DSP/SSP/SP/SPH/RSP4/TSP *Stud Plate Ties*

SIMPSON Strong-Tie®

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 Stud Plate Tie series offers various solutions for connecting the stud to the top and bottom plates. All models can be used to make a connection to either the top or bottom plate, and several are suitable for double top plates and studs.

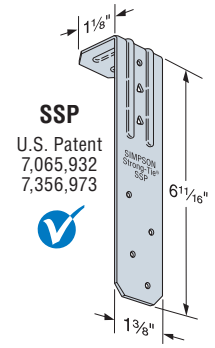
MATERIAL: DSP/SSP/SPH—18 gauge; TSP—16 gauge; all others—20 gauge
FINISH: Galvanized. Some products available in ZMAX® coating; see Corrosion Information, page 10-11.
INSTALLATION: • Use all specified fasteners; see General Notes.
- TSP/DSP/SSP—sill plate installation-fill all round holes.
- TSP/DSP/SSP—top plate installation-fill all round and triangle holes
- SP1/SP2/SP3/SP5—one of the 10d common stud nails is driven at a 45° angle through the stud into the plate.

CODES: See page 12 for Code Reference Key Chart.

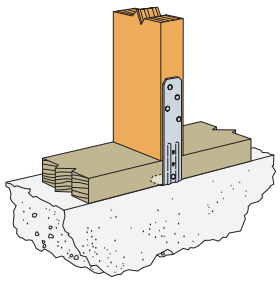
These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

Model No.	Dim. W	Dim. L	Fasteners: Studs	Fasteners: Double Top Plate	Fasteners: Single Sill Plate	Allowable Uplift Loads (160): Double Top Plate DF/SP/SPF	Allowable Uplift Loads (160): Single Sill Plate DF/SP	Allowable Uplift Loads (160): Single Sill Plate SPF/HF	Code Ref.
SSP	1⅜	6¹¹⁄₁₆	4-10dx1½	3-10dx1½	—	350	—	—	I17, F16
				—	1-10dx1½	—	420	325	
			4-10d	3-10d	—	435	—	—	
				—	1-10d	—	455	420	
DSP	2¾	6¹¹⁄₁₆	8-10dx1½	6-10dx1½	—	775	—	—	
				—	2-10dx1½	—	660	545	
			8-10d	6-10d	—	825	—	—	
				—	2-10d	—	825	600	
TSP	1½	7⅞	6-10dx1½	—	3-10dx1½	—	395	345	F26
					3-10d		395	370	
			9-10dx1½	6-10dx1½	—	755[4]	—	—	
				6-10d		1015[4]			

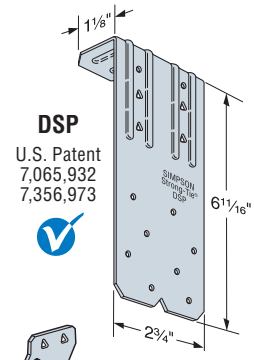
1. Allowable loads have been increased 60% for wind or earthquake loading with no further increase allowed.
2. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
3. Allowable loads for DSP installed to a rim joist are 660 lbs. (DF/SP), 545 lbs. (SPF/HF).
4. Noted values only apply to DF/SP members. For SPF values, multiply by 0.86.
5. **NAILS:** 10d = 0.148" dia. x 3" long, 10dx1½ = 0.148" dia. x 1½" long. See page 16-17 for other nail sizes and information.



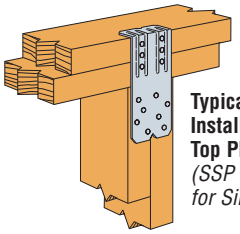
SSP
U.S. Patent 7,065,932 7,356,973



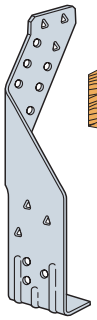
Typical SSP Installed to Sill Plate
(DSP similar for Double Stud)



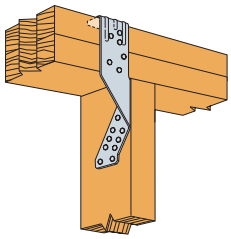
DSP
U.S. Patent 7,065,932 7,356,973



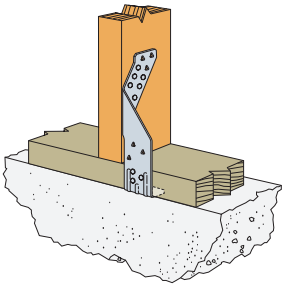
Typical DSP Installed to Top Plate
(SSP similar for Single Stud)



TSP



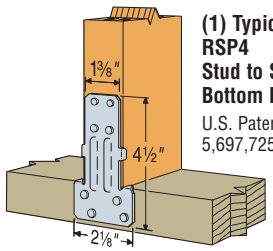
Typical TSP Installed to Top Plate



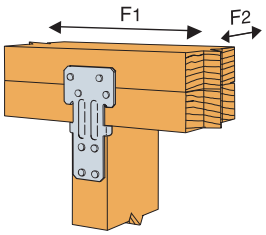
Typical TSP Installed to Sill Plate

Model No.	Dim. W	Dim. L	Stud	Plate Width	Fasteners: Stud[1]	Fasteners: Plate	Allowable Uplift Loads: DF/SP (160)[2]	Allowable Uplift Loads: SPF/HF (160)	Code Ref.
SP1	3½	5¹⁄₁₆	2x	—	6-10d	4-10d	585	535	I17, F16
SP2	3½	6⅝	2x	—	6-10d	6-10d	1065	605	
SP3	4½	6⅝	3x	—	6-10d	6-10d	1065	605	170
SP4	3⁹⁄₁₆	7¼	2x	4x	6-10dx1½	—	885	760	I17, F16
SP5	4½	5¹⁄₁₆	3x	—	6-10d	4-10d	585	535	170
SP6	5⁹⁄₁₆	7¾	2x	6x	6-10dx1½	—	885	760	I17, F16
SP8	7⁵⁄₁₆	8⅝	2x	8x	6-10dx1½	—	885	760	
SPH4 or	3⁹⁄₁₆	8¾	2x	4x	10-10dx1½	—	1240	1065	I17, F16
NEW SPH4R	4¹⁄₁₆	8¼			12-10dx1½	—	1360[5]	1170	170
SPH6 or	5⁹⁄₁₆	9¼	2x	6x	10-10dx1½	—	1240	1065	I17, F16
NEW SPH6R	6¹⁄₁₆	8¾			12-10dx1½	—	1360[5]	1170	170
SPH8	7⁵⁄₁₆	8⅜	2x	8x	10-10dx1½	—	1240	1065	I17, F16
					12-10dx1½	—	1360[5]	1170	
RSP4(1)	2⅛	4½	2x	—	4-8dx1½	4-8dx1½	315	285	I17, L22, F16
RSP4(2)	2⅛	4½	2x	—	4-8dx1½	4-8dx1½	450	370	

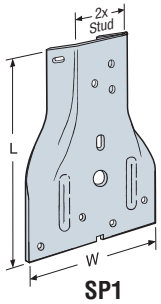
1. SP1, 2, 3 and SP5: drive one stud nail at an angle through the stud into the plate to achieve the table load *(see illustration)*.
2. Allowable loads have been increased for wind or earthquake loading with no further increase allowed. Reduce where other loads govern.
3. RSP4–see Installation details (1) and (2) for reference.
4. RSP4 F_2 is **250 lbs.** *(installation 1)* and **250 lbs.** *(installation 2)*. F_1 load is 210 lbs. for both installations.
5. Maximum load for SPH in Southern Yellow Pine is 1490 lbs.
6. When cross-grain bending or cross-grain tension cannot be avoided, mechanical reinforcement to resist such forces should be considered.
7. For retrofit application see technical bulletin T-STRAP *(see page 191 for details)*.
8. **NAILS:** 10d = 0.148" dia. x 3" long, 10dx1½ = 0.148" dia. x 1½" long, 8dx1½ = 0.131" dia. x 1½" long. See page 16-17 for other nail sizes and information.



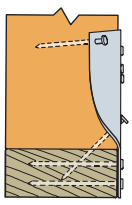
(1) Typical RSP4 Stud to Single Bottom Plate
U.S. Patent 5,697,725



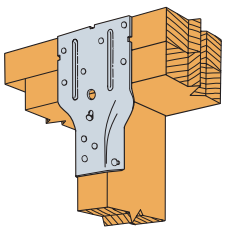
(2) Typical RSP4 Stud to Double Top Plate
(See footnote 4)



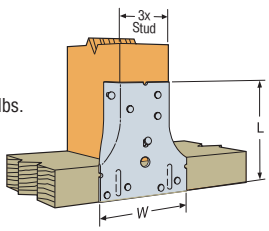
SP1



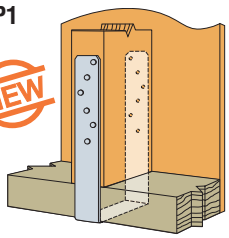
SP1 Nailing Profile



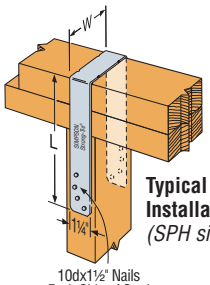
Typical SP2 Installation



Typical SP5 Installed
(SP3 similar installed at double top plate)



Typical SPH4R Stud to Single Bottom Plate



Typical SP4 Installation
(SPH similar)
10dx1½" Nails Each Side of Stud