

S/HDU Holdowns

The S/HDU series of holdowns combines performance with ease of installation. The pre-deflected geometry virtually eliminates material stretch, resulting in low deflection under load. Installation using self-drilling screws into the studs reduces installation time and saves labor cost.

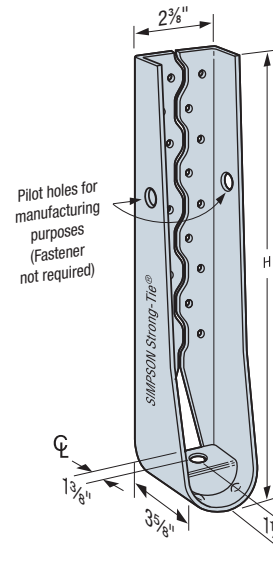
Material: 118 mil (10 ga.)

Finish: Galvanized

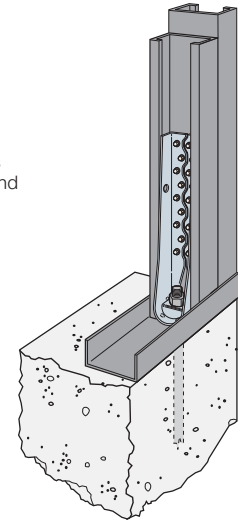
Installation:

- Use all specified fasteners; see General Notes
- Use standard #14 self-drilling screws to fasten to studs
- Anchor bolt washer is not required
- See SB, SSTB and PAB anchor bolts on pp. 236–241 for cast-in-place anchorage options
- See SET-XP® and AT-XP® adhesive products for anchor bolt retrofit options

Codes: See p. 11 for Code Reference Key Chart



S/HDU
U.S. Patents
5,979,130 and
6,112,495

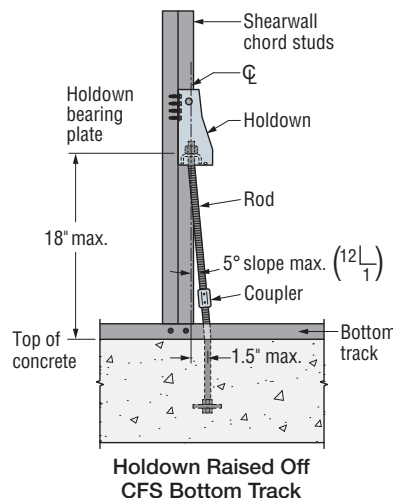


Typical S/HDU Installation

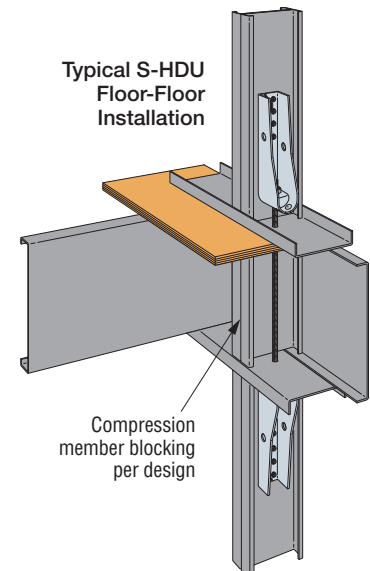
Model	H (in.)	Fasteners		Stud Member Thickness ² mil (ga.)	ASD (lb.)		LRFD (lb.)		Nominal Tension Load ⁶ (lb.)	Code Ref.
		Anchor Bolt Diameter ¹ (in.)	Stud Fasteners ⁷		Tension Load	Deflection at ASD Load ⁵	Tension Load	Deflection at LRFD Load ⁵		
S/HDU4	7%	5/8	(6) #14	2-33 (2-20)	2,320	0.093	3,705	0.149	5,685	IP1, L2, FL
				2-43 (2-18)	3,825	0.115	6,105	0.190	9,365	
				2-54 (2-16)	3,970	0.093	6,345	0.156	9,730	
				Steel fixture	4,470	0.063	7,165	0.103	12,120	
S/HDU6	10%	5/8	(12) #14	2-33 (2-20)	4,895	0.125	8,495	0.250	10,470	
				2-43 (2-18)	6,125	0.119	9,690	0.250	15,460	
				2-54 (2-16)	6,125	0.108	9,785	0.234	15,005	
				Steel fixture	5,995	0.060	9,580	0.136	14,695	
S/HDU9	12%	7/8	(18) #14	2-33 (2-20)	6,965	0.103	11,125	0.189	13,165	
				2-43 (2-18)	9,255	0.125	15,485	0.250	21,810	
				2-54 (2-16)	9,990	0.106	15,960	0.225	24,480	
				Steel fixture	12,715	0.125	20,510	0.177	31,455	
S/HDU11	16%	7/8	(27) #14	2-33 (2-20)	6,965	0.103	11,125	0.189	13,165	
				2-43 (2-18)	9,595	0.096	15,330	0.162	23,515	
				2-54 (2-16)	9,675	0.110	15,460	0.158	23,710	
		7/8 with heavy hex nut	(27) #14	2-43 (2-18) ⁶	11,100	0.125	17,500	0.250	24,955	
				2-54 (2-16) ⁶	12,175	0.125	19,445	0.243	29,825	
				Steel fixture ⁶	12,945	0.111	20,680	0.163	31,715	

These products are available with additional corrosion protection. Additional products on this page may also be available with this option. Check with Simpson Strong-Tie for details.

1. The Designer shall specify the foundation anchor material type, embedment and configuration. Some of the tabulated holdown tension loads exceed the tension strength of typical ASTM A36 or A307 anchor bolts.
2. Stud design by Specifier. Tabulated loads are based on a minimum stud thickness for fastener connection.
3. 1/4" self-drilling screws may be substituted for #14 self-tapping screws.
4. A heavy hex nut for the anchor bolt is required to achieve the table loads for S/HDU11.
5. Deflection at ASD or LRFD includes fastener slip, holdown deformation and anchor rod elongation for holdowns installed up to 4" above top of concrete. Holdowns may be installed raised, up to 18" above top of concrete, with no load reduction provided that additional elongation of the anchor rod is accounted for.
6. The Nominal Tension Load is based on the tested average ultimate (peak) load and is provided for design in accordance with section C5 of AISI S213 that requires a holddown to have a nominal strength to resist the lesser of the amplified seismic load or the maximum force the system can deliver.
7. See pp. 138 through 171 for more information on Simpson Strong-Tie fasteners.



Holdown Raised Off CFS Bottom Track



Typical S-HDU Floor-Floor Installation

Compression member blocking per design