



S/HD15

23/4" (S/HD10)

### RIGID CONNECTORS

## HOLDOWN (S/HD & S/HDS)

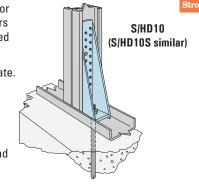
The S/HD series of holdowns is designed for installation with either screws or bolts into the studs or column. The S/HDS series installs with #14 screws and has been designed to utilize fewer fasteners to reduce installation time. The S/HDB series is ideal for bolt-on applications where the cold-formed stud manufacturer can re-punch the bolt holes.

MATERIAL: S/HD8 and S/HD10 - 118 mil (10 ga) with 3/8" plate, S/HD15 - 171 mil (7 ga) with 1/2" plate.

FINISH: Simpson gray paint. Hot-dip galvanized is available.

### **INSTALLATION:**

- · Use all specified fasteners.
- The design engineer may specify any alternate anchorage calculated to resist the tension load for your specific job.
- Anchor bolt washer is not required.



|              | Dimensions (in.) |        |       | Fasteners      |        | Allowable Tension Loads (133)<br>Back-to-Back Stud |                        |                        | Holdown Deflection                  |
|--------------|------------------|--------|-------|----------------|--------|--|------------------------|------------------------|-------------------------------------|
| Model<br>No. | W                | Н      | CL    | Anchor<br>Dia. | Screws | 2–33 mil.<br>(2–20 ga.)                            | 2–43 mil<br>(2–18 ga.) | 2-54 mil<br>(2-16 ga.) | at Highest Allowable<br>Design Load |
| S/HD8        | 2-1/2            | 13-7/8 | 1-1/2 | 7/8            | 24-#10 | 7615   | 8460                   | 8940                   | 0.085                               |
| S/HD10       | 2-1/2            | 16-1/8 | 1-1/2 | 7/8            | 30-#10 | 9520   | 9665                   | 9665                   | 0.093                               |
| S/HD15       | 2-3/4            | 21-1/2 | 1-1/2 | 1              | 48-#10 | _  | 12200                  | 14405                  | 0.070                               |
| S/HD8S       | 2-5/16           | 11     | 1-1/2 | 7/8            | 17-#14 | 8580   | 11070                  | 11070                  | 0.0695                              |
| S/HD10S      | 2-5/16           | 13-1/2 | 1-1/2 | 7/8            | 22-#14 | 8580   | 11120                  | 12200                  | 0.0960                              |
| S/HD15S      | 2-7/16           | 17     | 1-3/8 | 1              | 30-#14 | 8580   | 11120                  | 13500                  | 0.0970                              |

#### Notes:

- too.

  For load at (100), multiply table value by 0.75 where the 1/3 increase is not permitted.

  Values are test limited. For load at (100), no reduction necessary. For load at (133) for 1/3 increase, no further increase allowed.

  The Designer shall specify the anchor embedment and configuration.
- Deflection at Highest allowable Design Load: The deflection of a holdown measured between the anchor bolt and the strap portion of the holdown when loaded to the highest allowable load listed in the catalog table. This movement is strictly due to the hold deformation under a static load test conducted on a steel jig.

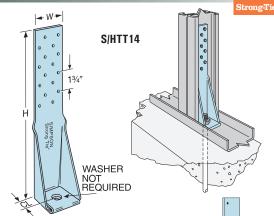
# TENSION TIE (S/LTT & S/HTT)

The S/HTT14 is a single-piece formed tension tie—no rivets, and a 4-ply formed seat which won't unfold during loading. No washers are required. The S/LTT and S/HTT Tension Ties are ideal for retrofit or new construction projects. They provide high strength, post-pour, concrete-to-steel connections.

MATERIAL: See table. FINISH: Galvanized - G90

### **INSTALLATION:**

- Use all specified fasteners.
- Use the specified number and type of screws to attach the strap portion to the steel stud.
- Bolt the base to the wall or foundation with a suitable anchor; see table for the required bolt diameter.



|   |              | Material    | Dimensions (in.) |       |    | Fasteners |                 | Allowable<br>Tension | Holdown Deflection |                                     |
|---|--------------|-------------|------------------|-------|----|-----------|-----------------|----------------------|--------------------|-------------------------------------|
|   | Model<br>No. | Strap       | Plate            | W     | Н  | CL        | Anchor<br>Bolts | Screws               | Loads<br>(133)     | at Highest Allowable<br>Design Load |
| I | S/LTT20      | 97 (12 ga)  | 229 (3 ga)       | 2     | 20 | 1-1/2     | 1/2             | 8 -#10               | 1600               | 0.209                               |
| l | S/HTT14      | 111 (11 ga) | -                | 2-1/2 | 15 | 1-1/4     | 5/8             | 14 -#10              | 4325               | 0.041                               |

- 1. The Designer shall specify the anchor embedment and configuration.

- Load at (100), no reduction necessary. Load at (133) for 1/3 increase, no further increase allowed.
   Loads are based on attachment of CFS members having a minimum thickness of 33 mil (20 ga).
   Deflection at Highest allowable Design Load: The deflection of a holdown measured between the anchor bolt and the strap portion of the holdown when loaded to the highest allowable load listed in the catalog table. This movement is strictly due to the holdown deformation under a static load test conducted on a steel jig.

