

**HTT, S/LTT & S/HTT** Tension Ties

The HTT and S/HTT is a single-piece formed tension tie—no rivets, and a 4-ply formed seat. No washers are required.

The S/LTT, S/HTT and HTT Tension Ties are ideal for retrofit or new construction projects. They provide high-strength, post-pour, concrete-to-steel connections.

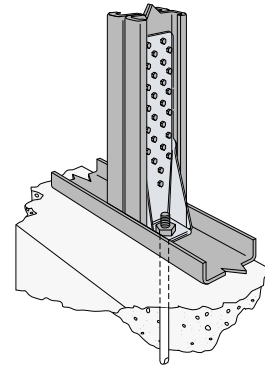
**MATERIAL:** S/HTT14, HTT4, HTT5 111 mil (11 ga)  
S/LTT20B – Strap: 97 mil (12 ga)  
Plate: 229 mil (3 ga)

**FINISH:** Galvanized

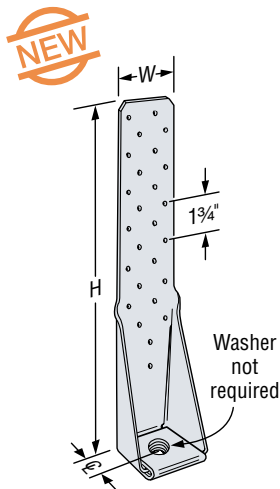
**INSTALLATION:** • Use all specified fasteners.

- 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.
- Do not install S/LTT20 raised off of the bottom track.

**CODE:** See page 8 for Code Listing Key Chart.



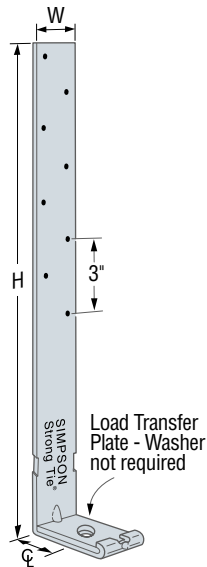
Typical HTT5 Installation  
as a Holdown



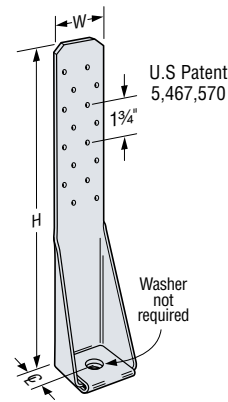
**HTT5**

(HTT4 similar)

U.S. Patent 5,467,570



**S/LTT20**



**S/HTT14**

Available with additional corrosion protection. Check with Simpson Strong-Tie.

Model	Dimensions			Fasteners		Stud Member Thickness mil (ga)	ASD		LRFD		Nominal Tension Load <sup>6</sup>	Code Ref.
	W	H	CL	Found. Anchor Diameter	Stud Fasteners		Tension Load	Deflection at ASD Load <sup>5</sup>	Tension Load	Deflection at LRFD Load <sup>5</sup>		
S/LTT20	2	20	1½	½	8 - #10	33 (20ga)	1200	0.125	1890	0.250	4625	ILC1, LC1, FC1
S/HTT14	2½	16	1¾	⅝	16 - #10	33 (20ga)	2775	0.108	4430	0.172	6800	
						2-33 (2-20ga)	3850	0.125	6700	0.250	11590	
HTT4	2½	12¾	1¾	⅝	18 - #10	33 (20ga)	3180	0.104	4770	0.187	8215	
						2-33 (2-20ga)	4395	0.125	6675	0.250	11835	
HTT5	2½	16	1¾	⅝	26 - #10	43 (18ga)	4240	0.125	6505	0.250	11585	
						2-43 (2-18ga)	4670	0.125	6970	0.250	12195	
						1-54 (1-16ga)	4150	0.125	6425	0.250	12365	

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

2. See pages 26–30 for anchor bolt options.

3. See page 21 for anchor bolt retrofit options.

4. Stud design by Specifier. Tabulated loads are based on a minimum stud thickness for fastener connection.

5. Deflection at ASD and LRFD Loads is the deflection of the holdown measured between the anchor bolt and strap portion of the holdown when loaded to the ASD and LRFD load, respectively. This movement is strictly due to the holdown deformation under a static load test attached to members listed in the table.

6. Nominal Tension Load is based on the average ultimate (peak) load from tests. AISI Lateral Design standard requires holdown to have nominal strength to resist lesser of amplified seismic load or the maximum force the system can deliver.