



The following pages are an excerpt from the North American Product Technical Guide, Volume 1: Direct Fastening Technical Guide, Edition 22.

Please refer to the publication in its entirety for complete details on this product including data development, base materials, general suitability, installation, corrosion, and product specifications.

[Direct Fastening Technical Guide, Edition 22](#)

To consult directly with a team member regarding our direct fastening products, contact Hilti's team of technical support specialists between the hours of 7:00am - 5:00pm CST.

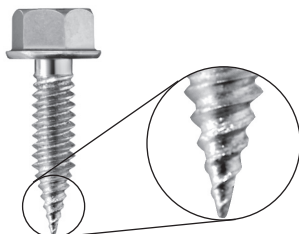
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3.5.6.1	Product description
3.5.6.2	Material specifications
3.5.6.3	Technical data
3.5.6.4	Ordering information



S-SLC 01 M HWH
Collated Sidelap Connectors



S-SLC 01 M HWH
Sidelap Connector



S-SLC 02 M HWH
Collated Sidelap Connectors



S-SLC 02 M HWH
Sidelap Connectors

Approvals/Listings

ICC-ES (International Code Council)
ESR-2776 with LABC/LARC Supplement
(AC43 for S-SLC 01
and S-SLC 02)

ESR-2197 with LABC/LARC Supplement
(AC43 for #10 HWH Screws)
ESR-2196 with LABC/LARC Supplement
(AC118 for S-SLC 02
and #10 HWH Screws)

FM (Factory Mutual)

S-SLC 01 M HWH and S-SLC 02 M HWH
fasteners for securing Class 1 Steel Roof
Deck sidelaps with wind uplift ratings up
to 1-330.



3.5.6 SLC SIDELAP CONNECTORS FOR FASTENING DECK-TO-DECK

3.5.6.1 PRODUCT DESCRIPTION

The Hilti sidelap fastening system consists of a stand up tool (SDT 9), an electric screwdriver (ST 1800) or SD 4500 with SDT 9 Speed Kit) and collated sidelap connectors.

For nestable steel deck profiles, the tool of choice is the SDT 9. It uses the ST 1800 electric or ST 1800-A22 battery screwdriver to drive sidelap connectors through sidelaps ranging from 16 to 26 gauge in thickness. Featuring an adjustable torque clutch, the ST 1800 or ST 1800-A22 helps ensure proper fastening while minimizing overdrive. The SDT5 can also use SD 4500 electric or SD 4500-A22 battery screw drive with SDT 9 Speed Kit for driving through sidelaps ranging from 20 to 22 gauge using SLC 01 and HWH #10 screws.

When used with the SDT 9 and Hilti's DX 9 tools, the ST 1800-A22 or SD 4500-A22 with SDT 9 Speed Kit cordless screw drivers provides for a completely stand-up and cordless deck attachment.

When compared with fastening individual, non-collated, screws, the SDT 9 offers the installer the capability to work upright. By improving the comfort of the installer and productivity, helping keep the project on time and on budget.

Hilti steel deck sidelap fasteners comply with ANSI/SDI RD1.0, C1.0 and NC1.0 standards.

3.5.6.2 MATERIAL SPECIFICATIONS

Fastener	Fastener material	Fastener plating
S-SLC 01 M HWH	Carbon Steel	5 µm Zinc ¹
S-SLC 02 M HWH	Carbon Steel	5 µm Zinc ²
Hilti #10 HWH Screw	Carbon Steel	5 µm Zinc ²

¹ EN/ISO 4042 A3/E. Reference Section 2.3.3.1 for more information.

² Minimum requirements of EN/ISO 4042 A3F. Reference Section 2.3.3.1 for more information.

3.5.6.3 TECHNICAL DATA

Allowable tension (pullout or pullover) and shear bearing loads for Hilti SLC Sidelap Connectors^{1,2,3}

Fastener	Sheet steel gauge							
	22 to 22		20 to 20		18 to 18		16 to 16	
	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)	Tension lb (kN)	Shear lb (kN)
S-SLC 01 M HWH ^{4,5}	105 (0.47)	148 (0.66)	120 (0.53)	198 (0.88)	150 (0.67)	302 (1.34)	-	-
S-SLC 02 M HWH ⁵	85 (0.38)	148 (0.66)	100 (0.44)	198 (0.88)	130 (0.58)	302 (1.34)	165 (0.73)	428 (1.90)
Hilti #10 HWH Screw ⁶	70 (0.31)	139 (0.62)	85 (0.38)	186 (0.83)	115 (0.51)	283 (1.26)	145 (0.64)	402 (1.79)

¹ Based upon attachment of two-same thickness layers of ASTM A1008 or minimum ASTM A653 SQ33 steel deck.

² Allowable capacities based on a safety factor of 3.0.

³ Allowable tension capacities based upon the controlling capacity of pullout, pullover or fastener tension strength.

⁴ Use of S-SLC 01 M HWH with 18 gauge steel deck is recommended only for standard tensile strength ($45 \leq F_u \leq 65$ ksi) steel deck. For high tensile strength ($F_u > 65$ ksi) 18 gauge steel deck, use S-SLC 02 M HWH.

⁵ Allowable shear capacities calculated according to Section J4.3 of AISI S100 for standard No. 12 screw. For shear capacities when used in diaphragm applications in combination with Hilti deck frame fasteners, reference P_{ns} values in Table 8 in Section 3.5.1.7.

⁶ Allowable shear capacities calculated according to Section J4.3 of AISI S100 for standard No. 10 screw.

3.5.6.4 ORDERING INFORMATION

SDT Stand-Up Decking Tool System

Tools description	Notes	Qty
ST 1800 Adjustable Torque Screwdriver	Includes tool with depth gauge, 13 ft supply cord and operating instructions	1 pcs
ST 1800-A22 Adjustable Torque Cordless Screwdriver	Includes tools, (2) B 22 Li-Ion batteries, (1) C 4/36 90 charger and operating instructions in a Hilti soft tool bag	1 pcs
SD 4500 Screwdriver	Includes tool with SDT 9 Speed Kit	1 pcs
SD 4500-A22 Cordless Screwdriver	Includes tool with SDT 9 Speed Kit	1 pcs
SDT 9 Stand Up Tool (for use with the ST 1800, ST 1800-A22 and SD 4500, SD 4500-A22)	Includes stand up tool, 2 grips, magazine, bit holder, nut setter, supply cord strain relief	1 pcs

Accessories description	Notes	Qty
SDT 9 Magazine	Replacement magazine for SDT 9	1 pcs
SDT Integrated Driver and Setter	Single piece design for SDT 9	1 pcs
SDT 9 Speed Kit	For use with SD 4500 or SD 4500-A22	1 pcs

Sidelap Connectors (combos including ST 1800 or ST 1800-A18 and SDT 30) description	Notes	Qty
SDT 9, ST 1800 and 10,000 Sidelap Connectors	Can include collated connector choices below	10,000 pcs
SDT 9, ST 1800 and 25,000 Sidelap Connectors	Can include collated connector choices below	25,000 pcs
SDT 9, ST 1800 and 50,000 Sidelap Connectors	Can include collated connector choices below	50,000 pcs
SDT 9, ST 1800 and 100,000 Sidelap Connectors	Can include collated connector choices below	100,000 pcs
SDT 9, ST 1800-A22 and 15,000 Sidelap Connectors	Can include collated connector choices below	15,000 pcs

Sidelap connectors (collated)* description	Deck thickness (GA)	Qty
S-SLC 01 M HWH	18 ¹ , 20, 22, 24, 26	250
S-SLC 02 M HWH	16, 18, 20, 22	250
#10 HWH Screw	18, 20, 22, 24, 26	250

1 Use of S-SLC 01 M HWH with 18 gauge steel deck is recommended only for standard tensile strength ($45 \leq F_u \leq 65$ ksi) steel deck. For high tensile strength ($F_u > 65$ ksi) 18 gauge steel deck, use S-SLC 02 M HWH.

