

NEW!

CTS218 Compression-Tension Strap



The CTS218 compression-tension strap is the only light-gauge steel strap that handles both tension and compression loads. It is designed to repair excessive cutting of wood members such as top plates, studs and trusses. The strap's unique rolled edges allow gaps as wide as 4½" to be repaired, and its 1½" width facilitates installation on the narrow face of 2x lumber. The CTS218 installs quickly with 10d x 1½" nails or, for increased capacity, with #9x1½" Simpson Strong-Tie® Strong-Drive® SD screws.

Although designed to repair excessive cutting of the top plate, the combined compression and tension loads provided by the CTS218 make it ideal for other structural applications, such as floor truss repair. Compared to nailed-on lumber scabs, the CTS218 is easier to install and verifiable during inspection.



FEATURES:

- Tested specifically for top/bottom plate repair with various multi-strap configurations
- Meets the requirements of the IBC and IRC for repairing top plates that have been cut or notched to accommodate plumbing or HVAC ductwork
- Rolled edges and embossment provide significant compression load values
- 1½" width fits on the narrow face of 2x lumber
- 18" length repairs up to 4½" gap
- Individual strap may be post-installed without interfering with existing plumbing and most framing
- Multiple strap combinations increase load capacity
- Installs with either 10dx1½" nails or #9x1½" Simpson Strong-Tie® Strong-Drive® SD screws for structural connectors.



Designed for Connectors



MATERIAL: 14 gauge steel

FINISH: Galvanized

INSTALLATION: Use all specified fasteners. See the General Notes in the Simpson Strong-Tie® *Wood Construction Connectors* catalog for more information.

- One-sided installations—install one or two CTS straps on the same side of the member.
- Two-sided installations—install CTS straps on opposite sides of same member. For three-part installations, install two parts on one side, one part on opposite side.

CODES:

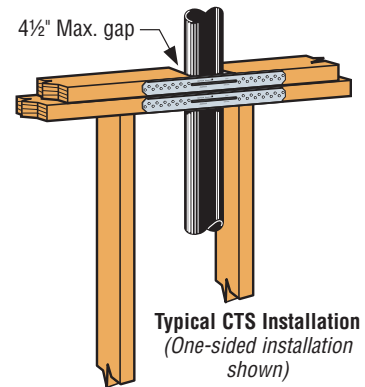
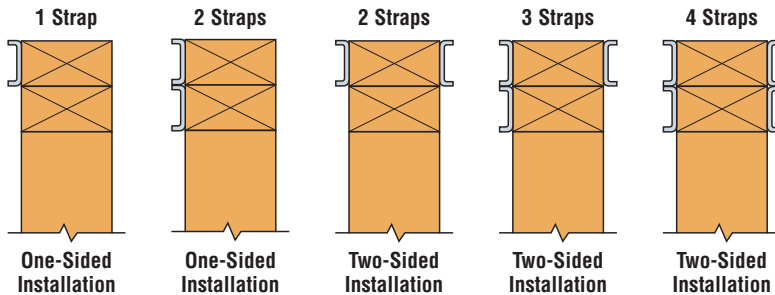
- 2008 Special Design Provisions for Wind and Seismic (ANSI / AF&PA SDPWS), Shearwall and diaphragm boundary element design (Section 4.1.4)
- 2009 International Residential Code (IRC), Repair top plates (Section R602.6.1)
- International Building Code (IBC), Repair top and bottom plates (Section 2308.9.8)

CTS218 Compression-Tension Strap for Top Plate Repair

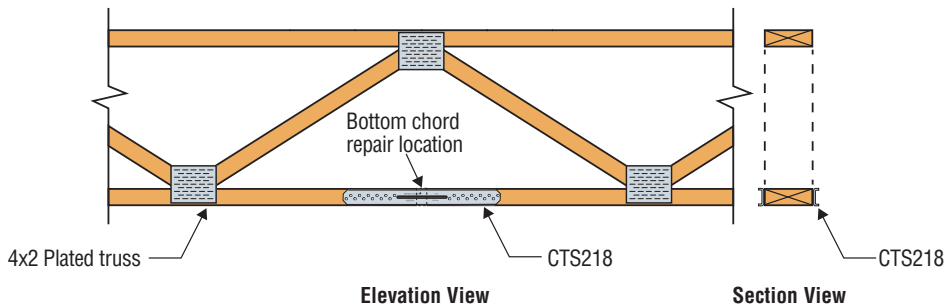
Model No.	Strap Qty.	Installation	Fasteners	Allowable Loads DF/SP (lbs.)			Allowable Loads SPF/HF (lbs.)		
				Compression (100/160)	Tension		Compression (100/160)	Tension	
					(100)	(160)		(100)	(160)
CTS218	1	One-Sided	24 - 10dx1½"	1020	1510	2270	880	1310	1970
	2	One-Sided		2045	3020	4540	1760	2620	3940
	2	Two-Sided		2370	3020	4540	2040	2620	3940
	3	Two-Sided		3725	4530	6810	3205	3930	5910
	4	Two-Sided		4740	6040	9080	4080	5240	7880
	1	One-Sided	24 - SD#9x1½"	1175	2050	2480	1010	1345	2150
	2	One-Sided		2350	4100	4960	2020	2690	4300
	2	Two-Sided		2735	4100	4960	2350	2690	4300
	3	Two-Sided		4130	6150	7440	3550	4035	6450
	4	Two-Sided		5470	8200	9920	4700	5380	8600

1. Allowable loads have been increased for wind or seismic with no further increase allowed. Reduce where other loads govern.
2. Fastener quantities are for a single strap.
3. Maximum gap between wood members is 4½".
4. **FASTENERS:** 10dx1½" = 0.148" dia. x 1½" nails. SD screw #9x1½" = 0.131" dia. x 1½" long.

Top Plate Repair Installation Options



Truss Chord Repair Application



1. Allowable Loads in table above are for the CTS218 straps only. Truss capacity design by others.

This flier is effective until June 30, 2013, and reflects information available as of February 1, 2011. This information is updated periodically and should not be relied upon after June 30, 2013; contact Simpson Strong-Tie for current information and limited warranty or see www.strongtie.com.