

HDC Concentric Holdown



This product is preferable to similar connectors because of a) easier installation, b) higher loads, c) lower installed cost, or a combination of these features.

The unique design of the HDC holdowns eliminate eccentricity. They install with Simpson Strong-Tie® Strong-Drive® SDS screws (included) to reduce slip and provide a greater net section area of the post compared to bolts.

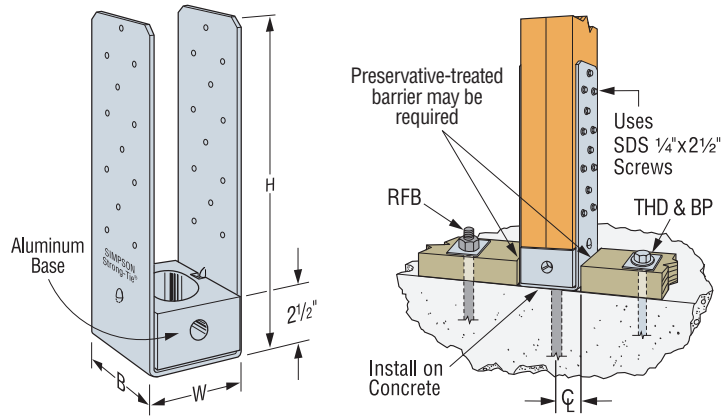
MATERIAL: 10 gauge strap

FINISH: Galvanized strap, aluminum base

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

- Install on concrete.
- For use in vertical and horizontal applications.
- Sized for 2-2x, and 4x. Center 2-2x posts on holddown.
- Uses SDS screws supplied with the holdowns to ensure proper fasteners are used.
- Slot in the seat allows for 3/8" of adjustment perpendicular to plate.
- Cut washer required between base and anchor nut. HDC10 models use narrow cut washer with outside diameter of 1 3/4".
- Witness slot in the base to inspect the nut.
- Maximum anchor bolt height above concrete is 2 1/8".
- To tie multiple 2x members together, the Designer must determine the fasteners required to join members without splitting the wood.
- Aluminum standoff cannot be in contact with preservative-treated wood.
- SDS screws install best with a low speed high torque drill with a 3/8" hex head driver.

CODES: See page 20 for Code Reference Key Chart.



HDC10
Patents:
U.S. 6,513,290
Can. 2,364,585

Typical HDC Installation with 2-2x4 Studs
(Similar with 2-2x6 studs)

For holdowns, per ASTM test standards, anchor bolt nut should be finger-tight plus 1/3 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.	Post Size	W	H	B	℄	Anchor Bolt	Number of SDS 1/4"x2 1/2"	Allowable Tension Loads DF/SP (160)	Allowable Tension Loads SPF/HF (160)	Concrete Bearing 4,5 @ 2500 psi	Holdown Deflection at Highest Allowable Design Load	Code Ref.
HDC5/22-SDS2.5	Discontinued – See HDC10/22-SDS2.5											
HDC5/4-SDS2.5	Discontinued – See HDC10/4-SDS2.5											
HDC10/22-SDS2.5	2-2x4	3 3/8"	14 3/8"	3"	1 1/16"	7/8"	24	9665	8425	7460	0.050	IL10
HDC10/4-SDS2.5	4x4	3 3/16"	14 1/8"	3"	1 1/16"	7/8"	24	9665	8425	9060	0.058	

1. The Designer must specify anchor bolt type, length and embedment. See SB and SSTB Anchor Bolts (pages 36-40).
2. Loads are based on static tests on wood studs, limited by the lowest of 0.125" deflection, tested lowest ultimate divided by 3, or the wood screw value.
3. Deflection at Highest Allowable Tension Load includes fastener slip, holdown elongation, and anchor bolt elongation.
4. The HDCs will be limited by wood compression capacity if installed on a sill plate. HDC10/22 will achieve an allowable load of 4005 lbs.

5. Higher values may be obtained when HDC is not placed at an edge or with f'c concrete strength > 2500 psi.
6. 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 215 for details).
7. Post design by Designer. See pages 210-211 for common post allowable loads.

RP6 Retro Plate

The RP6 retrofit plate fits on the outside of masonry buildings, and helps tie the walls to the roof or floor structure with a 3/4" diameter rod.

FINISH: Simpson Strong-Tie® gray paint. Optional hot-dip galvanized coating; see Corrosion Information, page 18-19, and specify HDG.

MATERIAL: 3/8" Steel

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

INSTALLATION: Use a 3/4" diameter rod.

