

S-MP 53 Z 6.5×L case-hardened carbon steel self-tapping screw

Product data

General information

Material specification:

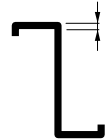
Carbon steel: case-hardened
 Zinc coating: $\geq 8 \mu\text{m}$ galvanized
 with fitted EPDM sealing washer $\varnothing 16 \text{ mm}$.
 Coloured screws available on request.

Fastening tools:

Drilling tool: Hilti UD16, UD30
 Screwdriver: Hilti ST1800
 Depth gauge set: Item no. 304611
 Nut set driver S-NSD $\frac{3}{8}$ " : Item no. 308905
 HSS drill bit

Recommended pre-drilled hole diameter in t_{II} :

t/mm	0.63	0.75	0.88	1.25	1.50	3.00
Predrilled \varnothing mm:	3.5	4.0	4.5	4.5	5.0	5.0
Predrilled \varnothing in timber:	4.5 mm					



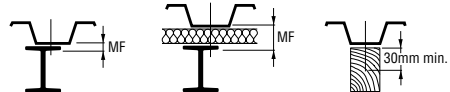
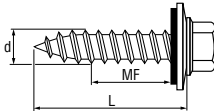
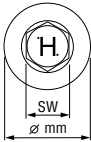
Dimensions

Uses:

Fastening sheet steel to thin steel members and to timber framing.

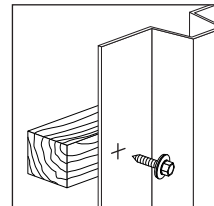
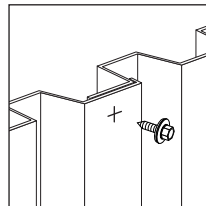
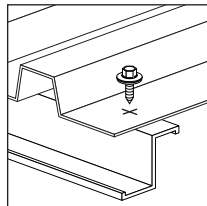
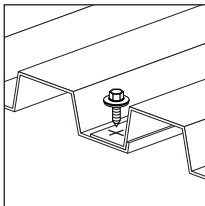
Steel framing Member thickness max. 3 mm

Timber framing Depth of engagement min. 30 mm



Applications

Examples



Load data

Design data

	Component II steel with t_{II} [mm] S280GD or S320GD (DIN EN 10326)			
	1.00	1.50	2.00	3.00

Component I

steel with t_I [mm]
S280GD or S320GD
(DIN EN 10326)

	Shear force $V_{R,k}$ [kN]			
0.63	2.20	2.70	2.70	–
0.75	2.30	3.20	3.20	–
0.88	2.30	3.20	3.20	–
1.00	2.40	3.40	3.60	–
	Tension force $N_{R,k}$ [kN]			
0.63	1.40	2.20	3.20	3.20
0.75	1.40	2.20	3.50	3.80
0.88	1.40	2.20	3.50	3.80
1.00	1.40	2.20	3.50	5.00

Safety factors according to EN 1993-1-3 and CUAP 06.02/07

	Tension	Shear
Partial safety concept		
Partial safety factor	$\gamma_M = 1.33$	$\gamma_M = 1.33$
Influence of cyclic loading	$\alpha_{cyclic} = 1.0$	– / –
Design load	$N_{Rd} = 1.0 \cdot N_{Rk} / 1.33$	$V_{Rd} = V_{Rk} / 1.33$
Global safety concept		
Global safety factor *	$\gamma_{GLOB} = 2.0$	$\gamma_{GLOB} = 2.0$
Recommended load	$N_{rec} = 1.0 \cdot N_{Rk} / 2.0$	$V_{rec} = V_{Rk} / 2.0$

* Note: The global safety factor of 2.0 includes a partial safety factor of $\gamma_F = 1.5$ for wind load. For other loads safety factors should be applied in accordance with the appropriate standards.

Screw selection

Screw program

Fastening thickness MF max. mm	Dimensions (d×L) mm	Sealing washer ∅ mm	Head size AF	Package contents	Ordering designation	Item no.
8	6.5 x 19	16	3/8"	500	S-MP53Z 6.5x19	375288
14	6.5 x 25	16	3/8"	500	S-MP53Z 6.5x25	375289
21	6.5 x 32	16	3/8"	250	S-MP53Z 6.5x32	375290
27	6.5 x 38	16	3/8"	250	S-MP53Z 6.5x38	375291
39	6.5 x 50	16	3/8"	250	S-MP53Z 6.5x50	375292
52	6.5 x 63	16	3/8"	100	S-MP53Z 6.5x63	375293
89	6.5 x 100	16	3/8"	100	S-MP53Z 6.5x100	375287