

S/HDS & S/HDB Holdowns

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 pre-punch the bolt holes.

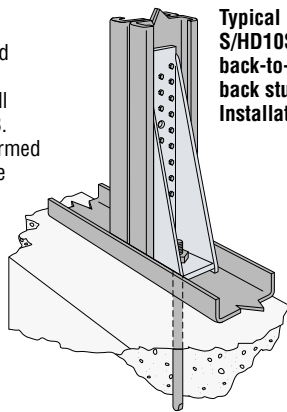
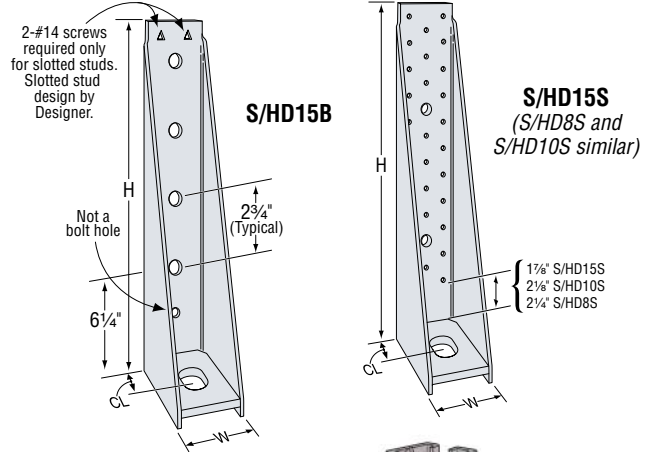
MATERIAL: See table

FINISH: Simpson Strong-Tie gray paint. Hot-dip galvanized is available; see Corrosion-Information, page 12–13.

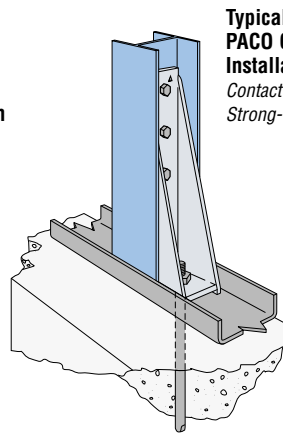
INSTALLATION: • Use all specified fasteners; some models have extra fastener holes. See General Notes.

- Anchor bolt washer is not required.
- Standard washers are required on stud bolt nuts for model S/HDB.
- Thin wall socket (OD=2" maximum) is required for S/HD15 to tighten the 1" anchor bolt.
- Stud bolts – use A307.
- Boundary members (*back-to-back studs*) design shall be by Designer.
- S/HDS and S/HDB holdowns can be welded per Designer's recommendation and specification. To tie back-to-back stud members together, the Designer must determine the fasteners required to bind members to act as one unit. Welders and welding procedures shall be qualified as specified in AWS D1.3. Welded connections used for cold-formed steel structural members in which the thickness of the thinnest connected part is 0.18 inch or less shall comply to 2001 AISI NAS Specification Section E2.

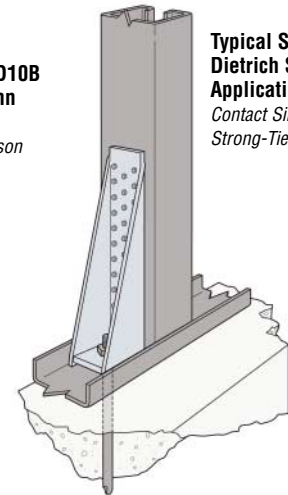
CODE: See page 8 for Code Listing Key Chart.



Typical S/HD10S back-to-back stud installation



Typical S/HD10B PACO Column Installation
Contact Simpson Strong-Tie.



Typical S/HD10S Dietrich Stud Application
Contact Simpson Strong-Tie.

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

Model	H	Fasteners		Stud Member Thickness mil (ga) ⁴	ASD		LRFD		Nominal Tension Load ⁷	Code Ref
		Found. Anchor Diameter ¹	Stud Fasteners		Tension Load	Deflection at ASD Load ⁶	Tension Load	Deflection at LRFD Load ⁶		
S/HD8S	11	3/8"	17 - #14	2-33 (2-20ga)	7335	0.120	11715	0.204	13720	FC1
				2-43 (2-18ga)	8750	0.086	13975	0.146	21435	
				2-54 (2-16ga)	8855	0.106	14145	0.162	21700	
				Steel Fixture	10840	0.053	17335	0.072	32525	
S/HD10S	13 1/2	3/8"	22 - #14	2-33 (2-20ga)	7400	0.122	11815	0.192	13835	
				2-43 (2-18ga)	11120	0.112	17755	0.124	20795	
				2-54 (2-16ga)	12220	0.096	19520	0.145	29940	
				Steel Fixture	12375	0.043	19820	0.061	33535	
S/HD15S	17	1"	30 - #14	2-43 (2-18ga)	12110	0.096	19340	0.164	22645	
				2-54 (2-16ga)	13500	0.110	21565	0.130	33075	
				Steel Fixture	15810	0.043	25320	0.065	42845	
S/HD8B	11	3/8"	2 - 3/4 Dia	2-33 (2-20ga)	3895	0.081	5620	0.144	8645	
				2-43 (2-18ga)	5345	0.098	7710	0.146	11865	
				2-54 (2-16ga)	8950	0.082	14280	0.141	20310	
				Steel Fixture	9080	0.069	14545	0.104	22975	
S/HD10B	13 1/2	3/8"	3 - 3/4 Dia	2-33 (2-20ga)	5840	0.070	8430	0.124	12970	
				2-43 (2-18ga)	8015	0.087	11565	0.120	17795	
				2-54 (2-16ga)	12090	0.125	19720	0.230	28050	
				Steel Fixture	15635	0.102	24955	0.123	35495	
S/HD15B	17	1"	4 - 3/4 Dia	2-43 (2-18ga)	10690	0.118	15425	0.179	22165	
				2-54 (2-16ga)	16020	0.090	25565	0.121	36360	
				Steel Fixture	18690	0.104	29825	0.139	42425	

1. Designer shall specify the foundation anchor material type, length, embedment and configuration. Tabulated loads may exceed anchor bolt ASTM A36 or A307 tension capacities.
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 studs thickness for fastener connection.
5. 1/4" self-drilling screws can be substituted for #14.

6. Deflection at ASD and LRFD Loads includes fastener slip, holdown elongation and anchor bolt elongation (L=4").
7. 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 what the system can deliver.