## SUBH Bridging Connectors



**Simplified Design and Installation Through Innovation**
Simpson Strong-Tie® SUBH and MSUBH wall stud bridging connectors for cold-formed steel (CFS) framing offer a compact profile that allows standard 1 5/8" studs to be sistered directly against adjacent studs. The LSUBH connector provides the same installation benefits of the SUBH/MSUBH connectors, and is suitable for many wind- and load-bearing situations where the load demand is light to moderate. Many applications require only one screw, greatly reducing labor costs and increasing productivity.

### Key Features

- Tested to include stud-web strength and stiffness in the tabulated design values
- Design values ensure compliance with AISI S100 Sections C2.2.1 and C2.3 for axially and laterally-loaded studs
- Flexible design solutions for web thicknesses of 33 mil (20 ga.) through 97 mil (12 ga.) and stud sizes from 3 5/8" to 8"
- SUBH and LSUBH accommodate single studs 33 mil (20 ga.) to 54 mil (16 ga.)
- MSUBH accommodates single studs 54 mil (16 ga.) to 97 mil (12 ga.) and back-to-back built-up members ranging from 33 mil (20 ga.) to 54 mil (16 ga.)

### Material

- LSUBH3.25 — 33 mil (20 ga.); SUBH3.25 — 43 mil (18 ga.); MSUBH3.25 — 68 mil (14 ga.)

### Finish

- Galvanized (G90)

### Installation

- See gallery for installation images

### *Disclaimer*

Some specific models of this product might not be covered in the associated code reports. Please verify coverage for the models you wish to use

## Product Information Table

| Model No. | Thickness (mil) | Ga. | Coating/Material | Packaging Qty. |
|---|---|---|---|---|
| LSUBH3.25-R150 | 33 | 20 | Zinc Galvanized, G90 | 150 |
| MSUBH3.25-R100 | 68 | 14 | Zinc Galvanized, G90 | 100 |
| SUBH3.25-R150 | 43 | 18 | Zinc Galvanized, G90 | 150 |

## Load Tables

**SUBH Bridge Clip Connector — Strength and Stiffness**

| Model No. | Stud Depth (in.) | Stud Thickness mils (ga.) | Laterally Loaded C-Stud | | Axially Loaded C-Stud | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Allowable Torsional Moment[1] (in.-lb.) | | Allowable Brace Strength[1] (lb.) | | Brace Stiffness[2] (lb./in.) | |
| | | | Min. | Max. | Min. | Max. | Min. | Max. |
| LSUBH3.25 | 3.50 or 3.625 | 33 (20) | 200 | 310 | 145 | 260 | 4,050 | 4,225 |
| | | 43 (18) | 215 | 345 | 165 | 290 | 7,415 | 10,095 |
| | | 54 (16) | 210 | 345 | 185 | 325 | 7,415 | 14,780 |
| SUBH3.25 | | 33 (20) | 320 | 345 | 230 | 370 | 2,790 | 3,680 |
| | | 43 (18) | 355 | 430 | 255 | 420 | 5,130 | 6,435 |
| | | 54 (16) | 420 | 455 | 290 | 475 | 5,130 | 6,690 |
| MSUBH3.25 | | 54 (16) | 550 | 800 | 435 | 630 | 5,560 | 7,470 |
| | | 68 (14) | 640 | 860 | 485 | 695 | 10,055 | 12,785 |
| | | 97 (12) | 670 | 860 | 515 | 770 | 17,255 | 23,295 |
| LSUBH3.25 | 6.00 | 33 (20) | 210 | 310 | 115 | 130 | 1,010 | 1,185 |
| | | 43 (18) | 235 | 365 | 145 | 265 | 1,695 | 2,560 |
| | | 54 (16) | 245 | 365 | 170 | 305 | 1,695 | 3,365 |
| SUBH3.25 | | 33 (20) | 275 | 385 | 110 | 110 | 860 | 860 |
| | | 43 (18) | 295 | 525 | 230 | 250 | 1,750 | 1,940 |
| | | 54 (16) | 350 | 550 | 275 | 415 | 2,075 | 2,610 |
| MSUBH3.25 | | 54 (16) | 565 | 895 | 385 | 430 | 2,475 | 2,600 |
| | | 68 (14) | 655 | 925 | 455 | 620 | 3,255 | 4,015 |
| | | 97 (12) | 690 | 960 | 505 | 765 | 5,870 | 6,680 |
| LSUBH3.25 | 8.00 | 43 (18) | 225 | 350 | 125 | 125 | 985 | 1,005 |
| | | 54 (16) | 235 | 350 | 170 | 240 | 1,585 | 1,585 |
| SUBH3.25 | | 43 (18) | 255 | 570 | 190 | 190 | 885 | 885 |
| | | 54 (16) | 325 | 605 | 250 | 300 | 1,385 | 1,470 |
| MSUBH3.25 | | 54 (16) | 545 | 890 | 270 | 270 | 1,455 | 1,460 |
| | | 68 (14) | 635 | 925 | 435 | 455 | 2,110 | 2,110 |
| | | 97 (12) | 665 | 955 | 545 | 545 | 4,040 | 4,040 |
| MSUBH3.25 | 10, 12 | 54 (16) | — | 775 | — | 200 | — | 570 |

1. Allowable loads are for use when utilizing Allowable Stress Design methology. For LRFD loads multiply the ASD tabulated values by 1.6.
2. Brace stiffness is at 40% of ultimate load per test standard AISI S915-20. Tabulated values apply to both ASD and LRFD designs.
3. Allowable loads consider bridging connection only. It is responsibility of the designer to verify the strength and serviceability of the framing members.
4. "Min." fastener quantity and tabulated values — fill round hole (one screw total); "Max." fastener quantity and tabulated values — fill round and triangle holes (two screws total).

## Load Tables

**LSUBH — Maximum Vertical Spacing for Rows of U-Channel Bridging (ft.)**

| Stud Spacing (in.) | Stud Section | Stud Thickness mil (ga.) | Lateral Stud Pressure (psf) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | | 10 | | 15 | | 20 | | 25 | | 30 | | 35 | | 40 | | 45 | | 50 | |
| | | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| 16 | 362S162 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 5 | — | 4 | — | 4 |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 5 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 5 | — | 4 |
| | 362S200 | 33 (20) | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | 362S250 | 43 (18) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | — | 5 | — | 4 | — | 4 | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 5 | 8 | 4 | 7 | — | 5 | — | 4 | — | 4 | — | — | — | — | — | — |
| | 600S162 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | 4 | 6 | — | 5 | — | 4 |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 |
| | 600S200 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 |
| | 600S250 | 43 (18) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — | — | — |
| | 800S162 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 6 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 | 7 | 4 | 6 |
| | 800S200 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 5 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | — | 5 | — | 5 | — | 4 |
| | 800S250 | 43 (18) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | — | 5 | — | 5 | — | 4 | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — |
| 24 | 362S162<br>362S162<br>362S162 | 33 (20) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 6 | — | 5 | — | 4 | — | — | — | — | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | — | — | — | — | — |
| | 362S200<br>362S200<br>362S200 | 33 (20) | 8 | 8 | 6 | 8 | 4 | 7 | — | 5 | — | 4 | — | — | — | — | — | — | — | — | — | — |
| | | 43 (18) | 8 | 8 | 7 | 8 | 4 | 8 | — | 6 | — | 4 | — | 4 | — | — | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 7 | 8 | 4 | 8 | — | 6 | — | 4 | — | 4 | — | — | — | — | — | — | — | — |
| | 362S250<br>362S250 | 43 (18) | 8 | 8 | 6 | 8 | 4 | 6 | — | 4 | — | — | — | — | — | — | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 5 | 8 | — | 6 | — | 4 | — | — | — | — | — | — | — | — | — | — | — | — |
| | 600S162<br>600S162<br>600S162 | 33 (20) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | 600S200<br>600S200<br>600S200 | 33 (20) | 8 | 8 | 8 | 8 | 5 | 8 | 4 | 6 | — | 4 | — | 4 | — | — | — | — | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | — | 5 | — | 4 | — | 4 | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | — | 5 | — | 4 | — | 4 | — | — | — | — | — | — |
| | 600S250<br>600S250 | 43 (18) | 8 | 8 | 7 | 8 | 4 | 7 | — | 5 | — | 4 | — | — | — | — | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 7 | 8 | 5 | 7 | — | 5 | — | 4 | — | — | — | — | — | — | — | — | — | — |
| | 800S162<br>800S162 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 5 | — | 4 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 |
| | 800S200<br>800S200 | 43 (18) | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | — | 5 | — | 4 | — | — | — | — | — | — |
| | 800S250<br>800S250 | 43 (18) | 8 | 8 | 7 | 8 | 5 | 7 | — | 5 | — | 4 | — | — | — | — | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 5 | 8 | 4 | 6 | — | 4 | — | 4 | — | — | — | — | — | — | — | — |

1. See General Information and Notes.
2. Tabulated solutions are for ASD lateral pressure. Contact Simpson Strong-Tie for LRFD solutions.
3. Lateral pressure shall be determined based on load combinations of the applicable code. For designs in accordance with the 2009 IBC and earlier, wind pressures are at working stress level and may be used directly. For designs in accordance with the 2012 IBC and later, wind pressures are at strength level and must be multiplied by 0.6 for ASD load combinations.
4. "Min." designates a solution with the minimum number of fasteners ((1) #10 screw installed in round hole). "Max." designates a solution requiring the maximum number of fasteners ((2) #10 screws; fill both round and triangle holes). Blank areas designate conditions where the LSUBH does not offer a solution.

## Load Tables

**SUBH — Maximum Vertical Spacing for Rows of U-Channel Bridging (ft.)**

| Stud Spacing (in.) | Stud Section | Stud Thickness mil (ga.) | Lateral Stud Pressure (psf) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | | 10 | | 15 | | 20 | | 25 | | 30 | | 35 | | 40 | | 45 | | 50 | |
| | | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| 16 | 362S162 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 7 | 5 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 7 | 5 | 6 | 5 | 6 | 4 | 5 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 7 | 6 | 6 | 5 | 5 |
| | 362S200 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 6 | 5 | 5 | 4 | 4 | — | 4 | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 6 | 4 | 5 | 4 | 5 | — | 4 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 7 | 5 | 6 | 5 | 5 | 4 | 4 | 4 | 4 |
| | 362S250 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 6 | 4 | 5 | — | 4 | — | 4 | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 7 | 5 | 5 | 4 | 5 | 4 | 4 | — | — | — | — |
| | 600S162 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 5 | 7 | 4 | 6 | 4 | 5 |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | 4 | 7 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 5 | 8 |
| | 600S200 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | 4 | 7 | — | 6 | — | 5 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 6 |
| | 600S250 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 5 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | — | 6 | — | 5 | — | 4 |
| | 800S162 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | 4 | 8 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 6 | 8 | 5 | 8 |
| | 800S200 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | — | 8 | — | 7 | — | 7 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 5 | 8 | 4 | 8 | 4 | 7 |
| | 800S250 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 4 | 8 | 4 | 8 | — | 7 | — | 6 | — | 6 | — | 5 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | — | 7 | — | 6 | — | 5 |
| 24 | 362S162 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 7 | 5 | 5 | 4 | 4 | — | 4 | — | — | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 7 | 5 | 6 | 4 | 5 | — | 4 | — | 4 | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 6 | 6 | 5 | 5 | 4 | 4 | 4 | 4 | — | — |
| | 362S200 | 33 (20) | 8 | 8 | 8 | 8 | 6 | 7 | 5 | 5 | 4 | 4 | — | — | — | — | — | — | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 6 | 4 | 5 | — | 4 | — | — | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 7 | 5 | 5 | 4 | 4 | — | 4 | — | — | — | — | — | — |
| | 362S250 | 43 (18) | 8 | 8 | 8 | 8 | 6 | 7 | 4 | 5 | — | 4 | — | — | — | — | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 7 | 7 | 5 | 5 | 4 | 4 | — | — | — | — | — | — | — | — | — | — |
| | 600S162 | 33 (20) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 8 | 4 | 7 | — | 6 | — | 5 | — | 5 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 5 | 7 | 4 | 6 | — | 6 | — | 5 |
| | 600S200 | 33 (20) | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 7 | 4 | 5 | — | 4 | — | 4 | — | — | — | — | — | — |
| | | 43 (18) | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 5 | — | 4 | — | 4 |
| | 600S250 | 43 (18) | 8 | 8 | 8 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | — | — | — | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 6 | — | 5 | — | 4 | — | 4 | — | — | — | — |
| | 800S162 | 43 (18) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 8 | 4 | 8 | — | 7 | — | 7 | — | 6 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | 4 | 7 | — | 6 |
| | 800S200 | 43 (18) | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | — | 7 | — | 6 | — | 5 | — | 5 | — | 4 |
| | | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 8 | — | 7 | — | 6 | — | 5 | — | 5 |
| | 800S250 | 43 (18) | 8 | 8 | 8 | 8 | 5 | 8 | 4 | 8 | — | 7 | — | 6 | — | 5 | — | 4 | — | 4 | — | — |
| | | 54 (16) | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 | — | 4 | — | 4 | — | — |

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2. Tabulated solutions are for ASD lateral pressure. Contact Simpson Strong-Tie for LRFD solutions.
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## Load Tables

**MSUBH — Maximum Vertical Spacing for Rows of U-Channel Bridging (ft.)**

| Stud Spacing (in.) | Stud Section | Stud Thickness mil (ga.) | Lateral Stud Pressure (psf) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | | 10 | | 15 | | 20 | | 25 | | 30 | | 35 | | 40 | | 45 | | 50 | |
| | | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| 16 | 362S162 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 362S200 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 6 | 8 | 5 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 | 8 | 6 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 |
| | 362S250 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 | 7 | 4 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 5 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 6 | 7 | 5 |
| | 600S162 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 600S200 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 | 8 | 6 | 8 | 6 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 600S250 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 5 | 7 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 |
| | 800S162 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 800S200 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 800S250 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 5 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 |
| | 1000S162 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1000S200 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1000S250 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1200S162 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1200S200 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1200S250 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |

| Stud Spacing (in.) | Stud Section | Stud Thickness mil (ga.) | Lateral Stud Pressure (psf) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 5 | | 10 | | 15 | | 20 | | 25 | | 30 | | 35 | | 40 | | 45 | | 50 | |
| | | | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. | Min. | Max. |
| 24 | 362S162 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 5 | 7 | 4 | 6 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 6 | 8 | 5 | 7 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 |
| | 362S200 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | 4 | 5 | — | 5 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | 4 | 5 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 5 | 6 | 4 | 5 |
| | 362S250 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 4 | — | 4 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 7 | 4 | 6 | 4 | 5 | — | 5 | — | 4 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 7 | 5 | 6 | 4 | 5 | 4 | 5 | — | 4 |
| | 600S162 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 |
| | 600S200 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | 4 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 7 | 4 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 |
| | 600S250 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | 4 | 6 | — | 5 | — | 5 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 800S162 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 800S200 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 800S250 | 54 (16) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 6 | 8 | 5 | 8 | 4 | 7 | — | 6 | — | 5 |
| | | 68 (14) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | | 97 (12) | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 1000S162 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1000S200 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 |
| | 1000S250 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 | — | 6 | — | 5 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 | — | 6 | — | 5 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 | — | 6 | — | 5 |
| | 1200S162 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1200S200 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 |
| | 1200S250 | 54 (16) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 | — | 6 | — | 6 |
| | | 68 (14) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 | — | 6 | — | 6 |
| | | 97 (12) | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 8 | — | 7 | — | 7 | — | 6 |

1. See General Information and Notes.
2. Tabulated solutions are for ASD lateral pressure. Contact Simpson Strong-Tie for LRFD solutions.
3. Lateral pressure shall be determined based on load combinations of the applicable code. For designs in accordance with the 2009 IBC and earlier, wind pressures are at working stress level and may be used directly. For designs in accordance with the 2012 IBC and later, wind pressures are at strength level and must be multiplied by 0.6 for ASD load combinations.
4. "Min." designates a solution with the minimum number of fasteners ((1) #10 screw installed in round hole). "Max." designates a solution requiring the maximum number of fasteners ((2) #10 screws; fill both round and triangle holes). Blank areas designate conditions where the MSUBH does not offer a solution.

### How to Use Bridging Connector Allowable Load Table

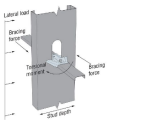
The tabulated strength and stiffness values are for use with Sections C2.2.1 and C2.3 of the 2016 edition of AISI North American Specification for the Design of Cold-Formed Steel Structural Members (AISI S100-2016) as follows:

**Bracing Design for Laterally Loaded C-Studs**

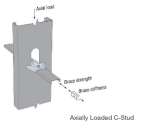
- Step 1: Calculate required bracing force for each flange using equation C2.2.1-3
- Step 2: Multiply result by stud depth to obtain torsional moment
- Step 3: Select connector with tabulated allowable torsional moment that exceeds torsional moment from Step 2 for the stud depth and gauge required

**Bracing Design for Axially Loaded C-Studs**

- Step 1: Calculate required brace strength using equation C2.3-1
- Step 2: Calculate required brace stiffness using equation C2.3-2a
- Step 3: Select connector with tabulated allowable brace strength that exceeds strength from Step 1 and tabulated brace stiffness that exceeds stiffness from Step 2 for the stud depth and gauge required



Laterally Loaded C-Stud



Axially Loaded C-Stud