

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 Moment (N-mm)	Tension (kN)	Shear (kN)
SD9112SS	1.5	38	25.4	3.5	4.3	3.0	4386	7.0	5.4
SD9212SS	2.5	64							

1. Tension and shear strengths are characteristic strengths from tests.

Table 2. Head Pull-through Capacity for single SD CONNECTOR SS screws in single withdrawal connections – seasoned timber for Structural Grades SG8 and SG6

Model No.	Screw Length (mm)	Thread Length (mm)	Head Pull-through Capacity - SG8 (N)		Head Pull-through Capacity - SG6 (N)	
			Timber Head Side Member Thickness (mm)		Timber Head Side Member Thickness (mm)	
			12 - 20 (WSP)	≥20 (WSP)	12 - 20 (WSP)	≥20 (WSP)
SD9112SS	38	25.4	1700	3200	1200	2200
SD9212SS	64					

1. SD SS screws shall be installed normal to the face of the timber.

SD SS — Strong-Drive® Connector SS Screw**Table 3. Characteristic Capacity (Qk) for single SD CONNECTOR SS screws in single shear connections – seasoned timber for Structural Grades SG8 and SG6**

Model No.	Screw Length (mm)	Thread Length (mm)	Characteristic Shear Capacity - SG8 (N)			Characteristic Shear Capacity - SG6 (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	1970	-	-	1745	-	-
SD9212SS	64		2185	2455	2405	1815	1745	2015

- SD SS screws shall be installed normal to the face or edge of the timber.

Table 4. Characteristic Capacity (Qk) for single SD CONNECTOR SS screws in single shear connections – steel-to-timber (side grain) for seasoned Structural Grades SG8 and SG6

Model No.	Screw Length (mm)	Thread Length (mm)	Characteristic Shear Capacity 1-mm Steel-to-Timber (N)	
			SG8	SG6
SD9112SS	38	25.4	2470	1595
SD9212SS	64		2940	1595

- SD SS screws shall be installed normal to the face or edge of the timber.
- Connection withdrawal strength shall be based on thread length penetration into the point-side member and shall be the lesser of connection withdrawal strength and pull-through resistance.

Table 5. Characteristic Withdrawal Capacity (Qk) for single SD CONNECTOR SS screws – seasoned timber for Structural Grades SG8 and SG6.

Model No.	Screw Length (mm)	Thread Length (mm)	Characteristic Withdrawal Value (N/mm)	
			SG8	SG6
SD9112SS	38	25.4	124	86
SD9212SS	64			

- Connection withdrawal strength shall be based on thread length penetration into the point-side member and shall be the lesser of connection withdrawal strength and pull-through resistance.

Table 6. 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