

HDQ8/HHDQ Holdowns

Holdowns & Tension Ties

The HHDQ series of holdowns combines low deflection and high loads with ease of installation. The unique seat design of the HDQ8 greatly minimizes deflection under load. Both styles of holddown employ the Simpson Strong-Tie® Strong-Drive® screws (SDS) which install easily, reduce fastener slip and provide a greater net section area of the post when compared to bolts. They may be installed either flush or raised off the mudsill without a reduction in load value.

SPECIAL FEATURES:

- Uses SDS screws which install easily, reduce fastener slip, and provide a greater net section area of the post compared to bolts.
- SDS screws are supplied with the holdowns to ensure proper fasteners are used.
- No stud bolts to countersink at openings.

MATERIAL: HDQ8—7 gauge; HHDQ—Body: 7 gauge, washer: ½" plate

FINISH: HDQ8—Galvanized; HHDQ—Simpson Strong-Tie® gray paint

INSTALLATION: • Use all specified fasteners. See General Notes.

- For use in vertical and horizontal applications.
- No additional washer is required.
- To tie multiple 2x members together, the Designer must determine the fasteners required to join members to act as one unit without splitting the wood. See page 20 for SDS values.
- See SB and SSTB Anchor Bolts on pages 27-29 for anchorage options.
- SDS screws install best with a low speed high torque drill with a ⅜" hex head driver.
- Refer to technical bulletin T-ANCHORSPEC for post-installed anchorage solutions (see page 191 for details).

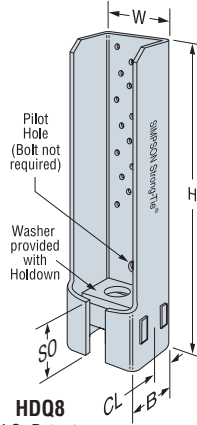
HDQ8:

- ⅝" of adjustability perpendicular to the wall.
- See SSTB Anchor Bolts, page 28-29, for anchorage options. For 2-2x and 3x sill plates use SSTBL models. The Designer may specify any alternate anchorage calculated to resist the tension load for a specific job. Anchorage length should take the bearing plate/washer height into account, to ensure adequate length of threads to engage the nut.

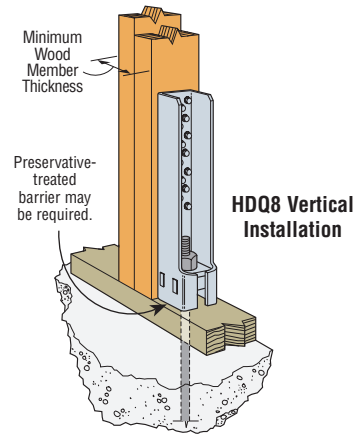
HHDQ11/14:

- No additional washer is required.
- HHDQ14 requires a heavy hex anchor nut (supplied with holddown)
- See SB Anchor Bolts, page 27, for anchorage options.

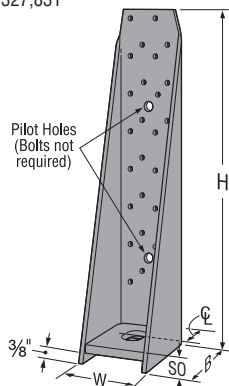
CODES: See page 12 for Code Reference Key Chart.



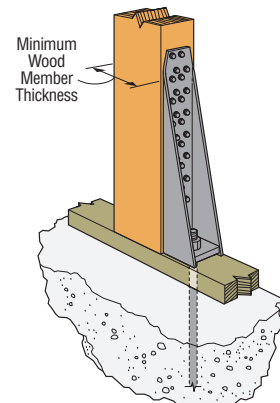
HDQ8
U.S. Patents
6,006,487 and
6,327,831



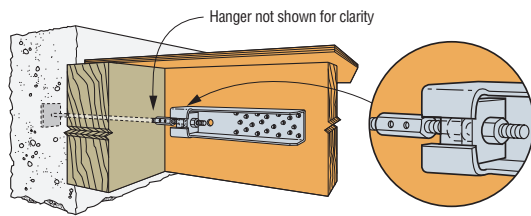
HDQ8 Vertical Installation



HHDQ11
(HHDQ14 similar)



Vertical HHDQ11 Installation
(HHDQ14 similar)



Horizontal HDQ8 Installation

For holdowns, per ASTM test standards, anchor bolt nut should be finger-tight plus 1/8 to 1/2 turn with a hand wrench, with consideration given to possible future wood shrinkage. Care should be taken to not over-torque the nut. Impact wrenches should not be used.

Model No.	Ga	Dimensions (in.)					Fasteners		Minimum Wood Member Thickness ⁴ (in.)	Allowable Tension Loads (lbs.) (160)			Code Ref.
		W	H	B	ϕ	SO	Anchor Bolt Dia. (in.)	SDS Screws		DF/SP	SPF/HF	Deflection at Allowable Load ⁶ (in.)	
HDQ8-SDS3	7	2⅞	14	2½	1¼	2⅝	⅞	20-SDS ¼"x3"	3	5715	4115	0.064	16, L24, F5
								20-SDS ¼"x3"	3½	7630	5495	0.094	
								20-SDS ¼"x3"	4½	9230	6645	0.095	
HHDQ11-SDS2.5	7	3	15⅝	3½	1½	⅞	1	24-SDS ¼"x2½"	5½	11810	8505	0.131	
HHDQ14-SDS2.5	7	3	18¾	3½	1½	⅞	1	30-SDS ¼"x2½"	7¼	13015 ⁹	9370 ⁹	0.107	
								5½ ⁸	13710 ^{8,9}	10745 ⁹	0.107		

1. Allowable loads have been increased for earthquake or wind load durations with no further increase allowed; reduce where other load durations govern.
2. The Designer must specify anchor bolt type, length and embedment. See SB and SSTB Anchor Bolts (pages 27-29). Refer to technical bulletin T-ANCHORSPEC for retrofit anchor solutions (see page 191 for details).
3. Structural composite lumber columns have sides that show either the wide face or the edges of the lumber strands/veneers. Values in the tables reflect installation into the wide face. See technical bulletin T-SCLCOLUMN for values on the narrow face (edge) (see page 191 for details).
4. Post design by Specifier. Allowable load values are based on a minimum wood member thickness in the direction of the fastener penetration. Posts may consist of multiple 2x members provided they are designed to act as one unit independently of the holddown fasteners. Holdowns shall be installed centered along the width of the attached post.
5. Tension values are valid for holdowns flush or raised off of sill plate.
6. Deflection at Highest Allowable Tension Load includes fastener slip, holdown elongation, and anchor bolt elongation (L = 6"). Additional elongation of anchor bolts shall be accounted for by the Designer when holdowns are raised higher than 6".
7. Tabulated loads may be doubled when the HDQ8 is installed on opposite sides of the wood member provided either the post is large enough to prevent opposing holddown screw interference or the holdowns are offset to eliminate screw interferences.
8. Noted HHDQ14 allowable loads are based on a 5½" wide post (6x6 min.). All other loads are based on 3½" wide post minimum.
9. Requires heavy hex anchor nut to achieve tabulated loads (supplied with holddown).
10. HHDQ holdowns installed horizontally can achieve compression loads with the addition of a standard nut on the underside of the load transfer plate. Refer to ESR 2330 for design values. Design of anchorage rods for the compression force shall be per the Designer.