

SCREWS

See the Anchor Systems Catalog for full Titen Screw details, and see Multi-Ply Wood Trusses, page 118 for additional information.

The Simpson Strong-Drive® wood screw has a hex washer head for easy driving with a 3/8" hex head socket and a low speed drill. The built-in reamer and type 17 tip cuts a hole to allow installation without predrilling. Predrilling may be necessary depending on the type and moisture content of wood.

CODES: See page 8 for Code Listing Key Chart.

Titen Screw Anchors for Concrete

Titen Dia. (in)	Drill Bit Dia. (in)	Embed. Depth (in)	Critical Spacing (in)	Critical Edge Dist. (in)	Tension Load				Shear Load		Code Ref.
					f'c >= 2000 psi (13.8 MPa) Concrete		f'c >= 4000 psi (27.6 MPa) Concrete		f'c >= 2000 psi (13.8 MPa) Concrete		
					Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.	Ultimate lbs.	Allowable lbs.	
3/16"	5/32"	1	2 1/4	1 1/8	500	125	640	160	1,020	255	46
3/16"	5/32"	1 1/2	2 1/4	1 1/8	1,220	305	1,850	460	1,670	415	
1/4"	3/16"	1	3	1 1/2	580	145	726	180	900	225	
1/4"	3/16"	1 1/2	3	1 1/2	1,460	365	2,006	500	1,600	400	

1. These loads also apply to masonry.

Wood Screws

Model No.	Description	Metric Equivalent (mm)	Finish ³	Fasteners per Carton	Doug Fir-Larch/Southern Pine Allowable Loads ¹			Spruce-Pine-Fir Allowable Loads ¹			Code Ref.
					Wood to Wood (DF to DF)	10 Gauge	3 Gauge	Wood to Wood (SPF to SPF)	10 Gauge	3 Gauge	
						Shear (100)	Shear (100)		Shear (100)	Shear (100)	
SD8x1.25	5/32 x 1 1/4" Wood screw	4.2 x 31.8	EG	—	—	76	—	—	65	—	170
SDS 1/4 x 1 1/2	1/4 x 1 1/2" Wood screw	6.1 x 38	ZINC	1500	—	247	243	—	214	212	27, 96
SDS 1/4 x 1 3/4	1/4 x 1 3/4" Wood screw	6.1 x 44.5	ZINC	1400	—	292	291	—	253	254	
SDS 1/4 x 2	1/4 x 2" Wood screw	6.1 x 50.8	ZINC	1300	—	306	327	—	264	284	
SDS 1/4 x 2 1/2	1/4 x 2 1/2" Wood screw	6.1 x 63.5	ZINC	1100	176	306	327	137	264	284	
SDS 1/4 x 3	1/4 x 3" Wood screw	6.1 x 76.2	ZINC	950	228	306	327	177	264	284	
SDS 1/4 x 3 1/2	1/4 x 3 1/2" Wood screw	6.1 x 88.9	ZINC	900	228	306	327	177	264	284	
SDS 1/4 x 4 1/2	1/4 x 4 1/2" Wood screw	6.1 x 114.3	ZINC	800	272	306	327	216	264	284	
SDS 1/4 x 6	1/4 x 6" Wood screw	6.1 x 152.4	ZINC	600	272	306	327	216	264	284	

1. Allowable loads are based on the ICBO-ER 5268 for use with metal side plates, Fes = 45 ksi.

2. Metric equivalents are listed by Diameter x Length.

3. Zinc = Yellow zinc dichromate.

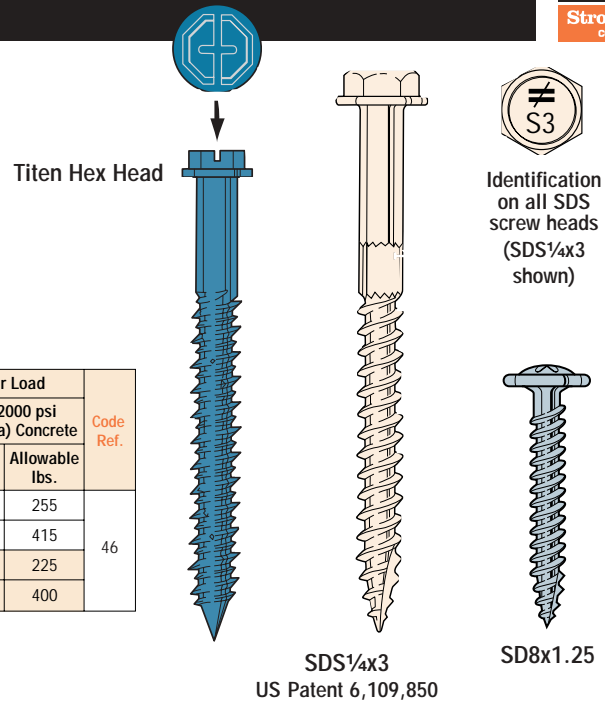
4. SDS screws install best with a low speed 1/2" drill with a 3/8" hex head driver.

5. Wood-to-wood applications are based on a wood thickness of 1 1/2" side member, and full penetration into the main member. For other wood species and thicknesses, reference ICBO 5268.

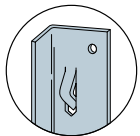
6. These loads are for 100% duration. They may be increased per the NDS.

7. SD8x1.25" wood screws are not to be used with structural connectors unless specifically stated in this catalog.

8. SDS requires 1 1/4" minimum penetration (7 x diameter) and SD8 3/4" penetration. Table values have been reduced to reflect the minimum required penetration.

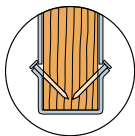


FASTENING IDENTIFICATION



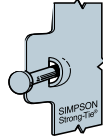
Speed Prongs

Used to temporarily position and secure the connector for easier and faster installation.



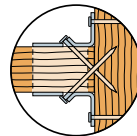
Positive Angle Nailing (PAN)

Provided when wood splitting may occur, and to speed installation.



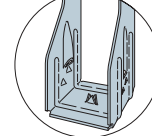
Dome Nailing

This feature guides the nail into the joist and header at a 45° angle. U.S. Patent 5,603,580



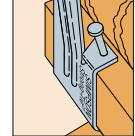
Double Shear Nailing

The nail is installed into the joist and header, distributing the load through two points on each joist nail for greater strength. U.S. Patent 4,480,941



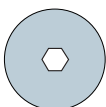
IUS Snap Detail

The "Snap-In" teardrops and Strong-Grips allow the I-joist to "snap" in securely without the need for joist nails.



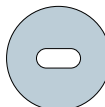
ITT Tab Nailing

The nail is hammered in at an angle to prevent the wood from splitting.



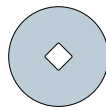
Hexagonal Holes

Used for concrete or masonry screw applications.



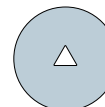
Obround Holes

Used to provide easier nailing access in tight locations. Fasteners may be installed at an angle.



Diamond Holes

Optional holes to temporarily secure connectors to the member during installation.



Triangle Holes

Provided on some products in addition to round holes. Round and triangle holes must be filled to achieve the published maximum load value.