

## Commercial Strapping

Multipurpose pre-punched commercial coil stock used for bracing, bridging or tension strapping.

Coil Strapping is made in a variety of widths, each with a unique layout of pre-punched holes for a variety of fastening options to meet different application requirements.

### PRODUCT DIMENSIONS

1" x 250'

1-1/2" x 250'

2" x 150'

2-1/2" x 150'

3" x 100'

### MATERIAL SPECIFICATIONS

**Material:** 50ksi, G60

**Gauge:** 20 gauge (33mil)

**Design Thickness:** 0.0346 inches

**ASTM:** A1003, A653

**Material:** 50ksi, G90 (Z275) hot-dipped galvanized

**Gauge:** 18 gauge (43mil)

**Design Thickness:** 0.0451 inches

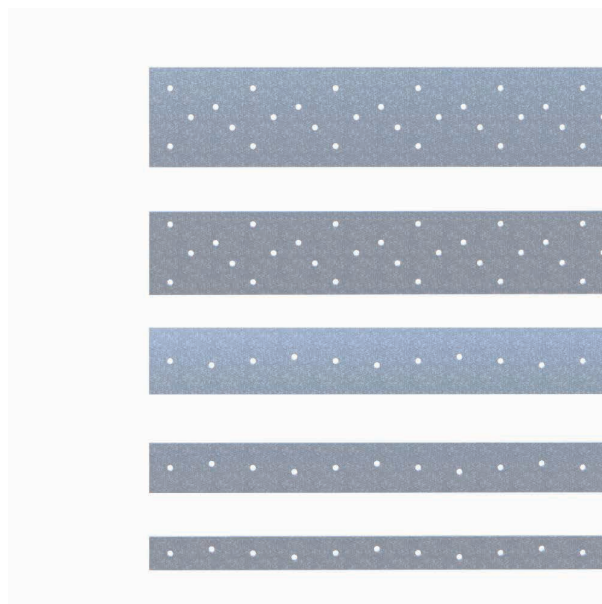
**ASTM:** A1003, A653

### TYPICAL APPLICATIONS:

- Horizontal strap lateral bracing for wall studs
- Strap bridging for bottom of floor joists
- Tension strapping for shear wall x-bracing

### FEATURES AND BENEFITS:

- Packaged for easy grab and go on jobsite
- Various LF lengths to aid in quicker installation
- Pre-punched holes to speed up installation and improve overall installation costs (see EOR for all connections)
- Tension Load Values available



## Commercial Strapping (CS)

Product code	Thickness	Width	Coil length
CS1-250-33	33mil (20ga)	1 inch	250 ft
CS1-250-43	43mil (18ga)	1 inch	250 ft
CS1.5-200-33	33mil (20ga)	1.5 inch	200 ft
CS1.5-200-43	43mil (18ga)	1.5 inch	200 ft
CS2-150-33	33mil (20ga)	2 inch	150 ft
CS2-150-43	43mil (18ga)	2 inch	150 ft
CS2.5-150-33	33mil (20ga)	2.5 inch	150 ft
CS2.5-100-43	43mil (18ga)	2.5 inch	100 ft
CS3-100-33	33mil (20ga)	3 inch	100 ft
CS3-100-43	43mil (18ga)	3 inch	100 ft

## INSTALLATION

### Horizontal strap lateral bracing for wall studs

Lateral bracing consists of a field-cut stud or track for solid blocking and steel strap bracing on both flanges of the studs. Solid blocking is placed at each end of the wall, adjacent to wall openings and 8' o.c. maximum. The blocking is attached to each adjacent stud via EasyClip™ E- or S- Series™ clips, or when a track is used, the flanges are cut, the web bent and a minimum 4" overlap is used to secure the track block to the studs. Strap bracing, 2" wide and 20ga (33 mil) minimum, is fastened to each solid block and stud flange.



### Strap bridging for bottom of floor joists

Spacing of bridging must be calculated based on the required strength. In general, bridging is installed at a maximum of 8' o.c. spacing perpendicular to the joists. For example, an 18' joist span would require two bridging runs at 6' o.c. spacing. Where the sub-floor or decking does not provide lateral support, strap must also be installed on the top flange of the joist. Install immediately after joists are erected and before construction loads are applied. Solid blocking is field cut from track or joist sections.



### Tension strapping for shear wall x-bracing

Straps are either attached directly to the compression studs or are attached via Gusset Plates. Compression studs must be anchored to the foundation, normally with ClarkDietrich Holdowns. For multi-story construction, the uplift loads are extremely high. It is not uncommon to require 20,000 to 40,000 pounds of uplift force at these connections. Since ClarkDietrich Holdowns are not designed to resist this magnitude of force, it is recommended that embedded plates be installed prior to pouring the concrete foundation. A heavy steel assembly is then welded to the embedded plate and to the compression studs.

Caution: Racking loads are first transferred to the roof or floor decking and then to the shearwalls (X-bracing). The X-bracing then relies on a proper foundation to resist uplift and shear forces. In order for the system to function properly, the load path from the roof or floor deck to the shearwalls to the foundation must be complete. This normally requires additional bracing, blocking, track and rim splices, drag struts, uplift anchors and heavy-duty foundations.

