Together we're building safer, stronger structures.



Outdoor Structures

SDWS TIMBER Screw

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

A structural screw with proven Performance, Versatility and Speed.

Strong-Drive® SDWS TIMBER Screw

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 engineered 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



Scan this QR code to watch a video of Strong-Drive® SDWS TIMBER Screw.

Product and Packaging Information

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

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.



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

Strong-Drive® SDWS TIMBER Screw

Serious Screws for Structural Applications



Table 1. Strong-Drive® SDWS Timber Screw Specifications

	Lload	Screw Length (mm)	Thread Length ^{1,2} (mm)	Diameter (mm)			Fastener Strength				
Model	Marking (##)			Shank	Major	Minor	Bending Yield Strength ³ (Mpa)	Characteristic Yield Moment ⁴ (kNmm)	Tension⁵ (kN)	Shear⁵ (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		5.6							
SDWS22600DB	6	152	70	5.0			1207				
SDWS22800DB	8	203	70								
SDWS221000DB	10	254									

1. For the purpose of measuring overall length fasteners

measured from the underside of the head to bottom of the point. 2

Length of thread includes the point. Bending yield strength determined following ASTM З. F1575 and based on minor thread diameter

ic yield moment determined following EU14358 and based on minor thread diameter.

5. 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.

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Table 2. Australian Limit States-Reference Characteristic Lateral Load Values (N) for Timber-to-Timber Connections with SDWS Timber Screws^{1,2,3,4,5}

	Screw	Timber	Characteristic Shear Loads (N)							Characteristic Withdrawal Capacity (N/mm)			
Model	(mm)	Group	Timber Side Member Thickness								Frank Owning		
	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Group	35	45	63	70	90	100	115	150	200	Face Grain	End Grain
		JD4	6630	_	—	_	_	_	_	—	_	88	62
SDWS22300DB	76	JD5	4995	—	—	—	—	—	—	—	—	82	50
		JD6	3896	—	—	-	—	-	-	—	-	64	40
		JD4	7400	6100	6100	_	_	-	_	_	_	112	69
SDWS22400DB	102	JD5	6000	6000	4545	-	-	-	-	-	-	91	54
		JD6	4680	4680	3545	_	_	-	_	_	_	71	42
		JD4	7400	7400	6100	5655	5655	-	-	-	-	134	110
SDWS22500DB	127	JD5	6000	6000	6000	3920	3920	-	-	—	-	93	78
		JD6	4680	4680	4680	3058	3058	-	_	—	-	73	60
		JD4	7550	7550	7550	7550	5865	5865	5840	—	-	134	110
SDWS22600DB	152	JD5	6030	6030	6030	6030	5220	5220	4385	—	_	93	78
		JD6	4703	4703	4703	4703	4072	4072	3420	—	-	73	60
		JD4	8055	8055	8055	8055	7040	7040	7040	6100	_	134	110
SDWS22800DB	203	JD5	6240	6240	6240	6240	5500	5500	5500	5485	-	93	78
		JD6	4867	4867	4867	4867	4290	4290	4290	4278	_	73	60
		JD4	8055	8055	8055	8055	7040	7040	7040	7040	6100	134	110
SDWS221000DB	254	JD5	6240	6240	6240	6240	5500	5500	5500	5500	5500	93	78
		JD6	4867	4867	4867	4867	4290	4290	4290	4290	4290	73	60

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, 450 kg/m³ for JD4 or 400 kg/m³ for JD6. 2.

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 3

4.

member with the screw axis at a 90-degree angle to the wood fibres. Minimum fastener penetration shall be equal to the screw 5.

length less the thickness of the wood side member.

6. 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 7.

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 Plate Shear Capacity

	0	Ledger	Shear Design Capacity (kN)								
Model	Screw Length (mm)	Plate Thickness (mm)	JD4			JD5			JD6		
Model			Uplift	Floor	Roof	Uplift	Floor	Roof	Uplift	Floor	Roof
		()	$K_1 = 1.14$	$K_1 = 0.09$	$K_1 = 0.77$	$K_1 = 1.14$	$K_1 = 0.09$	$K_1 = 0.77$	$K_1 = 1.14$	$K_1 = 0.09$	$K_1 = 0.77$
SDWS22300DB	76	35	6.4	3.9	4.3	4.8	2.9	3.3	3.8	2.3	2.5
	100	35	7.2	4.3	4.8	5.8	3.5	3.9	4.5	2.7	3.1
3D11322400DB	102	45	5.9	3.6	4.0	5.8	3.5	3.9	4.5	2.7	3.1

B. Bearer-to-Post Tie Down

Model	Screw Length	Bearer Thickness	Uplift Design Capacity (kN) k ₁ = 1.14			
	(mm)	(mm)	JD4	JD5	JD6	
SDWS22500DB	127	70	5.5	3.8	3.0	
SDWS22600DB	152		7.3	5.8	4.6	

1. Refer to AS1684.2 or AS1684.3 Table 9.16 for typical

comparison Tie-Down Connections.

C. Roof Batten-to-Rafter/Truss

	Screw	Batten	Uplift Design Capacity (kN)			
Model	Length (mm)	Thickness (mm)	JD4	JD5	JD6	
SDWS22300DB	76	35	2.8	2.7	2.1	
		45	2.3	2.2	1.7	
SDWS22400DB	102	35	5.7	4.7	3.6	
		45	5.4	4.4	3.4	

1. Refer to AS1684.2 or AS1684.3 Table 9.25 for typical comparison Tie-Down Connections.

D. Wall Plate-to-Stud Tie Down

	Screw	Wall Plate	Uplift Design Capacity (kN)			
Model	Length (mm)	Thickness (mm)	JD4	JD5	JD6	
		35	3.5	2.8	2.2	
SDWS22400DB	102	45	3.3	2.6	2.0	
		70	1.9	1.5	1.1	
	127	35	C F	4.6	2.6	
		45	0.0		3.0	
SDWS22500DB		70	5.3	3.8	2.9	
		80	4.4	3.1	2.4	
		90	3.5	2.5	1.8	
		35		4.6		
	152	45	6 5		26	
SDWS22600DB		70	0.0	4.0	3.0	
		80				
		90	5.8	4.1	3.2	



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E. Bottom Plate-to-Joist Tie Down

	Screw	Wall Plate	Uplift Design Capacity (kN)			
Model	Length (mm)	Thickness (mm)	JD4	JD5	JD6	
SDWS22300DB	76	35	1.6	1.5	1.2	
	102	35	4.6	3.7	2.9	
SDWS22400DB		45	3.6	2.9	2.3	
	127	35	8.0	5.5	4.3	
SDWS22500DB		45	7.2	5.0	3.9	

1. Refer to AS1684.2 or AS1684.3 Table 9.18 for typical

comparison Tie-Down Connections. 2. Uplift capacity allows for 19 mm flooring under bottom plate.



Generic Footnote: For Australia, the Capacity Factor (ϕ) is 0.85 for nails and screws for structural joints in a Category 1 application. Reduce tabulated values where other Category applications govern.

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