

Strong-Drive® SD CONNECTOR and SD CONNECTOR SS Screws

Structural Fastener

Simpson Strong-Tie offers the Strong-Drive SD Connector (SD) and SD Connector SS (SD SS) screws for use with our connectors. Designed to replace nails in certain products, the load-rated SD and SD SS screws have been tested and approved for use in many popular Simpson Strong-Tie connectors. In certain applications screws are easier and more convenient to install than nails, and the single-fastener load values achieved by the SD9 and SD10 exceed those of typical 0.148" x 3" or 0.162" x 3½" nails, respectively.

When selecting fasteners for connectors, match both the base metal and corrosion resistance to maximize connection durability. Stainless steel connector screws should be used with stainless steel connectors. Galvanized screws should be used with galvanized connectors. When galvanized and stainless steel parts are used together, galvanic corrosion can occur because the two metals (zinc and stainless steel) are electrochemically dissimilar. If the screw is galvanized and the connector is stainless steel, corrosion of the screw would begin with sacrifice of the zinc in the galvanized coating and then proceed with corrosion of the steel screw. Whether due to a galvanic or oxidative electrochemical process, corrosion can lead to the need for premature repair or failure of the connection.

The SD and SD SS screws feature an optimized shank, specifically designed for compatibility with the fastener holes in Simpson Strong-Tie connectors. The hex head allows for a secure drive and helps avoid stripping of the head during installation. The sharp point of the screw enables fast starts.

Features:

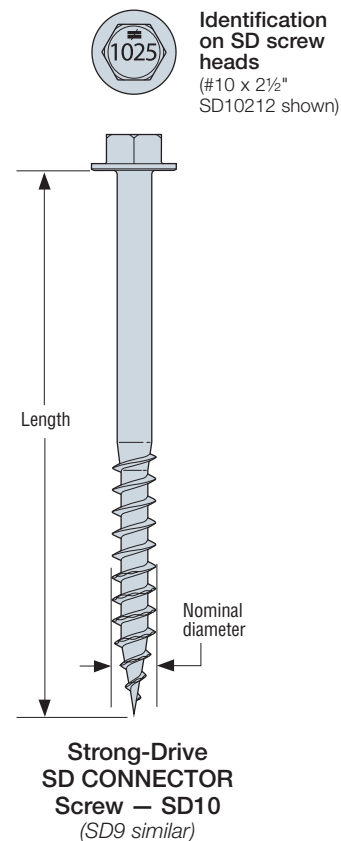
- Tested and approved for use in many of our best-selling connectors for interior and most exterior applications.
- The single-fastener steel-side-plate load capacity of the SD9 exceeds the capacity of a 0.148" x 3" nail, while the single-fastener load capacity of the SD10 exceeds that of the 0.162" x 3½" nail.
- Ideal for use in tight spaces where using a hammer is inconvenient.
- Optimized heat-treating for ductility and strength.
- Mechanically galvanized coating meets ASTM B695 Class 55, is recommended for use with certain preservative-treated woods and recognized as an alternate to hot-dip galvanized in ESR-3046. It is compliant with the 2009, 2012, 2015, 2018 and 2021 International Residential Code® (Section R317.3.1).
- ¼" hex-drive bit included.
- Head identification.

Material: SD Screw — Heat-treated carbon steel, mechanically galvanized (ASTM B695 Class 55); SD SS Screw — Type 316 stainless steel

Codes: See p. 13 for Code Reference Key Chart

Web Applications:

- Visit app.strongtie.com/ff to access our Fastener Finder web application.
- Visit app.strongtie.com/hs to access our Hanger Selector web application.
- Visit app.strongtie.com/rws to access our Roof-to-Wall Selector web application.



See pp. 364–366 for a list of connectors with the Strong-Drive SD Connector screw.

You can also reference the list of approved connectors, load values and applications at strongtie.com/sd, or reference the ICC-ES evaluation report ESR-3096 for a list of connectors and allowable loads using the Strong-Drive SD Connector screws.

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Structural Fastener (cont.)

These products are available with additional corrosion protection. For more information, see p. 16.

SS For stainless-steel fasteners, see p. 23.

	Size	Coating Material	Retail Pack		Contractor Pack		Mini Bulk	
			Fasteners per Pack	Model No.	Fasteners per Pack	Model No.	Fasteners per Pack	Model No.
SS	#9 x 1 ½"	316 stainless steel	100	SD9112SS-R100	500	SD9112SS-R500	3000	SD9112SSMB
SS	#9 x 2 ½"	316 stainless steel	100	SD9212SS-R100	500	SD9212SS-R500	2000	SD9212SSMB
	#9 x 1 ½"	Mechanically galvanized	100	SD9112R100	500	SD9112R500	3000	SD9112MB
	#9 x 2 ½"	Mechanically galvanized	100	SD9212R100-R	500	SD9212R500	2000	SD9212MB
	#10 x 1 ½"	Mechanically galvanized	100	SD10112R100	500	SD10112R500	3000	SD10112MB
	#10 x 2 ½"	Mechanically galvanized	100	SD10212R100-R	500	SD10212R500	2000	SD10212MB

1. Mechanically-galvanized SD screws to be used with galvanized connectors.

2. Stainless-steel SD screws to be used with stainless-steel connectors.

	Model No.	Size (ga. x in.)	Thread Length (in.)	DF/SP Allowable Loads (lb.)		SPF/HF Allowable Loads (lb.)		Code Ref.
				Shear	Withdrawal	Shear	Withdrawal	
				Steel Side Plate		Steel Side Plate		
				20 ga. – 12 ga.		20 ga. – 12 ga.		
SS	SD9112/SD9112SS	#9 x 1 ½	1	171	173	112	122	IBC®, FL, LA
SS	SD9212/SD9212SS	#9 x 2 ½	1	200		112		
	SD10112	#10 x 1 ½	1	173	173	138	122	
	SD10212	#10 x 2 ½	1	215		165		

1. Withdrawal loads and steel-side-plate shear loads are based on testing per ICC-ES AC233.

2. Allowable loads are shown at a wood load duration factor of $C_D = 1.0$. Loads may be increased for load duration per the building code up to a $C_D = 1.6$. Tabulated values must be multiplied by all applicable NDS adjustment factors.

3. Withdrawal loads are based on penetration of the screw's entire threaded section into the main member.

4. Visit strongtie.com for wood-to-wood shear values and wood side-plate details.

Strong-Drive® SD CONNECTOR and SD CONNECTOR SS Screws

Structural Fastener (cont.)

Connectors approved for use with the Strong-Drive SD Connector Screw. This is current as of this printing. We are constantly testing and updating this information. For the most updated information, see strongtie.com/sd.

Model No.	SD9 Qty.		SD10 Qty.	
	1 1/2"	2 1/2"	1 1/2"	2 1/2"
A21	(4)	—	—	—
A23	(8)	—	—	—
A33	(8)	—	—	—
A34/A34SS	(8)	—	—	—
A35/A35SS	(12)	—	—	—
A44	(8)	—	—	—
ABA24-2Z	(6)	—	—	—
ABA44Z	(6)	—	—	—
ABA44RZ	(6)	—	—	—
ABA46Z	—	—	(8)	—
ABA66Z	—	—	(8)	—
ABA66RZ	—	—	(8)	—
ABU44Z	—	—	(12)	—
ABU44SS ¹	(12)	—	—	—
ABU46Z	—	—	(12)	—
ABU46SS ¹	(12)	—	—	—
ABU66Z	—	—	(12)	—
ABU66SS ¹	(12)	—	—	—
ABU88Z	—	—	(18)	—
ABU88SS ¹	(18)	—	—	—
ABW44Z	(8)	—	—	—
ABW44RZ	(8)	—	—	—
ABW46Z	(10)	—	—	—
ABW46RZ	(10)	—	—	—
ABW66Z	(12)	—	—	—
ABW66RZ	(12)	—	—	—
AC4	—	—	(28)	—
AC4SS ¹	(28)	—	—	—
AC6	—	—	(28)	—
AC6SS ¹	(28)	—	—	—
ACH4Z	—	—	—	(40)
ACH6Z	—	—	—	(40)
BC4	—	—	(12)	—
BC4SS ¹	(12)	—	—	—
BC6	—	—	(12)	—
BC6SS ¹	(12)	—	—	—
BC40	—	—	(10)	—
BC40SS ¹	(10)	—	—	—
BC60	—	—	(10)	—
BC60SS ¹	(10)	—	—	—
BCS2-2/4	—	(14)	—	—
BCS2-2/4SS ¹	—	(14)	—	—
BCS2-3/6	—	(18)	—	—
BCS2-3/6SS ¹	—	(18)	—	—

Model No.	SD9 Qty.		SD10 Qty.	
	1 1/2"	2 1/2"	1 1/2"	2 1/2"
CS / CMST Straps	See p. 24 for straight strap fastener substitutions and reduction factors.			
CTS218	(24)	—	—	—
DJT14Z	—	—	—	(8)
DPT5Z	(5)	—	—	—
DPT7Z	(5)	—	—	—
DTT1Z	(6)	—	—	—
EPB44	—	—	(8)	—
EPB44PHDG	—	—	(8)	—
EPC4Z	(18)	—	—	—
EPC6Z	(18)	—	—	—
EPC8Z	(18)	—	—	—
FB24Z	(5)	—	—	—
FB24R	(5)	—	—	—
FB26	(6)	—	—	—
FBFZ	(4)	—	—	—
FBR24Z	(5)	—	—	—
FPBM44	(8)	—	—	—
FWH2	(16)	—	—	—
GA1	(4)	—	—	—
GA2	(6)	—	—	—
H1A	(8)	—	—	—
H2A / H2ASS	(10)	—	—	—
H2.5A / H2.5ASS	(10)	—	—	—
H3 / H3SS	(8)	—	—	—
H8 / H8SS	(10)	—	—	—
H10A / H10ASS	(18)	—	—	—
H10A-2	(18)	—	—	—
HGUS / HHUS Hangers	See strongtie.com for Strong-Drive SD Connector screw substitutions and allowable loads.			
HHRC2-2	—	—	—	(62)
HHRC42-2	—	—	—	(62)
HHRC4/1.81	—	—	—	(62)
HHRC44	—	—	—	(62)
HHRC5.25/3.25	—	—	—	(62)
HHRC5.37/3.12	—	—	—	(62)
HHRC5.37/3.56	—	—	—	(62)
HHRC64	—	—	—	(67)
HHRC66	—	—	—	(67)
HPTZ	—	—	(8)	—
HRS6	(6)	—	—	—
HRS8	(10)	—	—	—
HRS12	(14)	—	—	—
HTP37Z	(20)	—	—	—

See footnotes on p. 366.

Strong-Drive® SD CONNECTOR and SD CONNECTOR SS Screws

Structural Fastener (cont.)

Connectors approved for use with the Strong-Drive SD Connector Screw. This is current as of this printing. We are constantly testing and updating this information. For the most updated information, see strongtie.com/sd.

Model No.	SD9 Qty.		SD10 Qty.	
	1 1/2"	2 1/2"	1 1/2"	2 1/2"
HU / HUC Hangers	See p. 24 for face-mount hanger fastener substitutions and reduction factors.			
HSUR/L 45° Skewed Hangers	See strongtie.com for Strong-Drive SD Connector screw substitutions and allowable loads.			
HTT4	—	—	(18)	—
HTT5	—	—	(26)	—
HTU26	(31)	—	—	—
HTU26 (Min.)	(34)	—	—	—
HTU26 (Max.)	(40)	—	—	—
HTU28 (Min.)	(40)	—	—	—
HTU28 (Max.)	(52)	—	—	—
HTU210 (Min.)	(46)	—	—	—
HTU210 (Max.)	(64)	—	—	—
HTU26-2 (Min.)	(34)	—	—	—
HTU26-2 (Max.)	(40)	—	—	—
HTU28-2 (Min.)	(40)	—	—	—
HTU28-2 (Max.)	(52)	—	—	—
HTU210-2 (Min.)	(46)	—	—	—
HTU210-2 (Max.)	(64)	—	—	—
HUS26	—	—	—	(20)
HUS28	—	—	—	(30)
HUS210	—	—	—	(40)
HUS26-2	—	—	—	(8)
HUS28-2	—	—	—	(12)
HUS210-2	—	—	—	(16)
HUS212-2	—	—	—	(20)
HUS46	—	—	—	(8)
HUS48	—	—	—	(12)
HUS410	—	—	—	(16)
HUS412	—	—	—	(20)
HUS1.81/10	—	—	—	(40)
IUS Hangers	See p. 24 for face-mount hanger fastener substitutions and reduction factors.			
KBS1Z	(12)	—	—	—
L30	(4)	—	—	—
L50 / L50SS	(6)	—	—	—
L70	(8)	—	—	—
L90	(10)	—	—	—
LCE4	—	—	(24)	—
LCE4SS ¹	(24)	—	—	—
LPC4Z/LPC6Z	(16)	—	—	—
LRU26Z	—	—	—	(9)
LRU28Z	—	—	—	(10)
LRU210Z	—	—	—	(13)

See footnotes on p. 366.

Model No.	SD9 Qty.		SD10 Qty.	
	1 1/2"	2 1/2"	1 1/2"	2 1/2"
LRU212Z	—	—	—	(13)
LSCZ/LSCSS	(17)	—	—	—
LSSJ / LSSR	See strongtie.com for Strong-Drive SD Connector screw substitutions and allowable loads.			
LSTA9	(8)	—	—	—
LSTA12	(10)	—	—	—
LSTA15	(12)	—	—	—
LSTA18	(14)	—	—	—
LSTA21	(14)	—	—	—
LSTA24	(14)	—	—	—
LTS Twist Straps	LTS straps installed with SD #9 x 1 1/2" screws will match allowable loads for installations with 0.148" x 3" nails.			
LSTA30	(14)	—	—	—
LSTA36	(14)	—	—	—
LSTI49	(16)	—	—	—
LSTI73	(16)	—	—	—
LTP4	(12)	—	—	—
LTP2	(12)	—	—	—
LU Hangers	See p. 24 for face-mount hanger fastener substitutions and reduction factors.			
LU24 (10d)	(6)	—	—	—
LU26 (10d)	(10)	—	—	—
LU28 (10d)	(14)	—	—	—
LU210 (10d)	(16)	—	—	—
LUC26Z (10d)	(10)	—	—	—
LUC26SS (10d)	(10)	—	—	—
LUC210Z (10d)	(16)	—	—	—
LUC210SS (10d)	(16)	—	—	—
LUS24	(4)	(2)	—	—
LUS26 / LUS26SS	(4)	(4)	—	—
LUS28 / LUS28SS	(6)	(4)	—	—
LUS210 / LUS210SS	(8)	(4)	—	—
LUS36	(4)	(4)	—	—
LUS310	(6)	(4)	—	—
LUS24-2	(4)	(4)	—	—
LUS26-2	(4)	(4)	—	—
LUS28-2	(6)	(4)	—	—
LUS210-2	(8)	(6)	—	—
LUS214-2	(10)	(6)	—	—
LUS26-3	(4)	(4)	—	—
LUS28-3	(6)	(4)	—	—
LUS210-3	(8)	(6)	—	—
LUS44	(4)	(2)	—	—
LUS46	(4)	(4)	—	—

Strong-Drive® SD CONNECTOR and SD CONNECTOR SS Screws

Structural Fastener (cont.)

Connectors approved for use with the Strong-Drive SD Connector Screw. This is current as of this printing. We are constantly testing and updating this information. For the most updated information, see strongtie.com/sd.

Model No.	SD9 Qty.		SD10 Qty.	
	1 1/2"	2 1/2"	1 1/2"	2 1/2"
LUS48	(6)	(4)	—	—
LUS410	(8)	(6)	—	—
LUS414	(10)	(6)	—	—
LSU4.12	—	(40)	—	—
LSU4.28	—	(40)	—	—
LSU3510-2	—	(40)	—	—
LSU5.12	—	(40)	—	—
MIU Hangers	See p. 24 for face-mount hanger fastener substitutions and reduction factors.			
MST / MSTI Straps	See p. 24 for straight strap fastener substitutions and reduction factors.			
MSTA / MSTASS Straps	See p. 24 for straight strap fastener substitutions and reduction factors.			
MSTC Straps	See p. 24 for straight strap fastener substitutions and reduction factors.			
MSTI Straps	See p. 24 for straight strap fastener substitutions and reduction factors.			
MTS Twist Straps	MTS straps installed with SD #9 x 1 1/2" screws will match allowable loads for installations with 0.148" x 3" nails.			
NS1	(2)	—	—	—
NS2	(2)	—	—	—
PA51	(10)	—	—	—
PA68	(10)	—	—	—
PBS44A	—	—	(14)	—
PC4Z	(18)	—	—	—
PC6Z	(18)	—	—	—
PC8Z	(18)	—	—	—
PBS44A	—	—	(14)	—
PF24	—	(6)	—	—
PF26	—	(4)	—	—
PPBF44	(12)	—	—	—
PPBF66	(12)	—	—	—
PSPN58Z	—	—	(4)	—
PSPN516Z	—	—	(12 to 24)	—
RR	(8)	—	—	—
RSP4	(8)	—	—	—
RTA12	(16)	—	—	—
RTA2Z	(8)	—	—	—
RTA4	(12)	—	—	—
RTB22	(8)	—	—	—
RTC22Z	(11)	—	—	—
RTC2Z	(12)	—	—	—
RTC42	—	—	(22)	—
RTC44	—	—	(29)	—

Model No.	SD9 Qty.		SD10 Qty.	
	1 1/2"	2 1/2"	1 1/2"	2 1/2"
RTF2Z	(12)	—	—	—
RTT22Z	(10)	—	—	—
SS1.5	(12)	—	—	—
SS2.5	(12)	—	—	—
SS3	(12)	—	—	—
SS4.5	(14)	—	—	—
ST9	—	—	(8)	—
ST12	—	—	(10)	—
ST18	—	—	(12)	—
ST22	—	—	(12)	—
ST292	—	—	(12)	—
ST2115	—	—	(6)	—
ST2122	—	—	(12)	—
ST2215	—	—	(14)	—
ST6215	—	—	(16)	—
ST6224	—	—	(20)	—
ST6236	—	—	(28)	—
SUR/L 45° Skewed Hangers	See strongtie.com for Strong-Drive SD Connector screw substitutions and allowable loads.			
THASR/L29	(7)	(12)	—	—
THASR/L29-2	—	(20)	—	—
THASR/L422	—	(20)	—	—
TJC57	(24)	—	—	—
TP / TPA Tie Plates	Not load rated. Use #9 x 1 1/2" Strong-Drive SD Connector screw. Quantity as required.			
U Hangers	See p. 24 for face-mount hanger fastener substitutions and reduction factors.			
VTOR	(7)	—	—	—

- Where indicated, published allowable loads are for installation with #10 SD Connector screws. Multiply allowable loads by 0.83 to obtain allowable loads for #9 SD Connector screws.
- Stainless-steel connectors use #9 SD Connector SS screws and have the same allowable loads as carbon steel #9 SD Connector screws.
- Strong-Drive SD Connector screw substitutions may have load reductions. For additional information and specific allowable loads, refer to strongtie.com/sd.
- Fasteners:** SD screws are Simpson Strong-Tie Strong-Drive SD Connector screws. See pp. 23–24 for fastener information.