## Exterior curtain wall overview

## Load/Span Table Wind Pressure Notes.

Historically there have been differences in the design wind pressures determined through different versions of the model building codes. Older versions of the codes provided service level loads (ASD) while newer versions provide strength level loads (LRFD). Since IBC 2012/ASCE 7-10 design wind pressures have been determined via strength level (LRFD) loads. 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 2021/ASCE 7-16 design wind pressures by 0.6 (reference section 2.4 ASCE 7-16) prior to entering the load/span tables.

## Example:

- ASCE 7-16 Calculated Design Wind Pressure $=25$ psf (strength level loads, LRFD)
- Convert to service level load (ASD) $=25$ psf $\times 0.6=15$ psf
- Use 15 psf as the Pressure Value used in this table to determine the member span

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.

Allowable wall heights-curtain wall framing.
Exterior curtain walls must be designed to withstand the highest winds anticipated for the particular construction location. Wind pressures can be found in the project's structural drawings under the "general notes" section. Please contact technical services at 888-437-3244 for help converting wind speeds (mph) to wind loads (psf).

The tables on the following pages provide allowable height limitations for exterior curtain walls subjected to lateral transverse loads. Members shown vary in depth, flange width and steel thickness. Select the studs that are right for your application, also taking into account the acceptable deflection level.

Deflection.
L/240 Length (height) of stud, in inches, divided by 240 (exterior siding or EIFS)
L/360 Length (height) of stud, in inches, divided by 360 (exterior stucco)
L/600 Length (height) of stud, in inches, divided by 600 (exterior brick)
L/720 Length (height) of stud, in inches, divided by 720 (exterior brick)

## General Notes:

1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10" away from the end bearing.
2 A $1 / 3$ rd stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.
5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by "e"
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20.
A 1-1/2" by $4^{\prime \prime}$ knockout spaced no closer than 24 " o.c. is assumed. (3/4" for 2-1/2" studs)
9 All values are based on $\mathrm{Fy}=33 \mathrm{ksi}$ for 33 mil and 43 mil Studs, and $\mathrm{Fy}=50 \mathrm{ksi}$ for 54 mil, 68 mil and 97 mil Studs.
10 For deflection calculations, 15 psf and higher wind pressures have been multiplied by 0.7 , in accordance with footnote " $f$ " of IBC table 1604.3. The 5 psf pressure has not been reduced for deflection checks.
11 Lateral loads have not been modified for strength checks. Full loads are applied.
12 End reactions must be checked for web crippling separately.


See page 27 for clarification of code developed wind pressures prior to using this table.

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8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for 2-1/2" studs)

|  | Member | Spacing (in) | 15psf |  |  | 20 psf |  |  | 25psf |  |  | 30psf |  |  | 35psf |  |  | 40psf |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | o.c. | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| $\begin{aligned} & \stackrel{\rightharpoonup}{\mathbf{x}} \\ & \dot{\omega} \\ & \stackrel{\omega}{\omega} \\ & \dot{m} \end{aligned}$ | 362S200-33 | 12 | 15' 11" | 13' 11" | 11' 8" | 13' 11" | 12' 7" | 10' 8 " | 12' 5" | $11{ }^{\text {' } 8}$ | $9^{\prime} 10$ " | 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 |
|  |  | 16 | 13' 11" | 12'7" | $10^{\prime \prime} 8$ | $12^{\prime \prime} 1{ }^{\prime \prime}$ | 11' 5 " | 9'8" | $10^{\prime} 9$ e | $10^{\prime} 8$ " e | 9'0" | $9^{\prime} 10 \mathrm{e}$ | $9^{\prime} 10 \mathrm{e}$ | 8'5" e | 9'1"e | 9'1" e | 8'0" e | 8' 6" e | 8'6"e | 7' ${ }^{\text {" }}$ e |
|  |  | 24 | 11'4" e | $11^{\prime} 0^{\prime \prime} \mathrm{e}$ | 9' 3 " | 9'10" e | 9'10" e | 8'5" e | 8' 10 l e | $8^{\prime} 10 \mathrm{e}$ | 7'10" e | 8'0"e | $8^{\prime \prime} 0$ e | $7{ }^{\text {7 }}$ " e | 7'5" e | 7'5" e | 7'0"e | $7{ }^{10} 0$ | 7'0'e | $66^{\prime \prime} \mathrm{e}$ |
|  | 362S200-43 | 12 | $17^{\prime} 4^{\prime \prime}$ | 15' ${ }^{\prime \prime}$ | 12' 9" | 15' 9" | 13' 9" | 11'7" | 14' 8" | 12'9" | 10'9" | $13^{\prime} 8{ }^{\prime \prime}$ | 12' 0" | 10' 2 " | $12^{\prime \prime} 8$ | $11^{\prime \prime} 5^{\prime \prime}$ | $9^{\prime} 8{ }^{\prime \prime}$ | 11' 10" | 10' 11" | 9'3" |
|  |  | 16 | 15' 9" | $13^{\prime} 9$ | 11'7" | $14^{\prime \prime} 4^{\prime \prime}$ | $12^{\prime \prime} 6^{\prime \prime}$ | 10'7" | $13^{\prime \prime} 0$ | $11^{\prime} 7{ }^{\prime \prime}$ | 9' 10" | 11' 10" | 10' 11" | 9'3" | $11^{\prime \prime} 0$ | 10' 5" | 8'9" | $10^{\prime \prime} 3^{\prime \prime}$ | 9' 11" | 8'4" |
|  |  | 24 | $13^{\prime \prime} 8^{\prime \prime}$ | $12^{\prime} 0$ | 10' ${ }^{\prime \prime}$ | 11' 10" | 10' 11" | 9'3" | 10'7" | 10' 2 " | 8'7" | 9'8" e | 9'7" e | 8' ${ }^{\prime \prime}$ | 8'11" e | 8'11" e | 7' 8" | 8'5" e | 8' 5" e | 7'4"e |
|  | 362S200-54 | 12 | $18^{\prime} 7{ }^{\prime \prime}$ | $16^{\prime \prime}{ }^{\prime \prime}$ | $13^{\prime \prime} 8^{\prime \prime}$ | 16' 11" | 14' 9" | $12^{\prime \prime} 5^{\prime \prime}$ | $15{ }^{\prime \prime} 8$ | $13^{\prime \prime} 8$ | $11^{\prime} 7{ }^{\prime \prime}$ | 14' 9" | 12' 11" | 10' 11" | $14^{\prime} 0{ }^{\prime \prime}$ | $12^{\prime \prime} 3^{\prime \prime}$ | $10^{\prime \prime} 4^{\prime \prime}$ | $13^{\prime \prime} 5^{\prime \prime}$ | 11' 9" | $9^{\prime \prime} 11$ |
|  |  | 16 | 16' 11" | $14^{\prime \prime} 9$ | $12^{\prime \prime} 5^{\prime \prime}$ | $15^{\prime \prime} 4^{\prime \prime}$ | $13^{\prime} 5^{\prime \prime}$ | 11'4" | $14^{\prime} 3$ " | $12^{\prime \prime} 5^{\prime \prime}$ | $10^{\prime \prime} 6$ | $13^{\prime \prime} 5^{\prime \prime}$ | 11' 9" | 9'11" | 12'9" | 11' ${ }^{\prime \prime}$ | $9^{\prime} 5{ }^{\prime \prime}$ | $12^{\prime \prime} 2^{\prime \prime}$ | $10^{\prime} 8{ }^{\prime \prime}$ | $9{ }^{10}$ |
|  |  | 24 | 14' 9" | 12' 11" | 10' 11" | $13^{\prime \prime} 5^{\prime \prime}$ | 11' 9" | 9'11" | $12^{\prime \prime} 5$ | 10'11" | 9' ${ }^{\prime \prime}$ | 11' 9" | 10'3" | 8' 8 " | 11' 2 " | 9'9" | 8' ${ }^{\prime \prime}$ | $10^{\prime \prime} 8$ | 9'4" | 7' 10" |
|  | 362S200-68 | 12 | 19'11" | $17^{\prime} 5{ }^{\prime \prime}$ | 14' 8" | 18'1" | 15' 10" | 13'4" | 16' 10" | 14' 8" | 12'5" | 15' 10" | 13' 10" | 11' 8" | 15' 0 " | $13^{\prime \prime} 1$ | 11'1" | $14{ }^{\prime \prime}$ | 12'7" | 10'7" |
|  |  | 16 | $18^{\prime \prime} 1^{\prime \prime}$ | 15' 10" | $13^{\prime \prime} 4^{\prime \prime}$ | $16^{\prime \prime} 5^{\prime \prime}$ | $14^{\prime \prime} 4^{\prime \prime}$ | $12^{\prime \prime} 1$ | $15^{\prime} 3$ " | $13^{\prime \prime} 4^{\prime \prime}$ | $11^{\prime \prime}{ }^{\prime \prime}$ | $14^{\prime \prime} 4^{\prime \prime}$ | $12^{\prime} 7{ }^{\prime \prime}$ | $10^{\prime \prime} 7^{\prime \prime}$ | $13^{\prime \prime} 8^{\prime \prime}$ | 11' 11" | 10' $1^{\prime \prime}$ | $13^{\prime \prime} 1{ }^{\prime \prime}$ | $11^{\prime \prime} 5^{\prime \prime}$ | $9^{\prime} 7{ }^{\prime \prime}$ |
|  |  | 24 | $15^{\prime} 10 "$ | 13' 10" | 11' 8" | $14^{\prime \prime} 4^{\prime \prime}$ | $12^{\prime} 7^{\prime \prime}$ | 10'7" | $13^{\prime \prime}{ }^{\prime \prime}$ | $11^{\prime} 8{ }^{\prime \prime}$ | 9' 10" | $12^{\prime} 7{ }^{\prime \prime}$ | 11' ${ }^{\prime \prime}$ | 9'3" | 11' 11" | 10' 5" | 8' 9" | 11' 5" | 10' 0 " | $8{ }^{\prime} 5$ |
|  | 362S200-97 | 12 | 22'0" | 19'3" | 16' ${ }^{\prime \prime}$ | 20'0" | 17' 6" | 14'9" | 18'7" | 16' 3" | $13^{\prime \prime} 8$ | $17^{\prime \prime} 6^{\prime \prime}$ | 15' 3 " | 12' 11" | $16^{\prime} 7{ }^{\prime \prime}$ | $14^{\prime \prime} 6^{\prime \prime}$ | $12^{\prime \prime} 3^{\prime \prime}$ | 15' 11" | 13'11" | 11' 8" |
|  |  | 16 | 20'0" | 17' 6" | 14' 9" | 18' 2 " | 15' 11" | $13^{\prime \prime} 5^{\prime \prime}$ | 16' 11" | 14'9" | $12^{\prime \prime} 5$ | 15' 11" | 13' 11" | 11' 8" | $15^{\prime \prime} 1{ }^{\prime \prime}$ | $13^{\prime \prime} 2^{\prime \prime}$ | 11'1" | $14^{\prime \prime} 5^{\prime \prime}$ | $12^{\prime} 7{ }^{\prime \prime}$ | 10' 8" |
|  |  | 24 | $17^{\prime \prime} 6^{\prime \prime}$ | $15^{\prime} 3^{\prime \prime}$ | 12' 11" | 15' 11" | 13' 11" | 11' 8" | 14'9" | 12'11" | 10'10" | 13'11" | 12' 1" | $10^{\prime} 3^{\prime \prime}$ | $13^{\prime} 2$ " | $11^{\prime} 6$ " | 9' 9" | $12^{\prime} 7$ " | 11' 0" | $9^{\prime} 3^{\prime \prime}$ |
|  | 362S250-43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 12 | $18^{\prime \prime} 4^{\prime \prime}$ | 16'0" | $13^{\prime \prime} 6^{\prime \prime}$ | 16'7" | 14' ${ }^{\prime \prime}$ | 12'3" | 15' 5" | 13' 6" | 11'4" | 14' 2 " | 12' 8" | $10^{\prime \prime} 8$ | $13^{\prime \prime} 1{ }^{\prime \prime}$ | $12^{\prime \prime} 1{ }^{\prime \prime}$ | 10' $2^{\prime \prime}$ | $12^{\prime \prime} 3^{\prime \prime}$ | $11^{\prime \prime} 6^{\prime \prime}$ | 9'9" |
|  |  | 16 | 16' ${ }^{\prime \prime}$ | 14' 6 " | $12^{\prime \prime}{ }^{\prime \prime}$ | 15' 0 " | $13^{\prime \prime}{ }^{\prime \prime}$ | 11' 2 " | 13' 5" | 12' 3" | 10'4" | $12^{\prime \prime}{ }^{\prime \prime}$ | 11' 6 " | 9'9" | 11'4" | 10' 11" | 9'3' | 10' 8" e | 10'6"e | 8' 10" |
|  |  | 24 | $14^{\prime} 2^{\prime \prime}$ | $12^{\prime \prime} 8^{\prime \prime}$ | $10^{\prime} 8{ }^{\prime \prime}$ | 12'3" | $11^{\prime} 6^{\prime \prime}$ | 9'9" | 11'0" | 10' 8" | $9^{\prime} 0$ " | $10^{\prime} 0$ " e | $10^{\prime} 0$ " e | 8'6" | 9'3" e | 9'3" e | 8'1" e | 8' 8" e | 8'8" e | 7'9"e |
|  | 362S250-54 | 12 | 19'7" | $17^{\prime} 1{ }^{\prime \prime}$ | $14^{\prime} 5{ }^{\prime \prime}$ | 17' 9" | $15{ }^{\prime \prime}$ | $13^{\prime \prime} 1{ }^{\prime \prime}$ | 16' 6" | 14'5" | 12' 2 " | 15' 6 " | 13' 7 " | 11'5" | 14' 9" | 12' 11" | 10' 10" | $14^{\prime \prime} 1{ }^{\prime \prime}$ | 12'4" | 10' 5" |
|  |  | 16 | 17' 9" | 15' 6" | $13^{\prime \prime} 1$ | $16^{\prime \prime}{ }^{\prime \prime}$ | $14^{\prime} 1$ " | 11' 11" | 15' 0 " | $13^{\prime \prime} 1{ }^{\prime \prime}$ | 11'1" | $14^{\prime \prime} 1{ }^{\prime \prime}$ | $12^{\prime} 4^{\prime \prime}$ | 10' ${ }^{\prime \prime}$ | $13^{\prime \prime}{ }^{\prime \prime}$ | $11^{\prime \prime} 8$ | $9^{\prime} 10$ " | 12' 10" | 11' 2 " | $9^{\prime} 5{ }^{\prime \prime}$ |
|  |  | 24 | $15{ }^{\prime \prime}{ }^{\prime \prime}$ | $13^{\prime} 7{ }^{\prime \prime}$ | $11^{\prime} 5^{\prime \prime}$ | $14^{\prime \prime} 1^{\prime \prime}$ | $12^{\prime} 4$ | $10^{\prime \prime} 5^{\prime \prime}$ | $13^{\prime \prime} 1$ | $11^{\prime} 5^{\prime \prime}$ | $9^{\prime} 8{ }^{\prime \prime}$ | $12^{\prime} 4^{\prime \prime}$ | 10' 9" | 9'1" | $11^{\prime \prime} 8$ | $10^{\prime \prime} 3^{\prime \prime}$ | 8'7" | 11' 2" | 9' 9" | 8'3" |
|  | 362S250-68 | 12 | 21'0" | $18^{\prime \prime}{ }^{\prime \prime}$ | $15^{\prime \prime} 6^{\prime \prime}$ | 19'1" | 16' $8^{\prime \prime}$ | $14^{\prime \prime} 1{ }^{\prime \prime}$ | 17' 9" | 15' 6" | $13^{\prime \prime} 1{ }^{\prime \prime}$ | $16^{\prime \prime} 8$ | $14^{\prime} 7{ }^{\prime \prime}$ | 12'4" | 15' 10" | 13' 10 " | 11' 8" | 15' ${ }^{\prime \prime}$ | $13^{\prime \prime}{ }^{\prime \prime}$ | 11' 2 " |
|  |  | 16 | $19^{\prime \prime}{ }^{\prime \prime}$ | $16^{\prime \prime} 8^{\prime \prime}$ | $14^{\prime} 1^{\prime \prime}$ | $17^{\prime} 4^{\prime \prime}$ | 15' 2 " | 12'10" | $16^{\prime \prime} 1$ | $14^{\prime \prime} 1{ }^{\prime \prime}$ | 11' 11" | $15^{\prime \prime}{ }^{\prime \prime}$ | $13^{\prime \prime}{ }^{\prime \prime}$ | 11' 2 " | $14^{\prime \prime} 5^{\prime \prime}$ | $12^{\prime} 7$ " | 10'7" | $13^{\prime \prime}{ }^{\prime \prime}$ | $12^{\prime \prime} 0^{\prime \prime}$ | 10' 2 " |
|  |  | 24 | $16^{\prime \prime} 8$ | $14^{\prime} 7{ }^{\prime \prime}$ | $12^{\prime \prime} 4^{\prime \prime}$ | $15^{\prime} 2^{\prime \prime}$ | $13^{\prime \prime} 3^{\prime \prime}$ | 11'2" | $14^{\prime \prime} 1$ | $12^{\prime \prime}{ }^{\prime \prime}$ | $10^{\prime \prime} 5$ | $13^{\prime \prime}{ }^{\prime \prime}$ | 11'7" | $9^{\prime \prime}{ }^{\prime \prime}$ | $12^{\prime \prime} 7$ | $11^{\prime \prime} 0$ | $9^{\prime} 3^{\prime \prime}$ | $12^{\prime \prime} 0^{\prime \prime}$ | $10^{\prime \prime} 6^{\prime \prime}$ | 8' 10 " |
|  | 362S250-97 | 12 | 23'4" | $20^{\prime \prime}{ }^{\prime \prime}$ | 17' ${ }^{\prime \prime}$ | 21' 2 " | 18' 6 " | 15'7" | 19' 8" | 17' ${ }^{\prime \prime}$ | 14' 6" | $18^{\prime \prime} 6^{\prime \prime}$ | $16^{\prime \prime}{ }^{\prime \prime}$ | 13' ${ }^{\prime \prime}$ | 17' 7 " | $15^{\prime \prime} \mathbf{4 '}^{\prime \prime}$ | 12' 11" | 16' 10" | 14' 8" | 12'5" |
|  |  | 16 | 21' ${ }^{\prime \prime}$ | $18^{\prime \prime}{ }^{\prime \prime}$ | 15' 7 " | 19'3" | 16' 10" | 14' ${ }^{\prime \prime}$ | 17' 10" | 15' 7 " | $13^{\prime} 2$ " | 16' 10" | $14^{\prime \prime} 8^{\prime \prime}$ | 12' 5" | $16^{\prime} 0{ }^{\prime \prime}$ | 13' 11" | 11' 9" | $15^{\prime \prime} 3^{\prime \prime}$ | $13^{\prime} 4$ " | 11' 3 " |
|  |  | 24 | $18^{\prime \prime}{ }^{\prime \prime}$ | 16' ${ }^{\prime \prime}$ | $13^{\prime \prime} 8$ | 16'10" | 14' 8 " | $12^{\prime \prime}{ }^{\prime \prime}$ | $15{ }^{\prime \prime}$ | $13^{\prime \prime} 8^{\prime \prime}$ | 11' 6 " | $14^{\prime} 8$ " | 12' 10" | 10' 10" | 13' 11" | $12^{\prime \prime} 2$ | $10^{\prime \prime} 3^{\prime \prime}$ | $13^{\prime} 4^{\prime \prime}$ | $11^{\prime \prime} 8$ | $9^{\prime} 10 "$ |

See page 27 for clarification of code developed wind pressures prior to using this table.

Notes:
1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated
section 10 "away from the section 10 "away from the end bearing.
2 A $1 / 3$ stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.

5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by " e ".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for 2-1/2" studs)

9 All values are based on Fy=33ksi for 33 mil and 43 mil Studs, and Fy=50ksi for 54 mil, 68 mil and 97 mil Studs.
10 For deflection calculations, 15 psf and higher wind pressures have been multiplied by 0.7 , in accordance with footnote " $f$ " of IBC table 1604.3 The 5 psf pressure has not been reduced for deflection checks.
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|  | Member | Spacing (in)o.c. | 15psf |  |  | 20 psf |  |  | 25psf |  |  | 30psf |  |  | 35psf |  |  | 40psf |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 800S137-331 |  | 12 | 21'5" e | 21'5" e | 19' 7" e | $18^{\prime} 6$ " e | $18{ }^{6} 6$ e | $17{ }^{\text {1 }}$ " e | $16^{\prime} 7$ " e | $16^{\prime} 7$ " e | $16^{\prime} 6$ e e | $15^{\prime} 1$ e | $15^{\prime \prime} 1$ e | 15' 1" e | $14^{\prime \prime} 0$ e | $14^{\prime \prime} 0$ e | $14^{\prime \prime} 0$ e | $13^{\prime \prime} 1{ }^{\prime \prime}$ | $13^{\prime \prime} 1{ }^{\prime \prime} \mathrm{e}$ | $13^{\prime \prime}{ }^{\prime \prime} \mathrm{e}$ |
|  |  | 16 | $18{ }^{\text {6 }}$ " e | $18{ }^{6} \mathrm{6}$ e | 17' 9" e | 16' 0" e | $16^{\prime} 0$ e | $16^{\prime} 0$ e | $14^{\prime} 4$ " e | $14^{\prime} 4$ " e | $14^{\prime} 4$ " e | $13^{\prime} 1$ " e | $13^{\prime} 1$ " e | $13^{\prime} 1$ 1 e | 12' 2" e | 12' 2" e | 12' 2 " e | 11'4"e | 11'4"e | 11' 4" e |
|  |  | 24 | $15^{\prime} 1$ " e | $15{ }^{1 \prime}$ e | 15' 1" e | $13^{\prime \prime} 1$ e | $13^{\prime} 1$ " e | $13^{\prime \prime} 1$ e | 11'9" e | 11'9" e | 11'9" e | $10^{\prime \prime} 8$ e | $10^{\prime \prime} 8$ e | $10^{\prime} 8$ " e | 9'11" e | 9'11" e | 9'11" e | 9'3"e | 9'3"e | 9'3" e |
| 8" Exterior Curtain Wall Framing |  | 12 | 25' 11" | $25^{\prime \prime} 6^{\prime \prime}$ | 21'6" | 22' 5" | 22' 5" | $19^{\prime \prime} 7$ | 20'1" e | 20'1" e | 18' $2^{\prime \prime}$ | $18^{\prime \prime} 4^{\prime \prime}$ e | $18^{\prime \prime} 4^{\prime \prime}$ e | 17' 1" e | $16^{\prime \prime} 11 \mathrm{e}$ | $16^{\prime \prime} 11 \mathrm{e}$ | $16^{\prime} 3^{\prime \prime} \mathrm{e}$ | $15^{\prime} 10$ e | $15^{\prime} 10$ " e | 15' 6"e |
|  | 800S137-43 | 16 | $22^{\prime \prime}{ }^{\prime \prime}$ | $22^{\prime \prime}{ }^{\prime \prime}$ | $19^{\prime \prime} 7$ | 19'5" e | 19'5" e | 17' 9" | 17' 5" e | 17' 5" e | $16^{\prime} 6$ e | $15^{\prime} 10$ e | $15^{\prime} 10$ e | $15{ }^{\text {6 }}$ " e | $14{ }^{18} 8$ e | $14{ }^{\prime \prime}{ }^{\prime \prime}$ e | $14{ }^{\prime \prime} 8$ e | 13' 9"e | 13' 9"e | 13'9"e |
|  |  | 24 | $18^{\prime} 4^{\prime \prime} \mathrm{e}$ | $18^{\prime} 4$ " e | 17'1"e | $15^{\prime} 10$ " e | 15' 10 " e | 15' 6 " e | $14{ }^{\prime \prime}{ }^{\text {" }}$ e | $14{ }^{\prime \prime}{ }^{\text {" }}$ e | $14^{\prime} 2$ " e | $12^{\prime \prime} 11 \mathrm{e}$ | $12^{\prime \prime} 11 \mathrm{e}$ | $12^{\prime \prime} 11 \mathrm{e}$ | $12^{\prime \prime} 0^{\prime \prime}$ | $12^{\prime \prime} 0^{\prime \prime}$ | $12^{\prime} 0$ " e | 11'3"e | 11'3"e | 11'3"e |
|  | 800S137-54 | 12 | $31^{\prime \prime} 5^{\prime \prime}$ | $27^{\prime \prime} 6^{\prime \prime}$ | 23' ${ }^{\prime \prime}$ | 28'7" | 24' 11" | 21'1" | $26^{\prime \prime} 6^{\prime \prime}$ | 23' ${ }^{\prime \prime}$ | $19^{\prime \prime} 6^{\prime \prime}$ | $24^{\prime \prime} 6^{\prime \prime}$ | 21' 10" | $18^{\prime \prime} 5^{\prime \prime}$ | $22^{\prime \prime} 8^{\prime \prime}$ | $20^{\prime \prime} 8^{\prime \prime}$ | $17^{\prime \prime} 6^{\prime \prime}$ | 21'3" | $19^{\prime} 10^{\prime \prime}$ | $16^{\prime \prime} 8^{\prime \prime}$ |
|  |  | 16 | 28'7" | 24' 11" | 21'1" | $25{ }^{\prime \prime} 11$ | $22^{\prime \prime} 8^{\prime \prime}$ | 19'1" | $23^{\prime \prime} 3^{\prime \prime}$ | 21'1" | $17^{\prime \prime} 9$ | 21' 3" | 19' 10" | $16^{\prime \prime} 8$ | $19^{\prime} 8{ }^{\prime \prime}$ | 18' 10 " | $15^{\prime} 10$ " | $18^{\prime \prime} 5^{\prime \prime}$ | $18^{\prime \prime} 0$ | 15' 2 " |
|  |  | 24 | $24^{\prime \prime} 6^{\prime \prime}$ | 21' 10" | $18^{\prime \prime} 5^{\prime \prime}$ | 21'3" | $19^{\prime} 10 "$ | $16^{\prime \prime} 8^{\prime \prime}$ | $19^{\prime \prime} 0$ | $18^{\prime \prime} 5^{\prime \prime}$ | $15^{\prime \prime} 6^{\prime \prime}$ | $17^{\prime \prime} \mathbf{" '}^{\prime \prime}$ | $17^{\prime \prime} 4^{\prime \prime}$ | $14^{\prime} 7{ }^{\prime \prime}$ | $16^{\prime \prime} 0$ | $16^{\prime \prime} 0$ | $13^{\prime} 10^{\prime \prime}$ | $15^{\prime \prime} 0$ e | $15^{\prime \prime} 0$ | $13^{\prime} 3$ " |
|  | 800S137-68 | 12 | $34^{\prime \prime} 0^{\prime \prime}$ | 29'8" | 25' ${ }^{\prime \prime}$ | 30' 11" | $27{ }^{\prime \prime}$ | 22' 9" | 28' 8 " | 25'0" | 21'1" | 27' 0 " | 23' 7 " | 19'10" | 25' 7 " | 22' ${ }^{\prime \prime}$ | $18^{\prime \prime} 11$ | $24^{\prime \prime}{ }^{\prime \prime}$ | 21' 5" | 18'1" |
|  |  | 16 | 30' 11" | 27' 0 " | 22'9" | 28'1" | 24' 6 " | $20^{\prime \prime} 8$ | $26^{\prime \prime}{ }^{\prime \prime}$ | 22'9" | 19'2" | 24' 6 " | 21'5" | 18'1" | 23'1" | 20'4" | 17' 2" | 21'7" | 19' 5" | 16' 5 " |
|  |  | 24 | 27'0" | 23' 7 " | 19' 10" | $24^{\prime \prime} 6^{\prime \prime}$ | 21' 5" | 18'1" | 22'4" | 19' 10" | $16^{\prime \prime}{ }^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | $18^{\prime \prime} 8^{\prime \prime}$ | $15^{\prime \prime}{ }^{\prime \prime}$ | 18' 10 " | 17' 9" | $15^{\prime \prime} 0^{\prime \prime}$ | $17{ }^{\prime \prime}$ | $17^{\prime \prime} 0^{\prime \prime}$ | $14^{\prime \prime} 4^{\prime \prime}$ |
|  | 800S137-97 | 12 | 37' 9" | 32' 11" | 27' 10" | $34^{\prime \prime}{ }^{\prime \prime}$ | 29'11" | 25' ${ }^{\prime \prime}$ | 31' 10" | 27' 10" | 23' ${ }^{\prime \prime}$ | 29' 11" | 26' ${ }^{\prime \prime}$ | $22^{\prime \prime} 1$ | $28^{\prime \prime} 5^{\prime \prime}$ | 24' 10" | 20'11" | 27' ${ }^{\prime \prime}$ | 23'9" | $20^{\prime \prime} 1$ |
|  |  | 16 | 34' 3 " | 29' 11" | 25' 3 " | 31' 2 " | 27' 2" | 22' 11" | 28' 11" | $25^{\prime \prime}{ }^{\prime \prime}$ | 21'4" | 27' 2 " | 23' 9 " | 20'1" | 25' 10" | 22'7" | $19^{\prime \prime} 0$ | 24' 9" | 21'7" | 18' 3 " |
|  |  | 24 | 29' 11" | 26' $2^{\prime \prime}$ | $22^{\prime \prime} 1$ | 27' 2 " | 23' 9" | $20^{\prime \prime} 1$ | $25^{\prime \prime} 3^{\prime \prime}$ | $22^{\prime \prime} 1$ | $18^{\prime} 7 \prime$ | $23^{\prime \prime}{ }^{\prime \prime}$ | $20^{\prime \prime} 9$ | $17^{\prime \prime} 6^{\prime \prime}$ | 22'7" | $19^{\prime \prime}{ }^{\prime \prime}$ | $16^{\prime \prime} 8^{\prime \prime}$ | $21^{\prime \prime} 7$ | $18^{\prime} 10{ }^{\prime \prime}$ | $15^{\prime} 11{ }^{\prime \prime}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 800S162-331 | 12 | 23' 4" e | 23' 4 " e | 20' 4"e | 20' 2 " e | 20' 2 " e | 18' 6 " e | $1811{ }^{\prime \prime}$ e | $1811{ }^{\prime \prime}$ e | 17' 2" e | $16^{\prime \prime} 6^{\prime \prime}$ e | $16^{\prime \prime} 6^{\prime \prime}$ e | 16' 2 " e | 15' 3" e | $15{ }^{\prime \prime}{ }^{\prime \prime}$ e | $15^{\prime} 3^{\prime \prime} \mathrm{e}$ | $14{ }^{\text {3" e }}$ | $14{ }^{\text {3" e }}$ | 14'3"e |
|  |  | 16 | 20' 2 " e | 20' 2 " e | $18^{\prime} 6^{\prime \prime} \mathrm{e}$ | $17{ }^{\prime \prime}{ }^{\prime \prime}$ e | $17{ }^{\prime \prime}$ " e | $16^{\prime} 10 \mathrm{e}$ | $15{ }^{\text {8 }}$ " e | $15{ }^{\text {8 }}$ " e | $15^{\prime} 7$ " e | $14^{\prime} 3$ " e | $14^{\prime} 3$ " e | 14'3" e | 13' 3" e | 13' 3" e | $13^{\prime \prime} 3^{\prime \prime}$ e | 12'4"e | 12'4"e | 12'4"e |
|  |  | 24 | $16^{\prime} 6$ ' e | $16^{\prime} 6 \mathrm{e}$ e | $16^{\prime} 2^{\prime \prime} \mathrm{e}$ | $14^{\prime} 3^{\prime \prime} \mathrm{e}$ | $14^{\prime} 3^{\prime \prime} \mathrm{e}$ | $14^{\prime \prime} 3^{\prime \prime} \mathrm{e}$ | 12' 9"e | 12' 9" e | $12{ }^{\text {' }}$ " e | $11^{\prime} 8$ " e | $11^{\prime} 8$ " e | 11'8" e | 10'9"e | $10^{\prime} 9$ e e | $10^{\prime} 9$ e e | $10^{\prime} 1$ e | 10'1"e | 10'1"e |
|  | 800S162-43 | 12 | $28^{\prime \prime} 1$ | 26'7" | 22'5" | $24^{\prime} 4^{\prime \prime}$ | 24' ${ }^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | 21'9"e | 21'9"e | 18' 11" | $19^{\prime} 10 \mathrm{e}$ | $19^{\prime} 10 \mathrm{e}$ | $17{ }^{\prime \prime} 9$ | $18^{\prime} 4$ " e | $18^{\prime} 4$ " e | $16^{\prime} 11 \mathrm{e}$ | $17{ }^{12} \mathrm{e}$ | $17^{\prime \prime} 2 \mathrm{e}$ | $16^{\prime \prime} 2^{\prime \prime} \mathrm{e}$ |
|  |  | 16 | 24'4" | 24' ${ }^{\prime \prime}$ | $20^{\prime \prime} 4^{\prime \prime}$ | 21'1"e | 21'1" e | $18^{\prime \prime} 6^{\prime \prime}$ | $18^{\prime} 10$ e | $18^{\prime} 10$ e | $17^{\prime \prime} 2$ e | $17^{\prime} 2$ e | $17^{\prime} 2$ e | $16^{\prime} 2$ e | $15^{\prime \prime} 11 \mathrm{e}$ | $15^{\prime} 11 \mathrm{e}$ | $15^{\prime} 4$ " e | $14^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | $14^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | $14^{\prime} 8$ " e |
|  |  | 24 | $19^{\prime} 10$ e | $19^{\prime} 10$ e | 17' 9"e | $17^{\prime 2} 2 \mathrm{e}$ | 17' 2 " e | $16^{\prime 2} 2$ e | $15^{\prime} 4 \mathrm{l}$ e | $15^{\prime \prime} 4^{\prime \prime} \mathrm{e}$ | $15^{\prime} 0$ e | $14^{\prime} 0$ " e | $14^{\prime} 0$ " e | $14^{\prime} 0$ " e | $13^{\prime} 0^{\prime \prime} \mathrm{e}$ | $13^{\prime} 0^{\prime \prime} \mathrm{e}$ | $13^{\prime} 0$ e | $12{ }^{2}$ " e | $12{ }^{2}$ " e | $12^{\prime} 2^{\prime \prime} \mathrm{e}$ |
|  | 800S162-54 | 12 | $32^{\prime \prime} 8^{\prime \prime}$ | 28' 7 " | 24'1" | 29' 9" | 25' 11" | 21' 11" | 27' 7 " | 24'1" | 20'4" | 25' 11" | 22' 8 " | 19'1" | 24' 6 " | 21'6" | $18^{\prime \prime} 2^{\prime \prime}$ | 22' 11" | 20'7" | 17'4" |
|  |  | 16 | 29'9" | 25' 11" | 21'11" | $27^{\prime \prime}{ }^{\prime \prime}$ | 23' 7 " | 19' 11" | 25' 1" | 21' 11" | 18' 6 " | 22' 11" | 20'7" | 17'4" | 21'3" | 19'7" | $16^{\prime \prime} 6^{\prime \prime}$ | 19' 10" | 18' $9^{\prime \prime}$ | 15' 9" |
|  |  | 24 | 25' 11" | 22' $8^{\prime \prime}$ | 19'1" | 22' 11" | 20' 7 " | 17' 4" | 20' 6 " | 19'1" | $16^{\prime \prime} 2^{\prime \prime}$ | 18' 9 " | $18^{\prime \prime} 0$ | 15' 2 " | $17^{\prime \prime} \mathbf{4 " ~}^{\text {e }}$ | 17' 1" e | $14^{\prime \prime} 5^{\prime \prime}$ | 16' 2 " e | 16' 2 " e | 13' 9" |
|  | 800S162-68 | 12 | 35' 4" | 30' 10" | 26'0" | 321 1' | 28'1" | 23' ${ }^{\prime \prime}$ | 29' 10" | 26'0" | $22^{\prime \prime}{ }^{\prime \prime}$ | 28'1" | 24' ${ }^{\prime \prime}$ | 20' $8^{\prime \prime}$ | $26^{\prime \prime} 8^{\prime \prime}$ | $23^{\prime \prime}{ }^{\prime \prime}$ | $19^{\prime \prime} 8^{\prime \prime}$ | 25' $6^{\prime \prime}$ | $22^{\prime \prime} 3^{\prime \prime}$ | 18' 9" |
|  |  | 16 | $32{ }^{1 \prime}$ | $28^{\prime \prime} 1$ | $23^{\prime \prime} 8^{\prime \prime}$ | 29'2" | $25^{\prime} 6^{\prime \prime}$ | 21'6" | 27'1" | $23^{\prime \prime} 8^{\prime \prime}$ | 19' 11" | 25' $6^{\prime \prime}$ | 22'3" | $18^{\prime \prime} 9$ | $24^{\prime \prime} 3^{\prime \prime}$ | 21'2" | $17^{\prime} 10^{\prime \prime}$ | 23' ${ }^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | $17^{\prime \prime} 1$ |
|  |  | 24 | 28'1" | $24^{\prime \prime}{ }^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | $25^{\prime \prime} 6^{\prime \prime}$ | 22' 3" | 18 9" | 23' 8 " | $20^{\prime \prime}{ }^{\prime \prime}$ | 17' 5" | 21'11" | 19' ${ }^{\prime \prime}$ | $16^{\prime \prime} 5^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | $18^{\prime \prime} 6^{\prime \prime}$ | $15^{\prime} 7$ " | $19^{\prime \prime} 0$ | $17{ }^{\prime \prime}$ | 14' 11" |
|  | 800S162-97 | 12 | 39' ${ }^{\prime \prime}$ | $34^{\prime \prime} 4^{\prime \prime}$ | 28' 11" | $35^{\prime \prime} 8^{\prime \prime}$ | 31'2" | $26^{\prime \prime}{ }^{\prime \prime}$ | 33' ${ }^{\prime \prime}$ | 28' 11" | 24'5" | 31' ${ }^{\prime \prime}$ | $27{ }^{\prime \prime}$ | $23^{\prime \prime}{ }^{\prime \prime}$ | 29' 7 " | 25' 11" | 21' $10^{\prime \prime}$ | $28^{\prime \prime} 4^{\prime \prime}$ | 24'9" | 20'11" |
|  |  | 16 | $35^{\prime \prime} 8^{\prime \prime}$ | $31{ }^{\prime \prime}$ | 26'4" | $32{ }^{\prime \prime}$ | 28'4" | 23' 11" | $30 \cdot 1$ " | 26'4" | 22' 2 " | 28'4" | 24'9" | 20' 11" | 26'11" | $23^{\prime \prime} 6^{\prime \prime}$ | 19'10" | 25' 9" | 22' 6 " | 19'0" |
|  |  | 24 | 31' ${ }^{\prime \prime}$ | $27{ }^{\prime \prime}$ | 23' 0 " | $28^{\prime \prime} 4^{\prime \prime}$ | 24' 9" | 20' 11" | $26^{\prime \prime}{ }^{\prime \prime}$ | $23^{\prime \prime} 0^{\prime \prime}$ | $19^{\prime \prime}{ }^{\prime \prime}$ | $24^{\prime \prime}{ }^{\prime \prime}$ | 21'7" | $18^{\prime \prime}{ }^{\prime \prime}$ | $23^{\prime} 6$ " | $20^{\prime \prime}{ }^{\prime \prime}$ | $17{ }^{\prime \prime}{ }^{\prime \prime}$ | $22^{\prime \prime}{ }^{\prime \prime}$ | $19^{\prime \prime} 8$ | $16^{\prime} 7$ " |

Notes:
1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated
section $10 "$ away from the end bearing. section 10 "away from the end bearing.
2 A $1 / 3$ stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.

5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by " e ".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for 2-1/2" studs)

| CURTAIN WALL HEIGHTS <br> Spacing (in) <br> 15psf |  |  |  |  | 20 psf |  |  | 25psf |  |  | 30psf |  |  | 35psf |  |  | 40psf |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member | o.c. | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 800S200-331 | 12 | 25' 1" e | 25' 1" e | 21'8" e | 21'9" e | 21'9" e | 19'9" e | 19'5" e | 19'5" e | $18{ }^{\prime} 4$ e | 17'9"e | 17'9"e | 17'3"e | $16^{\prime} 5 \mathrm{l}$ e | $16^{\prime} 5^{\prime \prime} \mathrm{e}$ | $16^{\prime} 4$ " e | $15^{\prime \prime} 4 \mathrm{e}$ | $15^{\prime} 4$ " e | $15^{\prime} 4 \mathrm{l}$ e |
|  | 16 | 21'9" e | 21' 9" e | 19'9" e | 18 '10" e | 18' 10 " e | 17' 11" e | $16^{\prime} 10$ e | $16^{\prime} 10$ e | $16{ }^{\text {8 }}$ - | 15'4"e | 15'4"e | 15'4"e | 14' ${ }^{\prime \prime}$ e | $14^{\prime} 3^{\prime \prime}$ e | $14{ }^{\text {' }}$ " e | $13^{\prime \prime} 4^{\prime \prime}$ e | $13^{\prime \prime} 4^{\prime \prime}$ e | $13^{\prime \prime} 4^{\prime \prime}$ e |
|  | 24 | $17{ }^{\text {' }}$ " e | $17{ }^{\text {9" e }}$ | $17{ }^{\prime \prime}{ }^{\prime \prime} \mathrm{e}$ | 15 '4" e | 15 ' 4" e | $15{ }^{\text {' }}$ " e | $13^{\prime \prime}{ }^{\prime \prime}$ e | $13^{\prime \prime}{ }^{\prime \prime}$ e | $13^{\prime} 9$ e e | 12'6"e | 12'6"e | 12'6"e | 11' 7 " e | 11' 7 " e | 11'7" e | 10'10" e | 10' 10 " e | 10'10" e |
| 800S200-43 | 12 | $30^{\prime \prime} 1$ | $28^{\prime \prime} 1$ | 23' ${ }^{\prime \prime}$ | 26'1" e | 25' 6 " e | $21^{\prime \prime} 6^{\prime \prime}$ | $23^{\prime} 4$ " e | $23^{\prime} 4$ " e | 19'11"e | 21'4"e | 21'4"e | $18{ }^{\prime \prime} \mathrm{e}$ | 19' ${ }^{\prime \prime}$ e | 19'9"e | 17' 10" e | 18'5"e | 18'5"e | 17'1"e |
|  | 16 | 26'1" e | 25' 6 " e | 21' 6 " | $22^{\prime} 7$ " e | 22' 7 " e | 19' 6" e | 20' 2 " e | 20' 2 " e | $18{ }^{12} \mathrm{e}$ | $18{ }^{\text {5 }}$ " e | 18'5"e | 17'1" e | 17'1" e | 17'1"e | $16^{\prime} 2$ e | 16'0"e | $16^{\prime \prime} 0$ e | 15' 6 " e |
|  | 24 | 21'4" e | 21'4"e | $18^{\prime} 9$ e | $18{ }^{\prime} 5 \mathrm{e}$ e | $18{ }^{\prime \prime} 5 \mathrm{e}$ | $17^{\prime} 1$ e | $16^{\prime} 6$ ' e | $16^{\prime} 6$ ' e | $15^{\prime} 10$ e | 15'1"e | 15'1"e | 14'11"e | $13^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | $13^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | 13'11" e | $13^{\prime \prime} 1{ }^{\prime \prime} \mathrm{e}$ | $13^{\prime \prime} 1{ }^{\prime \prime} \mathrm{e}$ | $13{ }^{1 \prime \prime} \mathrm{e}$ |
| 800S200-54 | 12 | $34^{\prime \prime} 6^{\prime \prime}$ | 30' ${ }^{\prime \prime}$ | $25^{\prime \prime} 5^{\prime \prime}$ | $31^{\prime \prime} 4^{\prime \prime}$ | $27^{\prime \prime}{ }^{\prime \prime}$ | 23'1" | $29^{\prime \prime} 1$ | $25^{\prime \prime} 5^{\prime \prime}$ | 21' ${ }^{\prime \prime}$ | 27' 5" | 23' 11" | 20' $2^{\prime \prime}$ | $26^{\prime \prime} 0^{\prime \prime}$ | 22'9" | $19^{\prime \prime}{ }^{\prime \prime}$ | $24^{\prime \prime}{ }^{\prime \prime}$ | 21'9" | $18^{\prime \prime}{ }^{\prime \prime}$ |
|  | 16 | $31{ }^{\prime \prime}$ | 27' 5" | $23^{\prime \prime} 1$ | $28^{\prime \prime} 6^{\prime \prime}$ | 24' 10" | 21'0" | $26^{\prime \prime} 5^{\prime \prime}$ | 23'1" | $19^{\prime \prime} \mathbf{6 ' ~}^{\prime \prime}$ | $24^{\prime \prime} 7$ | 21'9" | $18^{\prime \prime} \mathbf{4 '}^{\prime \prime}$ | 22' 9" | $20^{\prime \prime} 8^{\prime \prime}$ | 17' 5" | 21'3" | 19' ${ }^{\prime \prime}$ | $16^{\prime \prime} 8^{\prime \prime}$ |
|  | 24 | 27' 5" | 23' 11" | 20' ${ }^{\prime \prime}$ | $24^{\prime \prime} 7^{\prime \prime}$ | 21'9" | $18^{\prime \prime} 4^{\prime \prime}$ | $22^{\prime \prime} 0^{\prime \prime}$ | 20' ${ }^{\prime \prime}$ | $17^{\prime \prime} 0^{\prime \prime}$ | 20'1"e | $19^{\prime \prime} 0^{\prime \prime}$ | $16^{\prime \prime} 0$ | $18^{\prime} 7$ " e | $18^{\prime \prime} 0$ e | $15^{\prime \prime}{ }^{\prime \prime}$ | $17^{\prime \prime} \mathbf{l ' ~}^{\text {e }}$ | $17^{\prime \prime} 3^{\prime \prime} \mathrm{e}$ | $14^{\prime} 7$ " e |
| 800S200-68 | 12 | 37'1' | $32^{\prime \prime}{ }^{\prime \prime}$ | 27'4" | $33^{\prime \prime} 8^{\prime \prime}$ | $29^{\prime \prime}{ }^{\prime \prime}$ | 24' 10" | $31{ }^{\prime \prime}$ | $27^{\prime \prime}{ }^{\prime \prime}$ | 23'0" | 29'5" | $25^{\prime \prime} 8^{\prime \prime}$ | 21'8" | 27' 11" | $24^{\prime \prime}{ }^{\prime \prime}$ | 20' 7 " | 26' 9" | 23'4" | $19^{\prime \prime} 8^{\prime \prime}$ |
|  | 16 | $33^{\prime \prime} 8^{\prime \prime}$ | $29^{\prime \prime}{ }^{\prime \prime}$ | 24' 10" | $30^{\prime \prime} 7$ | 26'9" | $22^{\prime \prime}{ }^{\prime \prime}$ | $28^{\prime \prime}{ }^{\prime \prime}$ | 24' 10" | 20' 11" | 26'9" | $23^{\prime \prime} \mathbf{\prime \prime}^{\prime \prime}$ | $19^{\prime \prime} 8^{\prime \prime}$ | 25'4" | 22' ${ }^{\prime \prime}$ | $18^{\prime \prime} 8^{\prime \prime}$ | $24^{\prime \prime} 3^{\prime \prime}$ | 21'2" | 17' 11" |
|  | 24 | 29' 5" | 25' $8^{\prime \prime}$ | 21'8" | 26' 9 " | 23' ${ }^{\prime \prime}$ | $19^{\prime \prime} 8^{\prime \prime}$ | 24' 10" | 21'8" | $18^{\prime \prime} 3^{\prime \prime}$ | $23^{\prime \prime}{ }^{\prime \prime}$ | 20' ${ }^{\prime \prime}$ | 17' 2 " | 21'8" | 19'4" | $16^{\prime \prime} 4^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | 18' 6 " | 15' 7 " |
| 800S200-97 | 12 | $41^{\prime \prime}{ }^{\prime \prime}$ | $36^{\prime \prime} 0^{\prime \prime}$ | $30^{\prime \prime} \mathbf{\prime \prime}^{\prime \prime}$ | $37^{\prime \prime} 5^{\prime \prime}$ | 32 8" | 27' 7 " | 34'9" | $30^{\prime \prime}{ }^{\prime \prime}$ | 25'7" | 32 8" | 28'7" | 24'1" | $31{ }^{\prime \prime}$ | 27' ${ }^{\prime \prime}$ | 22' 11" | 29'9" | 25' 11" | 21' 11" |
|  | 16 | 37' 5" | $32^{\prime \prime} 8$ | 27' 7" | $34^{\prime \prime} 0$ | 29'9" | 25' 1" | $31{ }^{\prime} 7{ }^{\prime \prime}$ | 27' 7" | 23' ${ }^{\prime \prime}$ | 29'9" | 25' 11" | 21' 11" | 28' ${ }^{\prime \prime}$ | $24^{\prime \prime} 8^{\prime \prime}$ | 20'10" | 27' 0 " | 23' 7" | 19' 11" |
|  | 24 | $32^{\prime \prime} 8$ | $28^{\prime \prime} 7$ | $24^{\prime \prime} 1{ }^{\prime \prime}$ | 29'9" | 25' 11" | 21' 11" | $27^{\prime \prime}{ }^{\prime \prime}$ | $24^{\prime \prime} 1{ }^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | 25' 11" | $22^{\prime \prime} 8^{\prime \prime}$ | $19^{\prime \prime} 1{ }^{\prime \prime}$ | $24^{\prime \prime} 8^{\prime \prime}$ | $21^{\prime \prime}{ }^{\prime \prime}$ | $18^{\prime \prime}{ }^{\prime \prime}$ | $23^{\prime} 7{ }^{\prime \prime}$ | $20^{\prime \prime} 7$ | $17^{\prime \prime}{ }^{\prime \prime}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 800S250-43 | 12 | 30' 11" | $29^{\prime \prime}{ }^{\prime \prime}$ | $24^{\prime \prime}{ }^{\prime \prime}$ | 26'9"e | 26'7" e | $22^{\prime \prime}{ }^{\prime \prime}$ | 23'11" e | 23'11"e | 20'10" e | 21'10" e | 21'10" e | $19^{\prime \prime} 7$ e | 20'3" e | 20'3" e | $18^{\prime} 7$ " e | 18'11"e | 18' 11"e | $17^{\prime} 10$ e |
|  | 16 | 26' 9" e | 26' 7" e | 22' ${ }^{\prime \prime}$ | 23' ${ }^{\prime \prime}$ e | 23' ${ }^{\prime \prime}$ e | 20' 4" e | 20' 9"e | 20' 9"e | 18'11" e | $18^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | $18^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | 17' 10" e | $17^{\prime} 6$ ' e | $17{ }^{\prime} 6$ e | 16' 11" e | 16'5"e | 16' 5" e | 16'2" e |
|  | 24 | 21'10"e | 21'10"e | 19'7" e | $18^{\prime} 11$ e | $18^{\prime \prime} 11$ e | 17' 10"e | $16^{\prime} 11{ }^{\prime \prime} \mathrm{e}$ | $16^{\prime \prime} 11$ e | $16^{\prime} 6$ e | $15{ }^{\text {5 }}$ " e | $15{ }^{\text {5 }}$ " e | $15{ }^{\text {' }}$ " e | $14^{\prime} 4$ " e | $14^{\prime \prime} 4^{\prime \prime}$ e | $14^{\prime} 4$ " e | 13' 5" e | $13{ }^{\text {' }}$ " e | 13' 5" e |
| 800S250-54 | 12 | 35' 10" | $31{ }^{\prime \prime}{ }^{\prime \prime}$ | 26' $5^{\prime \prime}$ | $32{ }^{\prime \prime}$ | $28^{\prime \prime} 5^{\prime \prime}$ | $24^{\prime \prime} 0^{\prime \prime}$ | 30' ${ }^{\prime \prime}$ | $26^{\prime \prime}{ }^{\prime \prime}$ | $22^{\prime \prime}{ }^{\prime \prime}$ | 28' ${ }^{\prime \prime}$ | 24' 10" | 21'0" | 26' 11" | 23' 7 " | 19'11" | 25' $2^{\prime \prime}$ | 22' 7 " | $19^{\prime \prime} 1$ |
|  | 16 | 32' 7 " | 28' ${ }^{\prime \prime}$ | $24^{\prime \prime} 0^{\prime \prime}$ | 29'7" | 25' 10" | 21' 10" | 27 ' ${ }^{\prime \prime}$ | $24^{\prime \prime} 0^{\prime \prime}$ | $20^{\prime \prime} 3^{\prime \prime}$ | 25' ${ }^{\prime \prime}$ | 22' 7 " | 19'1" | $23^{\prime \prime} 3^{\prime \prime}$ | 21' 5" | $18^{\prime \prime} 1{ }^{\prime \prime}$ | 21'9"e | 20' 6" | 17' 4" |
|  | 24 | $28^{\prime \prime}{ }^{\prime \prime}$ | 24' 10" | 21'0" | 25' 2 " | 22' 7 " | 19'1" | 22' 6 " | 21'0" | $17{ }^{\prime \prime}$ | 20'6"e | 19'9"e | $16^{\prime \prime} 8$ | 19' 0"e | 18' 9'e | 15' 10" | $17{ }^{\text {' }}$ e | $17{ }^{\text {' }}$ " e | $15{ }^{\prime \prime}$ e |
| 800S250-68 | 12 | $38^{\prime \prime} 8^{\prime \prime}$ | 33' ${ }^{\prime \prime}$ | $28^{\prime \prime} 6^{\prime \prime}$ | 35'1" | $30^{\prime \prime}{ }^{\prime \prime}$ | 25' 10" | $32^{\prime \prime} 7$ | $28^{\prime \prime} 6^{\prime \prime}$ | $24^{\prime \prime} 0^{\prime \prime}$ | $30^{\prime \prime} 8^{\prime \prime}$ | 26'10" | $22^{\prime \prime} 7$ | 29' ${ }^{\prime \prime}$ | $25^{\prime \prime}{ }^{\prime \prime}$ | 21'6" | 27' 10" | 24'4" | 20' 6" |
|  | 16 | 35'1" | 30' $8^{\prime \prime}$ | $25^{\prime} 10{ }^{\prime \prime}$ | 31' 11" | $27^{\prime} 10$ | 23' 6" | 29'7" | 25' 10 " | 21' 10" | 27' 10" | 24'4" | $20^{\prime \prime}{ }^{\prime \prime}$ | 26'6" | 23'1" | 19'6" | $25^{\prime \prime} 4^{\prime \prime}$ | $22^{\prime \prime} 1$ | $18^{\prime \prime} 8^{\prime \prime}$ |
|  | 24 | 30' $8^{\prime \prime}$ | 26' 10" | 22' 7 " | 27' 10" | 24'4" | $20^{\prime \prime} 6^{\prime \prime}$ | 25' 10" | 22'7" | 19'1" | 24'0" | 21'3" | 17' 11" | $22^{\prime \prime}{ }^{\prime \prime}$ | 20' 2 " | $17^{\prime \prime} 0^{\prime \prime}$ | 20' 10" | 19'4" | $16^{\prime \prime} 4^{\prime \prime}$ |
| 800S250-97 | 12 | $43^{\prime \prime} 1{ }^{\prime \prime}$ | 37' 7 " | 31' 9" | 39' ${ }^{\prime \prime}$ | 34' ${ }^{\prime \prime}$ | 28' 10 " | $36^{\prime \prime} 4^{\prime \prime}$ | 31' 9" | 26'9" | $34^{\prime \prime}$ | 29'10" | 25' ${ }^{\prime \prime}$ | $32{ }^{\prime \prime}{ }^{\prime \prime}$ | $28^{\prime \prime}{ }^{\prime \prime}$ | 23' 11" | $31^{\prime \prime} 1$ | 27' ${ }^{\prime \prime}$ | 22' 11" |
|  | 16 | 39' ${ }^{\prime \prime}$ | 34' ${ }^{\prime \prime}$ | 28' $10^{\prime \prime}$ | $35^{\prime \prime} 7$ | 31' 1" | 26' ${ }^{\prime \prime}$ | $33^{\prime} 0{ }^{\prime \prime}$ | 28' 10" | $24^{\prime \prime} 4^{\prime \prime}$ | 31' 1" | 27' 2 " | 22' 11" | 29' ${ }^{\prime \prime}$ | 25' 9" | 21'9" | $28^{\prime \prime} 3^{\prime \prime}$ | 24' "' $^{\prime \prime}$ | 20' 9" |
|  | 24 | $34^{\prime \prime} 2$ | 29'10" | $25^{\prime \prime}$ | $31{ }^{\prime \prime}$ | 27' 2" | 22' 11" | 28'10" | $25^{\prime \prime}$ | $21^{\prime \prime}{ }^{\prime \prime}$ | 27' 2" | 23' 8 " | 20' 0 " | $25^{\prime \prime}{ }^{\prime \prime}$ | $22^{\prime \prime}{ }^{\prime \prime}$ | $19^{\prime \prime} 0$ | $24^{\prime \prime} 8$ | 21' 6 " | $18^{\prime \prime}{ }^{\prime \prime}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 800S300-54 | 12 | 36'7" | $32^{\prime \prime} 0$ | $27^{\prime \prime} 0$ | $33^{\prime \prime} 3^{\prime \prime}$ | 29'1" | $24^{\prime \prime} 6^{\prime \prime}$ | 30' 11" | $27^{\prime \prime} 0$ | 22'9" | 29'1" | 25' 5" | 21' 5" | $27^{\prime \prime}{ }^{\prime \prime}$ | 24'1" | 20'4" | 25' ${ }^{\prime \prime}$ | 23'1" | $19^{\prime \prime} 5^{\prime \prime}$ |
|  | 16 | $33^{\prime \prime} 3^{\prime \prime}$ | 29'1" | $24^{\prime \prime}{ }^{\prime \prime}$ | $30^{\prime \prime} 3^{\prime \prime}$ | 26' "' $^{\prime \prime}$ | $22^{\prime \prime} 3^{\prime \prime}$ | 27' 11" | $24^{\prime \prime}{ }^{\prime \prime}$ | 20' $8^{\prime \prime}$ | $25^{\prime \prime}{ }^{\prime \prime}$ | 23'1" | 19' 5" | 23' 7 " | 21' 11" | 18' $6^{\prime \prime}$ | 22'1"e | 20'11" | $17{ }^{\prime \prime}$ |
|  | 24 | 29'1" | 25' 5" | 21'5" | 25' $6^{\prime \prime}$ | 23'1" | $19^{\prime \prime} 5^{\prime \prime}$ | 22'10" | 21'5" | $18^{\prime \prime} 1$ | 20'10" e | 20' ${ }^{\prime \prime} \mathrm{e}$ | $17^{\prime \prime} 0$ | 19' 3" e | 19' ${ }^{\prime \prime} \mathrm{e}$ | $16^{\prime \prime}$ | $18^{\prime \prime} 0$ e | $18^{\prime \prime} 0$ e | 15' 5" e |
| 800S300-68 | 12 | 39' 9" | 34' 9" | 29'4" | 36' ${ }^{\prime \prime}$ | 31'7" | $26^{\prime \prime}{ }^{\prime \prime}$ | 33' 7 " | $29^{\prime \prime} 4^{\prime \prime}$ | 24'9" | 31'7" | 27' 7 " | 23' ${ }^{\prime \prime}$ | $30^{\prime \prime} 0^{\prime \prime}$ | 26' ${ }^{\prime \prime}$ | $22^{\prime \prime} 1$ | $28^{\prime \prime} 8^{\prime \prime}$ | 25'1" | 21' ${ }^{\prime \prime}$ |
|  | 16 | 36' 2 " | 31'7" | $26^{\prime \prime} 8$ | 32' 10" | 28' 8 " | 24' ${ }^{\prime \prime}$ | $30^{\prime \prime} 6^{\prime \prime}$ | 26' $8^{\prime \prime}$ | 22' $\mathbf{6 \prime}^{\prime \prime}$ | $28^{\prime \prime} 8^{\prime \prime}$ | 25'1" | 21'2" | $27^{\prime \prime}{ }^{\prime \prime}$ | 23' 10" | 20'1" | 25' 11" | 22' 9" | 19' 2 " |
|  | 24 | 31'7" | 27' 7 " | $23^{\prime \prime} 3^{\prime \prime}$ | $28^{\prime \prime} 8^{\prime \prime}$ | 25'1" | 21' 2 " | $26^{\prime \prime} 8^{\prime \prime}$ | $23^{\prime \prime} 3^{\prime \prime}$ | $19^{\prime} 7{ }^{\prime \prime}$ | $24^{\prime \prime} 5^{\prime \prime}$ | 21' 11" | $18^{\prime \prime} 6^{\prime \prime}$ | 22'7" | 20' 10" | $17^{\prime} 6^{\prime \prime}$ | 21' 2 " | 19' 11" | $16^{\prime \prime} 9$ |
| 800S300-97 | 12 | $44^{\prime \prime} 7$ | 38' 11" | 32' 10" | $40^{\prime \prime} 6^{\prime \prime}$ | 35'4" | 29'10" | 37' 7" | 32' 10" | 27' $8^{\prime \prime}$ | 35'4" | 30' 11" | $26^{\prime \prime} 1$ | $33^{\prime \prime} 7$ | 29'4" | 24'9" | $32{ }^{\prime \prime}$ | 28'1" | 23' "' $^{\prime \prime}$ |
|  | 16 | 40' 6" | $35^{\prime \prime} 4$ | 29' 10" | 36' 9" | $32{ }^{\prime \prime}$ | 27' 1" | $34^{\prime \prime}{ }^{\prime \prime}$ | 29'10" | 25' 2 " | $32{ }^{\prime \prime}$ | 28' 1" | 23' 8" | 30' 6 " | 26' 8" | 22' 6 " | 29' 2 " | $25^{\prime \prime}{ }^{\prime \prime}$ | 21' 6" |
|  | 24 | $35^{\prime \prime} 4^{\prime \prime}$ | 30' 11" | $26^{\prime \prime} 1{ }^{\prime \prime}$ | $32^{\prime \prime}$ | 28' 1 " | $23^{\prime \prime} 8^{\prime \prime}$ | 29' 10" | $26^{\prime \prime} 1$ | $22^{\prime \prime}{ }^{\prime \prime}$ | $28^{\prime \prime} 1$ | $24^{\prime \prime}{ }^{\prime \prime}$ | $20^{\prime \prime}{ }^{\prime \prime}$ | $26^{\prime \prime} 8^{\prime \prime}$ | $23^{\prime \prime}{ }^{\prime \prime}$ | $19^{\prime \prime} 8^{\prime \prime}$ | $25^{\prime \prime} 6^{\prime \prime}$ | $22^{\prime \prime}{ }^{\prime \prime}$ | 18' $10^{\prime \prime}$ |

See page 27 for clarification of code developed wind pressures prior to using this table.

Notes:
1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the
unperforated section and shear moment interaction through the perforated
section 10 " away from the section 10 " away from the end bearing.
2 A $1 / 3$ stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.

5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by " e ".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than 24 " o.c. is assumed. (3/4" for
$2-1 / 2^{\prime \prime}$ studs) $2-1 / 2^{\prime \prime}$ studs)


## Notes:

1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10 "away from the end bearing.
2 A $1 / 3$ stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.

5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by "e".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for $2-1 / 2^{\prime \prime}$ studs)

9 All values are based on $\mathrm{Fy}=33$ ksi for 33 mil and 43 mil Studs, and $\mathrm{Fy}=50 \mathrm{ksi}$ for 54 mil, 68 mil and 97 mil Studs.
10 For deflection calculations, 15 psf and higher wind pressures have been multiplied by 0.7 , in accordance with footnote " $f$ " of IBC table 1604.3 The 5 psf pressure has not been reduced for deflection checks.
11 Lateral loads have not been modified for strength checks. Full loads are applied.
12 End reactions must be checked for web crippling separately.


See page 27 for clarification of code developed wind pressures prior to using this table.

Notes:
1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated
section 10 "away from the section 10 " away from the end bearing.
2 A $1 / 3$ stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.

5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by "e".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for 2-1/2" studs)

9 All values are based on $\mathrm{Fy}=33 \mathrm{ksi}$ for 33 mil and 43 mil Studs, and $\mathrm{Fy}=50 \mathrm{ksi}$ for 54 mil, 68 mil and 97 mil Studs.

10 For deflection calculations, 15 psf and higher wind pressures have been multiplied by 0.7 , in accordance with footnote " $f$ " of IBC table 1604.3 The 5 psf pressure has not been reduced for deflection checks.
11 Lateral loads have not been modified for strength checks. Full loads are applied.
12 End reactions must be checked for web crippling separately.

|  | Spacing (in) |  | 15psf |  | 20 psf |  |  | 25psf |  |  | 30psf |  |  | 35psf |  |  | 40psf |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member | o.c. | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 | L/240 | L/360 | L/600 |
| 1200S162-54 ${ }^{1}$ | 12 | $44^{\prime \prime} 8$ | 39'1" | 32' 11" | 38' 10" | $35^{\prime \prime} \mathbf{6 \prime}^{\prime \prime}$ | 29' 11" | 34' 9" | 32' 11" | 27' 9" | $31^{\prime \prime} 8$ | $31^{\prime \prime} 0^{\prime \prime}$ | $26^{\prime \prime}$ | 29'4"e | $29^{\prime} 4$ " e | 24' 10" | $27{ }^{\text {5 }}$ - e | 27' 5" e | 23' "' $^{\prime \prime}$ |
|  | 16 | 38'10" | $35^{\prime \prime} 6^{\prime \prime}$ | 29'11" | 33' 7 " | 32 3" | 27' 2 " | 30' 1" | 29' 11" | $25^{\prime \prime} 3^{\prime \prime}$ | 27 '5" e | 27' 5" e | 23' 9 " | 25'5" e | 25' 5" e | 22'7" e | 23' 9" e | 23' 9" e | 21'7" e |
|  | 24 | $31{ }^{\prime \prime} 8$ | 31' 0" | 26' 2 " | $27^{\prime} 5$ " e | $27^{\prime} 5 \mathrm{e}$ e | 23' 9" | 24'7" e | 24'7" e | $22{ }^{\prime \prime} 1$ e | 22 5" e | 22'5" e | 20' 9" e | 20' 9"e | 20' 9" e | 19' 8 " e | 19'5" e | 19'5" e | 18'10" e |
| 1200S162-68 | 12 | $48^{\prime \prime} 7$ | $42^{\prime \prime} 6^{\prime \prime}$ | 35' 10 " | 44' ${ }^{\prime \prime}$ | 38'7" | 32'6" | $41^{\prime \prime} 0$ | 35' 10 " | $30^{\prime \prime}{ }^{\prime \prime}$ | 37' ${ }^{\prime \prime}$ | $33^{\prime \prime} 8^{\prime \prime}$ | 28' ${ }^{\prime \prime}$ | 34' 10" | $32^{\prime} 0$ | $27^{\prime} 0$ | $32^{\prime \prime} 7$ | 30'7" | $25^{\prime} 10^{\prime \prime}$ |
|  | 16 | 44' ${ }^{\prime \prime}$ | 38'7" | $32^{\prime \prime} 6^{\prime \prime}$ | 39' 11" | $35^{\prime \prime} 1{ }^{\prime \prime}$ | 29'7" | $35^{\prime \prime} 8^{\prime \prime}$ | $32^{\prime \prime} 6^{\prime \prime}$ | $27^{\prime \prime} 5^{\prime \prime}$ | $32 \cdot 7$ ' | $30^{\prime \prime} 7$ | 25' 10" | 30' 2 " | 29'1" | $24^{\prime \prime} 6^{\prime \prime}$ | $28^{\prime \prime} 3^{\prime \prime}$ | 27' 10" | 23' ${ }^{\prime \prime}$ |
|  | 24 | $37{ }^{\prime \prime}$ | $33^{\prime \prime} 8^{\prime \prime}$ | 28' ${ }^{\prime \prime}$ | $32^{\prime \prime} 7$ | 30' 7 " | 25' 10 " | 29'2" | $28^{\prime \prime} 5^{\prime \prime}$ | $24^{\prime \prime}{ }^{\prime \prime}$ | 26' 7" e | 26' 7 " e | 22'7" | 24' 8"e | 24' 8" e | 21'5" | $23^{\prime} 0$ e | 23' ${ }^{\prime \prime}$ e | 20' 6" e |
| 1200S162-97 | 12 | $55^{\prime \prime} 1{ }^{\prime \prime}$ | $48^{\prime \prime} 1{ }^{\prime \prime}$ | $40^{\prime \prime} 7$ | $50^{\prime \prime} 0$ | $43^{\prime \prime} 8^{\prime \prime}$ | 36' 10" | $46^{\prime \prime} 5^{\prime \prime}$ | $40^{\prime \prime} 7$ | $34^{\prime \prime} 3^{\prime \prime}$ | $43^{\prime \prime} 8^{\prime \prime}$ | 38' ${ }^{\prime \prime}$ | $32{ }^{\prime \prime}$ | $41^{\prime} 6{ }^{\prime \prime}$ | $36^{\prime \prime} 3^{\prime \prime}$ | 30'7" | 39'8" | $34^{\prime \prime} 8^{\prime \prime}$ | 29'3" |
|  | 16 | $50^{\prime \prime} 0$ | $43^{\prime \prime} 8$ | 36' 10" | $45^{\prime \prime} 5^{\prime \prime}$ | 39' 8 " | $33^{\prime \prime} 6^{\prime \prime}$ | 42' ${ }^{\prime \prime}$ | 36' 10" | 31'1" | $39^{\prime \prime} 8^{\prime \prime}$ | $34{ }^{\prime \prime}$ | 29' ${ }^{\prime \prime}$ | 37' 9" | 32' 11" | 27' 9" | $36^{\prime \prime} 1{ }^{\prime \prime}$ | $31^{\prime \prime} 6^{\prime \prime}$ | 26'7" |
|  | 24 | $43^{\prime \prime} 8$ | $38^{\prime \prime} 2^{\prime \prime}$ | $32{ }^{\prime \prime}$ | $39^{\prime \prime} 8$ | $34^{\prime \prime} 8^{\prime \prime}$ | $29^{\prime \prime}{ }^{\prime \prime}$ | $36^{\prime} 10{ }^{\prime \prime}$ | $32{ }^{\prime \prime}$ | 27 ' ${ }^{\prime \prime}$ | $34^{\prime \prime}{ }^{\prime \prime}$ | $30^{\prime \prime} 4^{\prime \prime}$ | $25^{\prime \prime} 7$ | $31^{\prime} 10^{\prime \prime}$ | $28^{\prime \prime} 9$ | $24^{\prime \prime}{ }^{\prime \prime}$ | 29' 10" | $27^{\prime \prime} 6^{\prime \prime}$ | $23^{\prime \prime}{ }^{\prime \prime}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1200S200-54 ${ }^{1}$ | 12 | 46' 9" | 40' 10" | $34^{\prime \prime}{ }^{\prime \prime}$ | 42' ${ }^{\prime \prime}$ | $37^{\prime \prime} 1{ }^{\prime \prime}$ | $31^{\prime \prime} 3^{\prime \prime}$ | $37^{\prime \prime} 8^{\prime \prime}$ | $34^{\prime \prime}{ }^{\prime \prime}$ | 29'0" | 34'5" e | $32{ }^{\prime \prime}$ | $27^{\prime \prime} 4^{\prime \prime}$ | 31' 10" e | 30' 9" e | 25' 11" | 29'10" e | 29'5"e | 24' 10" |
|  | 16 | 42' ${ }^{\prime \prime}$ | 37' 1" | $31{ }^{\prime \prime}$ | 36' 6 " | $33^{\prime \prime} 8^{\prime \prime}$ | 28' ${ }^{\prime \prime}$ | 32' 8" e | 31'3" e | 26' ${ }^{\prime \prime}$ | 29'10" e | 29'5" e | 24' 10" | 27' 7' e | 27'7" e | 23' 7 " e | 25'10" e | 25' 10 " e | 22' 7 " e |
|  | 24 | 34'5" e | $32{ }^{\prime \prime}$ | $27^{\prime \prime} 4^{\prime \prime}$ | 29'10" e | 29'5" e | 24' 10" | $26^{\prime} 8$ e e | 26' 8" e | 23'1" e | 24'4"e | 24'4"e | 21' 8" e | 22'6"e | 22' 6" e | 20' 7 " e | 21'1"e | 2111"e | 19'8" e |
| 1200S200-68 | 12 | $50^{\prime \prime} 8$ | $44^{\prime \prime} 3^{\prime \prime}$ | 37' 4" | $46^{\prime \prime} 1{ }^{\prime \prime}$ | $40^{\prime \prime} 3^{\prime \prime}$ | 33' 11" | 42' 9" | $37^{\prime \prime} \mathbf{\prime \prime}^{\prime \prime}$ | $31^{\prime \prime} 6^{\prime \prime}$ | $40^{\prime} 3^{\prime \prime}$ | 35' ${ }^{\prime \prime}$ | 29'8" | $37^{\prime \prime}{ }^{\prime \prime}$ | $33^{\prime \prime} 5^{\prime \prime}$ | 28' 2 " | 35' ${ }^{\prime \prime}$ | 31' 11" | 26' 11" |
|  | 16 | $46^{\prime \prime} 1{ }^{\prime \prime}$ | $40^{\prime \prime} 3^{\prime \prime}$ | 33' 11" | 41' 10" | $36^{\prime \prime} 7$ | $30^{\prime} 10 "$ | $38^{\prime} 7{ }^{\prime \prime}$ | 33' 11" | 28'7" | 35' ${ }^{\prime \prime}$ | 31' 11" | 26' 11" | $32{ }^{\prime \prime}$ | $30^{\prime \prime} 4^{\prime \prime}$ | 25' 7 " | $30^{\prime} 6$ " e | $29^{\prime \prime} 0^{\prime \prime}$ | $24^{\prime \prime} 6^{\prime \prime}$ |
|  | 24 | 40'3" | $35^{\prime \prime} 2$ | 29'8" | 35' 2 " | 31' 11" | 26' 11" | 31'6" e | 29'8" | $25^{\prime \prime} 0^{\prime \prime}$ | $28{ }^{\prime \prime} 9$ e | $27^{\prime} 11$ " e | 23' $6^{\prime \prime}$ | 26' 7' e | 26' 6 " e | $22^{\prime \prime}$ " $^{\prime}$ | 24'11"e | 24'11"e | 21' 5" e |
| 1200S200-97 | 12 | 57' 4" | $50^{\prime \prime} 1$ | $42^{\prime \prime} 3^{\prime \prime}$ | $52^{\prime \prime} 1{ }^{\prime \prime}$ | $45^{\prime \prime} 6^{\prime \prime}$ | $38^{\prime \prime}{ }^{\prime \prime}$ | $48^{\prime \prime} 4^{\prime \prime}$ | $42^{\prime \prime} 3^{\prime \prime}$ | 35' 8 " | $45^{\prime} 6{ }^{\prime \prime}$ | 39' 9" | $33^{\prime \prime} 6^{\prime \prime}$ | $43^{\prime \prime}{ }^{\prime \prime}$ | 37' 9' | 31' 10" | $41^{\prime \prime}{ }^{\prime \prime}$ | $36^{\prime \prime} 1{ }^{\prime \prime}$ | $30^{\prime \prime}{ }^{\prime \prime}$ |
|  | 16 | $521^{\prime \prime}$ | $45^{\prime \prime} 6^{\prime \prime}$ | 38' 5" | 47' 4" | $41^{\prime \prime} 4^{\prime \prime}$ | $34^{\prime} 10 "$ | 43' 11" | $38^{\prime \prime}{ }^{\prime \prime}$ | $32^{\prime \prime} 4^{\prime \prime}$ | $41^{\prime \prime} 4^{\prime \prime}$ | $36^{\prime \prime} 1{ }^{\prime \prime}$ | $30^{\prime \prime} 6^{\prime \prime}$ | 39'3" | $34^{\prime \prime} 4^{\prime \prime}$ | 28'11" | $37^{\prime \prime}{ }^{\prime \prime}$ | 32' 10" | $27^{\prime \prime} 8^{\prime \prime}$ |
|  | 24 | $45^{\prime \prime}{ }^{\prime \prime}$ | 39' $9^{\prime \prime}$ | $33^{\prime \prime} 6^{\prime \prime}$ | $41^{\prime \prime}$ " $^{\prime \prime}$ | $36{ }^{\prime \prime}$ | $30^{\prime \prime} 6^{\prime \prime}$ | $38^{\prime \prime} 5^{\prime \prime}$ | $33^{\prime \prime} 6^{\prime \prime}$ | $28^{\prime \prime}{ }^{\prime \prime}$ | $36{ }^{\prime \prime}$ | $31{ }^{\prime} 7$ " | $26^{\prime \prime} 7$ | $34^{\prime \prime} 2^{\prime \prime}$ | 30' 0 " | $25^{\prime \prime}{ }^{\prime \prime}$ | $32^{\prime \prime} 0$ | $28^{\prime \prime} 8$ | $24^{\prime \prime}{ }^{\prime \prime}$ |
| $1200 S 250-541$$1200 S 250-68$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 12 | $48^{\prime \prime} 8$ | $42^{\prime \prime} 6^{\prime \prime}$ | 35' 10" | 43' 7 " | 38' 7 " | $32^{\prime \prime} 7$ | 38'11" | 35' 10" | 30' 3 " | 35' 7 " e | 33' 9" e | $28^{\prime \prime}{ }^{\prime \prime}$ | 32' 11" e | 32' 0" e | $27^{\prime \prime}$ | 30' 10" e | $30^{\prime \prime} 8$ e | 25'10" e |
|  | 16 | $43^{\prime} 7$ " | 38' 7 " | 32' 7 " | 37' 9" | 35' 1" | 29' 7 " | 33' 9" e | 32' 7" e | 27' 6 " | 30' 10" e | 30' 8" e | 25'10" e | 28' 6 " e | $28{ }^{6} 6$ e | 24'7" e | 26' 8 " e | 26' 8" e | 23' 6 " e |
|  | 24 | $35{ }^{\text {' 7" e }}$ | $33^{\prime} 9$ " e | $28^{\prime \prime} 5^{\prime \prime}$ | $30^{\prime} 10$ e | $30^{\prime} 8$ " e | 25' 10"e | $27^{\prime} 7$ " e | $27^{\prime} 7$ " | $24^{\prime} 0$ " e | 25' 2"e | 25' ${ }^{\prime \prime}$ e | 22' 7 " e | $23^{\prime} 3^{\prime \prime} \mathrm{e}$ | $23^{\prime} 3^{\prime \prime}$ e | 21'5" e | 21'9"e | 21'9"e | $20^{\prime} 6$ e |
|  | 12 | 52' 10" | $46^{\prime \prime} 1{ }^{\prime \prime}$ | 38' 11" | 48' 0 " | 41' 11" | $35^{\prime \prime} 4^{\prime \prime}$ | $44^{\prime \prime} 6^{\prime \prime}$ | $38^{\prime \prime} 11{ }^{\prime \prime}$ | 32' 10" | 41' 11" | 36' 7 " | 30' 11" | 38' 10" | 34' 9" | 29'4" | $36^{\prime \prime} 4^{\prime \prime}$ | $33^{\prime \prime}{ }^{\prime \prime}$ | 28'1" |
|  | 16 | 48' 0 " | 41' 11" | $35^{\prime} 4$ " | $43^{\prime} 7{ }^{\prime \prime}$ | 38'1" | $32{ }^{\prime \prime}$ | 39'10" | $35^{\prime \prime} 4^{\prime \prime}$ | 29'10" | 36'4" | $33^{\prime \prime}{ }^{\prime \prime}$ | 28'1" | 33' 8" e | 31'7" | $26^{\prime \prime} 8^{\prime \prime}$ | 31' 6 " e | 30' 3' e | $25^{\prime \prime}{ }^{\prime \prime}$ |
|  | 24 | 41' 11" | 36' 7 " | 30' 11" | $36^{\prime \prime} 4^{\prime \prime}$ | $33^{\prime \prime} 3^{\prime \prime}$ | 28'1" | 32' 6" e | 30' 11" | 26'1" | 29' 8" e | 29'1" e | 24' 6 " | 27' 6 " e | 27' 6" e | 23' 3" e | 25' 9" e | 25' 9" e | $22{ }^{\text {2 }}$ e |
| 1200S250-97 | 12 | $59^{\prime \prime} 7$ | $52^{\prime \prime} 0$ | 43' 11" | $54{ }^{\prime \prime}$ | $47^{\prime \prime}{ }^{\prime \prime}$ | 39'10" | $50^{\prime \prime} 3^{\prime \prime}$ | $43^{\prime} 11{ }^{\prime \prime}$ | $37^{\prime \prime} 0^{\prime \prime}$ | $47^{\prime \prime}{ }^{\prime \prime}$ | $41^{\prime \prime} \mathbf{4 '}^{\prime \prime}$ | 34' 10" | $44^{\prime} 11{ }^{\prime \prime}$ | 39' ${ }^{\prime \prime}$ | $33^{\prime \prime} 1^{\prime \prime}$ | 42' 11" | $37^{\prime \prime} 6^{\prime \prime}$ | $31^{\prime \prime} 8^{\prime \prime}$ |
|  | 16 | $54^{\prime \prime} 1{ }^{\prime \prime}$ | 47' 3" | 39' 10" | 49' ${ }^{\prime \prime}$ | 42' 11" | $36^{\prime \prime} 3^{\prime \prime}$ | $45^{\prime \prime} 8^{\prime \prime}$ | 39' 10" | $33^{\prime \prime} 8^{\prime \prime}$ | 42' 11" | $37{ }^{\prime \prime}$ | $31{ }^{\prime \prime} 8^{\prime \prime}$ | 40' 10" | $35^{\prime \prime} 8$ | $30^{\prime \prime} 1{ }^{\prime \prime}$ | 39'0" | $34^{\prime \prime} 1{ }^{\prime \prime}$ | 28'9" |
|  | 24 | $47{ }^{\prime \prime}{ }^{\prime \prime}$ | 41'4" | 34' 10" | 42' 11" | $37{ }^{\prime \prime}$ "' | $31{ }^{\prime \prime} 8^{\prime \prime}$ | $39^{\prime} 10^{\prime \prime}$ | 34' 10" | $29^{\prime \prime}{ }^{\prime \prime}$ | 371 ' ${ }^{\prime \prime}$ | 32 9" | 27 ' 8" | $35^{\prime \prime} 4^{\prime \prime}$ | 31' 2 " | $26^{\prime \prime}{ }^{\prime \prime}$ | $33^{\prime \prime} 1{ }^{\prime \prime}$ | 29' 9 " | $25^{\prime \prime} 1{ }^{\prime \prime}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1200S300-54 ${ }^{1}$ | 12 | 50' 10" | $44^{\prime \prime} 5^{\prime \prime}$ | $37^{\prime \prime} 5^{\prime \prime}$ | $44^{\prime \prime} 5^{\prime \prime}$ | $40^{\prime \prime} 4^{\prime \prime}$ | $34^{\prime \prime} 0^{\prime \prime}$ | 39' 9" | $37^{\prime \prime} 5^{\prime \prime}$ | $31^{\prime \prime} 7$ | $36{ }^{\prime \prime}$ e | $35^{\prime} 3$ " e | 29'9" | 33' 7" e | 33' 6" e | $28^{\prime \prime} 3^{\prime \prime}$ | 31'5" e | 31'5" e | 27'0" e |
|  | 16 | 44' 5" | 40' 4" | 34' 0" | $38^{\prime \prime} 5$ e | 36' $8^{\prime \prime}$ | 30' 11" | 34' 5" e | 34' 0 " e | 28' $8^{\prime \prime}$ | 31'5" e | 31'5" e | 27'0" e | 29'1" e | 29'1" e | 25' 8 " e | 27' 2 " e | 27' 2" e | 24'7" e |
|  | 24 | $36{ }^{\prime \prime}$ " e | $35^{\prime} 3^{\prime \prime} \mathrm{e}$ | 29'9" | $31{ }^{\prime \prime}{ }^{\prime \prime} \mathrm{e}$ | 31' 5" e | 27'0"e | 28'1" e | $28^{\prime} 1$ " e | 25'1" e | $25{ }^{\text {c }}$ " e | $25^{\prime} 8$ " e | 23' 7 " e | 23' 9"e | 23' 9" e | 22'5" e | 22' 2 " e | 22' ${ }^{\prime \prime}$ e | 21'5" e |
| 1200S300-68 | 12 | 54' 11" | $48^{\prime \prime} 0^{\prime \prime}$ | $40^{\prime \prime} 5^{\prime \prime}$ | 49' 11" | $43^{\prime} 7{ }^{\prime \prime}$ | 36' 9" | $46^{\prime \prime} 4^{\prime \prime}$ | $40^{\prime \prime} 5^{\prime \prime}$ | $34^{\prime \prime} 1{ }^{\prime \prime}$ | 42' 10" | $38^{\prime \prime} 1{ }^{\prime \prime}$ | $32^{\prime \prime} 1{ }^{\prime \prime}$ | $39^{\prime \prime} 8^{\prime \prime}$ | $36^{\prime \prime} 2^{\prime \prime}$ | $30^{\prime \prime}{ }^{\prime \prime}$ | $37^{\prime \prime} 1$ | $34^{\prime \prime}{ }^{\prime \prime}$ | 29' ${ }^{\prime \prime}$ |
|  | 16 | 49' 11" | $43^{\prime} 7{ }^{\prime \prime}$ | 36' 9" | $45^{\prime \prime}$ " $^{\prime}$ | 39'7" | 33' ${ }^{\prime \prime}$ | $40^{\prime} 7{ }^{\prime \prime}$ | 36' 9 " | $31^{\prime \prime} 0$ | 37' 1" | 34'7" | 29' ${ }^{\prime \prime}$ | 34'4"e | 32' 10" | 27' 9" | $32{ }^{1 \prime}$ e | 31'5" e | 26' 6 " |
|  | 24 | 42' 10" | $38^{\prime \prime} 1{ }^{\prime \prime}$ | $32{ }^{\prime \prime}$ | $37{ }^{\prime \prime}$ | $34{ }^{\prime \prime} 7$ | 29' ${ }^{\prime \prime}$ | 33' 2 " e | $32{ }^{\prime \prime} 1$ e | 27'1" | $30^{\prime} 3$ " e | 30' 3" e | 25' ${ }^{\prime \prime}$ | 28'0"e | $28^{\prime} 0$ e | 24' 2 " e | $26^{\prime} 3^{\prime \prime}$ e | $26{ }^{\prime \prime}$ " e | $23^{\prime} 2$ e |
| 1200S300-97 | 12 | 61' 5" | $53^{\prime \prime} 8$ | $45^{\prime \prime} 3^{\prime \prime}$ | 55' 9" | 48' $9^{\prime \prime}$ | 41' 1" | 51' 10" | $45^{\prime \prime} 3^{\prime \prime}$ | 38' 2 " | $48^{\prime \prime} 9$ | $42^{\prime \prime} 7{ }^{\prime \prime}$ | 35' 11" | 46' " $^{\prime \prime}$ | 40' 5"' | $34^{\prime \prime} 1{ }^{\prime \prime}$ | $44^{\prime \prime} 3^{\prime \prime}$ | $38^{\prime \prime} 8^{\prime \prime}$ | $32^{\prime \prime} 8^{\prime \prime}$ |
|  | 16 | $55^{\prime \prime}{ }^{\prime \prime}$ | $48^{\prime \prime} 9$ | 41' 1" | $50^{\prime \prime} 8$ | $44^{\prime \prime} 3^{\prime \prime}$ | 37' 4" | $47^{\prime \prime} 1{ }^{\prime \prime}$ | 41'1" | 34' 8 " | $44^{\prime \prime} 3^{\prime \prime}$ | $38^{\prime \prime} 8^{\prime \prime}$ | $32^{\prime \prime} 8$ | 42' 1" | 36' 9" | 31' 0 " | $40^{\prime \prime} 3^{\prime \prime}$ | $35^{\prime \prime} 2^{\prime \prime}$ | 29' $8^{\prime \prime}$ |
|  | 24 | $48^{\prime \prime} 9$ | $42^{\prime} 7$ " | 35' 11" | $44^{\prime \prime} 3^{\prime \prime}$ | $38^{\prime \prime} 8$ | 32 ' ${ }^{\prime \prime}$ | $41^{\prime \prime} 1{ }^{\prime \prime}$ | $35^{\prime \prime} 11{ }^{\prime \prime}$ | 30' 3" | $38^{\prime \prime} 8^{\prime \prime}$ | $33^{\prime} 10^{\prime \prime}$ | $28^{\prime \prime} 6^{\prime \prime}$ | $36^{\prime \prime} 1{ }^{\prime \prime}$ | 32 1" | $27^{\prime \prime} 1{ }^{\prime \prime}$ | $33^{\prime \prime}{ }^{\prime \prime}$ | $30^{\prime \prime} 8^{\prime \prime}$ | 25' 11" |

See page 27 for clarification of code developed wind pressures prior to using this table.
Notes:

1 Studs are checked for simple-span deflection and stress. Stress calculations are made for mid-span fully braced moment, end shear through the unperforated section and shear moment interaction through the perforated section 10 "away from the end bearing.
2 A $1 / 3$ stress increase is not used.
3 Limiting heights are based on continuous lateral support of each flange over the full height of the stud.
4 Listed limiting heights are based on steel properties only.

5 For bending, studs are assumed to be adequately braced to develop full allowable moment capacity. Stud distortional buckling based on an assumed $K \phi=0$.
6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by "e".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for $2-1 / 2^{\prime \prime}$ studs)

9 All values are based on $\mathrm{Fy}=33 \mathrm{ksi}$ for 33 mil and 43 mil Studs, and $\mathrm{Fy}=50 \mathrm{ksi}$ for 54 mil, 68 mil and 97 mil Studs.
10 For deflection calculations, 15 psf and higher wind pressures have been multiplied by 0.7 , in accordance with footnote " $f$ " of IBC table 1604.3. The 5 psf pressure has not been reduced for deflection checks.
11 Lateral loads have not been modified for strength checks. Full loads are applied.
12 End reactions must be checked for web crippling separately.


See page 27 for clarification of code developed wind pressures prior to using this table.

Notes:
1 Studs are checked for simple-span deflection and stress. Stress calculations Studs are checked for simple-span deflection and stress. Stress calcula
are made for mid-span fully braced moment, end shear through the
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6 Web crippling check based on 1 -inch end bearing. Web stiffeners are required when listed limiting heights are followed by " e ".
7 Members marked with an ${ }^{1}$ have $h / t>200$, and thus require end stiffeners.
8 Capacities are calculated according to the AISI S100-16 (2020) w/S2-20. A $1-1 / 2^{\prime \prime}$ by $4^{\prime \prime}$ knockout spaced no closer than $24^{\prime \prime}$ o.c. is assumed. (3/4" for 2-1/2" studs)

