SIMPSON Strong-Tie

CS Coiled Straps

CS are continuous utility straps which can be cut to length on the jobsite.
Packaged in lightweight (about 18kg) cartons.

- Provides maximum versatility – no need to shop for straps of a particular length
- Always have the right strap when you need it

Material: See table below.

Finish: Galvanised. See Corrosion Information.

Installation

- Use all specified fasteners. See General Notes.
- Timber shrinkage after strap installation across horizontal timber members may cause strap to buckle outward.
- Refer to the applicable code for minimum nail penetration and minimum timber edge and end distances.
- The table shows the maximum design capacities and the nails required to obtain them. Fewer nails may be used; reduce the design capacities as shown in footnote #3.
- The cut length of the strap shall be equal to twice the "End Length" noted in the table plus the clear span dimension.
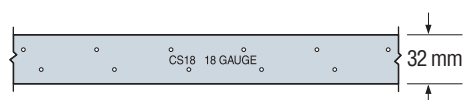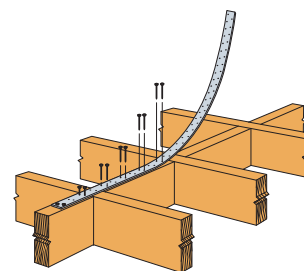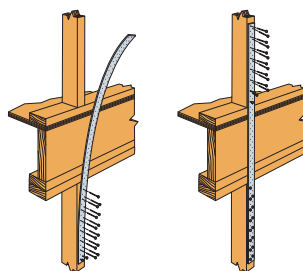
CS

Typical Installation

STEP 1: Cut strap to required length.
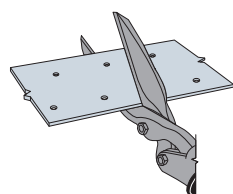
STEP 2: Use half the required nails in each member being connected. (No nails required in clear span.)

CS18 18 GAUGE   32 mm

CS18 *(CS20 similar)*

CS Technical Data

Model No.	Total Length (m)	Thickness (mm)	Fasteners (No. – Length x Dia., mm)	End Length (mm)	Country	Design Tension Capacity (kN)
CS18	61	1.3	16 – 75 x 3.75	229	AU	$k_1 = 1.14$ / 9.31
					NZ	$k_1 = 1.0$ / 7.12
			18 – 30 x 2.8		AU	$k_1 = 1.14$ / 6.32
					NZ	$k_1 = 1.0$ / 4.68
CS20	76	1.0	12 – 75 x 3.75	153	AU	$k_1 = 1.14$ / 7.22
					NZ	$k_1 = 1.0$ / 5.28
			14 – 30 x 2.8		AU	$k_1 = 1.14$ / 5.00
					NZ	$k_1 = 1.0$ / 3.60

1. Design Capacity is the minimum of the steel strap design tensile capacity calculated in accordance with AS/NZS 4600 and the structural joint design capacity using the applicable the k modification factors following AS 1720.1 and NZS 3603.
2. For Australia, the Capacity Factor (ϕ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern. For NZ, the Strength Reduction Factor ϕ is 0.80 for nails in lateral loading.
3. Duration of Load Factor (k_1) is as shown. Reduce Duration of Load Factor where applicable. Capacities may not be increased.
4. Timber species for joint design is seasoned Radiata Pine, which is Australia Joint Group JD4 per AS 1720.1 Table H2.4 and New Zealand Joint Group J5 per NZS 3603 Table 4.1.
5. Use half of the required nails in each member being connected to achieve the listed loads.
6. Calculate the connector value for a reduced number of nails as follows: Design capacities = (No. of nails used)/(No. of nails in table) X table load
7. Tension loads apply for uplift when installed vertically.

Bracing and Tiedowns