

HDU/DTT

Holdowns



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.

HDU holdowns are pre-deflected during the manufacturing process, virtually eliminating deflection under load due to material stretch. They use Strong-Drive® SDS Heavy-Duty Connector screws which install easily, reduce fastener slip and provide a greater net section when compared to bolts.

The DTT tension ties are designed for lighter-duty holddown applications on single 2x posts. The DTT1Z is installed with nails or Strong-Drive SD Connector screws and the DTT2 installs easily with the Strong-Drive SDS Heavy-Duty Connector screws (included). The DTT1Z holdowns have been tested for use in designed shearwalls and prescriptive braced wall panels as well as prescriptive wood-deck applications (see p. 295 for deck applications).

For more information on holddown options, contact Simpson Strong-Tie.

HDU Features:

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

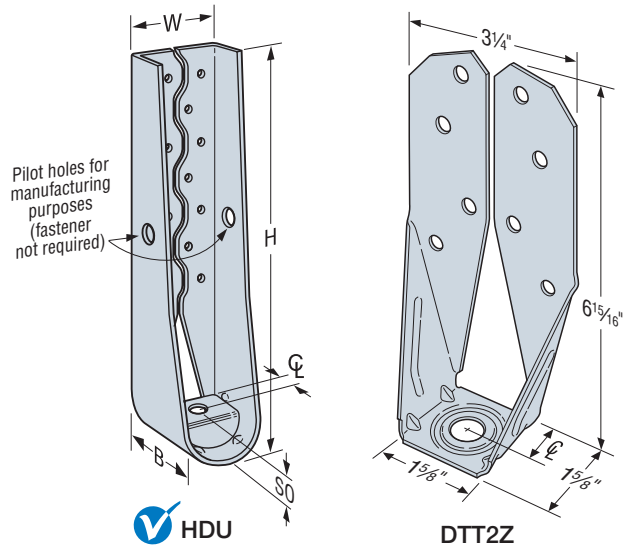
Material: See table

Finish: HDU — galvanized; DTT1Z and DTT2Z — ZMAX® coating; DTT2SS — stainless steel

Installation:

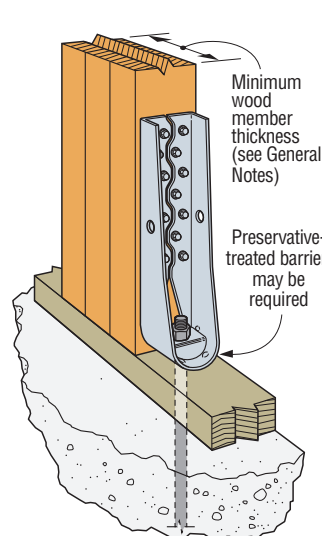
- See Holddown and Tension Tie General Notes on pp. 49–50.
- The HDU requires no additional washer; the DTT requires a standard-cut washer (included) be installed between the nut and the seat.
- Strong-Drive SDS Heavy-Duty Connector screws install best with a low-speed high-torque drill with a 3/8" hex-head driver.
- Fasteners and crescent washer are included with the holdowns. For replacements, order part no. SDS25212-HDU_ (Fill in the size needed, e.g., HDU2.)

Codes: See p. 11 for Code Reference Key Chart

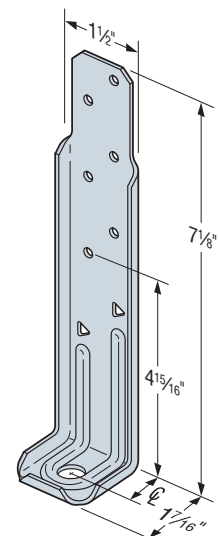


HDU

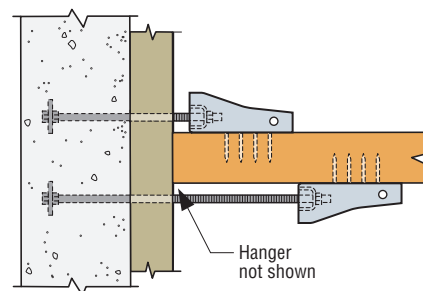
DTT2Z
US Patent
8,555,580



Vertical HDU Installation



DTT1Z
US Patent
10,865,558



Horizontal HDU Offset Installation
(plan view)

See Holddown and Tension Tie General Notes.

HDU/DTT

Holdowns (cont.)

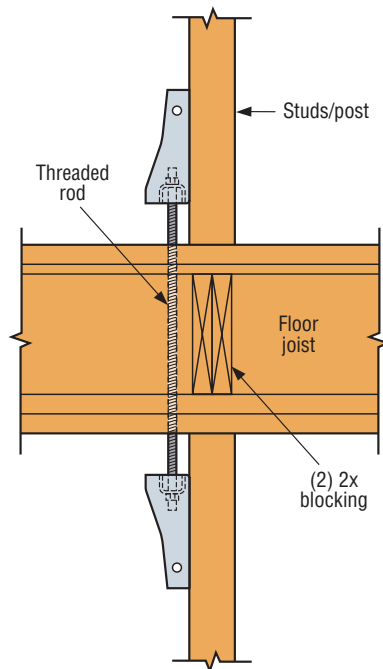
These products are available with additional corrosion protection. For more information, see p. 14.

SS For stainless-steel fasteners, see p. 21.

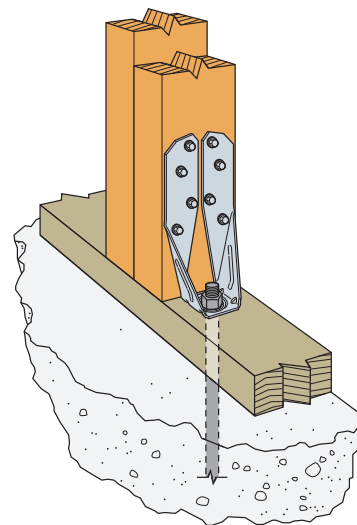
SD Many of these products are approved for installation with Strong-Drive® SD Connector screws. See pp. 348–352 for more information.

Model No.	Ga.	Dimensions (in.)					Fasteners (in.)		Minimum Wood Member Size (in.)	Allowable Tension Loads (160)			Code Ref.
		W	H	B	CL	SO	Anchor Bolt Dia. (in.)	Wood Fasteners		DF/SP	SPF/HF	Deflection at Allowable Load (in.)	
DTT1Z	14	1 ½	7 ⅞	1 ⅞	¾	¾	¾	(6) #9 x 1 ½" SD	1 ½ x 5 ½	840	840	0.17	IBC, FL, LA
								(6) 0.148 x 1 ½		910	640	0.167	
								(8) 0.148 x 1 ½		910	850	0.167	
DTT2Z	14	3 ¼	6 ⅝	1 ⅝	¾	¾	(8) ¼ x 1 ½ SDS	1 ½ x 3 ½	1,825	1,800	0.105		
							(8) ¼ x 1 ½ SDS		3 x 3 ½	2,145	1,835	0.128	
DTT2Z-SDS2.5							(8) ¼ x 2 ½ SDS	3 x 3 ½	2,145	2,105	0.128		
HDU2-SDS2.5	14	3	8 ⅞	3 ¼	1 ⅝	1 ⅝	¾	(6) ¼ x 2 ½ SDS	3 x 3 ½	3,075	2,215	0.088	
HDU4-SDS2.5	14	3	10 ⅝	3 ¼	1 ⅝	1 ⅝	¾	(10) ¼ x 2 ½ SDS	3 x 3 ½	4,565	3,285	0.114	
HDU5-SDS2.5	14	3	13 ⅞	3 ¼	1 ⅝	1 ⅝	¾	(14) ¼ x 2 ½ SDS	3 x 3 ½	5,645	4,340	0.115	
HDU8-SDS2.5	10	3	16 ⅝	3 ½	1 ⅝	1 ½	7 ⅞	(20) ¼ x 2 ½ SDS	3 x 3 ½	6,765	5,820	0.11	
									3 ½ x 3 ½	6,970	5,995	0.116	
									3 ½ x 4 ½	7,870	6,580	0.113	
HDU11-SDS2.5	10	3	22 ¼	3 ½	1 ⅝	1 ½	1	(30) ¼ x 2 ½ SDS	3 ½ x 5 ½	9,535	8,030	0.137	
									3 ½ x 7 ¼	11,175	9,610	0.137	
HDU14-SDS2.5	7	3	25 ⅞	3 ½	1 ⅝	1 ⅝	1	(36) ¼ x 2 ½ SDS	3 ½ x 5 ½	10,770	9,260	0.122	
									3 ½ x 7 ¼	14,390	12,375	0.177	
									5 ½ x 5 ½	14,445	12,425	0.172	

1. HDU14 requires heavy-hex anchor nut to achieve tabulated loads (supplied with holddown).
2. HDU14 loads on 4x6 post are applicable to installation on either the narrow or the wide face of the post.
3. **Fasteners:** Nail dimensions are listed diameter by length. SD and SDS screws are Simpson Strong-Tie® Strong-Drive SD Connector and SDS Heavy-Duty Connector screws. See pp. 21–22 for fastener information.



Typical HDU Tie Between Floors



Typical DTT2Z Installation