

The SFS logo is located in the top left corner. It consists of the letters 'SFS' in a bold, orange, sans-serif font. A horizontal orange line is positioned directly beneath the letters.

SFS

The title 'Roofing and Cladding' is centered on the page. 'Roofing' is written in a large, bold, orange sans-serif font. 'and' is written in a smaller, white, sans-serif font. 'Cladding' is written in a very large, bold, white sans-serif font. The background of the entire page is a photograph of a blue steel structural frame with a stack of yellow corrugated metal sheets in the foreground.

Roofing and Cladding

The building envelope specialist

We strive for continuous improvement and innovation – always in close collaboration with our customers, colleagues and suppliers. We want to be successful together, improve all the time, see where the technological limits are and drive them forward.

SFS creates value with advanced fastening systems for the building envelope. As the leading specialist in this application we offer the highest possible expertise focusing on specific customer segments. Our offering embraces application consultation, development, manufacture, distribution and after sales services.

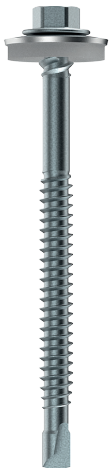
Together with our partners we invent new products and services for our shared success.

Our latest innovations

New sandwich panel fixing family

Higher. Faster. Outstanding. With our new sandwich panel family SFS offers improved technical values, drilling capacity, drilling performance and a wider application range.

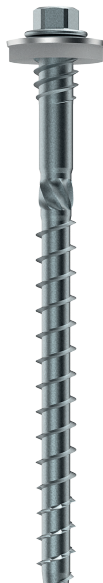
SXC5-6,3



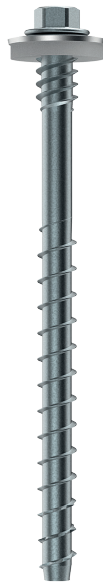
SXC16-5,8



MXC-7,5



MDC-7,5



Chipless metal deck fastener

SFS now offers a chipless metal deck fastener for faster assembly and improved technical characteristics.

CDM-4,8





Approvals

ETA – European Technical Assessment

ETAs (European Technical Assessments) represent evidence of the technical suitability of a construction product in line with the Construction Products Directive (CPD) of the EU member states.

An ETA is issued for a construction product which is not covered by a harmonised EU standard for the application concerned. The issue of such an approval allows the product manufacturer to use the CE mark on construction products and free access to all contracting states within the European marketplace.

An overview of European Technical Approvals

ETA-05/0011	Concrete screws for use in concrete
ETA-10/0198	Fastening screws for metal members and sheeting
ETA-11/0191	Self tapping screws nonut®
ETA-13/0183	Fastening screws for sandwich panel
ETA-13/0255	Blind rivets
ETA-15/0784	Screws anchor for use in cracked and uncracked concrete



AbZ – National Technical Approval

National technical approvals are the most common form of national verification of suitability for use for construction products. DIBt started granting them as early as 1968.

The AbZ regulates those properties of the construction product that are of regulatory relevance as well as the fields of use and other aspects like confirmation of conformity.

An overview of National Technical Approvals

Z-14.4-776	Screws for connection of steel structural members in steel and high bay warehouse structures
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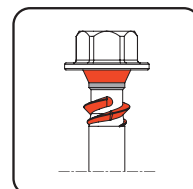


Innovations and features

NEW Premium-Sealing – improved air- and watertightness

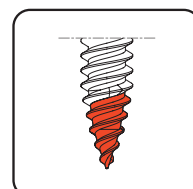
The Premium-Sealing allows valley-fixing on the roof and is characterised by the following attributes:

- Thread-free zone
- Double-support thread with cut-off thread-end (patent pending)
- Cone underneath the head for improved settlement



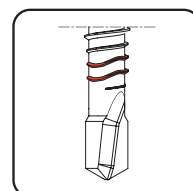
NEW Speed-Point – for rapid, chipless insertion

The Speed-Point allows ergonomic, low-force insertion, while simultaneously providing super-efficient setting and improved technical characteristics.



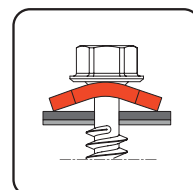
NEW Wave-Thread – improved values, saving customers money

This innovative SFS solution increases pull-out values, meaning that the number of fastening points and/or the thickness of the substructure can be reduced; saving tons of steel.



Thick to Thin – high application area

Products featuring “Thick to Thin” offer an extremely variable clamping range coupled with 100% setting security. This all-rounder meets customer needs head-on when it comes to non-seal-tight connections between thick components and thin substructures.



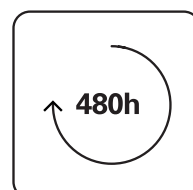
Safe setting – resistant to unwinding and vibration

The cut-off thread-end and defined free-spin zone join forces to offer easy-to-use, highly secured fasteners – safe against over-torquing. The result is a vibration-resistant connection that will not unwind.



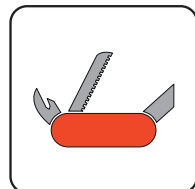
Durocoat® 480 – high corrosion resistance

This special surface stands for a high corrosion resistance and guarantees a very long protection against corrosive environmental influences. Durocoat® 480 corresponds to a resistance of 480h in the salt spray test according to DIN EN ISO 9227.



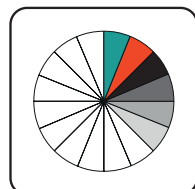
Multi Series – customer centered design

SFS Multi series products demonstrate particular ease-of-use in various applications. These are good all-round products, offering easy insertion, technical performance and simplification in use for the customer.



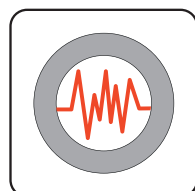
Paintable fasteners – all variants available

SFS offers a wide solution of coloured fasteners, wet or powder painted. The coating process produces a robust finish that is excellent against weathering, offering colour stability in exposed external applications.



Seismic approved – high physical life

Seismic approved products have been developed for category C1 and/or C2 according to Eurocode EN 1992-4 and ensure high durability and service life.



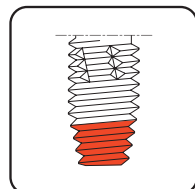
Fire approved – reliable and secure

These products are produced from non-flammable material (class A1) according to EN 13501-1, and tested for their fire resistance to class R30 - R120 according to EN 13501-2.



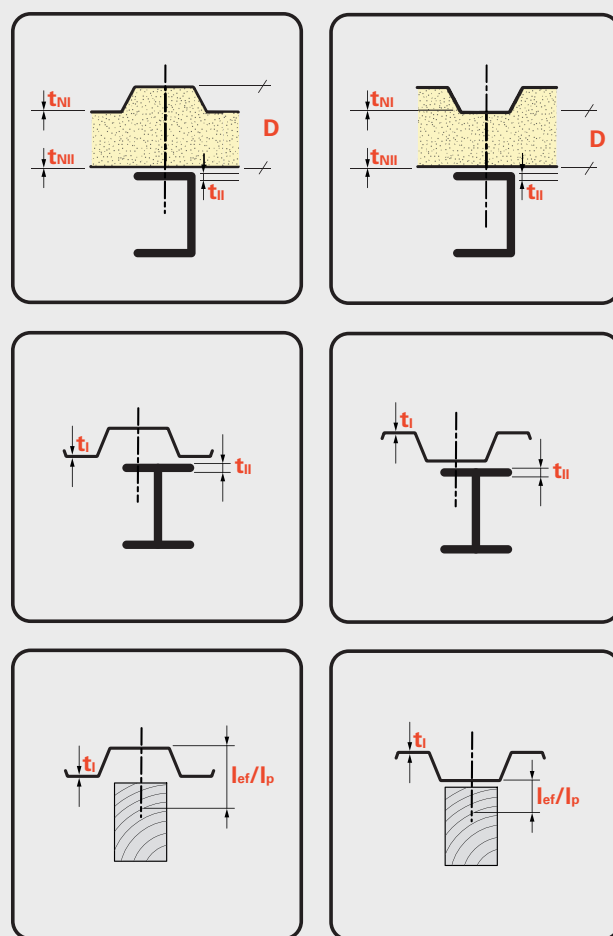
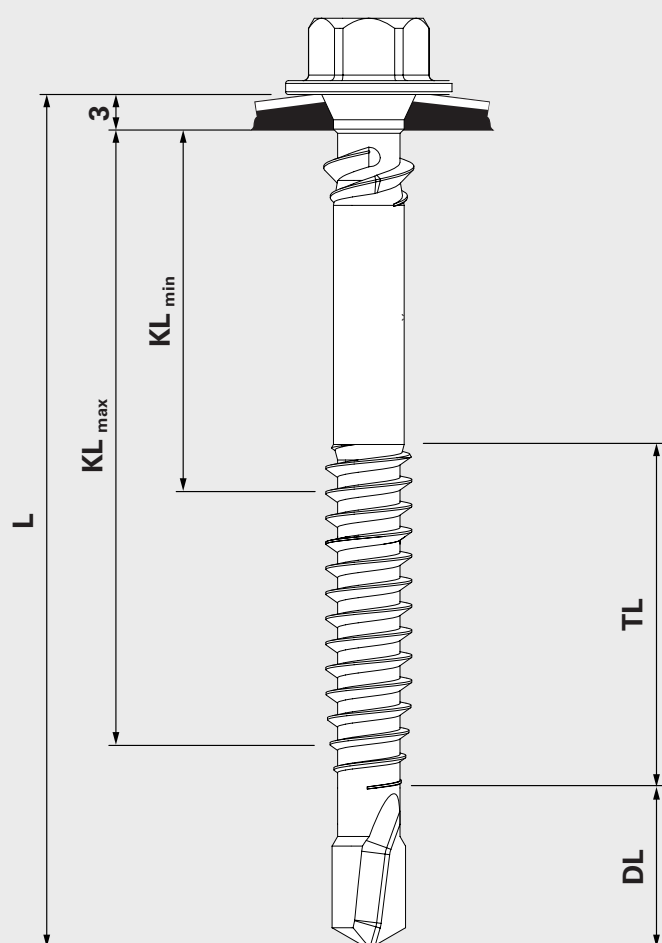
Centering point – easy installation

The special thread inlet makes it easy to install even mis-aligned components.



General information for steel, aluminium and timber

Definition clamping length KL



Explanation

KL

Clamping length of the fastener

L

Length of the fastener

D

Thickness of component I (sandwich panel)

t_{NI}

Thickness of the outer skin of component I (sandwich panel)

t_{NII}

Thickness of the inner skin of component I (sandwich panel)

t_I

Thickness of component I

t_{II}

Thickness of component II made of metal

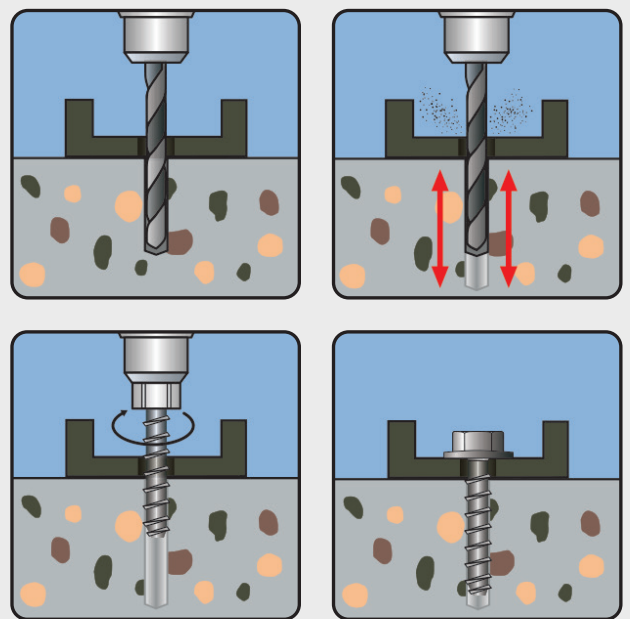
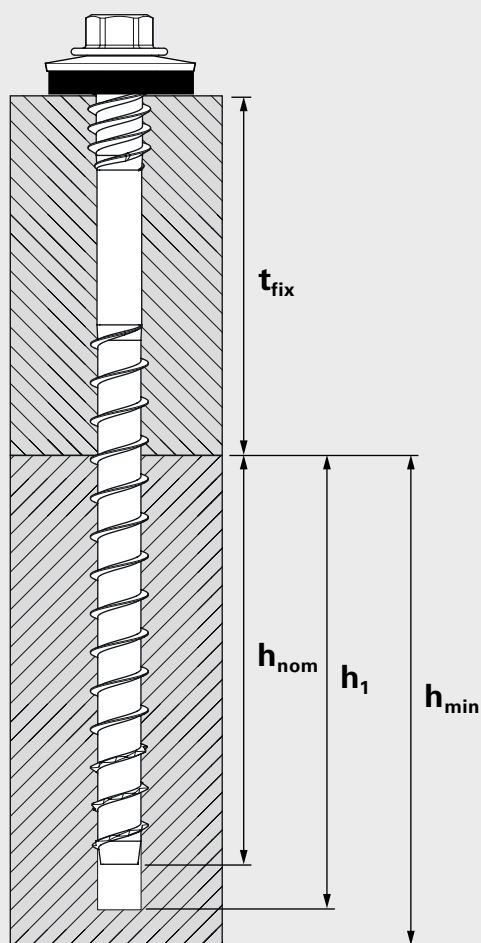
The thickness t_{II} corresponds to the load-bearing clamping length of the fastener in component II, if the load-bearing clamping length does not cover the entire component thickness.

l_{ef}/l_p

Effective embedment depth in component II made of timber (l_{ef} without drill point) (l_p with drill point)

General information for concrete and masonry

Definition clamping length KL



Explanation

- t_{fix}
Thickness of fixture
- h_{nom}
Nominal anchor depth
- h_1
Drill hole depth
- h_{min}
Minimum thickness of concrete subconstruction

Correct setting

In order to guarantee correct setting, the following points must be addressed:

Insertion speed:

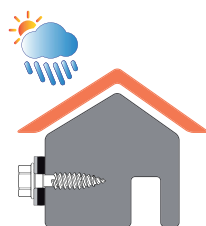
- Drilling fasteners in general at 1,500–2,000 RPMs
- Drilling fasteners in high tensile steel at 1,200 RPMs

Paint coated fasteners

- Clean tool, which fits exactly

The use of impact wrench has to be individually checked for each product and application.

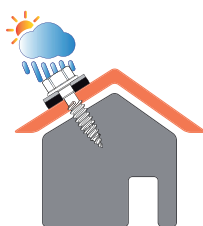
Washer recommendations



Recommendation

12–16 mm washer: Cladding

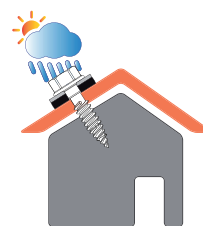
For walling systems and secondary clamping fasteners, smaller diameters, typically 12–16 mm, is recommended.



Recommendation

19 mm washer: Roofing

For primary valley fixing of through-fixed metal roof weather sheets and insulated roof panels, 19 mm is usually the preferred diameter, in some instances 22 mm is recommended.

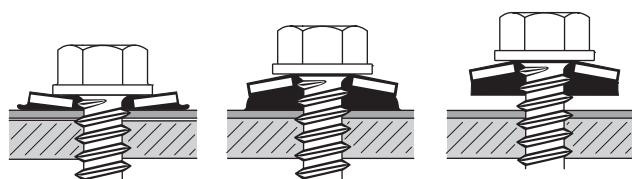


Recommendation

29 mm washer: Rooflights

For “plastics” rooflight profiles, typically GRP and polycarbonate, larger diameter washers, typically 29 mm is recommended.

Correct washer setting





Corrosion and working life

The following tables provide general guidelines for commonly-accepted applications in typical atmospheric conditions.

EOTA Guidance document 002 – Assumption of working life (1999)

Assumed working life of works (years)		Working life of construction products to be assumed in ETAGs, ETAs and hENs (years)		
Category	Years	Category		
To be defined by the specifier		repairable or easy replaceable	repairable or replaceable with additional efforts	life ²
short	10	10 ¹	10	10
medium	25	10 ¹	25	25
normal	50	10 ¹	25	50
long	100	10 ¹	25	100

¹In exceptional and justified cases, e.g. for certain repair products, a working life of 3 to 6 years may be envisaged (when agreed by EOTA TB or CEN respectively).

²When not repairable or replaceable either “easily” or “with increased effort”.

General: According to the Construction Products Directive “the products must be suitable for construction works which (as a whole and in their separate parts) are fit for their intended use, account being taken of economy, and in this connection satisfy the following essential requirements where the works are subject to regulations containing such requirements. Such requirements must, subject to normal maintenance, be satisfied for an economically reasonable working life”.

Contact corrosion

Material of fixing part or substructure	Fastener Material			
	Carbon steel	Austenitic stainless steel		
	T	A2	A4	R5*
Stainless steel	no	yes	yes	yes
Galvanised steel	yes	yes	yes	yes
Aluminium alloy	consult expert	yes	yes	yes

*R5: Internal SFS code referring to the corrosion resistance class V (CRC) out of the EUROCODE3.

The table shows the material of the fixing part and sub-structure and the suitability of the fastener material under atmospheric conditions.

Contact corrosion can occur when different metals are in close contact and conductively connected by a corrosive medium (water, humid air). The less-noble metal is preferentially corroded according to the electrochemical series. The area of ratio of the different metals has also had an influence on the corrosion. This fact is negligible in the case of a small area of the noble metal in relation to the less-noble metal (e.g. stainless-steel fasteners onto galvanised steel).

Recommended fastener materials

To suit EN 12944-2 exposure categories

Corrosivity category	C1 Very low	C2 Low	C3 Medium	C4 High	C5-I Very high (industrial)	C5-M Very high (Marine)	Swimming pools and chemical plants
Examples of typical environments in a temperate climate (informative only)	Interior - heated buildings with clean atmosphere	Rural areas - low levels of pollution - unheated buildings where condensation may occur	Urban and industrial areas - moderate pollution - coastal area with low salinity - production rooms with high humidity and some air pollution	Industrial and coastal areas with moderate salinity	Industrial areas with high humidity and aggressive atmosphere - permanent condensation and high pollution	Coastal and offshore areas with high salinity	Within pool halls and certain chemical processing plants - fasteners that penetrate or are below vcl and exposed to chlorine vapour
R5* Working life (ETA)	S >25	S >25	S >25	S >25	R 25	R 25	R consult expert
A4 Working life (ETA)	S >25	S >25	R >25	R 25	R 25	R consult expert	N -
A2 Working life (ETA)	S >25	R >25	R 25	A consult expert	A consult expert	N -	N -
T Working life (ETA)	R 25	A consult expert	A consult expert	N -	N -	N -	N -

S Suitable but not economic **R** Recommended **A** Requires approval **N** Not suitable

*R5: Internal SFS code referring to the corrosion resistance class V (CRC) out of the EUROCODE3.

This table is based on an average working life for typical applications. The final decision on the required fastener material must be made by the customer. SFS accepts no responsibility regarding the suitability of a product for a specific application, even if informed of the application's conditions.

Working life may not be considered in relation to a limited warranty. Limited warranties are provided upon request.

Product compass

Page	Type	Material					Single skin				Twin skin				Sandwich panels				Standing seam			
		A2	A4	R5	T	A									S	P	B		S	P	B	
28	BULB-TITE®														S	P	B		S	P	B	
30	LL-S-9.5						S															
32	MMS-7.5/10/12											C										
34	MMS-plus-7.5/10/12											C/M										
37	nonut®																					
39	SC2-4.2																					
41	SC3-4.8																					
43	SC5-5.5																					
45	SCN-4.2																					
47	SCS3-4.8																					
49	SCS5-5.5																					
51	SD2-S-6.0						S				S				S							
53	SD3/SDL3-5.5						S	P			S	P										
55	SD3-D10-5.5																					
57	SD5-LH-5.5																					
59	SD6-5.5							P				P										
61	SD6-H15-5.5											P							P			
63	SD14-5.5							B				B										
65	SD14-D10-5.5																					
67	SD14-H15-5.5											B								B		
69	SD14-LH-5.5																					
71	SDC5-5.5															P			W			
73	SDC12-5.5																B					
75	SDK2-S-6.0																		S			W
77	SDK3-S-6.0																			P		
79	SDT14-5.5																B					
82	SL2-S-5.5						S				S				S				S			
84	SL2-S-6.3						S				S				S							
86	SL2-T-4.8						S				S				S							
88	SL3/2-5-S-6.0														S				S	P		
90	SL3-F-4.2																					
92	SL3-H15-6.3										P									P		
94	SL4-F-4.8																					
96	SLG-S-4.8						S				S				S							
98	SLG-T-4.8						S				S				S							
100	SW3-T-6.5									W				W								
102	SX2-D9-4.8						S				S				S							
104	SX3-6.0						S	P			S	P										
106	SX3-D12-5.5						S	P			S	P										
108	SX5-5.5							P				P										
110	SX5-D10-5.5																					
112	SX14-5.5							B				B										
114	SX14-D10-5.5																					
116	SXC5-6.3															P			W			
120	SXC16-5.8																B					
124	SXK2-6.0																			S		
126	SXW-6.5									W				W								
128	TDA-S-6.5						S			W	S			W	S				W	S		
131	TDB-S-6.3							P	B			P	B			P	B					
134	TDC-S-7.1						S	P			S	P										
136	TI-6.3																C					
138	TI-S-Z10-6.3																					

Accessories from page 140 onwards

S Sheets P Profiles B Beams C Concrete M Masonry W Wood/Timber

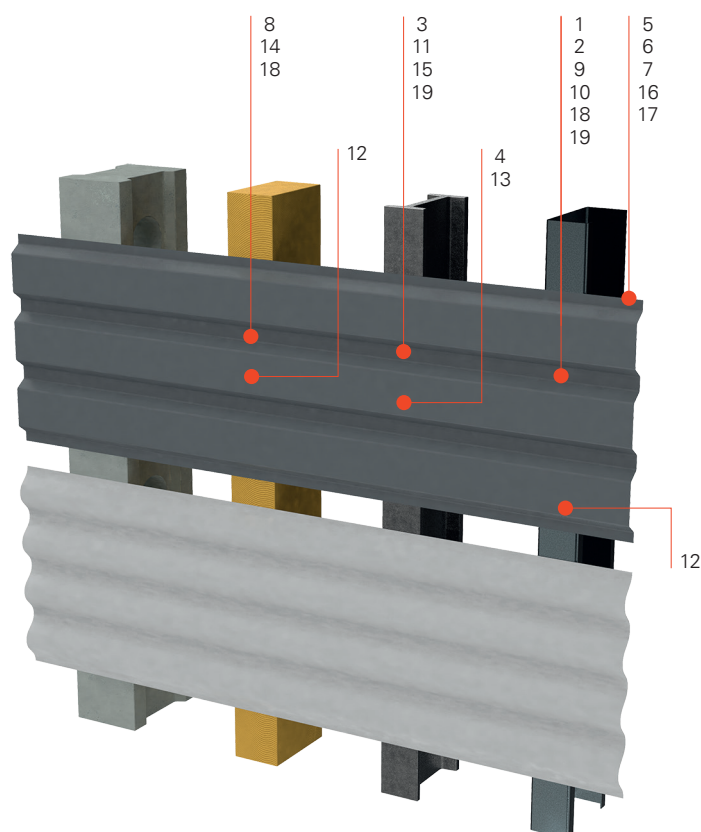
Product compass

Page	Type	Material					Single-ply insulation roof panels				Flashing				Structural connection			
		A2	A4	R5	T	A												
28	BULB-TITE®										S							
30	LL-S-9.5																	
32	MMS-7.5/10/12																C	
34	MMS-plus-7.5/10/12																C/M	
37	nonut®											S	P	B				
39	SC2-4.2																P	
41	SC3-4.8																P	
43	SC5-5.5																P	
45	SCN-4.2																P	
47	SCS3-4.8																P	
49	SCS5-5.5																P	
51	SD2-S-6.0																	
53	SD3/SDL3-5.5																	
55	SD3-D10-5.5							P										
57	SD5-LH-5.5											S	P					
59	SD6-5.5																P	
61	SD6-H15-5.5																P	
63	SD14-5.5																	
65	SD14-D10-5.5							P										
67	SD14-H15-5.5																	
69	SD14-LH-5.5																B	
71	SDC5-5.5																	
73	SDC12-5.5																	
75	SDK2-S-6.0																	
77	SDK3-S-6.0																	
79	SDT14-5.5																	
82	SL2-S-5.5										S							
84	SL2-S-6.3										S							
86	SL2-T-4.8										S							
88	SL3/2-5-S-6.0																	
90	SL3-F-4.2													S				
92	SL3-H15-6.3																	
94	SL4-F-4.8													S	P			
96	SLG-S-4.8										S							
98	SLG-T-4.8										S							
100	SW3-T-6.5																	
102	SX2-D9-4.8										S							
104	SX3-6.0																	
106	SX3-D12-5.5										S	P						
108	SX5-5.5																	
110	SX5-D10-5.5							P										
112	SX14-5.5																	
114	SX14-D10-5.5								B									
116	SXC5-6.3																	
120	SXC16-5.8																	
124	SXK2-6.0																	
126	SXW-6.5																	
128	TDA-S-6.5													S				
131	TDB-S-6.3														P	B		
134	TDC-S-7.1																	
136	TI-6.3																C	
138	TI-S-Z10-6.3																	

Accessories from page 140 onwards

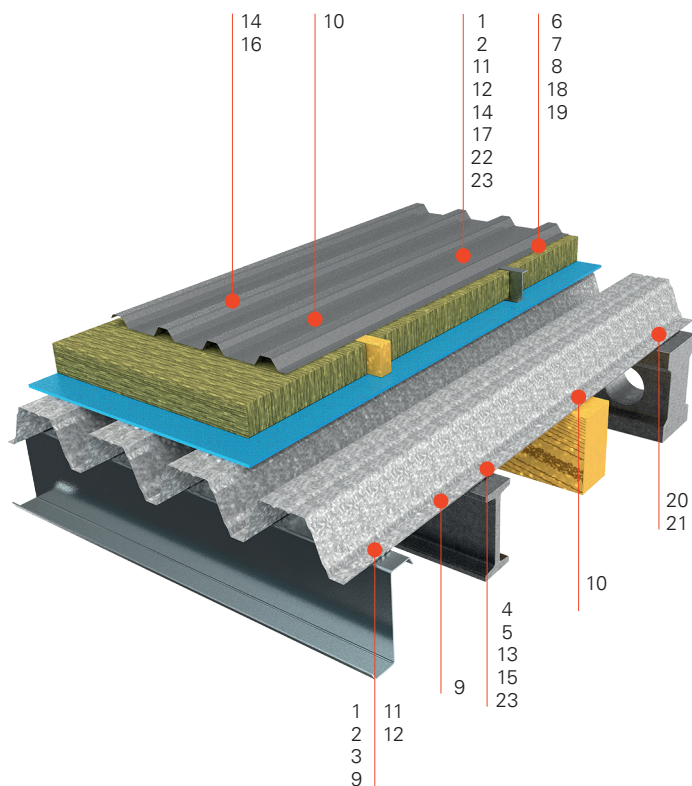
S Sheets P Profiles B Beams C Concrete M Masonry W Wood/Timber

Single skin

[illegible]

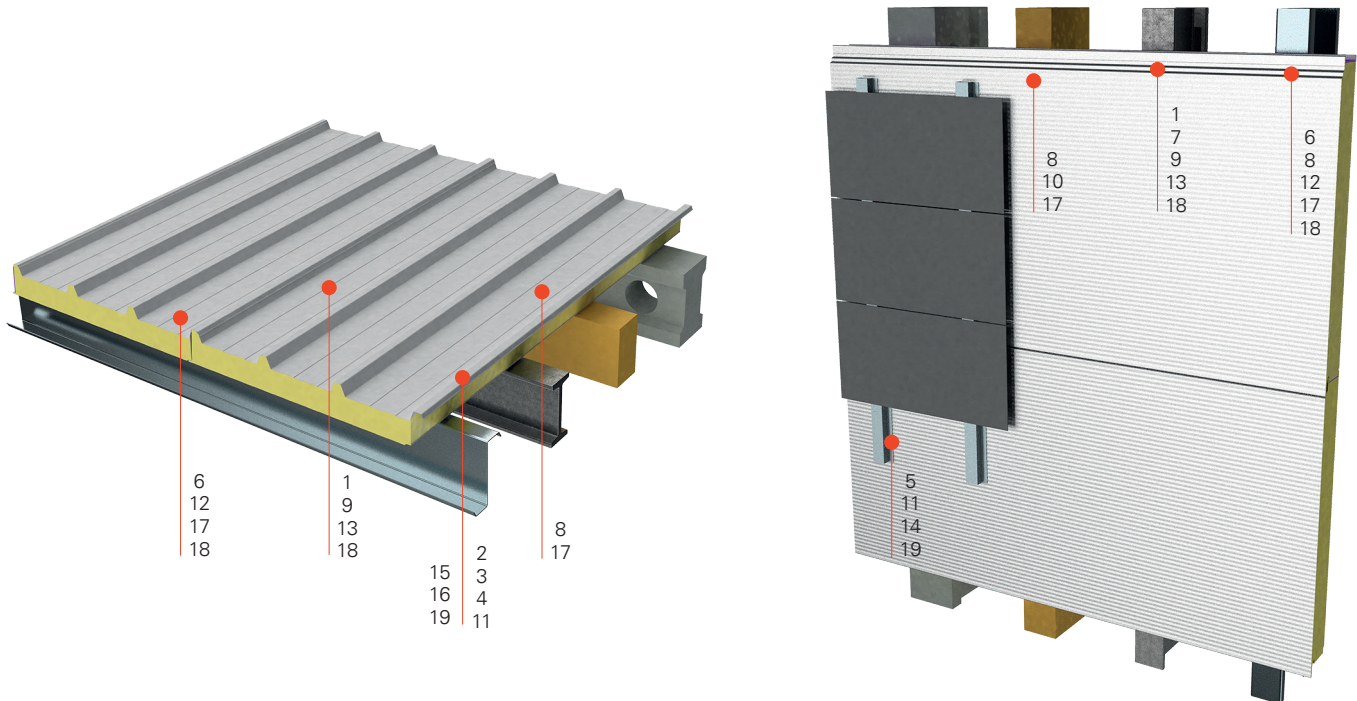
A Aluminium

Twin skin

[illegible]

A Aluminium

Sandwich panels

[illegible]

A2 Austenitic stainless steel A2

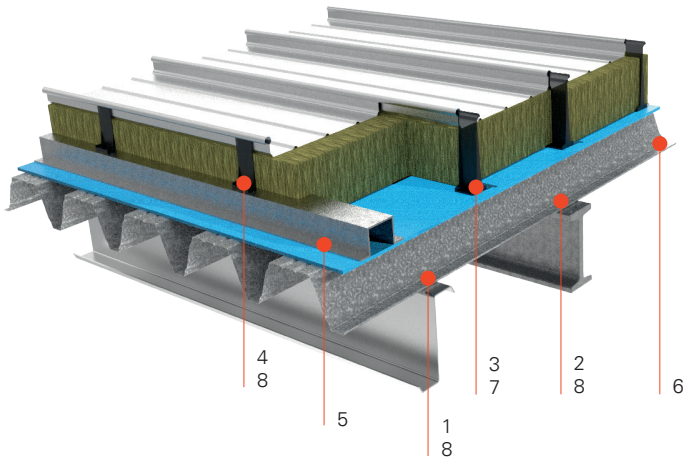
A4 Austenitic stainless steel A4

R5 Austenitic stainless steel R5

T Carbon steel

A Aluminium

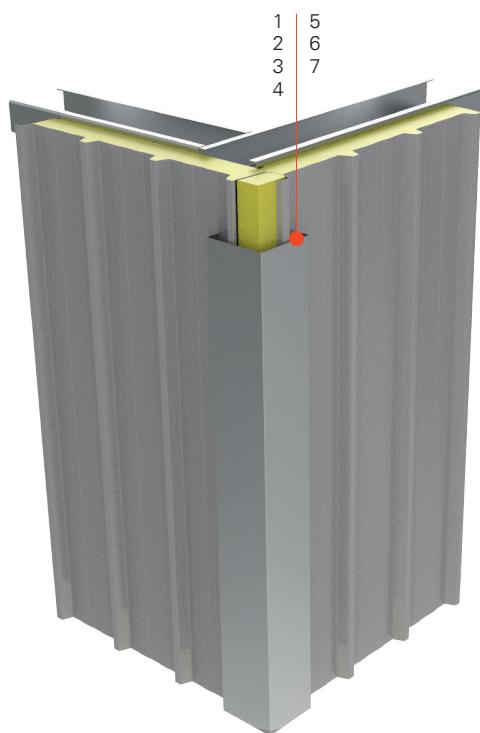
Standing seam

[illegible]

A Aluminium

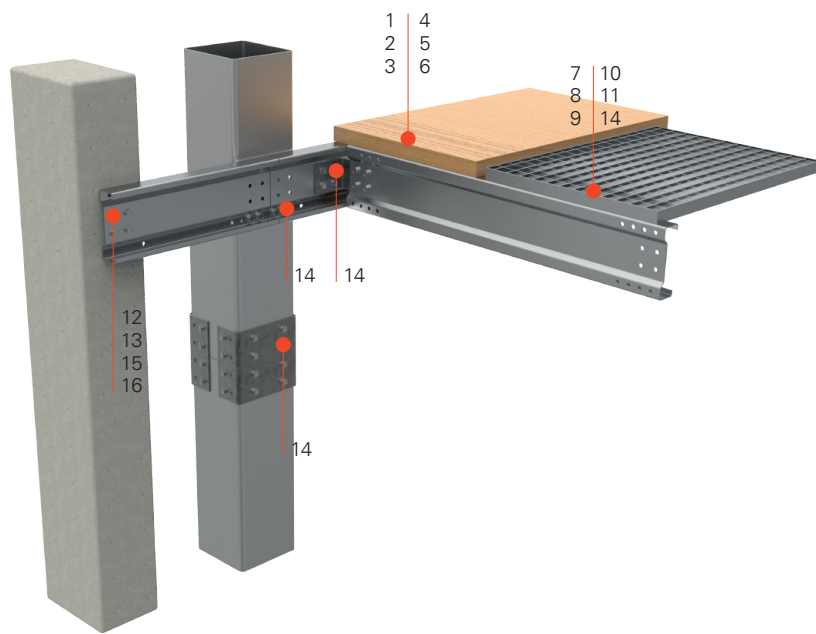
A2 Austenitic stainless steel A2 A4 Austenitic stainless steel A4 R5 Austenitic stainless steel R5 T Carbon steel A Aluminium

Flashing

[illegible]

A Aluminium

Structural connection

[illegible]

A Aluminium



Product codes explanation

S	X	C		5	/	35–65	–	L12	–	S19	–	6,3x140	–	A4	–	M	–	RAL9010
Fastener type	Fastener material	Fastener design	Market-specific	Drilling capacity		Clamping length (optional)		Head shape		Additional components		Dimension		Material quality & surface coating		Collated (optional)		Painting (optional)

Fastener type

Self drilling fastener	drill point	onto steel or timber	S
	thread point	onto steel or timber	C
Self tapping fastener		onto steel or timber	T
		onto concrete	M

Fastener material

Bimet	standard	X
	MULTI-MONTI®	MS
Carbon steel, Austenitic stainless steel, Aluminium	standard	D
	MULTI-MONTI®	MS-plus

Fastener design

Self drilling fastener	steel onto steel	standard	–
		composite panel	C
		fibre cement	F
	steel onto timber	standard	W
		composite panel	CW
		fibre cement	FW
	overlap- thread free zone	cut thread end	L
		cut thread end onto steel and/or timber	LW
		thread end run-out	M
	distance connection	–	D
	timber onto steel	double thread	U
	clip onto steel	cone underneath head	K

Product codes explanation

S	X	C		5	/	35–65	–	L12	–	S19	–	6,3x140	–	A4	–	M	–	RAL9010
Fastener type	Fastener material	Fastener design	Market-specific	Drilling capacity		Clamping length (optional)		Head shape		Additional components		Dimension		Material quality & surface coating		Collated (optional)		Painting (optional)

Fastener design

Self tapping fastener	steel onto timber	standard	A
	steel onto steel	standard	B
		repair fastener	C
	steel onto concrete	standard	–
		composite panel	C
	structural connection	standard	N
		thread free zone	NL

Market-specific

France	Kaskinox head	S
	Zamac head	Z

Drilling capacity

max. capacity in mm	e.g. 5
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Clamping length KL

min.–max. in mm	e.g. 35–65
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Product codes explanation

S	X	C		5	/	35-65	-	L12	-	S19	-	6,3x140	-	A4	-	M	-	RAL9010
Fastener type	Fastener material	Fastener design	Market-specific	Drilling capacity		Clamping length (optional)		Head shape		Additional components		Dimension		Material quality & surface coating		Collated (optional)		Painting (optional)

Head shape

Hexagon head	standard (e.g. size 8, 13, 16)	-	-
	low head high	-	LH
	increased flange	Ø in mm	H (mm)
Counter sunk	-	Ø in mm	C (mm)
Pan head	-	Ø in mm	D (mm)
SFS head	irius®	Ø in mm	L (mm)
	SXK head	-	K10

Additional components

Sealing washer	Austenitic stainless steel A2 or A4	Ø in mm	S (mm)
	aluminium	Ø in mm	A (mm)
	carbon steel galvanized	Ø in mm	T (mm)
Sealing element	-	-	BAZ
Cutting disc	stainless steel A2	Ø in mm	SC (mm)
	carbon steel galvanized	Ø in mm	TC (mm)
Curved disc	stainless steel A2	Ø in mm	SV (mm)

Dimension

Diameter x length in mm	e.g. 6,3x140
-------------------------	--------------

Product codes explanation

S	X	C		5	/	35–65	–	L12	–	S19	–	6,3×140	–	A4	–	M	–	RAL9010
Fastener type	Fastener material	Fastener design	Market-specific	Drilling capacity		Clamping length (optional)		Head shape		Additional components		Dimension		Material quality & surface coating		Collated (optional)		Painting (optional)

Material quality and surface coating

Bimet/Austenitic stainless steel	A2	A2
	A4	A4
	1.4547	R5
Carbon steel	Durocoat® 480	–

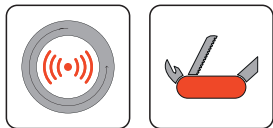
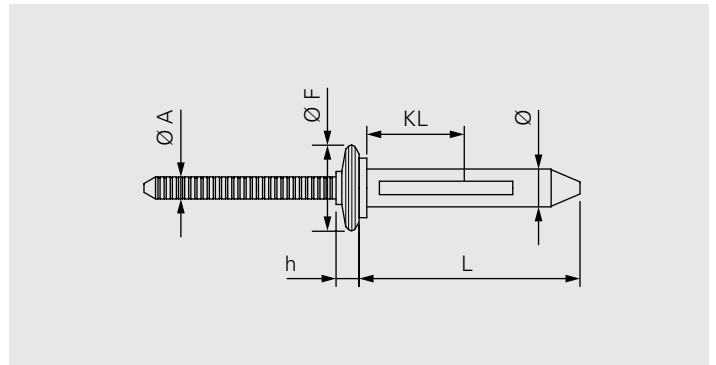
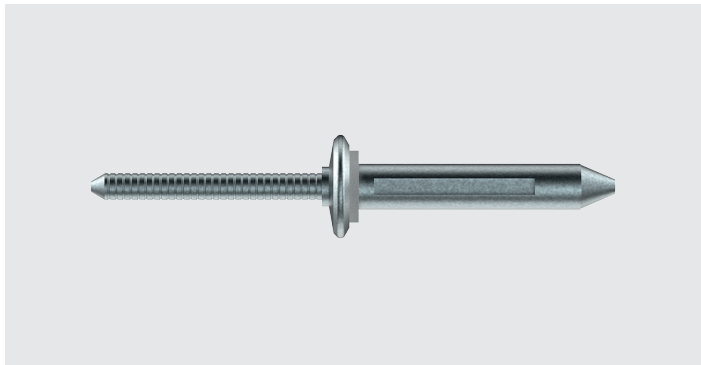
Collated

SFS setting tool	CF400, CF401	M
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Painting

RAL colour system	RAL (no)
NCS-S colour system	NCS-S (no)
BS colour system	BS (no)

BULB-TITE®



Application

Fastening of metal profiles onto metal sheets
Fastening of overlaps of profile sheets
Fastening of rooflights and plastic sheets

Component 1 (t_I)

Steel	≥0.40
Aluminium	≥0.50
Aluminium	≥0.50

Component 2 (t_{II})

Steel	≥0.40
Aluminium	≥0.50
Steel	≥0.50

$\Sigma_{\max} t_I + t_{II}$

–
–
–

Fastener material

Aluminium (EN573)
Sealing washer: Neoprene

Approvals

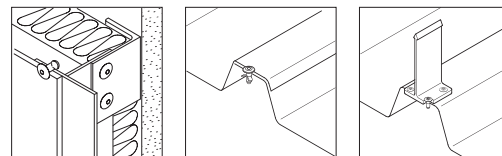


Features and Benefits

- Multi-functional blind rivet for a variety of applications
- High clamping range with clamping force independent of the clamping thickness
- High quality Neoprene sealing washer for long-term weather sealing
- Non-detachable end vibration-resistant connection
- Save setting given by the three load bearing legs

Documentation

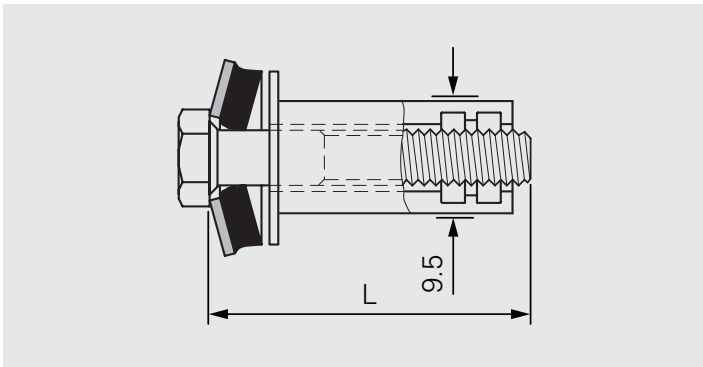
Approval document (ETA) | Declaration of performance (DoP)



Rivets in aluminium onto steel and aluminium

Product code	PU	Ø	L	KL	Pre-drill Ø	Ø A	Ø F	h	
RV6603-9-6W	1000	7.70	27.70	1.00–9.50	7.80–8.20	4.50	15.90	4.80	1570647
RV6604-6-3W	1000	5.20	17.50	1.30–4.80	5.30–5.50	2.90	11.60	3.40	1570655
RV6604-6-4W	1000	5.20	19.10	1.60–6.40	5.30–5.50	2.90	11.60	3.40	1570656
RV6604-6-6W	1000	5.20	22.20	4.70–9.50	5.30–5.50	2.90	11.60	3.40	1570658
RV6604-6-8W	1000	5.20	25.40	7.90–12.70	5.30–5.50	2.90	11.60	3.40	1570659
RV6604-6-10W	1000	5.20	28.60	11.10–15.90	5.30–5.50	2.90	11.60	3.40	1570629
RV6604-6-12W	1000	5.20	31.80	14.30–19.10	5.30–5.50	2.90	11.60	3.40	1570652
RV6605-9-6W	1000	7.70	28.20	1.10–8.30	7.80–8.20	4.50	19.40	5.30	1570660

LL-S-9.5



Application

Fastening of rooflights

Component 1 (t _I)	Component 2 (t _{II})	$\Sigma_{\max} t_I + t_{II}$
–	–	15.0

Fastener material

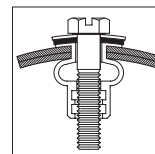
Austenitic stainless steel A2
 Sealing washer: Austenitic stainless steel A2, EPDM seal
 Grommet: EPDM

Approvals

–

Features and Benefits

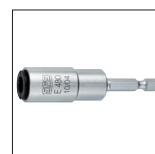
- GRP/PVC grommet fastener
- Pulls materials without overdriving and cracking of the sheet
- Requires 9.5mm pilot hole



Fastener in stainless steel A2

Product code	PU	L	KL	S16
LL-S-S16-9,5x25	100	25	2-15	1107880

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

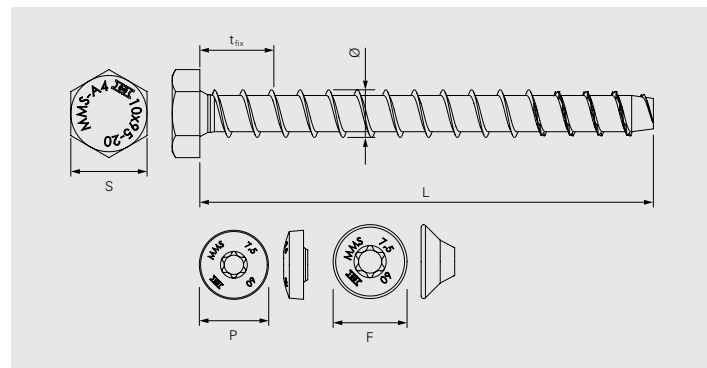
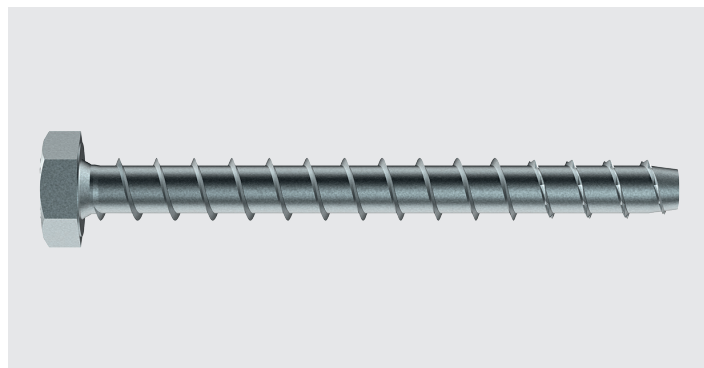


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

MMS-A4/R5



Application

Fastening of metal plates, profiles, brackets onto concrete
Fastening of timber battens onto concrete

Fastener Ø

	7.50	10.0	12.0
Pre-drill Ø	6.0	8.0	10.0
Embedment depth	65	75	90

Fastener material

Austenitic stainless steel A4/R5

Approvals

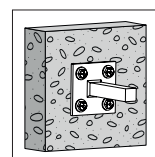
ETA-05/0011

Features and Benefits

- Self tapping fastener suitable for installation onto concrete
- Easily settable even in case of worn drills
- Settable by means of power-tools and immediately loadbearing
- Faster setting due to toothed functional tip
- Small spacing and edge distances thanks to no spreading effect

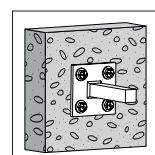
Documentation

Approval document (ETA) | Declaration of performance (DoP)



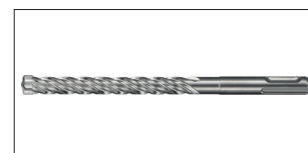
Fastener in A4 onto concrete

Product code	PU	L	t _{fix}	
MMS-S-7,5×75-A4	50	75	0–10	1479976
MMS-S-10×85-A4	25	85	0–10	1480024
MMS-S-12×100-A4	25	100	0–10	1480026



Fastener in R5 onto concrete

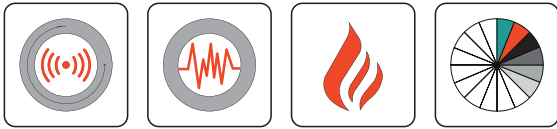
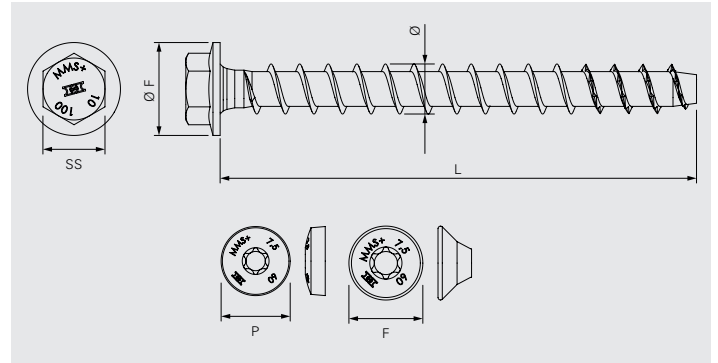
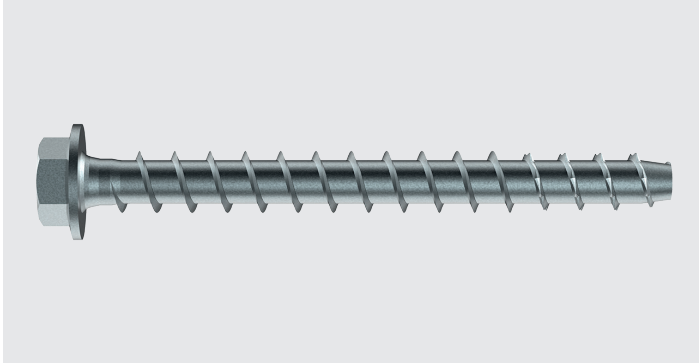
Product code	PU	L	t _{fix}	
MMS-F-C14-7,5×75-R5	50	75	0–10	1480027
MMS-F-C14-7,5×85-R5	50	85	0–20	1480028
MMS-F-C14-7,5×95-R5	50	95	0–30	1486553
MMS-F-C14-7,5×115-R5	50	115	0–50	1486583
MMS-P-D14-7,5×75-R5	50	75	0–10	1480029
MMS-P-D14-7,5×85-R5	50	85	0–20	1480030



Accessories/Ancillaries

Product code	PU	D	L	WL	FL	
SDS-6×210/150-4C	1	6	210	150	150	1487583
SDS-8×210/150-4C	1	8	210	150	150	1487585
SDS-10×210/150-4C	1	10	210	150	150	1487586

MMS-plus



Application

Fastening of metal plates, profiles, brackets onto concrete
Fastening of timber battens onto concrete

Fastener Ø

	7.50	10.0	12.0
Pre-drill Ø	6.0	8.0	10.0
Embedment depth	35/55	50/65	75/90
Seismic approved	—	yes	yes

Fastener material

Carbon steel, bright zinc plated

Approvals



ETA-15/0784

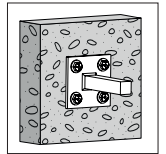


Features and Benefits

- Easily settable even in case of worn drills
- More flexibility given by two embedment depths
- Settable by means of power-tools and immediately loadbearing
- Seismic approval from diameter 10mm
- Highest demands and economical fixations given by reduced clearance hole displacements
- Faster setting due to toothed functional tip
- Multiple use in temporary fixations from diameter 10mm
- Small spacing and edge distances thanks to no spreading effect

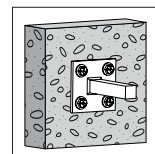
Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto concrete

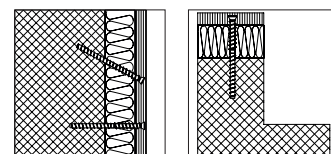
Product code	PU	L	t _{fix}	Ø F	
MMS-plus-F-C16-7,5×50	100	50	0–15	–	1480036
MMS-plus-F-C16-7,5×60	50	60	0–5/25	–	1480037
MMS-plus-F-C16-7,5×70	50	70	0–15/35	–	1564084
MMS-plus-F-C16-7,5×80	50	80	0–25/45	–	1503577
MMS-plus-F-C16-7,5×100	50	100	0–45/65	–	1486584
MMS-plus-F-C16-7,5×120	50	120	0–65/85	–	1564086
MMS-plus-F-C16-7,5×140	50	140	0–85/105	–	1564087
MMS-plus-F-C16-7,5×160	50	160	0–105/125	–	1486585
MMS-plus-F-C20-10×60	25	60	0–10	–	1503581
MMS-plus-F-C20-10×70	25	70	0–5/20	–	1480038
MMS-plus-F-C20-10×80	25	80	0–15/30	–	1503583
MMS-plus-F-C24-12×90	25	90	0–1/15	22	1480039
MMS-plus-F-C24-12×100	25	100	0–10/25	22	1503584
MMS-plus-F-C24-12×120	25	120	0–30/45	22	1564088
MMS-plus-P-D15-7,5×40	100	40	0–5	–	1480040
MMS-plus-P-D15-7,5×50	100	50	0–15	–	1480041
MMS-plus-P-D15-7,5×60	50	60	0–5/25	–	1480042
MMS-plus-SS-7,5×40	100	40	0–5	14	1480031
MMS-plus-SS-7,5×50	50	50	0–15	14	1480032
MMS-plus-SS-7,5×60	50	60	0–5/25	14	1480033
MMS-plus-SS-7,5×70	50	70	0–15/35	14	1503514
MMS-plus-SS-7,5×80	50	80	0–25/45	14	1507359
MMS-plus-SS-7,5×100	50	100	0–45/65	14	1515810
MMS-plus-SS-7,5×120	50	120	0–65/85	14	1563777
MMS-plus-SS-7,5×140	50	140	0–85/105	14	1563779
MMS-plus-SS-10×60	25	60	0–10	19	1503515
MMS-plus-SS-10×70	25	70	0–5/20	19	1480034
MMS-plus-SS-10×80	25	80	0–15/30	19	1491708
MMS-plus-SS-10×90	25	90	0–25/40	19	1563780
MMS-plus-SS-10×100	25	100	0–35/50	19	1547793
MMS-plus-SS-10×120	25	120	0–55/70	19	1563781
MMS-plus-SS-10×140	25	140	0–75/90	19	1522355
MMS-plus-SS-10×160	25	160	0–95/110	19	1563782



Fastener in carbon steel onto concrete

Product code	PU	L	t _{fix}	Ø F	
MMS-plus-SS-12×60	25	60	0–5	22	1599840
MMS-plus-SS-12×80	25	80	0–5	22	1516300
MMS-plus-SS-12×90	25	90	0–1/15	–	1480035
MMS-plus-SS-12×100	25	100	0–10/25	–	1503516
MMS-plus-SS-12×120	25	120	0–30/45	–	1503517
MMS-plus-SS-12×140	25	140	0–50/65	22	1516202
MMS-plus-SS-12×160	25	160	0–70/85	22	1516203

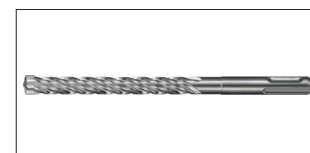
t_{fix} Calculated with two different embedment depths



Fastener in carbon steel onto concrete

Product code	PU	L	t _{fix}	
MMS-DT-C15-7,5×200-HP	50	200	0–145/165	1598480
MMS-DT-C15-7,5×250-HP	50	250	0–195/215	1525948
MMS-DT-C15-7,5×300-HP	50	300	0–245/265	1525949
MMS-DT-C15-7,5×350-HP	50	350	0–295/315	1525950
MMS-DT-C15-7,5×400-HP	50	400	0–345/365	1598486

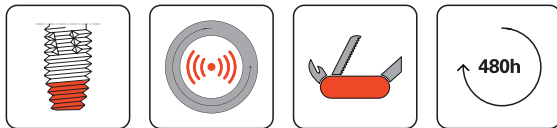
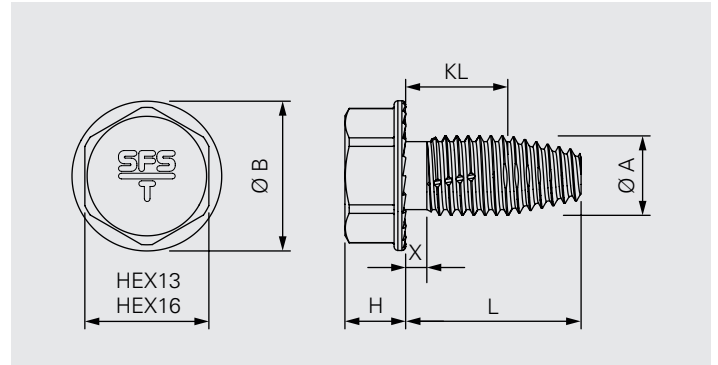
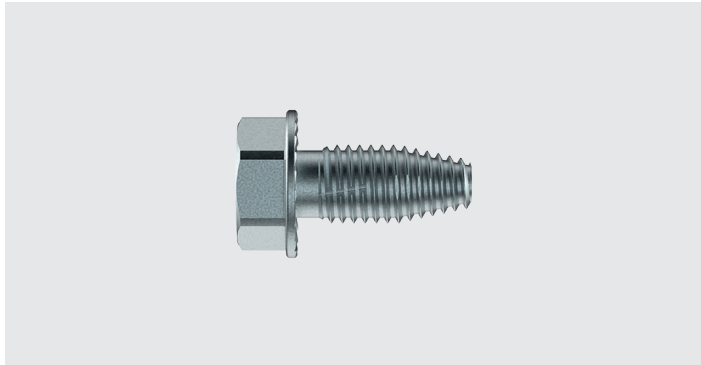
t_{fix} Calculated with two different embedment depths



Accessories/Ancillaries

Product code	PU	D	L	WL	FL	
SDS-6×210/150-4C	1	6	210	150	150	1487583
SDS-8×210/150-4C	1	8	210	150	150	1487585
SDS-10×210/150-4C	1	10	210	150	150	1487586

nonut®



Application

Structural connections of metal profiles

Component 1 (t_I)

Steel

Component 2 (t_{II})

Steel

$\Sigma_{\max} t_I + t_{II}$

—

Fastener material

Carbon steel, Durocoat® 480

Approvals

CE₁₁
ETA-11/0191

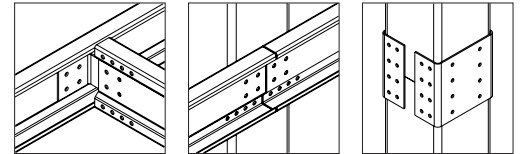


Features and Benefits

- Blind fastening – simple one side installation compared to nut and bolt
- Fast and user friendly installation with impact wrench
- Centering of the pre-punched metal profiles thanks to conical thread start
- Patented thread design for optimized thread forming capability
- High tension and shear resistance achieves by optimized fastener geometry
- Highest safety regarding over-winding and self-loosening

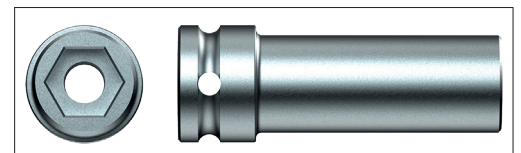
Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

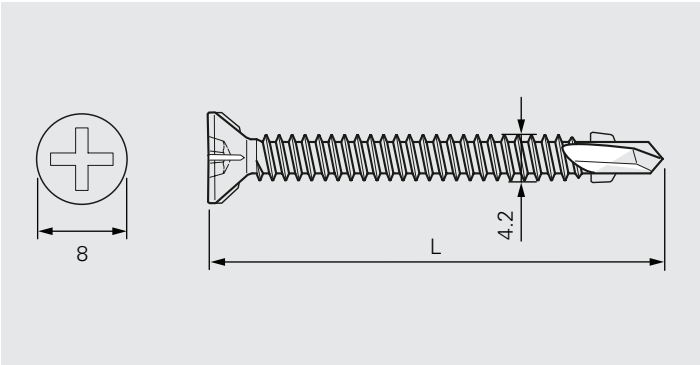
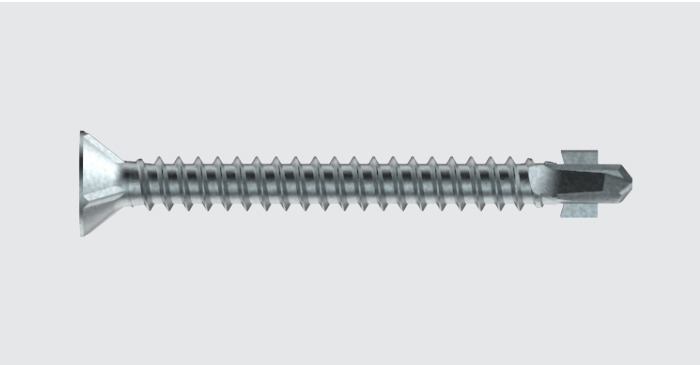
Product code	PU	L	KL	Head	Ø A	Ø B	x	H	
nonut®-TDBL-T-8,6×16	200	16	9	HEX13	8.60	16.0	2.0	7	1542214
nonut®-TDBLF-T-F-8,6×16	200	16	9	HEX13	8.60	16.0	<1.0	4.7	1541860
nonut®-TDBL-T-8,6×50	100	50	43	HEX16	8.60	16.0	20.0	7	1607124
nonut®-TDBL-T-10,6×23	100	23	13	HEX16	10.60	20.0	3.0	8	1542223
nonut®-TDBLF-T-10,6×23	100	23	13	HEX16	10.60	20.0	<1.50	8	1542229
nonut®-TDBL-T-10,6×30	100	30	20	HEX16	10.60	20.0	3.0	8	1542217
nonut®-TDBL-T-10,6×50	100	50	40	HEX16	10.60	20.0	3.0	8	1561761
nonut®-TDBLF-T-13,4×23	100	23	13	HEX16	13.40	20.0	<2.0	8	1589570
nonut®-TDBL-T-13,4×30	100	30	20	HEX16	13.40	20.0	3.0	8	1542212



Accessories/Ancillaries

Product code	PU	Drive	Head	
E313	1	¼"	HEX13	508029
E513	1	¼"	HEX13	1512203
E416	1	¼"	HEX16	1389740
E516	1	¼"	HEX16	1524373

SC2-4.2



Application

Fastening of timber boards onto supporting steel structures

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{max} t_I + t_{II}$
Timber	19.0–29.0	Steel	0.7–2.0	–

Fastener material

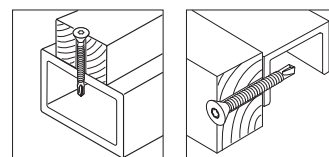
Carbon steel, case hardened

Approvals

–

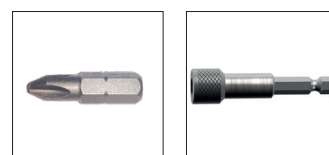
Features and Benefits

- Flush-mounted installation
- Ergonomical setting tool available



Fastener in carbon steel onto steel

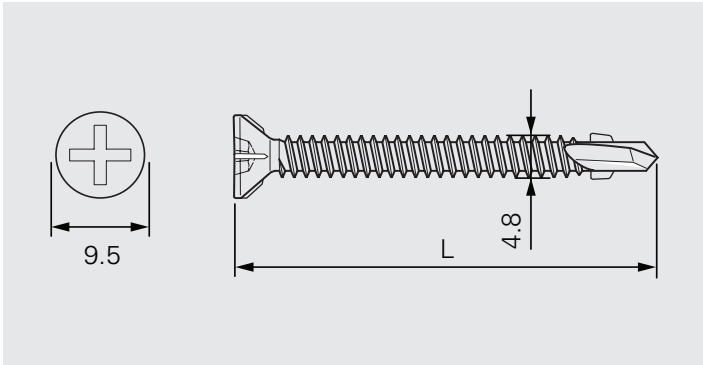
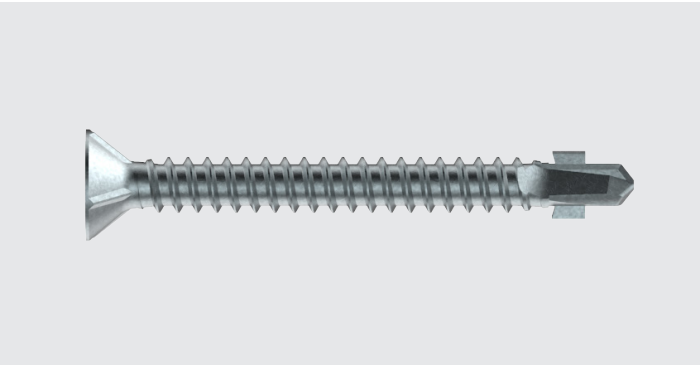
Product code	PU	L	KL	VD	
SC2/21-PH2-4,2x30	100	30	0-21	2	844488
SC2/31-PH2-4,2x40	100	40	0-31	2	844770



Accessories/Ancillaries

Product code	PU	
H2-25-HEX1/4"	1	25370
ZA1/4" bit holder	1	1162306

SC3-4.8



Application

Fastening of timber boards onto supporting steel structures

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Timber	22.0–54.0	Steel	1.0–3.0	–

Fastener material

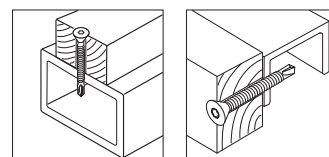
Carbon steel, case hardened

Approvals

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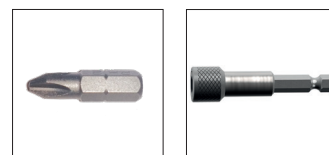
Features and Benefits

- Flush-mounted installation
- Ergonomical setting tool available



Fastener in carbon steel onto steel

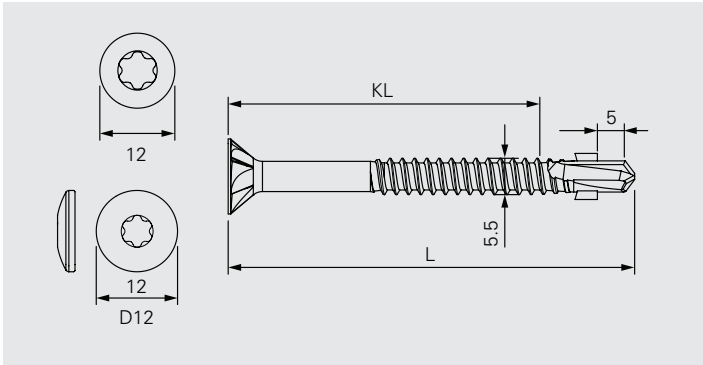
Product code	PU	L	KL	VD	
SC3/25-PH2-4,8x35	100	35	0-25	3	844771
SC3/35-PH2-4,8x45	100	45	0-35	3	1085781
SC3/55-PH2-4,8x65	100	65	0-55	3	1068872



Accessories/Ancillaries

Product code	PU	
H2-25-HEX1/4"	1	25370
ZA1/4" bit holder	1	1162306

SC5-5.5



Application

Fastening of timber boards onto supporting steel structures

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Timber	27.0–40.0	Steel	2.0–5.0	–

Fastener material

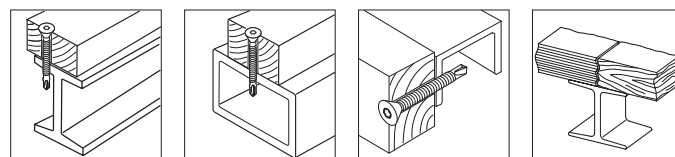
Carbon steel, Durocoat® 480

Approvals

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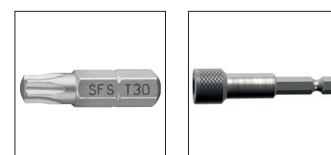
Features and Benefits

- Flush-mounted installation without damaging the timber surface given by the milling grooves
- Ergonomical setting tool available



Fastener in carbon steel onto steel

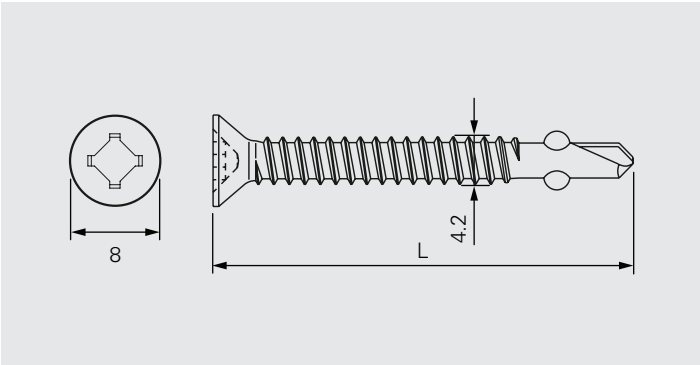
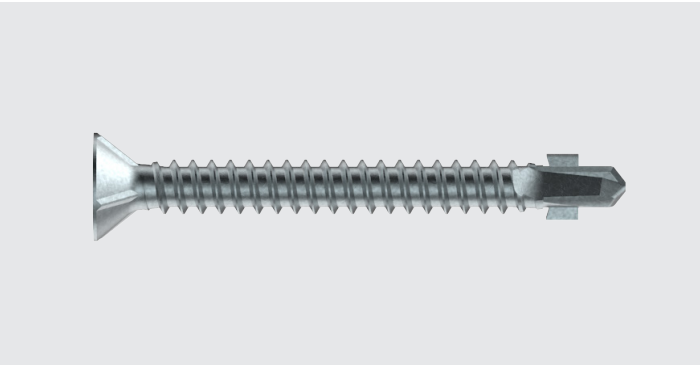
Product code	PU	L	KL	VD	
SC5/24-12-5,5x38	100	38	0-24	5	713805
SC5/31-12-5,5x45	100	45	0-31	5	713807
SC5/41-12-5,5x55	100	55	0-31	5	713816
SC5/24-DS12-5,5x38	100	38	0-24	5	713806
SC5/31-DS12-5,5x45	100	45	0-31	5	713809
SC5/36-DS12-5,5x50	100	50	0-36	5	713811
SC5/66-DS12-5,5x80	100	80	0-66	5	1068860
SC5/101-DS12-5,5x115	100	115	45-101	5	676891



Accessories/Ancillaries

Product code	PU	
T30-25-HEX1/4"	1	24010
ZA1/4" bit holder	1	1162306

SCN-4.2



Application

Fastening of timber boards onto supporting steel structures

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Timber	8.0–56.0	Steel	0.7–2.0	–

Fastener material

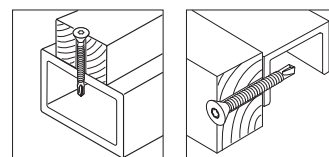
Carbon steel, case hardened

Approvals

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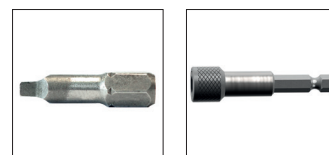
Features and Benefits

- Flush-mounted installation
- Ergonomical setting tool available



Fastener in carbon steel onto steel

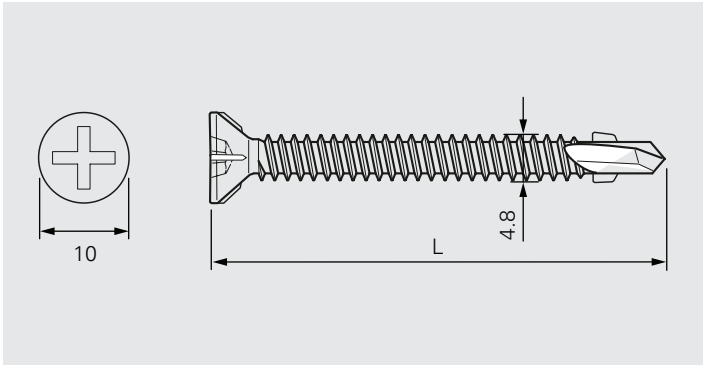
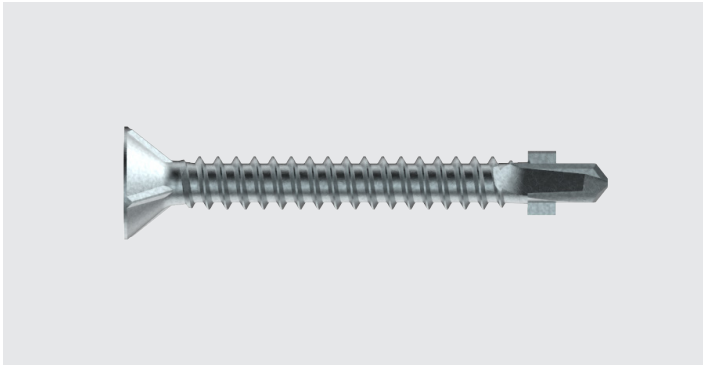
Product code	PU	L	KL	VD	
SCN2/25-SR2-4,2x38	100	38	10-25	2	62086
SCN2/57-SR2-4,2x70	100	70	40-57	2	834971



Accessories/Ancillaries

Product code	PU	
SR2-25-HEX1/4"	1	1146918
ZA1/4" bit holder	1	1162306

SCS3-4.8



Application

Fastening of timber boards onto supporting steel structures

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Timber	22.0–54 .0	Steel	1.0–3.0	–

Fastener material

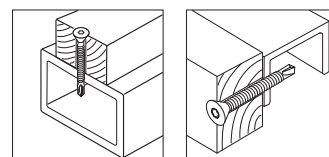
Austenitic stainless steel A2

Approvals

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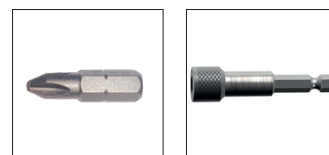
Features and Benefits

- Flush-mounted installation
- Ergonomical setting tool available



Fastener in carbon steel onto steel

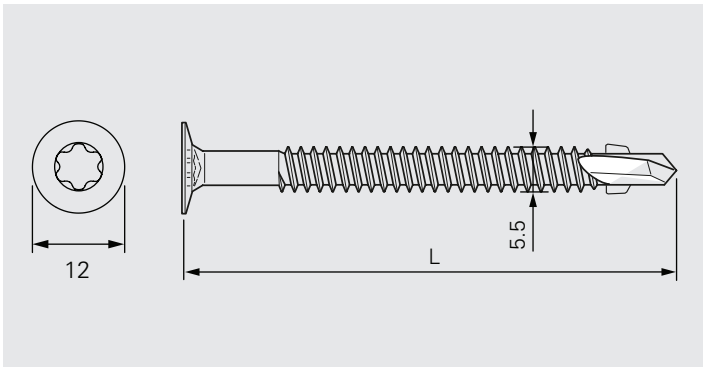
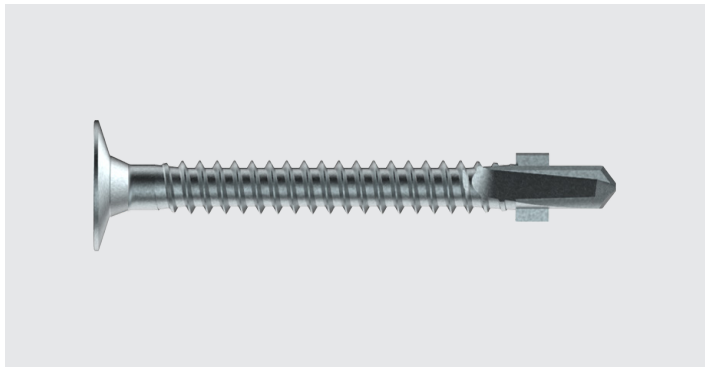
Product code	PU	L	KL	VD	
SCS3/25-7982/PH2-4,8x42	100	42	0-25	3	1282666
SCS3/55-7982/PH2-4,8x72	100	72	0-55	3	1282665



Accessories/Ancillaries

Product code	PU	
H2-25-HEX1/4"	1	25370
ZA1/4" bit holder	1	1162306

SCS5-5.5



Application

Fastening of timber boards onto supporting steel structures

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{max} t_I + t_{II}$
Timber	29.0–52.0	Steel	2.0–5.0	–

Fastener material

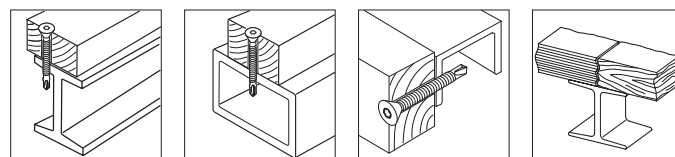
Austenitic stainless steel A2

Approvals

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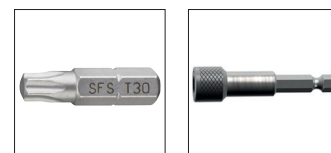
Features and Benefits

- Flush-mounted installation
- Ergonomical setting tool available



Fastener in carbon steel onto steel

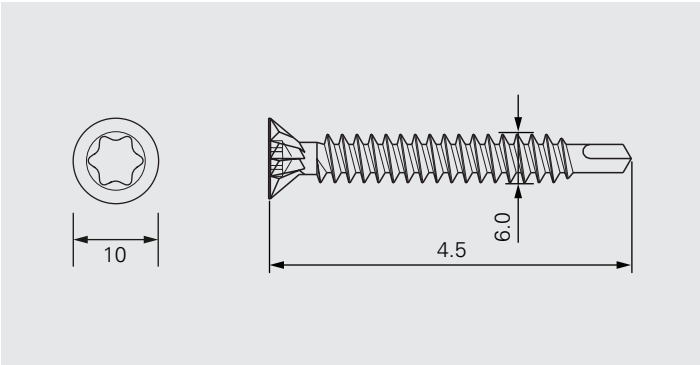
Product code	PU	L	KL	VD	
SCS5/34-D10/T30-5,5x55	100	55	0-34	5	1152443
SCS5/54-D10/T30-5,5x75	100	75	0-54	5	1152444



Accessories/Ancillaries

Product code	PU	
T30-25-HEX1/4"	1	24010
ZA1/4" bit holder	1	1162306

SD2-S-6.0



Application

Fastening of 25mm tiling batten to steel

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Timber	0–25.0	Steel	0.4–0.7	25.7

Fastener material

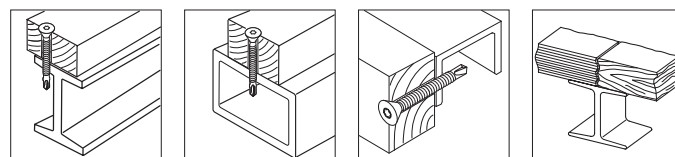
Austenitic stainless steel A2

Approvals

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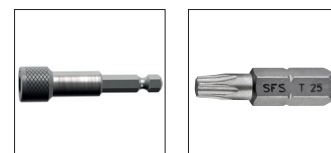
Features and Benefits

- Flush-mounted installation



Fastener in carbon steel onto steel

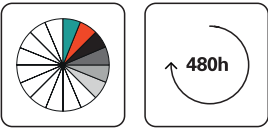
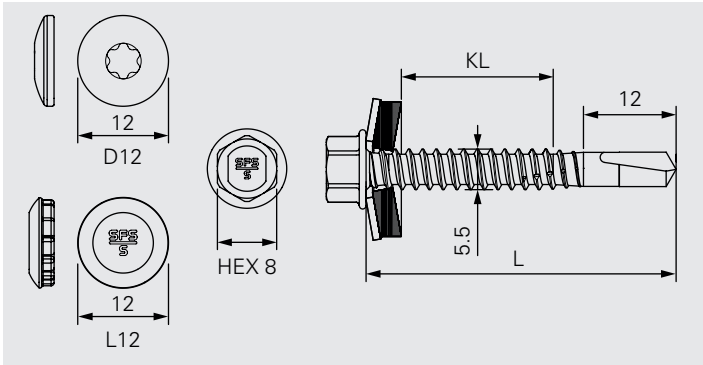
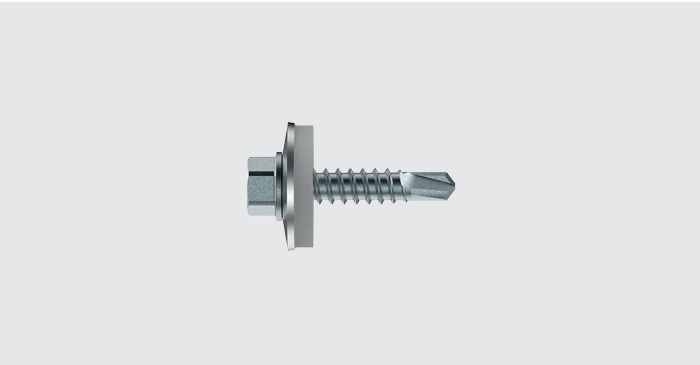
Product code	PU	L	KL	VD	
SD2-S-S10/T20-6x45	100	45	0-26	0.7	931985



Accessories/Ancillaries

Product code	PU	
T20-25-HEX1/4"	1	769471
ZA1/4" bit holder	1	1162306

SD3/SDL3-5.5



Application

Fastening of profile sheets onto metal profiles
Fastening of profile sheets onto liner trays

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Steel	0.50–1.50	Steel	1.25–3.0	4.0
		Steel	2×0.63–2.0	5.0

Fastener material

Carbon steel, Durocoat® 480

Approvals

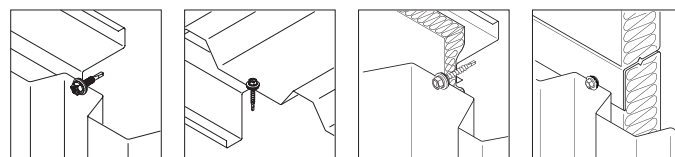


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets
- High quality EPDM sealing washer for long-term weather sealing
- High corrosion durability thanks to special galvanic zinc coating

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	T16
SD3-T16-5,5x25	100	25	0-12	1506612
SD3-T16-5,5x45	100	45	0-30	1506617
SD3-D12-5,5x22	100	22	0-10	3761
SDL3-L12-T16-5,5x25	100	25	0-12	1506893



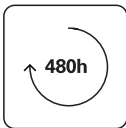
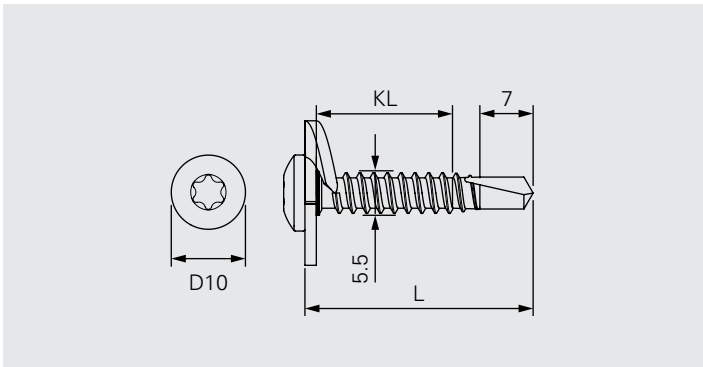
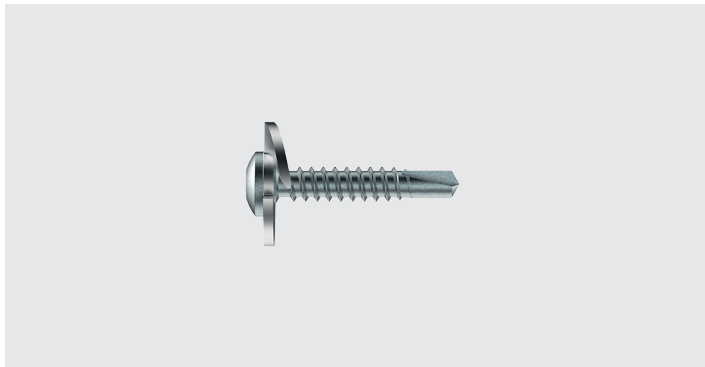
Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316
ZA1/4" bit holder	1	1162306
Torx T25w bit	1	7662

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SD3-D10-5.5

Available
Spring 2020



Application

Fastening of single-ply insulated roof panels onto metal profiles

Component 1 (t_I)

Single-ply panel

Component 2 (t_{II})

Steel

1.25–3.0

$\Sigma_{\max} t_I + t_{II}$

4.0

Fastener material

Carbon steel, Durocoat® 480

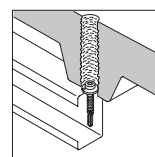
Cutting disc: Carbon steel

Approvals

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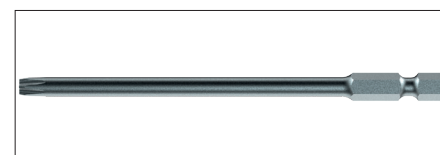
Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of PVC membrane and insulation required thanks to cutting-washer
- High corrosion resistance thanks to special galvanic zinc coating
- Self coring fastener without disruption of the insulating material achieved by the cutting-washer



Fastener in carbon steel onto steel

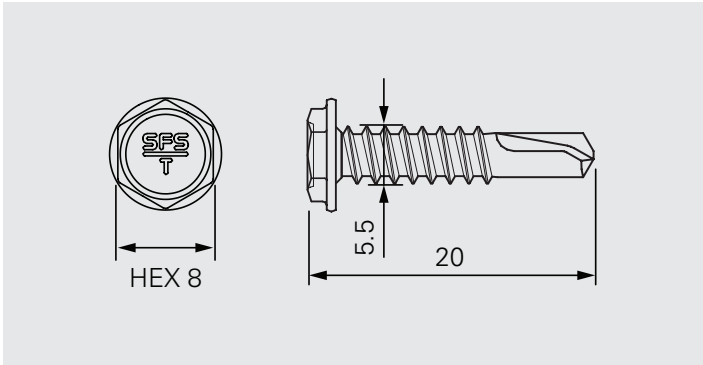
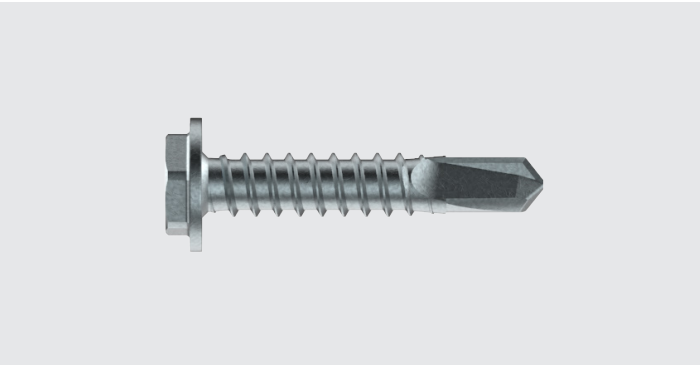
Product code	PU	L	KL	TC
SD3-D10-T19/C9-5,5×30	500	30	0-16	733171



Accessories/Ancillaries

Product code	PU								
T25W-175-HEX1/4"	1								727979

SD5-LH-5.5



Application

Fastening of light gauge steel framing

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Steel	0.50–1.50	Steel	1.50–4.50	5.0

Fastener material

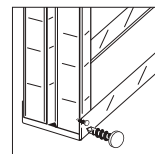
Carbon steel, Durocoat® 480

Approvals

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Features and Benefits

- Low head design to minimise projection once installed



Fastener in carbon steel onto steel

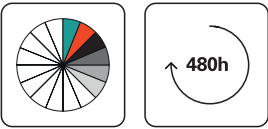
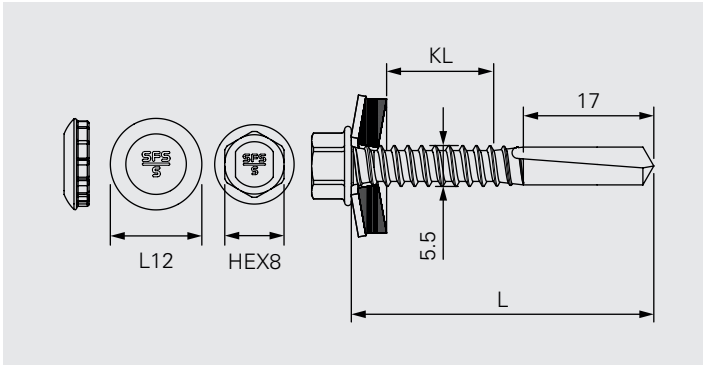
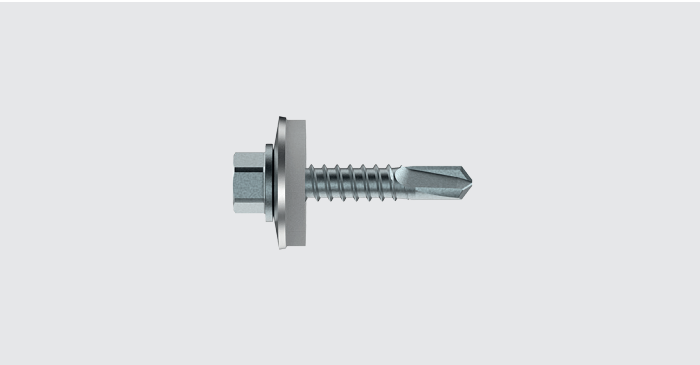
Product code	PU	L	KL	
SD5-LH-5,5×20	100	20	0-7	1042834



Accessories/Ancillaries

Product code	PU	
ZA1/4" LH nutsetter	1	1184669

SD6-5.5



Application

- Fastening of profile sheets onto metal profiles
- Fastening of profile sheets onto liner trays

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Steel	0.50–1.50	Steel	1.50–5.0	6.0
–	–	Steel	2×1.0–3.0	5.0

Fastener material

Carbon steel, Durocoat® 480

Approvals

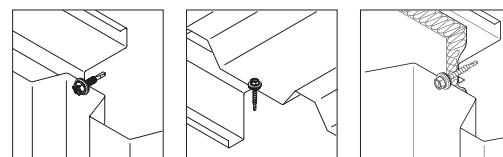


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets
- High quality EPDM sealing washer for long-term weather sealing
- High corrosion durability thanks to special galvanic zinc coating

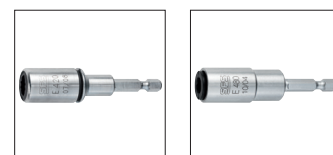
Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	T16
SD6-T16-5,5x28	100	28	0-13	1423085
SD6-L12-T16-5,5x28	100	28	0-13	1423575

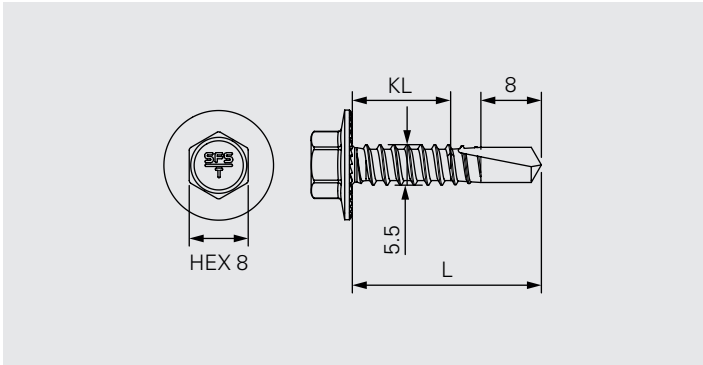


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SD6-H15-5.5



Application

- Fastening of metal decks onto metal profiles
- Fastening of liner trays onto metal profiles

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Steel	0.50–1.50	Steel	1.50–5.0	6.0
–	–	Steel	2×1.50–3.0	7.0

Fastener material

Carbon steel, Durocoat® 480

Approvals

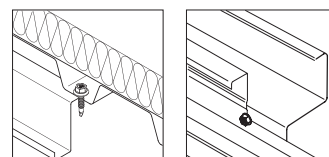


Features and Benefits

- Self drilling fastener suitable for installation of metal decks and liner trays
- Reduced risks of over-driving and unwinding achieved by locking ribs
- High tension resistance achieved by optimized fastener geometry
- High corrosion durability thanks to special galvanic zinc coating

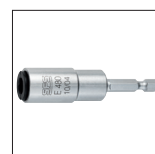
Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	
SD6-H15-5,5×25	100	22	0-10	1422763

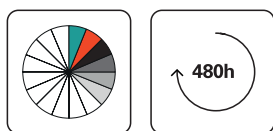
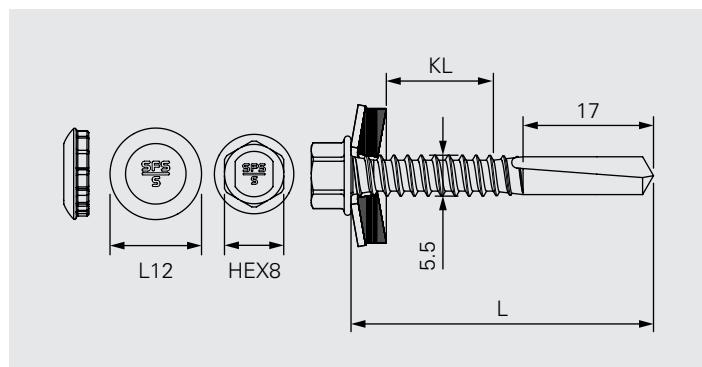


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SD14-5.5



Application

Fastening of profile sheets onto metal beams
Fastening of profile sheets onto liner trays

Fastener material

Carbon steel, Durocoat® 480

Component 1 (t_I)

Steel 0.50–1.50

Component 2 (t_{II})

Steel 4.0–13.50

$\Sigma_{\max} t_I + t_{II}$

14.0

Approvals

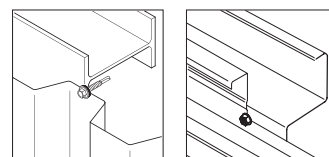


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets
- High quality EPDM sealing washer for long-term weather sealing
- High performance drill point for heavy steel beams
- High corrosion durability thanks to special galvanic zinc coating

Documentation

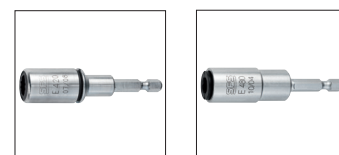
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	T16
SD14-T16-5,5×34	100	25	0-11	1423111
SD14-T16-5,5×48	100	48	0-25	1423120
SD14-T16-5,5×58	100	58	5-35	1423121
SD14-L12-T16-5,5×34	100	34	0-11	1423115

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.



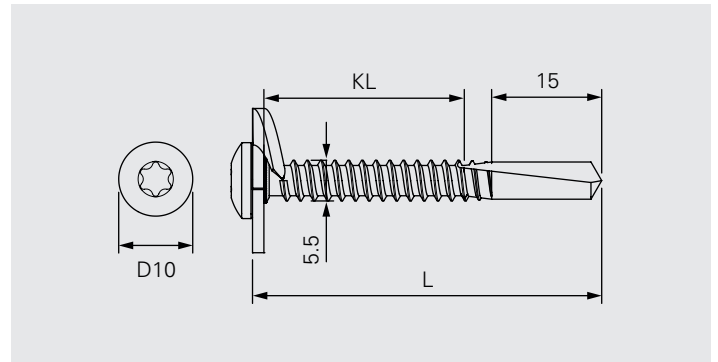
Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SD14-D10-5.5

Available
Spring 2020



Application

Fastening of single-ply insulated roof panels onto metal beams

Component 1 (t_I)

Single-ply panel

Component 2 (t_{II})

Steel 4.0–13.50

$\Sigma_{\max} t_I + t_{II}$

14.0

Fastener material

Carbon steel, Durocoat® 480

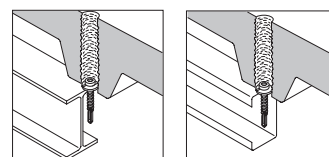
Cutting disc: Carbon steel

Approvals

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Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of PVC membrane and insulation required thanks to cutting-washer
- High performance drill point for heavy steel beams
- High corrosion resistance thanks to special galvanic zinc coating
- Self coring fastener without disruption of the insulating material achieved by the cutting washer



Fastener in carbon steel onto steel

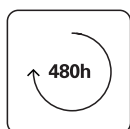
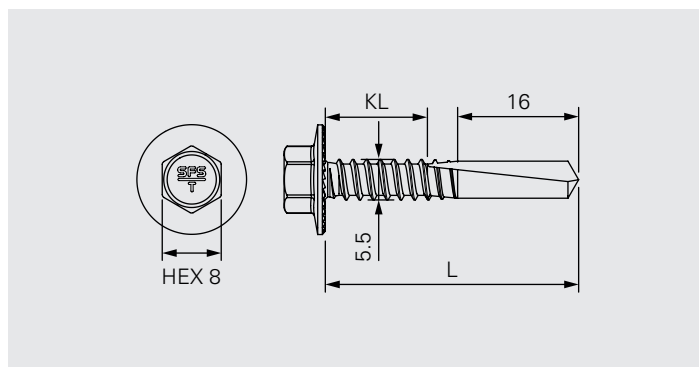
Product code	PU	L	KL	TC
SD14-D10-T19/C9-5,5×46	500	46	0-21	774650



Accessories/Ancillaries

Product code	PU	
T25W-175-HEX1/4"	1	727979
T25HF-240-HEX1/4"	1	1223621

SD14-H15-5.5



Application

Fastening of metal decks onto metal beams
Fastening of liner trays onto metal beams

Component 1 (t_I)

Steel 0.50–1.50

Component 2 (t_{II})

Steel 4.0–13.50

$\Sigma_{\max} t_I + t_{II}$

14.0

Fastener material

Carbon steel, Durocoat® 480

Approvals

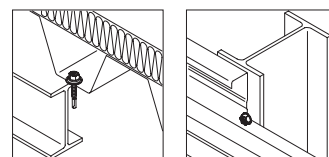


Features and Benefits

- Self drilling fastener suitable for installation of metal decks and liner trays
- Reduced risks of over-driving and unwinding achieved by locking ribs
- High tension resistance achieved by optimized fastener geometry
- High corrosion durability thanks to special galvanic zinc coating

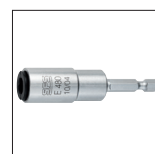
Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	
SD14-H15-5,5×34	100	34	0-14	1420173

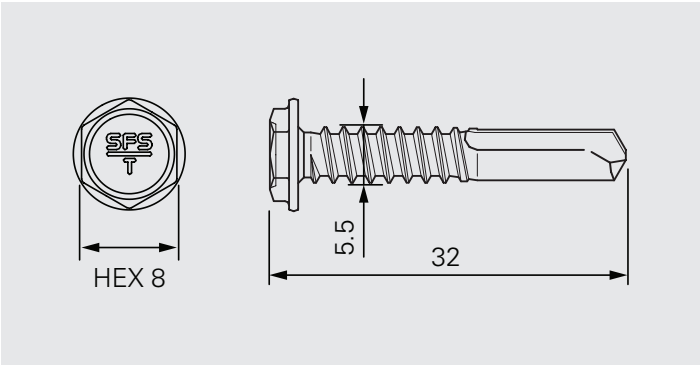
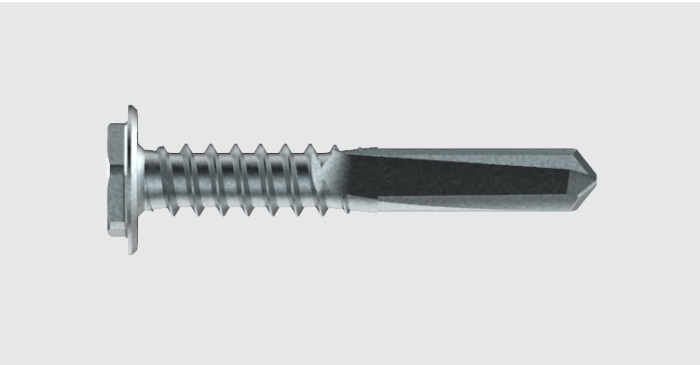


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SD14-LH-5.5



Application

Fastening of heavy gauge steel framing

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Steel	0.50–1.50	Steel	1.50–5.0	14.0

Fastener material

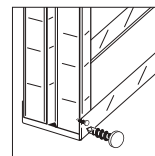
Carbon steel, Durocoat® 480

Approvals

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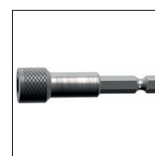
Features and Benefits

- Low head design to minimise projection once installed



Fastener in carbon steel onto steel

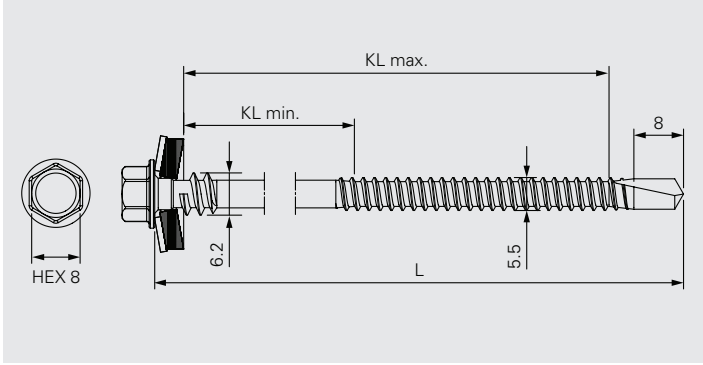
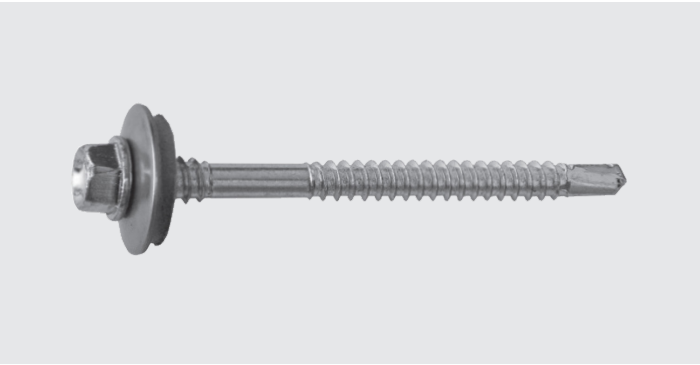
Product code	PU	L	KL	
SD14-LH-5,5×34	100	34	0-16	1430698



Accessories/Ancillaries

Product code	PU	
ZA1/4" LH nutsetter	1	1184669

SDC5-5.5



Application

- Fastening of sandwich panels onto metal profiles
- Fastening of sandwich panels onto timber

Component 1 (t _I)	Component 2 (t _{II})	Σ _{max} t _I + t _{II}
Sandwich panel	Steel	1.2–4.0
	Timber	≥35
		5.0

Fastener material

- Plated carbon steel, case hardened
- Sealing washer: Aluminium, EPDM-seal

Approvals

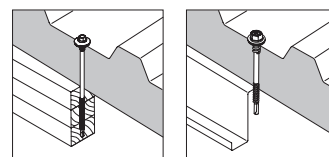
–

Features and Benefits

- Self drilling fastener suitable for installation of sandwich panels
- High quality EPDM sealing washer for long-term weather sealing

Documentation

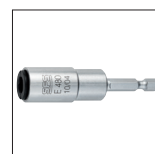
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel and timber

Product code	PU	L	Steel KL	Timber KL	A16	A19
SDC5-A16-5,5x75	100	75	30-50	-	1372330	1372331
SDC5-A16-5,5x90	100	90	35-65	10-30	1372481	1372512
SDC5-A16-5,5x120	100	120	60-95	30-60	1372485	1372516
SDC5-A16-5,5x135	100	135	45-110	40-75	1372487	1372519
SDC5-A16-5,5x145	100	145	55-120	50-85	1372490	1372522
SDC5-A16-5,5x180	100	180	70-155	85-120	1372500	1372531

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Product is available with A14 and S29 washer, contact a member of the team for material number.

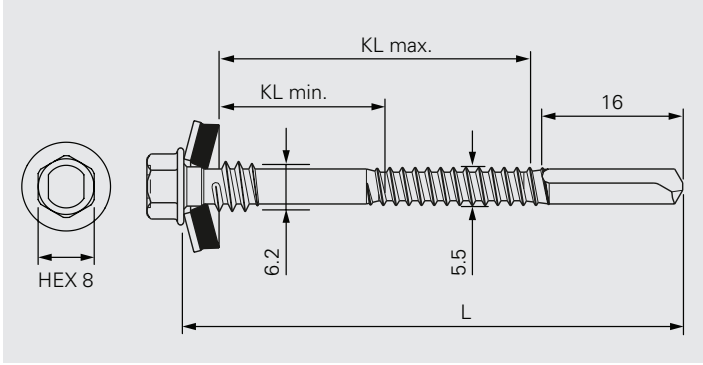
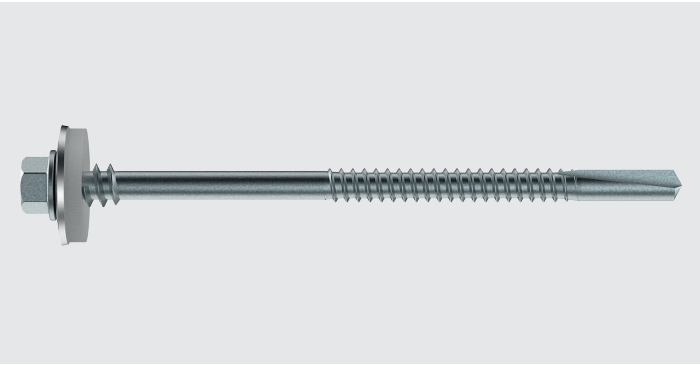


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SDC12-5.5



Application

Fastening of sandwich panels onto metal profiles

Component 1 (t _I)	Component 2 (t _{II})	$\Sigma_{\max} t_I + t_{II}$
Sandwich panel	– Steel 4.0–11	12.0

Fastener material

Plated carbon steel, case hardened
Sealing washer: Aluminium, EPDM-seal

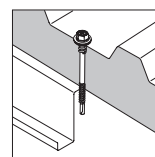
Approvals

Features and Benefits

- Self drilling fastener suitable for installation of sandwich panels
- High quality EPDM sealing washer for long-term weather sealing

Documentation

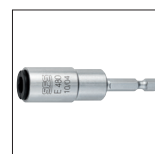
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	A16	A19
SDC12-A16-5,5x75	100	75	24-44	1372480	1372511
SDC12-A16-5,5x105	100	105	45-74	1372484	1389191
SDC12-A16-5,5x120	100	120	55-89	1372486	1372518
SDC12-A16-5,5x155	100	155	60-124	1372498	1389200

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Product is available with A14 and S29 washer, contact a member of the team for material number.

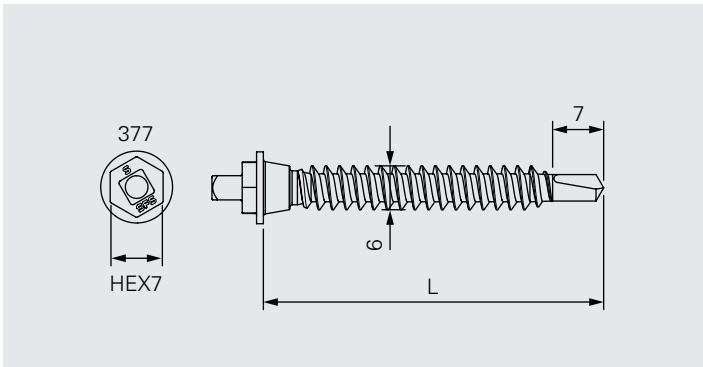
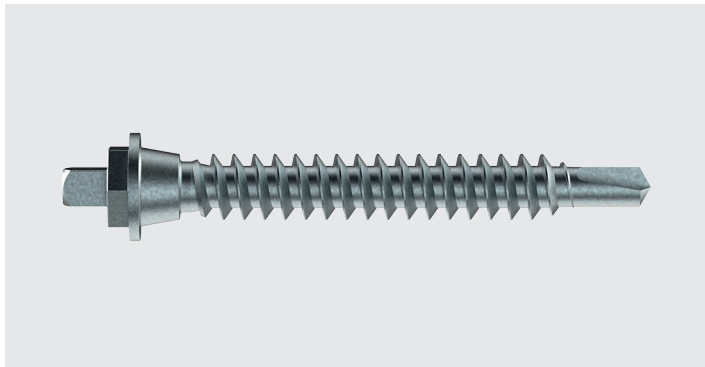


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SDK2-S-6.0



Application

- Fastening of standing seam clips onto metal decks
- Fastening of standing seam clips onto timber

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Clip	≥5.0	Steel	0.75–1.25	–
Clip	≥5.0	Aluminium	0.90–2.50	–
Clip	≥5.0	Timber	≥18.0	–

Fastener material

Austenitic stainless steel A2

Approvals

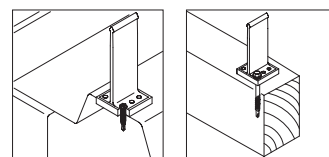


Features and Benefits

- Self drilling fastener suitable for installation of standing seam clips
- Safe against over-driving of the fastener onto thin steel sheets and timber substructure
- No torque control required given by breaking-off square drive
- Reduced risks of over-driving and unwinding thanks to clamping-cone
- High tension resistance achieved by optimized fastener geometry

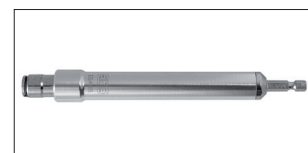
Documentation

Installation instruction I Technical Data



Fastener in A2 onto steel, aluminium and timber

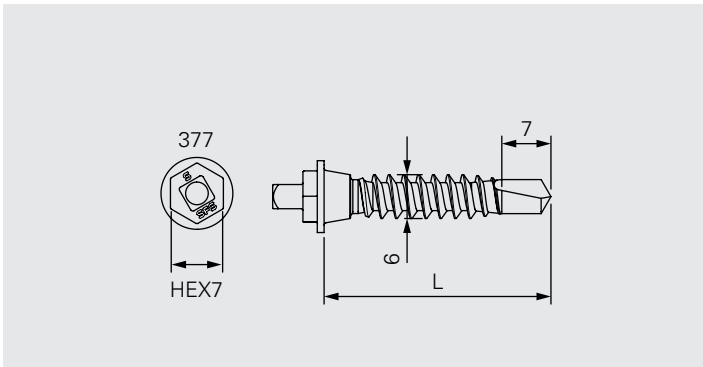
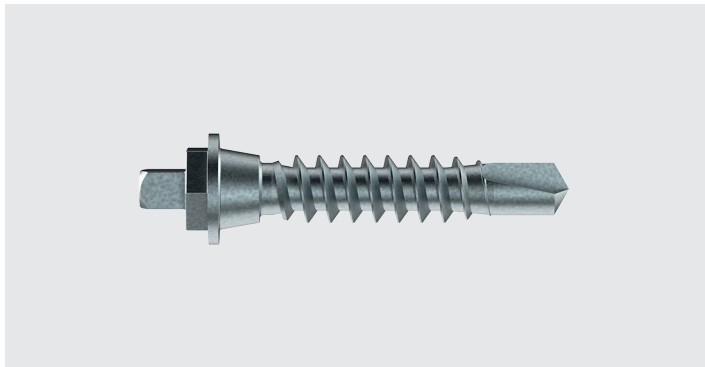
Product code	PU	L	Clip onto steel	Clip onto timber	
SDK2-S-377-6,0×35	100	35	6–18	–	931981
SDK2-S-377-6,0×45	100	45	6–28	–	950490
SDK2-S-377-6,0×60	250	60	5–42	5–18	1071714



Accessories/Ancillaries

Product code	PU	L	
Adapter DS-K185	1	185	1429676
Adapter DS-K265	1	265	1429717

SDK3-S-6.0



Application

Fastening of standing seam clips onto metal profiles

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Clip	≥5.0	Steel	1.50–2.50	–
Clip	≥5.0	Aluminium	1.80–3.0	–

Fastener material

Austenitic stainless steel A2

Approvals

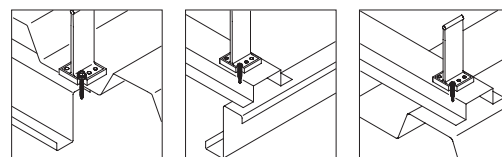


Features and Benefits

- Self drilling fastener suitable for installation of standing seam clips
- Safe against over-driving of the fastener onto thin steel sheets
- No torque control required given by breaking-off square drive
- Reduced risks of over-driving and unwinding thanks to clamping-cone
- High tension resistance achieved by optimized fastener geometry

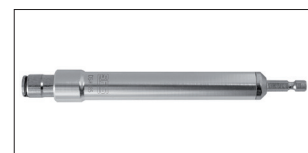
Documentation

Installation instruction I Technical Data



Fastener in A2 onto steel and aluminium

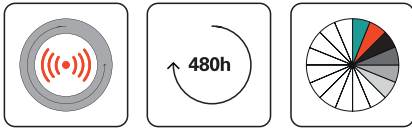
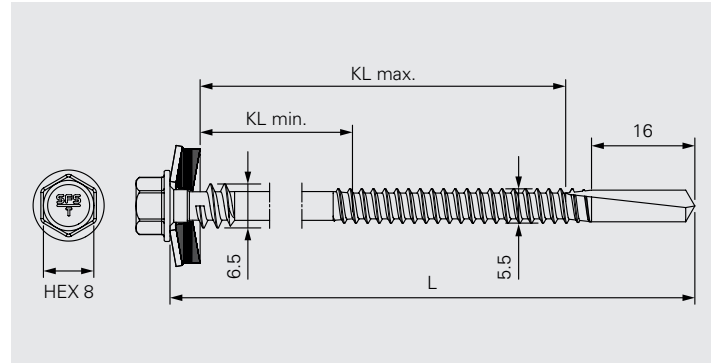
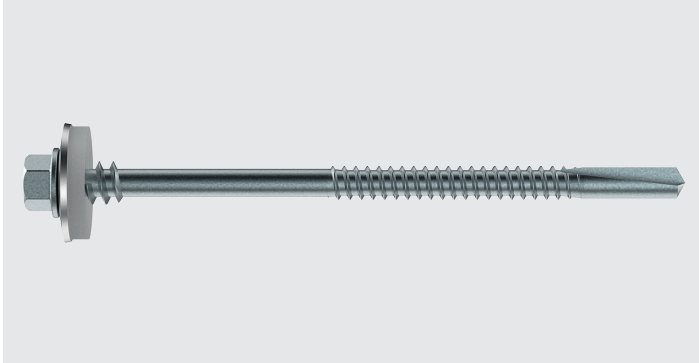
Product code	PU	L	Clip onto steel	
SDK3-S-377-6,0×30	100	30	6–13	1291699
SDK3-S-377-6,0×45	100	45	6–28	1291698



Accessories/Ancillaries

Product code	PU	L	
Adapter DS-K185	1	185	1429676
Adapter DS-K265	1	265	1429717

SDT14-5.5



Application

Fastening of sandwich panels onto steel beams

Component 1 (t_1)

Sandwich panel

Component 2 (t_2)

Steel

4.0–12.0

$\Sigma_{\max} t_1 + t_2$

14.0

Fastener material

Carbon steel, Durocoat® 480

Sealing washer: Aluminium, EPDM-seal

Approvals

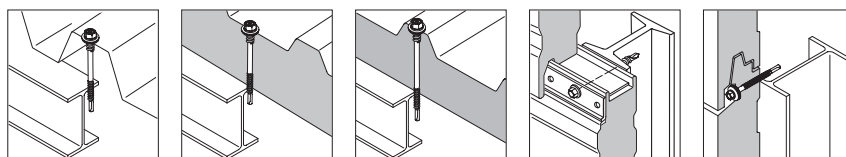


Features and Benefits

- Self drilling fastener suitable for installation of sandwich panels
- High quality EPDM sealing washer for long-term weather sealing
- Perfect supporting of the sandwich panel outer-skin given by support thread with cut-off thread-end
- High performance drill point for heavy steel beams
- High bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- High corrosion resistance thanks to special galvanic zinc coating

Documentation

Approval document (ETA) | Declaration of performance (DoP)

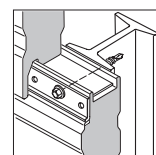


Fastener in carbon steel onto steel

Product code	PU	L	KL	A19
SDT14-A19-5,5×78	100	78	33–44	1422750
SDT14-A19-5,5×98	100	98	43–64	1423712
SDT14-A19-5,5×118	100	118	53–84	1423880
SDT14-A19-5,5×138	100	138	73–104	1423882
SDT14-A19-5,5×158	100	158	93–124	1423884
SDT14-A19-5,5×188	100	188	113–154	1424470
SDT14-A19-5,5×218	100	218	143–184	1424471
SDT14-A19-5,5×248	100	248	173–214	1424472
SDT14-A19-5,5×288	100	288	213–254	1424498
SDT14-A19-5,5×348	100	348	273–314	1465147

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Products available with A16 washers, contact a member of the team for variant codes.

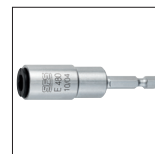
Without
approval



Fastener in carbon steel onto steel

Product code	PU	L	KL	No washer
SDT14-5,5×78	100	78	36–47	1422748
SDT14-5,5×98	100	98	46–67	1423711
SDT14-5,5×118	100	118	56–87	1423879
SDT14-5,5×138	100	138	76–107	1423881
SDT14-5,5×158	100	158	96–127	1423883
SDT14-5,5×188	100	188	116–157	1480356
SDT14-5,5×218	100	218	146–187	1491056
SDT14-5,5×248	100	248	176–217	1491057
SDT14-5,5×288	100	288	216–257	1491059
SDT14-5,5×348	100	348	276–317	1476752

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

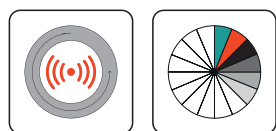
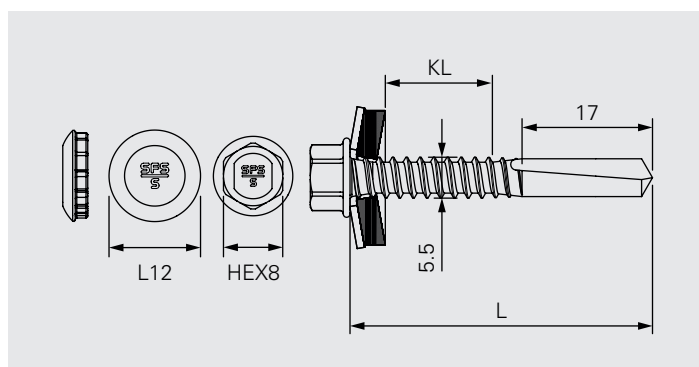


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SL2-S-5.5



Application

Fastening of overlaps of profile sheets
Fastening of overlaps of sandwich panels
Fastening of flashings onto sandwich panels
Fastening of flashings onto profile sheets

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_I)

Steel	0.40–1.50
Aluminium	0.50–1.50

Component 2 (t_{II})

Steel	0.40–1.50
Aluminium	0.50–1.50

$\Sigma_{\max} t_I + t_{II}$

2.50
2.50

Approvals

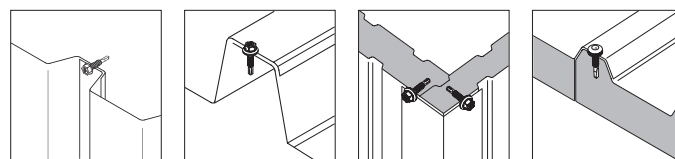


Features and Benefits

- Self drilling fastener suitable for fastening of overlaps and flashings
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end
- High quality EPDM sealing washer for long-term weather sealing

Documentation

Approval document (ETA) | Declaration of performance (DoP)

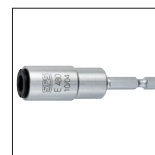


Fastener in A2 onto steel and aluminium

Product code	PU	L	KL	S16	S14
SL2-S-S14-5,5x25	100	25	0.80-2.50	1133653	1123164
SL2-S-D12-S14-5,5x25	100	25	0.80-2.50	-	1243422

Fastener in A4 onto steel and aluminium

Product code	PU	L	KL	S14
SL2-S-S14/A4-5,5x25-A4	100	25	0.80-2.50	1585156
SL2-S-D12-S14/A4-5,5x25-A4	100	25	0.80-2.50	1594428

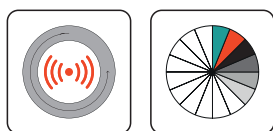
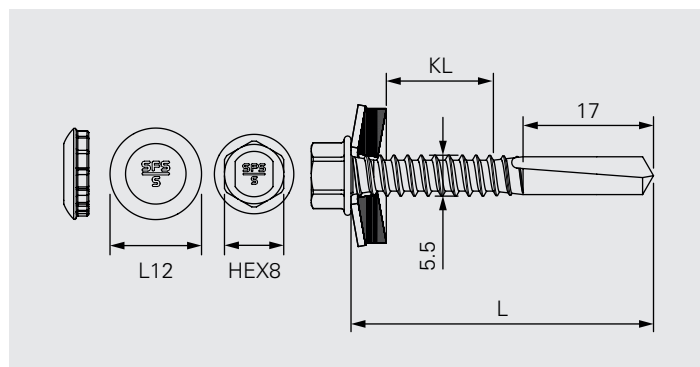


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SL2-S-6.3



Application

Fastening of overlaps of profile sheets
Fastening of overlaps of sandwich panels
Fastening of flashings onto sandwich panels
Fastening of flashings onto profile sheets

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	0.40–1.50	Steel	0.40–1.50	3.0
Aluminium	0.50–1.50	Aluminium	0.50–1.50	3.0

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Approvals

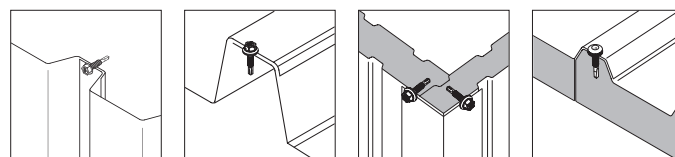


Features and Benefits

- Self drilling fastener suitable for fastening of overlaps and flashings
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end
- High quality EPDM sealing washer for long-term weather sealing

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel and Aluminium

Product code	PU	L	KL	S14	S16
SL2-S-S14-6,3x28	100	28	0.80-2.50	1210627	1133512

Fastener in A4 onto steel and Aluminium

Product code	PU	L	KL	S14	S16
SL2-S-S14/A4-6,3x28-A4	100	28	0.80-2.50	-	-
SL2-S-L12-S14/A4-6,3x28-A4	100	28	0.80-2.50	-	1585154

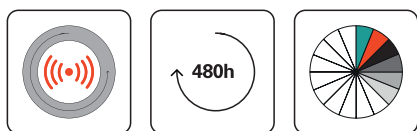
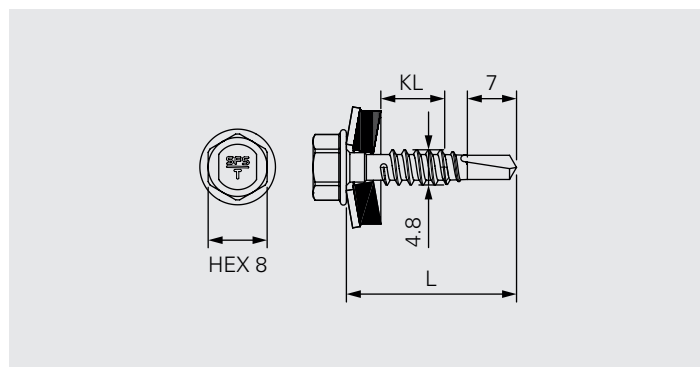


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SL2-T-4.8



Application

Fastening of overlaps of profile sheets
Fastening of overlaps of sandwich panels
Fastening of flashings onto sandwich panels
Fastening of flashings onto profile sheets

Fastener material

Carbon steel, Durocoat® 480
Sealing washer: Aluminium, EPDM-seal

Component 1 (t_I)

Steel 0.40–1.50

Component 2 (t_{II})

Steel 0.40–1.50

$\Sigma_{\max} t_I + t_{II}$

2.50

Approvals

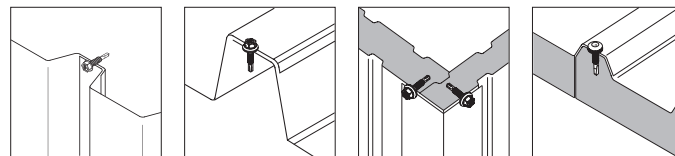


Features and Benefits

- Self drilling fastener suitable for fastening of overlaps and flashings
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end
- High corrosion durability thanks to special galvanic zinc coating
- High quality EPDM sealing washer for long-term weather sealing

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	A14
SL2-T-A14-4,8x20	100	20	0.80–2.50	3041

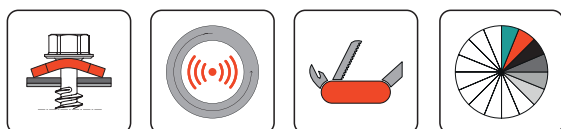
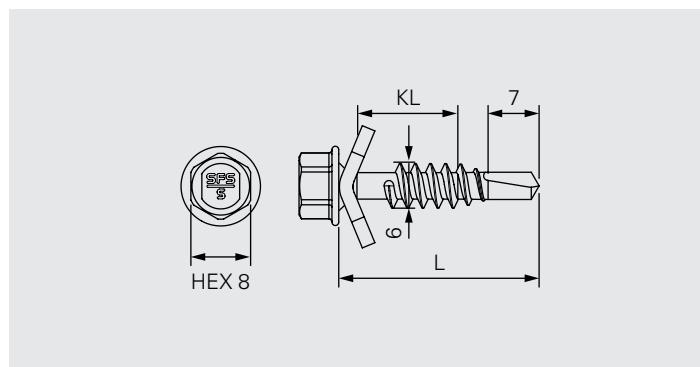


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SL3/2-5-S-SV16-6.0



Application

Fastening of metal profiles onto sandwich panels
Fastening of metal profiles onto profile sheets
Fastening of metal profiles onto metal decks
Fastening of metal profiles onto liner trays

Fastener material

Austenitic stainless steel A2/A4
Curved disc: Austenitic stainless steel A2/A4

Component 1 (t_1)		Component 2 (t_{II})		$\Sigma_{\max} t_1 + t_{II}$
Steel	1.0–2.0	Steel	0.63–2×0.90	3.0
Aluminium	1.50–3.0	Steel	0.63–2×0.90	4.80

Approvals

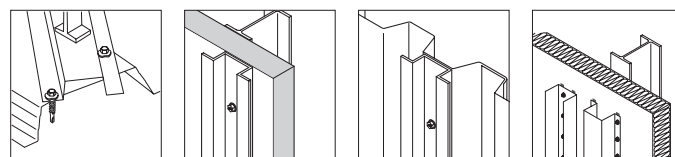


Features and Benefits

- Self drilling fastener suitable for installation of metal profiles onto thin metal sheets
- High clamping range with clamping force independent of the clamping thickness given by the spring washer
- Secured against unwinding given by cut-off thread-end
- No torque control required given by free-spin zone
- High tension and shear resistance achieved by optimized fastener geometry

Documentation

Approval document (ETA) | Declaration of performance (DoP)

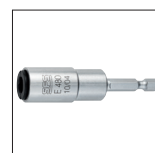


Fastener in A2 onto steel and aluminium

Product code	PU	L	KL _{Steel}	KL _{Alu}	SV16
SL3/2-5-S-SV16-6×27	100	27	1.90–4.80	2.30–4.80	1071554

Fastener in A4 onto steel and aluminium

Product code	PU	L	KL _{Steel}	KL _{Alu}	SV16
SL3/2-5-S-SV16-6×27-A4	100	27	1.90–4.80	2.30–4.80	1426185

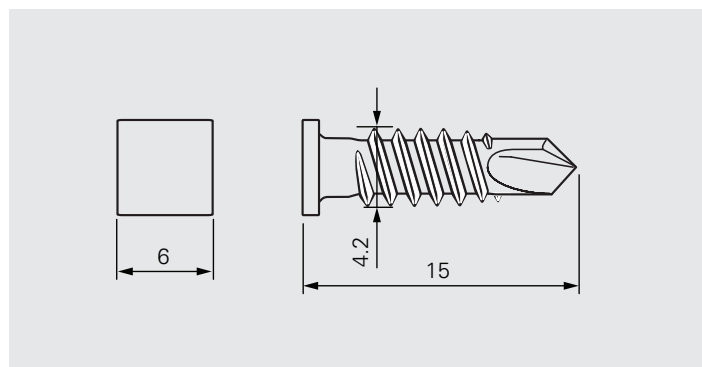


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SL3-F-4.2



Application

Fastening of light gauge steel frames

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	0.7–1.0	Steel	0.7–1.0	2.7

Fastener material

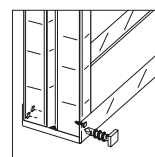
Carbon steel

Approvals

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Features and Benefits

- Enables fixing of two metal frames quickly and securely
- Thread-free zone under head prevents overdriving
- Double thread for high setting performance



Fastener in carbon steel onto steel

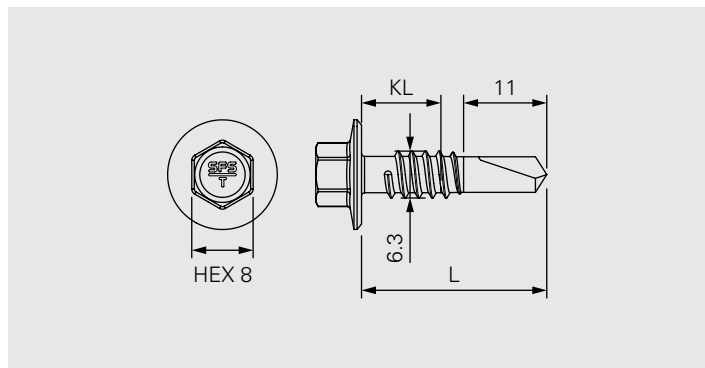
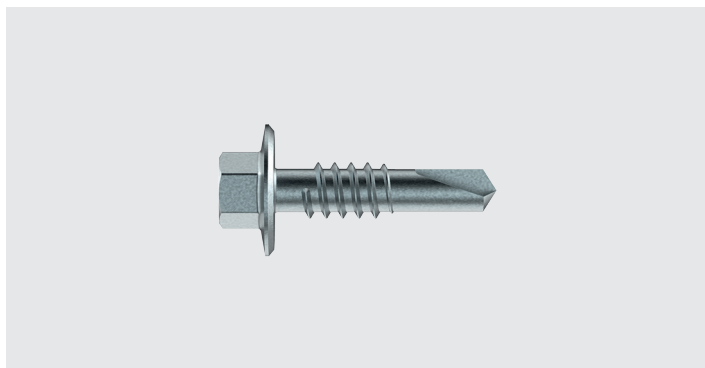
Product code	PU	L	KL	
SL3-F-4,2x15	100	15	1.4-4.0	857296



Accessories/Ancillaries

Product code	PU	
Socket E466	1	858496

SL3-H15-6.3



Application

Fastening of overlaps of metal decks
Fastening of metal profiles onto profile sheets

Component 1 (t_I)		Component 2 (t_{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	1.0–2.0	Steel	1.0–2.0	3.50

Fastener material

Carbon steel, Durocoat® 480

Approvals

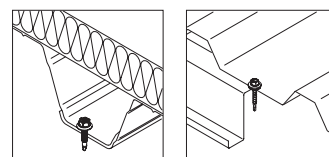


Features and Benefits

- Self drilling fastener suitable for fastening of overlaps
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end and free-spin zone
- High tension and shear resistance achieved by optimized H15 head flange and fastener geometry
- High corrosion durability thanks to special galvanic zinc coating

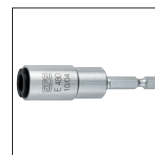
Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	
SL3-H15-6,3×24	100	24	2.0–3.50	984607
SL3-H15-6,3×32	100	32	2.0–3.60	3615

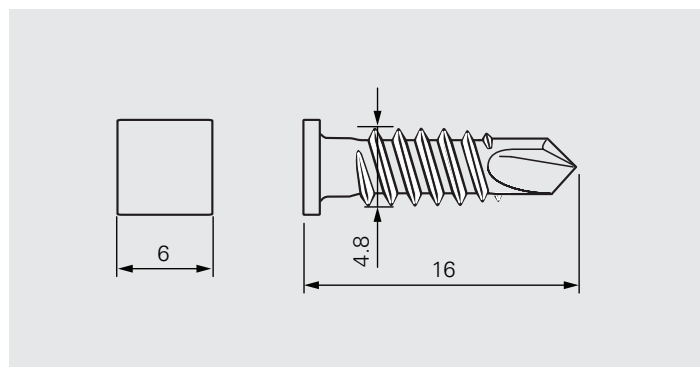


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SL4-F-4.8



Application

Fastening of light gauge steel frames

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	0.7–2.0	Steel	0.7–2.0	4.0

Fastener material

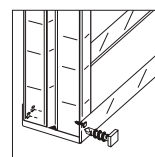
Carbon steel

Approvals

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Features and Benefits

- Enables fixing of two metal frames quickly and securely
- Thread-free zone under head prevents overdriving
- Double thread for high setting performance



Fastener in carbon steel onto steel

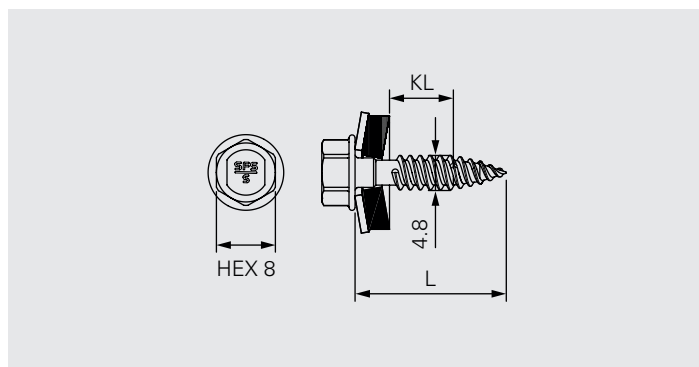
Product code	PU	L	KL	
SL4-F-4,8x16	100	16	2.7-4.0	856400



Accessories/Ancillaries

Product code	PU	
Socket E466	1	858496

SLG-S-4.8



Application

Fastening of overlaps of profile sheets
Fastening of overlaps of sandwich panels
Fastening of flashings onto sandwich panels
Fastening of flashings onto profile sheets

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	0.40–1.0	Steel	0.40–1.0	2.0

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Approvals

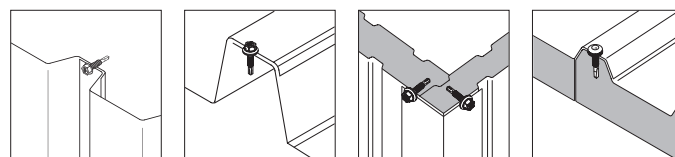


Features and Benefits

- Self drilling fastener suitable for fastening of overlaps and flashings
- Fast and chip-free installation thanks to the Speed-Point
- No scratches on painted metal surfaces thanks to the sharp Speed-Point
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end
- Cost saving installation as post-cleaning of chips is no longer necessary
- High quality EPDM sealing washer for long-term weather sealing
- High tension resistance achieved by optimized fastener geometry

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel

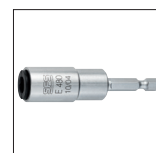
Product code	PU	L	KL	S14	S16	A14
SLG-S-S14-4,8x20	100	20	0.80-2.0	1351313	1378614	1378615

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel

Product code	PU	L	KL	S14
SLG-S-S14/A4-4,8x20-A4	100	20	0.80-2.0	-

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

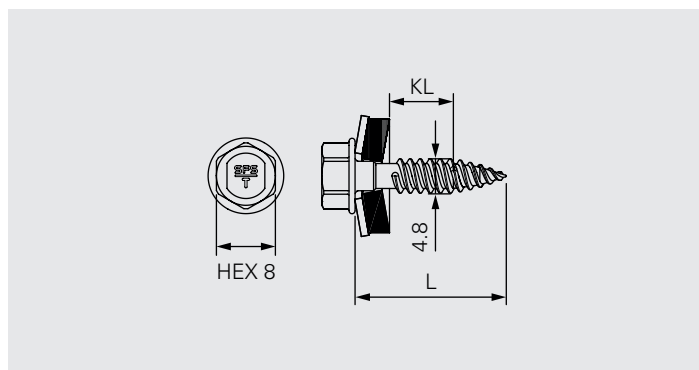


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SLG-T-4.8



Application

Fastening of overlaps of profile sheets
Fastening of overlaps of sandwich panels
Fastening of flashings onto sandwich panels
Fastening of flashings onto profile sheets

Component 1 (t_I)

Steel 0.40–1.0

Component 2 (t_{II})

Steel 0.40–1.0

$\Sigma_{\max} t_I + t_{II}$

2.0

Fastener material

Carbon steel, Durocoat® 480
Sealing washer: Aluminium, EPDM-seal

Approvals

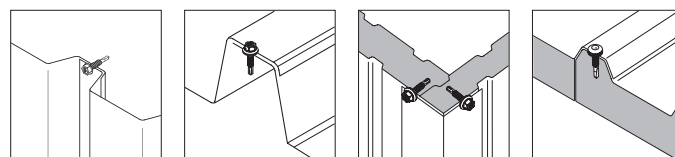


Features and Benefits

- Self drilling fastener suitable for fastening of overlaps and flashings
- Fast and chip-free installation thanks to the Speed-Point
- No scratches on painted metal surfaces thanks to the sharp Speed-Point
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end
- Cost saving installation as post-cleaning of chips is no longer necessary
- High quality EPDM sealing washer for long-term weather sealing
- High corrosion durability thanks to special zinc coating
- High tension resistance achieved by optimized fastener geometry

Documentation

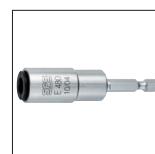
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto steel

Product code	PU	L	KL	A14
SLG-T-A14-4,8x20	100	20	0.80-2.0	1385274

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

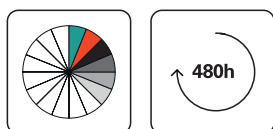
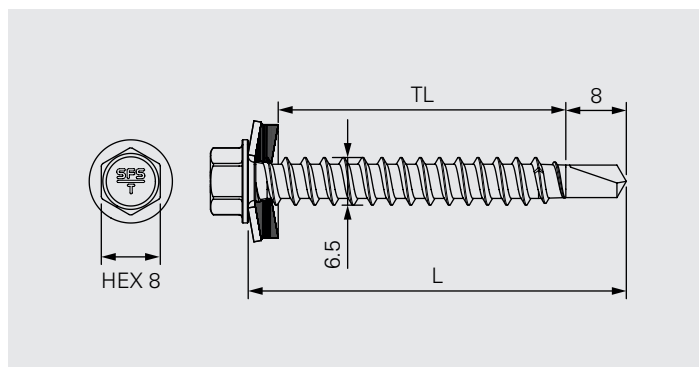
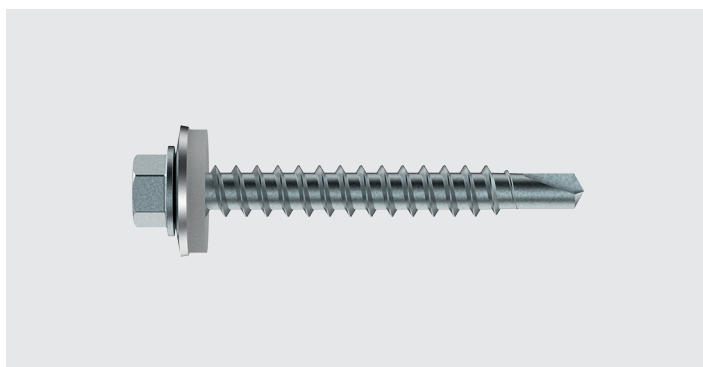


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SW3-T-6.5



Application

Fastening of profile sheets onto timber

Component 1 (t_I)

Steel 0.50–1.50

Component 2 (t_{II})

Timber ≥35.0

$\Sigma_{\max} t_I + t_{II}$

–

Fastener material

Carbon steel with Durocoat® 480

Sealing washer: Carbon steel galvanized, EPDM-seal

Approvals

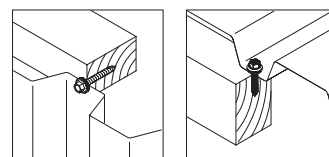


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets
- High quality EPDM sealing washer for long-term weather sealing
- Reduced risks of timber splitting given by the drill point
- High corrosion durability thanks to special galvanic zinc coating

Documentation

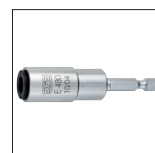
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel onto timber

Product code	PU	L	TL	T16
SW3-T-T16-6,5x50	100	50	40	71056

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

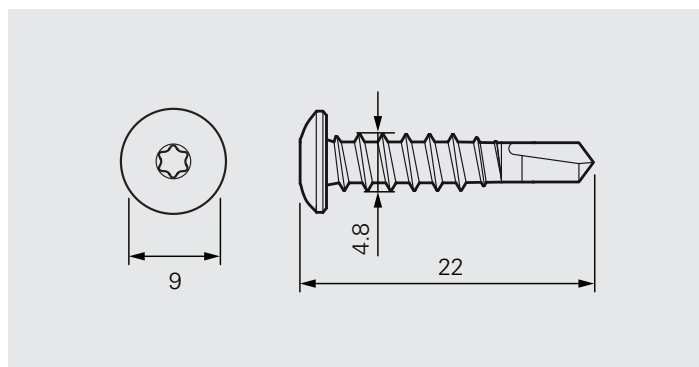
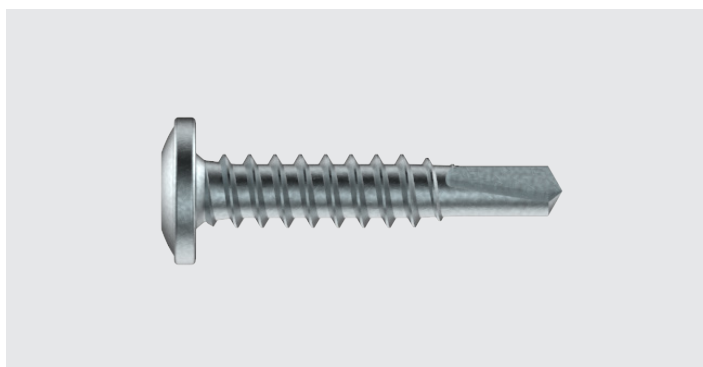


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SX2-D9-4.8



Application

Fastening to thin steel sheets

Component 1 (t_I)

Steel 0.50–0.70

Component 2 (t_{II})

Steel 0.50–0.70

$\Sigma_{\max} t_I + t_{II}$

1.4

Fastener material

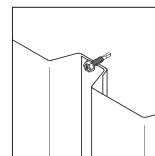
Austenitic stainless steel A4

Approvals

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Features and Benefits

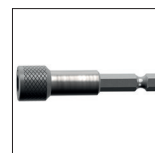
- Self drilling fastener suitable for fastening to thin steel sheets



Fastener in A4 onto steel

Product code	PU	L	KL	
SX2/8-D9-4,8x22-A4	100	22	0-0.80	1384245

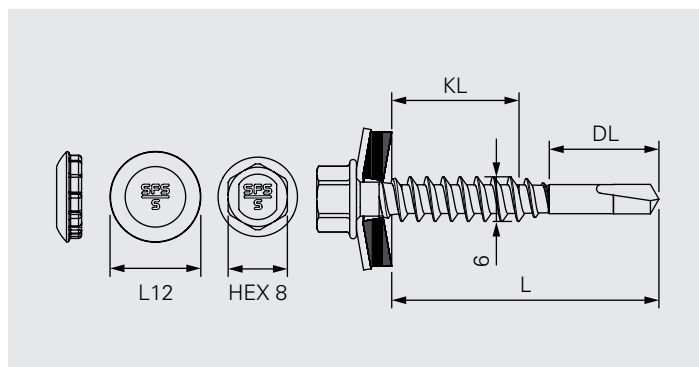
Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.



Accessories/Ancillaries

Product code	PU	
ZA1/4" bit holder	1	1162306
SRI-25-HEX1/4"	1	1146916

SX3-6.0



Application

Fastening of profile sheets onto metal profiles
Fastening of profile sheets onto liner trays
Fastening of standing seam clips onto metal decks

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_I)

Steel 0.50–1.50
Aluminium 0.50–1.50
–
–

Component 2 (t_{II})

Steel 0.63–2.50
Steel 2×0.63–1.50
Aluminium 1.0–2.50
Aluminium 2×1.0–1.50

$\Sigma_{\max} t_I + t_{II}$

3.50
4.0
3.50
4.0

Approvals

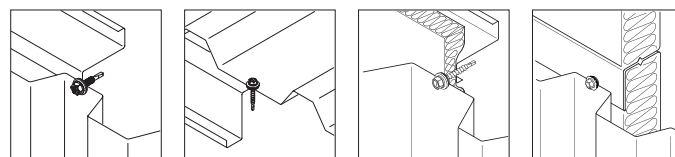


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets
- High quality EPDM sealing washer for long-term weather sealing
- Easy drilling through the whole clamping thickness (including insulation strip in between) given by the long drill point

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel and aluminium

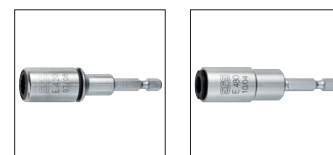
Product code	PU	L	KL	DL	S16	S19
SX3/9-S16-6x29	100	29	0-9	10	1141978	1142000
SX3/15-S16-6x40	100	40	0-15	15	1133237	1142008

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel and aluminium

Product code	PU	L	KL	DL	S16	S19
SX3/9-S16/A4-6x29-A4	100	29	0-9	10	1479579	1614057
SX3/18-S16/A4-6x38-A4	100	38	0-18	10	1575772	1614745
SX3/20-S16/A4-6x50-A4	100	50	0-20	10	1585248	-
SX3/28-S16/A4-6x48-A4	100	48	0-28	10	1575777	1614058
SX3/9-L12-S16/A4-6x29-A4	100	50	0-20	10	1585613	-
SX3/15-L12-S16/A4-6x40-A4	100	50	0-20	10	-	-

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

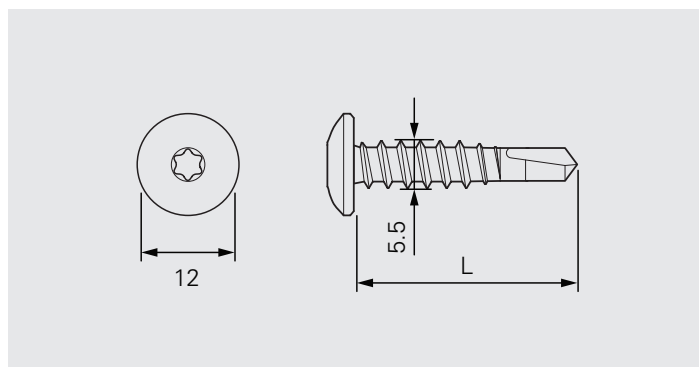
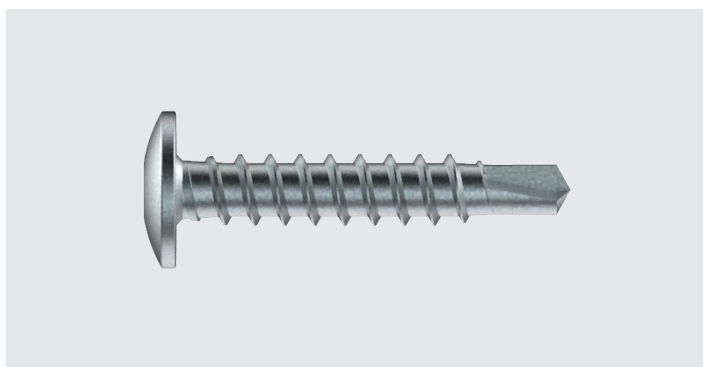


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SX3-D12-5.5



Application

Fastening of profile sheets onto metal profiles
Fastening of flashing details

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_1)

Steel	0.50–1.50
Aluminium	0.50–1.50
–	–
–	–

Component 2 (t_{II})

Steel	0.63–2.50
Steel	2×0.63–1.50
Aluminium	1.0–2.50
Aluminium	2×1.0–1.50

$\Sigma_{\max} t_1 + t_{II}$

3.50
4.0
3.50
4.0

Approvals

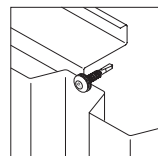


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets
- High quality EPDM sealing washer for long-term weather sealing

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel

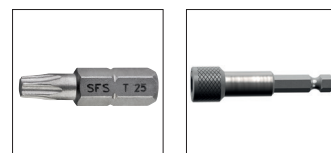
Product code	PU	L	KL	No washer	S12	S14	S16
SX3/15-D12-S14-5,5x30	100	30	0-15	1271253	1271254	1596669	1468882

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel

Product code	PU	L	KL	No washer	S12	S14	S16
SX3/15-D12-S14/A4-5,5x30-A4	100	30	0-15	1548549	-	-	1548550

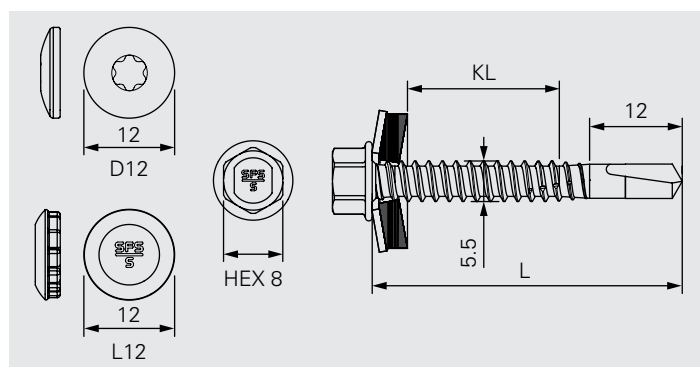
Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.



Accessories/Ancillaries

Product code	PU	
T25W-25-HEX1/4"	1	7662
ZA1/4" bit holder	1	1162306

SX5-5.5



Application

Fastening of profile sheets onto metal profiles
Fastening of sandwich panels onto metal profiles
Fastening of standing seam clips onto metal profiles

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_i)

Steel	0.50–1.50	Steel	1.50–4.0	5.0
Aluminium	0.50–1.50	Steel	2×1.50–2.50	6.0
Sandwich	–	Aluminium	1.50–4.0	5.0
–	–	Aluminium	2×1.50–2.50	6.0

Component 2 (t_{II})

$\Sigma_{\max} t_i + t_{II}$

Approvals

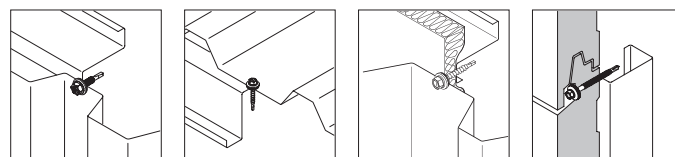


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets and sandwich panels
- High quality EPDM sealing washer for long-term weather sealing
- Easy drilling through overlapped metal profiles given by the long drill point

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel and aluminium

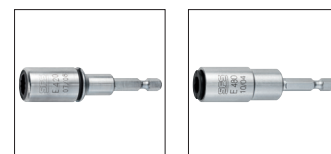
Product code	PU	L	KL	S16	S19
SX5/8-S16-5,5x31	100	31	0-8	1122767	1134299
SX5/12-S16-5,5x35	100	35	0-12	1123168	1123167
SX5/55-S16-5,5x78	250	78	8-55	1133330	1133331

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel and aluminium

Product code	PU	L	KL	S16	S19
SX5/8-S16/A4-5,5x31-A4	100	31	0-8	1614135	-
SX5/12-S16/A4-5,5x35-A4	100	35	0-12	1585655	-
SX5/18-S16/A4-5,5x41-A4	100	41	0-18	-	-
SX5/20-30-S16/A4-5,5x53-A4	100	53	20-30	-	-
SX5/38-S16/A4-5,5x61-A4	100	61	0-38	1585656	-
Sx5/55-S16/A4-5,5x78-A4	100	78	8-55	-	-

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.



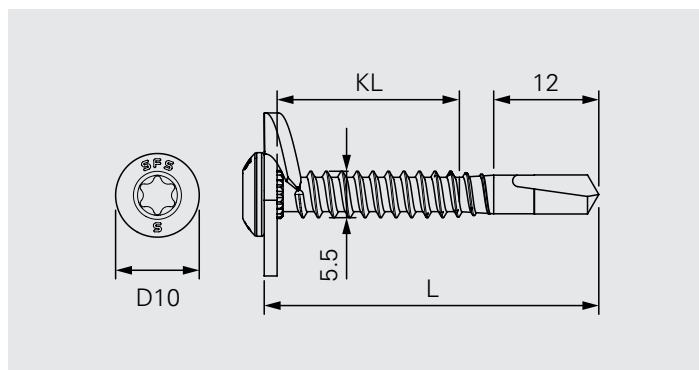
Accessories/Ancillaries

Product code	PU	Head	
Socket E480	1	HEX8	688056
Socket E420	1	L12	973316
Socket E380*	1	HEX8	8018
ZA1/4" drive bar*	1	-	7645

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SX5-D10-5.5

Available
Spring 2020



Application

Fastening of single-ply insulated roof panels onto metal profiles

Component 1 (t_I)

Single-ply panel

Component 2 (t_{II})

Steel

$\Sigma_{\max} t_I + t_{II}$

5.0 6.0

Fastener material

Austenitic stainless steel A2

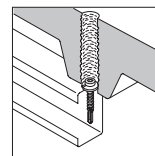
Cutting disc: Austenitic stainless steel A2

Approvals

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Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of PVC membrane and insulation required thanks to cutting-washer
- Easy drilling through overlapped metal profiles given by the long drill point
- Self coring fastener without disruption of the insulating material achieved by the cutting-washer



Fastener in A2 onto steel

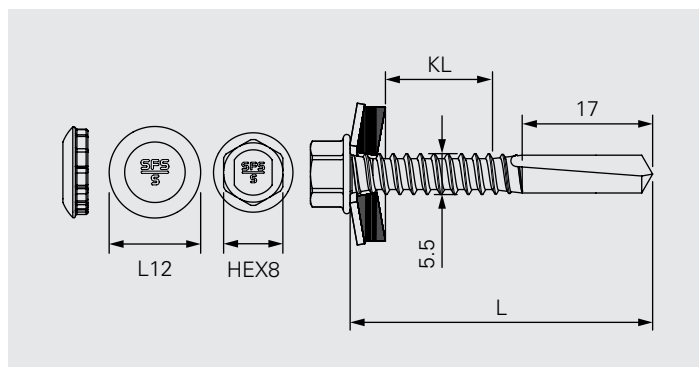
Product code	PU	L	KL	SC
SX5-D10-S19/C9-5,5x39	500	39	0-6	1122625



Accessories/Ancillaries

Product code	PU	
T25W-175-HEX1/4"	1	727979
T25HF-240-HEX1/4"	1	1223621

SX14-5.5



Application

Fastening of profile sheets onto metal beams
Fastening of sandwich panels onto metal beams (hidden fixing)
Fastening of standing seam clips onto metal beams

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_I)

Steel	0.50–1.50
Aluminium	0.50–1.50
Sandwich	–

Component 2 (t_{II})

Steel	4.0–12.0
Aluminium	–
Sandwich	–

$\Sigma_{\max} t_I + t_{II}$

Steel	13.50
Aluminium	–
Sandwich	–

Approvals

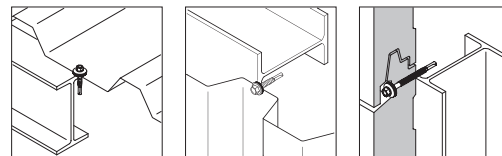
ETA-10/0198 ETA-13/0183

Features and Benefits

- Self drilling fastener suitable for installation of profile sheets and sandwich panels (hidden fixing)
- High quality EPDM sealing washer for long-term weather sealing
- High performance drill point for heavy steel beams

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel

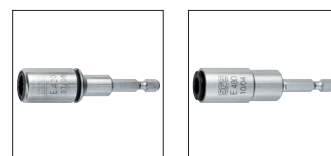
Product code	PU	L	KL	S16	S19
SX14/12-S16-5,5x40	100	40	0-12	770785	770796
SX14/20-S16-5,5x48	100	48	0-20	773625	773626

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel

Product code	PU	L	KL	S16	S19
SX14/12-S16/A4-5,5x40-A4	100	40	0-12	1614139	1585192
SX14/27-S16/A4-5,5x55-A4	100	55	0-27	1585194	1614143
SX14/38-S16/A4-5,5x66-A4	100	66	0-38	-	-
SX14/58-S16/A4-5,5x86-A4	100	86	0-58	-	-
SX14/12-L12-S16/A4-5,5x40-A4	100	40	0-12	-	-
SX14/20-D12-S16/A4-5,5x48-A4	100	48	0-20	-	-

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.



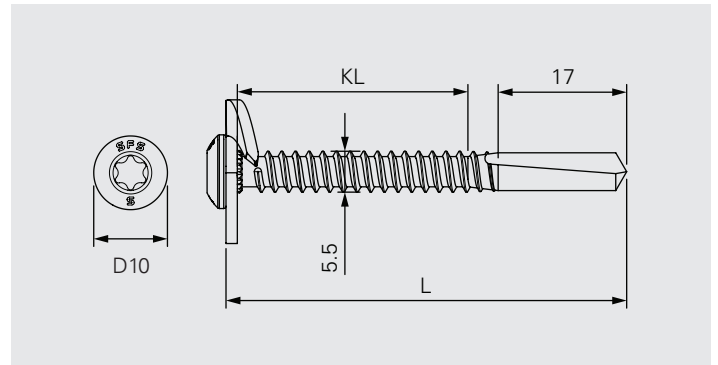
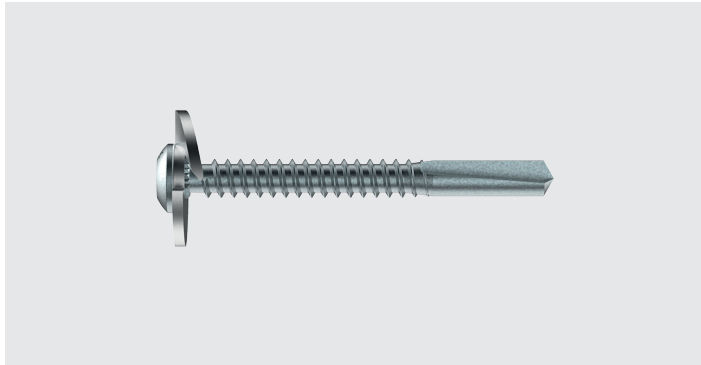
Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SX14-D10-5.5

Available
Spring 2020



Application

Fastening of single-ply insulated roof panels onto metal beams

Component 1 (t_I)

Single-ply panel

Component 2 (t_{II})

Steel

13.50

$\Sigma_{\max} t_I + t_{II}$

14.50

Fastener material

Austenitic stainless steel A2

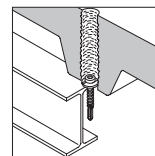
Cutting disc: Austenitic stainless steel A2

Approvals

–

Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of PVC membrane and insulation required thanks to cutting-washer
- Self coring fastener without disruption of the insulating material achieved by the cutting-washer
- High performance drill point for heavy steel beams



Fastener in A2 onto steel

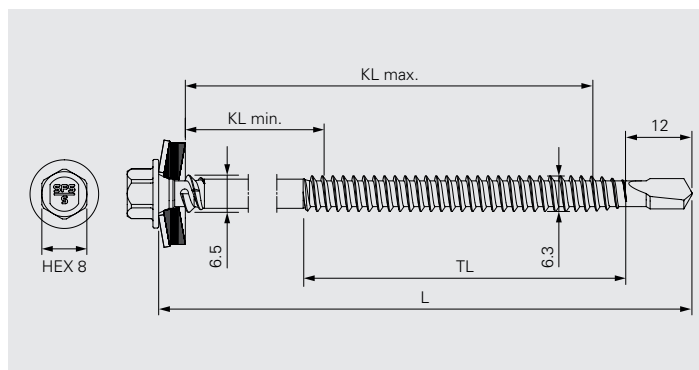
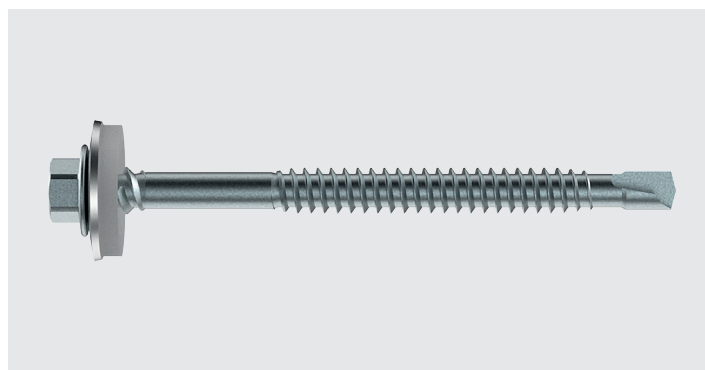
Product code	PU	L	KL	SC
SX14-D10-S19/C9-5,5×53	500	53	14	1174930



Accessories/Ancillaries

Product code	PU	
T25W-175-HEX1/4"	1	727979
T25HF-240-HEX1/4"	1	1223621

SXC5-6.3



Application

Fastening of sandwich panels onto metal profiles
Fastening of sandwich panels onto timber
Fastening of profile sheets onto metal profiles
Fastening of profile sheets onto timber

Fastener material

Austenitic stainless steel A2/A4
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_I)

Sandwich panel

Component 2 (t_{II})

Steel	1.0–4.0	5.0
Steel	2×0.75–2×2.70	6.50
Timber	≥35	–

$\Sigma_{\max} t_I + t_{II}$

Approvals

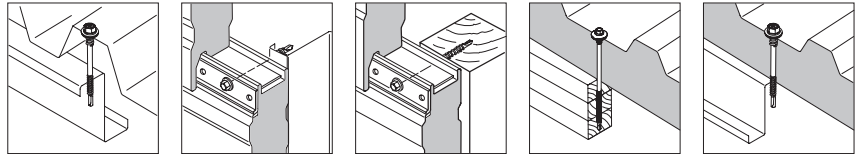


Features and Benefits

- Self drilling fastener suitable for installation of sandwich panels
- High quality soft EPDM sealing washer for long-term weather sealing
- Thread free zone preventing top thread stripping in panel outerskin
- Optimized support function achieved by engineered double support thread
- Easy drilling through overlapped metal profiles given by the long drill point
- High bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- High tension resistance achieved by optimized fastener geometry

Documentation

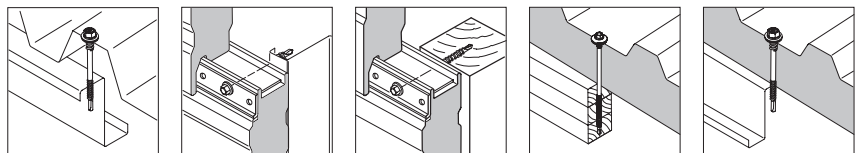
Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel and timber

Product code	PU	L	Steel KL	Timber KL	S16	S19
SXC5-S19-6,3×80-A2	100	80	33–53	18–31	1573397	1573583
SXC5-S19-6,3×100-A2	100	100	43–73	28–51	1573398	1573584
SXC5-S19-6,3×120-A2	100	120	53–93	38–71	1573400	1573585
SXC5-S19-6,3×140-A2	100	140	73–113	58–91	1573411	1573586
SXC5-S19-6,3×160-A2	100	160	93–133	78–111	1573414	1573587
SXC5-S19-6,3×190-A2	100	190	113–163	98–141	1573415	1573588
SXC5-S19-6,3×220-A2	100	220	143–193	128–171	1573416	1573590
SXC5-S19-6,3×250-A2	100	250	173–223	158–201	1573417	1573591
SXC5-S19-6,3×290-A2	100	290	213–263	198–241	1573418	1573592

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Product is available with S29 washer, contact a member of the team for material number.

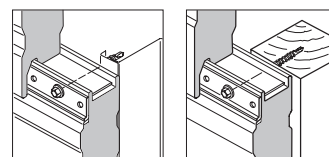


Fastener in A4 onto steel and timber

Product code	PU	L	Steel KL	Timber KL	S16	S19
SXC5-S19/A4-6,3×80-A4	100	80	33–53	18–31	1599990	1600001
SXC5-S19/A4-6,3×100-A4	100	100	43–73	28–51	1600005	1600007
SXC5-S19/A4-6,3×120-A4	100	120	53–93	38–71	1600022	1600023
SXC5-S19/A4-6,3×140-A4	100	140	73–113	58–91	1600026	1600027
SXC5-S19/A4-6,3×160-A4	100	160	93–133	78–111	1600042	1600043
SXC5-S19/A4-6,3×190-A4	100	190	113–163	98–141	1600047	1600049
SXC5-S19/A4-6,3×220-A4	100	220	143–193	128–171	1600055	1600056
SXC5-S19/A4-6,3×250-A4	100	250	173–223	158–201	1600059	1600064
SXC5-S19/A4-6,3×290-A4	100	290	213–263	198–241	1600078	1600080
SXC5-S19/A4-6,3×345-A4	100	345	268–318	254–296	1600140	1600161

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Product is available with S29 washer, contact a member of the team for material number.

Without
approval

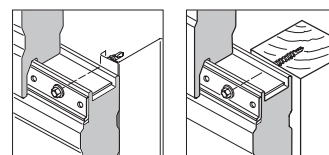


Fastener in A2 onto steel and timber

Product code	PU	L	Steel KL	Timber KL	No washer
SXC5-6,3×80-A2	100	80	36–56	33–53	1599843
SXC5-6,3×100-A2	100	100	46–76	43–73	1599844
SXC5-6,3×120-A2	100	120	56–96	53–93	1599847
SXC5-6,3×140-A2	100	140	76–116	73–113	1599848
SXC5-6,3×160-A2	100	160	96–136	93–133	1599851
SXC5-6,3×190-A2	100	190	116–166	113–163	1599857
SXC5-6,3×220-A2	100	220	146–196	143–193	1599859
SXC5-6,3×250-A2	100	250	176–226	173–223	1599860
SXC5-6,3×290-A2	100	290	216–266	213–263	1599871

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

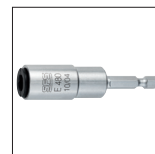
Without
approval



Fastener in A4 onto steel and timber

Product code	PU	L	Steel KL	Timber KL	No washer
SXC5-6,3×80-A4	100	80	36–56	33–53	1600004
SXC5-6,3×100-A4	100	100	46–76	43–73	1600010
SXC5-6,3×120-A4	100	120	56–96	53–93	1600025
SXC5-6,3×140-A4	100	140	76–116	73–113	1600029
SXC5-6,3×160-A4	100	160	96–136	93–133	1600045
SXC5-6,3×190-A4	100	190	116–166	113–163	1600052
SXC5-6,3×220-A4	100	220	146–196	143–193	1600058
SXC5-6,3×250-A4	100	250	176–226	173–223	1600073
SXC5-6,3×290-A4	100	290	216–266	213–263	1600137
SXC5-6,3×345-A4	100	345	268–318	265–315	1600185

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

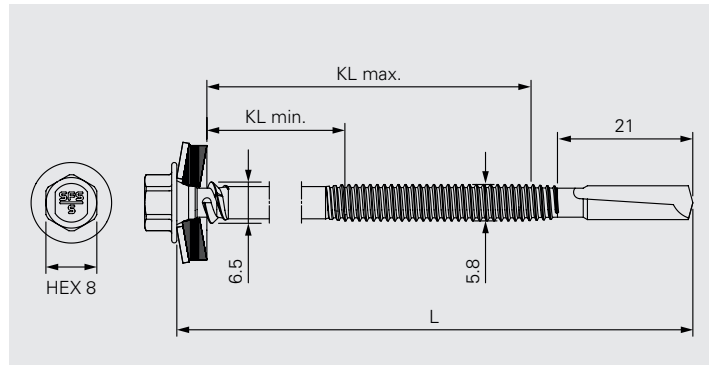
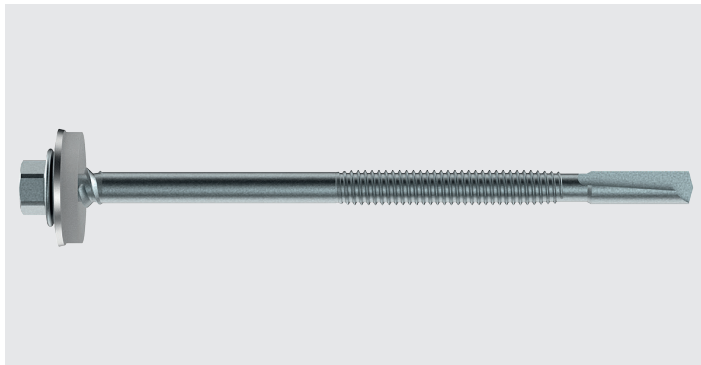


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SXC16-5.8



Application

Fastening of sandwich panels onto steel metal beams
Fastening of profile sheets onto steel metal beams

Component 1 (t_1)

Sandwich panel

Component 2 (t_2)

Steel

3.0–14.0

$\Sigma_{\max} t_1 + t_2$

16.0

Fastener material

Austenitic stainless steel A2/A4

Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Approvals

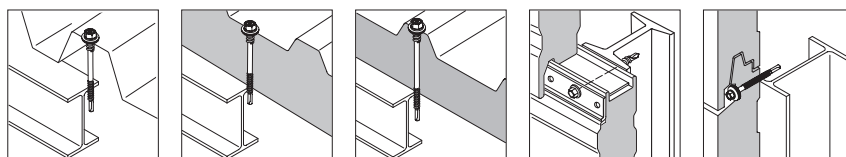


Features and Benefits

- Self drilling fastener suitable for installation of sandwich panels
- High quality soft EPDM sealing washer for long-term weather sealing
- Thread free zone preventing top thread stripping in panel outerskin
- Optimized support function achieved by engineered double support thread
- High performance drill point for heavy steel beams
- High bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- High tension resistance achieved by optimized fastener geometry
- Economical benefits due to faster installation time

Documentation

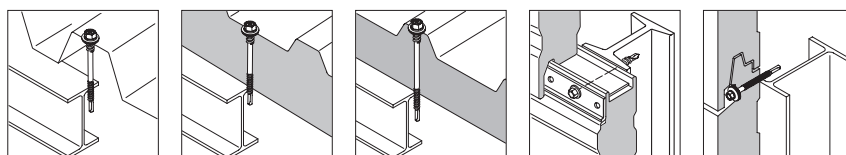
Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel

Product code	PU	L	KL	S16	S19
SXC16-S19-5,8×90-A2	100	90	33–56	1573419	1573595
SXC16-S19-5,8×110-A2	100	110	43–76	1573420	1573596
SXC16-S19-5,8×130-A2	100	130	53–96	1573441	1573597
SXC16-S19-5,8×150-A2	100	150	73–116	1573443	1573707
SXC16-S19-5,8×170-A2	100	170	93–136	1573445	1573709
SXC16-S19-5,8×200-A2	100	200	113–166	1573446	1573710
SXC16-S19-5,8×230-A2	100	230	143–196	1573447	1573712
SXC16-S19-5,8×260-A2	100	260	173–226	1573448	1573714
SXC16-S19-5,8×300-A2	100	300	213–266	1573450	1573715

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Product is available with S29 washer, contact a member of the team for material number.

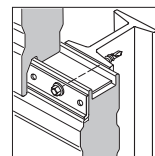


Fastener in A4 onto steel

Product code	PU	L	KL	S16	S19
SXC16-S19/A4-5,8×90-A4	100	90	33–56	1613574	1613558
SXC16-S19/A4-5,8×110-A4	100	110	43–76	1613594	1613595
SXC16-S19/A4-5,8×130-A4	100	130	53–96	1613602	1613603
SXC16-S19/A4-5,8×150-A4	100	150	73–116	1613606	1613607
SXC16-S19/A4-5,8×170-A4	100	170	93–136	1613622	1613623
SXC16-S19/A4-5,8×200-A4	100	200	113–166	1613693	1613694
SXC16-S19/A4-5,8×230-A4	100	230	143–196	1613699	1613707
SXC16-S19/A4-5,8×260-A4	100	260	173–226	1613711	1613712
SXC16-S19/A4-5,8×300-A4	100	300	213–266	1613720	1614801
SXC16-S19/A4-5,8×355-A4	100	355	268–321	1614805	1606472

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.
Product is available with S29 washer, contact a member of the team for material number.

Without
approval

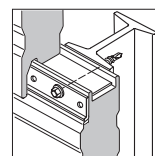


Fastener in A2 onto steel

Product code	PU	L	KL	No washer
SXC16-5,8×90-A2	100	90	36–59	1615954
SXC16-5,8×110-A2	100	110	46–79	1615960
SXC16-5,8×130-A2	100	130	56–99	1615963
SXC16-5,8×150-A2	100	150	76–119	1615978
SXC16-5,8×170-A2	100	170	96–139	1616036
SXC16-5,8×200-A2	100	200	116–169	1616046
SXC16-5,8×230-A2	100	230	146–199	1616051
SXC16-5,8×260-A2	100	260	176–229	1616090
SXC16-5,8×300-A2	100	300	216–269	1616112

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

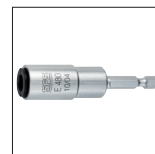
Without
approval



Fastener in A4 onto steel

Product code	PU	L	KL	No washer
SXC16-5,8×90-A4	100	90	36–59	1613577
SXC16-5,8×110-A4	100	110	46–79	1613600
SXC16-5,8×130-A4	100	130	56–99	1613605
SXC16-5,8×150-A4	100	150	76–119	1613609
SXC16-5,8×170-A4	100	170	96–139	1613630
SXC16-5,8×200-A4	100	200	116–169	1613697
SXC16-5,8×230-A4	100	230	146–199	1613709
SXC16-5,8×260-A4	100	260	176–229	1613717
SXC16-5,8×300-A4	100	300	216–269	1614804
SXC16-5,8×355-A4	100	355	271–324	1606471

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

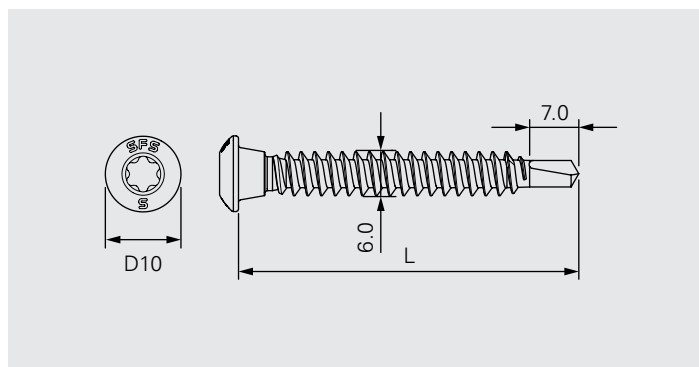
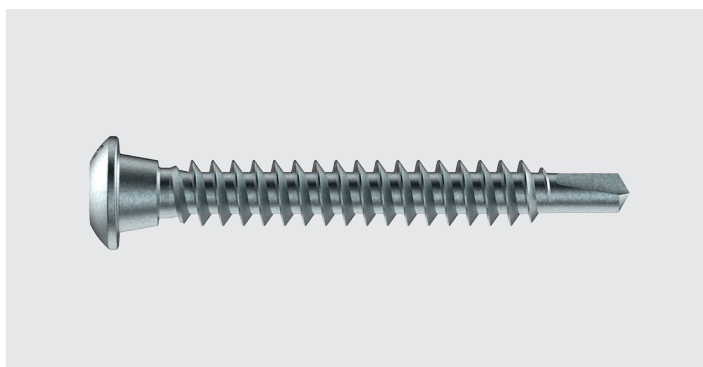


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

SXK2-6.0



Application

Fastening of standing seam clips onto metal decks

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Clip	≥5.0	Steel	0.75–1.25	–
Clip	≥5.0	Aluminium	0.90–2.50	–

Fastener material

Austenitic stainless steel A2

Approvals

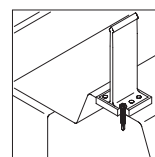
–

Features and Benefits

- Self drilling fastener suitable for installation of standing seam clips
- Reduced risks of over-driving and unwinding achieved by clamping-cone
- High tension resistance achieved by optimized fastener geometry

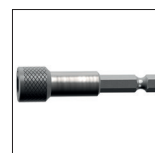
Documentation

Installation instruction | Technical Data



Fastener in A2 onto steel

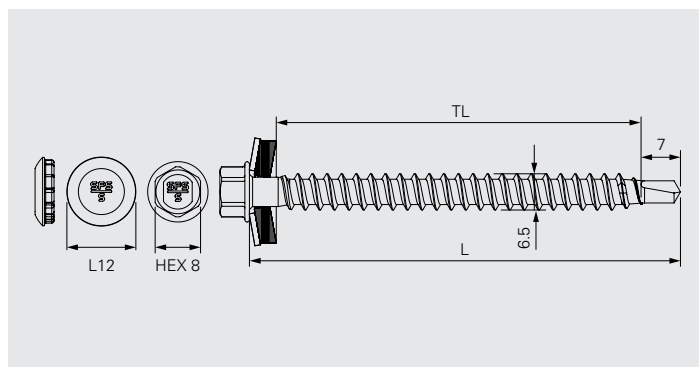
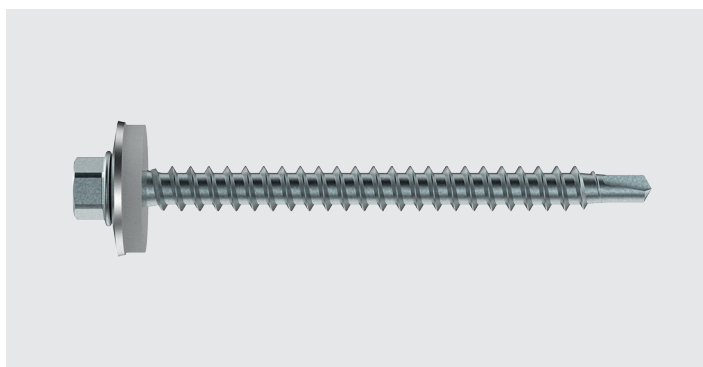
Product code	PU	L	Clip onto steel	
SXK2-D10-6,0×35-A2	250	35	5-17	1615850
SXK2-D10-6,0×45-A2	250	45	5-27	1615848



Accessories/Ancillaries

Product code	PU	
T20W-25-HEX1/4"	1	895280
ZA1/4" bit holder	1	1162306

SXW-6.5



Application

Fastening of profile sheets onto timber
Fastening of sandwich panels onto timber (hidden fixing)

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	0.50–1.50	Timber	≥ 35.0	–
Aluminium	0.50–1.50	–	–	–
Sandwich	–	–	–	–

Fastener material

Austenitic stainless steel A4
Sealing washer: Austenitic stainless steel A4, EPDM-seal

Approvals

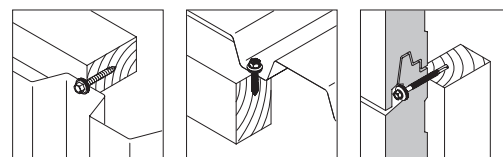
ETA-10/0198 ETA-13/0183

Features and Benefits

- Self drilling fastener suitable for installation of profile sheets and sandwich panels
- High quality EPDM sealing washer for long-term weather sealing
- Reduced risks of wood splitting given by the drill point

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel and timber

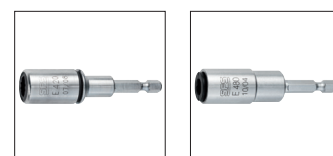
Product code	PU	L	TL	S16	S19
SXW-S16-6,5x52-A2	100	52	40	1123138	-

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel and timber

Product code	PU	L	TL	S16	S19
SXW-S16/A4-6,5x52-A4	100	52	40	-	-
SXW-L12-S16/A4-6,5x52-A4	100	52	40	-	-

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

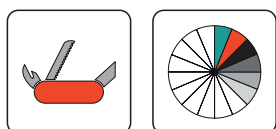
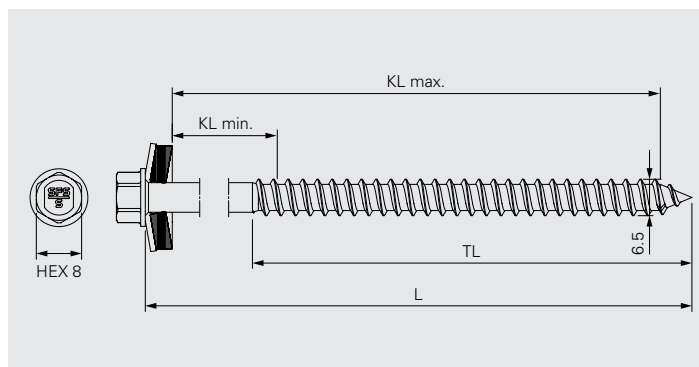
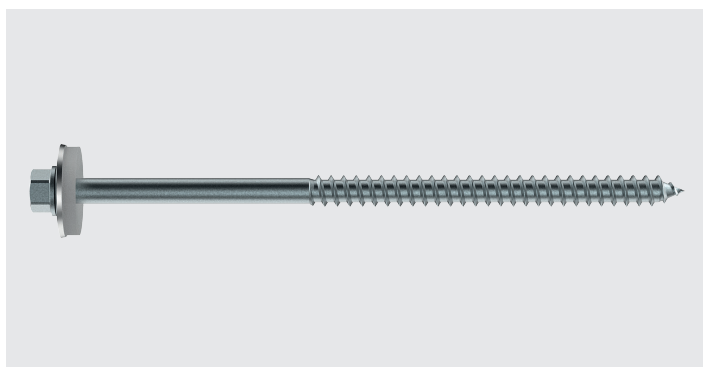


Accessories/Ancillaries

Product code	PU	
Socket E480	1	688056
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
irius® Socket E420	1	973316

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

TDA-S-6.5



Application

Fastening of metal sheets onto metal profiles
Fastening of metal sheets onto timber
Fastening of metal sheets onto liner trays
Fastening of sandwich panels onto timber

Fastener material

Austenitic stainless steel A2/A4/R5
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I + t _{II}
Steel	≥0.40	Steel	0.63–3.0	4.50
Aluminium	0.50–1.50	Steel	2×0.75–2×1.50	4.50
–	–	Aluminium	1.0–3.0	4.50
–	–	Timber	≥35.0	–

Approvals

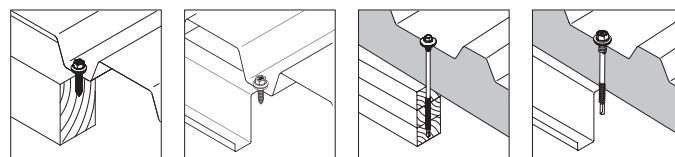


Features and Benefits

- Self tapping fastener suitable for installation of profile sheets and sandwich panels
- High quality EPDM sealing washer for long-term weather sealing
- Multi-functional fastener for a variety of applications

Documentation

Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel, timber and aluminium

Product code	PU	L	TL	KL	S16	S19
TDA-S-S16-6,5x20	100	20	20	0-10	1526324	1526378
TDA-S-S16-6,5x25	100	25	25	0-15	6760	6680
TDA-S-S16-6,5x32	100	32	32	0-22	6761	6681
TDA-S-S16-6,5x40	100	40	40	0-30	1526325	1526379
TDA-S-S16-6,5x50	100	50	50	0-40	6764	6684
TDA-S-S16-6,5x60	100	60	60	0-50	1526326	1526391
TDA-S-S16-6,5x80	100	80	76	5-68	1526328	1526392
TDA-S-S16-6,5x100	100	100	76	25-88	6768	6688
TDA-S-S16-6,5x120	100	120	76	45-108	1526330	1526393
TDA-S-S16-6,5x140	100	140	76	65-128	1526342	1526394
TDA-S-S16-6,5x160	100	160	76	85-148	1526344	1526395
TDA-S-S16-6,5x180	100	180	76	105-168	1526346	1526396
TDA-S-S16-6,5x200	100	200	76	125-188	1526347	1526397
TDA-S-S16-6,5x220	100	220	76	145-208	1526348	1526398
TDA-S-S16-6,5x260	100	260	76	185-248	1526349	1526399

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

Fastener in A4 onto steel, timber and aluminium

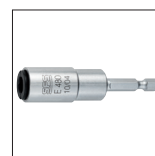
Product code	PU	L	TL	KL	S16	S19
TDA-S-S16/A4-6,5x60-A4	100	60	60	0-50	-	-

Fastener in R5 onto steel, timber and aluminium

Product code	PU	L	TL	KL	S16	S19
TDA-S-S16-6,5x20-R5	100	20	20	0-10	1612989	-
TDA-S-S16-6,5x60-R5	100	60	60	0-50	1606540	-

Pre-drill diameter

Application	Steel/Steel and Alu/Steel				Steel/Timber	Alu/Alu		
Component 2 (t _{II})	S280GD – S450GD (EN10346) HX300LAD to HX460LAD (EN10346)				Timber (EN14081)	Aluminium (EN573)		
	0.63	0.75 2×0.75–2×1.0	0.88–1.25 2×1.25–2×1.5	1.50–3.0	≥35.0	1.0–1.50	2.0–2.50	3.0
Pre-drill Ø	3.50	4.0	4.50	5.0	4.0	4.50	5.0	5.30

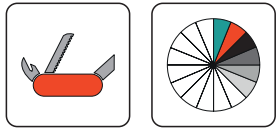
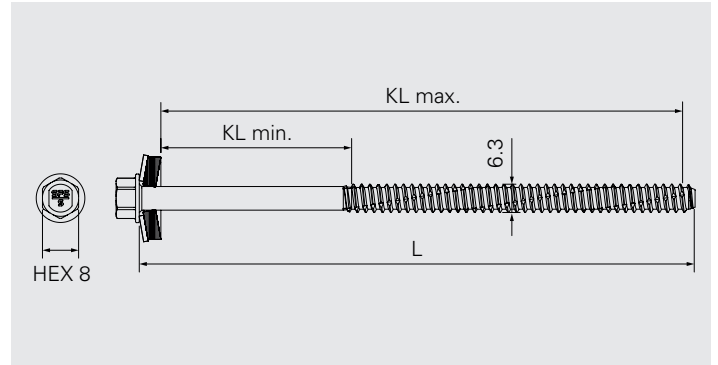
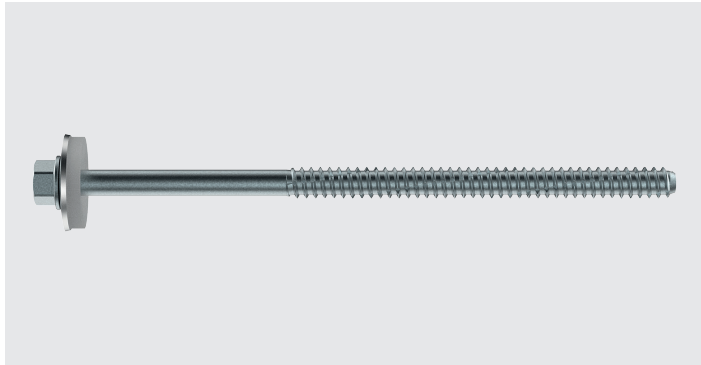


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

TDB-S-6.3



Application

Fastening of metal sheets onto metal profiles
Fastening of metal sheets onto metal beams
Fastening of sandwich panels onto metal profiles
Fastening of sandwich panels onto metal beams
Fastening of liner trays onto metal beams

Fastener material

Austenitic stainless steel A2/A4/R5
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Component 1 (t_I)

Steel	≥0.40
Aluminium	0.50–1.50

Component 2 (t_{II})

Steel	≥1.25
Aluminium	≥1.50

Σ_{max} t_I + t_{II}

≥1.65
≥2.0

Approvals



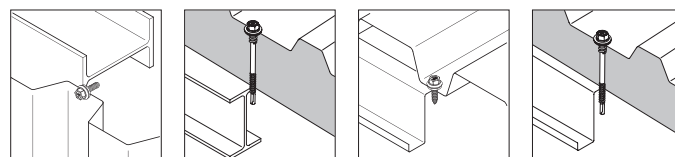
 ETA-10/0198 ETA-13/0183

Features and Benefits

- Self tapping fastener suitable for installation of profile sheets and sandwich panels
- High quality EPDM sealing washer for long-term weather sealing
- Multi-functional fastener for a variety of applications

Documentation

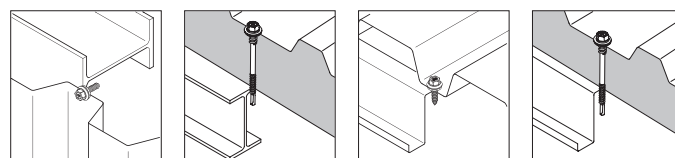
Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2 onto steel and aluminium

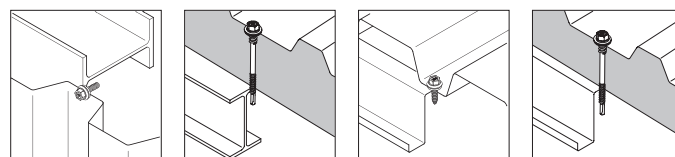
Product code	PU	L	KL	S16	S19
TDB-S-S16-6,3×20	100	20	0–12	1526350	1526400
TDB-S-S16-6,3×25	100	25	0–17	1021650	1021647
TDB-S-S16-6,3×32	100	32	0–24	1021659	1063816
TDB-S-S16-6,3×40	100	40	0–32	1526352	1526401
TDB-S-S16-6,3×50	100	50	0–42	1022745	1022746
TDB-S-S16-6,3×60	100	60	0–52	1526353	1526402
TDB-S-S16-6,3×80	100	80	5–70	1526354	1526403
TDB-S-S16-6,3×100	100	100	25–90	1022759	1022758
TDB-S-S16-6,3×120	100	120	45–110	1526355	1526405
TDB-S-S16-6,3×140	100	140	65–130	1526356	1526406
TDB-S-S16-6,3×160	100	160	85–150	1526357	1526407
TDB-S-S16-6,3×180	100	180	105–170	1526359	1526408
TDB-S-S16-6,3×200	100	200	125–190	1270144	1191450
TDB-S-S16-6,3×220	100	220	145–210	1191440	1194640
TDB-S-S16-6,3×260	100	260	185–250	1526371	1526410

Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.



Fastener in A4 onto steel and aluminium

Product code	PU	L	KL	S16	S19
TDB-S-S16/A4-6,3×25-A4	100	25	0–17	1479523	-
TDB-S-S16-6,3×40-A4	100	40	0–32	301797	1614055



Fastener in A5 onto steel and aluminium

Product code	PU	L	KL	S16	S19
TDB-S-S16-6,3x40-R5	250	40	0-32	-	-

Pre-drill diameter

Application	Steel/Steel and Alu/Steel					Alu/Alu			
Component 2 (t _{ij})	S235 - S355 (EN10025) S280GD - S450GD (EN10346) HX300LAD - HX460LAD (EN10346)					Aluminium (EN573)			
	1.25-1.50	1.60-4.00	4.10-6.0	6.10-10.0	>10.0	1.50	2.0-3.0	4.0	>6.0
Pre-drill Ø	5.0	5.3	5.50	5.70	5.80	4.50	5.0	5.30	5.50

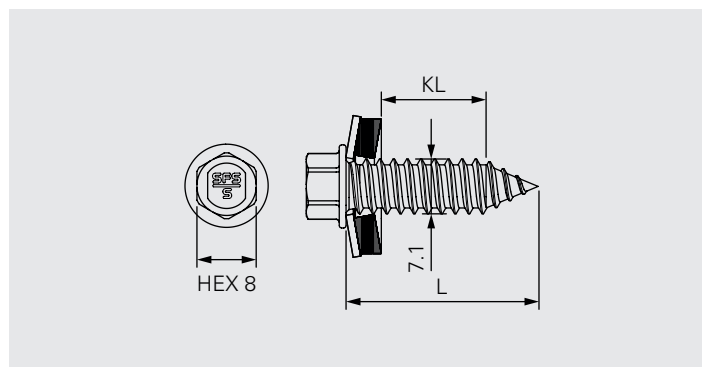


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

TDC-S-7.1



Application

Fastening of profile sheets onto metal profiles

Component 1 (t_I)		Component 2 (t_{II})		$\Sigma_{\max} t_I + t_{II}$
Steel	0.50–1.50	Steel	0.63–3.0	4.50

Fastener material

Austenitic stainless steel A2

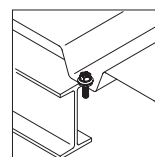
Sealing washer: Austenitic stainless steel A2, EPDM-seal

Approvals

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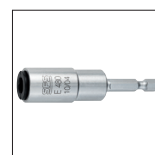
Features and Benefits

- Self tapping fastener suitable as replacement of over driven fasteners
- Applicable on metal profile sheets and sandwich panels



Fastener in A2 onto steel

Product code	PU	L	KL	Pre-drill Ø	S19
TDC-S-S19-7,1×25	500	25	1–14	6.50	1066788

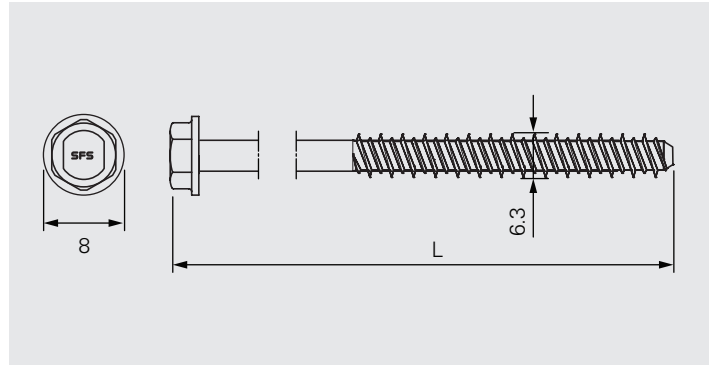
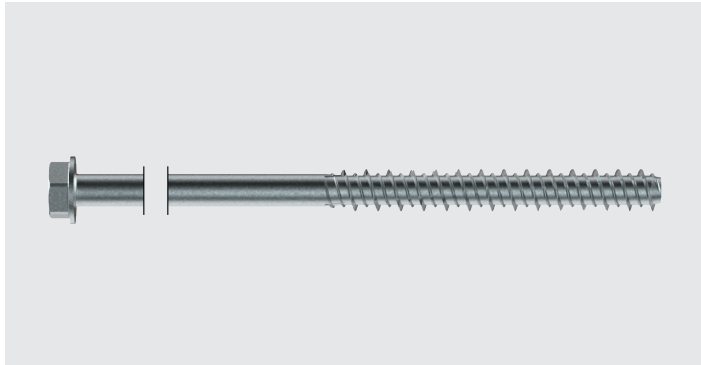


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

TI-6.3



Application

Fastening of galvanised angles and steel framing to concrete

Component 1 (t _i)	Component 2 (t _{ii})	$\Sigma_{\max} t_i + t_{ii}$
–	–	–

Fastener material

Carbon steel

Application range

Build-up:

Thickness concrete deck t: min. 40mm

Edge distance: min. 50mm

Thread length TL:

Fastener length 50mm: TL = 47mm

Fastener length 60-160 mm: TL = 50mm

Setting:

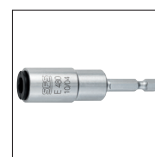
Sd (Setting depth): min. 20mm

Depth of pilot hole to be min. 15mm deeper than the setting depth of the fastener, depending on site conditions.

Typical pilot hole diameters will be in the range of 4.8mm-5.2mm depending on concrete strength. Site testing recommended to determine optimum diameter.

Fastener in carbon steel onto concrete

Product code	PU	L	KL	Pre-drill Ø	
TI-6,3×25	100	25	0-5	4.8-5.2	1237838
TI-6,3×32	100	32	0-12	4.8-5.2	1237839
TI-6,3×45	100	45	0-25	4.8-5.2	1237840
TI-6,3×55	100	55	0-35	4.8-5.2	1237841
TI-6,3×65	100	65	0-45	4.8-5.2	1237852
TI-6,3×75	100	75	0-55	4.8-5.2	1237853
TI-6,3×85	100	85	0-65	4.8-5.2	1237854
TI-6,3×95	100	95	0-75	4.8-5.2	1237855
TI-6,3×105	100	105	0-85	4.8-5.2	1237856
TI-6,3×115	100	115	0-95	4.8-5.2	1237857

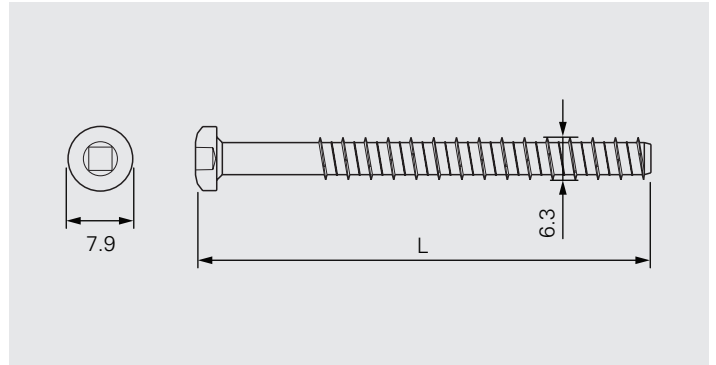
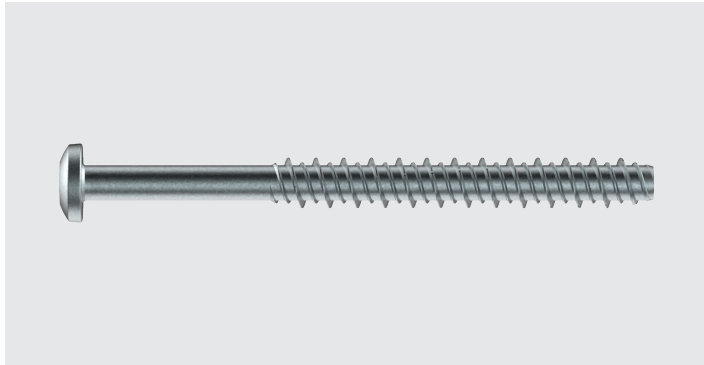


Accessories/Ancillaries

Product code	PU	
ZA1/4" drive bar*	1	7645
Socket E380*	1	8018
Socket E480	1	688056

*Socket E380 needs to be used in conjunction with the ZA1/4" drive bar.

TI-S-Z10-6.3



Application

Fastening of galvanised angles and steel framing to concrete

Fastener material

Austenitic stainless steel A2

Component 1 (t_1)

–

Component 2 (t_{II})

–

$\Sigma_{\max} t_1 + t_{II}$

–

Application range

Build-up:

Thickness concrete deck t: min. 40mm

Edge distance: min. 50mm

Thread length TL:

Fastener length 50mm: TL = 47mm

Fastener length 60-160 mm: TL = 50mm

Setting:

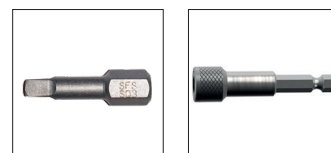
Sd (Setting depth): min. 20mm

Depth of pilot hole to be min. 15mm deeper than the setting depth of the fastener, depending on site conditions.

Typical pilot hole diameters will be in the range of 4.8mm- 5.2mm depending on concrete strength. Site testing recommended to determine optimum diameter.

Fastener in A2 onto concrete

Product code	PU	L	KL	Pre-drill Ø	
TI-S-Z10-6,3×45	100	45	0–25	4.8–5.2	507331
TI-S-Z10-6,3×75	100	75	0–75	4.8–5.2	501569
TI-S-Z10-6,3×115	100	115	0–115	4.8–5.2	507331



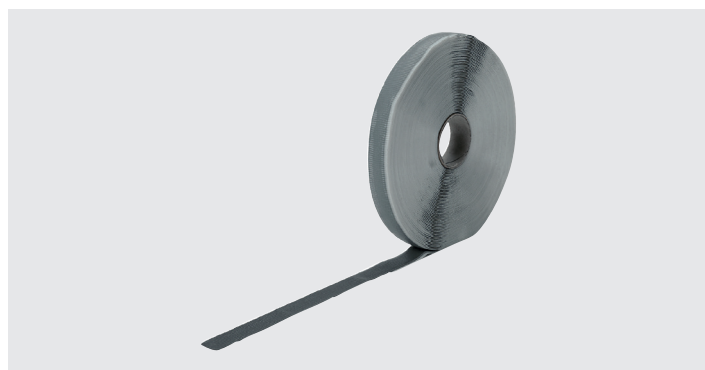
Accessories/Ancillaries

Product code	PU	
SQ3-25-HEX1/4"	1	1034497
ZA1/4" bit holder	1	1162306



Accessories

Butyl tape A/A+



Technical characteristics

Service temperature range	–40°C up to +110°C
Application temperature range	+5°C up to +40°C
Moisture vapour transmission rate	0.15g/m ² /24hr/mm

Application

Between overlaps of fastener connections in façade and roof construction including rooflights

Approvals

National Federation of Roofing Contractors (NFRC) - Class A performance

Product description

High performance butyl sealing tape

Type A = 10 year warranty

Type A+ = 25 year warranty

Features and Benefits

- High tack, self-adhesive providing excellent adhesion
- Strong and flexible
- Designed to accommodate building movement
- Range of sizes to suit applications

Instructions

- Surfaces to be clean, dry and free from frost, grease and loose materials
- Apply directly from reel onto first surface and press along length for good initial adhesion
- Remove backing paper and offer other surface to sealant and push firmly to seal across joint

Butyl tape type A

Product code	Wide tape (mm)	Colour	Roll length (m)	
BUTYL TYPE A 6x5mm	5	Grey	9.6	770659
BUTYL TYPE A BEAD 4mm	4	Grey	12	770660
BUTYL TYPE A BEAD 6mm	6	Grey	8	770662
BUTYL TYPE A BEAD 8mm	8	Grey	6	770663

Butyl tape type A+

Product code	Wide tape (mm)	Colour	Roll length (m)	
SFS BUTYL TYPE A+ 6x5mm	5	Pink	9.6	1016775
SFS BUTYL TYPE A+ BEAD 4mm	4	Pink	12	1016776
SFS BUTYL TYPE A+ BEAD 6mm	6	Pink	8	1016851
SFS BUTYL TYPE A+ BEAD 8mm	8	Pink	6	1016852

FEIN ASCS-6.3 screw gun



Technical characteristics

Battery voltage	18v
Speed, full load	0-1500 rpm
Speed, no load	0-1700 rpm
Max. torque (hard/soft)	30/10 Nm
Rapid change chuck	1/4 in
Screw Ø	6.3mm

Application

Speed optimised cordless drill/driver for screw connections in metal up to a diameter of 6,3mm

Warranty

- 3 year 'FEIN PLUS WARRANTY'
- Online registration with FEIN required

Features and Benefits

- Powerful battery for more than 150 screw connections in 1.25mm trapezoidal sheet metal on to 2mm steel
- Electronic torque shut-off for precise results even without a depth stop
- Maintenance-free, brush-free and highly-effective EC motor
- Tested for more than 1 million screw connections
- More than 1,000 charge cycles per battery pack
- Extremely light weight
- Optimum ergonomics with gun handle for high contact pressure
- Powerful up to 30 Nm
- Supplied with depth stop suitable for 16mm washer product

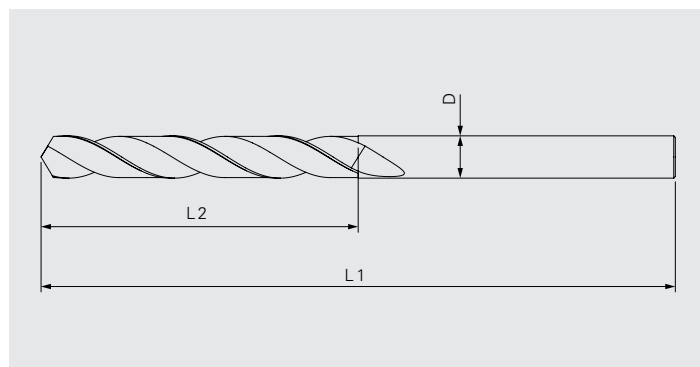
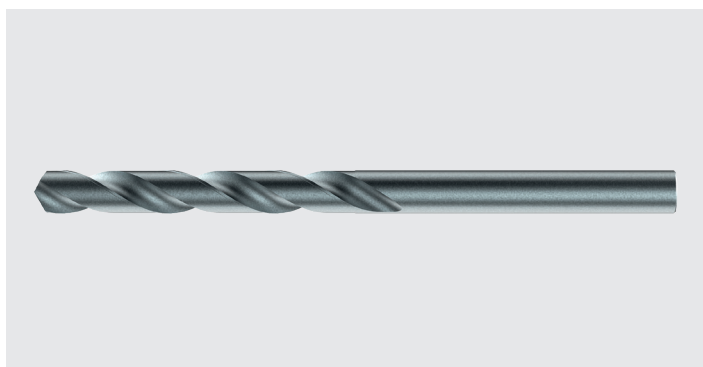
Screw gun

Product description	PU	
FEIN ASCS6.3 18v Screw Gun - body only in case	1	1486715
2 x 18v 5Ah batteries and charger	1	1553335
18v 5Ah replacement battery	1	1513248

Depth stop

Product description	PU	
20mm wide depth stop	1	1511699

HSS drill bits



Application

Drilling in construction steel and timber

Approvals

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Fastener material

HSS high speed steel

Features and Benefits

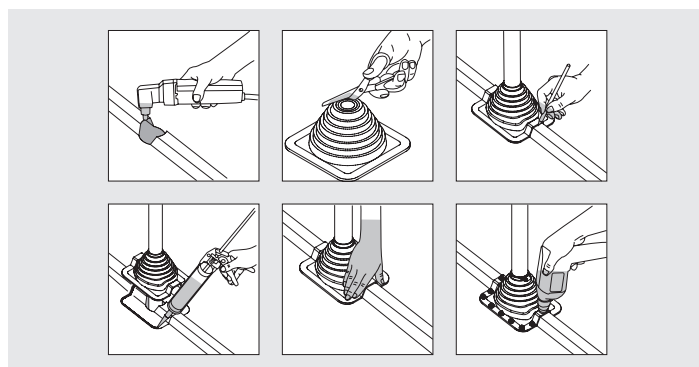
- For construction steel and timber
- Short spiral groove for better stability
- Insert ends: smooth shank

HSS drill bits

Product code	PU	D	L1	L2	
HSS-4,9x62/26	1	4.9	62	26	69585
HSS-4,9x86/52	1	4.9	86	52	69577
HSS-4,9x132/87	1	4.9	132	87	69593
HSS-5,0x60/31	1	5.0	60	31	1046721
HSS-5,0x90/31	1	5.0	90	31	1046723
HSS-5,0x125/31	1	5.0	125	31	1046724
HSS-5,0x175/31	1	5.0	175	31	1206462
HSS-5,0x220/31	1	5.0	220	31	1046726
HSS-5,0x250/31	1	5.0	250	31	1206458
HSS-5,0x86/52	1	5.0	86	52	893451
HSS-5,0x132/87-GROUND	1	5.0	132	87	701763
HSS-5,3x60/31	1	5.30	60	31	1046734
HSS-5,3x95/31	1	5.30	95	31	1046735
HSS-5,3x125/31	1	5.30	125	31	1206451
HSS-5,3x175/31	1	5.30	175	31	1046738
HSS-5,3x220/31	1	5.30	220	31	1206450
HSS-5,3x250/31	1	5.30	250	31	1046740
HSS-5,3x290/31	1	5.30	290	31	1046751
HSS-5,5x60/31	1	5.50	60	31	1046752
HSS-5,5x95/31	1	5.50	95	31	1046753
HSS-5,5x175/31	1	5.50	175	31	1046755
HSS-5,5x220/31	1	5.50	220	31	1046756
HSS-5,5x250/31	1	5.50	250	31	1046757
HSS-5,5x290/31	1	5.50	290	31	1046758
HSS-5,5x93/57	1	5,5	93	57	893453
HSS-5,5x139/91-GROUND	1	5,5	139	91	893277
HSS-5,7x60/31	1	5.70	60	31	1046760
HSS-5,7x95/31	1	5.70	95	31	1046772
HSS-5,7x125/31	1	5.70	125	31	1046773
HSS-5,7x175/31	1	5.70	175	31	1206429
HSS-5,7x220/31	1	5.70	220	31	1206428
HSS-5,7x250/31	1	5.70	250	31	1046777
HSS-5,7x290/31	1	5.70	290	31	1206427

Product code	PU	D	L1	L2		
HSS-5,8x66/28	1	5.80	66	28		69589
HSS-5,8x93/57	1	5.80	93	57		69580
HSS-5,8x139/91	1	5.80	139	91		69596
HSS-7,0x109/69-SILVER	1	7.00	109	69		893458
HSS-7,0x156/102	1	7.00	156	102		893285
HSS-7,0x200	1	7.00	200	-		844422
HSS-9,5x125/81	1	9.50	125	81		724928

Multi Flash MF



Application

Adaptable pipe flashing for all sheet metal roof profiles

To provide a permanently leakproof, vibration-proof, heatproof and weatherproof pipe penetration

The specifications of DIN 18807 "Openings in roofs" must be complied with when using the pipe sleeves

Material

EPDM black (–50°C up to +115°C/intermittently up to +150°C)

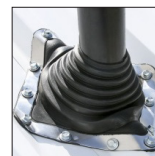
Silicone red (–50°C up to +200°C/intermittently up to +250°C)

Approvals

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Features and Benefits

- Perfect sealing of pipe outlets on walls and facades
- The soft aluminium base conforms easily to most metal roof profiles
- Sleeve flexibility accommodates vibration and pipe movement caused by expansion/contraction
- 20 years warranty



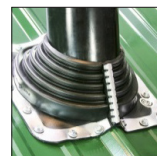
Multi Flash standard EPDM black

Product code	PU	Ø min.	Ø max.	Base	Required fixing kit	
MF-1-6-70-EPDM-BLACK	15	6	70	114	Set N°1	473303
MF-2-22-101-EPDM-BLACK	15	22	101	152	Set N°2	473405
MF-3-6-146-EPDM-BLACK	15	6	146	203	Set N°2	473408
MF-4-70-177-EPDM-BLACK	10	70	177	254	Set N°2	473410
MF-5-101-209-EPDM-BLACK	10	101	209	280	Set N°2	473412
MF-6-121-254-EPDM-BLACK	10	121	254	305	Set N°2	473414
MF-7-140-292-EPDM-BLACK	10	140	292	356	Set N°3	473416
MF-8-171-343-EPDM-BLACK	5	171	343	432	Set N°3	473418
MF-9-203-520-EPDM-BLACK	5	203	520	635	Set N°4	473420
MF-M-305-724-EPDM-BLACK	5	304	724	864	Set N°5	473422



Multi Flash standard Silicone red

Product code	PU	Ø min.	Ø max.	Base	Required fixing kit	
MF-1-6-70-SILICONE-RED	15	6	70	114	Set N°1	473308
MF-2-22-101-SILICONE-RED	15	22	101	152	Set N°2	473406
MF-3-6-146-SILICONE-RED	15	6	146	203	Set N°2	473409
MF-4-70-177-SILICONE-RED	10	70	177	254	Set N°2	473411
MF-5-101-209-SILICONE-RED	10	101	209	280	Set N°2	473413
MF-6-121-254-SILICONE-RED	10	121	254	305	Set N°2	473415
MF-7-140-292-SILICONE-RED	5	140	292	356	Set N°3	473417
MF-8-171-343-SILICONE-RED	5	171	343	432	Set N°3	473419
MF-9-203-520-SILICONE-RED	5	203	520	635	Set N°4	473421



Multi Flash EPDM black

Product code	PU	Standard		Retrofit		Base	Required fixing kit	Required clip	
		Ø min.	Ø max.	Ø min.	Ø max.				
MULTI-FLASH 3 EPDM BLACK	1	6	146	50	114	203	Set N°2	1237407	1237402
MULTI-FLASH 4 EPDM BLACK	1	70	177	57	165	254	Set N°2	1237390	1237326
MULTI-FLASH 5 EPDM BLACK	1	102	209	90	171	279	Set N°2	1237389	1237327
MULTI-FLASH 8 EPDM BLACK	1	171	343	165	304	431	Set N°3	1237408	1237404
MULTI-FLASH 9 EPDM BLACK	1	241	520	228	508	635	Set N°4	1237409	1237405
MULTI-FLASH MAXI EPDM BLACK	1	304	724	330	685	863	Set N°5	1237411	1237410

Multi Flash Silicone red

Product code	PU	Standard		Retrofit		Base	Required fixing kit	Required clip	
		Ø min.	Ø max.	Ø min.	Ø max.				
MULTI-FLASH 3 RED SILICONE	1	6	146	50	114	203	Set N°2	1237407	1239007
MULTI-FLASH 5 RED SILICONE	1	102	209	90	171	279	Set N°2	1237389	1239055
MULTI-FLASH 8 RED SILICONE	1	171	343	165	304	431	Set N°3	1237408	1239056
MULTI-FLASH MAXI RED SILICONE	1	304	724	330	685	863	Set N°5	1237411	1239057

Multi Flash fixing kit onto metal sheets

Product code	PU	Silicone transparent	Fastener SX3/9-A12-6,0x29	
MF-SET-1-SX3	1	1 pcs.	12 pcs.	1019634
MF-SET-2-SX3	1	1 pcs.	24 pcs.	1019635
MF-SET-3-SX3	1	1 pcs.	36 pcs.	1019637
MF-SET-4-SX3	1	1 pcs.	48 pcs.	1019638
MF-SET-5-SX3	1	1 pcs.	72 pcs.	1019639

Polyband A/A+



Technical characteristics

Service temperature range	–40°C up to +90°C
Application temperature range	+5°C up to +40°C
Moisture vapour transmission rate	0.15g/m ² /24hr/mm

Application

Air seal and moisture barrier tape developed for sealing side lap joints of metal roof, wall liners and steel decking side laps

Approvals

National Federation of Roofing Contractors (NFRC) - Class A performance

Product description

High performance butyl sealing tape

Type A = 10 year warranty

Type A+ = 25 year warranty

Features and Benefits

- High tack, self adhesive providing excellent adhesion
- High strength non-tear laminated film
- Self wound reels for easy application
- Reduces condensation and increases airtightness in buildings
- Can be used on purlins to reduce cold bridging

Instructions

- Surfaces to be clean, dry and free from frost, grease and loose materials
- Apply directly from reel onto first surface and press along length for good initial adhesion
- Remove backing paper and offer other surface to sealant and push firmly to seal across joint

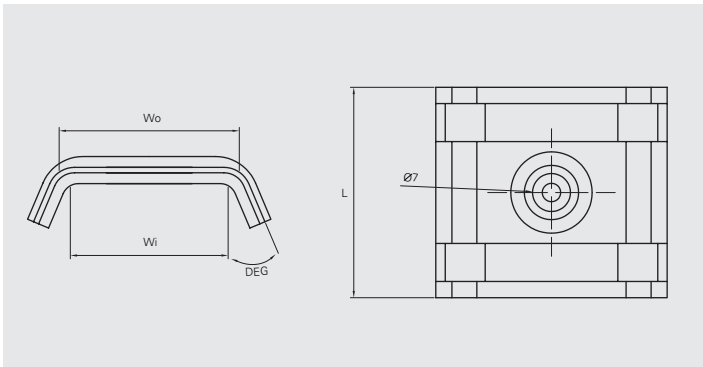
Polyband type A

Product code	Wide tape (mm)	Colour	Roll length (m)	
POLYBAND A	50	Clear/white	35	998427

Polyband type A+

Product code	Wide tape (mm)	Colour	Roll length (m)	
POLYBAND A+	50	Pink	35	1016857

Saddle washer



Application

Fastening of polycarbonate rooflight
Fastening of panel laps

Component 1 (t _I)	Component 2 (t _{II})	Σ _{max} t _I + t _{II}
–	–	–

Fastener material

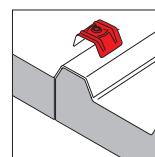
Aluminium, EPDM polymer backing

Approvals

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Features and Benefits

- 1mm aluminium with soft vulcanised EPDM for weather-sealing
- Reinforcement ribs to increase holding performance
- Raised area around fastener hole for effective sealing
- 7mm diameter hole in aluminium, 3.5mm hole in EPDM gives excellent sealing performance
- Can be painted to meet customer requirement

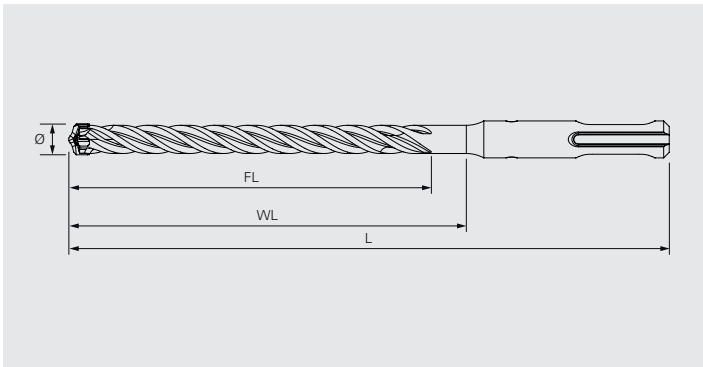


Saddle washer in aluminium

Product code	PU	Wo	Wi	L	DEG	
CA-SW-P34x45-23DEG	100	378	34	45	23°	1605845*
CA-SW-P34x45-23DEG-RAL2002	100	378	34	45	23°	1605861
CA-SW-P34x45-23DEG-BS10A05	100	378	34	45	23°	1605939
CA-SW-P34x45-23DEG-BS18B17	100	378	34	45	23°	1606133

*Material numbers shown are for mill finish items, contact a member of the team for painted variant codes.

SDS drill bits



Application

Pre-drill of reinforced concrete or natural stone

Approvals

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Fastener material

4x carbide cutting edge, steel shank

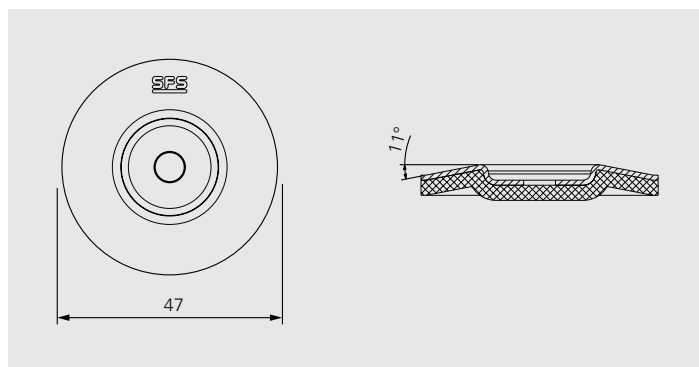
Features and Benefits

- Four symmetrical cutting edges for exact drilling diameters
- No slipping on the surface due to the centering tip
- Optimal removing of drilling dust due to the cupping flute geometry
- Optimum drilling performance and no seizure when hitting reinforcing steel thanks to the patented reinforcement chamfer
- 50% longer service life due to special geometry

SDS drill bits

Product code	PU	D	L	WL	FL	
SDS-6×210/150-4C	1	6	210	150	150	1487583
SDS-6×310/250-4C	1	6	310	250	250	1487584
SDS-6×515/200-4C	1	6	515	455	200	1608141
SDS-8×210/150-4C	1	8	210	150	150	1487585
SDS-10×210/150-4C	1	10	210	150	150	1487586

TCW Washer



Application

Fastening of Karrier panels and coldstore panels in combination with SXC5-L12

Fastener material

Austenitic stainless steel A4 or carbon steel
Sealing washer: EPDM foam

Approvals

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Features and Benefits

- Low profile washer for minimum projection
- 47mm diameter to support Karrier panels

Washer in carbon

Product code	PU	
TCW-47/6mm	100	1318706

Washer in A4

Product code	PU	
TCW-S-47/6mm-A4	100	1605506



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