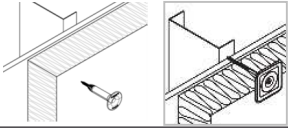




SIDING INSULATION FASTENER – SIF

Fastening rigid insulation material to sheathing boards and steel

Application	Thermal Optimized	Fire Resistant
		
Specification	S-IP40xL + S-ID01LC 4,8xL	S-IW 4,9 AZ 64x64 + S-ID01LSS 4,8xL
Base Material	<ul style="list-style-type: none"> Steel 1,2 – 3,0 mm (≤ S450GD) Sheathing boards (Outdoor) 	<ul style="list-style-type: none"> Steel 1,2 – 3,0 mm (≤ S450GD)
Material Fastener	Carbon steel screw zinc flake coated Plastic plug S-IP (PA6)	Stainless steel A4 screw Carbon steel washer (t = 0,8 mm) Aluzinc protection
Corrosion resistance	Screw: 15 cycles of Kesternich Test Plug: not relevant	Screw: stainless steel A4 Washer: 15 cycles of Kesternich Test
Chi-Value	■ ■ ■	■ □ □
Insulation thickness	40 mm – 240 mm	40 mm – 240 mm
Insulation material	<ul style="list-style-type: none"> EPS / PUR / PIR / Resol 	<ul style="list-style-type: none"> EPS / PUR / PIR / Resol
CE-Mark	In progress	In progress
Related Products	<ul style="list-style-type: none"> Bit S-SY PH 2 116 	<ul style="list-style-type: none"> Bit S-SY PH 2 116
Fire resistance	■ □ □	■ ■ ■
Reaction to fire behavior	■ ■ □	■ ■ ■

General fastening pattern for insulation boards 1,2 x 2,4m (2,9m²). 9 Fixings per board are mandatory (until otherwise stated by manufacturer), while 1/m² needs to be fire resistant.

Please contact the supplier of insulation boards for specific fastening requirements.

Fastening pattern per m²

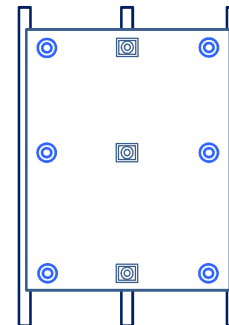
- 1,03 Fixings on steel sections
- 2,06 Fixings on cement board
- If gypsum boards are used all fastenings needs to be attached to steel sections



Fixing on steel C-section with S-IW 4,9 AZ 64x64 + S-ID01LSS 4,8xL

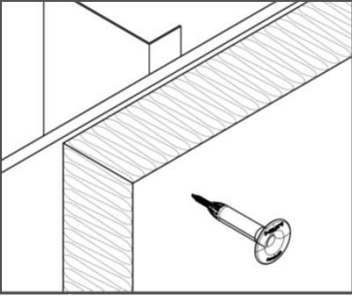
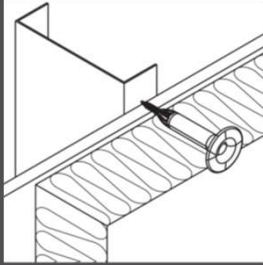



Fixing on cement board or steel C-section with S-IP 40xL + S-ID01LC 4,8xL



Insulation thickness	S-IP 40xL	S-ID01LC 4,8xL	S-IW 4,9 AZ 64x64	S-ID01LSS 4,8xL
≤ 40 mm	40mm #2038903	70mm #2161990	#2158889	90 mm #2161993
≤ 60 mm	40mm #2038903	90mm #2161991	#2158889	90 mm #2161993
≤ 80 mm	40mm #2038903	90mm #2161991	#2158889	150 mm #2161994
≤ 100 mm	80mm #2038904	70mm #2161990	#2158889	150 mm #2161994
≤ 120 mm	80mm #2038904	90mm #2161991	#2158889	150 mm #2161994
≤ 140 mm	120mm #2038905	70mm #2161990	#2158889	210 mm #2161995
≤ 160 mm	120mm #2038905	90mm #2161991	#2158889	210 mm #2161995
≤ 180 mm	160mm #2038906	70mm #2161990	#2158889	210 mm #2161995
≤ 200 mm	160mm #2038906	90mm #2161991	#2158889	270 mm #2161996
≤ 220 mm	200mm #2038907	70mm #2161990	#2158889	270 mm #2161996
≤ 240 mm	200mm #2038907	90mm #2161991	#2158889	270 mm #2161996

PERFORMANCE DATA

Application	Fixing of rigid insulation boards to sheathing boards and OSB boards with combination of S-ID screws and S-IP fastening plug					
Base material	Knauf Aquapanel®	Rigips Aquaroc®	Euroform Versapanel®		Euroform Versaliner®	
Board thickness	12,5 mm	12,5 mm	10 mm	12 mm	9 mm	12 mm
Characteristic load N_{Rk} [kN]	0,20	0,26	0,63	0,91	0,44	0,46
Recommended load N_{rec} [kN]	0,07	0,09	0,18	0,26	0,12	0,13
Base material	Timber / OSB/3					
Board thickness	≥18mm					
Characteristic load N_{Rk} [kN]	0,87					
Recommended load N_{rec} [kN]	0,31					
	Thermal Behavior (acc. EN ISO 6946 annex D)					
U-Value correction per fixing [W/m²K]	0,0012 (100mm insulation) 0,0006 (150mm insulation)					
Application	Fixing of rigid insulation boards with S-ID screw to steel and Aluminum profiles in combination with S-IW steel washer or S-IP plug					
Base material	Steel ≥ S235 or S280GD $R_m ≥ 360$ MPa		Aluminum profiles $R_m ≥ 245$ MPa			
Material thickness	1,2 - 3,0 mm		1,65 - 3,0 mm			
Fastener	S-ID + S-IP plug	S-ID + S-IW washer	S-ID + S-IP plug	S-ID + S-IW washer		
Characteristic load N_{Rk} [kN]	1,51	1,51	1,83	1,99		
Recommended load N_{rec} [kN]	0,81	0,81	0,98	1,07		
	Thermal Behavior (acc. EN ISO 6946 annex D)					
Fastener	S-ID + S-IP plug		S-ID + S-IW washer			
U-Value correction per fixing [W/m²K]	0,0012 (100mm insulation) 0,0006 (150mm insulation)		0,0058 (100mm insulation) 0,0039 (150mm insulation)			