

Together we're
building safer, stronger
structures.

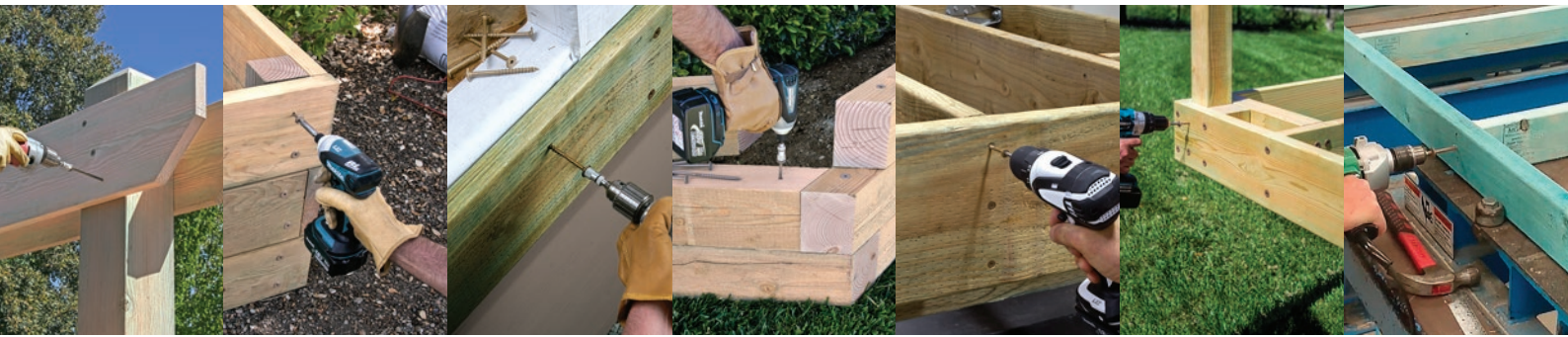


Strong-Drive
STRUCTURAL FASTENERS
SDWS **TIMBER** Screw

The 2nd Generation with
Patented **SawTooth™ point**

*A structural screw with proven
Performance, Versatility and Speed.*

One Screw for Many Uses



The SDWS is the 2nd Generation, redesigned with a patented SawTooth™ point. It delivers faster starts, less torque, and eliminates the need for pre-drilling. All this reduces tool wear and extends your battery life!

No pre-drilling means more screws installed and less labour for you compared to conventional installation. The SDWS is the advanced alternative to bolting timber, or batten and coach screws, being 30% faster and 10% stronger than an equivalent batten screw.

Application

Designed to be versatile the SDWS is recognised as a solution for wood connections and is backed by testing and load data.

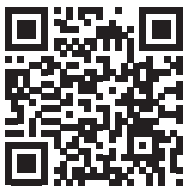
Applications include, but are not limited to:

- Outdoor Structures
- Deck Frames and Ledgers
- Landscaping
- Structural Timber Framing — It replaces strapping, which means, no interference with wall cladding.

Finish

- Double Barrier Coating — Suitable for interior, treated timber and external applications.

Corrosion Resistance Level
MEDIUM



Scan this QR code to watch a video of Strong-Drive® SDWS TIMBER Screw, and other great videos.

<http://bit.ly/SST-NZ-Videos>



Features and Benefits

6-lobe T-40 drive **eliminates cam-outs**, for easier installations and longer bit life — bit(s) included.

Head stamped for **easy identification** of length and diameter, for building certification.

Large washer-head provides **superior clamping**, while nibs offer **greater control** for the installer when seating the head.

Bold thread design provides **superior holding power**, even into the end grain of timber.

Patented **SawTooth™ point** for faster starts, less torque and no pre-drilling.

Product and Packaging Information

Model				Length (mm)	
Bulk Pack	Qty	50 Pack	12 Pack	Screw	Thread
SDWS22300DB	950	SDWS22300DB-R50	SDWS22300DB-R12	76	38
SDWS22400DB	600	SDWS22400DB-R50	SDWS22400DB-R12	102	60
SDWS22500DB		SDWS22500DB-R50	SDWS22500DB-R12	127	70
SDWS22600DB	500	SDWS22600DB-R50	SDWS22600DB-R12	152	
SDWS22800DB	400	SDWS22800DB-R50	SDWS22800DB-R12	203	
SDWS221000DB	250	SDWS221000DB-R50	SDWS221000DB-R12	254	



Bit(s) included. Replacement Bit: BIT40T-134-RC3

Serious Screws for Structural Applications

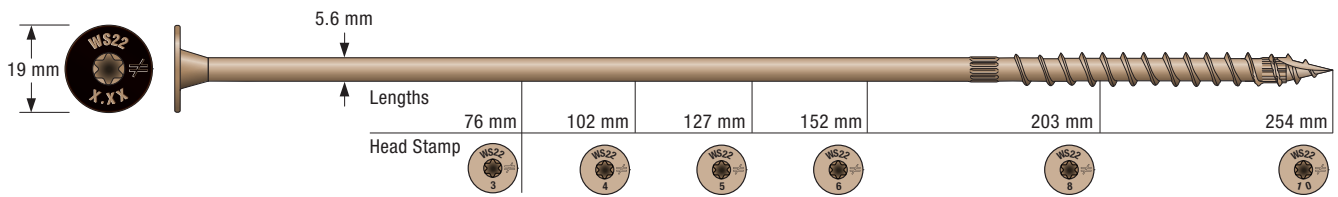


Table 1. Strong-Drive® SDWS Timber Screw Specifications

Model	Head Marking (##)	Screw Length (mm)	Thread Length ^{1,2} (mm)	Diameter (mm)			Fastener Strength			
				Shank	Major	Minor	Bending Yield Strength ³ (Mpa)	Characteristic Yield Moment ⁴ (kNmm)	Tension ⁵ (kN)	Shear ⁵ (kN)
SDWS22300DB	3	76	38	5.6	7.7	5.0	1103	17.9	10.5	6.1
SDWS22400DB	4	102	60							
SDWS22500DB	5	127	70				1207			
SDWS22600DB	6	152								
SDWS22800DB	8	203								
SDWS221000DB	10	254								

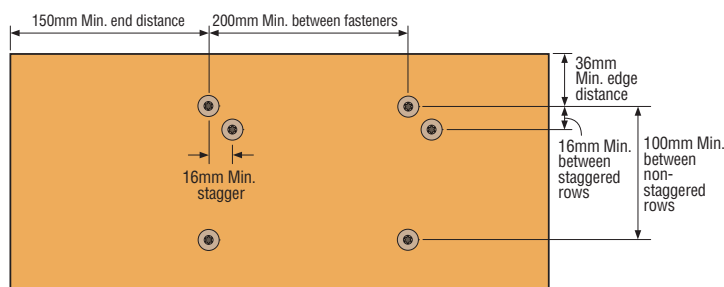
- For the purpose of measuring overall length, fasteners shall be measured from the underside of the head to bottom of the point.
- Length of thread includes the point.
- Bending yield strength determined following ASTM F1575 and based on minor thread diameter.
- Characteristic yield moment determined following EU14358 and based on minor thread diameter.
- Tension and shear properties are based on 0.5 of the average maximum load for screws tested in tension and shear, respectively. Shear strength is shear through the threads.

Table 2. Strong-Drive® SDWS Timber Screw Limit States-Reference Characteristic Load Values (N) for Timber-to-Timber Connections^{1,2,3,4,5}

Model	Screw Length (mm)	Timber Joint Group	Characteristic Shear Loads (N)									Characteristic Withdrawal Capacity (N/mm) ⁶	
			Timber Side Member Thickness									Face Grain	End Grain ⁷
			35	45	63	70	90	100	115	150	200		
SDWS22300DB	76	JD4	6630	—	—	—	—	—	—	—	—	88	62
		JD5	4995	—	—	—	—	—	—	—	—	82	50
SDWS22400DB	102	JD4	7400	6100	6100	—	—	—	—	—	—	112	69
		JD5	6000	6000	4545	—	—	—	—	—	—	91	54
SDWS22500DB	127	JD4	7400	7400	6100	5655	5655	—	—	—	—	134	110
		JD5	6000	6000	6000	3920	3920	—	—	—	—	93	78
SDWS22600DB	152	JD4	7550	7550	7550	7550	5865	5865	5840	—	—	134	110
		JD5	6030	6030	6030	6030	5220	5220	4385	—	—	93	78
SDWS22800DB	203	JD4	8055	8055	8055	8055	7040	7040	7040	6100	—	134	110
		JD5	6240	6240	6240	6240	5500	5500	5500	5485	—	93	78
SDWS221000DB	254	JD4	8055	8055	8055	8055	7040	7040	7040	7040	6100	134	110
		JD5	6240	6240	6240	6240	5500	5500	5500	5500	5500	93	78

- Conditions without numbers in the matrix shall not be used.
- The main and side members shall have a minimum density of 530 kg/m³ for JD4, or 450 kg/m³ for JD5.
- The tabulated characteristic shear loads and withdrawal are for normal duration of load.
- Screws shall be installed straight into the side grain of the wood main member with the screw axis at a 90-degree angle to the wood fibres.
- Minimum fastener penetration shall be equal to the screw length less the thickness of the wood side member.
- Tabulated characteristic values for withdrawal are in N/mm of thread length into the main member.
- Withdrawal to end grain values are based on the lesser value of withdrawal from the main member or the characteristic pull-through of the screw through a 35 mm thick side member of the same Joint Group, or tensile strength of the screw.

Strong-Drive® SDWS Timber Spacing Requirements



One Screw for Many Uses

A. Ledger/Bearer Plate Shear Capacity (per screw)

Model	Screw Length (mm)	Ledger/ Bearer Thickness (mm)	Shear Design Capacity (kN)					
			JD4			JD5		
			Brief/Uplift $k_t = 1$	Medium $k_t = 0.8$	Long term $k_t = 0.6$	Brief/Uplift $k_t = 1$	Medium $k_t = 0.8$	Long term $k_t = 0.6$
SDWS22400DB	102	45	4.9	3.9	2.9	4.8	3.8	2.9
SDWS22500DB	127	45	5.9	4.7	3.6	4.8	3.8	2.9
		70	4.5	3.6	2.7	3.1	2.5	1.9
SDWS22600DB	152	45	6.0	4.8	3.6	4.8	3.9	2.9
		70	6.0	4.8	3.6	4.8	3.9	2.9
		90	4.7	3.8	2.8	4.2	3.3	2.5

B. Top/Bottom Plate-to-Stud Fixing (per screw)

Model No.	Screw Length (mm)	Effective Thread Length ¹	Wall Plate Thickness (mm) ²	Uplift Design Capacity (kN)	
				JD4	JD5
SDWS22300DB	76	31	45	1.5	1.2
SDWS22400DB	102	57	45	3.1	2.5
SDWS22500DB	127	70	45	6.2	4.4
		47	80	4.1	2.9
		37	90	3.3	2.3
SDWS22600D	152	70	45	6.2	4.4
		70	80	6.2	4.4
		62	90	5.5	3.9
SDWS22800D	203	70	45	6.2	4.4
		70	80	6.2	4.4
		70	90	6.2	4.4

1. Effective thread length is the lesser of thread embedded into stud given wall plate thickness or screw thread length.

2. Plate thickness based on: 45mm = single top/bottom plate, 80mm = single top plate + 35mm top plate packer, 90mm = double top/bottom plate

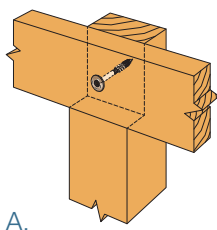
C. Lintel-to-Stud Fixing (per screw)

Model	Screw Length (mm)	Stud Thickness (mm)	Uplift Design Capacity (kN)	
			JD4	JD5
SDWS22400DB	102	45	3.3	3.2
SDWS22500DB	127		4.0	3.2
SDWS22600DB	152		4.0	3.2
SDWS22500DB	127	90	2.9	2.0
SDWS22600DB	152		3.1	2.8
SDWS22800DB	203	135	3.3	2.9
SDWS221000DB	254	180	3.3	2.9

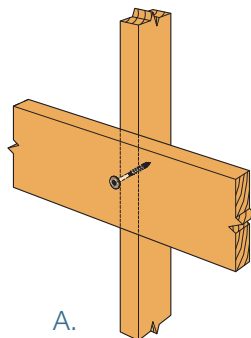
D. Bottom Plate-to-Joist Fixing (per screw)

Model	Screw Length (mm)	Wall Plate Thickness (mm)	Uplift Design Capacity (kN)	
			JD4	JD5
SDWS22400DB	102	45	3.4	2.8
SDWS22500DB	127	45	6.8	4.7

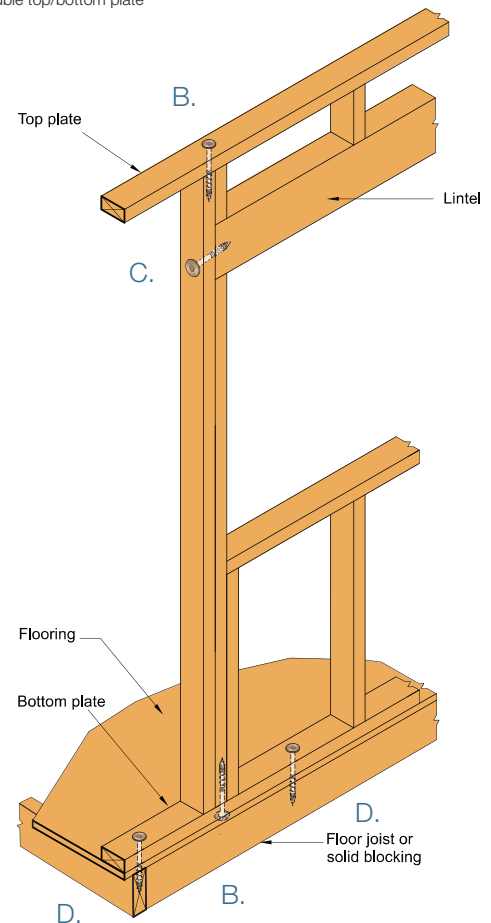
1. Uplift capacity allows for 19 mm flooring under bottom plate.



A.



A.



Generic Footnote: A Capacity Factor (ϕ) of 0.8 has been applied to all design capacities published.