



MILL STEEL
F R A M I N G

Structural Technical Data



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STRUCTURAL FRAMING

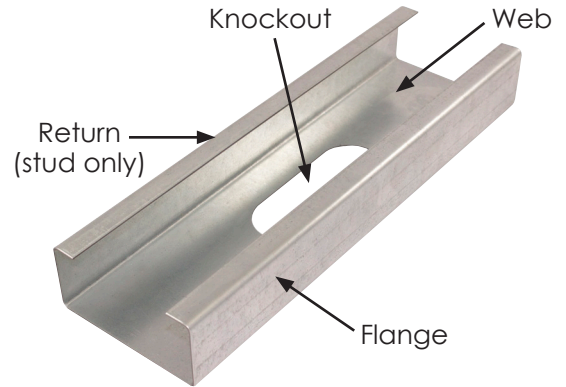


STUD AND JOIST

Studs are a general purpose framing component used in a number of applications including exterior curtain walls, load bearing walls, headers and floor and roof joists.

TRACK

Track is used as a closure to stud and joist ends as well as framing components to heads and sills. Note: 10' is the standard length. Custom lengths available upon request.



STRUCTURAL STUD PROFILE INFORMATION

| | | | | | | | |
|------------|--------|--------|--------|----|--------|-----|-----|
| WEB WIDTHS | 2 1/2" | 3 5/8" | 4" | 6" | 8" | 10" | 12" |
| FLANGE | 1 5/8" | 2" | 2 1/2" | 3" | 3 1/2" | | |

RETURN: Varies by part

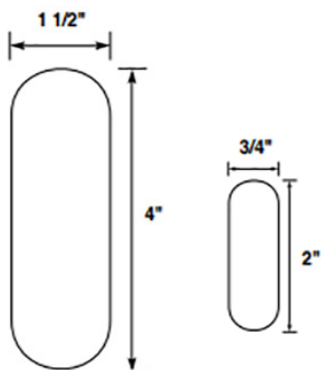
MATERIAL THICKNESS

| | | | | | |
|-------|------------|------------|------------|------------|------------|
| GAUGE | 20 | 18 | 16 | 14 | 12 |
| MILS | 33 (33ksi) | 43 (33ksi) | 54 (50ksi) | 68 (50ksi) | 97 (50ksi) |

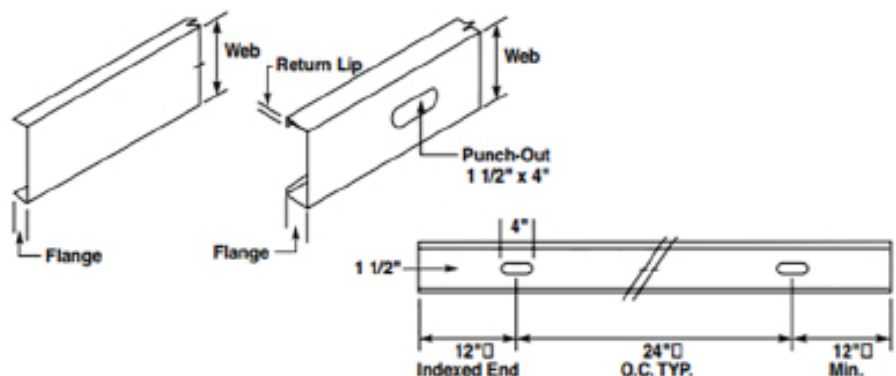
WEB PUNCH-OUT SIZE AND LOCATION

Mill Steel Framing studs and joists are manufactured with punch-outs along the centerline of the web to accommodate plumbing and electrical installation. The punch-out is provided 12" from the indexed end and the intermediate punch-outs are placed at 24" o.c. intervals. The 34" by 2" punch-out is available for 2 1/2" web members only. Unpunched studs are available upon request.

Punch-Out Dimensions



Framing Components



OVERVIEW AND PRODUCT SPECIFICATION

PRODUCT DESIGNATION

As specified in the AISI standard for cold formed steel framing General Provisions A5.2.

| Depth (1) | Type (2) | Flange (3) | - | Thickness (4) |
|-----------|----------|------------|---|---------------|
| 600 | S | 162 | - | 54 |

Depth (1): The first set of numbers represents the depth of the member to 2 decimal places without the use of a decimal point.

- Example: 600 = 6.00", 362 = 3.62" web depth

Type (2): The first set of numbers represents the depth of the member to 2 decimal places without the use of a decimal point.

- Example: S = Stud, T = Track

Flange (3): The second set of numbers represents the member flange width to 2 decimal places without the use of a decimal point.

- Example: 162 = 1.625" flange

Thickness (4): The last set of numbers is the minimum uncoated metal thickness expressed in mils (.001in). These thicknesses correspond to reference gauges as follows: 33(20ga), 43(18ga), 54(16ga), 68(14ga), 97(12ga). The mils define the minimum allowable uncoated metal thickness and are 95% of the design thickness. The 5% variance in metal thickness is permitted by section A2.4 of the NASPEC.

STEEL THICKNESS

| Designation Thickness (Mils) | Minimum Thickness (in) | Design Thickness ¹ (in) | Design Inside Corner Radii ² (in) | Reference Gauge No. |
|------------------------------|------------------------|------------------------------------|--|---------------------|
| 18 | 0.0179 | 0.0188 | 0.0844 | 25 |
| 30 | 0.0296 | 0.0312 | 0.0782 | 20-Drywall |
| 33 | 0.0329 | 0.0346 | 0.0765 | 20-Structural |
| 43 | 0.0428 | 0.0451 | 0.0712 | 18 |
| 54 | 0.0538 | 0.0566 | 0.0849 | 16 |
| 68 | 0.0677 | 0.0713 | 0.1070 | 14 |
| 97 | 0.0966 | 0.1017 | 0.1526 | 12 |

¹ Minimum Thickness represents 95% of the design thickness and is the minimum acceptable thickness delivered to the jobsite based on section A2.4 of the AISI S100-07 with S2-10 Supplement.

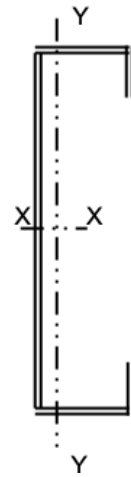
² The tables in this catalog are calculated based on inside corner radii listed in this table.

OVERVIEW AND PRODUCT SPECIFICATION

DEFINITION OF STRUCTURAL PROPERTY SYMBOLS:

Gross Properties

- **I_x**: Moment of inertia of gross section about the X-X axis (strong axis).
- **S_x**: Section modulus about the X-X axis (strong axis).
- **R_x**: Radius of gyration of the gross section about the X-X axis.
- **I_y**: Moment of inertia of gross section about the Y-Y axis (weak axis).
- **R_y**: Radius of gyration of the gross section about the Y-Y axis.



Effective Properties

- **I_{xe}**: Effective moment of inertia about the X-axis.
- **S_{xe}**: Effective section modulus about the X-X axis (strong axis) stress = F_y .
- **M_a**: Allowable Bending Moment - Based on the effective section modulus and the allowable stress including the strength increase from the cold-work of forming (section A3.3.2) where applicable.
- **M_{ad}**: Allowable Bending Moment - Based on Distortional Buckling Strength calculated per Sections F4, F4.1 of AISI S100-16.
- **V_{ag}**: Allowable strong axis shear away from punchout, calculated in accordance with Section G2 of AISI S100-16.
- **V_{anet}**: Allowable strong axis shear at punchout, calculated in accordance with Section G3 of AISI S100-16.

Torsional and Other Properties

- **J**: St. Venant Torsional Constant.
- **C_w**: Torsional warping constant.
- **m**: Distance from shear center to mid-plane of web.
- **X_o**: MDistance from the shear center to the centroid along the principal X-axis.
- **R_o**: Polar radius of gyration about the centroidal principal axis.
- **b**: $1 - (X_o/R_o)^2$
- **L_u**: The longest weak axis (L_y) and torsional (L_t) unbraced length at which lateral torsional buckling is restrained in accordance with Section F2.1 of AISI S100-16.

STRUCTURAL STUD SECTION PROPERTIES

| Structural (S) Stud Section Properties | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------------------|----------------------|-------------------------|----------------|-----------------------------------|-----------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|-----------------------------------|-----------------------|------------------------|---------------------|-------------------------|---------------------------|-----------------------------------|---------------------|--------|---------------------|-------|---------------------|--|
| Member | Design Thickness (in) | F _y (ksi) | Gross Properties | | | | | | | Effective Properties | | | | | | Torsional Properties | | | | | | | |
| | | | Area (in ²) | Weight (lb/ft) | I _x (in ⁴) | S _x (in ³) | R _x (in) | I _y (in ⁴) | R _y (in) | I _x (in ⁴) | S _x (in ³) | M _o (in-k) | M _{ed} (in-k) | V _a (lb) | V _{a,net} (lb) | Jx1000 (in ⁴) | C _w (in ⁶) | X _c (in) | m (in) | R _o (in) | β | L _u (in) | |
| 800S250-54 | 0.0566 | 50 | 0.783 | 2.66 | 7.467 | 1.867 | 3.089 | 0.614 | 0.886 | 7.378 | 1.525 | 45.66 | 37.84 | 2091 | 2091 | 0.836 | 7.850 | -1.661 | 1.036 | 3.617 | 0.789 | 49.8 | |
| 800S250-68 | 0.0713 | 50 | 0.978 | 3.33 | 9.263 | 2.316 | 3.077 | 0.752 | 0.877 | 9.241 | 2.059 | 61.65 | 51.85 | 4221 | 3367 | 1.658 | 9.652 | -1.644 | 1.027 | 3.597 | 0.791 | 49.6 | |
| 800S250-97 | 0.1017 | 50 | 1.372 | 4.67 | 12.793 | 3.198 | 3.053 | 1.009 | 0.858 | 12.790 | 3.054 | 102.70 | 83.02 | 10885 | 5938 | 4.731 | 13.091 | -1.607 | 1.008 | 3.555 | 0.796 | 46.4 | |
| 1000S162-43 | 0.0451 | 33 | 0.627 | 2.13 | 8.028 | 1.606 | 3.577 | 0.168 | 0.518 | 7.523 | 1.302 | 25.74 | 21.70 | 836 | 836 | 0.425 | 3.430 | -0.823 | 0.545 | 3.707 | 0.951 | 38.8 | |
| 1000S162-54 | 0.0566 | 33 | 0.783 | 2.66 | 9.954 | 1.991 | 3.566 | 0.204 | 0.511 | 9.628 | 1.722 | 34.02 | 29.91 | 1661 | 1661 | 0.836 | 4.198 | -0.812 | 0.538 | 3.693 | 0.952 | 38.5 | |
| 1000S162-54 | 0.0566 | 50 | 0.783 | 2.66 | 9.954 | 1.991 | 3.566 | 0.204 | 0.511 | 9.391 | 1.572 | 47.07 | 38.68 | 1661 | 1661 | 0.836 | 4.198 | -0.812 | 0.538 | 3.693 | 0.952 | 31.3 | |
| 1000S162-68 | 0.0713 | 50 | 0.978 | 3.33 | 12.330 | 2.466 | 3.550 | 0.247 | 0.502 | 11.979 | 2.155 | 64.51 | 53.74 | 3345 | 3345 | 1.658 | 5.121 | -0.798 | 0.531 | 3.673 | 0.953 | 31.0 | |
| 1000S162-97 | 0.1017 | 50 | 1.372 | 4.67 | 16.974 | 3.395 | 3.517 | 0.320 | 0.483 | 16.968 | 3.270 | 97.90 | 87.70 | 9864 | 7177 | 4.731 | 6.827 | -0.768 | 0.514 | 3.632 | 0.955 | 30.4 | |
| 1000S200-43 | 0.0451 | 33 | 0.672 | 2.29 | 9.088 | 1.818 | 3.676 | 0.309 | 0.677 | 8.603 | 1.470 | 29.05 | 25.40 | 836 | 836 | 0.456 | 6.236 | -1.147 | 0.743 | 3.910 | 0.914 | 49.3 | |
| 1000S200-54 | 0.0566 | 33 | 0.839 | 2.86 | 11.282 | 2.256 | 3.666 | 0.378 | 0.671 | 10.954 | 1.984 | 39.20 | 34.77 | 1661 | 1661 | 0.896 | 7.665 | -1.135 | 0.737 | 3.896 | 0.915 | 49.1 | |
| 1000S200-54 | 0.0566 | 50 | 0.839 | 2.86 | 11.282 | 2.256 | 3.666 | 0.378 | 0.671 | 10.770 | 1.705 | 51.05 | 45.06 | 1661 | 1661 | 0.896 | 7.665 | -1.135 | 0.737 | 3.896 | 0.915 | 39.8 | |
| 1000S200-68 | 0.0713 | 50 | 1.050 | 3.57 | 13.999 | 2.800 | 3.652 | 0.460 | 0.662 | 13.666 | 2.420 | 72.47 | 62.15 | 3345 | 3345 | 1.779 | 9.401 | -1.120 | 0.729 | 3.877 | 0.917 | 39.6 | |
| 1000S200-97 | 0.1017 | 50 | 1.474 | 5.01 | 19.343 | 3.869 | 3.622 | 0.610 | 0.643 | 19.337 | 3.741 | 112.01 | 100.50 | 9864 | 7177 | 5.082 | 12.679 | -1.088 | 0.711 | 3.836 | 0.920 | 39.0 | |
| 1000S250-43 | 0.0451 | 33 | 0.717 | 2.44 | 10.205 | 2.041 | 3.771 | 0.531 | 0.860 | 10.203 | 1.617 | 31.95 | 26.87 | 836 | 836 | 0.486 | 10.481 | -1.518 | 0.965 | 4.155 | 0.867 | 60.7 | |
| 1000S250-54 | 0.0566 | 33 | 0.896 | 3.05 | 12.681 | 2.536 | 3.762 | 0.653 | 0.854 | 12.677 | 2.277 | 44.99 | 36.94 | 1661 | 1661 | 0.957 | 12.922 | -1.505 | 0.958 | 4.141 | 0.868 | 60.5 | |
| 1000S250-54 | 0.0566 | 50 | 0.896 | 3.05 | 12.681 | 2.536 | 3.762 | 0.653 | 0.854 | 12.661 | 1.879 | 56.27 | 47.66 | 1661 | 1661 | 0.957 | 12.922 | -1.505 | 0.958 | 4.141 | 0.868 | 49.1 | |
| 1000S250-68 | 0.0713 | 50 | 1.121 | 3.81 | 15.756 | 3.151 | 3.749 | 0.799 | 0.844 | 15.742 | 2.769 | 82.90 | 66.09 | 3345 | 3345 | 1.899 | 15.909 | -1.488 | 0.950 | 4.121 | 0.870 | 48.8 | |
| 1000S250-97 | 0.1017 | 50 | 1.576 | 5.36 | 21.834 | 4.367 | 3.722 | 1.073 | 0.825 | 21.828 | 4.181 | 140.63 | 107.14 | 9864 | 7177 | 5.433 | 21.632 | -1.454 | 0.932 | 4.080 | 0.873 | 45.6 | |
| 1200S162-54 | 0.0566 | 33 | 0.896 | 3.05 | 15.736 | 2.623 | 4.191 | 0.212 | 0.486 | 14.744 | 2.109 | 41.68 | 35.04 | 1377 | 1377 | 0.957 | 6.340 | -0.732 | 0.493 | 4.282 | 0.971 | 37.5 | |
| 1200S162-54 | 0.0566 | 50 | 0.896 | 3.05 | 15.736 | 2.623 | 4.191 | 0.212 | 0.486 | 14.299 | 1.914 | 57.32 | 44.93 | 1377 | 1377 | 0.957 | 6.340 | -0.732 | 0.493 | 4.282 | 0.971 | 30.5 | |
| 1200S162-68 | 0.0713 | 50 | 1.121 | 3.81 | 19.526 | 3.254 | 4.174 | 0.255 | 0.477 | 18.391 | 2.645 | 79.20 | 63.43 | 2771 | 2771 | 1.899 | 7.739 | -0.719 | 0.485 | 4.262 | 0.972 | 30.2 | |
| 1200S162-97 | 0.1017 | 50 | 1.576 | 5.36 | 26.977 | 4.496 | 4.138 | 0.332 | 0.459 | 26.738 | 4.091 | 122.50 | 105.39 | 8147 | 7411 | 5.433 | 10.331 | -0.691 | 0.470 | 4.220 | 0.973 | 29.5 | |
| 1200S200-54 | 0.0566 | 33 | 0.953 | 3.24 | 17.668 | 2.945 | 4.307 | 0.394 | 0.643 | 16.679 | 2.425 | 47.93 | 41.25 | 1377 | 1377 | 1.017 | 11.550 | -1.032 | 0.681 | 4.475 | 0.947 | 48.0 | |
| 1200S200-54 | 0.0566 | 50 | 0.953 | 3.24 | 17.668 | 2.945 | 4.307 | 0.394 | 0.643 | 16.335 | 2.073 | 62.07 | 53.22 | 1377 | 1377 | 1.017 | 11.550 | -1.032 | 0.681 | 4.475 | 0.947 | 39.0 | |
| 1200S200-68 | 0.0713 | 50 | 1.192 | 4.06 | 21.955 | 3.659 | 4.291 | 0.479 | 0.634 | 20.865 | 2.963 | 88.72 | 73.93 | 2771 | 2771 | 2.020 | 14.176 | -1.017 | 0.673 | 4.456 | 0.948 | 38.7 | |
| 1200S200-97 | 0.1017 | 50 | 1.677 | 5.71 | 30.428 | 5.071 | 4.259 | 0.635 | 0.615 | 30.177 | 4.660 | 139.52 | 121.84 | 8147 | 7411 | 5.783 | 19.150 | -0.987 | 0.656 | 4.415 | 0.950 | 38.1 | |
| 1200S250-54 | 0.0566 | 33 | 1.009 | 3.43 | 19.687 | 3.281 | 4.417 | 0.683 | 0.823 | 18.832 | 2.483 | 49.06 | 44.20 | 1377 | 1377 | 1.078 | 19.505 | -1.378 | 0.892 | 4.699 | 0.914 | 59.5 | |
| 1200S250-54 | 0.0566 | 50 | 1.009 | 3.43 | 19.687 | 3.281 | 4.417 | 0.683 | 0.823 | 18.437 | 2.149 | 64.34 | 56.71 | 1377 | 1377 | 1.078 | 19.505 | -1.378 | 0.892 | 4.699 | 0.914 | 48.3 | |
| 1200S250-68 | 0.0713 | 50 | 1.263 | 4.30 | 24.491 | 4.082 | 4.403 | 0.836 | 0.813 | 23.576 | 3.007 | 90.04 | 79.05 | 2771 | 2771 | 2.141 | 24.034 | -1.362 | 0.884 | 4.680 | 0.915 | 48.1 | |
| 1200S250-97 | 0.1017 | 50 | 1.779 | 6.05 | 34.027 | 5.671 | 4.373 | 1.122 | 0.794 | 33.837 | 5.038 | 150.83 | 130.54 | 8147 | 7411 | 6.134 | 32.734 | -1.329 | 0.867 | 4.639 | 0.918 | 47.5 | |

SECTION PROPERTIES TABLE NOTES

1. Calculated properties are based on AISI S100-16, North American Specification for Design of Cold-Formed Steel Structural Members.
2. The centerline bend radius is based on inside corner radii shown in thickness chart.
3. Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2.
4. Tabulated gross properties are based on full-unreduced cross section of the studs, away from punchouts.
5. For deflection calculations, use the effective moment of inertia.
6. Allowable moment includes cold-work of forming.
7. For the steels that have both 33 and 50 ksi listing, if the design is based on 50 ksi, the 50 ksi steel needs to be specified. (ex. 3.625 S137 16-50 (50 ksi))
8. Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius. Hems on non-structural rack sections are ignored.

STRUCTURAL TRACK SECTION PROPERTIES

| (T) Track Section Properties | | | | | | | | | | | | | | | | | | | | | |
|------------------------------|-----------------------|----------------------|--------------------|---------|--------------------|--------------------|----------------|--------------------|----------------|--------------------|----------------------|----------------|-----------------|--------------------|--------------------|----------------------|-------|----------------|-------|--|--|
| Member | Design Thickness (in) | F _y (ksi) | Gross Properties | | | | | | | | Effective Properties | | | | | Torsional Properties | | | | | |
| | | | Area | Weight | I _x | S _x | R _x | I _y | R _y | I _x | S _x | M _x | V _{ax} | Jx1000 | C _w | X ₀ | m | R _y | β | | |
| | | | (in ²) | (lb/ft) | (in ⁴) | (in ³) | (in) | (in ⁴) | (in) | (in ⁴) | (in ³) | (in-k) | (lb) | (in ⁴) | (in ⁶) | (in) | (in) | (in) | | | |
| 550T200-97 | 0.1017 | 50 | 0.964 | 3.28 | 4.747 | 1.621 | 2.219 | 0.347 | 0.600 | 4.567 | 1.391 | 41.64 | 10197 | 3.3232 | 2.067 | -1.055 | 0.653 | 2.529 | 0.826 | | |
| 600T125-33 | 0.0346 | 33 | 0.294 | 1.00 | 1.429 | 0.465 | 2.205 | 0.034 | 0.339 | 1.258 | 0.297 | 5.87 | 622 | 0.1173 | 0.238 | -0.516 | 0.337 | 2.289 | 0.949 | | |
| 600T125-43 | 0.0451 | 33 | 0.383 | 1.30 | 1.862 | 0.604 | 2.205 | 0.044 | 0.337 | 1.768 | 0.461 | 9.11 | 1377 | 0.2596 | 0.307 | -0.513 | 0.335 | 2.289 | 0.950 | | |
| 600T125-54 | 0.0566 | 50 | 0.480 | 1.63 | 2.345 | 0.757 | 2.209 | 0.054 | 0.335 | 2.241 | 0.592 | 17.74 | 2728 | 0.5130 | 0.384 | -0.508 | 0.332 | 2.292 | 0.951 | | |
| 600T125-68 | 0.0713 | 50 | 0.605 | 2.06 | 2.970 | 0.951 | 2.216 | 0.067 | 0.332 | 2.934 | 0.858 | 25.69 | 5350 | 1.0251 | 0.483 | -0.503 | 0.329 | 2.296 | 0.952 | | |
| 600T125-97 | 0.1017 | 50 | 0.862 | 2.93 | 4.282 | 1.348 | 2.229 | 0.092 | 0.327 | 4.281 | 1.347 | 40.33 | 10885 | 2.9726 | 0.685 | -0.491 | 0.321 | 2.305 | 0.955 | | |
| 600T150-33 | 0.0346 | 33 | 0.311 | 1.06 | 1.590 | 0.517 | 2.260 | 0.057 | 0.426 | 1.335 | 0.303 | 5.99 | 622 | 0.1242 | 0.390 | -0.684 | 0.439 | 2.400 | 0.919 | | |
| 600T150-43 | 0.0451 | 33 | 0.405 | 1.38 | 2.073 | 0.673 | 2.261 | 0.073 | 0.424 | 1.890 | 0.474 | 9.36 | 1377 | 0.2749 | 0.504 | -0.680 | 0.437 | 2.399 | 0.920 | | |
| 600T150-54 | 0.0566 | 50 | 0.509 | 1.73 | 2.612 | 0.843 | 2.266 | 0.091 | 0.422 | 2.400 | 0.609 | 18.24 | 2728 | 0.5432 | 0.632 | -0.675 | 0.434 | 2.402 | 0.921 | | |
| 600T150-68 | 0.0713 | 50 | 0.641 | 2.18 | 3.310 | 1.059 | 2.273 | 0.113 | 0.419 | 3.162 | 0.891 | 26.68 | 5350 | 1.0855 | 0.797 | -0.669 | 0.430 | 2.406 | 0.923 | | |
| 600T150-97 | 0.1017 | 50 | 0.913 | 3.11 | 4.780 | 1.504 | 2.288 | 0.156 | 0.414 | 4.779 | 1.444 | 43.24 | 10885 | 3.1479 | 1.138 | -0.656 | 0.421 | 2.416 | 0.926 | | |
| 600T200-33 | 0.0346 | 33 | 0.346 | 1.18 | 1.913 | 0.623 | 2.352 | 0.126 | 0.604 | 1.542 | 0.333 | 6.59 | 622 | 0.1380 | 0.847 | -1.048 | 0.655 | 2.645 | 0.843 | | |
| 600T200-43 | 0.0451 | 33 | 0.451 | 1.53 | 2.494 | 0.810 | 2.353 | 0.163 | 0.602 | 2.076 | 0.565 | 11.16 | 1377 | 0.3055 | 1.098 | -1.044 | 0.652 | 2.644 | 0.844 | | |
| 600T200-54 | 0.0566 | 50 | 0.565 | 1.92 | 3.146 | 1.015 | 2.359 | 0.203 | 0.600 | 2.641 | 0.717 | 21.48 | 2728 | 0.6037 | 1.381 | -1.038 | 0.649 | 2.646 | 0.846 | | |
| 600T200-68 | 0.0713 | 50 | 0.712 | 2.42 | 3.991 | 1.277 | 2.368 | 0.254 | 0.597 | 3.540 | 0.973 | 29.12 | 5350 | 1.2064 | 1.746 | -1.031 | 0.644 | 2.651 | 0.849 | | |
| 600T200-97 | 0.1017 | 50 | 1.015 | 3.45 | 5.774 | 1.817 | 2.385 | 0.355 | 0.591 | 5.559 | 1.568 | 46.95 | 10885 | 3.4985 | 2.510 | -1.016 | 0.635 | 2.659 | 0.854 | | |
| 800T125-33 ¹ | 0.0346 | 33 | 0.363 | 1.24 | 2.897 | 0.711 | 2.824 | 0.036 | 0.313 | 2.442 | 0.407 | 8.03 | 465 | 0.1449 | 0.456 | -0.439 | 0.294 | 2.875 | 0.977 | | |
| 800T125-43 | 0.0451 | 33 | 0.473 | 1.61 | 3.774 | 0.925 | 2.824 | 0.046 | 0.311 | 3.484 | 0.640 | 12.65 | 1030 | 0.3208 | 0.589 | -0.436 | 0.292 | 2.875 | 0.977 | | |
| 800T125-54 | 0.0566 | 50 | 0.594 | 2.02 | 4.747 | 1.158 | 2.828 | 0.057 | 0.309 | 4.427 | 0.824 | 24.66 | 2039 | 0.6339 | 0.735 | -0.432 | 0.289 | 2.877 | 0.977 | | |
| 800T125-68 | 0.0713 | 50 | 0.748 | 2.54 | 6.000 | 1.455 | 2.833 | 0.070 | 0.307 | 5.956 | 1.216 | 36.40 | 4087 | 1.2668 | 0.920 | -0.427 | 0.286 | 2.881 | 0.978 | | |
| 800T125-97 | 0.1017 | 50 | 1.066 | 3.63 | 8.617 | 2.062 | 2.844 | 0.097 | 0.301 | 8.614 | 2.062 | 61.72 | 10885 | 3.6738 | 1.296 | -0.417 | 0.279 | 2.890 | 0.979 | | |
| 800T150-33 ¹ | 0.0346 | 33 | 0.380 | 1.29 | 3.181 | 0.781 | 2.892 | 0.060 | 0.397 | 2.570 | 0.414 | 8.18 | 465 | 0.1518 | 0.751 | -0.588 | 0.388 | 2.977 | 0.961 | | |
| 800T150-43 | 0.0451 | 33 | 0.496 | 1.69 | 4.145 | 1.016 | 2.892 | 0.077 | 0.395 | 3.690 | 0.655 | 12.95 | 1030 | 0.3361 | 0.972 | -0.584 | 0.386 | 2.977 | 0.961 | | |
| 800T150-54 | 0.0566 | 50 | 0.622 | 2.12 | 5.216 | 1.272 | 2.896 | 0.096 | 0.393 | 4.693 | 0.844 | 25.27 | 2039 | 0.6641 | 1.215 | -0.580 | 0.383 | 2.980 | 0.962 | | |
| 800T150-68 | 0.0713 | 50 | 0.783 | 2.66 | 6.596 | 1.599 | 2.902 | 0.119 | 0.390 | 6.361 | 1.255 | 37.58 | 4087 | 1.3272 | 1.526 | -0.575 | 0.379 | 2.984 | 0.963 | | |
| 800T150-97 | 0.1017 | 50 | 1.116 | 3.80 | 9.483 | 2.270 | 2.914 | 0.165 | 0.385 | 9.480 | 2.192 | 65.62 | 10885 | 3.8491 | 2.162 | -0.564 | 0.372 | 2.993 | 0.965 | | |
| 800T200-33 ¹ | 0.0346 | 33 | 0.415 | 1.41 | 3.750 | 0.921 | 3.006 | 0.135 | 0.571 | 2.789 | 0.424 | 8.37 | 465 | 0.1656 | 1.638 | -0.917 | 0.589 | 3.194 | 0.918 | | |
| 800T200-43 | 0.0451 | 33 | 0.541 | 1.84 | 4.888 | 1.198 | 3.006 | 0.175 | 0.569 | 4.044 | 0.676 | 13.35 | 1030 | 0.3667 | 2.124 | -0.913 | 0.587 | 3.193 | 0.918 | | |
| 800T200-54 | 0.0566 | 50 | 0.679 | 2.31 | 6.154 | 1.501 | 3.012 | 0.218 | 0.567 | 5.151 | 0.872 | 26.09 | 2039 | 0.7245 | 2.664 | -0.908 | 0.584 | 3.196 | 0.919 | | |
| 800T200-68 | 0.0713 | 50 | 0.854 | 2.91 | 7.789 | 1.888 | 3.019 | 0.272 | 0.564 | 7.053 | 1.310 | 39.22 | 4087 | 1.4480 | 3.357 | -0.902 | 0.580 | 3.201 | 0.921 | | |
| 800T200-97 | 0.1017 | 50 | 1.218 | 4.14 | 11.215 | 2.684 | 3.034 | 0.379 | 0.558 | 10.834 | 2.347 | 70.28 | 10885 | 4.1998 | 4.792 | -0.889 | 0.571 | 3.211 | 0.923 | | |
| 1000T125-43 ¹ | 0.0451 | 33 | 0.563 | 1.92 | 6.633 | 1.306 | 3.431 | 0.047 | 0.290 | 5.887 | 0.819 | 16.19 | 822 | 0.3819 | 0.973 | -0.379 | 0.259 | 3.465 | 0.988 | | |
| 1000T125-54 | 0.0566 | 50 | 0.707 | 2.40 | 8.337 | 1.635 | 3.434 | 0.059 | 0.288 | 7.480 | 1.055 | 31.59 | 1628 | 0.7548 | 1.212 | -0.376 | 0.256 | 3.467 | 0.988 | | |
| 1000T125-68 | 0.0713 | 50 | 0.890 | 3.03 | 10.526 | 2.054 | 3.439 | 0.073 | 0.286 | 10.156 | 1.575 | 47.15 | 3261 | 1.5084 | 1.515 | -0.372 | 0.253 | 3.471 | 0.989 | | |
| 1000T125-97 | 0.1017 | 50 | 1.269 | 4.32 | 15.083 | 2.913 | 3.448 | 0.100 | 0.281 | 15.077 | 2.753 | 82.42 | 9507 | 4.3751 | 2.123 | -0.363 | 0.247 | 3.478 | 0.989 | | |
| 1000T150-43 ¹ | 0.0451 | 33 | 0.586 | 1.99 | 7.210 | 1.419 | 3.508 | 0.080 | 0.370 | 6.197 | 0.837 | 16.54 | 822 | 0.3972 | 1.612 | -0.513 | 0.345 | 3.565 | 0.979 | | |
| 1000T150-54 | 0.0566 | 50 | 0.735 | 2.50 | 9.065 | 1.778 | 3.512 | 0.100 | 0.368 | 7.881 | 1.079 | 32.30 | 1628 | 0.7850 | 2.013 | -0.509 | 0.342 | 3.567 | 0.980 | | |
| 1000T150-68 | 0.0713 | 50 | 0.926 | 3.15 | 11.450 | 2.234 | 3.517 | 0.124 | 0.366 | 10.776 | 1.621 | 48.53 | 3261 | 1.5688 | 2.522 | -0.505 | 0.339 | 3.572 | 0.980 | | |
| 1000T150-97 | 0.1017 | 50 | 1.320 | 4.49 | 16.420 | 3.171 | 3.527 | 0.172 | 0.361 | 16.414 | 2.903 | 86.90 | 9507 | 4.5504 | 3.557 | -0.495 | 0.332 | 3.580 | 0.981 | | |
| 1000T200-43 ¹ | 0.0451 | 33 | 0.631 | 2.15 | 8.364 | 1.646 | 3.641 | 0.183 | 0.539 | 6.724 | 0.861 | 17.01 | 822 | 0.4278 | 3.540 | -0.813 | 0.534 | 3.769 | 0.953 | | |
| 1000T200-54 | 0.0566 | 50 | 0.792 | 2.69 | 10.520 | 2.063 | 3.645 | 0.228 | 0.537 | 8.563 | 1.111 | 33.26 | 1628 | 0.8454 | 4.434 | -0.809 | 0.531 | 3.772 | 0.954 | | |
| 1000T200-68 | 0.0713 | 50 | 0.997 | 3.39 | 13.296 | 2.595 | 3.652 | 0.284 | 0.534 | 11.821 | 1.684 | 50.42 | 3261 | 1.6896 | 5.576 | -0.803 | 0.527 | 3.777 | 0.955 | | |
| 1000T200-97 | 0.1017 | 50 | 1.422 | 4.84 | 19.093 | 3.687 | 3.665 | 0.397 | 0.528 | 18.584 | 3.081 | 92.26 | 9507 | 4.9010 | 7.924 | -0.791 | 0.519 | 3.786 | 0.956 | | |
| 1200T125-54 ¹ | 0.0566 | 50 | 0.820 | 2.79 | 13.341 | 2.187 | 4.034 | 0.060 | 0.271 | 11.463 | 1.286 | 38.51 | 1354 | 0.8756 | 1.820 | -0.333 | 0.230 | 4.056 | 0.993 | | |
| 1200T125-68 | 0.0713 | 50 | 1.033 | 3.51 | 16.834 | 2.749 | 4.037 | 0.074 | 0.268 | 15.689 | 1.934 | 57.90 | 2713 | 1.7501 | 2.270 | -0.329 | 0.227 | 4.060 | 0.993 | | |
| 1200T125-97 | 0.1017 | 50 | 1.472 | 5.01 | 24.090 | 3.899 | 4.045 | 0.102 | 0.264 | 23.752 | 3.443 | 103.07 | 7902 | 5.0763 | 3.171 | -0.322 | 0.222 | 4.066 | 0.994 | | |
| 1200T150-54 ¹ | 0.0566 | 50 | 0.848 | 2.89 | 14.384 | 2.358 | 4.118 | 0.103 | 0.348 | 12.023 | 1.313 | 39.32 | 1354 | 0.9059 | 3.033 | -0.454 | 0.310 | 4.157 | 0.988 | | |
| 1200T150-68 | 0.0713 | 50 | 1.068 | 3.63 | 18.156 | 2.964 | 4.122 | 0.127 | 0.345 | 16.568 | 1.987 | 59.48 | 2713 | 1.8105 | 3.795 | -0.450 | 0.307 | 4.161 | 0.988 | | |
| 1200T150-97 | 0.1017 | 50 | 1.523 | 5.18 | 25.999 | 4.208 | 4.131 | 0.176 | 0.340 | 25.720 | 3.616 | 108.27 | 7902 | 5.2516 | 5.335 | -0.441 | 0.301 | 4.169 | 0.989 | | |
| 1200T200-54 ¹ | 0.0566 | 50 | 0.905 | 3.08 | 16.470 | 2.700 | 4.266 | 0.236 | 0.510 | 12.965 | 1.350 | 40.42 | 1354 | 0.9663 | 6.714 | -0.730 | 0.487 | 4.358 | 0.972 | | |
| 1200T200-68 | 0.0713 | 50 | 1.140 | 3.88 | 20.799 | 3.396 | 4.272 | 0.294 | 0.508 | 18.029 | 2.058 | 61.63 | 2713 | 1.9313 | 8.431 | -0.725 | 0.483 | 4.363 | 0.972 | | |
| 1200T200-97 | 0.1017 | 50 | 1.625 | 5.53 | 29.816 | 4.826 | 4.284 | 0.410 | 0.502 | 28.962 | 3.819 | 114.35 | 7902 | 5.6022 | 11.945 | -0.714 | 0.476 | 4.372 | 0.973 | | |

SECTION PROPERTIES TABLE NOTES

- Calculated properties are based on AISI S100-16, North American Specification for Design of Cold-Formed Steel Structural Members.
- The centerline bend radius is based on inside corner radii shown in thickness chart.
- Effective properties incorporate the strength increase from the cold work of forming as applicable per AISI A3.3.2.
- Tabulated gross properties are based on full-unreduced cross section of the studs, away from punchouts.
- For deflection calculations, use the effective moment of inertia.
- Allowable moment includes cold-work of forming.
- For the steels that have both 33 and 50 ksi listing, if the design is based on 50 ksi, the 50 ksi steel needs to be specified. (ex. 3.625 S137 16-50 (50 ksi))
- Web depth for track sections is equal to the nominal height plus 2 times the design thickness plus the bend radius. Hems on non-structural rack sections are ignored.

LIMITING WALL HEIGHTS - CURTAIN WALL (5-25 psf)

| Stud Member | Spacing, in. oc | Fy, ksi | 5 psf | | | 15 psf | | | 20 psf | | | 25 psf | | |
|-------------|-----------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|--------|
| | | | L/120 | L/240 | L/360 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 250S162-33 | 12 | 33 | 18'4" | 14'7" | 12'9" | 11'4" | 9'11" | 8'5" | 10'4" | 9'0" | 7'7" | 9'7" | 8'5" | 7'1" |
| 250S162-33 | 16 | 33 | 16'8" | 13'3" | 11'7" | 10'4" | 9'0" | 7'7" | 9'5" | 8'2" | 6'11" | 8'5" | 7'7" | 6'5" |
| 250S162-33 | 24 | 33 | 14'7" | 11'7" | 10'1" | 8'11" | 7'11" | 6'8" | 7'8" | 7'2" | 6'0" | 6'11" | 6'8" | 5'7" |
| 250S162-43 | 12 | 33 | 19'11" | 15'10" | 13'10" | 12'4" | 10'10" | 9'1" | 11'3" | 9'10" | 8'3" | 10'5" | 9'1" | 7'8" |
| 250S162-43 | 16 | 33 | 18'1" | 14'4" | 12'7" | 11'3" | 9'10" | 8'3" | 10'2" | 8'11" | 7'6" | 9'6" | 8'3" | 7'0" |
| 250S162-43 | 24 | 33 | 15'10" | 12'7" | 11'0" | 9'10" | 8'7" | 7'3" | 8'11" | 7'9" | 6'7" | 8'3" | 7'3" | 6'1" |
| 250S162-54 | 12 | 50 | 21'4" | 16'11" | 14'9" | 13'3" | 11'7" | 9'9" | 12'0" | 10'6" | 8'10" | 11'2" | 9'9" | 8'3" |
| 250S162-54 | 16 | 50 | 19'4" | 15'5" | 13'5" | 12'0" | 10'6" | 8'10" | 10'11" | 9'6" | 8'0" | 10'2" | 8'10" | 7'6" |
| 250S162-54 | 24 | 50 | 16'11" | 13'5" | 11'9" | 10'6" | 9'2" | 7'9" | 9'6" | 8'4" | 7'0" | 8'10" | 7'9" | 6'6" |
| 250S162-68 | 12 | 50 | 22'9" | 18'1" | 15'9" | 14'1" | 12'4" | 10'5" | 12'10" | 11'2" | 9'5" | 11'11" | 10'5" | 8'9" |
| 250S162-68 | 16 | 50 | 20'8" | 16'5" | 14'4" | 12'10" | 11'2" | 9'5" | 11'8" | 10'2" | 8'7" | 10'10" | 9'5" | 8'0" |
| 250S162-68 | 24 | 50 | 18'1" | 14'4" | 12'6" | 11'2" | 9'9" | 8'3" | 10'2" | 8'11" | 7'6" | 9'5" | 8'3" | 7'0" |
| 362S162-33 | 12 | 33 | 24'4" | 19'4" | 16'11" | 15'1" | 13'2" | 11'1" | 13'3" | 12'0" | 10'1" | 11'11" | 11'1" | 9'5" |
| 362S162-33 | 16 | 33 | 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" |
| 362S162-33 | 24 | 33 | 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 |
| 362S162-43 | 12 | 33 | 26'6" | 21'0" | 18'5" | 16'5" | 14'4" | 12'1" | 14'11" | 13'0" | 11'0" | 13'10" | 12'1" | 10'2" |
| 362S162-43 | 16 | 33 | 24'1" | 19'1" | 16'8" | 14'11" | 13'0" | 11'0" | 13'7" | 11'10" | 10'0" | 12'1" | 11'0" | 9'3" |
| 362S162-43 | 24 | 33 | 21'0" | 16'8" | 14'7" | 12'9" | 11'5" | 9'7" | 11'1" | 10'4" | 8'9" | 9'11" | 9'7" | 8'1" |
| 362S162-54 | 12 | 50 | 28'5" | 22'6" | 19'8" | 17'7" | 15'4" | 13'0" | 16'0" | 14'0" | 11'9" | 14'10" | 13'0" | 10'11" |
| 362S162-54 | 16 | 50 | 25'10" | 20'6" | 17'11" | 16'0" | 14'0" | 11'9" | 14'6" | 12'8" | 10'8" | 13'6" | 11'9" | 9'11" |
| 362S162-54 | 24 | 50 | 22'6" | 17'11" | 15'7" | 14'0" | 12'2" | 10'3" | 12'8" | 11'1" | 9'4" | 11'9" | 10'3" | 8'8" |
| 362S162-68 | 12 | 50 | 30'5" | 24'1" | 21'1" | 18'10" | 16'5" | 13'10" | 17'1" | 14'11" | 12'7" | 15'11" | 13'10" | 11'8" |
| 362S162-68 | 16 | 50 | 27'7" | 21'11" | 19'2" | 17'1" | 14'11" | 12'7" | 15'6" | 13'7" | 11'5" | 14'5" | 12'7" | 10'8" |
| 362S162-68 | 24 | 50 | 24'1" | 19'2" | 16'9" | 14'11" | 13'1" | 11'0" | 13'7" | 11'10" | 10'0" | 12'7" | 11'0" | 9'3" |
| 362S162-97 | 12 | 50 | 33'6" | 26'7" | 23'3" | 20'9" | 18'2" | 15'4" | 18'10" | 16'6" | 13'11" | 17'6" | 15'4" | 12'11" |
| 362S162-97 | 16 | 50 | 30'5" | 24'2" | 21'1" | 18'10" | 16'6" | 13'11" | 17'2" | 15'0" | 12'8" | 15'11" | 13'11" | 11'9" |
| 362S162-97 | 24 | 50 | 26'7" | 21'1" | 18'5" | 16'6" | 14'5" | 12'2" | 15'0" | 13'1" | 11'0" | 13'11" | 12'2" | 10'3" |
| 362S200-33 | 12 | 33 | 25'8" | 20'4" | 17'9" | 15'11" | 13'11" | 11'8" | 13'11" | 12'7" | 10'8" | 12'5" | 11'8" | 9'10" |
| 362S200-33 | 16 | 33 | 23'3" | 18'6" | 16'2" | 13'11" | 12'7" | 10'8" | 12'1" | 11'5" | 9'8" | 10'9'e | 10'8'e | 9'0" |
| 362S200-33 | 24 | 33 | 19'8" | 16'2" | 14'1" | 11'4'e | 11'0'e | 9'3" | 9'10'e | 9'10'e | 8'5'e | 8'10'e | 8'10'e | 7'10'e |
| 362S200-43 | 12 | 33 | 28'0" | 22'3" | 19'5" | 17'4" | 15'2" | 12'9" | 15'9" | 13'9" | 11'7" | 14'8" | 12'9" | 10'9" |
| 362S200-43 | 16 | 33 | 25'5" | 20'2" | 17'8" | 15'9" | 13'9" | 11'7" | 14'4" | 12'6" | 10'7" | 13'0" | 11'7" | 9'10" |
| 362S200-43 | 24 | 33 | 22'3" | 17'8" | 15'5" | 13'8" | 12'0" | 10'2" | 11'10" | 10'11" | 9'3" | 10'7" | 10'2" | 8'7" |
| 362S200-54 | 12 | 50 | 30'0" | 23'10" | 20'10" | 18'7" | 16'3" | 13'8" | 16'11" | 14'9" | 12'5" | 15'8" | 13'8" | 11'7" |
| 362S200-54 | 16 | 50 | 27'3" | 21'8" | 18'11" | 16'11" | 14'9" | 12'5" | 15'4" | 13'5" | 11'4" | 14'3" | 12'5" | 10'6" |
| 362S200-54 | 24 | 50 | 23'10" | 18'11" | 16'6" | 14'9" | 12'11" | 10'11" | 13'5" | 11'9" | 9'11" | 12'5" | 10'11" | 9'2" |
| 362S200-68 | 12 | 50 | 32'2" | 25'6" | 22'3" | 19'11" | 17'5" | 14'8" | 18'1" | 15'10" | 13'4" | 16'10" | 14'8" | 12'5" |
| 362S200-68 | 16 | 50 | 29'2" | 23'2" | 20'3" | 18'1" | 15'10" | 13'4" | 16'5" | 14'4" | 12'1" | 15'3" | 13'4" | 11'3" |
| 362S200-68 | 24 | 50 | 25'6" | 20'3" | 17'8" | 15'10" | 13'10" | 11'8" | 14'4" | 12'7" | 10'7" | 13'4" | 11'8" | 9'10" |
| 362S200-97 | 12 | 50 | 35'6" | 28'3" | 24'8" | 22'0" | 19'3" | 16'3" | 20'0" | 17'6" | 14'9" | 18'7" | 16'3" | 13'8" |
| 362S200-97 | 16 | 50 | 32'3" | 25'8" | 22'5" | 20'0" | 17'6" | 14'9" | 18'2" | 15'11" | 13'5" | 16'11" | 14'9" | 12'5" |
| 362S200-97 | 24 | 50 | 28'3" | 22'5" | 19'7" | 17'6" | 15'3" | 12'11" | 15'11" | 13'11" | 11'8" | 14'9" | 12'11" | 10'10" |
| 400S162-33 | 12 | 33 | 26'3" | 20'10" | 18'3" | 16'2" | 14'3" | 12'0" | 14'0" | 12'11" | 10'11" | 12'7" | 12'0" | 10'1" |
| 400S162-33 | 16 | 33 | 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" |

SECTION PROPERTIES TABLE NOTES

1. Lateral loads have not been modified for strength checks: full loads are applied.
2. Calculated properties are based on AISI S100-16, North American Specification for Cold-Formed Steel Structural Members.
3. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2012/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

- Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

4. 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote f of IBC table 1604.3. The 5 psf live load has not been reduced for deflection checks.
5. Limiting heights are based on continuous support of each flange over the full length of the stud.
6. Limiting heights are based on steel properties alone (non-composite).
7. Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
8. End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be atleast 10-inches from the end of members, in accordance with ASTM C955, section 4.6.
9. Where limiting heights are followed by "e", web stiffeners are required.

LIMITING WALL HEIGHTS - CURTAIN WALL (5-25 psf)

| Stud Member | Spacing, in, oc | Fy, ksi | 5 psf | | | 15 psf | | | 20 psf | | | 25 psf | | |
|-------------|-----------------|---------|--------|--------|--------|---------|---------|--------|---------|--------|---------|---------|---------|---------|
| | | | L/120 | L/240 | L/360 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 400S162-33 | 24 | 33 | 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 |
| 400S162-43 | 12 | 33 | 28'7" | 22'8" | 19'10" | 17'9" | 15'6" | 13'1" | 16'1" | 14'1" | 11'10" | 14'10" | 13'1" | 11'0" |
| 400S162-43 | 16 | 33 | 26'0" | 20'7" | 18'0" | 16'1" | 14'1" | 11'10" | 14'4" | 12'9" | 10'9" | 12'10" | 11'10" | 10'0" |
| 400S162-43 | 24 | 33 | 22'8" | 18'0" | 15'9" | 13'6" | 12'3" | 10'4" | 11'9" | 11'2" | 9'5" | 10'6" | 10'4" | 8'9" |
| 400S162-54 | 12 | 50 | 30'8" | 24'4" | 21'3" | 19'0" | 16'7" | 14'0" | 17'3" | 15'1" | 12'9" | 16'0" | 14'0" | 11'10" |
| 400S162-54 | 16 | 50 | 27'10" | 22'1" | 19'4" | 17'3" | 15'1" | 12'9" | 15'8" | 13'8" | 11'7" | 14'7" | 12'9" | 10'9" |
| 400S162-54 | 24 | 50 | 24'4" | 19'4" | 16'10" | 15'1" | 13'2" | 11'1" | 13'8" | 12'0" | 10'1" | 12'9" | 11'1" | 9'4" |
| 400S162-68 | 12 | 50 | 32'10" | 26'0" | 22'9" | 20'4" | 17'9" | 15'0" | 18'6" | 16'2" | 13'7" | 17'2" | 15'0" | 12'8" |
| 400S162-68 | 16 | 50 | 29'10" | 23'8" | 20'8" | 18'6" | 16'2" | 13'7" | 16'9" | 14'8" | 12'4" | 15'7" | 13'7" | 11'6" |
| 400S162-68 | 24 | 50 | 26'0" | 20'8" | 18'1" | 16'2" | 14'1" | 11'11" | 14'8" | 12'10" | 10'10" | 13'7" | 11'11" | 10'0" |
| 400S162-97 | 12 | 50 | 36'3" | 28'9" | 25'1" | 22'5" | 19'7" | 16'7" | 20'5" | 17'10" | 15'0" | 18'11" | 16'7" | 13'11" |
| 400S162-97 | 16 | 50 | 32'11" | 26'1" | 22'10" | 20'5" | 17'10" | 15'0" | 18'6" | 16'2" | 13'8" | 17'2" | 15'0" | 12'8" |
| 400S162-97 | 24 | 50 | 28'9" | 22'10" | 19'11" | 17'10" | 15'7" | 13'2" | 16'2" | 14'2" | 11'11" | 15'0" | 13'2" | 11'1" |
| 400S200-33 | 12 | 33 | 27'8" | 21'11" | 19'2" | 17'0" | 15'0" | 12'7" | 14'9" | 13'7" | 11'6" | 13'2"e | 12'7" | 10'8" |
| 400S200-33 | 16 | 33 | 25'1" | 19'11" | 17'5" | 14'9" | 13'7" | 11'6" | 12'9"e | 12'4"e | 10'5" | 11'5"e | 11'5"e | 9'8" |
| 400S200-33 | 24 | 33 | 20'10" | 17'5" | 15'2" | 12'0"e | 11'10"e | 10'0" | 10'5"e | 10'5"e | 9'1"e | 9'4"e | 9'4"e | 8'5"e |
| 400S200-43 | 12 | 33 | 30'2" | 23'11" | 20'11" | 18'8" | 16'4" | 13'9" | 17'0" | 14'10" | 12'6" | 15'9" | 13'9" | 11'7" |
| 400S200-43 | 16 | 33 | 27'5" | 21'9" | 19'0" | 17'0" | 14'10" | 12'6" | 15'4" | 13'6" | 11'4" | 13'9" | 12'6" | 10'7" |
| 400S200-43 | 24 | 33 | 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" |
| 400S200-54 | 12 | 50 | 32'4" | 25'8" | 22'5" | 20'1" | 17'6" | 14'9" | 18'3" | 15'11" | 13'5" | 16'11" | 14'9" | 12'6" |
| 400S200-54 | 16 | 50 | 29'5" | 23'4" | 20'5" | 18'3" | 15'11" | 13'5" | 16'7" | 14'6" | 12'2" | 15'4" | 13'5" | 11'4" |
| 400S200-54 | 24 | 50 | 25'8" | 20'5" | 17'10" | 15'11" | 13'11" | 11'9" | 14'6" | 12'8" | 10'8" | 13'5" | 11'9" | 9'11" |
| 400S200-68 | 12 | 50 | 34'8" | 27'6" | 24'0" | 21'6" | 18'9" | 15'10" | 19'6" | 17'1" | 14'5" | 18'1" | 15'10" | 13'4" |
| 400S200-68 | 16 | 50 | 31'6" | 25'0" | 21'10" | 19'6" | 17'1" | 14'5" | 17'9" | 15'6" | 13'1" | 16'6" | 14'5" | 12'2" |
| 400S200-68 | 24 | 50 | 27'6" | 21'10" | 19'1" | 17'1" | 14'11" | 12'7" | 15'6" | 13'6" | 11'5" | 14'5" | 12'7" | 10'7" |
| 400S200-97 | 12 | 50 | 38'5" | 30'6" | 26'7" | 23'9" | 20'9" | 17'6" | 21'7" | 18'11" | 15'11" | 20'1" | 17'6" | 14'9" |
| 400S200-97 | 16 | 50 | 34'10" | 27'8" | 24'2" | 21'7" | 18'11" | 15'11" | 19'8" | 17'2" | 14'6" | 18'3" | 15'11" | 13'5" |
| 400S200-97 | 24 | 50 | 30'6" | 24'2" | 21'1" | 18'11" | 16'6" | 13'11" | 17'2" | 15'0" | 12'8" | 15'11" | 13'11" | 11'9" |
| 600S162-33 | 12 | 33 | 35'6" | 28'8" | 25'0" | 20'6"e | 19'6" | 16'6" | 17'9"e | 17'9"e | 15'0" | 15'11"e | 15'11"e | 13'11"e |
| 600S162-33 | 16 | 33 | 30'9" | 26'0" | 22'9" | 17'9"e | 17'9"e | 15'0" | 15'5"e | 15'5"e | 13'7"e | 13'9"e | 13'9"e | 12'8"e |
| 600S162-33 | 24 | 33 | 25'2" | 22'9" | 19'10" | 14'6"e | 14'6"e | 13'1"e | 12'7"e | 12'7"e | 11'11"e | 11'3"e | 11'3"e | 11'0"e |
| 600S162-43 | 12 | 33 | 39'4" | 31'2" | 27'3" | 24'4" | 21'3" | 17'11" | 22'0" | 19'4" | 16'4" | 19'8" | 17'11" | 15'2" |
| 600S162-43 | 16 | 33 | 35'9" | 28'4" | 24'9" | 22'0" | 19'4" | 16'4" | 19'0" | 17'7" | 14'10" | 17'0"e | 16'4"e | 13'9" |
| 600S162-43 | 24 | 33 | 31'1" | 24'9" | 21'8" | 17'11"e | 16'11" | 14'3" | 15'6"e | 15'4"e | 12'11" | 13'11"e | 13'11"e | 12'0"e |
| 600S162-54 | 12 | 50 | 42'2" | 33'6" | 29'3" | 26'2" | 22'10" | 19'3" | 23'9" | 20'9" | 17'6" | 22'1" | 19'3" | 16'3" |
| 600S162-54 | 16 | 50 | 38'4" | 30'5" | 26'7" | 23'9" | 20'9" | 17'6" | 21'7" | 18'10" | 15'11" | 20'0" | 17'6" | 14'9" |
| 600S162-54 | 24 | 50 | 33'6" | 26'7" | 23'3" | 20'9" | 18'1" | 15'3" | 18'10" | 16'6" | 13'11" | 17'6" | 15'3" | 12'11" |
| 600S162-68 | 12 | 50 | 45'3" | 35'11" | 31'4" | 28'0" | 24'6" | 20'8" | 25'6" | 22'3" | 18'9" | 23'8" | 20'8" | 17'5" |
| 600S162-68 | 16 | 50 | 41'1" | 32'7" | 28'6" | 25'6" | 22'3" | 18'9" | 23'2" | 20'3" | 17'1" | 21'6" | 18'9" | 15'10" |
| 600S162-68 | 24 | 50 | 35'11" | 28'6" | 24'11" | 22'3" | 19'5" | 16'5" | 20'3" | 17'8" | 14'11" | 18'9" | 16'5" | 13'10" |
| 600S162-97 | 12 | 50 | 50'1" | 39'9" | 34'9" | 31'1" | 27'2" | 22'11" | 28'3" | 24'8" | 20'9" | 26'2" | 22'11" | 19'4" |
| 600S162-97 | 16 | 50 | 45'6" | 36'2" | 31'7" | 28'3" | 24'8" | 20'9" | 25'8" | 22'5" | 18'11" | 23'10" | 20'9" | 17'6" |
| 600S162-97 | 24 | 50 | 39'9" | 31'7" | 27'7" | 24'8" | 21'6" | 18'2" | 22'5" | 19'7" | 16'6" | 20'9" | 18'2" | 15'4" |
| 600S162-118 | 12 | 50 | 52'11" | 42'0" | 36'8" | 32'10" | 28'8" | 24'2" | 29'10" | 26'0" | 22'0" | 27'8" | 24'2" | 20'5" |
| 600S162-118 | 16 | 50 | 48'1" | 38'2" | 33'4" | 29'10" | 26'0" | 22'0" | 27'1" | 23'8" | 19'11" | 25'2" | 22'0" | 18'6" |
| 600S162-118 | 24 | 50 | 42'0" | 33'4" | 29'2" | 26'0" | 22'9" | 19'2" | 23'8" | 20'8" | 17'5" | 22'0" | 19'2" | 16'2" |
| 600S200-33 | 12 | 33 | 37'9" | 30'0" | 26'2" | 21'11"e | 20'6"e | 17'3" | 18'11"e | 18'7"e | 15'8"e | 16'11"e | 16'11"e | 14'7"e |
| 600S200-33 | 16 | 33 | 32'10" | 27'3" | 23'10" | 18'11"e | 18'7"e | 15'8"e | 16'5"e | 16'5"e | 14'3"e | 14'8"e | 14'8"e | 13'3"e |
| 600S200-33 | 24 | 33 | 26'10" | 23'10" | 20'10" | 15'6"e | 15'6"e | 13'8"e | 13'5"e | 13'5"e | 12'5"e | 12'0"e | 12'0"e | 11'7"e |
| 600S200-43 | 12 | 33 | 41'3" | 32'9" | 28'7" | 25'7" | 22'4" | 18'10" | 22'8" | 20'4" | 17'2" | 20'3" | 18'10" | 15'11" |

SECTION PROPERTIES TABLE NOTES

- Lateral loads have not been modified for strength checks; full loads are applied.
- Calculated properties are based on AISI S100-16, North American Specification for Cold-Formed Steel Structural Members.
- The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2012/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

- Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

- 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote f of IBC table 1604.3. The 5 psf live load has not been reduced for deflection checks.
- Limiting heights are based on continuous support of each flange over the full length of the stud.
- Limiting heights are based on steel properties alone (non-composite).
- Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
- End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be atleast 10-inches from the end of members, in accordance with ASTM C955, section 4.6.
- Where limiting heights are followed by "e", web stiffeners are required.

LIMITING WALL HEIGHTS - CURTAIN WALL (5-25 psf)

| Stud Member | Spacing, in. oc | Fy, ksi | 5 psf | | | 15 psf | | | 20 psf | | | 25 psf | | |
|-------------|-----------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | L/120 | L/240 | L/360 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 600S200-43 | 16 | 33 | 37'6" | 29'9" | 26'0" | 22'8" | 20'4" | 17'2" | 19'7" | 18'5" | 15'7" | 17'7" | 17'2" | 14'5" |
| 600S200-43 | 24 | 33 | 32'0" | 26'0" | 22'9" | 18'6" | 17'9" | 15'0" | 16'0" | 16'0" | 13'7" | 14'4" | 14'4" | 12'7" |
| 600S200-54 | 12 | 50 | 44'4" | 35'2" | 30'9" | 27'6" | 24'0" | 20'3" | 24'11" | 21'10" | 18'5" | 23'2" | 20'3" | 17'1" |
| 600S200-54 | 16 | 50 | 40'3" | 32'0" | 27'11" | 24'11" | 21'10" | 18'5" | 22'8" | 19'10" | 16'8" | 21'1" | 18'5" | 15'6" |
| 600S200-54 | 24 | 50 | 35'2" | 27'11" | 24'5" | 21'10" | 19'1" | 16'1" | 19'10" | 17'4" | 14'7" | 18'5" | 16'1" | 13'7" |
| 600S200-68 | 12 | 50 | 47'7" | 37'9" | 33'0" | 29'6" | 25'9" | 21'9" | 26'9" | 23'5" | 19'9" | 24'10" | 21'9" | 18'4" |
| 600S200-68 | 16 | 50 | 43'2" | 34'4" | 29'11" | 26'9" | 23'5" | 19'9" | 24'4" | 21'3" | 17'11" | 22'7" | 19'9" | 16'8" |
| 600S200-68 | 24 | 50 | 37'9" | 29'11" | 26'2" | 23'5" | 20'5" | 17'3" | 21'3" | 18'7" | 15'8" | 19'9" | 17'3" | 14'6" |
| 600S200-97 | 12 | 50 | 52'10" | 41'11" | 36'7" | 32'9" | 28'7" | 24'1" | 29'9" | 26'0" | 21'11" | 27'7" | 24'1" | 20'4" |
| 600S200-97 | 16 | 50 | 48'0" | 38'1" | 33'3" | 29'9" | 26'0" | 21'11" | 27'0" | 23'7" | 19'11" | 25'1" | 21'11" | 18'6" |
| 600S200-97 | 24 | 50 | 41'11" | 33'3" | 29'1" | 26'0" | 22'8" | 19'2" | 23'7" | 20'7" | 17'5" | 21'11" | 19'2" | 16'2" |
| 800S162-33 | 12 | 33 | 41'0" | 35'5" | 30'11" | 23'8" | 23'8" | 20'4" | 20'6" | 20'6" | 18'6" | 18'4" | 18'4" | 17'2" |
| 800S162-33 | 16 | 33 | 35'6" | 32'2" | 28'1" | 20'6" | 20'6" | 18'6" | 17'9" | 17'9" | 16'10" | 15'11" | 15'11" | 15'7" |
| 800S162-33 | 24 | 33 | 29'0" | 28'1" | 24'7" | 16'9" | 16'9" | 16'2" | 14'6" | 14'6" | 14'6" | 13'0" | 13'0" | 13'0" |
| 800S162-43 | 12 | 33 | 49'1" | 38'11" | 34'0" | 28'7" | 26'7" | 22'5" | 24'9" | 24'2" | 20'4" | 22'1" | 22'1" | 18'11" |
| 800S162-43 | 16 | 33 | 42'10" | 35'4" | 30'11" | 24'9" | 24'2" | 20'4" | 21'5" | 21'5" | 18'6" | 19'2" | 19'2" | 17'2" |
| 800S162-43 | 24 | 33 | 35'0" | 30'11" | 27'0" | 20'2" | 20'2" | 17'9" | 17'6" | 17'6" | 16'2" | 15'8" | 15'8" | 15'0" |
| 800S162-54 | 12 | 50 | 52'9" | 41'10" | 36'7" | 32'8" | 28'7" | 24'1" | 29'9" | 25'11" | 21'11" | 27'7" | 24'1" | 20'4" |
| 800S162-54 | 16 | 50 | 47'11" | 38'1" | 33'3" | 29'9" | 25'11" | 21'11" | 27'0" | 23'7" | 19'11" | 25'1" | 21'11" | 18'6" |
| 800S162-54 | 24 | 50 | 41'10" | 33'3" | 29'0" | 25'11" | 22'8" | 19'1" | 23'5" | 20'7" | 17'4" | 20'11" | 19'1" | 16'2" |
| 800S162-68 | 12 | 50 | 57'0" | 45'3" | 39'6" | 35'4" | 30'10" | 26'0" | 32'1" | 28'1" | 23'8" | 29'10" | 26'0" | 22'0" |
| 800S162-68 | 16 | 50 | 51'10" | 41'1" | 35'11" | 32'1" | 28'1" | 23'8" | 29'2" | 25'6" | 21'6" | 27'1" | 23'8" | 19'11" |
| 800S162-68 | 24 | 50 | 45'3" | 35'11" | 31'5" | 28'1" | 24'6" | 20'8" | 25'6" | 22'3" | 18'9" | 23'8" | 20'8" | 17'5" |
| 800S162-97 | 12 | 50 | 63'5" | 50'4" | 43'11" | 39'3" | 34'4" | 28'11" | 35'8" | 31'2" | 26'4" | 33'2" | 28'11" | 24'5" |
| 800S162-97 | 16 | 50 | 57'7" | 45'9" | 39'11" | 35'8" | 31'2" | 26'4" | 32'5" | 28'4" | 23'11" | 30'1" | 26'4" | 22'2" |
| 800S162-97 | 24 | 50 | 50'4" | 39'11" | 34'11" | 31'2" | 27'3" | 23'0" | 28'4" | 24'9" | 20'11" | 26'4" | 23'0" | 19'5" |
| 800S162-118 | 12 | 50 | 67'1" | 53'3" | 46'6" | 41'7" | 36'4" | 30'8" | 37'9" | 33'0" | 27'10" | 35'1" | 30'8" | 25'10" |
| 800S162-118 | 16 | 50 | 60'11" | 48'4" | 42'3" | 37'9" | 33'0" | 27'10" | 34'4" | 30'0" | 25'3" | 31'10" | 27'10" | 23'6" |
| 800S162-118 | 24 | 50 | 53'3" | 42'3" | 36'11" | 33'0" | 28'10" | 24'4" | 30'0" | 26'2" | 22'1" | 27'10" | 24'4" | 20'6" |
| 800S200-33 | 12 | 33 | 44'0" | 37'9" | 33'0" | 25'5" | 25'5" | 21'8" | 22'0" | 22'0" | 19'9" | 19'8" | 19'8" | 18'4" |
| 800S200-33 | 16 | 33 | 38'1" | 34'3" | 29'11" | 22'0" | 22'0" | 19'9" | 19'1" | 19'1" | 17'11" | 17'1" | 17'1" | 16'8" |
| 800S200-33 | 24 | 33 | 31'1" | 29'11" | 26'2" | 18'0" | 18'0" | 17'3" | 15'7" | 15'7" | 15'7" | 13'11" | 13'11" | 13'11" |
| 800S200-43 | 12 | 33 | 51'10" | 41'1" | 35'11" | 30'7" | 28'1" | 23'8" | 26'5" | 25'6" | 21'6" | 23'8" | 23'8" | 19'11" |
| 800S200-43 | 16 | 33 | 45'10" | 37'4" | 32'8" | 26'5" | 25'6" | 21'6" | 22'11" | 22'11" | 19'6" | 20'6" | 20'6" | 18'2" |
| 800S200-43 | 24 | 33 | 37'5" | 32'8" | 28'6" | 21'7" | 21'7" | 18'9" | 18'8" | 18'8" | 17'1" | 16'9" | 16'9" | 15'10" |
| 800S200-54 | 12 | 50 | 55'8" | 44'2" | 38'7" | 34'6" | 30'2" | 25'5" | 31'4" | 27'5" | 23'1" | 29'1" | 25'5" | 21'5" |
| 800S200-54 | 16 | 50 | 50'7" | 40'2" | 35'1" | 31'4" | 27'5" | 23'1" | 28'6" | 24'10" | 21'0" | 26'5" | 23'1" | 19'6" |
| 800S200-54 | 24 | 50 | 44'2" | 35'1" | 30'8" | 27'5" | 23'11" | 20'2" | 24'10" | 21'9" | 18'4" | 22'4" | 20'2" | 17'0" |
| 800S200-68 | 12 | 50 | 59'9" | 47'5" | 41'5" | 37'1" | 32'4" | 27'4" | 33'8" | 29'5" | 24'10" | 31'3" | 27'4" | 23'0" |
| 800S200-68 | 16 | 50 | 54'4" | 43'1" | 37'8" | 33'8" | 29'5" | 24'10" | 30'7" | 26'9" | 22'6" | 28'5" | 24'10" | 20'11" |
| 800S200-68 | 24 | 50 | 47'5" | 37'8" | 32'11" | 29'5" | 25'8" | 21'8" | 26'9" | 23'4" | 19'8" | 24'10" | 21'8" | 18'3" |
| 800S200-97 | 12 | 50 | 66'6" | 52'9" | 46'1" | 41'2" | 36'0" | 30'4" | 37'5" | 32'8" | 27'7" | 34'9" | 30'4" | 25'7" |
| 800S200-97 | 16 | 50 | 60'5" | 47'11" | 41'11" | 37'5" | 32'8" | 27'7" | 34'0" | 29'9" | 25'1" | 31'7" | 27'7" | 23'3" |
| 800S200-97 | 24 | 50 | 52'9" | 41'11" | 36'7" | 32'8" | 28'7" | 24'1" | 29'9" | 25'11" | 21'11" | 27'7" | 24'1" | 20'4" |

SECTION PROPERTIES TABLE NOTES

- Lateral loads have not been modified for strength checks; full loads are applied.
- Calculated properties are based on AISI S100-16, North American Specification for Cold-Formed Steel Structural Members.
- The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2012/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

- Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

- 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote f of IBC table 1604.3. The 5 psf live load has not been reduced for deflection checks.
- Limiting heights are based on continuous support of each flange over the full length of the stud.
- Limiting heights are based on steel properties alone (non-composite).
- Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
- End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be at least 10-inches from the end of members, in accordance with ASTM C955, section 4.6.
- Where limiting heights are followed by "e", web stiffeners are required.

LIMITING WALL HEIGHTS - CURTAIN WALL (30-40 psf)

| Stud Member | Spacing, in, oc | Fy, ksi | 30 psf | | | 35 psf | | | 40 psf | | |
|-------------|-----------------|---------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| | | | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 250S162-33 | 12 | 33 | 8'11" | 7'11" | 6'8" | 8'3" | 7'6" | 6'4" | 7'8" | 7'2" | 6'0" |
| 250S162-33 | 16 | 33 | 7'8" | 7'2" | 6'0" | 7'2" | 6'10" | 5'9" | 6'8"e | 6'6"e | 5'6" |
| 250S162-33 | 24 | 33 | 6'3"e | 6'3"e | 5'3" | 5'10"e | 5'10"e | 5'0"e | 5'5"e | 5'5"e | 4'10"e |
| 250S162-43 | 12 | 33 | 9'10" | 8'7" | 7'3" | 9'4" | 8'2" | 6'10" | 8'11" | 7'9" | 6'7" |
| 250S162-43 | 16 | 33 | 8'11" | 7'9" | 6'7" | 8'6" | 7'5" | 6'3" | 8'1" | 7'1" | 6'0" |
| 250S162-43 | 24 | 33 | 7'7" | 6'10" | 5'9" | 7'1" | 6'6" | 5'5" | 6'7" | 6'2" | 5'3" |
| 250S162-54 | 12 | 50 | 10'6" | 9'2" | 7'9" | 10'0" | 8'8" | 7'4" | 9'6" | 8'4" | 7'0" |
| 250S162-54 | 16 | 50 | 9'6" | 8'4" | 7'0" | 9'1" | 7'11" | 6'8" | 8'8" | 7'7" | 6'5" |
| 250S162-54 | 24 | 50 | 8'4" | 7'3" | 6'2" | 7'11" | 6'11" | 5'10" | 7'7" | 6'7" | 5'7" |
| 250S162-68 | 12 | 50 | 11'2" | 9'9" | 8'3" | 10'8" | 9'4" | 7'10" | 10'2" | 8'11" | 7'6" |
| 250S162-68 | 16 | 50 | 10'2" | 8'11" | 7'6" | 9'8" | 8'5" | 7'1" | 9'3" | 8'1" | 6'10" |
| 250S162-68 | 24 | 50 | 8'11" | 7'9" | 6'7" | 8'5" | 7'5" | 6'3" | 8'1" | 7'1" | 5'11" |
| 362S162-33 | 12 | 33 | 10'10" | 10'6" | 8'10" | 10'0"e | 9'11"e | 8'5" | 9'5"e | 9'5"e | 8'0" |
| 362S162-33 | 16 | 33 | 9'5"e | 9'5"e | 8'0" | 8'8"e | 8'8"e | 7'7"e | 8'2"e | 8'2"e | 7'3"e |
| 362S162-33 | 24 | 33 | 7'8"e | 7'8"e | 7'0"e | 7'1"e | 7'1"e | 6'8"e | 6'8"e | 6'8"e | 6'4"e |
| 362S162-43 | 12 | 33 | 12'9" | 11'5" | 9'7" | 11'10" | 10'10" | 9'1" | 11'1" | 10'4" | 8'9" |
| 362S162-43 | 16 | 33 | 11'1" | 10'4" | 8'9" | 10'3" | 9'10" | 8'3" | 9'7" | 9'5" | 7'11" |
| 362S162-43 | 24 | 33 | 9'0" | 9'0" | 7'7" | 8'4"e | 8'4"e | 7'3" | 7'10"e | 7'10"e | 6'11"e |
| 362S162-54 | 12 | 50 | 14'0" | 12'2" | 10'3" | 13'3" | 11'7" | 9'9" | 12'8" | 11'1" | 9'4" |
| 362S162-54 | 16 | 50 | 12'8" | 11'1" | 9'4" | 12'1" | 10'6" | 8'11" | 11'6" | 10'1" | 8'6" |
| 362S162-54 | 24 | 50 | 11'1" | 9'8" | 8'2" | 10'6" | 9'2" | 7'9" | 10'1" | 8'10" | 7'5" |
| 362S162-68 | 12 | 50 | 14'11" | 13'1" | 11'0" | 14'2" | 12'5" | 10'6" | 13'7" | 11'10" | 10'0" |
| 362S162-68 | 16 | 50 | 13'7" | 11'10" | 10'0" | 12'11" | 11'3" | 9'6" | 12'4" | 10'9" | 9'1" |
| 362S162-68 | 24 | 50 | 11'10" | 10'4" | 8'9" | 11'3" | 9'10" | 8'4" | 10'9" | 9'5" | 7'11" |
| 362S162-97 | 12 | 50 | 16'6" | 14'5" | 12'2" | 15'8" | 13'8" | 11'6" | 15'0" | 13'1" | 11'0" |
| 362S162-97 | 16 | 50 | 15'0" | 13'1" | 11'0" | 14'3" | 12'5" | 10'6" | 13'7" | 11'11" | 10'0" |
| 362S162-97 | 24 | 50 | 13'1" | 11'5" | 9'8" | 12'5" | 10'10" | 9'2" | 11'11" | 10'5" | 8'9" |
| 362S200-33 | 12 | 33 | 11'4"e | 11'0"e | 9'3" | 10'6"e | 10'6"e | 8'10" | 9'10"e | 9'10"e | 8'5"e |
| 362S200-33 | 16 | 33 | 9'10"e | 9'10"e | 8'5"e | 9'1"e | 9'1"e | 8'0"e | 8'6"e | 8'6"e | 7'8"e |
| 362S200-33 | 24 | 33 | 8'0"e | 8'0"e | 7'4"e | 7'5"e | 7'0"e | 7'0"e | 7'0"e | 7'0"e | 6'8"e |
| 362S200-43 | 12 | 33 | 13'8" | 12'0" | 10'2" | 12'8" | 11'5" | 9'8" | 11'10" | 10'11" | 9'3" |
| 362S200-43 | 16 | 33 | 11'10" | 10'11" | 9'3" | 11'0" | 10'5" | 8'9" | 10'3" | 9'11" | 8'4" |
| 362S200-43 | 24 | 33 | 9'8"e | 9'7"e | 8'1" | 9'0"e | 9'0"e | 7'8" | 8'5"e | 8'5"e | 7'4"e |
| 362S200-54 | 12 | 50 | 14'9" | 12'11" | 10'11" | 14'0" | 12'3" | 10'4" | 13'5" | 11'9" | 9'11" |
| 362S200-54 | 16 | 50 | 13'5" | 11'9" | 9'11" | 12'9" | 11'2" | 9'5" | 12'2" | 10'8" | 9'0" |
| 362S200-54 | 24 | 50 | 11'9" | 10'3" | 8'8" | 11'2" | 9'9" | 8'2" | 10'8" | 9'4" | 7'10" |
| 362S200-68 | 12 | 50 | 15'10" | 13'10" | 11'8" | 15'0" | 13'1" | 11'1" | 14'4" | 12'7" | 10'7" |
| 362S200-68 | 16 | 50 | 14'4" | 12'7" | 10'7" | 13'8" | 11'11" | 10'1" | 13'1" | 11'5" | 9'7" |
| 362S200-68 | 24 | 50 | 12'7" | 11'0" | 9'3" | 11'11" | 10'5" | 8'9" | 11'5" | 10'0" | 8'5" |
| 362S200-97 | 12 | 50 | 17'6" | 15'3" | 12'11" | 16'7" | 14'6" | 12'3" | 15'11" | 13'11" | 11'8" |
| 362S200-97 | 16 | 50 | 15'11" | 13'11" | 11'8" | 15'1" | 13'2" | 11'1" | 14'5" | 12'7" | 10'8" |
| 362S200-97 | 24 | 50 | 13'11" | 12'1" | 10'3" | 13'2" | 11'6" | 9'9" | 12'7" | 11'0" | 9'3" |
| 400S162-33 | 12 | 33 | 11'5"e | 11'4"e | 9'6" | 10'7"e | 10'7"e | 9'1" | 9'11"e | 9'11"e | 8'8"e |
| 400S162-33 | 16 | 33 | 9'11"e | 9'11"e | 8'8"e | 9'2"e | 9'2"e | 8'3"e | 8'7"e | 8'7"e | 7'10"e |

SECTION PROPERTIES TABLE NOTES

- Lateral loads have not been modified for strength checks: full loads are applied.
- Calculated properties are based on AISI S100-16, North American Specification for Cold-Formed Steel Structural Members.
- The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2012/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

- Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

- 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote f of IBC table 1604.3. The 5 psf live load has not been reduced for deflection checks.
- Limiting heights are based on continuous support of each flange over the full length of the stud.
- Limiting heights are based on steel properties alone (non-composite).
- Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
- End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be atleast 10-inches from the end of members, in accordance with ASTM C955, section 4.6.
- Where limiting heights are followed by "e", web stiffeners are required.

LIMITING WALL HEIGHTS - CURTAIN WALL (30-40 psf)

| Stud Member | Spacing, in, oc | Fy, ksi | 30 psf | | | 35 psf | | | 40 psf | | |
|-------------|-----------------|---------|---------|---------|---------|--------|---------|---------|---------|---------|---------|
| | | | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 400S162-33 | 24 | 33 | 8'1"e | 8'1"e | 7'7"e | 7'6"e | 7'6"e | 7'2"e | 7'0"e | 7'0"e | 6'10"e |
| 400S162-43 | 12 | 33 | 13'6" | 12'3" | 10'4" | 12'6" | 11'8" | 9'10" | 11'9" | 11'2" | 9'5" |
| 400S162-43 | 16 | 33 | 11'9" | 11'2" | 9'5" | 10'10" | 10'7" | 8'11" | 10'2" | 10'2" | 8'7" |
| 400S162-43 | 24 | 33 | 9'7"e | 9'7"e | 8'3" | 8'10"e | 8'10"e | 7'10" | 8'3"e | 8'3"e | 7'6"e |
| 400S162-54 | 12 | 50 | 15'1" | 13'2" | 11'1" | 14'4" | 12'6" | 10'7" | 13'8" | 12'0" | 10'1" |
| 400S162-54 | 16 | 50 | 13'8" | 12'0" | 10'1" | 13'0" | 11'4" | 9'7" | 12'5" | 10'10" | 9'2" |
| 400S162-54 | 24 | 50 | 12'0" | 10'5" | 8'10" | 11'4" | 9'11" | 8'5" | 10'10" | 9'6" | 8'0" |
| 400S162-68 | 12 | 50 | 16'2" | 14'1" | 11'11" | 15'4" | 13'5" | 11'4" | 14'8" | 12'10" | 10'10" |
| 400S162-68 | 16 | 50 | 14'8" | 12'10" | 10'10" | 13'11" | 12'2" | 10'3" | 13'4" | 11'8" | 9'10" |
| 400S162-68 | 24 | 50 | 12'10" | 11'2" | 9'5" | 12'2" | 10'8" | 9'0" | 11'8" | 10'2" | 8'7" |
| 400S162-97 | 12 | 50 | 17'10" | 15'7" | 13'2" | 16'11" | 14'9" | 12'6" | 16'2" | 14'2" | 11'11" |
| 400S162-97 | 16 | 50 | 16'2" | 14'2" | 11'11" | 15'5" | 13'5" | 11'4" | 14'9" | 12'10" | 10'10" |
| 400S162-97 | 24 | 50 | 14'2" | 12'4" | 10'5" | 13'5" | 11'9" | 9'11" | 12'10" | 11'3" | 9'6" |
| 400S200-33 | 12 | 33 | 12'0"e | 11'10"e | 10'0" | 11'1"e | 11'1"e | 9'6"e | 10'5"e | 10'5"e | 9'1"e |
| 400S200-33 | 16 | 33 | 10'5"e | 10'5"e | 9'1"e | 9'8"e | 9'8"e | 8'8"e | 9'0"e | 9'0"e | 8'3"e |
| 400S200-33 | 24 | 33 | 8'6"e | 8'6"e | 7'11"e | 7'10"e | 7'10"e | 7'7"e | 7'4"e | 7'4"e | 7'3"e |
| 400S200-43 | 12 | 33 | 14'6" | 13'0" | 10'11" | 13'5" | 12'4" | 10'5" | 12'7" | 11'9" | 9'11" |
| 400S200-43 | 16 | 33 | 12'7" | 11'9" | 9'11" | 11'7" | 11'2" | 9'5" | 10'10"e | 10'8"e | 9'0" |
| 400S200-43 | 24 | 33 | 10'3"e | 10'3"e | 8'8" | 9'6"e | 9'6"e | 8'3"e | 8'11"e | 8'11"e | 7'11"e |
| 400S200-54 | 12 | 50 | 15'11" | 13'11" | 11'9" | 15'1" | 13'3" | 11'2" | 14'6" | 12'8" | 10'8" |
| 400S200-54 | 16 | 50 | 14'6" | 12'8" | 10'8" | 13'9" | 12'0" | 10'1" | 13'2" | 11'6" | 9'8" |
| 400S200-54 | 24 | 50 | 12'8" | 11'0" | 9'4" | 12'0" | 10'6" | 8'10" | 11'6" | 10'0" | 8'5" |
| 400S200-68 | 12 | 50 | 17'1" | 14'11" | 12'7" | 16'2" | 14'2" | 11'11" | 15'6" | 13'6" | 11'5" |
| 400S200-68 | 16 | 50 | 15'6" | 13'6" | 11'5" | 14'9" | 12'10" | 10'10" | 14'1" | 12'4" | 10'4" |
| 400S200-68 | 24 | 50 | 13'6" | 11'10" | 10'0" | 12'10" | 11'3" | 9'6" | 12'4" | 10'9" | 9'1" |
| 400S200-97 | 12 | 50 | 18'11" | 16'6" | 13'11" | 17'11" | 15'8" | 13'3" | 17'2" | 15'0" | 12'8" |
| 400S200-97 | 16 | 50 | 17'2" | 15'0" | 12'8" | 16'4" | 14'3" | 12'0" | 15'7" | 13'7" | 11'6" |
| 400S200-97 | 24 | 50 | 15'0" | 13'1" | 11'0" | 14'3" | 12'5" | 10'6" | 13'7" | 11'11" | 10'0" |
| 600S162-33 | 12 | 33 | 14'6"e | 14'6"e | 13'1"e | 13'5"e | 13'5"e | 12'5"e | 12'7"e | 12'7"e | 11'11"e |
| 600S162-33 | 16 | 33 | 12'7"e | 12'7"e | 11'11"e | 11'8"e | 11'8"e | 11'3"e | 10'11"e | 10'11"e | 10'10"e |
| 600S162-33 | 24 | 33 | 10'3"e | 10'3"e | 10'3"e | 9'6"e | 9'6"e | 9'6"e | 8'11"e | 8'11"e | 8'11"e |
| 600S162-43 | 12 | 33 | 17'11"e | 16'11" | 14'3" | 16'7"e | 16'1"e | 13'6" | 15'6"e | 15'4"e | 12'11" |
| 600S162-43 | 16 | 33 | 15'6"e | 15'4"e | 12'11" | 14'5"e | 14'5"e | 12'4"e | 13'5"e | 13'5"e | 11'9"e |
| 600S162-43 | 24 | 33 | 12'8"e | 12'8"e | 11'4"e | 11'9"e | 11'9"e | 10'9"e | 11'0"e | 11'0"e | 10'3"e |
| 600S162-54 | 12 | 50 | 20'9" | 18'1" | 15'3" | 19'8" | 17'3" | 14'6" | 18'10" | 16'6" | 13'11" |
| 600S162-54 | 16 | 50 | 18'10" | 16'6" | 13'11" | 17'11" | 15'8" | 13'2" | 17'2" | 15'0" | 12'7" |
| 600S162-54 | 24 | 50 | 16'6" | 14'5" | 12'2" | 15'8" | 13'8" | 11'6" | 14'8" | 13'1" | 11'0" |
| 600S162-68 | 12 | 50 | 22'3" | 19'5" | 16'5" | 21'2" | 18'5" | 15'7" | 20'3" | 17'8" | 14'11" |
| 600S162-68 | 16 | 50 | 20'3" | 17'8" | 14'11" | 19'2" | 16'9" | 14'2" | 18'4" | 16'0" | 13'6" |
| 600S162-68 | 24 | 50 | 17'8" | 15'5" | 13'0" | 16'9" | 14'8" | 12'4" | 16'0" | 14'0" | 11'10" |
| 600S162-97 | 12 | 50 | 24'8" | 21'6" | 18'2" | 23'5" | 20'5" | 17'3" | 22'5" | 19'7" | 16'6" |
| 600S162-97 | 16 | 50 | 22'5" | 19'7" | 16'6" | 21'3" | 18'7" | 15'8" | 20'4" | 17'9" | 15'0" |
| 600S162-97 | 24 | 50 | 19'7" | 17'1" | 14'5" | 18'7" | 16'3" | 13'8" | 17'9" | 15'6" | 13'1" |
| 600S162-118 | 12 | 50 | 26'0" | 22'9" | 19'2" | 24'9" | 21'7" | 18'3" | 23'8" | 20'8" | 17'5" |
| 600S162-118 | 16 | 50 | 23'8" | 20'8" | 17'5" | 22'6" | 19'8" | 16'7" | 21'6" | 18'9" | 15'10" |
| 600S162-118 | 24 | 50 | 20'8" | 18'1" | 15'3" | 19'8" | 17'2" | 14'6" | 18'9" | 16'5" | 13'10" |
| 600S200-33 | 12 | 33 | 15'6"e | 15'6"e | 13'8"e | 14'4"e | 14'4"e | 13'0"e | 13'5"e | 13'5"e | 12'5"e |
| 600S200-33 | 16 | 33 | 13'5"e | 13'5"e | 12'5"e | 12'5"e | 12'5"e | 11'10"e | 11'7"e | 11'7"e | 11'4"e |
| 600S200-33 | 24 | 33 | 10'11"e | 10'11"e | 10'10"e | 10'2"e | 10'2"e | 10'2"e | 9'6"e | 9'6"e | 9'6"e |
| 600S200-43 | 12 | 33 | 18'6"e | 17'9"e | 15'0" | 17'1"e | 16'10"e | 14'3" | 16'0"e | 16'0"e | 13'7"e |

SECTION PROPERTIES TABLE NOTES

- Lateral loads have not been modified for strength checks: full loads are applied.
- Calculated properties are based on AISI S100-16, North American Specification for Cold-Formed Steel Structural Members.
- The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2012/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

- Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

- 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote f of IBC table 1604.3. The 5 psf live load has not been reduced for deflection checks.
- Limiting heights are based on continuous support of each flange over the full length of the stud.
- Limiting heights are based on steel properties alone (non-composite).
- Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
- End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be at least 10-inches from the end of members, in accordance with ASTM C955, section 4.6.
- Where limiting heights are followed by "e", web stiffeners are required.

LIMITING WALL HEIGHTS - CURTAIN WALL (30-40 psf)

| Stud Member | Spacing, in, oc | Fy, ksi | 30 psf | | | 35 psf | | | 40 psf | | |
|-------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| | | | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 600S200-43 | 16 | 33 | 16'0"e | 16'0"e | 13'7"e | 14'10"e | 14'10"e | 12'11"e | 13'10"e | 13'10"e | 12'4"e |
| 600S200-43 | 24 | 33 | 13'1"e | 13'1"e | 11'11"e | 12'1"e | 12'1"e | 11'3"e | 11'4"e | 11'4"e | 10'9"e |
| 600S200-54 | 12 | 50 | 21'10" | 19'1" | 16'1" | 20'9" | 18'1" | 15'3" | 19'10" | 17'4" | 14'7" |
| 600S200-54 | 16 | 50 | 19'10" | 17'4" | 14'7" | 18'10" | 16'5" | 13'10" | 18'0" | 15'9" | 13'3" |
| 600S200-54 | 24 | 50 | 17'4" | 15'1" | 12'9" | 16'2" | 14'4" | 12'1" | 15'1"e | 13'9" | 11'7" |
| 600S200-68 | 12 | 50 | 23'5" | 20'5" | 17'3" | 22'3" | 19'5" | 16'4" | 21'3" | 18'7" | 15'8" |
| 600S200-68 | 16 | 50 | 21'3" | 18'7" | 15'8" | 20'2" | 17'8" | 14'11" | 19'4" | 16'10" | 14'3" |
| 600S200-68 | 24 | 50 | 18'7" | 16'3" | 13'8" | 17'8" | 15'5" | 13'0" | 16'10" | 14'9" | 12'5" |
| 600S200-97 | 12 | 50 | 26'0" | 22'8" | 19'2" | 24'8" | 21'7" | 18'2" | 23'7" | 20'7" | 17'5" |
| 600S200-97 | 16 | 50 | 23'7" | 20'7" | 17'5" | 22'5" | 19'7" | 16'6" | 21'5" | 18'9" | 15'10" |
| 600S200-97 | 24 | 50 | 20'7" | 18'0" | 15'2" | 19'7" | 17'1" | 14'5" | 18'9" | 16'4" | 13'10" |
| 800S162-33 | 12 | 33 | 16'9"e | 16'9"e | 16'2"e | 15'6"e | 15'6"e | 15'4"e | 14'6"e | 14'6"e | 14'6"e |
| 800S162-33 | 16 | 33 | 14'6"e | 14'6"e | 14'6"e | 13'5"e | 13'5"e | 13'5"e | 12'7"e | 12'7"e | 12'7"e |
| 800S162-33 | 24 | 33 | 11'10"e | 11'10"e | 11'10"e | 11'0"e | 11'0"e | 11'0"e | 10'3"e | 10'3"e | 10'3"e |
| 800S162-43 | 12 | 33 | 20'2"e | 20'2"e | 17'9"e | 18'8"e | 18'8"e | 16'11"e | 17'6"e | 17'6"e | 16'2"e |
| 800S162-43 | 16 | 33 | 17'6"e | 17'6"e | 16'2"e | 16'2"e | 16'2"e | 15'4"e | 15'2"e | 15'2"e | 14'8"e |
| 800S162-43 | 24 | 33 | 14'3"e | 14'3"e | 14'1"e | 13'3"e | 13'3"e | 13'3"e | 12'4"e | 12'4"e | 12'4"e |
| 800S162-54 | 12 | 50 | 25'11" | 22'8" | 19'1" | 24'8" | 21'6" | 18'2" | 23'5" | 20'7" | 17'4" |
| 800S162-54 | 16 | 50 | 23'5" | 20'7" | 17'4" | 21'8" | 19'7" | 16'6" | 20'3" | 18'9" | 15'9" |
| 800S162-54 | 24 | 50 | 19'1" | 18'0" | 15'2" | 17'8"e | 17'1"e | 14'5" | 16'6"e | 16'4"e | 13'9" |
| 800S162-68 | 12 | 50 | 28'1" | 24'6" | 20'8" | 26'8" | 23'3" | 19'8" | 25'6" | 22'3" | 18'9" |
| 800S162-68 | 16 | 50 | 25'6" | 22'3" | 18'9" | 24'3" | 21'2" | 17'10" | 23'2" | 20'3" | 17'1" |
| 800S162-68 | 24 | 50 | 22'3" | 19'5" | 16'5" | 20'9" | 18'6" | 15'7" | 19'5" | 17'8" | 14'11" |
| 800S162-97 | 12 | 50 | 31'2" | 27'3" | 23'0" | 29'7" | 25'11" | 21'10" | 28'4" | 24'9" | 20'11" |
| 800S162-97 | 16 | 50 | 28'4" | 24'9" | 20'11" | 26'11" | 23'6" | 19'10" | 25'9" | 22'6" | 19'0" |
| 800S162-97 | 24 | 50 | 24'9" | 21'7" | 18'3" | 23'6" | 20'6" | 17'4" | 22'6" | 19'8" | 16'7" |
| 800S162-118 | 12 | 50 | 33'0" | 28'10" | 24'4" | 31'4" | 27'5" | 23'1" | 30'0" | 26'2" | 22'1" |
| 800S162-118 | 16 | 50 | 30'0" | 26'2" | 22'1" | 28'6" | 24'11" | 21'0" | 27'3" | 23'10" | 20'1" |
| 800S162-118 | 24 | 50 | 26'2" | 22'11" | 19'4" | 24'11" | 21'9" | 18'4" | 23'10" | 20'9" | 17'6" |
| 800S200-33 | 12 | 33 | 18'0"e | 18'0"e | 17'3"e | 16'8"e | 16'8"e | 16'4"e | 15'7"e | 15'7"e | 15'7"e |
| 800S200-33 | 16 | 33 | 15'7"e | 15'7"e | 15'7"e | 14'5"e | 14'5"e | 14'5"e | 13'6"e | 13'6"e | 13'6"e |
| 800S200-33 | 24 | 33 | 12'8"e | 12'8"e | 12'8"e | 11'9"e | 11'9"e | 11'9"e | 11'0"e | 11'0"e | 11'0"e |
| 800S200-43 | 12 | 33 | 21'7"e | 21'7"e | 18'9"e | 20'0"e | 20'0"e | 17'10"e | 18'8"e | 18'8"e | 17'1"e |
| 800S200-43 | 16 | 33 | 18'8"e | 18'8"e | 17'1"e | 17'4"e | 17'4"e | 16'2"e | 16'2"e | 16'2"e | 15'6"e |
| 800S200-43 | 24 | 33 | 15'3"e | 15'3"e | 14'11"e | 14'2"e | 14'2"e | 14'2"e | 13'3"e | 13'3"e | 13'3"e |
| 800S200-54 | 12 | 50 | 27'5" | 23'11" | 20'2" | 26'0" | 22'9" | 19'2" | 24'10" | 21'9" | 18'4" |
| 800S200-54 | 16 | 50 | 24'10" | 21'9" | 18'4" | 23'1" | 20'8" | 17'5" | 21'7"e | 19'9" | 16'8" |
| 800S200-54 | 24 | 50 | 20'5"e | 19'0" | 16'0" | 18'10"e | 18'0"e | 15'2" | 17'8"e | 17'3"e | 14'7"e |
| 800S200-68 | 12 | 50 | 29'5" | 25'8" | 21'8" | 27'11" | 24'5" | 20'7" | 26'9" | 23'4" | 19'8" |
| 800S200-68 | 16 | 50 | 26'9" | 23'4" | 19'8" | 25'4" | 22'2" | 18'8" | 24'3" | 21'2" | 17'11" |
| 800S200-68 | 24 | 50 | 23'4" | 20'5" | 17'2" | 22'2" | 19'4" | 16'4" | 21'2" | 18'6" | 15'7" |
| 800S200-97 | 12 | 50 | 32'8" | 28'7" | 24'1" | 31'1" | 27'2" | 22'11" | 29'9" | 25'11" | 21'11" |
| 800S200-97 | 16 | 50 | 29'9" | 25'11" | 21'11" | 28'3" | 24'8" | 20'10" | 27'0" | 23'7" | 19'11" |
| 800S200-97 | 24 | 50 | 25'11" | 22'8" | 19'1" | 24'8" | 21'6" | 18'2" | 23'7" | 20'7" | 17'5" |

SECTION PROPERTIES TABLE NOTES

- Lateral loads have not been modified for strength checks: full loads are applied.
- Calculated properties are based on AISI S100-16, North American Specification for Cold-Formed Steel Structural Members.
- The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2012/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

- Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

- 15 psf and higher wind pressures have been multiplied by 0.7 for deflection determination, in accordance with footnote f of IBC table 1604.3. The 5 psf live load has not been reduced for deflection checks.
- Limiting heights are based on continuous support of each flange over the full length of the stud.
- Limiting heights are based on steel properties alone (non-composite).
- Web crippling checks are based on end-one flange loading condition using 1-inch end bearing.
- End shear and web crippling capacity have not been reduced for punchouts. Punchouts are assumed to be at least 10-inches from the end of members, in accordance with ASTM C955, section 4.6.
- Where limiting heights are followed by "e", web stiffeners are required.

COMBINED AXIAL AND LATERAL LOAD TABLES

| 5 psf Lateral Load (Interior Walls Only) | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|---------|
| Wall Height (ft) | Spacing (in.) | 362S162-(mils) | | | | | 362S200-(mils) | | | | | 400S162-(mils) | | | | | 400S200-(mils) | | | | |
| | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 1.87 a | 2.65 a | 4.15 a | 5.38 a | 7.87 a | 2.25 a | 3.28 a | 5.18 a | 6.68 a | 9.54 a | 2.03 a | 2.87 a | 4.62 a | 6.18 a | 9.08 a | 2.42 a | 3.55 a | 5.77 a | 7.63 a | 11.03 a |
| | 16 | 1.8 a | 2.57 a | 4.08 a | 5.31 a | 7.79 a | 2.17 a | 3.2 a | 5.1 a | 6.6 a | 9.46 a | 1.96 a | 2.8 a | 4.55 a | 6.11 a | 9.01 a | 2.34 a | 3.48 a | 5.7 a | 7.56 a | 10.95 a |
| | 24 | 1.65 a | 2.42 a | 3.94 a | 5.17 a | 7.63 a | 2.01 a | 3.03 a | 4.94 a | 6.45 a | 9.3 a | 1.82 a | 2.65 a | 4.42 a | 5.97 a | 8.86 a | 2.19 a | 3.32 a | 5.54 a | 7.41 a | 10.8 a |
| 9 | 12 | 1.74 a | 2.48 a | 3.86 a | 4.99 a | 7.28 a | 2.1 a | 3.07 a | 4.79 a | 6.17 a | 8.81 a | 1.91 a | 2.72 a | 4.37 a | 5.85 a | 8.56 a | 2.28 a | 3.37 a | 5.43 a | 7.19 a | 10.36 a |
| | 16 | 1.64 a | 2.38 a | 3.77 a | 4.9 a | 7.18 a | 2 a | 2.96 a | 4.69 a | 6.07 a | 8.71 a | 1.82 a | 2.63 a | 4.28 a | 5.76 a | 8.46 a | 2.19 a | 3.27 a | 5.33 a | 7.1 a | 10.26 a |
| | 24 | 1.46 a | 2.19 a | 3.6 a | 4.72 a | 6.98 a | 1.8 a | 2.76 a | 4.49 a | 5.88 a | 8.51 a | 1.65 a | 2.45 a | 4.11 a | 5.59 a | 8.27 a | 2 a | 3.08 a | 5.14 a | 6.91 a | 10.06 a |
| 10 | 12 | 1.58 a | 2.29 a | 3.53 a | 4.55 a | 6.62 a | 1.93 a | 2.84 a | 4.37 a | 5.61 a | 8.02 a | 1.77 a | 2.56 a | 4.07 a | 5.47 a | 7.95 a | 2.13 a | 3.16 a | 5.04 a | 6.7 a | 9.61 a |
| | 16 | 1.47 a | 2.17 a | 3.42 a | 4.44 a | 6.5 a | 1.81 a | 2.71 a | 4.25 a | 5.49 a | 7.9 a | 1.67 a | 2.45 a | 3.97 a | 5.36 a | 7.83 a | 2.01 a | 3.04 a | 4.92 a | 6.58 a | 9.48 a |
| | 24 | 1.26 a | 1.95 a | 3.22 a | 4.23 a | 6.27 a | 1.57 a | 2.47 a | 4.01 a | 5.27 a | 7.66 a | 1.46 a | 2.23 a | 3.77 a | 5.14 a | 7.6 a | 1.79 a | 2.81 a | 4.69 a | 6.35 a | 9.24 a |
| 12 | 12 | 1.25 a | 1.87 a | 2.79 a | 3.6 a | 5.23 a | 1.56 a | 2.32 a | 3.45 a | 4.44 a | 6.36 a | 1.46 a | 2.17 a | 3.41 a | 4.54 a | 6.58 a | 1.79 a | 2.69 a | 4.19 a | 5.57 a | 7.97 a |
| | 16 | 1.11 a | 1.72 a | 2.66 a | 3.47 a | 5.08 a | 1.4 a | 2.16 a | 3.3 a | 4.3 a | 6.21 a | 1.32 a | 2.02 a | 3.27 a | 4.39 a | 6.42 a | 1.63 a | 2.53 a | 4.03 a | 5.41 a | 7.8 a |
| | 24 | 0.86 c | 1.44 b | 2.42 a | 3.22 a | 4.8 a | 1.11 c | 1.86 a | 3.03 a | 4.03 a | 5.92 a | 1.06 b | 1.74 a | 3.01 a | 4.12 a | 6.11 a | 1.35 a | 2.22 a | 3.74 a | 5.11 a | 7.48 a |
| 14 | 12 | 0.93 b | 1.44 a | 2.14 a | 2.78 a | 4.03 a | 1.18 a | 1.81 a | 2.64 a | 3.43 a | 4.94 a | 1.14 a | 1.75 a | 2.71 a | 3.57 a | 5.17 a | 1.43 a | 2.19 a | 3.32 a | 4.39 a | 6.3 a |
| | 16 | 0.78 d | 1.28 b | 2 a | 2.64 a | 3.87 a | 1.01 c | 1.63 b | 2.48 a | 3.28 a | 4.77 a | 0.98 c | 1.58 a | 2.55 a | 3.41 a | 4.99 a | 1.25 b | 2 a | 3.14 a | 4.21 a | 6.12 a |
| | 24 | 0.52 e | 0.99 d | 1.75 c | 2.38 b | 3.58 a | 0.7 d | 1.31 d | 2.19 c | 2.99 a | 4.46 a | 0.7 d | 1.26 c | 2.27 b | 3.11 a | 4.66 a | 0.92 d | 1.65 b | 2.82 a | 3.88 a | 5.76 a |
| 16 | 12 | 0.65 d | 1.06 c | 1.63 b | 2.14 a | 3.12 a | 0.84 c | 1.36 b | 2.01 a | 2.66 a | 3.85 a | 0.84 c | 1.35 b | 2.12 a | 2.78 a | 4.04 a | 1.07 b | 1.71 a | 2.6 a | 3.42 a | 4.95 a |
| | 16 | 0.51 e | 0.9 d | 1.49 c | 2 b | 2.96 a | 0.67 d | 1.18 c | 1.86 c | 2.5 a | 3.68 a | 0.68 d | 1.17 c | 1.96 b | 2.61 a | 3.85 a | 0.89 d | 1.51 b | 2.41 a | 3.24 a | 4.76 a |
| | 24 | 0.25 f | 0.61 e | 1.25 e | 1.74 d | 2.67 c | 0.38 e | 0.86 e | 1.58 d | 2.21 c | 3.37 b | 0.39 e | 0.85 e | 1.67 d | 2.31 c | 3.52 b | 0.56 e | 1.16 d | 2.09 c | 2.91 b | 4.4 a |

| 5 psf Lateral Load (Interior Walls Only) | | | | | | | | | | | | | | | | | | | | | |
|--|---------------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|---------|---------|
| Wall Height (ft) | Spacing (in.) | 600S162-(mils) | | | | | 600S200-(mils) | | | | | 800S162-(mils) | | | | | 800S200-(mils) | | | | |
| | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 2.42 a | 3.39 a | 5.61 a | 7.45 a | 11.4 a | 2.86 a | 4.31 a | 7.46 a | 9.97 a | 15.65 a | 2.39 a* | 3.35 a | 5.43 a | 7.25 a | 11.26 a | 2.97 a* | 4.47 a | 7.74 a | 10.29 a | 15.98 a |
| | 16 | 2.37 a | 3.35 a | 5.57 a | 7.41 a | 11.36 a | 2.81 a | 4.26 a | 7.41 a | 9.92 a | 15.6 a | 2.36 a* | 3.32 a | 5.4 a | 7.22 a | 11.24 a | 2.93 a* | 4.44 a | 7.71 a | 10.25 a | 15.95 a |
| | 24 | 2.28 a | 3.27 a | 5.49 a | 7.33 a | 11.29 a | 2.72 a | 4.16 a | 7.31 a | 9.83 a | 15.51 a | 2.29 a* | 3.26 a | 5.35 a | 7.16 a | 11.18 a | 2.86 a* | 4.36 a | 7.64 a | 10.19 a | 15.89 a |
| 9 | 12 | 2.38 a | 3.36 a | 5.57 a | 7.41 a | 11.36 a | 2.8 a | 4.23 a | 7.31 a | 9.79 a | 15.39 a | 2.37 a* | 3.33 a | 5.41 a | 7.22 a | 11.24 a | 2.94 a* | 4.44 a | 7.71 a | 10.26 a | 15.95 a |
| | 16 | 2.32 a | 3.3 a | 5.52 a | 7.36 a | 11.31 a | 2.74 a | 4.16 a | 7.25 a | 9.73 a | 15.33 a | 2.32 a* | 3.29 a | 5.37 a | 7.19 a | 11.21 a | 2.89 a* | 4.39 a | 7.67 a | 10.21 a | 15.91 a |
| | 24 | 2.2 a | 3.19 a | 5.42 a | 7.26 a | 11.22 a | 2.62 a | 4.03 a | 7.12 a | 9.61 a | 15.2 a | 2.24 a* | 3.21 a | 5.3 a | 7.12 a | 11.14 a | 2.8 a* | 4.3 a | 7.57 a | 10.13 a | 15.83 a |
| 10 | 12 | 2.33 a | 3.31 a | 5.53 a | 7.37 a | 11.32 a | 2.73 a | 4.13 a | 7.14 a | 9.58 a | 15.07 a | 2.33 a* | 3.3 a | 5.38 a | 7.2 a | 11.21 a | 2.9 a* | 4.41 a | 7.68 a | 10.22 a | 15.92 a |
| | 16 | 2.25 a | 3.24 a | 5.46 a | 7.3 a | 11.26 a | 2.65 a | 4.05 a | 7.05 a | 9.5 a | 14.99 a | 2.28 a* | 3.25 a | 5.34 a | 7.15 a | 11.17 a | 2.85 a* | 4.35 a | 7.62 a | 10.17 a | 15.87 a |
| | 24 | 2.1 a | 3.11 a | 5.33 a | 7.17 a | 11.13 a | 2.5 a | 3.88 a | 6.89 a | 9.34 a | 14.83 a | 2.18 a* | 3.15 a | 5.24 a | 7.06 a | 11.08 a | 2.73 a* | 4.23 a | 7.5 a | 10.06 a | 15.77 a |
| 12 | 12 | 2.17 a | 3.15 a | 5.35 a | 7.25 a | 11.2 a | 2.55 a | 3.88 a | 6.67 a | 9 a | 14.21 a | 2.26 a* | 3.22 a | 5.31 a | 7.13 a | 11.15 a | 2.82 a* | 4.32 a | 7.59 a | 10.14 a | 15.84 a |
| | 16 | 2.06 a | 3.05 a | 5.25 a | 7.15 a | 11.1 a | 2.44 a | 3.76 a | 6.55 a | 8.89 a | 14.09 a | 2.18 a* | 3.15 a | 5.24 a | 7.06 a | 11.08 a | 2.74 a* | 4.23 a | 7.5 a | 10.06 a | 15.76 a |
| | 24 | 1.85 a | 2.85 a | 5.05 a | 6.95 a | 10.89 a | 2.22 a | 3.52 a | 6.31 a | 8.66 a | 13.85 a | 2.03 a* | 3 a | 5.11 a | 6.93 a | 10.95 a | 2.57 a* | 4.06 a | 7.32 a | 9.9 a | 15.61 a |
| 14 | 12 | 1.95 a | 2.91 a | 4.93 a | 6.77 a | 10.96 a | 2.32 a | 3.56 a | 6.07 a | 8.26 a | 13.08 a | 2.17 a* | 3.13 a | 5.22 a | 7.04 a | 11.06 a | 2.69 a* | 4.16 a | 7.36 a | 9.96 a | 15.73 a |
| | 16 | 1.81 a | 2.78 a | 4.8 a | 6.63 a | 10.8 a | 2.17 a | 3.4 a | 5.91 a | 8.1 a | 12.91 a | 2.06 a* | 3.03 a | 5.13 a | 6.95 a | 10.96 a | 2.58 a* | 4.04 a | 7.24 a | 9.84 a | 15.61 a |
| | 24 | 1.54 a | 2.51 a | 4.53 a | 6.35 a | 10.49 a | 1.89 a | 3.09 a | 5.59 a | 7.79 a | 12.58 a | 1.85 a* | 2.83 a | 4.94 a | 6.76 a | 10.77 a | 2.35 a* | 3.8 a | 6.99 a | 9.61 a | 15.38 a |
| 16 | 12 | 1.71 a | 2.62 a | 4.41 a | 6.1 a | 9.89 a | 2.05 a | 3.18 a | 5.38 a | 7.38 a | 11.74 a | 2.05 a* | 3.02 a | 5.11 a | 6.93 a | 10.94 a | 2.52 a* | 3.93 a | 6.95 a | 9.46 a | 15.15 a |
| | 16 | 1.53 a | 2.45 a | 4.24 a | 5.91 a | 9.68 a | 1.87 a | 2.98 a | 5.18 a | 7.17 a | 11.52 a | 1.92 a* | 2.89 a | 4.98 a | 6.8 a | 10.81 a | 2.37 a* | 3.77 a | 6.78 a | 9.3 a | 15 a |
| | 24 | 1.2 b | 2.12 a | 3.91 a | 5.57 a | 9.28 a | 1.52 a | 2.61 a | 4.79 a | 6.79 a | 11.09 a | 1.64 a* | 2.62 a | 4.72 a | 6.54 a | 10.54 a | 2.09 a* | 3.46 a | 6.46 a | 9 a | 14.68 a |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of Lu to develop full allowable moment, Ma.
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have h/t>200, thus require bearing stiffeners. Cells are left blank when h/t>260.
10. Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
11. Stud distortional buckling moment based on assumed Kφ = 0
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 15 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|---------|
| Wall Height (ft) | Spacing (in.) | 3625162-(mils) | | | | | 3625200-(mils) | | | | | 4005162-(mils) | | | | | 4005200-(mils) | | | | | |
| | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | |
| | | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | | 1.44 a | 2.2 a | 3.74 a | 4.96 a | 7.41 a | 1.77 a | 2.79 a | 4.71 a | 6.22 a | 9.07 a | 1.62 a | 2.45 a | 4.22 a | 5.77 a | 8.64 a | 1.97 a | 3.1 a | 5.32 a | 7.19 a | 10.57 a |
| | 16 | | 1.23 a | 1.99 a | 3.55 a | 4.76 a | 7.19 a | 1.55 a | 2.56 a | 4.49 a | 6 a | 8.84 a | 1.42 a | 2.25 a | 4.03 a | 5.57 a | 8.42 a | 1.76 a | 2.88 a | 5.1 a | 6.97 a | 10.34 a |
| | 24 | | 0.85 a | 1.59 a | 3.17 a | 4.38 a | 6.76 a | 1.13 a | 2.13 a | 4.06 a | 5.58 a | 8.4 a | 1.05 a | 1.86 a | 3.67 a | 5.18 a | 7.99 a | 1.35 a | 2.46 a | 4.68 a | 6.55 a | 9.9 a |
| 9 | 12 | | 1.21 a | 1.93 a | 3.35 a | 4.47 a | 6.7 a | 1.51 a | 2.47 a | 4.21 a | 5.6 a | 8.22 a | 1.4 a | 2.2 a | 3.87 a | 5.33 a | 7.99 a | 1.73 a | 2.8 a | 4.86 a | 6.63 a | 9.77 a |
| | 16 | | 0.97 a | 1.67 a | 3.12 a | 4.23 a | 6.43 a | 1.25 a | 2.19 a | 3.94 a | 5.34 a | 7.94 a | 1.17 a | 1.95 a | 3.64 a | 5.08 a | 7.71 a | 1.47 a | 2.53 a | 4.59 a | 6.36 a | 9.49 a |
| | 24 | | 0.53 c | 1.21 a | 2.68 a | 3.77 a | 5.92 a | 0.76 b | 1.68 a | 3.44 a | 4.84 a | 7.41 a | 0.73 b | 1.49 a | 3.2 a | 4.6 a | 7.19 a | 0.99 a | 2.03 a | 4.09 a | 5.84 a | 8.94 a |
| 10 | 12 | | 0.97 a | 1.64 a | 2.93 a | 3.94 a | 5.95 a | 1.25 a | 2.13 a | 3.69 a | 4.95 a | 7.32 a | 1.17 a | 1.93 a | 3.48 a | 4.83 a | 7.26 a | 1.47 a | 2.48 a | 4.36 a | 6.01 a | 8.89 a |
| | 16 | | 0.7 b | 1.36 a | 2.67 a | 3.66 a | 5.64 a | 0.95 a | 1.82 a | 3.38 a | 4.64 a | 7 a | 0.9 a | 1.64 a | 3.21 a | 4.54 a | 6.93 a | 1.18 a | 2.17 a | 4.05 a | 5.69 a | 8.55 a |
| | 24 | | 0.23 d | 0.84 c | 2.18 b | 3.15 a | 5.06 a | 0.42 c | 1.25 b | 2.83 a | 4.09 a | 6.4 a | 0.41 c | 1.12 b | 2.7 a | 3.99 a | 6.33 a | 0.64 b | 1.59 a | 3.47 a | 5.1 a | 7.92 a |
| 12 | 12 | | 0.53 d | 1.08 b | 2.1 a | 2.88 a | 4.43 a | 0.74 c | 1.46 a | 2.66 a | 3.66 a | 5.52 a | 0.72 b | 1.37 a | 2.65 a | 3.73 a | 5.69 a | 0.96 b | 1.81 a | 3.33 a | 4.69 a | 7.04 a |
| | 16 | | 0.24 e | 0.76 d | 1.8 c | 2.58 b | 4.08 a | 0.41 d | 1.11 c | 2.32 b | 3.32 a | 5.16 a | 0.41 d | 1.03 c | 2.33 b | 3.38 a | 5.3 a | 0.61 c | 1.44 b | 2.96 a | 4.31 a | 6.63 a |
| | 24 | | | 0.2 e | 1.29 d | 2.03 d | 3.46 b | | 0.49 d | 1.73 d | 2.72 c | 4.49 a | | 0.43 d | 1.75 d | 2.76 c | 4.6 a | | 0.78 d | 2.31 c | 3.62 b | 5.88 a |
| 14 | 12 | | 0.18 e | 0.61 d | 1.42 d | 2.03 c | 3.19 a | 0.32 e | 0.9 d | 1.82 c | 2.61 b | 4.05 a | 0.33 d | 0.86 c | 1.89 c | 2.7 a | 4.21 a | 0.5 d | 1.21 c | 2.39 b | 3.44 a | 5.29 a |
| | 16 | | | 0.29 e | 1.13 e | 1.73 d | 2.85 c | | 0.54 e | 1.49 d | 2.28 c | 3.68 b | 0.01 e | 0.5 d | 1.56 d | 2.35 c | 3.81 a | 0.14 e | 0.81 d | 2.02 c | 3.05 b | 4.86 a |
| | 24 | | | | 0.64 f | 1.2 e | 2.24 d | | | 0.92 e | 1.69 e | 3.03 d | | | 0.98 e | 1.73 d | 3.11 c | | 0.13 e | 1.36 e | 2.36 d | 4.11 c |
| 16 | 12 | | | 0.26 e | 0.93 e | 1.41 d | 2.29 c | 0.01 f | 0.46 e | 1.22 d | 1.85 d | 2.97 b | 0.03 e | 0.44 e | 1.3 d | 1.92 c | 3.08 b | 0.14 e | 0.71 d | 1.67 d | 2.48 c | 3.93 a |
| | 16 | | | | 0.66 f | 1.12 e | 1.96 d | | 0.12 f | 0.91 e | 1.53 e | 2.61 d | | 0.09 e | 0.97 e | 1.58 d | 2.7 c | | 0.32 e | 1.3 e | 2.1 d | 3.52 c |
| | 24 | | | | 0.19 f | 0.62 f | 1.39 e | | | 0.38 f | 0.98 f | 1.99 e | | | 0.42 f | 0.98 e | 2.03 e | | 0.68 f | 1.45 e | 2.79 d | |

| 15 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|---------|--------|--------|--------|----------------|---------|--------|--------|---------|---------|
| Wall Height (ft) | Spacing (in.) | 6005162-(mils) | | | | | 6005200-(mils) | | | | | 8005162-(mils) | | | | | 8005200-(mils) | | | | | |
| | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | |
| | | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | | 2.14 a | 3.14 a | 5.37 a | 7.22 a | 11.18 a | 2.57 a | 4.01 a | 7.16 a | 9.69 a | 15.37 a | 2.2 a* | 3.17 a | 5.26 a | 7.08 a | 11.1 a | 2.75 a* | 4.25 a | 7.53 a | 10.09 a | 15.8 a |
| | 16 | | 2 a | 3.02 a | 5.25 a | 7.1 a | 11.06 a | 2.43 a | 3.86 a | 7.01 a | 9.55 a | 15.23 a | 2.1 a* | 3.07 a | 5.18 a | 7 a | 11.02 a | 2.65 a* | 4.14 a | 7.42 a | 9.99 a | 15.7 a |
| | 24 | | 1.73 a | 2.77 a | 5.02 a | 6.88 a | 10.84 a | 2.15 a | 3.56 a | 6.71 a | 9.27 a | 14.95 a | 1.9 a* | 2.89 a | 5.01 a | 6.84 a | 10.86 a | 2.44 a* | 3.93 a | 7.21 a | 9.8 a | 15.52 a |
| 9 | 12 | | 2.02 a | 3.03 a | 5.26 a | 7.11 a | 11.07 a | 2.43 a | 3.84 a | 6.92 a | 9.43 a | 15.02 a | 2.12 a* | 3.09 a | 5.19 a | 7.01 a | 11.03 a | 2.67 a* | 4.16 a | 7.44 a | 10 a | 15.71 a |
| | 16 | | 1.85 a | 2.87 a | 5.11 a | 6.96 a | 10.92 a | 2.26 a | 3.65 a | 6.73 a | 9.25 a | 14.84 a | 1.99 a* | 2.97 a | 5.08 a | 6.91 a | 10.93 a | 2.53 a* | 4.02 a | 7.3 a | 9.88 a | 15.59 a |
| | 24 | | 1.51 a | 2.56 a | 4.81 a | 6.67 a | 10.63 a | 1.9 a | 3.27 a | 6.35 a | 8.89 a | 14.48 a | 1.75 a* | 2.73 a | 4.87 a | 6.69 a | 10.72 a | 2.27 a* | 3.74 a | 7.02 a | 9.63 a | 15.35 a |
| 10 | 12 | | 1.89 a | 2.91 a | 5.14 a | 6.98 a | 10.94 a | 2.28 a | 3.65 a | 6.65 a | 9.12 a | 14.6 a | 2.02 a* | 3 a | 5.11 a | 6.93 a | 10.95 a | 2.57 a* | 4.05 a | 7.33 a | 9.91 a | 15.62 a |
| | 16 | | 1.67 a | 2.71 a | 4.94 a | 6.8 a | 10.75 a | 2.06 a | 3.41 a | 6.41 a | 8.89 a | 14.37 a | 1.87 a* | 2.85 a | 4.97 a | 6.8 a | 10.82 a | 2.4 a* | 3.88 a | 7.15 a | 9.75 a | 15.46 a |
| | 24 | | 1.26 a | 2.32 a | 4.57 a | 6.43 a | 10.38 a | 1.63 a | 2.96 a | 5.94 a | 8.45 a | 13.92 a | 1.57 a* | 2.56 a | 4.7 a | 6.53 a | 10.56 a | 2.07 a* | 3.54 a | 6.81 a | 9.43 a | 15.16 a |
| 12 | 12 | | 1.54 a | 2.56 a | 4.76 a | 6.66 a | 10.6 a | 1.91 a | 3.19 a | 5.96 a | 8.33 a | 13.5 a | 1.81 a* | 2.79 a | 4.91 a | 6.73 a | 10.75 a | 2.33 a* | 3.8 a | 7.06 a | 9.66 a | 15.37 a |
| | 16 | | 1.25 a | 2.28 a | 4.48 a | 6.37 a | 10.3 a | 1.6 a | 2.86 a | 5.63 a | 8 a | 13.16 a | 1.59 a* | 2.57 a | 4.71 a | 6.53 a | 10.55 a | 2.09 a* | 3.55 a | 6.81 a | 9.42 a | 15.14 a |
| | 24 | | 0.7 a | 1.75 a | 3.94 a | 5.82 a | 9.74 a | 1.03 a | 2.24 a | 4.98 a | 7.37 a | 12.5 a | 1.16 a* | 2.15 a | 4.31 a | 6.15 a | 10.17 a | 1.63 a* | 3.05 a | 6.3 a | 8.95 a | 14.68 a |
| 14 | 12 | | 1.15 a | 2.13 a | 4.15 a | 5.95 a | 10.05 a | 1.49 a | 2.65 a | 5.14 a | 7.34 a | 12.1 a | 1.55 a* | 2.53 a | 4.65 a | 6.48 a | 10.49 a | 2.03 a* | 3.45 a | 6.63 a | 9.28 a | 15.04 a |
| | 16 | | 0.79 a | 1.78 a | 3.79 a | 5.58 a | 9.63 a | 1.11 a | 2.24 a | 4.71 a | 6.92 a | 11.64 a | 1.25 a* | 2.24 a | 4.38 a | 6.2 a | 10.21 a | 1.71 a* | 3.11 a | 6.28 a | 8.94 a | 14.71 a |
| | 24 | | 0.14 c | 1.12 b | 3.11 a | 4.87 a | 8.83 a | 0.42 c | 1.48 a | 3.92 a | 6.13 a | 10.78 a | 0.69 a* | 1.68 a | 3.84 a | 5.67 a | 9.66 a | 1.1 a* | 2.46 a | 5.59 a | 8.29 a | 14.05 a |
| 16 | 12 | | 0.75 b | 1.67 a | 3.45 a | 5.08 a | 8.73 a | 1.05 a | 2.09 a | 4.26 a | 6.25 a | 10.5 a | 1.25 a* | 2.23 a | 4.35 a | 6.16 a | 10.15 a | 1.68 a* | 3.02 a | 6 a | 8.55 a | 14.23 a |
| | 16 | | 0.35 c | 1.26 b | 3.03 a | 4.64 a | 8.22 a | 0.62 c | 1.62 a | 3.76 a | 5.75 a | 9.94 a | 0.88 a* | 1.86 a | 3.98 a | 5.8 a | 9.77 a | 1.28 a* | 2.59 a | 5.55 a | 8.13 a | 13.78 a |
| | 24 | | | 0.51 d | 2.28 c | 3.82 b | 7.28 a | | 0.77 c | 2.88 b | 4.85 a | 8.92 a | 0.19 b* | 1.15 a | 3.29 a | 5.09 a | 9.04 a | 0.54 a* | 1.79 a | 4.71 a | 7.3 a | 12.92 a |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of Lu to develop full allowable moment, Ma.
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have h/t>200, thus require bearing stiffeners. Cells are left blank when h/t>260.
10. Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
11. Stud distortional buckling moment based on assumed Kφ = 0
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 20 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|---------|
| Wall | Spacing | 362S162-(mils) | | | | | 362S200-(mils) | | | | | 400S162-(mils) | | | | | 400S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 1.23 a | 1.99 a | 3.55 a | 4.76 a | 7.19 a | 1.55 a | 2.56 a | 4.49 a | 6 a | 8.84 a | 1.42 a | 2.25 a | 4.03 a | 5.57 a | 8.42 a | 1.76 a | 2.88 a | 5.1 a | 6.97 a | 10.34 a |
| | 16 | 0.98 a | 1.72 a | 3.3 a | 4.5 a | 6.9 a | 1.27 a | 2.27 a | 4.2 a | 5.72 a | 8.54 a | 1.17 a | 1.99 a | 3.79 a | 5.31 a | 8.13 a | 1.48 a | 2.6 a | 4.82 a | 6.69 a | 10.05 a |
| | 24 | 0.5 b | 1.21 a | 2.82 a | 4.01 a | 6.35 a | 0.74 b | 1.71 a | 3.65 a | 5.18 a | 7.97 a | 0.7 a | 1.5 a | 3.32 a | 4.81 a | 7.58 a | 0.97 a | 2.06 a | 4.28 a | 6.14 a | 9.48 a |
| 9 | 12 | 0.97 a | 1.67 a | 3.12 a | 4.23 a | 6.43 a | 1.25 a | 2.19 a | 3.94 a | 5.34 a | 7.94 a | 1.17 a | 1.95 a | 3.64 a | 5.08 a | 7.71 a | 1.47 a | 2.53 a | 4.59 a | 6.36 a | 9.49 a |
| | 16 | 0.67 b | 1.36 a | 2.82 a | 3.92 a | 6.09 a | 0.92 a | 1.85 a | 3.6 a | 5 a | 7.58 a | 0.87 a | 1.64 a | 3.34 a | 4.76 a | 7.36 a | 1.15 a | 2.19 a | 4.25 a | 6.01 a | 9.12 a |
| | 24 | 0.13 d | 0.78 c | 2.27 b | 3.34 a | 5.44 a | 0.32 c | 1.21 b | 2.97 a | 4.37 a | 6.91 a | 0.33 c | 1.07 b | 2.78 a | 4.16 a | 6.7 a | 0.55 b | 1.56 a | 3.61 a | 5.36 a | 8.43 a |
| 10 | 12 | 0.7 b | 1.36 a | 2.67 a | 3.66 a | 5.64 a | 0.95 a | 1.82 a | 3.38 a | 4.64 a | 7 a | 0.9 a | 1.64 a | 3.21 a | 4.54 a | 6.93 a | 1.18 a | 2.17 a | 4.05 a | 5.69 a | 8.55 a |
| | 16 | 0.38 d | 1.01 c | 2.34 a | 3.32 a | 5.25 a | 0.59 c | 1.43 b | 3 a | 4.27 a | 6.59 a | 0.57 c | 1.29 a | 2.87 a | 4.17 a | 6.52 a | 0.81 b | 1.78 a | 3.66 a | 5.29 a | 8.13 a |
| | 24 | | 0.38 d | 1.74 c | 2.69 b | 4.53 a | | 0.74 d | 2.32 c | 3.58 b | 5.84 a | | 0.64 c | 2.24 b | 3.48 a | 5.76 a | 0.15 d | 1.07 c | 2.94 a | 4.54 a | 7.33 a |
| 12 | 12 | 0.24 e | 0.76 d | 1.8 c | 2.58 b | 4.08 a | 0.41 d | 1.11 c | 2.32 b | 3.32 a | 5.16 a | 0.41 d | 1.03 c | 2.33 b | 3.38 a | 5.3 a | 0.61 c | 1.44 b | 2.96 a | 4.31 a | 6.63 a |
| | 16 | | 0.38 e | 1.45 d | 2.2 c | 3.66 b | 0.01 e | 0.69 d | 1.92 c | 2.91 b | 4.71 a | 0.04 e | 0.62 d | 1.94 c | 2.96 b | 4.82 a | 0.2 d | 0.99 c | 2.52 b | 3.84 a | 6.12 a |
| | 24 | | | 0.84 e | 1.55 e | 2.9 d | | | 1.21 e | 2.19 d | 3.9 c | | | 1.25 e | 2.2 d | 3.96 c | | | 0.2 e | 1.73 d | 3.01 c |
| 14 | 12 | | 0.29 e | 1.13 e | 1.73 d | 2.85 c | | 0.54 e | 1.49 d | 2.28 c | 3.68 b | 0.01 e | 0.5 d | 1.56 d | 2.35 c | 3.81 a | 0.14 e | 0.81 d | 2.02 c | 3.05 b | 4.86 a |
| | 16 | | | 0.79 e | 1.36 e | 2.43 d | | 0.12 e | 1.1 e | 1.88 d | 3.23 c | | 0.08 e | 1.16 e | 1.92 d | 3.33 c | | 0.35 e | 1.57 d | 2.58 c | 4.35 b |
| | 24 | | | 0.2 f | 0.73 f | 1.71 e | | | 0.43 f | 1.18 e | 2.45 e | | | 0.48 f | 1.18 e | 2.49 d | | | 0.79 e | 1.76 e | 3.44 d |
| 16 | 12 | | | 0.66 f | 1.12 e | 1.96 d | | 0.12 f | 0.91 e | 1.53 e | 2.61 d | | 0.09 e | 0.97 e | 1.58 d | 2.7 c | | 0.32 e | 1.3 e | 2.1 d | 3.52 c |
| | 16 | | | 0.34 f | 0.77 f | 1.57 e | | | 0.54 f | 1.15 e | 2.19 e | | | 0.59 f | 1.17 e | 2.24 d | | | 0.87 e | 1.66 e | 3.02 d |
| | 24 | | | | 0.19 f | 0.9 f | | | | 0.5 f | 1.46 f | | | | 0.48 f | 1.45 e | | | 0.14 f | 0.89 f | 2.17 e |

| 20 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|
| Wall | Spacing | 600S162-(mils) | | | | | 600S200-(mils) | | | | | 800S162-(mils) | | | | | 800S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 2 a | 3.02 a | 5.25 a | 7.1 a | 11.06 a | 2.43 a | 3.86 a | 7.01 a | 9.55 a | 15.23 a | 2.1 a* | 3.07 a | 5.18 a | 7 a | 11.02 a | 2.65 a* | 4.14 a | 7.42 a | 9.99 a | 15.7 a |
| | 16 | 1.82 a | 2.85 a | 5.1 a | 6.95 a | 10.92 a | 2.25 a | 3.66 a | 6.81 a | 9.36 a | 15.04 a | 1.97 a* | 2.95 a | 5.07 a | 6.89 a | 10.91 a | 2.51 a* | 4 a | 7.28 a | 9.86 a | 15.58 a |
| | 24 | 1.47 a | 2.53 a | 4.79 a | 6.65 a | 10.62 a | 1.88 a | 3.27 a | 6.42 a | 9 a | 14.67 a | 1.71 a* | 2.7 a | 4.84 a | 6.67 a | 10.7 a | 2.23 a* | 3.71 a | 6.99 a | 9.6 a | 15.33 a |
| 9 | 12 | 1.85 a | 2.87 a | 5.11 a | 6.96 a | 10.92 a | 2.26 a | 3.65 a | 6.73 a | 9.25 a | 14.84 a | 1.99 a* | 2.97 a | 5.08 a | 6.91 a | 10.93 a | 2.53 a* | 4.02 a | 7.3 a | 9.88 a | 15.59 a |
| | 16 | 1.62 a | 2.66 a | 4.91 a | 6.77 a | 10.73 a | 2.02 a | 3.4 a | 6.48 a | 9.01 a | 14.6 a | 1.83 a* | 2.81 a | 4.94 a | 6.77 a | 10.79 a | 2.36 a* | 3.84 a | 7.11 a | 9.71 a | 15.43 a |
| | 24 | 1.18 a | 2.25 a | 4.52 a | 6.38 a | 10.35 a | 1.56 a | 2.91 a | 5.98 a | 8.54 a | 14.12 a | 1.5 a* | 2.5 a | 4.65 a | 6.49 a | 10.51 a | 2.01 a* | 3.47 a | 6.75 a | 9.38 a | 15.11 a |
| 10 | 12 | 1.67 a | 2.71 a | 4.94 a | 6.8 a | 10.75 a | 2.06 a | 3.41 a | 6.41 a | 8.89 a | 14.37 a | 1.87 a* | 2.85 a | 4.97 a | 6.8 a | 10.82 a | 2.4 a* | 3.88 a | 7.15 a | 9.75 a | 15.46 a |
| | 16 | 1.4 a | 2.45 a | 4.69 a | 6.55 a | 10.5 a | 1.77 a | 3.11 a | 6.1 a | 8.59 a | 14.07 a | 1.67 a* | 2.65 a | 4.79 a | 6.62 a | 10.65 a | 2.18 a* | 3.65 a | 6.93 a | 9.54 a | 15.26 a |
| | 24 | 0.86 a | 1.94 a | 4.2 a | 6.06 a | 10.02 a | 1.22 a | 2.51 a | 5.49 a | 8.02 a | 13.47 a | 1.27 a* | 2.27 a | 4.44 a | 6.27 a | 10.3 a | 1.75 a* | 3.2 a | 6.47 a | 9.12 a | 14.86 a |
| 12 | 12 | 1.25 a | 2.28 a | 4.48 a | 6.37 a | 10.3 a | 1.6 a | 2.86 a | 5.63 a | 8 a | 13.16 a | 1.59 a* | 2.57 a | 4.71 a | 6.53 a | 10.55 a | 2.09 a* | 3.55 a | 6.81 a | 9.42 a | 15.14 a |
| | 16 | 0.88 a | 1.92 a | 4.11 a | 6 a | 9.92 a | 1.22 a | 2.44 a | 5.19 a | 7.58 a | 12.72 a | 1.3 a* | 2.29 a | 4.44 a | 6.27 a | 10.29 a | 1.78 a* | 3.22 a | 6.47 a | 9.11 a | 14.83 a |
| | 24 | 0.19 c | 1.24 a | 3.43 a | 5.3 a | 9.19 a | 0.5 b | 1.66 a | 4.37 a | 6.77 a | 11.86 a | 0.74 a* | 1.74 a | 3.93 a | 5.76 a | 9.78 a | 1.17 a* | 2.57 a | 5.81 a | 8.49 a | 14.23 a |
| 14 | 12 | 0.79 a | 1.78 a | 3.79 a | 5.58 a | 9.63 a | 1.11 a | 2.24 a | 4.71 a | 6.92 a | 11.64 a | 1.25 a* | 2.24 a | 4.38 a | 6.2 a | 10.21 a | 1.71 a* | 3.11 a | 6.28 a | 8.94 a | 14.71 a |
| | 16 | 0.35 c | 1.33 b | 3.33 a | 5.1 a | 9.09 a | 0.64 b | 1.73 a | 4.18 a | 6.38 a | 11.06 a | 0.87 a* | 1.86 a | 4.02 a | 5.84 a | 9.84 a | 1.3 a* | 2.67 a | 5.82 a | 8.51 a | 14.27 a |
| | 24 | | 0.52 d | 2.5 c | 4.21 a | 8.09 a | | 0.79 c | 3.19 b | 5.39 a | 9.97 a | 0.15 b* | 1.14 a | 3.32 a | 5.14 a | 9.13 a | 0.52 a* | 1.83 a | 4.94 a | 7.66 a | 13.41 a |
| 16 | 12 | 0.35 c | 1.26 b | 3.03 a | 4.64 a | 8.22 a | 0.62 c | 1.62 a | 3.76 a | 5.75 a | 9.94 a | 0.88 a* | 1.86 a | 3.98 a | 5.8 a | 9.77 a | 1.28 a* | 2.59 a | 5.55 a | 8.13 a | 13.78 a |
| | 16 | | 0.75 d | 2.52 c | 4.08 a | 7.58 a | 0.1 d | 1.04 c | 3.16 b | 5.14 a | 9.25 a | 0.41 b* | 1.38 a | 3.52 a | 5.32 a | 9.28 a | 0.78 a* | 2.05 a | 4.98 a | 7.57 a | 13.2 a |
| | 24 | | | 1.6 d | 3.09 c | 6.44 b | | 0.01 d | 2.09 d | 4.03 c | 8.01 a | | 0.49 b | 2.63 a | 4.42 a | 8.34 a | | 1.03 a | 3.91 a | 6.52 a | 12.09 a |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 psf as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of L_u to develop full allowable moment, M_a .
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have $h/t > 200$, thus require bearing stiffeners. Cells are left blank when $h/t > 260$.
10. Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
11. Stud distortional buckling moment based on assumed $K\phi = 0$
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 25 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|---------|
| Wall | Spacing | 362S162-(mils) | | | | | 362S200-(mils) | | | | | 400S162-(mils) | | | | | 400S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| | 12 | 1.04 a | 1.78 a | 3.36 a | 4.57 a | 6.97 a | 1.34 a | 2.34 a | 4.27 a | 5.79 a | 8.62 a | 1.23 a | 2.05 a | 3.85 a | 5.37 a | 8.2 a | 1.55 a | 2.67 a | 4.89 a | 6.76 a | 10.12 a |
| | 16 | 0.73 a | 1.46 a | 3.05 a | 4.25 a | 6.62 a | 1 a | 1.99 a | 3.92 a | 5.45 a | 8.26 a | 0.93 a | 1.74 a | 3.55 a | 5.06 a | 7.86 a | 1.22 a | 2.32 a | 4.55 a | 6.41 a | 9.76 a |
| | 24 | 0.16 c | 0.86 b | 2.48 a | 3.66 a | 5.96 a | 0.37 c | 1.33 a | 3.26 a | 4.79 a | 7.56 a | 0.37 b | 1.15 a | 2.98 a | 4.45 a | 7.19 a | 0.6 b | 1.67 a | 3.89 a | 5.75 a | 9.06 a |
| 9 | 12 | 0.74 b | 1.44 a | 2.89 a | 3.99 a | 6.17 a | 1 a | 1.93 a | 3.68 a | 5.08 a | 7.67 a | 0.94 a | 1.72 a | 3.41 a | 4.84 a | 7.45 a | 1.23 a | 2.28 a | 4.34 a | 6.1 a | 9.21 a |
| | 16 | 0.39 c | 1.06 b | 2.54 a | 3.62 a | 5.76 a | 0.61 c | 1.52 a | 3.28 a | 4.68 a | 7.24 a | 0.59 b | 1.35 a | 3.06 a | 4.45 a | 7.02 a | 0.84 a | 1.87 a | 3.92 a | 5.68 a | 8.77 a |
| | 24 | | 0.39 d | 1.89 c | 2.94 b | 4.99 a | | 0.78 c | 2.54 b | 3.93 a | 6.43 a | | 0.66 c | 2.39 b | 3.73 a | 6.22 a | 0.14 c | 1.12 b | 3.16 a | 4.89 a | 7.93 a |
| | 12 | 0.46 c | 1.09 b | 2.42 a | 3.4 a | 5.34 a | 0.68 c | 1.52 a | 3.1 a | 4.36 a | 6.69 a | 0.65 b | 1.38 a | 2.95 a | 4.26 a | 6.62 a | 0.9 a | 1.87 a | 3.75 a | 5.39 a | 8.23 a |
| 10 | 16 | 0.08 d | 0.68 d | 2.03 c | 2.99 a | 4.88 a | 0.25 d | 1.07 c | 2.65 b | 3.91 a | 6.21 a | 0.26 d | 0.96 b | 2.54 a | 3.82 a | 6.13 a | 0.47 c | 1.41 b | 3.29 a | 4.91 a | 7.72 a |
| | 24 | | | 1.34 d | 2.26 c | 4.04 b | | 0.27 d | 1.86 d | 3.1 c | 5.32 a | | 0.2 d | 1.81 c | 3.01 b | 5.23 a | | 0.59 d | 2.45 c | 4.03 b | 6.77 a |
| | 12 | | 0.47 d | 1.54 d | 2.29 c | 3.76 a | 0.11 e | 0.79 d | 2.01 c | 3.01 b | 4.82 a | 0.13 d | 0.72 d | 2.03 c | 3.06 b | 4.94 a | 0.3 d | 1.1 c | 2.62 b | 3.95 a | 6.24 a |
| | 16 | | 0.03 e | 1.13 e | 1.86 d | 3.27 c | | 0.3 e | 1.55 d | 2.53 c | 4.29 b | | 0.25 e | 1.58 d | 2.56 c | 4.38 b | | 0.58 d | 2.11 c | 3.41 b | 5.65 a |
| 12 | 24 | | | 0.43 f | 1.11 e | 2.4 d | | | 0.74 e | 1.7 e | 3.36 d | | | 0.78 e | 1.69 e | 3.39 d | | | 1.2 e | 2.45 d | 4.59 c |
| | 12 | | | 0.87 e | 1.45 e | 2.53 d | | 0.22 e | 1.2 e | 1.97 d | 3.34 c | | 0.18 e | 1.26 e | 2.02 d | 3.45 c | | 0.46 e | 1.67 d | 2.69 c | 4.47 b |
| | 16 | | | 0.49 f | 1.04 e | 2.06 e | | | 0.75 e | 1.51 e | 2.83 d | | | 0.81 e | 1.54 e | 2.9 d | | | 1.16 e | 2.15 d | 3.88 c |
| | 24 | | | 0.32 f | 1.24 f | | | | 0.72 f | 1.94 e | | | | 0.03 f | 0.7 f | 1.94 e | | | 0.28 f | 1.23 e | 2.84 e |
| 16 | 12 | | | 0.41 f | 0.85 f | 1.67 e | | | 0.63 f | 1.24 e | 2.29 d | | | 0.69 e | 1.27 e | 2.35 d | | | 0.97 e | 1.76 e | 3.14 d |
| | 16 | | | 0.05 f | 0.47 f | 1.22 f | | | 0.22 f | 0.81 f | 1.81 e | | | 0.26 f | 0.81 f | 1.83 e | | | 0.49 f | 1.26 e | 2.57 e |
| | 24 | | | | | 0.47 f | | | | 0.08 f | 0.98 f | | | | 0.02 f | 0.94 f | | | | 0.39 f | 1.6 f |

| 25 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|---------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|---------|---------|
| Wall | Spacing | 600S162-(mils) | | | | | 600S200-(mils) | | | | | 800S162-(mils) | | | | | 800S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| | 12 | 1.87 a | 2.89 a | 5.14 a | 6.99 a | 10.95 a | 2.29 a | 3.71 a | 6.86 a | 9.41 a | 15.09 a | 2 a* | 2.98 a | 5.09 a | 6.92 a | 10.94 a | 2.55 a* | 4.03 a | 7.31 a | 9.89 a | 15.61 a |
| | 16 | 1.64 a | 2.69 a | 4.94 a | 6.8 a | 10.77 a | 2.06 a | 3.46 a | 6.61 a | 9.18 a | 14.86 a | 1.84 a* | 2.82 a | 4.95 a | 6.78 a | 10.81 a | 2.37 a* | 3.85 a | 7.14 a | 9.73 a | 15.45 a |
| | 24 | 1.21 a | 2.28 a | 4.56 a | 6.43 a | 10.4 a | 1.6 a | 2.98 a | 6.12 a | 8.72 a | 14.4 a | 1.52 a* | 2.52 a | 4.67 a | 6.51 a | 10.54 a | 2.03 a* | 3.49 a | 6.78 a | 9.41 a | 15.14 a |
| 9 | 12 | 1.68 a | 2.71 a | 4.96 a | 6.82 a | 10.78 a | 2.08 a | 3.46 a | 6.54 a | 9.07 a | 14.66 a | 1.87 a* | 2.85 a | 4.97 a | 6.8 a | 10.82 a | 2.4 a* | 3.88 a | 7.16 a | 9.75 a | 15.47 a |
| | 16 | 1.4 a | 2.45 a | 4.71 a | 6.57 a | 10.54 a | 1.79 a | 3.15 a | 6.23 a | 8.78 a | 14.36 a | 1.66 a* | 2.65 a | 4.79 a | 6.62 a | 10.65 a | 2.18 a* | 3.65 a | 6.93 a | 9.54 a | 15.27 a |
| | 24 | 0.86 a | 1.95 a | 4.22 a | 6.09 a | 10.06 a | 1.23 a | 2.55 a | 5.62 a | 8.19 a | 13.77 a | 1.26 a* | 2.26 a | 4.44 a | 6.28 a | 10.31 a | 1.75 a* | 3.2 a | 6.48 a | 9.13 a | 14.87 a |
| | 12 | 1.46 a | 2.51 a | 4.75 a | 6.61 a | 10.57 a | 1.84 a | 3.18 a | 6.17 a | 8.67 a | 14.14 a | 1.72 a* | 2.7 a | 4.84 a | 6.67 a | 10.69 a | 2.24 a* | 3.71 a | 6.98 a | 9.59 a | 15.31 a |
| 10 | 16 | 1.13 a | 2.19 a | 4.44 a | 6.3 a | 10.26 a | 1.49 a | 2.81 a | 5.79 a | 8.3 a | 13.77 a | 1.47 a* | 2.46 a | 4.61 a | 6.45 a | 10.47 a | 1.97 a* | 3.42 a | 6.7 a | 9.33 a | 15.06 a |
| | 24 | 0.48 a | 1.58 a | 3.84 a | 5.71 a | 9.66 a | 0.82 a | 2.08 a | 5.05 a | 7.59 a | 13.03 a | 0.97 a* | 1.98 a | 4.17 a | 6.01 a | 10.04 a | 1.43 a* | 2.86 a | 6.13 a | 8.81 a | 14.56 a |
| | 12 | 0.97 a | 2.01 a | 4.2 a | 6.09 a | 10.02 a | 1.31 a | 2.55 a | 5.3 a | 7.68 a | 12.83 a | 1.37 a* | 2.36 a | 4.51 a | 6.34 a | 10.36 a | 1.86 a* | 3.3 a | 6.55 a | 9.19 a | 14.91 a |
| | 16 | 0.53 b | 1.58 a | 3.77 a | 5.64 a | 9.55 a | 0.85 a | 2.04 a | 4.78 a | 7.17 a | 12.29 a | 1.02 a* | 2.01 a | 4.18 a | 6.02 a | 10.04 a | 1.48 a* | 2.89 a | 6.13 a | 8.8 a | 14.53 a |
| 12 | 24 | 0.76 b | 2.94 a | 4.79 a | 8.66 a | | 1.1 b | 3.79 a | 6.2 a | 11.25 a | 0.33 a* | 1.34 a | 3.55 a | 5.39 a | 9.4 a | 0.73 a* | 2.1 a | 5.32 a | 8.04 a | 13.78 a | |
| | 12 | 0.45 c | 1.44 a | 3.44 a | 5.21 a | 9.22 a | 0.76 b | 1.86 a | 4.31 a | 6.51 a | 11.2 a | 0.97 a* | 1.96 a | 4.11 a | 5.93 a | 9.94 a | 1.4 a* | 2.78 a | 5.93 a | 8.61 a | 14.38 a |
| | 16 | | 0.91 c | 2.9 b | 4.65 a | 8.58 a | 0.21 c | 1.25 b | 3.67 a | 5.87 a | 10.5 a | 0.51 a* | 1.49 a | 3.66 a | 5.49 a | 9.48 a | 0.91 a* | 2.24 a | 5.37 a | 8.08 a | 13.84 a |
| | 24 | | | 1.92 d | 3.6 c | 7.39 a | | 0.15 d | 2.52 c | 4.7 b | 9.21 a | | 0.62 a | 2.82 a | 4.64 a | 8.6 a | | 1.22 a | 4.3 a | 7.05 a | 12.79 a |
| 16 | 12 | | 0.87 c | 2.64 b | 4.22 a | 7.74 a | 0.23 d | 1.18 c | 3.31 a | 5.29 a | 9.42 a | 0.53 a* | 1.5 a | 3.63 a | 5.44 a | 9.4 a | 0.91 a* | 2.18 a | 5.12 a | 7.71 a | 13.34 a |
| | 16 | | 0.29 d | 2.04 d | 3.57 c | 6.99 a | | 0.5 d | 2.61 c | 4.57 b | 8.61 a | | 0.93 a | 3.07 a | 4.87 a | 8.8 a | 0.31 b* | 1.53 a | 4.44 a | 7.04 a | 12.64 a |
| | 24 | | | 0.98 e | 2.42 d | 5.67 c | | | 1.37 d | 3.28 d | 7.16 b | | | 2.01 b | 3.78 a | 7.66 a | | 0.32 c | 3.15 a | 5.77 a | 11.3 a |

SECTION PROPERTIES TABLE NOTES

- Allowable axial loads listed in kips (1 kip = 1000 pounds).
- Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
- Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
- Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
- The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 psf as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

- Studs are assumed to be adequately braced at a maximum spacing of L_u to develop full allowable moment, M_a .
- End supports have not been checked for web crippling. Refer web crippling capacity tables.
- All tables are based on simple (single) span.
- Cells marked with an " * " have $h/t > 200$, thus require bearing stiffeners. Cells are left blank when $h/t > 260$.
- Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
- Stud distortional buckling moment based on assumed $K\phi = 0$
- Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 30 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|
| Wall | Spacing | 3625162-(mils) | | | | | 3625200-(mils) | | | | | 4005162-(mils) | | | | | 4005200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 0.85 a | 1.59 a | 3.17 a | 4.38 a | 6.76 a | 1.13 a | 2.13 a | 4.06 a | 5.58 a | 8.4 a | 1.05 a | 1.86 a | 3.67 a | 5.18 a | 7.99 a | 1.35 a | 2.46 a | 4.68 a | 6.55 a | 9.9 a |
| | 16 | 0.5 b | 1.21 a | 2.82 a | 4.01 a | 6.35 a | 0.74 b | 1.71 a | 3.65 a | 5.18 a | 7.97 a | 0.7 a | 1.5 a | 3.32 a | 4.81 a | 7.58 a | 0.97 a | 2.06 a | 4.28 a | 6.14 a | 9.48 a |
| | 24 | | 0.52 c | 2.16 b | 3.32 a | 5.58 a | 0.02 d | 0.95 b | 2.89 a | 4.42 a | 7.17 a | 0.05 c | 0.81 b | 2.66 a | 4.1 a | 6.8 a | 0.26 c | 1.3 a | 3.52 a | 5.37 a | 8.66 a |
| 9 | 12 | 0.53 c | 1.21 a | 2.68 a | 3.77 a | 5.92 a | 0.76 b | 1.68 a | 3.44 a | 4.84 a | 7.41 a | 0.73 b | 1.49 a | 3.2 a | 4.6 a | 7.19 a | 0.99 a | 2.03 a | 4.09 a | 5.84 a | 8.94 a |
| | 16 | 0.13 d | 0.78 c | 2.27 b | 3.34 a | 5.44 a | 0.32 c | 1.21 b | 2.97 a | 4.37 a | 6.91 a | 0.33 c | 1.07 b | 2.78 a | 4.16 a | 6.7 a | 0.55 b | 1.56 a | 3.61 a | 5.36 a | 8.43 a |
| | 24 | | 0.02 d | 1.54 d | 2.57 c | 4.56 a | | 0.37 d | 2.13 c | 3.51 b | 5.98 a | | 0.28 d | 2.02 c | 3.33 b | 5.77 a | | 0.7 c | 2.73 b | 4.45 a | 7.45 a |
| 10 | 12 | 0.23 d | 0.84 c | 2.18 b | 3.15 a | 5.06 a | 0.42 c | 1.25 b | 2.83 a | 4.09 a | 6.4 a | 0.41 c | 1.12 b | 2.7 a | 3.99 a | 6.33 a | 0.64 b | 1.59 a | 3.47 a | 5.1 a | 7.92 a |
| | 16 | | 0.38 d | 1.74 c | 2.69 b | 4.53 a | | 0.74 d | 2.32 c | 3.58 b | 5.84 a | | 0.64 c | 2.24 b | 3.48 a | 5.76 a | 0.15 d | 1.07 c | 2.94 a | 4.54 a | 7.33 a |
| | 24 | | | 0.96 e | 1.86 d | 3.58 c | | | 1.43 d | 2.66 d | 4.83 b | | | 1.4 d | 2.57 c | 4.73 b | | 0.13 d | 1.98 c | 3.54 c | 6.24 a |
| 12 | 12 | | 0.2 e | 1.29 d | 2.03 d | 3.46 b | | 0.49 d | 1.73 d | 2.72 c | 4.49 a | | 0.43 d | 1.75 d | 2.76 c | 4.6 a | | 0.78 d | 2.31 c | 3.62 b | 5.88 a |
| | 16 | | | 0.84 e | 1.55 e | 2.9 d | | | 1.21 e | 2.19 d | 3.9 c | | | 1.25 e | 2.2 d | 3.96 c | | 0.2 e | 1.73 d | 3.01 c | 5.21 b |
| | 24 | | | 0.05 f | 0.71 f | 1.94 e | | | 0.32 f | 1.26 e | 2.86 d | | | 0.36 f | 1.23 e | 2.86 d | | | 0.71 e | 1.93 e | 4.02 d |
| 14 | 12 | | | 0.64 f | 1.2 e | 2.24 d | | | 0.92 e | 1.69 e | 3.03 d | | | 0.98 e | 1.73 d | 3.11 c | | 0.13 e | 1.36 e | 2.36 d | 4.11 c |
| | 16 | | | 0.2 f | 0.73 f | 1.71 e | | | 0.43 f | 1.18 e | 2.45 e | | | 0.48 f | 1.18 e | 2.49 d | | | 0.79 e | 1.76 e | 3.44 d |
| | 24 | | | | | 0.8 f | | | | 0.31 f | 1.47 f | | | | 0.25 f | 1.43 e | | | | 0.74 f | 2.29 e |
| 16 | 12 | | | 0.19 f | 0.62 f | 1.39 e | | | 0.38 f | 0.98 f | 1.99 e | | | 0.42 f | 0.98 e | 2.03 e | | | 0.68 f | 1.45 e | 2.79 d |
| | 16 | | | | 0.19 f | 0.9 f | | | | 0.5 f | 1.46 f | | | | 0.48 f | 1.45 e | | | 0.14 f | 0.89 f | 2.17 e |
| | 24 | | | | | 0.07 f | | | | | 0.54 f | | | | 0.46 f | | | | | | 1.09 f |

| 30 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|
| Wall | Spacing | 6005162-(mils) | | | | | 6005200-(mils) | | | | | 8005162-(mils) | | | | | 8005200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 1.73 a | 2.77 a | 5.02 a | 6.88 a | 10.84 a | 2.15 a | 3.56 a | 6.71 a | 9.27 a | 14.95 a | 1.9 a* | 2.89 a | 5.01 a | 6.84 a | 10.86 a | 2.44 a* | 3.93 a | 7.21 a | 9.8 a | 15.52 a |
| | 16 | 1.47 a | 2.53 a | 4.79 a | 6.65 a | 10.62 a | 1.88 a | 3.27 a | 6.42 a | 9 a | 14.67 a | 1.71 a* | 2.7 a | 4.84 a | 6.67 a | 10.7 a | 2.23 a* | 3.71 a | 6.99 a | 9.6 a | 15.33 a |
| | 24 | 0.95 a | 2.05 a | 4.33 a | 6.21 a | 10.18 a | 1.34 a | 2.69 a | 5.84 a | 8.45 a | 14.12 a | 1.33 a* | 2.33 a | 4.5 a | 6.34 a | 10.38 a | 1.82 a* | 3.28 a | 6.57 a | 9.22 a | 14.96 a |
| 9 | 12 | 1.51 a | 2.56 a | 4.81 a | 6.67 a | 10.63 a | 1.9 a | 3.27 a | 6.35 a | 8.89 a | 14.48 a | 1.75 a* | 2.73 a | 4.87 a | 6.69 a | 10.72 a | 2.27 a* | 3.74 a | 7.02 a | 9.63 a | 15.35 a |
| | 16 | 1.18 a | 2.25 a | 4.52 a | 6.38 a | 10.35 a | 1.56 a | 2.91 a | 5.98 a | 8.54 a | 14.12 a | 1.5 a* | 2.5 a | 4.65 a | 6.49 a | 10.51 a | 2.01 a* | 3.47 a | 6.75 a | 9.38 a | 15.11 a |
| | 24 | 0.54 a | 1.65 a | 3.94 a | 5.81 a | 9.78 a | 0.9 a | 2.2 a | 5.26 a | 7.85 a | 13.42 a | 1.02 a* | 2.03 a | 4.22 a | 6.07 a | 10.1 a | 1.49 a* | 2.92 a | 6.21 a | 8.88 a | 14.64 a |
| 10 | 12 | 1.26 a | 2.32 a | 4.57 a | 6.43 a | 10.38 a | 1.63 a | 2.96 a | 5.94 a | 8.45 a | 13.92 a | 1.57 a* | 2.56 a | 4.7 a | 6.53 a | 10.56 a | 2.07 a* | 3.54 a | 6.81 a | 9.43 a | 15.16 a |
| | 16 | 0.86 a | 1.94 a | 4.2 a | 6.06 a | 10.02 a | 1.22 a | 2.51 a | 5.49 a | 8.02 a | 13.47 a | 1.27 a* | 2.27 a | 4.44 a | 6.27 a | 10.3 a | 1.75 a* | 3.2 a | 6.47 a | 9.12 a | 14.86 a |
| | 24 | 0.11 b | 1.22 a | 3.5 a | 5.36 a | 9.31 a | 0.44 a | 1.67 a | 4.62 a | 7.18 a | 12.6 a | 0.68 a* | 1.7 a | 3.91 a | 5.75 a | 9.79 a | 1.12 a* | 2.53 a | 5.8 a | 8.5 a | 14.26 a |
| 12 | 12 | 0.7 a | 1.75 a | 3.94 a | 5.82 a | 9.74 a | 1.03 a | 2.24 a | 4.98 a | 7.37 a | 12.5 a | 1.16 a* | 2.15 a | 4.31 a | 6.15 a | 10.17 a | 1.63 a* | 3.05 a | 6.3 a | 8.95 a | 14.68 a |
| | 16 | 0.19 c | 1.24 a | 3.43 a | 5.3 a | 9.19 a | 0.5 b | 1.66 a | 4.37 a | 6.77 a | 11.86 a | 0.74 a* | 1.74 a | 3.93 a | 5.76 a | 9.78 a | 1.17 a* | 2.57 a | 5.81 a | 8.49 a | 14.23 a |
| | 24 | | 0.31 c | 2.47 b | 4.31 a | 8.15 a | | 0.57 c | 3.24 b | 5.65 a | 10.66 a | | 0.95 a | 3.17 a | 5.02 a | 9.03 a | 0.31 a* | 1.64 a | 4.85 a | 7.59 a | 13.34 a |
| 14 | 12 | 0.14 c | 1.12 b | 3.11 a | 4.87 a | 8.83 a | 0.42 c | 1.48 a | 3.92 a | 6.13 a | 10.78 a | 0.69 a* | 1.68 a | 3.84 a | 5.67 a | 9.66 a | 1.1 a* | 2.46 a | 5.59 a | 8.29 a | 14.05 a |
| | 16 | | 0.52 d | 2.5 c | 4.21 a | 8.09 a | | 0.79 c | 3.19 b | 5.39 a | 9.97 a | 0.15 b* | 1.14 a | 3.32 a | 5.14 a | 9.13 a | 0.52 a* | 1.83 a | 4.94 a | 7.66 a | 13.41 a |
| | 24 | | | 1.38 d | 3.02 c | 6.74 b | | | 1.88 d | 4.06 c | 8.49 a | | 0.12 b | 2.33 a | 4.14 a | 8.09 a | | 0.64 a | 3.69 a | 6.45 a | 12.18 a |
| 16 | 12 | | 0.51 d | 2.28 c | 3.82 b | 7.28 a | | 0.77 c | 2.88 b | 4.85 a | 8.92 a | 0.19 b* | 1.15 a | 3.29 a | 5.09 a | 9.04 a | 0.54 a* | 1.79 a | 4.71 a | 7.3 a | 12.92 a |
| | 16 | | | 1.6 d | 3.09 c | 6.44 b | | 0.01 d | 2.09 d | 4.03 c | 8.01 a | | 0.49 b | 2.63 a | 4.42 a | 8.34 a | | 1.03 a | 3.91 a | 6.52 a | 12.09 a |
| | 24 | | | 0.4 e | 1.8 e | 4.95 d | | | 0.7 e | 2.59 d | 6.38 c | | | 1.41 c | 3.16 b | 7 a | | | 2.44 b | 5.06 a | 10.53 a |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of L_u to develop full allowable moment, M_a .
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have $h/t > 200$, thus require bearing stiffeners. Cells are left blank when $h/t > 260$.
10. Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
11. Stud distortional buckling moment based on assumed $K_\phi = 0$
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 35 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|
| Wall | Spacing | 362S162-(mils) | | | | | 362S200-(mils) | | | | | 400S162-(mils) | | | | | 400S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 0.67 b | 1.4 a | 2.99 a | 4.19 a | 6.55 a | 0.93 a | 1.92 a | 3.85 a | 5.38 a | 8.18 a | 0.87 a | 1.68 a | 3.49 a | 4.99 a | 7.79 a | 1.16 a | 2.26 a | 4.48 a | 6.34 a | 9.69 a |
| | 16 | 0.27 c | 0.98 b | 2.59 a | 3.77 a | 6.09 a | 0.49 b | 1.45 a | 3.39 a | 4.92 a | 7.7 a | 0.47 b | 1.26 a | 3.09 a | 4.57 a | 7.32 a | 0.72 a | 1.8 a | 4.02 a | 5.88 a | 9.2 a |
| | 24 | | 0.2 d | 1.85 c | 3 b | 5.21 a | | 0.6 c | 2.54 b | 4.07 a | 6.78 a | | 0.49 c | 2.34 b | 3.76 a | 6.43 a | | 0.95 b | 3.15 a | 5 a | 8.26 a |
| 9 | 12 | 0.33 c | 0.99 b | 2.47 a | 3.55 a | 5.68 a | 0.54 c | 1.44 a | 3.2 a | 4.6 a | 7.16 a | 0.52 b | 1.28 a | 2.99 a | 4.38 a | 6.94 a | 0.77 b | 1.79 a | 3.84 a | 5.6 a | 8.68 a |
| | 16 | | 0.52 d | 2.02 c | 3.07 b | 5.14 a | 0.05 d | 0.92 c | 2.68 b | 4.07 a | 6.59 a | 0.07 d | 0.79 c | 2.52 a | 3.87 a | 6.38 a | 0.27 c | 1.26 b | 3.31 a | 5.04 a | 8.09 a |
| | 24 | | | 1.2 d | 2.2 d | 4.15 b | | | 1.74 d | 3.12 c | 5.54 a | | | 1.66 c | 2.94 c | 5.34 a | | 0.3 d | 2.32 c | 4.03 b | 6.99 a |
| 10 | 12 | 0.01 e | 0.6 d | 1.96 c | 2.92 b | 4.79 a | 0.17 d | 0.99 c | 2.57 b | 3.83 a | 6.11 a | 0.19 d | 0.88 c | 2.47 b | 3.73 a | 6.04 a | 0.39 c | 1.33 b | 3.2 a | 4.81 a | 7.62 a |
| | 16 | | 0.09 e | 1.47 d | 2.4 c | 4.2 b | | 0.42 d | 2.01 c | 3.26 b | 5.49 a | | 0.35 d | 1.95 c | 3.17 b | 5.41 a | | 0.74 c | 2.61 b | 4.2 a | 6.95 a |
| | 24 | | | 0.61 e | 1.48 e | 3.15 d | | | 1.02 e | 2.24 d | 4.37 c | | | 1.02 e | 2.15 d | 4.26 c | | | 1.54 d | 3.08 c | 5.73 b |
| 12 | 12 | | | 1.06 e | 1.78 d | 3.17 c | | 0.21 e | 1.46 d | 2.45 d | 4.19 b | | 0.16 e | 1.49 d | 2.47 c | 4.27 b | | 0.49 d | 2.01 c | 3.3 c | 5.54 a |
| | 16 | | | 0.56 e | 1.25 e | 2.56 d | | | 0.9 e | 1.86 e | 3.54 d | | | 0.93 e | 1.86 d | 3.58 c | | | 1.37 d | 2.63 d | 4.79 b |
| | 24 | | | | 0.34 f | 1.51 e | | | | 0.84 f | 2.39 e | | | 0.79 e | 2.36 e | | | | 1.37 d | 2.63 d | 4.79 b |
| 14 | 12 | | | 0.41 f | 0.96 e | 1.97 e | | | 0.67 e | 1.43 e | 2.73 d | | | 0.72 e | 1.45 e | 2.79 d | | | 1.06 e | 2.05 d | 3.76 c |
| | 16 | | | | 0.45 f | 1.39 e | | | 0.14 f | 0.87 f | 2.11 e | | | 0.17 f | 0.85 f | 2.12 e | | | 0.44 f | 1.4 e | 3.03 d |
| | 24 | | | | | 0.4 f | | | | 1.03 f | | | | | 0.96 f | | | | | 0.28 f | 1.77 e |
| 16 | 12 | | | | 0.39 f | 1.14 f | | | 0.14 f | 0.73 f | 1.72 e | | | 0.18 f | 0.72 f | 1.73 e | | | 0.4 f | 1.16 e | 2.47 e |
| | 16 | | | | | 0.61 f | | | 0.21 f | 1.13 f | | | | 0.17 f | 1.1 f | | | | | 0.55 f | 1.79 e |
| | 24 | | | | | | | | | 0.14 f | | | | | 0.03 f | | | | | | 0.62 f |

| 35 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|
| Wall | Spacing | 600S162-(mils) | | | | | 600S200-(mils) | | | | | 800S162-(mils) | | | | | 800S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | | 33 ksi | | 50 ksi | | |
| (ft) | o.c. | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 1.6 a | 2.65 a | 4.9 a | 6.76 a | 10.73 a | 2.01 a | 3.41 a | 6.56 a | 9.13 a | 14.81 a | 1.81 a* | 2.79 a | 4.92 a | 6.75 a | 10.78 a | 2.34 a* | 3.82 a | 7.1 a | 9.7 a | 15.42 a |
| | 16 | 1.3 a | 2.36 a | 4.64 a | 6.5 a | 10.47 a | 1.7 a | 3.07 a | 6.22 a | 8.81 a | 14.49 a | 1.58 a* | 2.58 a | 4.73 a | 6.56 a | 10.59 a | 2.1 a* | 3.57 a | 6.85 a | 9.47 a | 15.21 a |
| | 24 | 0.7 a | 1.81 a | 4.11 a | 5.99 a | 9.97 a | 1.07 a | 2.41 a | 5.55 a | 8.18 a | 13.85 a | 1.14 a* | 2.15 a | 4.34 a | 6.18 a | 10.22 a | 1.62 a* | 3.07 a | 6.36 a | 9.02 a | 14.78 a |
| 9 | 12 | 1.34 a | 2.4 a | 4.66 a | 6.52 a | 10.49 a | 1.73 a | 3.09 a | 6.17 a | 8.72 a | 14.3 a | 1.62 a* | 2.61 a | 4.76 a | 6.59 a | 10.62 a | 2.14 a* | 3.61 a | 6.89 a | 9.5 a | 15.23 a |
| | 16 | 0.96 a | 2.05 a | 4.32 a | 6.19 a | 10.16 a | 1.34 a | 2.67 a | 5.74 a | 8.31 a | 13.89 a | 1.34 a* | 2.34 a | 4.51 a | 6.35 a | 10.38 a | 1.83 a* | 3.29 a | 6.57 a | 9.21 a | 14.95 a |
| | 24 | 0.24 a | 1.36 a | 3.66 a | 5.53 a | 9.5 a | 0.58 a | 1.85 a | 4.9 a | 7.52 a | 13.07 a | 0.78 a* | 1.8 a | 4.01 a | 5.86 a | 9.9 a | 1.23 a* | 2.66 a | 5.94 a | 8.64 a | 14.4 a |
| 10 | 12 | 1.06 a | 2.13 a | 4.38 a | 6.24 a | 10.2 a | 1.42 a | 2.73 a | 5.71 a | 8.23 a | 13.69 a | 1.42 a* | 2.41 a | 4.57 a | 6.4 a | 10.43 a | 1.91 a* | 3.37 a | 6.64 a | 9.28 a | 15.01 a |
| | 16 | 0.61 a | 1.7 a | 3.96 a | 5.82 a | 9.78 a | 0.95 a | 2.23 a | 5.19 a | 7.73 a | 13.18 a | 1.07 a* | 2.08 a | 4.26 a | 6.1 a | 10.13 a | 1.54 a* | 2.97 a | 6.25 a | 8.91 a | 14.66 a |
| | 24 | | 0.88 a | 3.15 a | 5.02 a | 8.96 a | 0.07 b | 1.26 a | 4.2 a | 6.77 a | 12.18 a | 0.4 a* | 1.42 a | 3.65 a | 5.5 a | 9.53 a | 0.81 a* | 2.2 a | 5.47 a | 8.2 a | 13.96 a |
| 12 | 12 | 0.44 b | 1.49 a | 3.68 a | 5.56 a | 9.46 a | 0.76 a | 1.94 a | 4.67 a | 7.07 a | 12.18 a | 0.95 a* | 1.94 a | 4.12 a | 5.95 a | 9.97 a | 1.4 a* | 2.81 a | 6.05 a | 8.72 a | 14.45 a |
| | 16 | | 0.92 b | 3.1 a | 4.96 a | 8.84 a | 0.16 c | 1.28 a | 3.98 a | 6.39 a | 11.45 a | 0.47 a* | 1.47 a | 3.67 a | 5.51 a | 9.53 a | 0.88 a* | 2.26 a | 5.48 a | 8.19 a | 13.93 a |
| | 24 | | | 2.03 c | 3.84 b | 7.66 a | | 0.06 c | 2.7 b | 5.12 a | 10.08 a | | 0.56 a | 2.81 a | 4.65 a | 8.66 a | | 1.18 a | 4.38 a | 7.15 a | 12.9 a |
| 14 | 12 | | 0.81 c | 2.8 b | 4.54 a | 8.45 a | 0.1 c | 1.13 b | 3.55 a | 5.75 a | 10.37 a | 0.42 a* | 1.4 a | 3.58 a | 5.4 a | 9.39 a | 0.81 a* | 2.14 a | 5.26 a | 7.97 a | 13.73 a |
| | 16 | | 0.14 d | 2.11 c | 3.8 b | 7.62 a | | 0.36 d | 2.74 c | 4.93 b | 9.46 a | | 0.79 a | 2.98 a | 4.8 a | 8.78 a | 0.15 b* | 1.42 a | 4.51 a | 7.25 a | 13 a |
| | 24 | | | 0.87 e | 2.48 d | 6.11 c | | | 1.28 d | 3.44 d | 7.8 b | | | 1.85 b | 3.66 a | 7.59 a | | 0.08 b | 3.1 a | 5.88 a | 11.58 a |
| 16 | 12 | | 0.17 d | 1.93 d | 3.45 c | 6.85 a | | 0.38 d | 2.48 c | 4.43 b | 8.46 a | | 0.81 b | 2.96 a | 4.75 a | 8.69 a | 0.19 b* | 1.41 a | 4.3 a | 6.91 a | 12.5 a |
| | 16 | | | 1.18 e | 2.64 d | 5.92 c | | | 1.6 d | 3.53 c | 7.44 b | | 0.07 c | 2.22 b | 3.99 a | 7.88 a | | 0.55 b | 3.4 a | 6.02 a | 11.56 a |
| | 24 | | | | 1.22 e | 4.28 d | | | 0.08 e | 1.94 e | 5.64 d | | | 0.84 d | 2.57 c | 6.36 a | | | 1.75 c | 4.37 b | 9.79 a |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of L_u to develop full allowable moment, M_a .
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have $h/t > 200$, thus require bearing stiffeners. Cells are left blank when $h/t > 260$.
10. Cells marked with an a, b, c, d, e or f meets L/720, L/600, L/480, L/360, L/240, or L/120 respectively. Blank cells do not meet L/120.
11. Stud distortional buckling moment based on assumed $K_\phi = 0$
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 40 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|
| Wall | Spacing | 362S162-(mils) | | | | | 362S200-(mils) | | | | | 400S162-(mils) | | | | | 400S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | |
| (ft) | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 0.5 b | 1.21 a | 2.82 a | 4.01 a | 6.35 a | 0.74 b | 1.71 a | 3.65 a | 5.18 a | 7.97 a | 0.7 a | 1.5 a | 3.32 a | 4.81 a | 7.58 a | 0.97 a | 2.06 a | 4.28 a | 6.14 a | 9.48 a |
| | 16 | 0.06 d | 0.75 c | 2.37 b | 3.54 a | 5.83 a | 0.25 c | 1.2 b | 3.14 a | 4.67 a | 7.43 a | 0.26 c | 1.03 a | 2.87 a | 4.33 a | 7.06 a | 0.49 b | 1.55 a | 3.76 a | 5.62 a | 8.93 a |
| | 24 | | | 1.56 d | 2.68 c | 4.85 a | | 0.26 d | 2.19 c | 3.72 b | 6.41 a | | 0.17 c | 2.04 b | 3.44 a | 6.06 a | | 0.61 c | 2.8 b | 4.64 a | 7.88 a |
| 9 | 12 | 0.13 d | 0.78 c | 2.27 b | 3.34 a | 5.44 a | 0.32 c | 1.21 b | 2.97 a | 4.37 a | 6.91 a | 0.33 c | 1.07 b | 2.78 a | 4.16 a | 6.7 a | 0.55 b | 1.56 a | 3.61 a | 5.36 a | 8.43 a |
| | 16 | | 0.26 d | 1.77 c | 2.82 b | 4.84 a | | 0.64 c | 2.4 c | 3.79 a | 6.28 a | | 0.53 c | 2.26 b | 3.6 a | 6.07 a | | 0.97 b | 3.01 a | 4.74 a | 7.77 a |
| | 24 | | | 0.87 e | 1.86 d | 3.75 c | | | 1.36 d | 2.74 c | 5.12 b | | | 1.32 d | 2.57 c | 4.92 b | | | 1.93 c | 3.62 b | 6.55 a |
| 10 | 12 | | 0.38 d | 1.74 c | 2.69 b | 4.53 a | 0.74 d | 2.32 c | 3.58 b | 5.84 a | | 0.64 c | 2.24 b | 3.48 a | 5.76 a | | 0.15 d | 1.07 c | 2.94 a | 4.54 a | 7.33 a |
| | 16 | | | 1.21 d | 2.12 d | 3.89 b | 0.13 e | 1.71 d | 2.95 c | 5.15 a | | 0.06 d | 1.67 d | 2.86 c | 5.06 a | | 0.43 d | 2.29 c | 3.86 b | 6.59 a | |
| | 24 | | | 0.27 e | 1.12 e | 2.73 d | | 0.64 e | 1.85 e | 3.92 c | | | 0.66 e | 1.75 d | 3.8 c | | | 1.13 d | 2.64 d | 5.25 b | |
| 12 | 12 | | | 0.84 e | 1.55 e | 2.9 d | | 1.21 e | 2.19 d | 3.9 c | | | 1.25 e | 2.2 d | 3.96 c | | 0.2 e | 1.73 d | 3.01 c | 5.21 b | |
| | 16 | | | 0.3 f | 0.98 e | 2.24 e | | 0.6 e | 1.55 e | 3.19 d | | | 0.64 e | 1.54 e | 3.21 d | | | 1.03 e | 2.27 d | 4.4 c | |
| | 24 | | | | | 1.1 f | | | 0.45 f | 1.95 e | | | | 0.38 f | 1.89 e | | | | 1 e | 2.97 e | |
| 14 | 12 | | | 0.2 f | 0.73 f | 1.71 e | | 0.43 f | 1.18 e | 2.45 e | | | 0.48 f | 1.18 e | 2.49 d | | | 0.79 e | 1.76 e | 3.44 d | |
| | 16 | | | | | 0.19 f | | | 0.58 f | 1.78 e | | | | 0.54 f | 1.76 e | | | 0.12 f | 1.06 e | 2.65 e | |
| | 24 | | | | | | | | | 0.62 f | | | | | 0.51 f | | | | | 1.29 f | |
| 16 | 12 | | | | | 0.19 f | | | 0.5 f | 1.46 f | | | | 0.48 f | 1.45 e | | | 0.14 f | 0.89 f | 2.17 e | |
| | 16 | | | | | | | | | 0.83 f | | | | | 0.77 f | | | | | 0.24 f | 1.43 f |
| | 24 | | | | | | | | | | | | | | | | | | | | 0.17 f |

| 40 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|---------|---------|
| Wall | Spacing | 600S162-(mils) | | | | | 600S200-(mils) | | | | | 800S162-(mils) | | | | | 800S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | |
| (ft) | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 1.47 a | 2.53 a | 4.79 a | 6.65 a | 10.62 a | 1.88 a | 3.27 a | 6.42 a | 9 a | 14.67 a | 1.71 a* | 2.7 a | 4.84 a | 6.67 a | 10.7 a | 2.23 a* | 3.71 a | 6.99 a | 9.6 a | 15.33 a |
| | 16 | 1.12 a | 2.2 a | 4.48 a | 6.35 a | 10.33 a | 1.52 a | 2.88 a | 6.03 a | 8.63 a | 14.3 a | 1.46 a* | 2.45 a | 4.62 a | 6.45 a | 10.49 a | 1.96 a* | 3.42 a | 6.71 a | 9.34 a | 15.08 a |
| | 24 | 0.45 a | 1.58 a | 3.89 a | 5.77 a | 9.75 a | 0.81 a | 2.13 a | 5.27 a | 7.92 a | 13.58 a | 0.95 a* | 1.97 a | 4.17 a | 6.02 a | 10.06 a | 1.42 a* | 2.85 a | 6.15 a | 8.83 a | 14.59 a |
| 9 | 12 | 1.18 a | 2.25 a | 4.52 a | 6.38 a | 10.35 a | 1.56 a | 2.91 a | 5.98 a | 8.54 a | 14.12 a | 1.5 a* | 2.5 a | 4.65 a | 6.49 a | 10.51 a | 2.01 a* | 3.47 a | 6.75 a | 9.38 a | 15.11 a |
| | 16 | 0.75 a | 1.85 a | 4.13 a | 6 a | 9.97 a | 1.12 a | 2.43 a | 5.49 a | 8.08 a | 13.65 a | 1.18 a* | 2.19 a | 4.37 a | 6.21 a | 10.24 a | 1.66 a* | 3.11 a | 6.39 a | 9.05 a | 14.79 a |
| | 24 | | 1.07 a | 3.38 a | 5.26 a | 9.22 a | 0.27 a | 1.51 a | 4.55 a | 7.18 a | 12.73 a | 0.55 a* | 1.57 a | 3.8 a | 5.66 a | 9.69 a | 0.98 a* | 2.39 a | 5.68 a | 8.39 a | 14.16 a |
| 10 | 12 | 0.86 a | 1.94 a | 4.2 a | 6.06 a | 10.02 a | 1.22 a | 2.51 a | 5.49 a | 8.02 a | 13.47 a | 1.27 a* | 2.27 a | 4.44 a | 6.27 a | 10.3 a | 1.75 a* | 3.2 a | 6.47 a | 9.12 a | 14.86 a |
| | 16 | 0.36 a | 1.46 a | 3.73 a | 5.59 a | 9.54 a | 0.69 a | 1.94 a | 4.9 a | 7.45 a | 12.89 a | 0.88 a* | 1.89 a | 4.08 a | 5.93 a | 9.96 a | 1.33 a* | 2.75 a | 6.02 a | 8.71 a | 14.46 a |
| | 24 | | 0.54 b | 2.82 a | 4.68 a | 8.61 a | | 0.86 a | 3.78 a | 6.37 a | 11.76 a | 0.11 a* | 1.14 a | 3.39 a | 5.24 a | 9.28 a | 0.51 a* | 1.88 a | 5.14 a | 7.89 a | 13.67 a |
| 12 | 12 | 0.19 c | 1.24 a | 3.43 a | 5.3 a | 9.19 a | 0.5 b | 1.66 a | 4.37 a | 6.77 a | 11.86 a | 0.74 a* | 1.74 a | 3.93 a | 5.76 a | 9.78 a | 1.17 a* | 2.57 a | 5.81 a | 8.49 a | 14.23 a |
| | 16 | | 0.61 c | 2.78 b | 4.63 a | 8.49 a | | 0.92 b | 3.6 a | 6.01 a | 11.05 a | 0.2 a* | 1.21 a | 3.42 a | 5.26 a | 9.28 a | 0.59 a* | 1.94 a | 5.16 a | 7.89 a | 13.63 a |
| | 24 | | | 1.59 d | 3.39 c | 7.17 a | | | 2.19 c | 4.6 b | 9.52 a | | | 2.45 a | 4.29 a | 8.29 a | | 0.74 a | 3.92 a | 6.72 a | 12.47 a |
| 14 | 12 | | 0.52 d | 2.5 c | 4.21 a | 8.09 a | 0.79 c | 3.19 b | 5.39 a | 9.97 a | 0.15 b* | 1.14 a | 3.32 a | 5.14 a | 9.13 a | 0.52 a* | 1.83 a | 4.94 a | 7.66 a | 13.41 a | |
| | 16 | | | 1.74 d | 3.41 c | 7.17 a | | 2.3 c | 4.48 b | 8.96 a | | 0.45 b | 2.65 a | 4.47 a | 8.43 a | | 1.03 a | 4.1 a | 6.85 a | 12.58 a | |
| | 24 | | | 0.38 e | 1.95 d | 5.51 c | | | 0.71 e | 2.85 d | 7.15 c | | | 1.39 c | 3.19 a | 7.1 a | | | 2.52 b | 5.31 a | 11 a |
| 16 | 12 | | | 1.6 d | 3.09 c | 6.44 b | 0.01 d | 2.09 d | 4.03 c | 8.01 a | | 0.49 b | 2.63 a | 4.42 a | 8.34 a | | 1.03 a | 3.91 a | 6.52 a | 12.09 a | |
| | 16 | | | 0.78 e | 2.21 d | 5.43 c | | 1.14 e | 3.05 d | 6.9 c | | | 1.81 c | 3.57 a | 7.44 a | | 0.09 c | 2.91 b | 5.53 a | 11.04 a | |
| | 24 | | | | 0.67 e | 3.65 e | | | 1.32 e | 4.94 d | | | 0.29 d | 2 c | 5.75 b | | | 1.09 d | 3.71 c | 9.08 a | |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of L_u to develop full allowable moment, M_n .
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have $h/t > 200$, thus require bearing stiffeners. Cells are left blank when $h/t > 260$.
10. Cells marked with an a, b, c, d, e or f meets $L/720$, $L/600$, $L/480$, $L/360$, $L/240$, or $L/120$ respectively. Blank cells do not meet $L/120$.
11. Stud distortional buckling moment based on assumed $K_\phi = 0$
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

COMBINED AXIAL AND LATERAL LOAD TABLES

| 50 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|
| Wall | Spacing | 362S162-(mils) | | | | | 362S200-(mils) | | | | | 400S162-(mils) | | | | | 400S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | |
| (ft) | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 0.16 c | 0.86 b | 2.48 a | 3.66 a | 5.96 a | 0.37 c | 1.33 a | 3.26 a | 4.79 a | 7.56 a | 0.37 b | 1.15 a | 2.98 a | 4.45 a | 7.19 a | 0.6 b | 1.67 a | 3.89 a | 5.75 a | 9.06 a |
| | 16 | | 0.31 d | 1.96 c | 3.1 b | 5.33 a | | 0.72 c | 2.65 b | 4.18 a | 6.91 a | | 0.59 c | 2.45 a | 3.87 a | 6.55 a | 0.03 c | 1.07 b | 3.27 a | 5.12 a | 8.39 a |
| | 24 | | | 0.99 d | 2.08 d | 4.17 b | | | 1.54 d | 3.06 c | 5.69 a | | | 1.46 c | 2.81 c | 5.35 a | | | 2.13 c | 3.95 b | 7.14 a |
| 9 | 12 | | 0.39 d | 1.89 c | 2.94 b | 4.99 a | | 0.78 c | 2.54 b | 3.93 a | 6.43 a | | 0.66 c | 2.39 b | 3.73 a | 6.22 a | 0.14 c | 1.12 b | 3.16 a | 4.89 a | 7.93 a |
| | 16 | | | 1.31 d | 2.32 c | 4.28 b | | 0.1 d | 1.86 d | 3.25 c | 5.68 a | | 0.04 d | 1.78 c | 3.07 b | 5.48 a | | 0.43 c | 2.46 c | 4.17 a | 7.15 a |
| | 24 | | | 0.27 e | 1.21 e | 3.01 d | | | 0.67 e | 2.02 d | 4.33 c | | | 0.68 e | 1.87 d | 4.12 c | | | 1.19 d | 2.84 c | 5.7 b |
| 10 | 12 | | | 1.34 d | 2.26 c | 4.04 b | | 0.27 d | 1.86 d | 3.1 c | 5.32 a | | 0.2 d | 1.81 c | 3.01 b | 5.23 a | | 0.59 d | 2.45 c | 4.03 b | 6.77 a |
| | 16 | | | 0.72 e | 1.61 d | 3.29 c | | | 1.15 e | 2.38 d | 4.52 c | | | 1.15 d | 2.29 d | 4.41 b | | | 1.69 d | 3.23 c | 5.9 a |
| | 24 | | | | 0.45 e | 1.96 e | | | | 1.11 e | 3.09 d | | | | 1 e | 2.95 d | | | 0.35 e | 1.82 e | 4.33 c |
| 12 | 12 | | | 0.43 f | 1.11 e | 2.4 d | | | 0.74 e | 1.7 e | 3.36 d | | | 0.78 e | 1.69 e | 3.39 d | | | 1.2 e | 2.45 d | 4.59 c |
| | 16 | | | | 0.46 f | 1.65 e | | | 0.05 f | 0.98 e | 2.55 e | | | 0.09 f | 0.93 e | 2.52 e | | | 0.41 e | 1.61 e | 3.66 d |
| | 24 | | | | | 0.34 f | | | | | 1.13 f | | | | | 1.01 f | | | | 0.16 f | 2.03 e |
| 14 | 12 | | | | 0.32 f | 1.24 f | | | | 0.72 f | 1.94 e | | | 0.03 f | 0.7 f | 1.94 e | | | 0.28 f | 1.23 e | 2.84 e |
| | 16 | | | | | 0.53 f | | | | 0.05 f | 1.17 f | | | | 1.11 f | | | | | 0.43 f | 1.94 e |
| | 24 | | | | | | | | | | | | | | | | | | | | 0.4 f |
| 16 | 12 | | | | | 0.47 f | | | | 0.08 f | 0.98 f | | | | 0.02 f | 0.94 f | | | | 0.39 f | 1.6 f |
| | 16 | | | | | | | | | | 0.27 f | | | | | 0.17 f | | | | | 0.77 f |
| | 24 | | | | | | | | | | | | | | | | | | | | |

| 50 psf Lateral Load | | | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|----------------|--------|--------|--------|---------|
| Wall | Spacing | 600S162-(mils) | | | | | 600S200-(mils) | | | | | 800S162-(mils) | | | | | 800S200-(mils) | | | | |
| Height | (in.) | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | | 33 ksi | | | 50 ksi | |
| (ft) | | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 | 33 | 43 | 54 | 68 | 97 |
| 8 | 12 | 1.21 a | 2.28 a | 4.56 a | 6.43 a | 10.4 a | 1.6 a | 2.98 a | 6.12 a | 8.72 a | 14.4 a | 1.2 a* | 2.52 a | 4.67 a | 6.51 a | 10.54 a | 2.03 a* | 3.49 a | 6.78 a | 9.41 a | 15.14 a |
| | 16 | 0.78 a | 1.89 a | 4.18 a | 6.06 a | 10.04 a | 1.16 a | 2.5 a | 5.64 a | 8.27 a | 13.94 a | 1.2 a* | 2.21 a | 4.39 a | 6.24 a | 10.27 a | 1.69 a* | 3.14 a | 6.43 a | 9.09 a | 14.84 a |
| | 24 | | 1.12 a | 3.45 a | 5.34 a | 9.32 a | 0.3 a | 1.58 a | 4.71 a | 7.39 a | 13.05 a | 0.58 a* | 1.61 a | 3.84 a | 5.7 a | 9.74 a | 1.01 a* | 2.43 a | 5.73 a | 8.45 a | 14.22 a |
| 9 | 12 | 0.86 a | 1.95 a | 4.22 a | 6.09 a | 10.06 a | 1.23 a | 2.55 a | 5.62 a | 8.19 a | 13.77 a | 1.26 a* | 2.26 a | 4.44 a | 6.28 a | 10.31 a | 1.75 a* | 3.2 a | 6.48 a | 9.13 a | 14.87 a |
| | 16 | 0.34 a | 1.46 a | 3.75 a | 5.62 a | 9.59 a | 0.69 a | 1.97 a | 5.02 a | 7.63 a | 13.19 a | 0.86 a* | 1.88 a | 4.08 a | 5.93 a | 9.97 a | 1.32 a* | 2.75 a | 6.03 a | 8.72 a | 14.48 a |
| | 24 | | 0.52 b | 2.84 a | 4.72 a | 8.68 a | | 0.85 a | 3.87 a | 6.53 a | 12.06 a | 0.09 a* | 1.12 a | 3.39 a | 5.25 a | 9.29 a | 0.48 a* | 1.86 a | 5.15 a | 7.9 a | 13.69 a |
| 10 | 12 | 0.48 a | 1.58 a | 3.84 a | 5.71 a | 9.66 a | 0.82 a | 2.08 a | 5.05 a | 7.59 a | 13.03 a | 0.97 a* | 1.98 a | 4.17 a | 6.01 a | 10.04 a | 1.43 a* | 2.86 a | 6.13 a | 8.81 a | 14.56 a |
| | 16 | | 0.99 a | 3.27 a | 5.13 a | 9.07 a | 0.19 b | 1.39 a | 4.33 a | 6.9 a | 12.32 a | 0.49 a* | 1.51 a | 3.73 a | 5.58 a | 9.62 a | 0.91 a* | 2.31 a | 5.58 a | 8.3 a | 14.06 a |
| | 24 | | | 2.17 b | 4.03 a | 7.94 a | | 0.1 b | 2.99 a | 5.59 a | 10.94 a | | 0.59 a | 2.88 a | 4.74 a | 8.77 a | | | 1.24 a | 4.5 a | 7.29 a |
| 12 | 12 | | 0.76 b | 2.94 a | 4.79 a | 8.66 a | | 1.1 b | 3.79 a | 6.2 a | 11.25 a | 0.33 a* | 1.34 a | 3.55 a | 5.39 a | 9.4 a | 0.73 a* | 2.1 a | 5.32 a | 8.04 a | 13.78 a |
| | 16 | | 0.01 d | 2.17 c | 4 b | 7.82 a | | 0.23 c | 2.88 b | 5.29 a | 10.27 a | | 0.69 a | 2.93 a | 4.77 a | 8.78 a | 0.02 a* | 1.33 a | 4.53 a | 7.3 a | 13.05 a |
| | 24 | | | 0.77 d | 2.53 d | 6.25 b | | | 1.22 d | 3.62 c | 8.45 a | | | 1.74 a | 3.58 a | 7.56 a | | | 3.03 a | 5.87 a | 11.62 a |
| 14 | 12 | | | 1.92 d | 3.6 c | 7.39 a | | 0.15 d | 2.52 c | 4.7 b | 9.21 a | | 0.62 a | 2.82 a | 4.64 a | 8.6 a | | 1.22 a | 4.3 a | 7.05 a | 12.79 a |
| | 16 | | | 1.03 e | 2.66 d | 6.32 c | | | 1.48 d | 3.64 c | 8.03 b | | | 2.01 b | 3.82 a | 7.76 a | | 0.26 b | 3.29 a | 6.07 a | 11.78 a |
| | 24 | | | | 0.97 e | 4.39 d | | | | 1.75 e | 5.91 d | | | 0.5 d | 2.27 c | 6.14 a | | | 1.42 c | 4.22 b | 9.86 a |
| 16 | 12 | | | 0.98 e | 2.42 d | 5.67 c | | | 1.37 d | 3.28 d | 7.16 b | | | 2.01 b | 3.78 a | 7.66 a | | 0.32 c | 3.15 a | 5.77 a | 11.3 a |
| | 16 | | | 0.04 f | 1.41 e | 4.5 d | | | 0.28 e | 2.15 e | 5.88 d | | | 1.03 d | 2.77 c | 6.57 a | | | 1.97 c | 4.6 b | 10.04 a |
| | 24 | | | | | 2.47 e | | | | 0.18 f | 3.64 e | | | | 0.91 d | 4.57 c | | | | 2.45 d | 7.71 b |

SECTION PROPERTIES TABLE NOTES

1. Allowable axial loads listed in kips (1 kip = 1000 pounds).
2. Allowable axial loads determined in accordance with AISI S240-15, assuming that all axial loads pass through the geometric center of the section
3. Listed lateral pressures and axial loads have not been modified for 1/3 stress increase based on wind/earthquake or multiple transient loads.
4. Allowable axial loads based on lateral and torsional bracing at a maximum spacing of 4 feet on center.
5. The 5 psf live load has not been reduced for deflection checks. For 15 psf or higher wind pressure, read the note below.

IBC 2018/ASCE 7-10: Due to the change in the model building codes, design wind pressures determined using IBC 2012/ASCE 7-10 are strength level loads (LRFD) in comparison to those determined in earlier IBC codes which were service level loads (ASD). The load/span tables that follow are based on service level (ASD) wind loads. Therefore, to properly use the load/span tables in this catalog, multiply the IBC 2012/ASCE 7-10 design wind pressures by 0.6 (Reference section 2.4 ASCE 7-10) prior to entering the load/span tables.

Example:

- * ASCE 7-10 Calculated Design Wind Pressure = 25 psf (Strength level loads, LRFD)
- * Convert to service level loads (ASD) = 25 psf x 0.6 = 15 psf
- * Use 10 pfs as the Pressure Value used in this Table to determine the member span

Any Other Building Code: The load/span tables that follow are based on service level (ASD) wind loads. If the wind load being used meets this criterion, it does not need to be modified prior to using the tables.

6. Studs are assumed to be adequately braced at a maximum spacing of L_u to develop full allowable moment, M_n .
7. End supports have not been checked for web crippling. Refer web crippling capacity tables.
8. All tables are based on simple (single) span.
9. Cells marked with an " * " have $h/t > 200$, thus require bearing stiffeners. Cells are left blank when $h/t > 260$.
10. Cells marked with an a, b, c, d, e or f meets $L/720$, $L/600$, $L/480$, $L/360$, $L/240$, or $L/120$ respectively. Blank cells do not meet $L/120$.
11. Stud distortional buckling moment based on assumed $K\phi = 0$
12. Moment of inertia for deflection is optimized based on the maximum moment at service loads for the listed spans; therefore span values may be greater than spans based on effective moment of inertia listed in section property tables

FLOOR JOIST SPAN TABLES

10 psf Dead Load and 20 psf Live Load

| Member | Fy (ksi) | Live Load Deflection L/360 | | | | | | Live Load Deflection L/480 | | | | | |
|-------------|----------|----------------------------|---------|---------|-------------------|---------|---------|----------------------------|---------|---------|-------------------|---------|---------|
| | | Single Span | | | Two Equal Spans | | | Single Span | | | Two Equal Spans | | |
| | | Spacing (in) o.c. | | | Spacing (in) o.c. | | | Spacing (in) o.c. | | | Spacing (in) o.c. | | |
| | | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 | 12 | 16 | 24 |
| 600S162-33 | 33 | 14'6" | 12'7"e | 10'3"e | 14'6"i | 12'7"i | 10'3"a | 14'4" | 12'7"e | 10'3"e | 14'6"i | 12'7"i | 10'3"a |
| 600S200-33 | 33 | 15'6" | 13'5"e | 10'11"e | 15'6"i | 13'5"i | 10'11"a | 15'0" | 13'5"e | 10'11"e | 15'6"i | 13'5"i | 10'11"a |
| 600S162-43 | 33 | 17'2" | 15'6" | 12'8" | 17'11"i | 15'6"i | 12'8"i | 15'7" | 14'2" | 12'5" | 17'6"i | 15'6"i | 12'8"i |
| 600S200-43 | 33 | 18'0" | 16'0" | 13'1" | 18'6"i | 16'0"i | 13'1"i | 16'5" | 14'11" | 13'0" | 18'5"i | 16'0"i | 13'1"i |
| 600S250-43 | 33 | 18'11" | 16'5" | 13'5"e | 19'0"i | 16'5"i | 13'5"i | 17'2" | 15'7" | 13'5"e | 19'0"i | 16'5"i | 13'5"i |
| 600S162-54 | 50 | 18'5" | 16'9" | 14'7" | 20'8" | 18'9"i | 16'5"i | 16'9" | 15'2" | 13'3" | 18'9" | 17'1" | 14'11"i |
| 600S200-54 | 50 | 19'4" | 17'7" | 15'4" | 21'9" | 19'9"i | 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 | 17'10"i | 18'4" | 16'8" | 14'7" | 20'7" | 18'9" | 16'4"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"i | 19'9" | 18'0" | 15'8" | 22'3" | 20'2" | 17'8" |
| 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" |
| 800S162-33 | 33 | 16'9"e | 14'6"e | 11'10"e | 16'9"a | 14'0"a | 10'6"a | 16'9"e | 14'6"e | 11'10"e | 16'9"a | 14'0"a | 10'6"a |
| 800S200-33 | 33 | 18'0"e | 15'7"e | 12'8"e | 17'10"a | 14'7"a | 10'10"a | 18'0"e | 15'7"e | 12'8"e | 17'10"a | 14'7"a | 10'10"a |
| 800S162-43 | 33 | 20'2" | 17'6" | 14'3"e | 20'2"i | 17'6"i | 14'3"i | 19'6" | 17'6" | 14'3"e | 20'2"i | 17'6"i | 14'3"i |
| 800S200-43 | 33 | 21'7" | 18'8" | 15'3"e | 21'7"i | 18'8"i | 15'3"a | 20'7" | 18'8" | 15'3"e | 21'7"i | 18'8"i | 15'3"a |
| 800S250-43 | 33 | 22'2" | 19'2"e | 15'8"e | 22'2"i | 19'2"i | 15'8"a | 21'5" | 19'2"e | 15'8"e | 22'2"i | 19'2"i | 15'8"a |
| 800S162-54 | 50 | 23'1" | 20'11" | 18'3" | 25'10"i | 23'5"i | 19'1"i | 20'11" | 19'0" | 16'7" | 23'6" | 21'4"i | 18'8"i |
| 800S200-54 | 50 | 24'4" | 22'1" | 19'4" | 27'3"i | 24'10"i | 20'5"i | 22'1" | 20'1" | 17'6" | 24'10" | 22'6"i | 19'8"i |
| 800S250-54 | 50 | 25'3" | 22'11" | 20'1" | 28'4"i | 25'7"i | 20'10"i | 22'11" | 20'10" | 18'3" | 25'9" | 23'5"i | 20'5"i |
| 800S162-68 | 50 | 24'11" | 22'8" | 19'9" | 28'0" | 25'5"i | 22'2"i | 22'8" | 20'7" | 18'0" | 25'5" | 23'1" | 20'2"i |
| 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"i | 24'3"i | 24'9" | 22'6" | 19'8" | 27'9" | 25'3" | 22'1"i |
| 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" |
| 1000S162-43 | 33 | 22'4"e | 19'4"e | 15'10"e | 22'4"a | 19'4"a | 15'9"a | 22'4"e | 19'4"e | 15'10"e | 22'4"a | 19'4"a | 15'9"a |
| 1000S200-43 | 33 | 24'1"e | 20'11"e | 17'1"e | 24'1"a | 20'11"a | 16'6"a | 24'1"e | 20'11"e | 17'1"e | 24'1"a | 20'11"a | 16'6"a |
| 1000S250-43 | 33 | 24'10"e | 21'6"e | 17'6"e | 24'10"a | 21'6"a | 16'9"a | 24'10"e | 21'6"e | 17'6"e | 24'10"a | 21'6"a | 16'9"a |
| 1000S162-54 | 50 | 27'5" | 24'10" | 21'2" | 30'0"i | 25'11"i | 21'2"i | 24'10" | 22'7" | 19'9" | 27'11"i | 25'4"i | 21'2"i |
| 1000S200-54 | 50 | 28'8" | 26'0" | 22'9" | 32'2"i | 27'11"i | 22'9"i | 26'0" | 23'8" | 20'8" | 29'3"i | 26'7"i | 22'9"i |
| 1000S250-54 | 50 | 30'3" | 27'6" | 23'5" | 33'1"i | 28'8"i | 23'5"i | 27'6" | 25'0" | 21'10" | 30'10"i | 28'0"i | 23'5"i |
| 1000S162-68 | 50 | 29'8" | 27'0" | 23'7" | 33'4"i | 30'3"i | 25'0"i | 27'0" | 24'6" | 21'5" | 30'3" | 27'6"i | 24'0"i |
| 1000S200-68 | 50 | 31'0" | 28'2" | 24'7" | 34'10"i | 31'8"i | 26'9"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"i | 33'2"i | 27'6"i | 29'7" | 26'10" | 23'5" | 33'2" | 30'2"i | 26'4"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" |
| 1200S162-54 | 50 | 31'6"e | 27'11"e | 22'10"e | 32'3"a | 27'11"a | 22'10"a | 28'7"e | 26'0"e | 22'9"e | 32'2"a | 27'11"a | 22'10"a |
| 1200S200-54 | 50 | 32'11"e | 29'11"e | 24'8"e | 34'11"a | 30'3"a | 24'8"a | 29'11"e | 27'2"e | 23'9"e | 33'7"a | 30'3"a | 24'8"a |
| 1200S250-54 | 50 | 34'3"e | 31'2"e | 25'6"e | 36'0"a | 31'2"a | 25'6"a | 31'2"e | 28'4"e | 24'9"e | 35'0"a | 31'2"a | 25'6"a |
| 1200S162-68 | 50 | 34'3" | 31'1" | 27'1" | 38'4"i | 33'3"i | 27'1"i | 31'1" | 28'3" | 24'8" | 34'11"i | 31'9"i | 27'1"i |
| 1200S200-68 | 50 | 35'9" | 32'5" | 28'4" | 40'1"i | 35'9"i | 29'2"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 | 36'11"i | 30'1"i | 33'10" | 30'9" | 26'10" | 37'11"i | 34'6"i | 30'1"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" |

ALLOWABLE FLOOR JOIST TABLE NOTES

- Spans are based on continuous support of compression flange over the full length of the joist.
- End shear and web crippling capacity have not been reduced for punchouts.
- Calculated allowable properties are based on AISI S100-16, NAS for Design of Cold-Formed Steel Structural Members.
- For two equal spans, the listed span is the center-to-center distance from either end to the center support, with the joist continuous over the center support.
- Joists must be braced against rotation at all supports.
- End web crippling check is based on 3.5 inch end bearing. Joist flanges must be fastened to the support.
- Shear capacity at mid-span support has been reduced for the presence of punchouts adjacent to the support. Mid-span combined bending and shear check based on stiffened web.
- Deflection checks are computed using unbalanced loads for the two equal span condition.
- Total load deflection limited to L/240. Live load deflection limit as noted.
- "e" indicates that web stiffeners are required at the end supports only.
- "i" indicates that web stiffeners are required at the interior supports only.
- "a" indicates that web stiffeners are required at all the supports.
- Allowable flexural strength values in the tables are based on the minimum of local, distortional, and lateral-torsional buckling. Distortional buckling strength is based on a $k\phi = 0$. Higher values may be obtained when sheathing is applied to the walls resulting in a higher $k\phi$ value.

FLOOR JOIST SPAN TABLES

10 psf Dead Load and 30 psf Live Load

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

ALLOWABLE FLOOR JOIST TABLE NOTES

- Spans are based on continuous support of compression flange over the full length of the joist.
- End shear and web crippling capacity have not been reduced for punchouts.
- Calculated allowable properties are based on AISI S100-16, NAS for Design of Cold-Formed Steel Structural Members.
- For two equal spans, the listed span is the center-to-center distance from either end to the center support, with the joist continuous over the center support.
- Joists must be braced against rotation at all supports.
- End web crippling check is based on 3.5 inch end bearing. Joist flanges must be fastened to the support.
- Shear capacity at mid-span support has been reduced for the presence of punchouts adjacent to the support. Mid-span combined bending and shear check based on stiffened web.
- Deflection checks are computed using unbalanced loads for the two equal span condition.
- Total load deflection limited to L/240. Live load deflection limit as noted.
- "e" indicates that web stiffeners are required at the end supports only.
- "i" indicates that web stiffeners are required at the interior supports only.
- "a" indicates that web stiffeners are required at all the supports.
- Allowable flexural strength values in the tables are based on the minimum of local, distortional, and lateral-torsional buckling. Distortional buckling strength is based on a $k\phi = 0$. Higher values may be obtained when sheathing is applied to the walls resulting in a higher k-phi value.

FLOOR JOIST SPAN TABLES

10 psf Dead Load and 40 psf Live Load

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

ALLOWABLE FLOOR JOIST TABLE NOTES

- Spans are based on continuous support of compression flange over the full length of the joist.
- End shear and web crippling capacity have not been reduced for punchouts.
- Calculated allowable properties are based on AISI S100-16, NAS for Design of Cold-Formed Steel Structural Members.
- For two equal spans, the listed span is the center-to-center distance from either end to the center support, with the joist continuous over the center support.
- Joists must be braced against rotation at all supports.
- End web crippling check is based on 3.5 inch end bearing. Joist flanges must be fastened to the support.
- Shear capacity at mid-span support has been reduced for the presence of punchouts adjacent to the support. Mid-span combined bending and shear check based on stiffened web.
- Deflection checks are computed using unbalanced loads for the two equal span condition.
- Total load deflection limited to L/240. Live load deflection limit as noted.
- "e" indicates that web stiffeners are required at the end supports only.
- "i" indicates that web stiffeners are required at the interior supports only.
- "a" indicates that web stiffeners are required at all the supports.
- Allowable flexural strength values in the tables are based on the minimum of local, distortional, and lateral-torsional buckling. Distortional buckling strength is based on a $k\phi = 0$. Higher values may be obtained when sheathing is applied to the walls resulting in a higher $k\phi$ value.