

SD SS – Strong-Drive® Connector SS Screw

Material

316 Stainless Steel



Size: See the table below

Features & Benefits

- A premium fastener for a premium connection
- The load rated SD SS screw has been tested and approved for use in Simpson Strong-Tie stainless steel connectors
- Shank is specifically designed to match the fastener holes in Simpson Strong-Tie connectors
- Screws are easier and more convenient to install than nails in certain applications where using a hammer is inconvenient
- Stainless steel products are an investment in your outdoor structures. When you are ready to repair, remodel or replace your structure, SD SS screws are easy to remove, inspect, and install when compared with nailed connections
- 1/4" (6.35mm) hex drive bit included

Applications

- Simpson Strong-Tie® stainless steel connectors



Head Stamp with size for easy identification



316 Stainless Steel SD SS provides maximum corrosion protection



Patented Serrated Threads and Sharp Point make driving easier

Specifications

Model No.	Size	Thread	Point	Material & Finish	Box Qty	Drive Size
SD9112SS-R100	#9 x 38mm	Serrated Threads	Sharp Point	316 Stainless Steel	100	1/4" Hex Head
SD9212SS-R100	#9 x 64mm				100	

PLEASE NOTE: Pre-drilling and countersink may be necessary at ends, butt joints, and on applications where denser material is used. Follow the board manufacturer's recommendation where applicable. WARNINGS: Always wear PPE during installation. Corrosive environments, exposure to water, salt air, or chemicals (including some wood preservatives) may cause early failure.

Table 1. Model numbers, markings, dimensions, and basic properties for the SD Connector SS screws

Model No.	Head Marking (##)	Screw Length (mm)	Thread Length (mm)	Diameter (mm)			Fastener Strength		
				Shank	Major	Minor	Bending Yield Strength (MPa)	Tension (kN)	Shear (kN)
SD9112SS	1.5	38	25.4	3.5	4.3	3.0	1070	3.5	2.9
SD9212SS	2.5	64							

1. Fastener length is measured from the underside of the head to the point.
2. Thread length includes the point.
3. Bending yield strength testing followed ASTM A F1575 and is based on minor thread diameter.
4. Characteristic bending yield strength determined following EN14358.
5. Tension and shear properties are based on 0.5 of the average load for screws tested in tension and shear, respectively. Shear strength is shear through the threads.

Table 2. Characteristic Capacity (Qk) for single SD SS Screws Single Shear Connections (Type 1) – Seasoned Timber for Joint Groups JD4 and JD5 and Wood Structural Panels (WSP)

Model No.	Screw Length (mm)	Thread Length (mm)	Characteristic Shear Capacity - JD4 (N)			Characteristic Shear Capacity - JD5 (N)		
			Timber Side Member Thickness (mm)			Timber Side Member Thickness (mm)		
			11.9-12.7 (WSP)	18.3-19.1 (WSP)	35	11.9-12.7 (WSP)	18.3-19.1 (WSP)	35
SD9112SS	38	25.4	1525	-	-	1350	-	-
SD9212SS	64		1615	1810	1920	1340	1280	1830

1. Main and side members shall have densities representative of JD4 and JD5, 550 kg/m³ and 500 kg/m³, respectively.
2. Tabulated characteristic lateral capacities are for normal duration of load.
3. Screws shall be installed normal to the surface of the timber member.

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Table 3. Characteristic Capacity (Qk) for Single SD SS Screws Single Shear Connection (Type 1) - Steel-to-Timber for Seasoned Timber for Joint Groups JD4 and JD5

Model No.	Screw Length (mm)	Thread Length (mm)	Characteristic Shear Strength 1-mm Steel-to-Timber (N)	
			JD4	JD5
SD9112SS	38	25.4	1665	1080
SD9212SS	64		1970	1080

1. The main members shall have densities representative of JD4 and JD5, 550 kg/m³ and 500 kg/m³, respectively.
2. Tabulated characteristic lateral capacities are for normal duration of load.
3. Screws shall be installed normal to the surface of the timber member.

Table 4. Characteristic Capacity (Qk) for Single SD SS Screws Withdrawal Connections (Type 2) – Seasoned Timber for Joint Groups JD4 and JD5

Model No.	Screw Length (mm)	Thread Length (mm)	Characteristic Withdrawal Value (N/mm)	
			JD4	JD5
SD9112SS	38	25.4	110	71
SD9212SS	64			

1. The main members shall have densities representative of JD4 and JD5, 550 kg/m³ and 500 kg/m³, respectively.
2. Tabulated characteristic withdrawal capacities are for normal duration of load.
3. Tabulated characteristic withdrawal values are in N/mm of thread length into the main member.

Table 5. Minimum recommended spacing for connections with SD CONNECTOR SS screws

Condition		Minimum Distance or Spacing (mm)
Edge Distance	Perpendicular to grain loading	25
	Parallel to grain loading	13
End Distance	Perpendicular to grain loading	50
	Parallel to grain loading	50
Spacing	Between fasteners in a row	50
	Between non-staggered rows	13
	Between staggered rows	13

1. Edge distances, end distances, and spacing of screws shall be sufficient to prevent splitting of the timber or as required in this table; or when applicable as recommended by the structural composite lumber manufacturer, whichever is more restrictive.