

# SDPW – Deflector Screw

**Material:** Carbon Steel & Polymer

**Finish:** E-coat®

Corrosion Resistance Level  
**LOW**

**Size:** See illustration on the right and table below

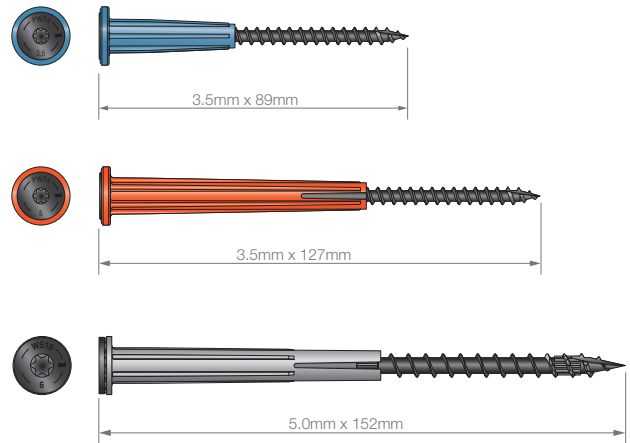
## Features & Benefits

- Pre-drill bit bores its own hole eliminating the screw from following the timber grain that could cause a miss-installation into the truss/joist.
- Polymer sleeve allows for sliding during deflection, preventing squeaks
- E-coat® for dry service applications and is compatible with treated timber
- Offset driver bit (6-lobe) securely drives SDPW Deflector screw to predetermined screw depth
- Extension allows for overhead installations eliminating the use of a ladder
- Available in three lengths to suit various scenarios
- US Patent 8,458,972 applies to Strong-Drive SDPW Solution
- US Patent 9,523,383 applies to 152mm (6") SDPW Deflector fasteners

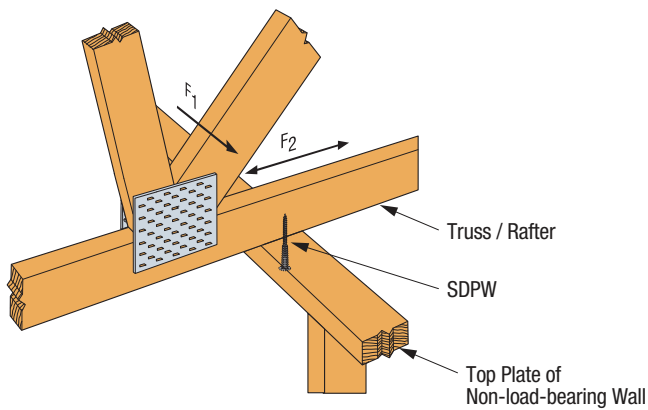
## Application

- Non-load bearing wall connections to truss/rafters (including I-joists)

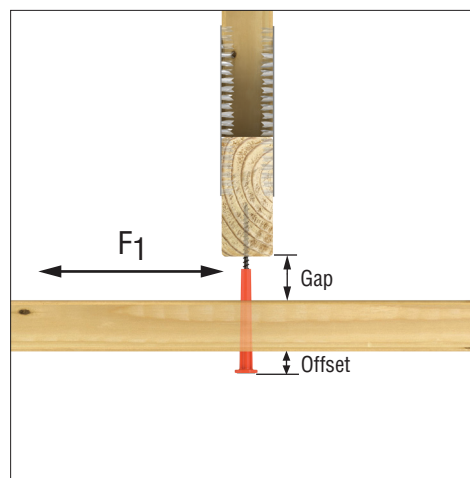
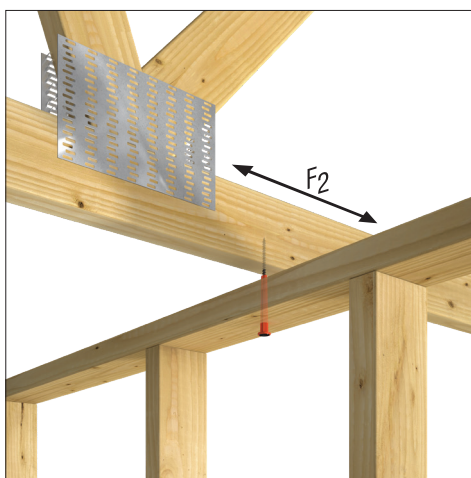
## Construction Details



**SDPW**



**SDPW Wall Plate to Truss/Rafter Installation**



**Typical Installation of SDPW Deflector Screw Showing Load Directions, Gap, and Offset**

# SDPW – Deflector Screw

## SDPW Technical Data

Table 1. Characteristic Shear Loads (F1 and F2) for SDPW DEFLECTOR screws that connect a Non-Loadbearing/Non-Bracing Internal Wall and the Supporting Member

Model	Size (mm)	Thread Length (mm)	Min. Embedment (mm)	Top Plate Thickness (mm)	Characteristic Lateral Load (N)							
					Offset = 0mm Gap				Offset = 19mm Gap			
					0mm	10mm	19mm	35mm	0mm	10mm	19mm	35mm
SDPW14312	3.5 x 89	51	13	35	2020	1345	1345	N/A	2020	940	N/A	N/A
SDPW14500	3.5 x 127	51	13	45	1675	1320	1320	1320	1695	980	620	425
SDPW19600	5.0 x 152	70	19	(2)35	2720	1885	1535	715	2720	1885	1535	N/A

- Characteristic shear loads are based on AS1649 analysis of tested connections in JD5 and are compatible with AS1720.1-2010. These represent normal duration of load. Adjust when other load durations govern.
- Screw spacing shall be determined by a designer.
- I-Joist shall have minimum flange thickness of 28.5mm.
- The SDPW DEFLECTOR screw is preferably driven with Simpson

- Strong-Tie offset driver bit for the 19mm offset installation.
- The non-loadbearing internal wall top plate-to-stud and top plate splice connections shall be fastened per applicable building code.
- A 0mm gap may result in load transfer into walls not designed to be loadbearing.
- Cells with "N/A" represent conditions that should not be built using the SDPW DEFLECTOR screws.

Table 2. Recommended Maximum SDPW DEFLECTOR Screw Spacing for 2400-mm and 3000-mm Tall Non-Loadbearing/Non-Bracing Internal Walls

Model	Size (mm)	Thread Length (mm)	Min. Embedment (mm)	Top Plate Thickness (mm)	On-Center Spacing (mm)								
					Offset = 0mm Gap				Offset = 19mm Gap				
					0mm	10mm	19mm	35mm	0mm	10mm	19mm	35mm	
SDPW14312	3.5 x 89	51	13	35					N/A				
SDPW14500	3.5 x 127	51	13	45	1220 / 1220				1220 / 1220	1220 / 1220			
SDPW19600	5.0 x 152	70	19	(2)35					1220 / 1220	1220 / 1220			

- Spacings are maximums (mm on-center) based on a 240N/m<sup>2</sup> horizontal pressure and normal duration of load. For other durations, adjust loads and spacing.
- In each table cell: spacing (mm) for 2400mm tall/3000mm tall wall.
- Cells with "N/A" represent conditions that should not be

- built using the SDPW DEFLECTOR screw.
- Spacing for wall heights between 2400mm and 3000mm may be interpolated.
- Spacing for other loads and wall heights shall be calculated using the characteristic loads of Table 1.

## Specifications - SDPW

Model No.	Size (mm)	Thread Length (mm)	Head Dia. (mm)	Sleeve Length (mm)	Sleeve Colour	Thread	Point	Material & Finish	Box Qty	Drive Size	Replacement Bit		
SDPW14312-R50	3.5 x 89	51	14	38	Blue	Coarse Threads	Type-17	Carbon Steel Polymer E-coat®	50	T-25, 6-lobe	BIT25T-2-RC3		
SDPW14312MB									500				
SDPW14500-R50	3.5 x 127	51	14	76	Orange				50				
SDPW14500MB									500				
SDPW19600-R50	5.0 x 152	70	16.5	76	Gray				50	T-40, 6-lobe		50	BIT40T-134-RC3
SDPW19600MB									400				

Note: 50 packs are 6 per carton and include (1) offset driver bit and (1) 3/8" predrill bit. Bulk packs include (2) offset driver bits and (2) 3/8" predrill bits.

## Specifications - SDPW Accessories

Model No.	Name	Description	Packs/Ctn
PWKIT25T	T25 Bit Kit	1 x Quick Release Predrill Bit (3/8" x 5") / (9.5mm x 127mm) 2 x T25 Offset Driver Bits	12
PWKIT40T	T40 Bit Kit	1 x Quick Release Predrill Bit (3/8" x 5") / (9.5mm x 127mm) 2 x T40 Offset Driver Bits	12
PW18EXT	Extension	1 x Extension 450mm	15

- Offset Driver Bit included in every pack and required
- Drill Bit 3/8" (9.5 mm) x 5" (127mm) included in every pack and required
- Extension 450mm PW18EXT (sold separately)