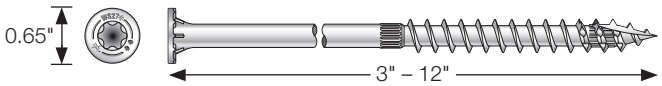
Strong-Drive®
SDWS TIMBER SS Screw

Structural Wood and Engineered Wood Connections Including Docks, Piers, Boardwalks and Ledgers, Applications Requiring High to Severe Corrosion Resistance

Deisgned to provide an easy-to-install, low-torque driving, high-strength, severe-corrosion resistant alternatives to through bolting, traditional lags and spikes. The Strong-Drive SDWS Timber SS screw is a premium solution for heavy-duty structural applications. Type 316 stainless steel provides severe-corrosion resistance, making it suitable for exterior and preservative-treated wood applications.

US Patent 9,523,383

For more information, see p. 54, C-F-2019 Fastening Systems Catalog



SDWS Timber SS — Allowable Shear Loads — Douglas Fir-Larch, Southern Pine Lumber

Size (dia. x length) (in.)	Model No.	Thread Length (in.)	Reference DFL/SP Allowable Shear Loads (lb.) Wood Side Member Thickness (in.)								Reference Withdrawal Design Value, W (lb./in.)	Reference Withdrawal Design Value, W_{max} (lb.)
			1.5	2.5	3	3.5	4.5	6	8	10		
0.276 x 3	SDWS27300SS	2	225	—	—	—	—	—	—	—	222	410
0.276 x 4	SDWS27400SS	3	375	225	—	—	—	—	—	—	204	410
0.276 x 5	SDWS27500SS	3	375	335	310	210	—	—	—	—	204	410
0.276 x 6	SDWS27600SS	3	375	335	335	335	210	—	—	—	204	410
0.276 x 8	SDWS27800SS	3	375	415	485	440	335	275	—	—	204	410
0.276 x 10	SDWS271000SS	3	375	415	485	440	335	275	275	—	204	410
0.276 x 12	SDWS271200SS	3	375	415	485	440	335	275	275	275	204	410

See footnotes below.

SDWS Timber SS — Allowable Shear Loads — Hem-Fir, Spruce-Pine-Fir Lumber

Size (dia. x length) (in.)	Model No.	Thread Length (in.)	Reference HF/SPF Allowable Shear Loads (lb.) Wood Side Member Thickness (in.)								Reference Withdrawal Design Value, W (lb./in.)	Reference Withdrawal Design Value, W_{max} (lb.)
			1.5	2.5	3	3.5	4.5	6	8	10		
0.276 x 3	SDWS27300SS	2	210	—	—	—	—	—	—	—	182	365
0.276 x 4	SDWS27400SS	3	325	180	—	—	—	—	—	—	200	385
0.276 x 5	SDWS27500SS	3	325	285	235	175	—	—	—	—	200	385
0.276 x 6	SDWS27600SS	3	325	285	285	285	175	—	—	—	200	385
0.276 x 8	SDWS27800SS	3	325	350	390	465	280	240	—	—	200	385
0.276 x 10	SDWS271000SS	3	325	350	390	465	280	240	240	—	200	385
0.276 x 12	SDWS271200SS	3	325	350	390	465	280	240	240	240	200	385

1. All applications are based on full penetration into the main member. Full penetration is the screw length minus the side member thickness.
2. Allowable loads are shown at the wood load duration factor of C_D = 1.0. Loads may be increased for load duration per the building code up to a C_D = 1.6. Tabulated values must be multiplied by all applicable adjustment factors per the NDS.
3. Minimum fastener spacing requirements to achieve table loads: 6" end distance, 1½" edge distance, ¾" between staggered rows of fasteners, 4" between non-staggered rows of fasteners and 6" between fasteners in a row.
4. For in-service moisture content greater than 19%, use C_M = 0.7.
5. Loads are based on installation into the side grain of the wood with the screw axis perpendicular to the face of the member.
6. The tabulated reference withdrawal design value, W, is in pounds per inch of the thread penetration into the side grain of the main member.
7. The tabulated reference withdrawal design value, W_{max}, is in pounds where the entire thread length must penetrate into the side grain of the main member.
8. Embedded thread length is that portion held in the main member including the screw point.
9. Values are based on the lesser of withdrawal from the main member or pull-through of a 1½" side member.

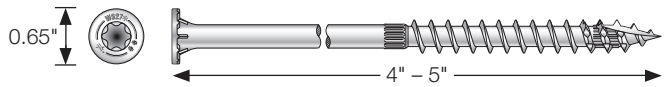
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Strong-Drive® SDWS TIMBER SS Screw

Structural Wood and Engineered Wood Connections including Docks, Piers, Boardwalks and Ledgers

Deisgned to provide an easy-to-install, low-torque driving, high-strength, severe-corrosion resistant alternatives to through bolting, traditional lags and spikes. The Strong-Drive SDWS Timber SS screw is a premium solution for heavy-duty structural applications. Type 316 stainless steel provide severe-corrosion resistance, making it suitable for exterior and preservative-treated wood applications. For installation geometries, please refer to the previous page.

For more information, see p. 54, C-F-2019 Fastening Systems Catalog



SDWS27SS — 2015 and 2018 IRC Compliant Spacing for a Sawn Lumber Deck Ledger-to-Rim Board

Loading Condition	Nominal Ledger Size	Size (in.)	Model No.	Band Joist Material and Size	Maximum Deck Joist Span						
					Up to 6 ft.	Up to 8 ft.	Up to 10 ft.	Up to 12 ft.	Up to 14 ft.	Up to 16 ft.	Up to 18 ft.
					Maximum On-Center Spacing of Fasteners (in.)						
40 psf Live 10 psf Dead	2x	0.276 x 4	SDWS27400SS	1" OSB	13	10	8	6	6	5	4
				1" LVL							
				1⅛" OSB	18	14	11	9	8	7	6
				1⅝" LVL							
				1¼" OSB							
				1½" LVL							
				1¼" LSL							
				1¾" LVL							
				2x SP, DFL, SPF, HF	18	14	11	9	8	7	6
60 psf Live 10 psf Dead	2x	0.276 x 4	SDWS27400SS	1" OSB	9	7	6	5	4	3	3
				1" LVL							
				1⅛" OSB	13	10	8	7	6	5	4
				1⅝" LVL							
				1¼" OSB							
				1½" LVL							
				1¼" LSL							
				1¾" LVL							
				2x SP, DFL, SPF, HF	13	10	8	7	6	5	4
40 psf Live 10 psf Dead	(2) 2x	0.276 x 5	SDWS27500SS	1" OSB	15	12	9	8	7	6	5
				1" LVL							
				1⅛" OSB	15	12	9	8	7	6	5
				1⅝" LVL							
				1¼" OSB							
				1½" LVL							
				1¼" LSL							
				1¾" LVL							
				2x SP, DFL, SPF, HF	15	12	9	8	7	6	5
60 psf Live 10 psf Dead	(2) 2x	0.276 x 5	SDWS27500SS	1" OSB	11	8	7	6	5	4	4
				1" LVL							
				1⅛" OSB	11	8	7	6	5	4	4
				1⅝" LVL							
				1¼" OSB							
				1½" LVL							
				1¼" LSL							
				1¾" LVL							
				2x SP, DFL, SPF, HF	11	8	7	6	5	4	4

1. SDWS27SS screw spacing values are equivalent to 2015 IRC table R507.2. The table above also provides SDWS27SS screw spacing for a wider range of materials commonly used for rim board, and an alternate loading condition as required by some jurisdictions.
2. Solid-sawn rim board shall be Spruce-Pine-Fir, Hem-Fir, Douglas Fir-Larch, or Southern Pine species. Ledger shall be Hem-Fir, Douglas Fir-Larch, or Southern Pine species.
3. Fastener spacings are based on the lesser of single fastener ICCES AC233 testing of the Strong-Drive SDWS27SS screw with a safety factor of 5.0 or ICC-ES AC13 assembly testing with a factor of safety of 5.0. Spacing includes NDS wet service factor adjustment.
4. Rows of screws shall be vertically offset and evenly staggered. Screws shall be placed 1½" to 2" from the top and bottom of the ledger or rim board with 3" minimum and 6" maximum between rows and spaced per the table. End screws shall be located 6" from the end and at 1½" to 2" from the bottom of the ledger. For screws located at least 2" but less than 6" from the end, use 50% of the load per screw and 50% of the table spacing between the end screw and the adjacent screw, and for screws located between 2" and 4" from the end, predrill using a 3⁄16" drill.
5. Structural sheathing between the ledger and rim board shall be a maximum of ½" thick and fastened per code.

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