′ 1″ e | 17′ 10″ e | 25′ 3″ a | 20′ 10″ a | 15′ 6″ a | 21′ 1″ e | 19′ 2″ e | 16′ 9″ e | 23′ 8″ a | 20′ 10″ a | 15′ 6″ a |
| 1200S200-54 | 50 | 24′ 3″ e | 22′ 0″ e | 18′ 7″ e | 26′ 1″ a | 21′ 4″ a | 15′ 10″ a | 22′ 0″ e | 20′ 0″ e | 17′ 6″ e | 24′ 9″ a | 21′ 4″ a | 15′ 10″ a |
| 1200S250-54 | 50 | 25′ 3″ e | 22′ 11″ e | 18′ 11″ e | 26′ 4″ a | 21′ 6″ a | 16′ 0″ a | 22′ 11″ e | 20′ 10″ e | 18′ 3″ e | 25′ 9″ a | 21′ 6″ a | 16′ 0″ a |
| 1200S300-54 | 50 | 26′ 11″ e | 24′ 5″ e | 21′ 2″ e | 28′ 3″ a | 22′ 11″ a | 16′ 11″ a | 24′ 5″ e | 22′ 2″ e | 19′ 5″ e | 27′ 5″ a | 22′ 11″ a | 16′ 11″ a |
| 1200S162-68 | 50 | 25′ 3″ | 22′ 11″ | 20′ 0″ | 28′ 4″ i | 25′ 8″ i | 21′ 0″ i | 22′ 11″ | 20′ 10″ | 18′ 2″ | 25′ 9″ i | 23′ 5″ i | 20′ 5″ i |
| 1200S200-68 | 50 | 26′ 4″ | 23′ 11″ | 20′ 11″ e | 29′ 7″ i | 26′ 10″ i | 22′ 2″ i | 23′ 11″ | 21′ 9″ | 19′ 0″ | 26′ 10″ i | 24′ 5″ i | 21′ 4″ i |
| 1200S250-68 | 50 | 27′ 5″ | 24′ 11″ | 21′ 9″ e | 30′ 9″ i | 27′ 5″ i | 22′ 4″ i | 24′ 11″ | 22′ 8″ | 19′ 9″ | 28′ 0″ i | 25′ 5″ i | 22′ 2″ i |
| 1200S300-68 | 50 | 29′ 0″ | 26′ 5″ | 23′ 1″ e | 32′ 7″ i | 29′ 7″ i | 24′ 11″ i | 26′ 5″ | 24′ 0″ | 20′ 11″ e | 29′ 7″ i | 26′ 11″ i | 23′ 6″ i |
| 1200S162-97 | 50 | 28′ 7″ | 26′ 0″ | 22′ 8″ | 32′ 1″ | 29′ 2″ i | 25′ 6″ i | 26′ 0″ | 23′ 7″ | 20′ 7″ | 29′ 2″ | 26′ 6″ | 23′ 2″ i |
| 1200S200-97 | 50 | 29′ 9″ | 27′ 1″ | 23′ 8″ | 33′ 5″ | 30′ 4″ i | 26′ 6″ i | 27′ 1″ | 24′ 7″ | 21′ 6″ | 30′ 4″ | 27′ 7″ | 24′ 1″ i |
| 1200S250-97 | 50 | 30′ 11″ | 28′ 1″ | 24′ 7″ | 34′ 9″ | 31′ 7″ i | 27′ 7″ i | 28′ 1″ | 25′ 6″ | 22′ 4″ | 31′ 7″ | 28′ 8″ | 25′ 0″ i |
| 1200S300-97 | 50 | 32′ 5″ | 29′ 6″ | 25′ 9″ | 36′ 5″ | 33′ 1″ i | 28′ 11″ i | 29′ 6″ | 26′ 9″ | 23′ 5″ | 33′ 1″ | 30′ 1″ | 26′ 3″ i |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

CEMCO
Steel Framing and Metal Lath

# Allowable Floor Joist Spans 15 psf Dead Load and 125 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 7′ 4″ e | 6′ 5″ e | 4′ 7″ e | 6′ 3″ a | 5′ 1″ a | 3′ 8″ a | 7′ 4″ e | 6′ 5″ e | 4′ 7″ e | 6′ 3″ a | 5′ 1″ a | 3′ 8″ a |
| 600S200-33 | 33 | 7′ 8″ e | 6′ 7″ e | 4′ 7″ e | 6′ 5″ a | 5′ 2″ a | 3′ 8″ a | 7′ 8″ e | 6′ 7″ e | 4′ 7″ e | 6′ 5″ a | 5′ 2″ a | 3′ 8″ a |
| 600S162-43 | 33 | 8′ 11″ e | 7′ 9″ e | 6′ 4″ e | 8′ 11″ a | 7′ 9″ a | 6′ 1″ a | 8′ 6″ e | 7′ 8″ e | 6′ 4″ e | 8′ 11″ a | 7′ 9″ a | 6′ 1″ a |
| 600S200-43 | 33 | 9′ 1″ e | 7′ 10″ e | 6′ 5″ e | 9′ 1″ a | 7′ 10″ a | 6′ 1″ a | 8′ 11″ e | 7′ 10″ e | 6′ 5″ e | 9′ 1″ a | 7′ 10″ a | 6′ 1″ a |
| 600S250-43 | 33 | 9′ 4″ e | 8′ 1″ e | 6′ 7″ e | 9′ 4″ a | 8′ 1″ a | 6′ 2″ a | 9′ 4″ e | 8′ 1″ e | 6′ 7″ e | 9′ 4″ a | 8′ 1″ a | 6′ 2″ a |
| 600S162-54 | 50 | 10′ 0″ | 9′ 1″ | 7′ 11″ e | 11′ 3″ i | 10′ 2″ i | 8′ 6″ i | 9′ 1″ | 8′ 3″ | 7′ 3″ e | 10′ 2″ i | 9′ 3″ i | 8′ 1″ i |
| 600S200-54 | 50 | 10′ 6″ | 9′ 7″ | 8′ 4″ e | 11′ 10″ i | 10′ 5″ i | 8′ 6″ i | 9′ 7″ | 8′ 8″ | 7′ 7″ e | 10′ 9″ i | 9′ 9″ i | 8′ 6″ i |
| 600S250-54 | 50 | 11′ 0″ | 9′ 11″ e | 8′ 8″ e | 12′ 4″ i | 10′ 8″ i | 8′ 9″ a | 9′ 11″ | 9′ 1″ | 7′ 11″ e | 11′ 2″ i | 10′ 2″ i | 8′ 9″ a |
| 600S300-54 | 50 | 11′ 6″ | 10′ 5″ e | 9′ 1″ e | 12′ 11″ i | 11′ 8″ i | 9′ 6″ a | 10′ 5″ | 9′ 6″ | 8′ 3″ e | 11′ 9″ i | 10′ 8″ i | 9′ 4″ a |
| 600S162-68 | 50 | 10′ 9″ | 9′ 9″ | 8′ 6″ | 12′ 0″ i | 10′ 11″ i | 9′ 7″ i | 9′ 9″ | 8′ 10″ | 7′ 9″ | 10′ 11″ i | 9′ 11″ i | 8′ 8″ i |
| 600S200-68 | 50 | 11′ 3″ | 10′ 3″ | 8′ 11″ | 12′ 8″ i | 11′ 6″ i | 10′ 1″ i | 10′ 3″ | 9′ 4″ | 8′ 2″ | 11′ 6″ i | 10′ 5″ i | 9′ 2″ i |
| 600S250-68 | 50 | 11′ 10″ | 10′ 9″ | 9′ 5″ | 13′ 3″ i | 12′ 1″ i | 9′ 11″ i | 10′ 9″ | 9′ 9″ | 8′ 6″ | 12′ 1″ i | 10′ 11″ i | 9′ 7″ i |
| 600S300-68 | 50 | 12′ 6″ | 11′ 4″ | 9′ 11″ e | 14′ 0″ i | 12′ 9″ i | 10′ 9″ i | 11′ 4″ | 10′ 3″ | 9′ 0″ | 12′ 9″ i | 11′ 7″ i | 10′ 1″ i |
| 600S162-97 | 50 | 11′ 11″ | 10′ 10″ | 9′ 5″ | 13′ 4″ | 12′ 1″ | 10′ 7″ i | 10′ 10″ | 9′ 10″ | 8′ 7″ | 12′ 1″ | 11′ 0″ | 9′ 7″ i |
| 600S200-97 | 50 | 12′ 6″ | 11′ 4″ | 9′ 11″ | 14′ 1″ | 12′ 9″ | 11′ 2″ i | 11′ 4″ | 10′ 4″ | 9′ 0″ | 12′ 9″ | 11′ 7″ | 10′ 2″ i |
| 600S250-97 | 50 | 13′ 2″ | 11′ 11″ | 10′ 5″ | 14′ 9″ | 13′ 5″ | 11′ 9″ i | 11′ 11″ | 10′ 10″ | 9′ 6″ | 13′ 5″ | 12′ 2″ | 10′ 8″ i |
| 600S300-97 | 50 | 13′ 10″ | 12′ 7″ | 11′ 0″ | 15′ 7″ | 14′ 2″ i | 12′ 4″ i | 12′ 7″ | 11′ 5″ | 10′ 0″ | 14′ 2″ | 12′ 10″ | 11′ 3″ i |
| 800S162-33 | 33 | 6′ 9″ e | 5′ 1″ e | 3′ 5″ e | 5′ 5″ a | 4′ 1″ a | 2′ 9″ a | 6′ 9″ e | 5′ 1″ e | 3′ 5″ e | 5′ 5″ a | 4′ 1″ a | 2′ 9″ a |
| 800S200-33 | 33 | 6′ 9″ e | 5′ 1″ e | 3′ 5″ e | 5′ 5″ a | 4′ 1″ a | 2′ 9″ a | 6′ 9″ e | 5′ 1″ e | 3′ 5″ e | 5′ 5″ a | 4′ 1″ a | 2′ 9″ a |
| 800S162-43 | 33 | 9′ 10″ e | 8′ 6″ e | 6′ 11″ e | 9′ 3″ a | 7′ 6″ a | 5′ 6″ a | 9′ 10″ e | 8′ 6″ e | 6′ 11″ e | 9′ 3″ a | 7′ 6″ a | 5′ 6″ a |
| 800S200-43 | 33 | 11′ 0″ e | 9′ 7″ e | 7′ 6″ e | 9′ 10″ a | 8′ 0″ a | 5′ 10″ a | 11′ 0″ e | 9′ 7″ e | 7′ 6″ e | 9′ 10″ a | 8′ 0″ a | 5′ 10″ a |
| 800S250-43 | 33 | 11′ 1″ e | 9′ 8″ e | 7′ 6″ e | 9′ 11″ a | 8′ 0″ a | 5′ 10″ a | 11′ 1″ e | 9′ 8″ e | 7′ 6″ e | 9′ 11″ a | 8′ 0″ a | 5′ 10″ a |
| 800S162-54 | 50 | 12′ 6″ e | 11′ 4″ e | 9′ 4″ e | 13′ 3″ i | 11′ 6″ i | 9′ 0″ a | 11′ 4″ | 10′ 4″ e | 9′ 0″ e | 12′ 9″ i | 11′ 6″ i | 9′ 0″ a |
| 800S200-54 | 50 | 13′ 2″ e | 12′ 0″ e | 10′ 4″ e | 14′ 7″ i | 12′ 7″ a | 9′ 6″ a | 12′ 0″ | 10′ 11″ e | 9′ 6″ e | 13′ 6″ i | 12′ 3″ i | 9′ 6″ a |
| 800S250-54 | 50 | 13′ 9″ e | 12′ 6″ e | 10′ 5″ e | 14′ 9″ i | 12′ 8″ a | 9′ 6″ a | 12′ 6″ | 11′ 4″ e | 9′ 11″ e | 14′ 0″ i | 12′ 8″ a | 9′ 6″ a |
| 800S300-54 | 50 | 14′ 4″ e | 13′ 0″ e | 11′ 5″ e | 16′ 1″ i | 13′ 5″ a | 10′ 0″ a | 13′ 0″ e | 11′ 10″ e | 10′ 4″ e | 14′ 8″ i | 13′ 4″ a | 10′ 0″ a |
| 800S162-68 | 50 | 13′ 6″ | 12′ 3″ | 10′ 9″ e | 15′ 2″ i | 13′ 4″ i | 10′ 11″ i | 12′ 3″ | 11′ 2″ | 9′ 9″ e | 13′ 10″ i | 12′ 6″ i | 10′ 11″ i |
| 800S200-68 | 50 | 14′ 2″ | 12′ 11″ | 11′ 3″ e | 15′ 11″ i | 14′ 5″ i | 12′ 6″ i | 12′ 11″ | 11′ 8″ | 10′ 3″ e | 14′ 5″ i | 13′ 2″ i | 11′ 6″ i |
| 800S250-68 | 50 | 14′ 9″ | 13′ 5″ | 11′ 9″ e | 16′ 7″ i | 14′ 10″ i | 12′ 1″ i | 13′ 5″ | 12′ 2″ | 10′ 8″ e | 15′ 1″ i | 13′ 8″ i | 12′ 0″ i |
| 800S300-68 | 50 | 15′ 7″ | 14′ 2″ e | 12′ 4″ e | 17′ 6″ i | 15′ 10″ i | 13′ 0″ a | 14′ 2″ | 12′ 10″ | 11′ 3″ e | 15′ 10″ i | 14′ 5″ i | 12′ 7″ a |
| 800S162-97 | 50 | 15′ 0″ | 13′ 8″ | 11′ 11″ | 16′ 11″ i | 15′ 4″ i | 13′ 2″ i | 13′ 8″ | 12′ 5″ | 10′ 10″ | 15′ 4″ | 13′ 11″ i | 12′ 2″ i |
| 800S200-97 | 50 | 15′ 9″ | 14′ 4″ | 12′ 6″ | 17′ 8″ | 16′ 1″ i | 14′ 1″ i | 14′ 4″ | 13′ 0″ | 11′ 4″ | 16′ 1″ | 14′ 7″ | 12′ 9″ i |
| 800S250-97 | 50 | 16′ 6″ | 15′ 0″ | 13′ 1″ | 18′ 6″ | 16′ 10″ i | 14′ 8″ i | 15′ 0″ | 13′ 7″ | 11′ 11″ | 16′ 10″ | 15′ 3″ i | 13′ 4″ i |
| 800S300-97 | 50 | 17′ 4″ | 15′ 9″ | 13′ 9″ | 19′ 6″ i | 17′ 8″ i | 15′ 5″ i | 15′ 9″ | 14′ 4″ | 12′ 6″ | 17′ 8″ | 16′ 1″ i | 14′ 0″ i |
| 1000S162-43 | 33 | 11′ 1″ e | 8′ 11″ e | 6′ 0″ e | 8′ 10″ a | 7′ 0″ a | 4′ 9″ a | 11′ 1″ e | 8′ 11″ e | 6′ 0″ e | 8′ 10″ a | 7′ 0″ a | 4′ 9″ a |
| 1000S200-43 | 33 | 11′ 9″ e | 8′ 11″ e | 6′ 0″ e | 9′ 0″ a | 7′ 2″ a | 4′ 9″ a | 11′ 9″ e | 8′ 11″ e | 6′ 0″ e | 9′ 0″ a | 7′ 2″ a | 4′ 9″ a |
| 1000S250-43 | 33 | 11′ 11″ e | 8′ 11″ e | 6′ 0″ e | 9′ 3″ a | 7′ 2″ a | 4′ 9″ a | 11′ 11″ e | 8′ 11″ e | 6′ 0″ e | 9′ 3″ a | 7′ 2″ a | 4′ 9″ a |
| 1000S162-54 | 50 | 14′ 10″ e | 13′ 0″ e | 10′ 7″ e | 14′ 4″ i | 11′ 8″ i | 8′ 7″ a | 13′ 6″ e | 12′ 3″ e | 10′ 7″ e | 14′ 4″ i | 11′ 8″ i | 8′ 7″ a |
| 1000S200-54 | 50 | 15′ 7″ e | 13′ 6″ e | 11′ 0″ e | 14′ 8″ i | 11′ 11″ i | 8′ 9″ a | 14′ 2″ e | 12′ 10″ e | 11′ 0″ e | 14′ 8″ i | 11′ 11″ i | 8′ 9″ a |
| 1000S250-54 | 50 | 16′ 4″ e | 14′ 2″ e | 11′ 7″ e | 15′ 1″ i | 12′ 2″ a | 8′ 11″ a | 14′ 11″ e | 13′ 7″ e | 11′ 7″ e | 15′ 1″ i | 12′ 2″ a | 8′ 11″ a |
| 1000S300-54 | 50 | 17′ 1″ e | 15′ 7″ e | 11′ 10″ e | 15′ 10″ i | 12′ 9″ a | 9′ 3″ a | 15′ 7″ e | 14′ 2″ e | 11′ 10″ e | 15′ 10″ i | 12′ 9″ a | 9′ 3″ a |
| 1000S162-68 | 50 | 16′ 1″ | 14′ 8″ e | 12′ 5″ e | 17′ 6″ i | 15′ 2″ i | 12′ 5″ a | 14′ 8″ | 13′ 4″ | 11′ 7″ e | 16′ 5″ i | 14′ 11″ i | 12′ 5″ a |
| 1000S200-68 | 50 | 16′ 10″ | 15′ 4″ e | 13′ 2″ e | 18′ 7″ i | 16′ 1″ i | 13′ 2″ a | 15′ 4″ | 13′ 11″ e | 12′ 2″ e | 17′ 2″ i | 15′ 7″ i | 13′ 2″ a |
| 1000S250-68 | 50 | 17′ 8″ | 16′ 0″ e | 14′ 0″ e | 19′ 10″ i | 17′ 2″ i | 13′ 10″ a | 16′ 0″ | 14′ 7″ e | 12′ 9″ e | 18′ 0″ i | 16′ 4″ i | 13′ 10″ a |
| 1000S300-68 | 50 | 18′ 6″ e | 16′ 10″ e | 14′ 8″ e | 20′ 9″ i | 18′ 4″ a | 14′ 4″ a | 16′ 10″ | 15′ 3″ e | 13′ 4″ e | 18′ 11″ i | 17′ 2″ i | 14′ 4″ a |
| 1000S162-97 | 50 | 18′ 1″ | 16′ 5″ | 14′ 4″ | 20′ 4″ i | 18′ 6″ i | 15′ 3″ i | 16′ 5″ | 14′ 11″ | 13′ 1″ | 18′ 6″ i | 16′ 9″ i | 14′ 8″ i |
| 1000S200-97 | 50 | 18′ 11″ | 17′ 2″ | 15′ 0″ | 21′ 3″ i | 19′ 3″ i | 16′ 4″ i | 17′ 2″ | 15′ 7″ | 13′ 8″ | 19′ 3″ i | 17′ 6″ i | 15′ 4″ i |
| 1000S250-97 | 50 | 19′ 8″ | 17′ 11″ | 15′ 8″ | 22′ 1″ i | 20′ 1″ i | 17′ 7″ i | 17′ 11″ | 16′ 3″ | 14′ 2″ | 20′ 1″ | 18′ 3″ i | 15′ 11″ i |
| 1000S300-97 | 50 | 20′ 8″ | 18′ 9″ | 16′ 5″ | 23′ 2″ i | 21′ 1″ i | 18′ 5″ i | 18′ 9″ | 17′ 1″ | 14′ 11″ | 21′ 1″ i | 19′ 2″ i | 16′ 9″ i |
| 1200S162-54 | 50 | 16′ 6″ e | 14′ 4″ e | 9′ 10″ e | 13′ 10″ a | 11′ 1″ a | 7′ 10″ a | 15′ 6″ e | 14′ 1″ e | 9′ 10″ e | 13′ 10″ a | 11′ 1″ a | 7′ 10″ a |
| 1200S200-54 | 50 | 17′ 2″ e | 14′ 9″ e | 9′ 10″ e | 14′ 1″ a | 11′ 3″ a | 7′ 10″ a | 16′ 3″ e | 14′ 9″ e | 9′ 10″ e | 14′ 1″ a | 11′ 3″ a | 7′ 10″ a |
| 1200S250-54 | 50 | 17′ 6″ e | 14′ 9″ e | 9′ 10″ e | 14′ 3″ a | 11′ 4″ a | 7′ 10″ a | 16′ 11″ e | 14′ 9″ e | 9′ 10″ e | 14′ 3″ a | 11′ 4″ a | 7′ 10″ a |
| 1200S300-54 | 50 | 19′ 8″ e | 14′ 9″ e | 9′ 10″ e | 15′ 0″ a | 11′ 10″ a | 7′ 10″ a | 18′ 0″ e | 14′ 9″ e | 9′ 10″ e | 15′ 0″ a | 11′ 10″ a | 7′ 10″ a |
| 1200S162-68 | 50 | 18′ 7″ e | 16′ 10″ e | 13′ 9″ e | 19′ 5″ i | 16′ 9″ i | 12′ 7″ a | 16′ 11″ | 15′ 4″ e | 13′ 5″ e | 19′ 0″ i | 16′ 9″ i | 12′ 7″ a |
| 1200S200-68 | 50 | 19′ 5″ e | 17′ 7″ e | 14′ 6″ e | 20′ 7″ i | 17′ 4″ i | 13′ 0″ a | 17′ 7″ | 16′ 0″ e | 14′ 0″ e | 19′ 9″ i | 17′ 4″ i | 13′ 0″ a |
| 1200S250-68 | 50 | 20′ 2″ e | 17′ 11″ e | 14′ 8″ e | 20′ 8″ i | 17′ 5″ i | 13′ 1″ a | 18′ 4″ e | 16′ 8″ e | 14′ 7″ e | 20′ 7″ i | 17′ 5″ i | 13′ 1″ a |
| 1200S300-68 | 50 | 21′ 5″ e | 19′ 5″ e | 16′ 4″ e | 22′ 9″ i | 18′ 7″ a | 13′ 10″ a | 19′ 5″ e | 17′ 8″ e | 15′ 5″ e | 21′ 10″ i | 18′ 7″ a | 13′ 10″ a |
| 1200S162-97 | 50 | 21′ 1″ | 19′ 2″ | 16′ 9″ | 23′ 8″ i | 20′ 11″ i | 17′ 1″ i | 19′ 2″ | 17′ 5″ | 15′ 2″ | 21′ 6″ i | 19′ 6″ i | 17′ 1″ i |
| 1200S200-97 | 50 | 21′ 11″ | 19′ 11″ | 17′ 5″ e | 24′ 7″ i | 22′ 4″ i | 18′ 3″ i | 19′ 11″ | 18′ 1″ | 15′ 10″ | 22′ 4″ i | 20′ 4″ i | 17′ 9″ i |
| 1200S250-97 | 50 | 22′ 9″ | 20′ 8″ | 18′ 1″ e | 25′ 7″ i | 23′ 3″ i | 18′ 11″ i | 20′ 8″ | 18′ 10″ | 16′ 5″ | 23′ 3″ i | 21′ 1″ i | 18′ 5″ i |
| 1200S300-97 | 50 | 23′ 11″ | 21′ 9″ | 19′ 0″ e | 26′ 10″ i | 24′ 4″ i | 21′ 1″ i | 21′ 9″ | 19′ 9″ | 17′ 3″ e | 24′ 4″ i | 22′ 2″ i | 19′ 4″ i |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

CEMCO
Steel Framing and Metal Lath

# Allowable Floor Joist Spans 30 psf Dead Load and 100 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 7′ 8″ e | 6′ 7″ e | 4′ 11″ e | 6′ 8″ a | 5′ 4″ a | 3′ 11″ a | 7′ 8″ e | 6′ 7″ e | 4′ 11″ e | 6′ 8″ a | 5′ 4″ a | 3′ 11″ a |
| 600S200-33 | 33 | 7′ 11″ e | 6′ 10″ e | 4′ 11″ e | 6′ 9″ a | 5′ 5″ a | 3′ 11″ a | 7′ 11″ e | 6′ 10″ e | 4′ 11″ e | 6′ 9″ a | 5′ 5″ a | 3′ 11″ a |
| 600S162-43 | 33 | 9′ 3″ e | 8′ 0″ e | 6′ 6″ e | 9′ 3″ a | 8′ 0″ a | 6′ 4″ a | 9′ 1″ e | 8′ 0″ e | 6′ 6″ e | 9′ 3″ a | 8′ 0″ a | 6′ 4″ a |
| 600S200-43 | 33 | 9′ 5″ e | 8′ 2″ e | 6′ 8″ e | 9′ 5″ a | 8′ 2″ a | 6′ 5″ a | 9′ 5″ e | 8′ 2″ e | 6′ 8″ e | 9′ 5″ a | 8′ 2″ a | 6′ 5″ a |
| 600S250-43 | 33 | 9′ 8″ e | 8′ 4″ e | 6′ 10″ e | 9′ 8″ a | 8′ 4″ a | 6′ 6″ a | 9′ 8″ e | 8′ 4″ e | 6′ 10″ e | 9′ 8″ a | 8′ 4″ a | 6′ 6″ a |
| 600S162-54 | 50 | 10′ 9″ | 9′ 9″ | 8′ 7″ e | 12′ 1″ i | 10′ 10″ i | 8′ 10″ i | 9′ 9″ | 8′ 11″ | 7′ 9″ e | 11′ 0″ i | 10′ 0″ i | 8′ 9″ i |
| 600S200-54 | 50 | 11′ 4″ | 10′ 3″ | 8′ 10″ e | 12′ 6″ i | 10′ 10″ i | 8′ 10″ i | 10′ 3″ | 9′ 4″ | 8′ 2″ e | 11′ 7″ i | 10′ 6″ i | 8′ 10″ i |
| 600S250-54 | 50 | 11′ 10″ | 10′ 9″ e | 9′ 1″ e | 12′ 10″ i | 11′ 1″ i | 9′ 1″ i | 10′ 9″ | 9′ 9″ | 8′ 6″ e | 12′ 1″ i | 10′ 11″ i | 9′ 1″ i |
| 600S300-54 | 50 | 12′ 4″ | 11′ 3″ e | 9′ 10″ e | 13′ 11″ i | 12′ 2″ i | 9′ 11″ a | 11′ 3″ | 10′ 3″ | 8′ 11″ e | 12′ 7″ i | 11′ 6″ i | 9′ 11″ a |
| 600S162-68 | 50 | 11′ 7″ | 10′ 6″ | 9′ 2″ | 13′ 0″ i | 11′ 9″ i | 10′ 1″ i | 10′ 6″ | 9′ 6″ | 8′ 4″ | 11′ 9″ i | 10′ 8″ i | 9′ 4″ i |
| 600S200-68 | 50 | 12′ 2″ | 11′ 0″ | 9′ 8″ | 13′ 8″ i | 12′ 5″ i | 10′ 7″ i | 11′ 0″ | 10′ 0″ | 8′ 9″ | 12′ 5″ i | 11′ 3″ i | 9′ 10″ i |
| 600S250-68 | 50 | 12′ 9″ | 11′ 7″ | 10′ 1″ | 14′ 4″ i | 12′ 8″ i | 10′ 4″ i | 11′ 7″ | 10′ 6″ | 9′ 2″ | 13′ 0″ i | 11′ 10″ i | 10′ 4″ i |
| 600S300-68 | 50 | 13′ 5″ | 12′ 2″ | 10′ 8″ e | 15′ 1″ i | 13′ 7″ i | 11′ 1″ i | 12′ 2″ | 11′ 1″ | 9′ 8″ | 13′ 8″ i | 12′ 5″ i | 10′ 10″ i |
| 600S162-97 | 50 | 12′ 10″ | 11′ 8″ | 10′ 2″ | 14′ 4″ | 13′ 1″ | 11′ 5″ i | 11′ 8″ | 10′ 7″ | 9′ 3″ | 13′ 1″ | 11′ 10″ | 10′ 4″ i |
| 600S200-97 | 50 | 13′ 6″ | 12′ 3″ | 10′ 8″ | 15′ 2″ | 13′ 9″ | 12′ 0″ i | 12′ 3″ | 11′ 2″ | 9′ 9″ | 13′ 9″ | 12′ 6″ | 10′ 11″ i |
| 600S250-97 | 50 | 14′ 2″ | 12′ 10″ | 11′ 3″ | 15′ 11″ | 14′ 5″ i | 12′ 7″ i | 12′ 10″ | 11′ 8″ | 10′ 3″ | 14′ 5″ | 13′ 1″ | 11′ 6″ i |
| 600S300-97 | 50 | 14′ 11″ | 13′ 7″ | 11′ 10″ | 16′ 9″ | 15′ 3″ i | 13′ 4″ i | 13′ 7″ | 12′ 4″ | 10′ 9″ | 15′ 3″ | 13′ 10″ | 12′ 1″ i |
| 800S162-33 | 33 | 7′ 4″ e | 5′ 6″ e | 3′ 8″ e | 5′ 10″ a | 4′ 5″ a | 2′ 11″ a | 7′ 4″ e | 5′ 6″ e | 3′ 8″ e | 5′ 10″ a | 4′ 5″ a | 2′ 11″ a |
| 800S200-33 | 33 | 7′ 4″ e | 5′ 6″ e | 3′ 8″ e | 5′ 10″ a | 4′ 5″ a | 2′ 11″ a | 7′ 4″ e | 5′ 6″ e | 3′ 8″ e | 5′ 10″ a | 4′ 5″ a | 2′ 11″ a |
| 800S162-43 | 33 | 10′ 2″ e | 8′ 10″ e | 7′ 2″ e | 9′ 9″ a | 7′ 11″ a | 5′ 10″ a | 10′ 2″ e | 8′ 10″ e | 7′ 2″ e | 9′ 9″ a | 7′ 11″ a | 5′ 10″ a |
| 800S200-43 | 33 | 11′ 5″ e | 9′ 11″ e | 8′ 1″ e | 10′ 5″ a | 8′ 5″ a | 6′ 2″ a | 11′ 5″ e | 9′ 11″ e | 8′ 1″ e | 10′ 5″ a | 8′ 5″ a | 6′ 2″ a |
| 800S250-43 | 33 | 11′ 6″ e | 10′ 0″ e | 8′ 1″ e | 10′ 5″ a | 8′ 5″ a | 6′ 2″ a | 11′ 6″ e | 10′ 0″ e | 8′ 1″ e | 10′ 5″ a | 8′ 5″ a | 6′ 2″ a |
| 800S162-54 | 50 | 13′ 6″ e | 11′ 11″ e | 9′ 9″ e | 13′ 9″ i | 11′ 11″ i | 9′ 5″ a | 12′ 3″ | 11′ 1″ e | 9′ 9″ e | 13′ 9″ i | 11′ 11″ i | 9′ 5″ a |
| 800S200-54 | 50 | 14′ 3″ e | 12′ 11″ e | 10′ 9″ e | 15′ 2″ i | 13′ 2″ i | 10′ 0″ a | 12′ 11″ | 11′ 9″ e | 10′ 3″ e | 14′ 6″ i | 13′ 2″ i | 10′ 0″ a |
| 800S250-54 | 50 | 14′ 9″ e | 13′ 3″ e | 10′ 10″ e | 15′ 4″ i | 13′ 3″ i | 10′ 1″ a | 13′ 5″ e | 12′ 2″ e | 10′ 8″ e | 15′ 1″ i | 13′ 3″ i | 10′ 1″ a |
| 800S300-54 | 50 | 15′ 5″ e | 14′ 0″ e | 11′ 10″ e | 16′ 9″ i | 14′ 1″ a | 10′ 7″ a | 14′ 0″ e | 12′ 9″ e | 11′ 2″ e | 15′ 9″ i | 14′ 1″ a | 10′ 7″ a |
| 800S162-68 | 50 | 14′ 7″ | 13′ 3″ | 11′ 4″ e | 16′ 0″ i | 13′ 10″ i | 11′ 4″ i | 13′ 3″ | 12′ 0″ | 10′ 6″ e | 14′ 10″ i | 13′ 6″ i | 11′ 4″ i |
| 800S200-68 | 50 | 15′ 3″ | 13′ 10″ | 12′ 1″ e | 17′ 2″ i | 15′ 7″ i | 12′ 11″ i | 13′ 10″ | 12′ 7″ | 11′ 0″ e | 15′ 7″ i | 14′ 2″ i | 12′ 4″ i |
| 800S250-68 | 50 | 15′ 11″ | 14′ 6″ | 12′ 7″ e | 17′ 9″ i | 15′ 5″ i | 12′ 7″ i | 14′ 6″ | 13′ 2″ | 11′ 6″ e | 16′ 3″ i | 14′ 9″ i | 12′ 7″ i |
| 800S300-68 | 50 | 16′ 9″ | 15′ 3″ e | 13′ 4″ e | 18′ 10″ i | 16′ 6″ i | 13′ 6″ i | 15′ 3″ | 13′ 10″ | 12′ 1″ e | 17′ 1″ i | 15′ 6″ i | 13′ 6″ i |
| 800S162-97 | 50 | 16′ 2″ | 14′ 9″ | 12′ 10″ | 18′ 2″ i | 16′ 6″ i | 13′ 8″ i | 14′ 9″ | 13′ 4″ | 11′ 8″ | 16′ 6″ | 15′ 0″ i | 13′ 1″ i |
| 800S200-97 | 50 | 17′ 0″ | 15′ 5″ | 13′ 6″ | 19′ 1″ | 17′ 4″ i | 15′ 2″ i | 15′ 5″ | 14′ 0″ | 12′ 3″ | 17′ 4″ | 15′ 9″ i | 13′ 9″ i |
| 800S250-97 | 50 | 17′ 9″ | 16′ 1″ | 14′ 1″ | 19′ 11″ i | 18′ 1″ i | 15′ 10″ i | 16′ 1″ | 14′ 8″ | 12′ 10″ | 18′ 1″ | 16′ 5″ i | 14′ 4″ i |
| 800S300-97 | 50 | 18′ 8″ | 17′ 0″ | 14′ 10″ | 21′ 0″ i | 19′ 1″ i | 16′ 7″ i | 17′ 0″ | 15′ 5″ | 13′ 6″ | 19′ 1″ | 17′ 4″ i | 15′ 1″ i |
| 1000S162-43 | 33 | 11′ 6″ e | 9′ 8″ e | 6′ 5″ e | 9′ 4″ a | 7′ 5″ a | 5′ 2″ a | 11′ 6″ e | 9′ 8″ e | 6′ 5″ e | 9′ 4″ a | 7′ 5″ a | 5′ 2″ a |
| 1000S200-43 | 33 | 12′ 2″ e | 9′ 8″ e | 6′ 5″ e | 9′ 7″ a | 7′ 7″ a | 5′ 2″ a | 12′ 2″ e | 9′ 8″ e | 6′ 5″ e | 9′ 7″ a | 7′ 7″ a | 5′ 2″ a |
| 1000S250-43 | 33 | 12′ 10″ e | 9′ 8″ e | 6′ 5″ e | 9′ 9″ a | 7′ 9″ a | 5′ 2″ a | 12′ 10″ e | 9′ 8″ e | 6′ 5″ e | 9′ 9″ a | 7′ 9″ a | 5′ 2″ a |
| 1000S162-54 | 50 | 15′ 6″ e | 13′ 5″ e | 11′ 0″ e | 15′ 1″ i | 12′ 3″ i | 9′ 1″ a | 14′ 7″ e | 13′ 3″ e | 11′ 0″ e | 15′ 1″ i | 12′ 3″ i | 9′ 1″ a |
| 1000S200-54 | 50 | 16′ 2″ e | 14′ 0″ e | 11′ 5″ e | 15′ 5″ i | 12′ 7″ i | 9′ 3″ a | 15′ 3″ e | 13′ 10″ e | 11′ 5″ e | 15′ 5″ i | 12′ 7″ i | 9′ 3″ a |
| 1000S250-54 | 50 | 17′ 0″ e | 14′ 9″ e | 12′ 0″ e | 15′ 10″ i | 12′ 11″ i | 9′ 6″ a | 16′ 1″ e | 14′ 7″ e | 12′ 0″ e | 15′ 10″ i | 12′ 11″ i | 9′ 6″ a |
| 1000S300-54 | 50 | 18′ 5″ e | 16′ 2″ e | 12′ 9″ e | 16′ 9″ i | 13′ 6″ a | 9′ 10″ a | 16′ 9″ e | 15′ 3″ e | 12′ 9″ e | 16′ 9″ i | 13′ 6″ a | 9′ 10″ a |
| 1000S162-68 | 50 | 17′ 4″ | 15′ 9″ e | 12′ 10″ e | 18′ 2″ i | 15′ 9″ i | 12′ 10″ i | 15′ 9″ | 14′ 4″ | 12′ 6″ e | 17′ 9″ i | 15′ 9″ i | 12′ 10″ i |
| 1000S200-68 | 50 | 18′ 2″ | 16′ 6″ e | 13′ 8″ e | 19′ 3″ i | 16′ 8″ i | 13′ 8″ a | 16′ 6″ | 15′ 0″ e | 13′ 1″ e | 18′ 6″ i | 16′ 8″ i | 13′ 8″ a |
| 1000S250-68 | 50 | 19′ 0″ | 17′ 3″ e | 14′ 7″ e | 20′ 7″ i | 17′ 10″ i | 14′ 6″ a | 17′ 3″ | 15′ 8″ e | 13′ 9″ e | 19′ 5″ i | 17′ 8″ i | 14′ 6″ a |
| 1000S300-68 | 50 | 19′ 11″ e | 18′ 1″ e | 15′ 7″ e | 22′ 0″ i | 19′ 1″ i | 15′ 1″ a | 18′ 1″ | 16′ 6″ e | 14′ 5″ e | 20′ 4″ i | 18′ 6″ i | 15′ 1″ a |
| 1000S162-97 | 50 | 19′ 6″ | 17′ 9″ | 15′ 6″ | 21′ 11″ i | 19′ 5″ i | 15′ 10″ i | 17′ 9″ | 16′ 1″ | 14′ 1″ | 19′ 11″ i | 18′ 1″ i | 15′ 9″ i |
| 1000S200-97 | 50 | 20′ 4″ | 18′ 6″ | 16′ 2″ | 22′ 10″ i | 20′ 9″ i | 16′ 11″ i | 18′ 6″ | 16′ 10″ | 14′ 8″ | 20′ 9″ i | 18′ 11″ i | 16′ 6″ i |
| 1000S250-97 | 50 | 21′ 2″ | 19′ 3″ | 16′ 10″ | 23′ 10″ i | 21′ 8″ i | 18′ 11″ i | 19′ 3″ | 17′ 6″ | 15′ 4″ | 21′ 8″ i | 19′ 8″ i | 17′ 2″ i |
| 1000S300-97 | 50 | 22′ 3″ | 20′ 3″ | 17′ 8″ | 25′ 0″ i | 22′ 8″ i | 19′ 3″ i | 20′ 3″ | 18′ 4″ | 16′ 1″ | 22′ 8″ i | 20′ 8″ i | 18′ 0″ i |
| 1200S162-54 | 50 | 17′ 2″ e | 14′ 10″ e | 10′ 7″ e | 14′ 8″ a | 11′ 9″ a | 8′ 6″ a | 16′ 9″ e | 14′ 10″ e | 10′ 7″ e | 14′ 8″ a | 11′ 9″ a | 8′ 6″ a |
| 1200S200-54 | 50 | 17′ 10″ e | 15′ 5″ e | 10′ 7″ e | 14′ 11″ a | 12′ 0″ a | 8′ 6″ a | 17′ 6″ e | 15′ 5″ e | 10′ 7″ e | 14′ 11″ a | 12′ 0″ a | 8′ 6″ a |
| 1200S250-54 | 50 | 18′ 2″ e | 15′ 9″ e | 10′ 7″ e | 15′ 1″ a | 12′ 1″ a | 8′ 6″ a | 18′ 2″ e | 15′ 9″ e | 10′ 7″ e | 15′ 1″ a | 12′ 1″ a | 8′ 6″ a |
| 1200S300-54 | 50 | 20′ 4″ e | 15′ 11″ e | 10′ 7″ e | 15′ 10″ a | 12′ 7″ a | 8′ 6″ a | 19′ 5″ e | 15′ 11″ e | 10′ 7″ e | 15′ 10″ a | 12′ 7″ a | 8′ 6″ a |
| 1200S162-68 | 50 | 20′ 0″ e | 17′ 5″ e | 14′ 3″ e | 20′ 2″ i | 17′ 5″ i | 13′ 3″ a | 18′ 2″ | 16′ 6″ e | 14′ 3″ e | 20′ 2″ i | 17′ 5″ i | 13′ 3″ a |
| 1200S200-68 | 50 | 20′ 11″ e | 18′ 6″ e | 15′ 1″ e | 21′ 4″ i | 18′ 3″ i | 13′ 9″ a | 19′ 0″ | 17′ 3″ e | 15′ 1″ e | 21′ 4″ i | 18′ 3″ i | 13′ 9″ a |
| 1200S250-68 | 50 | 21′ 6″ e | 18′ 7″ e | 15′ 2″ e | 21′ 6″ i | 18′ 4″ i | 13′ 9″ a | 19′ 9″ e | 18′ 0″ e | 15′ 2″ e | 21′ 6″ i | 18′ 4″ i | 13′ 9″ a |
| 1200S300-68 | 50 | 23′ 1″ e | 20′ 9″ e | 16′ 11″ e | 23′ 11″ i | 19′ 7″ a | 14′ 7″ a | 20′ 11″ e | 19′ 0″ e | 16′ 7″ e | 23′ 6″ i | 19′ 7″ a | 14′ 7″ a |
| 1200S162-97 | 50 | 22′ 8″ | 20′ 7″ | 17′ 9″ | 25′ 1″ i | 21′ 8″ i | 17′ 9″ i | 20′ 7″ | 18′ 9″ | 16′ 4″ | 23′ 2″ i | 21′ 0″ i | 17′ 9″ i |
| 1200S200-97 | 50 | 23′ 8″ | 21′ 6″ | 18′ 9″ e | 26′ 6″ i | 23′ 2″ i | 18′ 11″ i | 21′ 6″ | 19′ 6″ | 17′ 0″ | 24′ 1″ i | 21′ 11″ i | 18′ 11″ i |
| 1200S250-97 | 50 | 24′ 7″ | 22′ 4″ | 19′ 6″ e | 27′ 7″ i | 24′ 1″ i | 19′ 8″ i | 22′ 4″ | 20′ 3″ | 17′ 8″ | 25′ 0″ i | 22′ 9″ i | 19′ 8″ i |
| 1200S300-97 | 50 | 25′ 9″ | 23′ 5″ | 20′ 5″ e | 28′ 11″ i | 26′ 3″ i | 21′ 11″ i | 23′ 5″ | 21′ 3″ | 18′ 7″ e | 26′ 3″ i | 23′ 10″ i | 20′ 10″ i |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

CEMCO
Steel Framing and Metal Lath

# Allowable Floor Joist Spans 40 psf Dead Load and 125 psf Live Load

| Section | Fy (Ksi) | L/360 Live Load Deflection | | | | | | L/480 Live Load Deflection | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | | Single Span Spacing (in) | | | Two Equal Spans Spacing (in) | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 6′ 9″ e | 5′ 10″ e | 3′ 10″ e | 5′ 7″ a | 4′ 5″ a | 3′ 1″ a | 6′ 9″ e | 5′ 10″ e | 3′ 10″ e | 5′ 7″ a | 4′ 5″ a | 3′ 1″ a |
| 600S200-33 | 33 | 7′ 1″ e | 5′ 10″ e | 3′ 10″ e | 5′ 8″ a | 4′ 6″ a | 3′ 1″ a | 7′ 1″ e | 5′ 10″ e | 3′ 10″ e | 5′ 8″ a | 4′ 6″ a | 3′ 1″ a |
| 600S162-43 | 33 | 8′ 3″ e | 7′ 1″ e | 5′ 10″ e | 8′ 3″ a | 7′ 1″ a | 5′ 5″ a | 8′ 3″ e | 7′ 1″ e | 5′ 10″ e | 8′ 3″ a | 7′ 1″ a | 5′ 5″ a |
| 600S200-43 | 33 | 8′ 4″ e | 7′ 3″ e | 5′ 11″ e | 8′ 4″ a | 7′ 3″ a | 5′ 5″ a | 8′ 4″ e | 7′ 3″ e | 5′ 11″ e | 8′ 4″ a | 7′ 3″ a | 5′ 5″ a |
| 600S250-43 | 33 | 8′ 7″ e | 7′ 5″ e | 6′ 1″ e | 8′ 7″ a | 7′ 4″ a | 5′ 6″ a | 8′ 7″ e | 7′ 5″ e | 6′ 1″ e | 8′ 7″ a | 7′ 4″ a | 5′ 6″ a |
| 600S162-54 | 50 | 10′ 0″ | 9′ 1″ e | 7′ 10″ e | 11′ 1″ i | 9′ 7″ i | 7′ 10″ a | 9′ 1″ | 8′ 3″ | 7′ 3″ e | 10′ 2″ i | 9′ 3″ i | 7′ 10″ a |
| 600S200-54 | 50 | 10′ 6″ | 9′ 7″ e | 7′ 10″ e | 11′ 1″ i | 9′ 7″ i | 7′ 10″ a | 9′ 7″ | 8′ 8″ e | 7′ 7″ e | 10′ 9″ i | 9′ 7″ i | 7′ 10″ a |
| 600S250-54 | 50 | 11′ 0″ | 9′ 10″ e | 8′ 0″ e | 11′ 4″ i | 9′ 10″ i | 8′ 0″ a | 9′ 11″ | 9′ 1″ e | 7′ 11″ e | 11′ 2″ i | 9′ 10″ i | 8′ 0″ a |
| 600S300-54 | 50 | 11′ 6″ e | 10′ 5″ e | 8′ 9″ e | 12′ 5″ i | 10′ 9″ i | 8′ 9″ a | 10′ 5″ | 9′ 6″ e | 8′ 3″ e | 11′ 9″ i | 10′ 8″ i | 8′ 9″ a |
| 600S162-68 | 50 | 10′ 9″ | 9′ 9″ | 8′ 6″ e | 12′ 0″ i | 10′ 11″ i | 8′ 11″ i | 9′ 9″ | 8′ 10″ | 7′ 9″ | 10′ 11″ i | 9′ 11″ i | 8′ 8″ i |
| 600S200-68 | 50 | 11′ 3″ | 10′ 3″ | 8′ 11″ e | 12′ 8″ i | 11′ 6″ i | 9′ 5″ i | 10′ 3″ | 9′ 4″ | 8′ 2″ | 11′ 6″ i | 10′ 5″ i | 9′ 2″ i |
| 600S250-68 | 50 | 11′ 10″ | 10′ 9″ | 9′ 2″ e | 12′ 11″ i | 11′ 3″ i | 9′ 2″ i | 10′ 9″ | 9′ 9″ | 8′ 6″ e | 12′ 1″ i | 10′ 11″ i | 9′ 2″ i |
| 600S300-68 | 50 | 12′ 6″ | 11′ 4″ | 9′ 10″ e | 13′ 11″ i | 12′ 1″ i | 9′ 10″ i | 11′ 4″ | 10′ 3″ | 9′ 0″ e | 12′ 9″ i | 11′ 7″ i | 9′ 10″ i |
| 600S162-97 | 50 | 11′ 11″ | 10′ 10″ | 9′ 5″ | 13′ 4″ | 12′ 1″ i | 10′ 7″ i | 10′ 10″ | 9′ 10″ | 8′ 7″ | 12′ 1″ | 11′ 0″ | 9′ 7″ i |
| 600S200-97 | 50 | 12′ 6″ | 11′ 4″ | 9′ 11″ | 14′ 1″ | 12′ 9″ i | 11′ 2″ i | 11′ 4″ | 10′ 4″ | 9′ 0″ | 12′ 9″ | 11′ 7″ | 10′ 2″ i |
| 600S250-97 | 50 | 13′ 2″ | 11′ 11″ | 10′ 5″ | 14′ 9″ i | 13′ 5″ i | 11′ 9″ i | 11′ 11″ | 10′ 10″ | 9′ 6″ | 13′ 5″ | 12′ 2″ i | 10′ 8″ i |
| 600S300-97 | 50 | 13′ 10″ | 12′ 7″ | 11′ 0″ | 15′ 7″ i | 14′ 2″ i | 12′ 2″ i | 12′ 7″ | 11′ 5″ | 10′ 0″ | 14′ 2″ | 12′ 10″ i | 11′ 3″ i |
| 800S162-33 | 33 | 5′ 9″ e | 4′ 4″ e | 2′ 10″ e | 4′ 7″ a | 3′ 5″ a | 2′ 4″ a | 5′ 9″ e | 4′ 4″ e | 2′ 10″ e | 4′ 7″ a | 3′ 5″ a | 2′ 4″ a |
| 800S200-33 | 33 | 5′ 9″ e | 4′ 4″ e | 2′ 10″ e | 4′ 7″ a | 3′ 5″ a | 2′ 4″ a | 5′ 9″ e | 4′ 4″ e | 2′ 10″ e | 4′ 7″ a | 3′ 5″ a | 2′ 4″ a |
| 800S162-43 | 33 | 9′ 0″ e | 7′ 10″ e | 6′ 4″ e | 8′ 2″ a | 6′ 8″ a | 4′ 10″ a | 9′ 0″ e | 7′ 10″ e | 6′ 4″ e | 8′ 2″ a | 6′ 8″ a | 4′ 10″ a |
| 800S200-43 | 33 | 10′ 2″ e | 8′ 10″ e | 6′ 4″ e | 8′ 9″ a | 7′ 0″ a | 5′ 1″ a | 10′ 2″ e | 8′ 10″ e | 6′ 4″ e | 8′ 9″ a | 7′ 0″ a | 5′ 1″ a |
| 800S250-43 | 33 | 10′ 3″ e | 8′ 10″ e | 6′ 4″ e | 8′ 9″ a | 7′ 1″ a | 5′ 1″ a | 10′ 3″ e | 8′ 10″ e | 6′ 4″ e | 8′ 9″ a | 7′ 1″ a | 5′ 1″ a |
| 800S162-54 | 50 | 12′ 2″ e | 10′ 7″ e | 8′ 7″ e | 12′ 2″ i | 10′ 7″ i | 8′ 0″ a | 11′ 4″ e | 10′ 4″ e | 8′ 7″ e | 12′ 2″ i | 10′ 7″ i | 8′ 0″ a |
| 800S200-54 | 50 | 13′ 2″ e | 11′ 8″ e | 9′ 6″ e | 13′ 6″ i | 11′ 3″ a | 8′ 5″ a | 12′ 0″ e | 10′ 11″ e | 9′ 6″ e | 13′ 6″ i | 11′ 3″ a | 8′ 5″ a |
| 800S250-54 | 50 | 13′ 7″ e | 11′ 9″ e | 9′ 7″ e | 13′ 7″ i | 11′ 4″ a | 8′ 6″ a | 12′ 6″ e | 11′ 4″ e | 9′ 7″ e | 13′ 7″ i | 11′ 4″ a | 8′ 6″ a |
| 800S300-54 | 50 | 14′ 4″ e | 12′ 10″ e | 10′ 6″ e | 14′ 7″ a | 11′ 11″ a | 8′ 10″ a | 13′ 0″ e | 11′ 10″ e | 10′ 4″ e | 14′ 7″ a | 11′ 11″ a | 8′ 10″ a |
| 800S162-68 | 50 | 13′ 6″ | 12′ 3″ e | 10′ 0″ e | 14′ 2″ i | 12′ 3″ i | 10′ 0″ i | 12′ 3″ | 11′ 2″ | 9′ 9″ e | 13′ 10″ i | 12′ 3″ i | 10′ 0″ i |
| 800S200-68 | 50 | 14′ 2″ | 12′ 11″ e | 11′ 3″ e | 15′ 11″ i | 14′ 1″ i | 11′ 6″ a | 12′ 11″ | 11′ 8″ | 10′ 3″ e | 14′ 5″ i | 13′ 2″ i | 11′ 6″ a |
| 800S250-68 | 50 | 14′ 9″ | 13′ 5″ e | 11′ 2″ e | 15′ 9″ i | 13′ 8″ i | 11′ 2″ a | 13′ 5″ | 12′ 2″ e | 10′ 8″ e | 15′ 1″ i | 13′ 8″ i | 11′ 2″ a |
| 800S300-68 | 50 | 15′ 7″ | 14′ 2″ e | 12′ 0″ e | 16′ 11″ i | 14′ 8″ i | 12′ 0″ a | 14′ 2″ | 12′ 10″ e | 11′ 3″ e | 15′ 10″ i | 14′ 5″ i | 12′ 0″ a |
| 800S162-97 | 50 | 15′ 0″ | 13′ 8″ | 11′ 11″ | 16′ 11″ i | 14′ 10″ i | 12′ 1″ i | 13′ 8″ | 12′ 5″ | 10′ 10″ | 15′ 4″ i | 13′ 11″ i | 12′ 1″ i |
| 800S200-97 | 50 | 15′ 9″ | 14′ 4″ | 12′ 6″ | 17′ 8″ i | 16′ 1″ i | 14′ 0″ i | 14′ 4″ | 13′ 0″ | 11′ 4″ | 16′ 1″ | 14′ 7″ i | 12′ 9″ i |
| 800S250-97 | 50 | 16′ 6″ | 15′ 0″ | 13′ 1″ | 18′ 6″ i | 16′ 10″ i | 14′ 5″ i | 15′ 0″ | 13′ 7″ | 11′ 11″ | 16′ 10″ i | 15′ 3″ i | 13′ 4″ i |
| 800S300-97 | 50 | 17′ 4″ | 15′ 9″ | 13′ 9″ | 19′ 6″ i | 17′ 8″ i | 14′ 8″ i | 15′ 9″ | 14′ 4″ | 12′ 6″ | 17′ 8″ i | 16′ 1″ i | 14′ 0″ i |
| 1000S162-43 | 33 | 10′ 2″ e | 7′ 7″ e | 5′ 1″ e | 7′ 9″ a | 6′ 1″ a | 4′ 1″ a | 10′ 2″ e | 7′ 7″ e | 5′ 1″ e | 7′ 9″ a | 6′ 1″ a | 4′ 1″ a |
| 1000S200-43 | 33 | 10′ 2″ e | 7′ 7″ e | 5′ 1″ e | 7′ 11″ a | 6′ 1″ a | 4′ 1″ a | 10′ 2″ e | 7′ 7″ e | 5′ 1″ e | 7′ 11″ a | 6′ 1″ a | 4′ 1″ a |
| 1000S250-43 | 33 | 10′ 2″ e | 7′ 7″ e | 5′ 1″ e | 8′ 1″ a | 6′ 1″ a | 4′ 1″ a | 10′ 2″ e | 7′ 7″ e | 5′ 1″ e | 8′ 1″ a | 6′ 1″ a | 4′ 1″ a |
| 1000S162-54 | 50 | 13′ 9″ e | 11′ 11″ e | 9′ 9″ e | 12′ 9″ i | 10′ 4″ a | 7′ 7″ a | 13′ 6″ e | 11′ 11″ e | 9′ 9″ e | 12′ 9″ i | 10′ 4″ a | 7′ 7″ a |
| 1000S200-54 | 50 | 14′ 4″ e | 12′ 5″ e | 10′ 1″ e | 13′ 0″ i | 10′ 6″ a | 7′ 8″ a | 14′ 2″ e | 12′ 5″ e | 10′ 1″ e | 13′ 0″ i | 10′ 6″ a | 7′ 8″ a |
| 1000S250-54 | 50 | 15′ 1″ e | 13′ 1″ e | 10′ 1″ e | 13′ 4″ i | 10′ 9″ a | 7′ 10″ a | 14′ 11″ e | 13′ 1″ e | 10′ 1″ e | 13′ 4″ i | 10′ 9″ a | 7′ 10″ a |
| 1000S300-54 | 50 | 16′ 7″ e | 14′ 4″ e | 10′ 1″ e | 14′ 0″ a | 11′ 3″ a | 8′ 1″ a | 15′ 7″ e | 14′ 2″ e | 10′ 1″ e | 14′ 0″ a | 11′ 3″ a | 8′ 1″ a |
| 1000S162-68 | 50 | 16′ 1″ e | 14′ 0″ e | 11′ 5″ e | 16′ 2″ i | 14′ 0″ i | 11′ 5″ a | 14′ 8″ | 13′ 4″ e | 11′ 5″ e | 16′ 2″ i | 14′ 0″ i | 11′ 5″ a |
| 1000S200-68 | 50 | 16′ 10″ e | 14′ 10″ e | 12′ 1″ e | 17′ 1″ i | 14′ 10″ i | 11′ 10″ a | 15′ 4″ | 13′ 11″ e | 12′ 1″ e | 17′ 1″ i | 14′ 10″ i | 11′ 10″ a |
| 1000S250-68 | 50 | 17′ 8″ e | 15′ 10″ e | 12′ 11″ e | 18′ 4″ i | 15′ 10″ a | 12′ 4″ a | 16′ 0″ e | 14′ 7″ e | 12′ 9″ e | 18′ 0″ i | 15′ 10″ a | 12′ 4″ a |
| 1000S300-68 | 50 | 18′ 6″ e | 16′ 10″ e | 13′ 10″ e | 19′ 6″ i | 16′ 11″ a | 12′ 9″ a | 16′ 10″ e | 15′ 3″ e | 13′ 4″ e | 18′ 11″ i | 16′ 11″ a | 12′ 9″ a |
| 1000S162-97 | 50 | 18′ 1″ | 16′ 5″ | 14′ 1″ | 19′ 11″ i | 17′ 3″ i | 14′ 1″ i | 16′ 5″ | 14′ 11″ | 13′ 1″ | 18′ 6″ i | 16′ 9″ i | 14′ 1″ i |
| 1000S200-97 | 50 | 18′ 11″ | 17′ 2″ | 15′ 0″ e | 21′ 3″ i | 18′ 5″ i | 15′ 1″ i | 17′ 2″ | 15′ 7″ | 13′ 8″ | 19′ 3″ i | 17′ 6″ i | 15′ 1″ i |
| 1000S250-97 | 50 | 19′ 8″ | 17′ 11″ | 15′ 8″ e | 22′ 1″ i | 20′ 1″ i | 16′ 10″ i | 17′ 11″ | 16′ 3″ | 14′ 2″ | 20′ 1″ i | 18′ 3″ i | 15′ 11″ i |
| 1000S300-97 | 50 | 20′ 8″ | 18′ 9″ | 16′ 5″ e | 23′ 2″ i | 21′ 0″ i | 17′ 1″ i | 18′ 9″ | 17′ 1″ | 14′ 11″ e | 21′ 1″ i | 19′ 2″ i | 16′ 9″ i |
| 1200S162-54 | 50 | 15′ 3″ e | 12′ 6″ e | 8′ 4″ e | 12′ 2″ a | 9′ 9″ a | 6′ 8″ a | 15′ 3″ e | 12′ 6″ e | 8′ 4″ e | 12′ 2″ a | 9′ 9″ a | 6′ 8″ a |
| 1200S200-54 | 50 | 15′ 10″ e | 12′ 6″ e | 8′ 4″ e | 12′ 5″ a | 9′ 11″ a | 6′ 8″ a | 15′ 10″ e | 12′ 6″ e | 8′ 4″ e | 12′ 5″ a | 9′ 11″ a | 6′ 8″ a |
| 1200S250-54 | 50 | 16′ 1″ e | 12′ 6″ e | 8′ 4″ e | 12′ 6″ a | 10′ 0″ a | 6′ 8″ a | 16′ 1″ e | 12′ 6″ e | 8′ 4″ e | 12′ 6″ a | 10′ 0″ a | 6′ 8″ a |
| 1200S300-54 | 50 | 16′ 8″ e | 12′ 6″ e | 8′ 4″ e | 13′ 2″ a | 10′ 0″ a | 6′ 8″ a | 16′ 8″ e | 12′ 6″ e | 8′ 4″ e | 13′ 2″ a | 10′ 0″ a | 6′ 8″ a |
| 1200S162-68 | 50 | 17′ 11″ e | 15′ 6″ e | 12′ 8″ e | 17′ 11″ i | 14′ 11″ i | 11′ 2″ a | 16′ 11″ e | 15′ 4″ e | 12′ 8″ e | 17′ 11″ i | 14′ 11″ i | 11′ 2″ a |
| 1200S200-68 | 50 | 18′ 11″ e | 16′ 5″ e | 13′ 5″ e | 18′ 11″ i | 15′ 5″ a | 11′ 6″ a | 17′ 7″ e | 16′ 0″ e | 13′ 5″ e | 18′ 11″ i | 15′ 5″ a | 11′ 6″ a |
| 1200S250-68 | 50 | 19′ 1″ e | 16′ 6″ e | 13′ 6″ e | 19′ 0″ i | 15′ 6″ a | 11′ 7″ a | 18′ 4″ e | 16′ 6″ e | 13′ 6″ e | 19′ 0″ i | 15′ 6″ a | 11′ 7″ a |
| 1200S300-68 | 50 | 21′ 3″ e | 18′ 5″ e | 15′ 0″ e | 20′ 3″ a | 16′ 6″ a | 12′ 2″ a | 19′ 5″ e | 17′ 8″ e | 15′ 0″ e | 20′ 3″ a | 16′ 6″ a | 12′ 2″ a |
| 1200S162-97 | 50 | 21′ 1″ | 19′ 2″ | 15′ 9″ e | 22′ 3″ i | 19′ 3″ i | 15′ 9″ i | 19′ 2″ | 17′ 5″ | 15′ 2″ e | 21′ 6″ i | 19′ 3″ i | 15′ 9″ i |
| 1200S200-97 | 50 | 21′ 11″ | 19′ 11″ | 16′ 9″ e | 23′ 9″ i | 20′ 7″ i | 16′ 9″ i | 19′ 11″ | 18′ 1″ | 15′ 10″ e | 22′ 4″ i | 20′ 4″ i | 16′ 9″ i |
| 1200S250-97 | 50 | 22′ 9″ | 20′ 8″ | 17′ 5″ e | 24′ 8″ i | 21′ 5″ i | 17′ 5″ i | 20′ 8″ | 18′ 10″ | 16′ 5″ e | 23′ 3″ i | 21′ 1″ i | 17′ 5″ i |
| 1200S300-97 | 50 | 23′ 11″ | 21′ 9″ e | 19′ 0″ e | 26′ 10″ i | 23′ 10″ i | 19′ 5″ a | 21′ 9″ | 19′ 9″ | 17′ 3″ e | 24′ 4″ i | 22′ 2″ i | 19′ 4″ a |

"e" Requires web stiffeners at end supports
"i" Requires web stiffeners at interior supports
"a" Requires web stiffeners at all supports

Interior Bearing Length = 3.5"
End Bearing Length = 3.5"
Alternate Span Loading Considered
Studs considered unpunched for web crippling and shear

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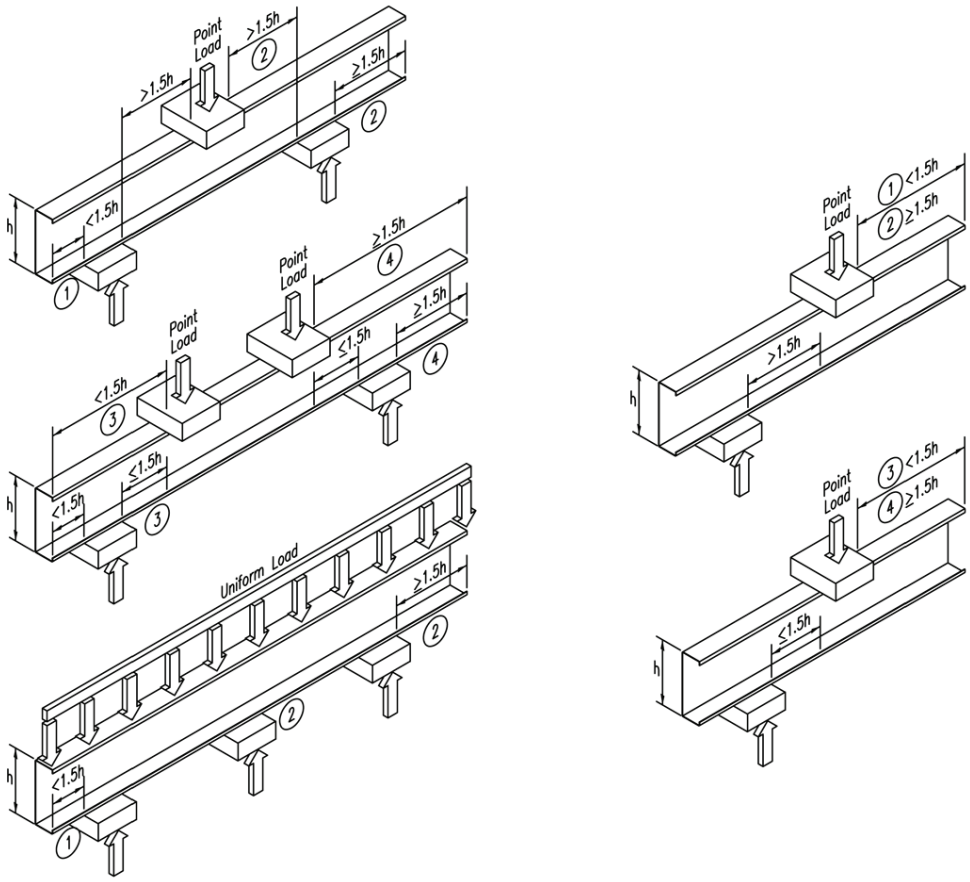
# Web Crippling Load Tables

## Web Crippling Load Table Notes

1. Listed allowable loads apply only to members with stiffened flanges (i.e. S-sections).
2. Listed allowable loads are based on members 'fastened to supports'.
3. Listed allowable loads are for unpunched webs. Capacity reductions for end and interior one flange loading (Conditions 1 and 2) near punchouts are listed per NASPEC C3.4.2.
4. For listed punchout reduction factors, Rc, x is the nearest distance between the web hole and edge of nearing in inches.




## Web Crippling Conditions:

1. Condition 1- End One Flange Landing
2. Condition 2 - Interior One Flange Loading
3. Condition 3 - End Two Flange Loading
4. Condition 4 - Interior Two Flange Loading

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# Allowable Web Crippling Loads - Single Members

| Stud Designation | Design Thickness | Fy(Ksi) | Condition 1 (E1F) Bearing Length (in) | | | | Condition 2 (I1F) Bearing Length (in) | | | | Condition 3 (E2F) Bearing Length (in) | | | | Condition 4 (I2F) Bearing Length (in) | | | | Punchout Reductions | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | 3.5 | 4 | 6 | 1 | 3.5 | 4 | 6 | 1 | 3.5 | 4 | 6 | 1 | 3.5 | 4 | 6 | Rc (E1F) | Rc (I1F) |
| 162 S__-18 | 0.0188 | 33 | 55 | 89[1] | 951 1,2 | 112 1,2 | 87 | 125[1] | 131 1,2 | 151 1,2 | 45 | 64[1] | 67 1,2 | 76 1,2 | 122 | 161[1] | 166 1,2 | 186 1,2 | 0.838 + 0.059x <= 1.0 | 0.875 + 0.037x <= 1.0 |
| 162 S__-27 | 0.0283 | 33 | 122 | 194[1] | 205[1] | 242 1,2 | 218 | 304[1] | 317[1] | 361 1,2 | 111 | 151[1] | 157[1] | 178 1,2 | 290 | 371[1] | 383[1] | 425 1,2 | 0.837 + 0.059x <= 1.0 | 0.875 + 0.038x <= 1.0 |
| 162 S__-30 | 0.0312 | 33 | 148 | 233[1] | 246[1] | 290[1] | 269 | 373[1] | 388[1] | 442[1] | 137 | 185[1] | 192[1] | 217[1] | 356 | 452[1] | 466[1] | 516[1] | 0.837 + 0.059x <= 1.0 | 0.875 + 0.038x <= 1.0 |
| 162 S__-33 | 0.0346 | 33 | 180 | 282[1] | 297[1] | 350[1] | 336 | 462[1] | 481[1] | 545[1] | 170 | 229[1] | 237[1] | 267[1] | 441 | 557[1] | 574[1] | 634[1] | 0.836 + 0.059x <= 1.0 | 0.875 + 0.038x <= 1.0 |
| 250 S__-18 | 0.0188 | 33 | 52 | 84 | 89[2] | 106 1,2 | 85 | 122 | 128[2] | 147 1,2 | 37 | 51 | 54[2] | 61 1,2 | 109 | 145 | 150[2] | 168 1,2 | 0.904 + 0.036x <= 1.0 | 0.885 + 0.023x <= 1.0 |
| 250 S__-27 | 0.0283 | 33 | 117 | 186 | 196 | 231 1,2 | 213 | 298 | 310 | 354 1,2 | 96 | 130 | 135 | 153 1,2 | 268 | 343 | 354 | 393 1,2 | 0.903 + 0.036x <= 1.0 | 0.885 + 0.023x <= 1.0 |
| 250 S__-30 | 0.0312 | 33 | 141 | 223 | 235 | 277[1] | 264 | 365 | 381 | 433[1] | 119 | 161 | 167 | 189[1] | 330 | 420 | 433 | 479[1] | 0.903 + 0.036x <= 1.0 | 0.885 + 0.023x <= 1.0 |
| 250 S__-33 | 0.0346 | 33 | 173 | 271 | 285 | 336[1] | 330 | 453 | 472 | 535[1] | 150 | 201 | 209 | 235[1] | 411 | 519 | 535 | 591[1] | 0.903 + 0.036x <= 1.0 | 0.885 + 0.023x <= 1.0 |
| 250 S__-43 | 0.0451 | 33 | 287 | 443 | 466 | 547[1] | 580 | 780 | 810 | 913[1] | 267 | 351 | 364 | 407[1] | 720 | 892 | 918 | 1006[1] | 0.902 + 0.037x <= 1.0 | 0.884 + 0.023x <= 1.0 |
| 250 S__-54 | 0.0566 | 33 | 433 | 657 | 690 | 806 | 891 | 1178 | 1221 | 1369[1] | 430 | 556 | 574 | 639[1] | 1142 | 1392 | 1429 | 1558[1] | 0.900 + 0.037x <= 1.0 | 0.884 + 0.024x <= 1.0 |
| 250 S__-54 | 0.0566 | 50 | 656 | 996 | 1046 | 1222[1] | 1350 | 1785 | 1850 | 2075[1] | 652 | 842 | 870 | 968[1] | 1730 | 2109 | 2165 | 2361[1] | 0.900 + 0.037x <= 1.0 | 0.884 + 0.024x <= 1.0 |
| 250 S__-68 | 0.0713 | 33 | 654 | 977 | 1024 | 1191[1] | 1368 | 1778 | 1838 | 2050[1] | 693 | 880 | 907 | 1004[1] | 1815 | 2179 | 2233 | 2421[1] | 0.896 + 0.039x <= 1.0 | 0.884 + 0.025x <= 1.0 |
| 250 S__-68 | 0.0713 | 50 | 990 | 1480 | 1552 | 1805[1] | 2073 | 2693 | 2785 | 3106[1] | 1049 | 1333 | 1375 | 1521[1] | 2750 | 3302 | 3384 | 3669[1] | 0.896 +0.039x <= 1.0 | 0.884 + 0.025x <= 1.0 |
| 250 S__-97 | 0.1017 | 33 | 1236 | 1799 | 1882[1] | 2173[1] | 2657 | 3362 | 3467[1] | 3831[1] | 1430 | 1771 | 1821[1] | 1997[1] | 3694 | 4340 | 4435[1] | 4768[1] | 0.888 + 0.042x <= 1.0 | 0.882 + 0.027x <= 1.0 |
| 250 S__-97 | 0.1017 | 50 | 1872 | 2726 | 2852[1] | 3293[1] | 4025 | 5095 | 5253[1] | 5805[1] | 2167 | 2683 | 2759[1] | 3026[1] | 5597 | 6575 | 6720[1] | 7225[1] | 0.888 + 0.042x <= 1.0 | 0.882 + 0.027x <= 1.0 |
| 350 S__-18 | 0.0188 | 33 | 49 | 80 | 84[2] | 100[2] | 83 | 119 | 124[2] | 143[2] | 28 | 40 | 42[2] | 48[2] | 98 | 130 | 134[2] | 150[2] | 0.862 + 0.025x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 350 S__-27 | 0.0283 | 33 | 112 | 177 | 187 | 221[2] | 209 | 292 | 304 | 347[2] | 81 | 111 | 115 | 130[2] | 247 | 316 | 327 | 362[2] | 0.862 + 0.025x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 350 S__-30 | 0.0312 | 33 | 135 | 214 | 225 | 266 | 259 | 359 | 373 | 425 | 103 | 139 | 144 | 163 | 306 | 389 | 402 | 445 | 0.861 + 0.025x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 350 S__-33 | 0.0346 | 33 | 166 | 260 | 274 | 323 | 324 | 445 | 463 | 526 | 131 | 175 | 182 | 205 | 384 | 484 | 499 | 551 | 0.861 + 0.025x <= 1.0 | 0.878 + 0.016x <= 1.0 |
| 350 S__-43 | 0.0451 | 33 | 278 | 428 | 451 | 528 | 571 | 768 | 798 | 900 | 240 | 315 | 326 | 365 | 680 | 842 | 866 | 949 | 0.861 + 0.025x <= 1.0 | 0.878 + 0.016x <= 1.0 |
| 350 S__-54 | 0.0566 | 33 | 420 | 638 | 670 | 783 | 879 | 1162 | 1204 | 1351 | 392 | 507 | 524 | 583 | 1086 | 1324 | 1359 | 1482 | 0.858 + 0.026x <= 1.0 | 0.878 + 0.016x <= 1.0 |
| 350 S__-54 | 0.0566 | 50 | 637 | 967 | 1016 | 1186 | 1331 | 1761 | 1825 | 2046 | 594 | 768 | 794 | 883 | 1645 | 2005 | 2059 | 2245 | 0.858 + 0.026x <= 1.0 | 0.878 + 0.016x <= 1.0 |
| 350 S__-68 | 0.0713 | 33 | 637 | 951 | 998 | 1160 | 1351 | 1756 | 1816 | 2025 | 640 | 813 | 839 | 928 | 1736 | 2085 | 2137 | 2317 | 0.855 + 0.026x <= 1.0 | 0.878 + 0.017x <= 1.0 |
| 350 S__-68 | 0.0713 | 50 | 965 | 1441 | 1512 | 1758 | 2047 | 2660 | 2751 | 3068 | 970 | 1232 | 1271 | 1406 | 2631 | 3159 | 3238 | 3510 | 0.855 + 0.026x <= 1.0 | 0.878 + 0.017x <= 1.0 |
| 350 S__-97 | 0.1017 | 33 | 1209 | 1759 | 1841 | 2125[1] | 2629 | 3327 | 3431 | 3791[1] | 1343 | 1663 | 1710 | 1876[1] | 3562 | 4184 | 4276 | 4597[1] | 0.847 + 0.028x <= 1.0 | 0.876 + 0.018x <= 1.0 |
| 350 S__-97 | 0.1017 | 50 | 1831 | 2666 | 2790 | 3220[1] | 3983 | 5041 | 5198 | 5745[1] | 2035 | 2520 | 2592 | 2842[1] | 5397 | 6339 | 6479 | 6965[1] | 0.847 + 0.028x <= 1.0 | 0.876 + 0.018x <= 1.0 |
| 362 S__-18 | 0.0188 | 33 | 49 | 79 | 84[2] | 99[2] | 82 | 119 | 124[2] | 143[2] | 27 | 39 | 40[2] | 46[2] | 97 | 128 | 132[2] | 149[2] | 0.867 + 0.024x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-27 | 0.0283 | 33 | 111 | 177 | 186 | 220[2] | 209 | 291 | 303 | 346[2] | 80 | 108 | 113 | 127[2] | 245 | 313 | 324 | 359[2] | 0.867 + 0.024x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-30 | 0.0312 | 33 | 135 | 213 | 224 | 265 | 258 | 358 | 373 | 424 | 101 | 136 | 141 | 160 | 304 | 386 | 398 | 441 | 0.867 + 0.024x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-33 | 0.0346 | 33 | 165 | 259 | 273 | 322 | 323 | 444 | 462 | 525 | 129 | 173 | 179 | 202 | 381 | 480 | 495 | 547 | 0.867 + 0.024x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-43 | 0.0451 | 33 | 277 | 427 | 449 | 526 | 570 | 767 | 796 | 898 | 236 | 311 | 322 | 360 | 675 | 836 | 860 | 943 | 0.866 + 0.024x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-54 | 0.0566 | 33 | 419 | 636 | 668 | 780 | 877 | 1160 | 1202 | 1348 | 388 | 501 | 518 | 577 | 1079 | 1316 | 1351 | 1473 | 0.864 + 0.025x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-54 | 0.0566 | 50 | 634 | 963 | 1012 | 1182 | 1329 | 1758 | 1822 | 2043 | 588 | 760 | 785 | 874 | 1635 | 1994 | 2047 | 2232 | 0.864 + 0.025x <= 1.0 | 0.879 + 0.016x <= 1.0 |
| 362 S__-68 | 0.0713 | 33 | 635 | 948 | 995 | 1157 | 1349 | 1753 | 1813 | 2022 | 635 | 806 | 831 | 920 | 1728 | 2074 | 2126 | 2305 | 0.861 + 0.025x <= 1.0 | 0.878 + 0.016x <= 1.0 |
| 362 S__-68 | 0.0713 | 50 | 962 | 1437 | 1507 | 1752 | 2044 | 2657 | 2747 | 3064 | 961 | 1221 | 1259 | 1393 | 2618 | 3143 | 3221 | 3492 | 0.861 + 0.025x <= 1.0 | 0.878 + 0.016x <= 1.0 |
| 362 S__-97 | 0.1017 | 33 | 1206 | 1755 | 1837 | 2120 | 2626 | 3323 | 3427 | 3787 | 1333 | 1651 | 1698 | 1862 | 3547 | 4166 | 4258 | 4578 | 0.854 + 0.027x <= 1.0 | 0.877 + 0.017x <= 1.0 |
| 362 S__-97 | 0.1017 | 50 | 1827 | 2659 | 2783 | 3212 | 3978 | 5035 | 5192 | 5738 | 2020 | 2501 | 2573 | 2821 | 5374 | 6313 | 6452 | 6936 | 0.854 + 0.027x <= 1.0 | 0.877 + 0.017x <= 1.0 |
| 400 S__-27 | 0.0283 | 33 | 109 | 174 | 183 | 217[2] | 207 | 289 | 301 | 344[2] | 75 | 102 | 106 | 120[2] | 238 | 305 | 315 | 349[2] | 0.881 + 0.022x <= 1.0 | 0.881 + 0.014x <= 1.0 |
| 400 S__-30 | 0.0312 | 33 | 133 | 210 | 221 | 261 | 257 | 356 | 370 | 421 | 95 | 129 | 134 | 151 | 296 | 376 | 388 | 429 | 0.881 + 0.022x <= 1.0 | 0.881 + 0.014x <= 1.0 |
| 400 S__-33 | 0.0346 | 33 | 163 | 256 | 269 | 317 | 322 | 442 | 460 | 522 | 122 | 164 | 170 | 192 | 372 | 469 | 483 | 534 | 0.881 + 0.022x <= 1.0 | 0.881 + 0.014x <= 1.0 |
| 400 S__-43 | 0.0451 | 33 | 274 | 422 | 444 | 520 | 567 | 763 | 792 | 893 | 227 | 299 | 309 | 346 | 662 | 819 | 843 | 924 | 0.881 + 0.022x <= 1.0 | 0.881 + 0.014x <= 1.0 |
| 400 S__-54 | 0.0566 | 33 | 415 | 629 | 661 | 772 | 873 | 1155 | 1197 | 1342 | 376 | 485 | 502 | 558 | 1061 | 1293 | 1328 | 1448 | 0.879 + 0.022x <= 1.0 | 0.881 + 0.014x <= 1.0 |
| 400 S__-54 | 0.0566 | 50 | 628 | 954 | 1002 | 1170 | 1323 | 1750 | 1813 | 2034 | 569 | 735 | 760 | 846 | 1607 | 1960 | 2012 | 2194 | 0.879 + 0.022x <= 1.0 | 0.881 + 0.014x <= 1.0 |
| 400 S__-68 | 0.0713 | 33 | 629 | 940 | 986 | 1147 | 1344 | 1746 | 1806 | 2014 | 617 | 784 | 809 | 895 | 1702 | 2044 | 2094 | 2271 | 0.876 + 0.023x <= 1.0 | 0.881 + 0.015x <= 1.0 |
| 400 S__-68 | 0.0713 | 50 | 953 | 1424 | 1494 | 1737 | 2036 | 2646 | 2736 | 3051 | 936 | 1188 | 1226 | 1356 | 2579 | 3096 | 3173 | 3440 | 0.876 + 0.023x <= 1.0 | 0.881 + 0.015x <= 1.0 |
| 400 S__-97 | 0.1017 | 33 | 1197 | 1742 | 1823 | 2105 | 2617 | 3312 | 3415 | 3774 | 1305 | 1616 | 1662 | 1822 | 3504 | 4116 | 4207 | 4523 | 0.870 + 0.024x <= 1.0 | 0.880 + 0.015x <= 1.0 |
| 400 S__-97 | 0.1017 | 50 | 1814 | 2640 | 2762 | 3189 | 3965 | 5018 | 5174 | 5718 | 1978 | 2448 | 2518 | 2761 | 5309 | 6236 | 6374 | 6852 | 0.870 + 0.024x <= 1.0 | 0.880 + 0.015x <= 1.0 |
| 550 S__-27 | 0.0283 | 33 | 103 | 164 | 173 | 205[2] | 202 | 282 | 294 | 336[2] | 58 | 79 | 82 | 93[2] | 214 | 274 | 283 | 314[2] | 0.918 + 0.016x <= 1.0 | 0.887 + 0.010x <= 1.0 |
| 550 S__-30 | 0.0312 | 33 | 126 | 199 | 210 | 248 | 251 | 348 | 362 | 412 | 76 | 103 | 106 | 120 | 268 | 341 | 351 | 389 | 0.918 + 0.016x <= 1.0 | 0.887 + 0.010x <= 1.0 |
| 550 S__-33 | 0.0346 | 33 | 155 | 243 | 256 | 302 | 315 | 432 | 450 | 511 | 100 | 134 | 139 | 157 | 339 | 428 | 441 | 487 | 0.918 + 0.016x <= 1.0 | 0.887 + 0.010x <= 1.0 |
| 550 S__-43 | 0.0451 | 33 | 262 | 405 | 426 | 499 | 556 | 749 | 778 | 877 | 195 | 256 | 265 | 297 | 614 | 760 | 782 | 858 | 0.917 + 0.016x <= 1.0 | 0.887 + 0.010x <= 1.0 |
| 550 S__-54 | 0.0566 | 33 | 400 | 607 | 638 | 745 | 859 | 1136 | 1177 | 1320 | 331 | 428 | 443 | 493 | 995 | 1213 | 1246 | 1358 | 0.917 + 0.016x <= 1.0 | 0.886 + 0.010x <= 1.0 |
| 550 S__-54 | 0.0566 | 50 | 606 | 920 | 966 | 1128 | 1302 | 1722 | 1784 | 2001 | 502 | 649 | 671 | 746 | 1508 | 1838 | 1887 | 2058 | 0.917 + 0.016x <= 1.0 | 0.886 + 0.010x <= 1.0 |
| 550 S__-68 | 0.0713 | 33 | 609 | 910 | 955 | 1111 | 1324 | 1721 | 1780 | 1985 | 557 | 707 | 729 | 807 | 1611 | 1934 | 1982 | 2149 | 0.915 + 0.016x <= 1.0 | 0.886 + 0.010x <= 1.0 |
| 550 S__-68 | 0.0713 | 50 | 923 | 1380 | 1447 | 1683 | 2007 | 2608 | 2697 | 3007 | 844 | 1071 | 1105 | 1223 | 2441 | 2931 | 3003 | 3256 | 0.915 + 0.016x <= 1.0 | 0.886 + 0.010x <= 1.0 |
| 550 S__-97 | 0.1017 | 33 | 1166 | 1697 | 1776 | 2050 | 2585 | 3272 | 3373 | 3728 | 1205 | 1492 | 1535 | 1683 | 3352 | 3937 | 4024 | 4326 | 0.912 + 0.017x <= 1.0 | 0.886 + 0.011x <= 1.0 |
| 550 S__-97 | 0.1017 | 50 | 1766 | 2571 | 2691 | 3106 | 3917 | 4957 | 5111 | 5648 | 1826 | 2261 | 2325 | 2550 | 5078 | 5965 | 6097 | 6555 | 0.912 + 0.017x <= 1.0 | 0.886 + 0.011x <= 1.0 |
| 600 S__-30 | 0.0312 | 33 | 124 | 196 | 206 | 243 | 249 | 345 | 359 | 409 | 70 | 95 | 98 | 111 | 260 | 330 | 340 | 377 | 0.926 + 0.014x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-33 | 0.0346 | 33 | 153 | 240 | 253 | 297 | 313 | 430 | 447 | 507 | 93 | 125 | 130 | 146 | 329 | 416 | 429 | 473 | 0.926 + 0.014x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-43 | 0.0451 | 33 | 259 | 400 | 420 | 493 | 553 | 745 | 773 | 872 | 185 | 243 | 252 | 282 | 600 | 743 | 764 | 838 | 0.925 + 0.014x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-54 | 0.0566 | 33 | 395 | 600 | 631 | 736 | 855 | 1131 | 1172 | 1314 | 318 | 411 | 425 | 473 | 975 | 1189 | 1221 | 1331 | 0.925 + 0.015x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-54 | 0.0566 | 50 | 599 | 909 | 956 | 1116 | 1295 | 1713 | 1775 | 1991 | 482 | 623 | 644 | 716 | 1478 | 1802 | 1850 | 2017 | 0.925 + 0.015x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-68 | 0.0713 | 33 | 604 | 902 | 946 | 1100 | 1318 | 1713 | 1772 | 1976 | 539 | 684 | 706 | 781 | 1583 | 1901 | 1949 | 2113 | 0.924 + 0.015x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-68 | 0.0713 | 50 | 914 | 1366 | 1433 | 1666 | 1998 | 2596 | 2685 | 2994 | 816 | 1036 | 1069 | 1183 | 2399 | 2881 | 2952 | 3201 | 0.924 + 0.015x <= 1.0 | 0.888 + 0.009x <= 1.0 |
| 600 S__-97 | 0.1017 | 33 | 1157 | 1684 | 1762 | 2034 | 2575 | 3260 | 3361 | 3714 | 1175 | 1455 | 1497 | 1641 | 3306 | 3884 | 3969 | 4267 | 0.921 + 0.015x <= 1.0 | 0.887 + 0.010x <= 1.0 |
| 600 S__-97 | 0.1017 | 50 | 1752 | 2551 | 2669 | 3081 | 3902 | 4939 | 5093 | 5628 | 1781 | 2205 | 2268 | 2487 | 5010 | 5885 | 6014 | 6466 | 0.921 + 0.015x <= 1.0 | 0.887 + 0.010x <= 1.0 |
| 800 S__-43 | 0.0451 | 33 | 247 | 381 | 401 | 470 | 542 | 730 | 757 | 854 | 150 | 197 | 204 | 228 | 548 | 678 | 698 | 765 | 0.947 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 800 S__-54 | 0.0566 | 33 | 379 | 576 | 605 | 706 | 839 | 1110 | 1150 | 1290 | 270 | 349 | 361 | 402 | 904 | 1102 | 1131 | 1234 | 0.947 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 800 S__-54 | 0.0566 | 50 | 575 | 872 | 917 | 1070 | 1272 | 1682 | 1743 | 1955 | 409 | 529 | 547 | 608 | 1370 | 1670 | 1714 | 1869 | 0.947 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 800 S__-68 | 0.0713 | 33 | 582 | 870 | 912 | 1061 | 1297 | 1686 | 1744 | 1944 | 473 | 600 | 619 | 685 | 1485 | 1783 | 1827 | 1981 | 0.946 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 800 S__-68 | 0.0713 | 50 | 882 | 1318 | 1382 | 1607 | 1966 | 2555 | 2642 | 2946 | 716 | 910 | 939 | 1038 | 2250 | 2701 | 2768 | 3001 | 0.946 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 800 S__-97 | 0.1017 | 33 | 1123 | 1635 | 1711 | 1975 | 2541 | 3216 | 3316 | 3665 | 1068 | 1322 | 1360 | 1491 | 3142 | 3691 | 3773 | 4056 | 0.945 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 800 S__-97 | 0.1017 | 50 | 1702 | 2477 | 2592 | 2992 | 3850 | 4873 | 5025 | 5553 | 1618 | 2003 | 2060 | 2259 | 4761 | 5593 | 5716 | 6145 | 0.945 + 0.011x <= 1.0 | 0.891 + 0.007x <= 1.0 |
| 1000 S__-54 | 0.0566 | 33 | 365 | 554 | 582 | 680 | 826 | 1092 | 1132 | 1269 | 228 | 295 | 305 | 339 | 841 | 1026 | 1053 | 1148 | 0.960 + 0.009x <= 1.0 | 0.893 + 0.005x <= 1.0 |
| 1000 S__-54 | 0.0566 | 50 | 553 | 840 | 882 | 1031 | 1251 | 1655 | 1715 | 1923 | 346 | 447 | 462 | 514 | 1275 | 1554 | 1595 | 1740 | 0.960 + 0.009x <= 1.0 | 0.893 + 0.005x <= 1.0 |
| 1000 S__-68 | 0.0713 | 33 | 563 | 842 | 883 | 1027 | 1279 | 1662 | 1719 | 1917 | 415 | 527 | 544 | 602 | 1398 | 1679 | 1721 | 1865 | 0.959 + 0.009x <= 1.0 | 0.893 + 0.005x <= 1.0 |
| 1000 S__-68 | 0.0713 | 50 | 854 | 1275 | 1338 | 1555 | 1938 | 2518 | 2604 | 2904 | 629 | 799 | 824 | 912 | 2119 | 2544 | 2607 | 2826 | 0.959 + 0.009x <= 1.0 | 0.893 + 0.005x <= 1.0 |
| 1000 S__-97 | 0.1017 | 33 | 1094 | 1592 | 1666 | 1923 | 2511 | 3178 | 3277 | 3622 | 974 | 1206 | 1240 | 1360 | 2999 | 3523 | 3601 | 3871 | 0.959 + 0.009x <= 1.0 | 0.893 + 0.006x <= 1.0 |
| 1000 S__-97 | 0.1017 | 50 | 1657 | 2412 | 2525 | 2914 | 3805 | 4815 | 4965 | 5487 | 1476 | 1827 | 1879 | 2060 | 4545 | 5338 | 5456 | 5866 | 0.959 + 0.009x <= 1.0 | 0.893 + 0.006x <= 1.0 |
| 1200 S__-68 | 0.0713 | 33 | 547 | 816 | 857 | 996 | 1262 | 1640 | 1696 | 1892 | 363 | 462 | 476 | 527 | 1320 | 1585 | 1625 | 1762 | 0.968 + 0.007x <= 1.0 | 0.894 + 0.005x <= 1.0 |
| 1200 S__-68 | 0.0713 | 50 | 828 | 1237 | 1298 | 1509 | 1913 | 2485 | 2570 | 2866 | 551 | 699 | 721 | 798 | 2001 | 2402 | 2462 | 2669 | 0.968 + 0.007x <= 1.0 | 0.894 + 0.005x <= 1.0 |
| 1200 S__-97 | 0.1017 | 33 | 1068 | 1554 | 1626 | 1877 | 2484 | 3144 | 3242 | 3583 | 889 | 1101 | 1133 | 1242 | 2871 | 3372 | 3446 | 3705 | 0.968 + 0.007x <= 1.0 | 0.894 + 0.005x <= 1.0 |
| 1200 S__-97 | 0.1017 | 50 | 1618 | 2355 | 2464 | 2844 | 3764 | 4764 | 4912 | 5428 | 1348 | 1668 | 1716 | 1882 | 4350 | 5109 | 5222 | 5614 | 0.968 + 0.007x <= 1.0 | 0.894 + 0.005x <= 1.0 |

NOTES: 1.Bearing length to web height ratio, N/h, exceeds NASPEC limit of 2 2.Bearing Length to thickness ratio, N/t, exceeds NASPEC limit of 210 3.Bearing length to web height ratio, N/h, exceeds NASPEC limit of 2 and bearing Length to thickness ratio, N/t, exceeds NASPEC limit of 210

## Allowable Ceiling Spans Deflection Notes

1. For unbraced sections, allowable moment based on NASPEC section C3.1.2 with KyLy = KtLt = listed span. For mid-span braced sections, allowable moment based on NASPEC C3.1.2 with KyLy = KtLt = (listed span)/2
2. For spans listed with "e", web stiffeners are required at end reactions.
3. Web crippling calculation based on bearing length = 1 inch.
4. Web crippling and shear capacity have not been reduced for punchouts. If web punchouts occur near supports members must be checked for reduced shear and web crippling in accordance with the NASPEC.
5. Values are for simple span conditions.

## Allowable Ceiling Spans Deflection Limit L/240

| Section | Fy (Ksi) | 4 psf Lateral Support of Compression Flange | | | | | | 6 psf Lateral Support of Compression Flange | | | | | | 13 psf Lateral Support of Compression Flange | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unsupported Joist Spacing (in) o.c. | | | Midspan Joist Spacing (in) o.c. | | | Unsupported Joist Spacing (in) o.c. | | | Midspan Joist Spacing (in) o.c. | | | Unsupported Joist Spacing (in) o.c. | | | Midspan Joist Spacing (in) o.c. | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 162S125-18 | 33 | 7′ 3″ | 6′ 7″ | 5′ 10″ | 8′ 3″ | 7′ 6″ | 6′ 7″ | 6′ 5″ | 5′ 10″ | 5′ 1″ | 7′ 2″ | 7′ 8″ | 5′ 9″ | 5′ 0″ | 4′ 5″ | 3′ 9″ | 5′ 7″ | 4′ 10″ | 3′ 11″ |
| 162S125-27 | 33 | 8′ 7″ | 7′ 11″ | 7′ 1″ | 9′ 8″ | 8′ 9″ | 7′ 8″ | 7′ 8″ | 7′ 1″ | 6′ 3″ | 8′ 5″ | 6′ 7″ | 6′ 8″ | 6′ 1″ | 5′ 6″ | 4′ 9″ | 6′ 6″ | 5′ 11″ | 5′ 2″ |
| 162S125-30 | 33 | 9′ 0″ | 8′ 3″ | 7′ 4″ | 9′ 11″ | 9′ 0″ | 7′ 11″ | 8′ 0″ | 7′ 4″ | 6′ 7″ | 8′ 8″ | 7′ 11″ | 6′ 11″ | 6′ 5″ | 5′ 10″ | 5′ 0″ | 6′ 9″ | 6′ 1″ | 5′ 4″ |
| 162S125-33 | 33 | 9′ 6″ | 8′ 8″ | 7′ 8″ | 10′ 3″ | 9′ 4″ | 8′ 2″ | 8′ 4″ | 7′ 8″ | 6′ 10″ | 9′ 0″ | 8′ 2″ | 7′ 1″ | 6′ 8″ | 6′ 1″ | 5′ 4″ | 6′ 11″ | 6′ 4″ | 5′ 6″ |
| 250S125-18 | 33 | 8′ 5″ | 7′ 9″ | 6′ 11″ | 11′ 4″ | 10′ 4″ | 9′ 0″ | 7′ 6″ | 6′ 11″ | 6′ 2″ | 9′ 11″ | 9′ 0″ | 7′ 8″ | 6′ 0″ | 5′ 6″ | 4′ 10″ e | 7′ 5″ | 6′ 7″ e | 5′ 6″ e |
| 250S125-27 | 33 | 9′ 8″ | 8′ 11″ | 8′ 0″ | 13′ 4″ | 12′ 1″ | 10′ 7″ | 8′ 8″ | 8′ 0″ | 7′ 2″ | 11′ 8″ | 10′ 7″ | 9′ 3″ | 7′ 0″ | 6′ 6″ | 5′ 9″ | 9′ 0″ | 8′ 2″ | 6′ 10″ |
| 250S125-30 | 33 | 10′ 1″ | 9′ 3″ | 8′ 3″ | 13′ 9″ | 12′ 6″ | 10′ 11″ | 9′ 0″ | 8′ 3″ | 7′ 5″ | 12′ 0″ | 10′ 11″ | 9′ 6″ | 7′ 3″ | 6′ 8″ | 6′ 0″ | 9′ 3″ | 8′ 5″ | 7′ 3″ |
| 250S125-33 | 33 | 10′ 6″ | 9′ 8″ | 8′ 7″ | 14′ 3″ | 12′ 11″ | 11′ 3″ | 9′ 4″ | 8′ 7″ | 7′ 8″ | 12′ 5″ | 11′ 3″ | 9′ 10″ | 7′ 6″ | 6′ 11″ | 6′ 2″ | 9′ 7″ | 8′ 9″ | 7′ 7″ |
| 250S125-43 | 33 | 11′ 9″ | 10′ 10″ | 9′ 7″ | 15′ 6″ | 14′ 1″ | 12′ 3″ | 10′ 5″ | 9′ 7″ | 8′ 6″ | 13′ 6″ | 12′ 3″ | 10′ 9″ | 8′ 4″ | 7′ 8″ | 6′ 10″ | 10′ 5″ | 9′ 6″ | 8′ 3″ |
| 250S137-33 | 33 | 11′ 10″ | 10′ 11″ | 9′ 9″ | 14′ 11″ | 13′ 7″ | 11′ 10″ | 10′ 7″ | 9′ 9″ | 8′ 9″ | 13′ 1″ | 11′ 10″ | 10′ 4″ | 8′ 7″ | 7′ 11″ | 7′ 1″ | 10′ 1″ | 9′ 2″ | 8′ 0″ |
| 250S137-43 | 33 | 13′ 3″ | 12′ 2″ | 10′ 10″ | 16′ 3″ | 14′ 9″ | 12′ 11″ | 11′ 9″ | 10′ 10″ | 9′ 7″ | 14′ 2″ | 12′ 11″ | 11′ 3″ | 9′ 5″ | 8′ 8″ | 7′ 9″ | 10′ 11″ | 9′ 11″ | 8′ 8″ |
| 250S162-33 | 33 | 13′ 6″ | 12′ 5″ | 11′ 2″ | 15′ 8″ | 14′ 3″ | 12′ 5″ | 12′ 1″ | 11′ 2″ | 10′ 0″ | 13′ 8″ | 12′ 5″ | 10′ 10″ | 9′ 10″ | 9′ 1″ | 8′ 1″ | 10′ 7″ | 9′ 7″ | 8′ 5″ |
| 250S162-43 | 33 | 15′ 0″ | 13′ 9″ | 12′ 3″ | 17′ 1″ | 15′ 6″ | 13′ 6″ | 13′ 4″ | 12′ 3″ | 10′ 11″ | 14′ 11″ | 13′ 6″ | 11′ 10″ | 10′ 9″ | 9′ 11″ | 8′ 10″ | 11′ 6″ | 10′ 5″ | 9′ 2″ |
| 350S125-18 | 33 | 9′ 2″ | 8′ 6″ | 7′ 6″ | 12′ 6″ | 11′ 5″ | 9′ 11″ | 8′ 3″ | 7′ 6″ | 6′ 8″ | 11′ 0″ | 9′ 11″ | 8′ 5″ e | 6′ 6″ | 5′ 11″ e | 5′ 3″ e | 8′ 2″ e | 7′ 2″ e | 6′ 0″ e |
| 350S125-27 | 33 | 10′ 7″ | 9′ 9″ | 8′ 9″ | 14′ 11″ | 13′ 9″ | 12′ 3″ | 9′ 5″ | 8′ 9″ | 7′ 9″ | 13′ 4″ | 12′ 3″ | 10′ 7″ | 7′ 7″ | 7′ 1″ | 6′ 4″ | 10′ 4″ | 9′ 3″ | 7′ 9″ |
| 350S125-30 | 33 | 10′ 11″ | 10′ 1″ | 9′ 0″ | 15′ 5″ | 14′ 2″ | 12′ 9″ | 9′ 9″ | 9′ 0″ | 8′ 1″ | 13′ 9″ | 12′ 9″ | 11′ 2″ | 7′ 11″ | 7′ 3″ | 6′ 6″ | 10′ 11″ | 9′ 9″ | 8′ 3″ |
| 350S125-33 | 33 | 11′ 4″ | 10′ 5″ | 9′ 4″ | 16′ 0″ | 14′ 9″ | 13′ 2″ | 10′ 1″ | 9′ 4″ | 8′ 4″ | 14′ 3″ | 13′ 2″ | 11′ 9″ | 8′ 2″ | 7′ 7″ | 6′ 9″ | 11′ 5″ | 10′ 4″ | 8′ 10″ |
| 350S125-43 | 33 | 12′ 7″ | 11′ 7″ | 10′ 4″ | 17′ 7″ | 16′ 3″ | 14′ 6″ | 11′ 2″ | 10′ 4″ | 9′ 2″ | 15′ 8″ | 14′ 6″ | 12′ 11″ | 9′ 0″ | 8′ 3″ | 7′ 5″ | 12′ 7″ | 11′ 6″ | 10′ 1″ |
| 350S137-33 | 33 | 12′ 9″ | 11′ 10″ | 10′ 7″ | 18′ 2″ | 16′ 9″ | 15′ 1″ | 11′ 5″ | 10′ 7″ | 9′ 6″ | 16′ 3″ | 15′ 1″ | 13′ 4″ | 9′ 3″ | 8′ 7″ | 7′ 8″ | 13′ 0″ | 11′ 9″ | 10′ 0″ |
| 350S137-43 | 33 | 14′ 2″ | 13′ 0″ | 11′ 7″ | 19′ 10″ | 18′ 4″ | 16′ 5″ | 12′ 7″ | 11′ 7″ | 10′ 4″ | 17′ 9″ | 16′ 5″ | 14′ 7″ | 10′ 2″ | 9′ 4″ | 8′ 5″ | 14′ 2″ | 12′ 11″ | 11′ 3″ |
| 350S162-33 | 33 | 14′ 6″ | 13′ 5″ | 12′ 1″ | 20′ 3″ | 18′ 5″ | 16′ 1″ | 13′ 0″ | 12′ 1″ | 10′ 10″ | 17′ 9″ | 16′ 1″ | 14′ 1″ | 10′ 7″ | 9′ 10″ | 8′ 10″ | 13′ 8″ | 12′ 5″ | 10′ 10″ |
| 350S162-43 | 33 | 16′ 0″ | 14′ 9″ | 13′ 2″ | 22′ 1″ | 20′ 0″ | 17′ 6″ | 14′ 3″ | 13′ 2″ | 11′ 9″ | 19′ 3″ | 17′ 6″ | 15′ 3″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 14′ 11″ | 13′ 6″ | 11′ 10″ |
| 362S125-18 | 33 | 9′ 3″ | 8′ 7″ | 7′ 7″ | 12′ 8″ | 11′ 7″ | 10′ 0″ | 8′ 4″ | 7′ 7″ | 6′ 9″ | 11′ 1″ | 10′ 0″ | 8′ 6″ e | 6′ 7″ | 6′ 0″ e | 5′ 4″ e | 8′ 3″ e | 7′ 4″ e | 6′ 1″ e |
| 362S125-27 | 33 | 10′ 8″ | 9′ 10″ | 8′ 10″ | 15′ 0″ | 13′ 11″ | 12′ 4″ | 9′ 6″ | 8′ 10″ | 7′ 10″ | 13′ 5″ | 12′ 4″ | 10′ 9″ | 7′ 8″ | 7′ 1″ | 6′ 5″ | 10′ 5″ | 9′ 4″ | 7′ 11″ |
| 362S125-30 | 33 | 11′ 0″ | 10′ 2″ | 9′ 1″ | 15′ 6″ | 14′ 4″ | 12′ 10″ | 9′ 10″ | 9′ 1″ | 8′ 2″ | 13′ 11″ | 12′ 10″ | 11′ 4″ | 8′ 0″ | 7′ 4″ | 6′ 7″ | 11′ 0″ | 9′ 11″ | 8′ 5″ |
| 362S125-33 | 33 | 11′ 5″ | 10′ 7″ | 9′ 5″ | 16′ 2″ | 14′ 10″ | 13′ 3″ | 10′ 3″ | 9′ 5″ | 8′ 5″ | 14′ 5″ | 13′ 3″ | 11′ 10″ | 8′ 3″ | 7′ 8″ | 6′ 10″ | 11′ 7″ | 10′ 6″ | 9′ 0″ |
| 362S125-43 | 33 | 12′ 8″ | 11′ 8″ | 10′ 5″ | 17′ 9″ | 16′ 5″ | 14′ 8″ | 11′ 3″ | 10′ 5″ | 9′ 3″ | 15′ 10″ | 14′ 8″ | 13′ 0″ | 9′ 1″ | 8′ 4″ | 7′ 6″ | 12′ 9″ | 11′ 8″ | 10′ 2″ |
| 362S137-33 | 33 | 12′ 11″ | 11′ 11″ | 10′ 8″ | 18′ 4″ | 16′ 11″ | 15′ 2″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 16′ 5″ | 15′ 2″ | 13′ 6″ | 9′ 4″ | 8′ 8″ | 7′ 9″ | 13′ 2″ | 11′ 11″ | 10′ 2″ |
| 362S137-43 | 33 | 14′ 3″ | 13′ 2″ | 11′ 8″ | 20′ 0″ | 18′ 6″ | 16′ 7″ | 12′ 8″ | 11′ 8″ | 10′ 5″ | 17′ 11″ | 16′ 7″ | 14′ 9″ | 10′ 3″ | 9′ 5″ | 8′ 6″ | 14′ 5″ | 13′ 2″ | 11′ 5″ |
| 362S162-33 | 33 | 14′ 8″ | 13′ 7″ | 12′ 2″ | 20′ 10″ | 18′ 11″ | 16′ 6″ | 13′ 2″ | 12′ 2″ | 10′ 11″ | 18′ 2″ | 16′ 6″ | 14′ 5″ | 10′ 8″ | 9′ 11″ | 8′ 11″ | 14′ 1″ | 12′ 9″ | 11′ 2″ |
| 362S162-43 | 33 | 16′ 2″ | 14′ 11″ | 13′ 4″ | 22′ 8″ | 20′ 7″ | 18′ 0″ | 14′ 5″ | 13′ 4″ | 11′ 11″ | 19′ 10″ | 18′ 0″ | 15′ 9″ | 11′ 8″ | 10′ 9″ | 9′ 8″ | 15′ 4″ | 13′ 11″ | 12′ 2″ |
| 400S125-18 | 33 | 9′ 6″ e | 8′ 9″ e | 7′ 10″ e | 13′ 0″ e | 11′ 11″ e | 10′ 5″ e | 8′ 6″ e | 7′ 10″ e | 6′ 11″ e | 11′ 6″ e | 10′ 5″ e | 8′ 11″ e | 6′ 9″ e | 6′ 2″ e | 5′ 6″ e | 8′ 7″ e | 7′ 8″ e | 6′ 5″ e |
| 400S125-27 | 33 | 10′ 11″ | 10′ 1″ | 9′ 1″ | 15′ 5″ | 14′ 3″ | 12′ 9″ | 9′ 9″ | 9′ 1″ | 8′ 1″ | 13′ 10″ | 12′ 9″ | 11′ 2″ | 7′ 11″ | 7′ 4″ | 6′ 7″ | 10′ 10″ | 9′ 9″ | 8′ 3″ |
| 400S125-30 | 33 | 11′ 4″ | 10′ 5″ | 9′ 4″ | 16′ 0″ | 14′ 9″ | 13′ 2″ | 10′ 1″ | 9′ 4″ | 8′ 4″ | 14′ 3″ | 13′ 2″ | 11′ 9″ | 8′ 2″ | 7′ 7″ | 6′ 9″ | 11′ 5″ | 10′ 4″ | 8′ 9″ |
| 400S125-33 | 33 | 11′ 9″ | 10′ 10″ | 9′ 8″ | 16′ 7″ | 15′ 3″ | 13′ 8″ | 10′ 6″ | 9′ 8″ | 8′ 8″ | 14′ 9″ | 13′ 8″ | 12′ 2″ | 8′ 6″ | 7′ 10″ | 7′ 0″ | 11′ 11″ | 10′ 11″ | 9′ 4″ |
| 400S125-43 | 33 | 13′ 0″ | 12′ 0″ | 10′ 8″ | 18′ 3″ | 16′ 10″ | 15′ 0″ | 11′ 7″ | 10′ 8″ | 9′ 6″ | 16′ 3″ | 15′ 0″ | 13′ 5″ | 9′ 4″ | 8′ 7″ | 7′ 8″ | 13′ 1″ | 12′ 0″ | 10′ 7″ |
| 400S137-33 | 33 | 13′ 3″ | 12′ 3″ | 10′ 11″ | 18′ 9″ | 17′ 4″ | 15′ 7″ | 11′ 10″ | 10′ 11″ | 9′ 10″ | 16′ 10″ | 15′ 7″ | 13′ 11″ | 9′ 7″ | 8′ 11″ | 8′ 0″ | 13′ 7″ | 12′ 4″ | 10′ 8″ |
| 400S137-43 | 33 | 14′ 7″ | 13′ 6″ | 12′ 0″ | 20′ 7″ | 19′ 0″ | 17′ 0″ | 13′ 0″ | 12′ 0″ | 10′ 9″ | 18′ 4″ | 17′ 0″ | 15′ 2″ | 10′ 6″ | 9′ 8″ | 8′ 8″ | 14′ 10″ | 13′ 7″ | 11′ 10″ |
| 400S162-33 | 33 | 15′ 0″ | 13′ 11″ | 12′ 6″ | 21′ 5″ | 19′ 10″ | 17′ 9″ | 13′ 6″ | 12′ 6″ | 11′ 2″ | 19′ 3″ | 17′ 9″ | 15′ 7″ | 10′ 11″ | 10′ 2″ | 9′ 1″ | 15′ 2″ | 13′ 9″ | 11′ 9″ |
| 400S162-43 | 33 | 16′ 7″ | 15′ 3″ | 13′ 8″ | 23′ 4″ | 21′ 7″ | 19′ 4″ | 14′ 9″ | 13′ 8″ | 12′ 2″ | 20′ 11″ | 19′ 4″ | 16′ 11″ | 11′ 11″ | 11′ 0″ | 9′ 11″ | 16′ 6″ | 15′ 0″ | 13′ 1″ |
| 550S125-27 | 33 | 12′ 1″ | 11′ 3″ | 10′ 1″ | 17′ 6″ | 16′ 1″ | 14′ 5″ | 10′ 11″ | 10′ 1″ | 9′ 1″ | 15′ 7″ | 14′ 5″ | 12′ 11″ | 8′ 11″ | 8′ 3″ | 7′ 5″ | 12′ 7″ | 11′ 7″ | 10′ 0″ e |
| 550S125-30 | 33 | 12′ 6″ | 11′ 7″ | 10′ 5″ | 17′ 11″ | 16′ 8″ | 14′ 11″ | 11′ 2″ | 10′ 5″ | 9′ 4″ | 16′ 2″ | 14′ 11″ | 13′ 4″ | 9′ 2″ | 8′ 6″ | 7′ 8″ | 13′ 0″ | 12′ 1″ | 10′ 7″ e |
| 550S125-33 | 33 | 12′ 10″ | 11′ 11″ | 10′ 8″ | 18′ 6″ | 17′ 1″ | 15′ 5″ | 11′ 7″ | 10′ 8″ | 9′ 7″ | 16′ 7″ | 15′ 5″ | 13′ 10″ | 9′ 5″ | 8′ 9″ | 7′ 10″ | 13′ 6″ | 12′ 5″ | 11′ 1″ |
| 550S125-43 | 33 | 14′ 2″ | 13′ 0″ | 11′ 8″ | 20′ 0″ | 18′ 6″ | 16′ 7″ | 12′ 7″ | 11′ 8″ | 10′ 5″ | 17′ 11″ | 16′ 7″ | 14′ 11″ | 10′ 2″ | 9′ 5″ | 8′ 6″ | 14′ 7″ | 13′ 6″ | 12′ 2″ |
| 550S137-33 | 33 | 14′ 6″ | 13′ 5″ | 12′ 1″ | 20′ 10″ | 19′ 4″ | 17′ 5″ | 13′ 0″ | 12′ 1″ | 10′ 10″ | 18′ 9″ | 17′ 5″ | 15′ 9″ | 10′ 8″ | 9′ 10″ | 8′ 11″ | 15′ 5″ | 14′ 3″ | 12′ 9″ e |
| 550S137-43 | 33 | 15′ 11″ | 14′ 8″ | 13′ 1″ | 22′ 7″ | 20′ 11″ | 18′ 9″ | 14′ 2″ | 13′ 1″ | 11′ 9″ | 20′ 3″ | 18′ 9″ | 16′ 10″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 16′ 6″ | 15′ 4″ | 13′ 9″ |
| 550S162-33 | 33 | 16′ 6″ | 15′ 3″ | 13′ 9″ | 23′ 9″ | 22′ 1″ | 19′ 11″ | 14′ 10″ | 13′ 9″ | 12′ 4″ | 21′ 5″ | 19′ 11″ | 17′ 11″ | 12′ 2″ | 11′ 3″ | 10′ 2″ | 17′ 7″ | 16′ 2″ | 14′ 3″ e |
| 550S162-43 | 33 | 18′ 0″ | 16′ 7″ | 14′ 11″ | 25′ 8″ | 23′ 9″ | 21′ 4″ | 16′ 1″ | 14′ 11″ | 13′ 4″ | 23′ 1″ | 21′ 4″ | 19′ 3″ | 13′ 1″ | 12′ 1″ | 10′ 11″ | 18′ 10″ | 17′ 6″ | 15′ 6″ |
| 600S125-27 | 33 | 12′ 5″ e | 11′ 6″ e | 10′ 4″ e | 17′ 11″ e | 16′ 6″ e | 14′ 9″ e | 11′ 2″ e | 10′ 4″ e | 9′ 4″ e | 16′ 0″ e | 14′ 9″ e | 13′ 2″ e | 9′ 2″ e | 8′ 6″ e | 7′ 7″ e | 12′ 11″ e | 11′ 10″ e | 10′ 4″ e |
| 600S125-30 | 33 | 12′ 9″ | 11′ 10″ | 10′ 8″ | 18′ 5″ | 17′ 1″ | 15′ 3″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 16′ 7″ | 15′ 3″ | 13′ 8″ | 9′ 5″ | 8′ 9″ | 7′ 10″ | 13′ 4″ | 12′ 4″ | 10′ 11″ e |
| 600S125-33 | 33 | 13′ 2″ | 12′ 3″ | 11′ 0″ | 18′ 11″ | 17′ 7″ | 15′ 10″ | 11′ 10″ | 11′ 0″ | 9′ 10″ | 17′ 0″ | 15′ 10″ | 14′ 2″ | 9′ 8″ | 8′ 11″ | 8′ 1″ | 13′ 10″ | 12′ 9″ | 11′ 5″ |
| 600S125-43 | 33 | 14′ 6″ | 13′ 4″ | 11′ 11″ | 20′ 6″ | 19′ 0″ | 17′ 0″ | 12′ 11″ | 11′ 11″ | 10′ 8″ | 18′ 4″ | 17′ 0″ | 15′ 3″ | 10′ 5″ | 9′ 8″ | 8′ 8″ | 15′ 0″ | 13′ 11″ | 12′ 6″ |
| 600S137-33 | 33 | 14′ 11″ | 13′ 9″ | 12′ 5″ | 21′ 5″ | 19′ 10″ | 17′ 10″ | 13′ 4″ | 12′ 5″ | 11′ 2″ | 19′ 3″ | 17′ 10″ | 16′ 0″ | 10′ 11″ | 10′ 2″ | 9′ 2″ | 15′ 8″ | 14′ 6″ | 12′ 11″ e |
| 600S137-43 | 33 | 16′ 3″ | 15′ 0″ | 13′ 5″ | 23′ 1″ | 21′ 5″ | 19′ 3″ | 14′ 6″ | 13′ 5″ | 12′ 0″ | 20′ 9″ | 19′ 3″ | 17′ 4″ | 11′ 9″ | 10′ 11″ | 9′ 10″ | 16′ 11″ | 15′ 9″ | 14′ 2″ |
| 600S162-33 | 33 | 16′ 11″ | 15′ 8″ | 14′ 1″ | 24′ 5″ | 22′ 8″ | 20′ 5″ | 15′ 2″ | 14′ 1″ | 12′ 8″ | 22′ 0″ | 20′ 5″ | 18′ 5″ | 12′ 5″ | 11′ 7″ | 10′ 5″ | 18′ 0″ | 16′ 8″ | 14′ 9″ e |
| 600S162-43 | 33 | 18′ 5″ | 17′ 0″ | 15′ 3″ | 26′ 4″ | 24′ 4″ | 21′ 11″ | 16′ 6″ | 15′ 3″ | 13′ 8″ | 23′ 8″ | 21′ 11″ | 19′ 9″ | 13′ 5″ | 12′ 5″ | 11′ 2″ | 19′ 4″ | 17′ 11″ | 16′ 0″ |

"e" Requires web stiffeners at end supports

CEMCO
Steel Framing and Metal Lath

## Allowable Ceiling Spans Deflection Notes

1. For unbraced sections, allowable moment based on NASPEC section C3.1.2 with KyLy = KtLt = listed span. For mid-span braced sections, allowable moment based on NASPEC C3.1.2 with KyLy = KtLt = (listed span)/2
2. For spans listed with "e", web stiffeners are required at end reactions.
3. Web crippling calculation based on bearing length = 1 inch.
4. Web crippling and shear capacity have not been reduced for punchouts. If web punchouts occur near supports members must be checked for reduced shear and web crippling in accordance with the NASPEC.
5. Values are for simple span conditions.

## Allowable Ceiling Spans Deflection Limit L/360

| Section | Fy (Ksi) | 4 psf Lateral Support of Compression Flange | | | | | | 6 psf Lateral Support of Compression Flange | | | | | | 13 psf Lateral Support of Compression Flange | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Unsupported Joist Spacing (in) o.c. | | | Midspan Joist Spacing (in) o.c. | | | Unsupported Joist Spacing (in) o.c. | | | Midspan Joist Spacing (in) o.c. | | | Unsupported Joist Spacing (in) o.c. | | | Midspan Joist Spacing (in) o.c. | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 162S125-18 | 33 | 7′ 2″ | 6′ 7″ | 5′ 9″ | 7′ 2″ | 6′ 7″ | 5′ 9″ | 6′ 4″ | 5′ 9″ | 5′ 0″ | 6′ 4″ | 5′ 9″ | 5′ 0″ | 4′ 10″ | 4′ 5″ | 3′ 9″ | 4′ 10″ | 4′ 5″ | 3′ 10″ |
| 162S125-27 | 33 | 8′ 5″ | 7′ 8″ | 6′ 8″ | 8′ 5″ | 7′ 8″ | 6′ 8″ | 7′ 4″ | 6′ 8″ | 5′ 10″ | 7′ 4″ | 6′ 8″ | 5′ 10″ | 5′ 8″ | 5′ 2″ | 4′ 6″ | 5′ 8″ | 5′ 2″ | 4′ 6″ |
| 162S125-30 | 33 | 8′ 8″ | 7′ 11″ | 6′ 11″ | 8′ 8″ | 7′ 11″ | 6′ 11″ | 7′ 7″ | 6′ 11″ | 6′ 0″ | 7′ 7″ | 6′ 11″ | 6′ 0″ | 5′ 10″ | 5′ 4″ | 4′ 8″ | 5′ 10″ | 5′ 4″ | 4′ 8″ |
| 162S125-33 | 33 | 9′ 0″ | 8′ 2″ | 7′ 1″ | 9′ 0″ | 8′ 2″ | 7′ 1″ | 7′ 10″ | 7′ 1″ | 6′ 3″ | 7′ 10″ | 7′ 1″ | 6′ 3″ | 6′ 1″ | 5′ 6″ | 4′ 10″ | 6′ 1″ | 5′ 6″ | 4′ 10″ |
| 250S125-18 | 33 | 8′ 5″ | 7′ 9″ | 6′ 11″ | 9′ 11″ | 9′ 0″ | 7′ 10″ | 7′ 6″ | 6′ 11″ | 6′ 2″ | 8′ 8″ | 7′ 10″ | 6′ 11″ | 6′ 0″ | 5′ 6″ | 4′ 10″ e | 6′ 8″ | 6′ 1″ e | 5′ 4″ e |
| 250S125-27 | 33 | 9′ 8″ | 8′ 11″ | 8′ 0″ | 11′ 8″ | 10′ 7″ | 9′ 3″ | 8′ 8″ | 8′ 0″ | 7′ 2″ | 10′ 2″ | 9′ 3″ | 8′ 1″ | 7′ 0″ | 6′ 6″ | 5′ 9″ | 7′ 10″ | 7′ 2″ | 6′ 3″ |
| 250S125-30 | 33 | 10′ 1″ | 9′ 3″ | 8′ 3″ | 12′ 0″ | 10′ 11″ | 9′ 6″ | 9′ 0″ | 8′ 3″ | 7′ 5″ | 10′ 6″ | 9′ 6″ | 8′ 4″ | 7′ 3″ | 6′ 8″ | 6′ 0″ | 8′ 1″ | 7′ 4″ | 6′ 5″ |
| 250S125-33 | 33 | 10′ 6″ | 9′ 8″ | 8′ 7″ | 12′ 5″ | 11′ 3″ | 9′ 10″ | 9′ 4″ | 8′ 7″ | 7′ 8″ | 10′ 10″ | 9′ 10″ | 8′ 7″ | 7′ 6″ | 6′ 11″ | 6′ 2″ | 8′ 5″ | 7′ 7″ | 6′ 8″ |
| 250S125-43 | 33 | 11′ 9″ | 10′ 10″ | 9′ 7″ | 13′ 6″ | 12′ 3″ | 10′ 9″ | 10′ 5″ | 9′ 7″ | 8′ 6″ | 11′ 10″ | 10′ 9″ | 9′ 4″ | 8′ 4″ | 7′ 8″ | 6′ 10″ | 9′ 1″ | 8′ 3″ | 7′ 3″ |
| 250S137-33 | 33 | 11′ 10″ | 10′ 11″ | 9′ 9″ | 13′ 1″ | 11′ 10″ | 10′ 4″ | 10′ 7″ | 9′ 9″ | 8′ 9″ | 11′ 5″ | 10′ 4″ | 9′ 1″ | 8′ 7″ | 7′ 11″ | 7′ 0″ | 8′ 10″ | 8′ 0″ | 7′ 0″ |
| 250S137-43 | 33 | 13′ 3″ | 12′ 2″ | 10′ 10″ | 14′ 2″ | 12′ 11″ | 11′ 3″ | 11′ 9″ | 10′ 10″ | 9′ 7″ | 12′ 5″ | 11′ 3″ | 9′ 10″ | 9′ 5″ | 8′ 8″ | 7′ 7″ | 9′ 7″ | 8′ 8″ | 7′ 7″ |
| 250S162-33 | 33 | 13′ 6″ | 12′ 5″ | 10′ 10″ | 13′ 8″ | 12′ 5″ | 10′ 10″ | 12′ 0″ | 10′ 10″ | 9′ 6″ | 12′ 0″ | 10′ 10″ | 9′ 6″ | 9′ 3″ | 8′ 5″ | 7′ 4″ | 9′ 3″ | 8′ 5″ | 7′ 4″ |
| 250S162-43 | 33 | 14′ 11″ | 13′ 6″ | 11′ 10″ | 14′ 11″ | 13′ 6″ | 11′ 10″ | 13′ 0″ | 11′ 10″ | 10′ 4″ | 13′ 0″ | 11′ 10″ | 10′ 4″ | 10′ 1″ | 9′ 2″ | 8′ 0″ | 10′ 1″ | 9′ 2″ | 8′ 0″ |
| 350S125-18 | 33 | 9′ 2″ | 8′ 6″ | 7′ 6″ | 12′ 6″ | 11′ 5″ | 9′ 11″ | 8′ 3″ | 7′ 6″ | 6′ 8″ | 11′ 0″ | 9′ 11″ | 8′ 5″ e | 6′ 6″ | 5′ 11″ e | 5′ 3″ e | 8′ 2″ e | 7′ 2″ e | 6′ 0″ e |
| 350S125-27 | 33 | 10′ 7″ | 9′ 9″ | 8′ 9″ | 14′ 11″ | 13′ 9″ | 12′ 0″ | 9′ 5″ | 8′ 9″ | 7′ 9″ | 13′ 2″ | 12′ 0″ | 10′ 6″ | 7′ 7″ | 7′ 1″ | 6′ 4″ | 10′ 2″ | 9′ 3″ | 7′ 9″ |
| 350S125-30 | 33 | 10′ 11″ | 10′ 1″ | 9′ 0″ | 15′ 5″ | 14′ 2″ | 12′ 4″ | 9′ 9″ | 9′ 0″ | 8′ 1″ | 13′ 7″ | 12′ 4″ | 10′ 10″ | 7′ 11″ | 7′ 3″ | 6′ 6″ | 10′ 6″ | 9′ 7″ | 8′ 3″ |
| 350S125-33 | 33 | 11′ 4″ | 10′ 5″ | 9′ 4″ | 16′ 0″ | 14′ 8″ | 12′ 9″ | 10′ 1″ | 9′ 4″ | 8′ 4″ | 14′ 1″ | 12′ 9″ | 11′ 2″ | 8′ 2″ | 7′ 7″ | 6′ 9″ | 10′ 10″ | 9′ 11″ | 8′ 8″ |
| 350S125-43 | 33 | 12′ 7″ | 11′ 7″ | 10′ 4″ | 17′ 7″ | 15′ 11″ | 13′ 11″ | 11′ 2″ | 10′ 4″ | 9′ 2″ | 15′ 4″ | 13′ 11″ | 12′ 2″ | 9′ 0″ | 8′ 3″ | 7′ 5″ | 11′ 10″ | 10′ 9″ | 9′ 5″ |
| 350S137-33 | 33 | 12′ 9″ | 11′ 10″ | 10′ 7″ | 16′ 11″ | 15′ 4″ | 13′ 5″ | 11′ 5″ | 10′ 7″ | 9′ 6″ | 14′ 9″ | 13′ 5″ | 11′ 9″ | 9′ 3″ | 8′ 7″ | 7′ 8″ | 11′ 5″ | 10′ 4″ | 9′ 1″ |
| 350S137-43 | 33 | 14′ 2″ | 13′ 0″ | 11′ 7″ | 18′ 4″ | 16′ 8″ | 14′ 7″ | 12′ 7″ | 11′ 7″ | 10′ 4″ | 16′ 1″ | 14′ 7″ | 12′ 9″ | 10′ 2″ | 9′ 4″ | 8′ 5″ | 12′ 5″ | 11′ 3″ | 9′ 10″ |
| 350S162-33 | 33 | 14′ 6″ | 13′ 5″ | 12′ 1″ | 17′ 9″ | 16′ 1″ | 14′ 1″ | 13′ 0″ | 12′ 1″ | 10′ 10″ | 15′ 6″ | 14′ 1″ | 12′ 3″ | 10′ 7″ | 9′ 10″ | 8′ 10″ | 11′ 11″ | 10′ 10″ | 9′ 6″ |
| 350S162-43 | 33 | 16′ 0″ | 14′ 9″ | 13′ 2″ | 19′ 3″ | 17′ 6″ | 15′ 3″ | 14′ 3″ | 13′ 2″ | 11′ 9″ | 16′ 10″ | 15′ 3″ | 13′ 4″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 13′ 0″ | 11′ 10″ | 10′ 4″ |
| 362S125-18 | 33 | 9′ 3″ | 8′ 7″ | 7′ 7″ | 12′ 8″ | 11′ 7″ | 10′ 0″ | 8′ 4″ | 7′ 7″ | 6′ 9″ | 11′ 1″ | 10′ 0″ | 8′ 6″ e | 6′ 7″ | 6′ 0″ e | 5′ 4″ e | 8′ 3″ e | 7′ 4″ e | 6′ 1″ e |
| 362S125-27 | 33 | 10′ 8″ | 9′ 10″ | 8′ 10″ | 15′ 0″ | 13′ 11″ | 12′ 4″ | 9′ 6″ | 8′ 10″ | 7′ 10″ | 13′ 5″ | 12′ 4″ | 10′ 9″ | 7′ 8″ | 7′ 1″ | 6′ 5″ | 10′ 5″ | 9′ 4″ | 7′ 11″ |
| 362S125-30 | 33 | 11′ 0″ | 10′ 2″ | 9′ 1″ | 15′ 6″ | 14′ 4″ | 12′ 9″ | 9′ 10″ | 9′ 1″ | 8′ 2″ | 13′ 11″ | 12′ 9″ | 11′ 1″ | 8′ 0″ | 7′ 4″ | 6′ 7″ | 10′ 10″ | 9′ 10″ | 8′ 5″ |
| 362S125-33 | 33 | 11′ 5″ | 10′ 7″ | 9′ 5″ | 16′ 2″ | 14′ 10″ | 13′ 2″ | 10′ 3″ | 9′ 5″ | 8′ 5″ | 14′ 5″ | 13′ 2″ | 11′ 6″ | 8′ 3″ | 7′ 8″ | 6′ 10″ | 11′ 2″ | 10′ 2″ | 8′ 10″ |
| 362S125-43 | 33 | 12′ 8″ | 11′ 8″ | 10′ 5″ | 17′ 9″ | 16′ 5″ | 14′ 4″ | 11′ 3″ | 10′ 5″ | 9′ 3″ | 15′ 9″ | 14′ 4″ | 12′ 6″ | 9′ 1″ | 8′ 4″ | 7′ 6″ | 12′ 2″ | 11′ 1″ | 9′ 8″ |
| 362S137-33 | 33 | 12′ 11″ | 11′ 11″ | 10′ 8″ | 17′ 4″ | 15′ 9″ | 13′ 9″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 15′ 2″ | 13′ 9″ | 12′ 0″ | 9′ 4″ | 8′ 8″ | 7′ 9″ | 11′ 9″ | 10′ 8″ | 9′ 4″ |
| 362S137-43 | 33 | 14′ 3″ | 13′ 2″ | 11′ 8″ | 18′ 11″ | 17′ 2″ | 15′ 0″ | 12′ 8″ | 11′ 8″ | 10′ 5″ | 16′ 6″ | 15′ 0″ | 13′ 1″ | 10′ 3″ | 9′ 5″ | 8′ 6″ | 12′ 9″ | 11′ 7″ | 10′ 1″ |
| 362S162-33 | 33 | 14′ 8″ | 13′ 7″ | 12′ 2″ | 18′ 2″ | 16′ 6″ | 14′ 5″ | 13′ 2″ | 12′ 2″ | 10′ 11″ | 15′ 11″ | 14′ 5″ | 12′ 7″ | 10′ 8″ | 9′ 11″ | 8′ 11″ | 12′ 3″ | 11′ 2″ | 9′ 9″ |
| 362S162-43 | 33 | 16′ 2″ | 14′ 11″ | 13′ 4″ | 19′ 10″ | 18′ 0″ | 15′ 9″ | 14′ 5″ | 13′ 4″ | 11′ 11″ | 17′ 3″ | 15′ 9″ | 13′ 9″ | 11′ 8″ | 10′ 9″ | 9′ 8″ | 13′ 4″ | 12′ 2″ | 10′ 7″ |
| 400S125-18 | 33 | 9′ 6″ e | 8′ 9″ e | 7′ 10″ e | 13′ 0″ e | 11′ 11″ e | 10′ 5″ e | 8′ 6″ e | 7′ 10″ e | 6′ 11″ e | 11′ 6″ e | 10′ 5″ e | 8′ 11″ e | 6′ 9″ e | 6′ 2″ e | 5′ 6″ e | 8′ 7″ e | 7′ 8″ e | 6′ 5″ e |
| 400S125-27 | 33 | 10′ 11″ | 10′ 1″ | 9′ 1″ | 15′ 5″ | 14′ 3″ | 12′ 9″ | 9′ 9″ | 9′ 1″ | 8′ 1″ | 13′ 10″ | 12′ 9″ | 11′ 2″ | 7′ 11″ | 7′ 4″ | 6′ 7″ | 10′ 10″ | 9′ 9″ | 8′ 3″ |
| 400S125-30 | 33 | 11′ 4″ | 10′ 5″ | 9′ 4″ | 16′ 0″ | 14′ 9″ | 13′ 2″ | 10′ 1″ | 9′ 4″ | 8′ 4″ | 14′ 3″ | 13′ 2″ | 11′ 9″ | 8′ 2″ | 7′ 7″ | 6′ 9″ | 11′ 5″ | 10′ 4″ | 8′ 9″ |
| 400S125-33 | 33 | 11′ 9″ | 10′ 10″ | 9′ 8″ | 16′ 7″ | 15′ 3″ | 13′ 8″ | 10′ 6″ | 9′ 8″ | 8′ 8″ | 14′ 9″ | 13′ 8″ | 12′ 2″ | 8′ 6″ | 7′ 10″ | 7′ 0″ | 11′ 11″ | 10′ 11″ | 9′ 4″ |
| 400S125-43 | 33 | 13′ 0″ | 12′ 0″ | 10′ 8″ | 18′ 3″ | 16′ 10″ | 15′ 0″ | 11′ 7″ | 10′ 8″ | 9′ 6″ | 16′ 3″ | 15′ 0″ | 13′ 5″ | 9′ 4″ | 8′ 7″ | 7′ 8″ | 13′ 1″ | 12′ 0″ | 10′ 5″ |
| 400S137-33 | 33 | 13′ 3″ | 12′ 3″ | 10′ 11″ | 18′ 9″ | 17′ 0″ | 14′ 11″ | 11′ 10″ | 10′ 11″ | 9′ 10″ | 16′ 5″ | 14′ 11″ | 13′ 0″ | 9′ 7″ | 8′ 11″ | 8′ 0″ | 12′ 8″ | 11′ 6″ | 10′ 1″ |
| 400S137-43 | 33 | 14′ 7″ | 13′ 6″ | 12′ 0″ | 20′ 5″ | 18′ 6″ | 16′ 2″ | 13′ 0″ | 12′ 0″ | 10′ 9″ | 17′ 10″ | 16′ 2″ | 14′ 2″ | 10′ 6″ | 9′ 8″ | 8′ 8″ | 13′ 9″ | 12′ 6″ | 10′ 11″ |
| 400S162-33 | 33 | 15′ 0″ | 13′ 11″ | 12′ 6″ | 19′ 8″ | 17′ 10″ | 15′ 7″ | 13′ 6″ | 12′ 6″ | 11′ 2″ | 17′ 2″ | 15′ 7″ | 13′ 7″ | 10′ 11″ | 10′ 2″ | 9′ 1″ | 13′ 3″ | 12′ 0″ | 10′ 6″ |
| 400S162-43 | 33 | 16′ 7″ | 15′ 3″ | 13′ 8″ | 21′ 4″ | 19′ 5″ | 16′ 11″ | 14′ 9″ | 13′ 8″ | 12′ 2″ | 18′ 8″ | 16′ 11″ | 14′ 10″ | 11′ 11″ | 11′ 0″ | 9′ 11″ | 14′ 5″ | 13′ 1″ | 11′ 5″ |
| 550S125-27 | 33 | 12′ 1″ | 11′ 3″ | 10′ 1″ | 17′ 6″ | 16′ 1″ | 14′ 5″ | 10′ 11″ | 10′ 1″ | 9′ 1″ | 15′ 7″ | 14′ 5″ | 12′ 11″ | 8′ 11″ | 8′ 3″ | 7′ 5″ | 12′ 7″ | 11′ 7″ | 10′ 0″ e |
| 550S125-30 | 33 | 12′ 6″ | 11′ 7″ | 10′ 5″ | 17′ 11″ | 16′ 8″ | 14′ 11″ | 11′ 2″ | 10′ 5″ | 9′ 4″ | 16′ 2″ | 14′ 11″ | 13′ 4″ | 9′ 2″ | 8′ 6″ | 7′ 8″ | 13′ 0″ | 12′ 1″ | 10′ 7″ e |
| 550S125-33 | 33 | 12′ 10″ | 11′ 11″ | 10′ 8″ | 18′ 6″ | 17′ 1″ | 15′ 5″ | 11′ 7″ | 10′ 8″ | 9′ 7″ | 16′ 7″ | 15′ 5″ | 13′ 10″ | 9′ 5″ | 8′ 9″ | 7′ 10″ | 13′ 6″ | 12′ 5″ | 11′ 1″ |
| 550S125-43 | 33 | 14′ 2″ | 13′ 0″ | 11′ 8″ | 20′ 0″ | 18′ 6″ | 16′ 7″ | 12′ 7″ | 11′ 8″ | 10′ 5″ | 17′ 11″ | 16′ 7″ | 14′ 11″ | 10′ 2″ | 9′ 5″ | 8′ 6″ | 14′ 7″ | 13′ 6″ | 12′ 2″ |
| 550S137-33 | 33 | 14′ 6″ | 13′ 5″ | 12′ 1″ | 20′ 10″ | 19′ 4″ | 17′ 5″ | 13′ 0″ | 12′ 1″ | 10′ 10″ | 18′ 9″ | 17′ 5″ | 15′ 9″ | 10′ 8″ | 9′ 10″ | 8′ 11″ | 15′ 5″ | 14′ 3″ | 12′ 9″ e |
| 550S137-43 | 33 | 15′ 11″ | 14′ 8″ | 13′ 1″ | 22′ 7″ | 20′ 11″ | 18′ 9″ | 14′ 2″ | 13′ 1″ | 11′ 9″ | 20′ 3″ | 18′ 9″ | 16′ 10″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 16′ 6″ | 15′ 4″ | 13′ 9″ |
| 550S162-33 | 33 | 16′ 6″ | 15′ 3″ | 13′ 9″ | 23′ 9″ | 22′ 1″ | 19′ 11″ | 14′ 10″ | 13′ 9″ | 12′ 4″ | 21′ 5″ | 19′ 11″ | 17′ 5″ | 12′ 2″ | 11′ 3″ | 10′ 2″ | 17′ 0″ | 15′ 5″ | 13′ 6″ e |
| 550S162-43 | 33 | 18′ 0″ | 16′ 7″ | 14′ 11″ | 25′ 8″ | 23′ 9″ | 21′ 4″ | 16′ 1″ | 14′ 11″ | 13′ 4″ | 23′ 1″ | 21′ 4″ | 19′ 0″ | 13′ 1″ | 12′ 1″ | 10′ 11″ | 18′ 6″ | 16′ 10″ | 14′ 8″ |
| 600S125-27 | 33 | 12′ 5″ e | 11′ 6″ e | 10′ 4″ e | 17′ 11″ e | 16′ 6″ e | 14′ 9″ e | 11′ 2″ e | 10′ 4″ e | 9′ 4″ e | 16′ 0″ e | 14′ 9″ e | 13′ 2″ e | 9′ 2″ e | 8′ 6″ e | 7′ 7″ e | 12′ 11″ e | 11′ 10″ e | 10′ 4″ e |
| 600S125-30 | 33 | 12′ 9″ | 11′ 10″ | 10′ 8″ | 18′ 5″ | 17′ 1″ | 15′ 3″ | 11′ 6″ | 10′ 8″ | 9′ 7″ | 16′ 7″ | 15′ 3″ | 13′ 8″ | 9′ 5″ | 8′ 9″ | 7′ 10″ | 13′ 4″ | 12′ 4″ | 10′ 11″ e |
| 600S125-33 | 33 | 13′ 2″ | 12′ 3″ | 11′ 0″ | 18′ 11″ | 17′ 7″ | 15′ 10″ | 11′ 10″ | 11′ 0″ | 9′ 10″ | 17′ 0″ | 15′ 10″ | 14′ 2″ | 9′ 8″ | 8′ 11″ | 8′ 1″ | 13′ 10″ | 12′ 9″ | 11′ 5″ |
| 600S125-43 | 33 | 14′ 6″ | 13′ 4″ | 11′ 11″ | 20′ 6″ | 19′ 0″ | 17′ 0″ | 12′ 11″ | 11′ 11″ | 10′ 8″ | 18′ 4″ | 17′ 0″ | 15′ 3″ | 10′ 5″ | 9′ 8″ | 8′ 8″ | 15′ 0″ | 13′ 11″ | 12′ 6″ |
| 600S137-33 | 33 | 14′ 11″ | 13′ 9″ | 12′ 5″ | 21′ 5″ | 19′ 10″ | 17′ 10″ | 13′ 4″ | 12′ 5″ | 11′ 2″ | 19′ 3″ | 17′ 10″ | 16′ 0″ | 10′ 11″ | 10′ 2″ | 9′ 2″ | 15′ 8″ | 14′ 6″ | 12′ 11″ e |
| 600S137-43 | 33 | 16′ 3″ | 15′ 0″ | 13′ 5″ | 23′ 1″ | 21′ 5″ | 19′ 3″ | 14′ 6″ | 13′ 5″ | 12′ 0″ | 20′ 9″ | 19′ 3″ | 17′ 4″ | 11′ 9″ | 10′ 11″ | 9′ 10″ | 16′ 11″ | 15′ 9″ | 14′ 2″ |
| 600S162-33 | 33 | 16′ 11″ | 15′ 8″ | 14′ 1″ | 24′ 5″ | 22′ 8″ | 20′ 5″ | 15′ 2″ | 14′ 1″ | 12′ 8″ | 22′ 0″ | 20′ 5″ | 18′ 5″ | 12′ 5″ | 11′ 7″ | 10′ 5″ | 18′ 0″ | 16′ 6″ | 14′ 5″ e |
| 600S162-43 | 33 | 18′ 5″ | 17′ 0″ | 15′ 3″ | 26′ 4″ | 24′ 4″ | 21′ 11″ | 16′ 6″ | 15′ 3″ | 13′ 8″ | 23′ 8″ | 21′ 11″ | 19′ 9″ | 13′ 5″ | 12′ 5″ | 11′ 2″ | 19′ 4″ | 17′ 11″ | 15′ 9″ |

"e" Requires web stiffeners at end supports

CEMCO
Steel Framing and Metal Lath

## Section Properties - U Channels

| Section | Design Thickness (in) | Gross | | | | | | Effective Properties 33 ksi | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Area (in2) | Weight (lb/ft) | Ix (in4) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (in-k) | Va (lb) |
| 75U050-54 | 0.0566 | 0.087 | 0.30 | 0.007 | 0.288 | 0.002 | 0.155 | 0.007 | 0.019 | 0.45 | 315 |
| 150U050-54 | 0.0566 | 0.129 | 0.44 | 0.039 | 0.547 | 0.003 | 0.144 | 0.039 | 0.052 | 1.22 | 840 |
| 200U050-54 | 0.0566 | 0.157 | 0.54 | 0.079 | 0.709 | 0.003 | 0.136 | 0.079 | 0.079 | 1.87 | 1190 |

**PROPERTY NOTES:**

1. For Deflection calculations, use effective Ixx

## Allowable U-Channel Ceiling Spans - L/240

| Section | | 4 psf Channel Spacing (in) o.c. | | | | | 6 psf Channel Spacing (in) o.c. | | | | | 13 psf Channel Spacing (in) o.c. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 24 | 36 | 48 | 60 | 72 | 24 | 36 | 48 | 60 | 72 | 24 | 36 | 48 | 60 | 72 |
| 75U050-54 | Single | 3′11″ | 3′5″ | 3′1″ | 2′10″ | 2′8″ | 3′5″ | 3′0″ | 2′8″ | 2′6″ | 2′4″ | 2′7″ | 2′4″ | 2′1″ | 1′11″ | 1′9″ |
| | Multiple | 4′10″ | 4′2″ | 3′10″ | 3′7″ | 3′4″ | 4′2″ | 3′8″ | 3′4″ | 3′1″ | 2′10″ | 3′3″ | 2′9″ | 2′4″ | 2′1″ | 1′11″ |
| 150U050-54 | Single | 5′6″ | 4′10″ | 4′5″ | 4′1″ | 3′10″ | 4′10″ | 4′3″ | 3′10″ | 3′7″ | 3′5″ | 3′9″ | 3′3″ | 3′0″ | 2′9″ | 2′7″ |
| | Multiple | 7′1″ | 6′2″ | 5′8″ | 5′3″ | 4′11″ | 6′2″ | 5′5″ | 4′11″ | 4′7″ | 4′4″ | 4′10″ | 4′2″ | 3′9″ | 3′4″ | 3′0″ |
| 200U050-54 | Single | 5′10″ | 5′1″ | 4′8″ | 4′4″ | 4′1″ | 5′1″ | 4′6″ | 4′1″ | 3′10″ | 3′7″ | 4′0″ | 3′6″ | 3′2″ | 3′0″ | 2′10″ |
| | Multiple | 7′5″ | 6′6″ | 5′11″ | 5′6″ | 5′2″ | 6′6″ | 5′8″ | 5′2″ | 4′10″ | 4′7″ | 5′1″ | 4′5″ | 4′0″ | 3′9″ | 3′6″ |

## Allowable U-Channel Ceiling Spans - L/360

| Section | | 4 psf Channel Spacing (in) o.c. | | | | | 6 psf Channel Spacing (in) o.c. | | | | | 13 psf Channel Spacing (in) o.c. | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 24 | 36 | 48 | 60 | 72 | 24 | 36 | 48 | 60 | 72 | 24 | 36 | 48 | 60 | 72 |
| 75U050-54 | Single | 3′5″ | 3′0″ | 2′8″ | 2′6″ | 2′4″ | 3′0″ | 2′7″ | 2′4″ | 2′2″ | 2′1″ | 2′4″ | 2′0″ | 1′10″ | 1′8″ | 1′7″ |
| | Multiple | 4′2″ | 3′8″ | 3′4″ | 3′1″ | 2′11″ | 3′8″ | 3′2″ | 2′11″ | 2′8″ | 2′7″ | 2′10″ | 2′6″ | 2′3″ | 2′1″ | 1′11″ |
| 150U050-54 | Single | 5′6″ | 4′10″ | 4′5″ | 4′1″ | 3′10″ | 4′10″ | 4′3″ | 3′10″ | 3′7″ | 3′5″ | 3′9″ | 3′3″ | 3′0″ | 2′9″ | 2′7″ |
| | Multiple | 7′1″ | 6′2″ | 5′8″ | 5′3″ | 4′11″ | 6′2″ | 5′5″ | 4′11″ | 4′7″ | 4′4″ | 4′10″ | 4′2″ | 3′9″ | 3′4″ | 3′0″ |
| 200U050-54 | Single | 5′10″ | 5′1″ | 4′8″ | 4′4″ | 4′1″ | 5′1″ | 4′6″ | 4′1″ | 3′10″ | 3′7″ | 4′0″ | 3′6″ | 3′2″ | 3′0″ | 2′10″ |
| | Multiple | 7′5″ | 6′6″ | 5′11″ | 5′6″ | 5′2″ | 6′6″ | 5′8″ | 5′2″ | 4′10″ | 4′7″ | 5′1″ | 4′5″ | 4′0″ | 3′9″ | 3′6″ |

**SPAN NOTES:**

1. Fy = 33 ksi for all sections
2. Multiple span indicates two or more equal spans with channel continuous over interior supports
3. Bearing Lengths = 0.75"
4. allowable spans based on the compression flange laterally unbraced

## A. Physical/Structural Properties for Hat Furring Channels

| Section | Fy (ksi) | Design Thickness (in) | Gross Properties | | | | | | Effective Properties | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area (in2) | Weight (lb/ft) | Ix (in4) | Rx (in) | Iy (in4) | Ry (in) | Ix (in4) | Sx (in3) | Ma (Ft-lb) |
| 087F125-18 | 33 | 0.0188 | 0.070 | 0.239 | 0.009 | 0.356 | 0.0422 | 0.774 | 0.0086 | 0.0160 | 26.41 |
| 087F125-27 | 33 | 0.0283 | 0.105 | 0.357 | 0.013 | 0.353 | 0.0628 | 0.774 | 0.0131 | 0.0272 | 44.78 |
| 087F125-30 | 33 | 0.0312 | 0.115 | 0.392 | 0.014 | 0.352 | 0.0691 | 0.774 | 0.0143 | 0.0307 | 50.47 |
| 087F125-33 | 33 | 0.0346 | 0.127 | 0.433 | 0.016 | 0.351 | 0.0763 | 0 774 | 0.0157 | 0.0337 | 55.43 |

**NOTES:**

1. Properties based on the 2001 NASPEC with the 2004 Supplement
2. Design thickness used for determination of properties. Minimum delivered thickness must be no less than 95% of design thickness.
3. For deflection calculations, use effective Ixx. Effective Ixx is based on Procedure 1 of the NASPEC
4. Effective properties are given as the minimum value for positive or negative bending.

## B.Hat Furring Channel Allowable Ceiling Spans - L/240

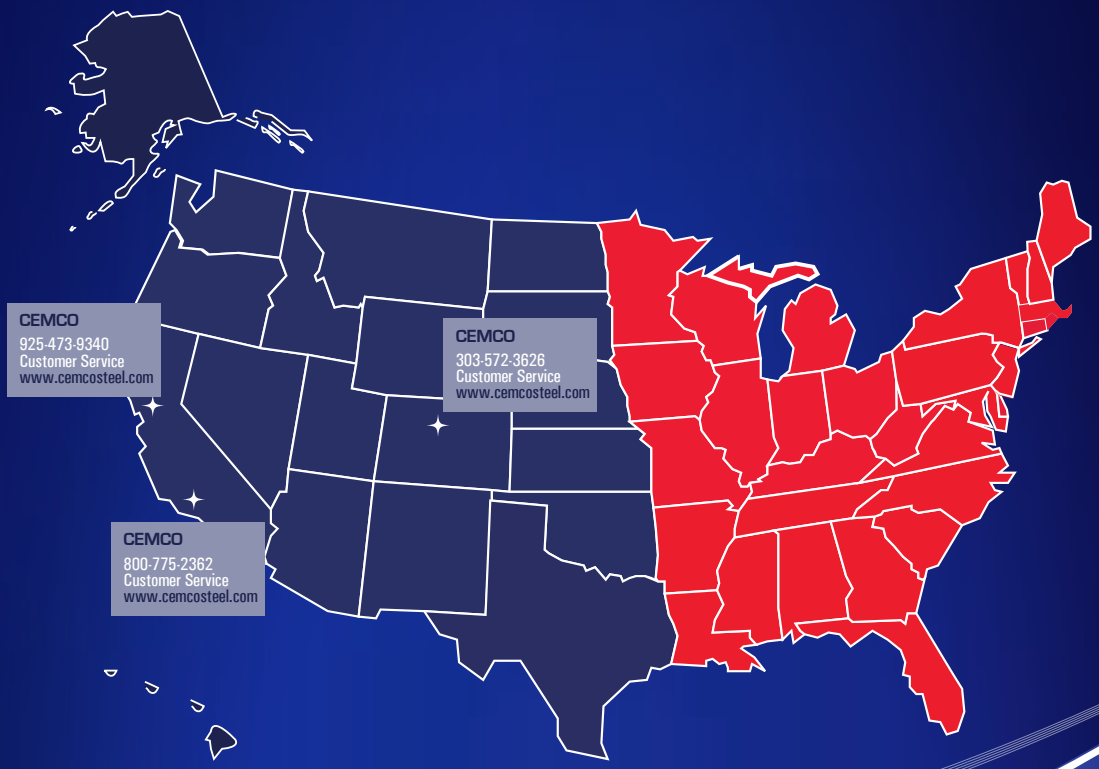
| Section | Fy (ksi) | | Uniform Load | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 4 psf Spacing (in) oc | | | 6 psf Spacing (in) oc | | | 13 psf Spacing (in) oc | | |
| | | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 087F125-18 | 33 | Single | 5′ 2″ | 4′ 9″ | 4′ 1″ | 4′ 6″ | 4′ 1″ | 3′ 7″ | 3′ 6″ | 3′ 2″ | 2′ 9″ |
| | | Multiple | 6′ 5″ | 5′ 10″ | 5′ 1″ | 5′ 7″ | 5′ 1″ | 4′ 2″ | 4′ 0″ | 3′ 6″ | 2′ 10″ |
| 087F125-27 | 33 | Single | 6′ 0″ | 5′ 5″ | 4′ 9″ | 5′ 3″ | 4′ 9″ | 4′ 2″ | 4′ 0″ | 3′ 8″ | 3′ 2″ |
| | | Multiple | 7′ 5″ | 6′ 9″ | 5′ 10″ | 6′ 6″ | 5′ 10″ | 5′ 2″ | 5′ 0″ | 4′ 6″ | 3′ 8″ |
| 087F125-30 | 33 | Single | 6′ 2″ | 5′ 7″ | 4′ 11″ | 5′ 5″ | 4′ 11″ | 4′ 3″ | 4′ 2″ | 3′ 9″ | 3′ 4″ |
| | | Multiple | 7′ 7″ | 6′ 11″ | 6′ 1″ | 6′ 8″ | 6′ 1″ | 5′ 3″ | 5′ 2″ | 4′ 8″ | 3′ 11″ |
| 087F125-33 | 33 | Single | 6′ 4″ | 5′ 9″ | 5′ 1″ | 5′ 7″ | 5′ 1″ | 4′ 5″ | 4′ 4″ | 3′ 11″ | 3′ 5″ |
| | | Multiple | 7′ 10″ | 7′ 2″ | 6′ 3″ | 6′ 10″ | 6′ 3″ | 5′ 5″ | 5′ 4″ | 4′ 10″ | 4′ 1″ |

## B.Hat Furring Channel Allowable Ceiling Spans - L/240

| Section | Fy (ksi) | | Uniform Load | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 4 psf Spacing (in) oc | | | 6 psf Spacing (in) oc | | | 13 psf Spacing (in) oc | | |
| | | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 087F125-18 | 33 | Single | 4′ 6″ | 4′ 1″ | 3′ 7″ | 4′ 0″ | 3′ 7″ | 3′ 2″ | 3′ 1″ | 2′ 9″ | 2′ 5″ |
| | | Multiple | 5′ 7″ | 5′ 1″ | 4′ 5″ | 4′ 11″ | 4′ 5″ | 3′ 11″ | 3′ 9″ | 3′ 5″ | 2′ 10″ |
| 087F125-27 | 33 | Single | 5′ 3″ | 4′ 9″ | 4′ 2″ | 4′ 7″ | 4′ 2″ | 3′ 7″ | 3′ 6″ | 3′ 2″ | 2′ 10″ |
| | | Multiple | 6′ 6″ | 5′ 10″ | 5′ 2″ | 5′ 8″ | 5′ 2″ | 4′ 6″ | 4′ 4″ | 4′ 0″ | 3′ 6″ |
| 087F125-30 | 33 | Single | 5′ 5″ | 4′ 11″ | 4′ 3″ | 4′ 8″ | 4′ 3″ | 3′ 9″ | 3′ 8″ | 3′ 4″ | 2′ 11″ |
| | | Multiple | 6′ 8″ | 6′ 1″ | 5′ 3″ | 5′ 10″ | 5′ 3″ | 4′ 7″ | 4′ 6″ | 4′ 1″ | 3′ 7″ |
| 087F125-33 | 33 | Single | 5′ 7″ | 5′ 1″ | 4′ 5″ | 4′ 10″ | 4′ 5″ | 3′ 10″ | 3′ 9″ | 3′ 5″ | 3′ 0″ |
| | | Multiple | 6′ 10″ | 6′ 3″ | 5′ 5″ | 6′ 0″ | 5′ 5″ | 4′ 9″ | 4′ 8″ | 4′ 3″ | 3′ 8″ |

**NOTES:**

1. Single spans taken as the minimum span based on moment, shear, web crippling or deflection
2. Multiple spans indicate two or more equal, continuous spans with span length measured support to support.
3. Multiple spans taken as the minimum span based on moment, shear, web crippling, deflection combined bending and shear or combined and web crippling
4. Web crippling values based on 1" bearing at end and interior supports.

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