

Roofing and Cladding

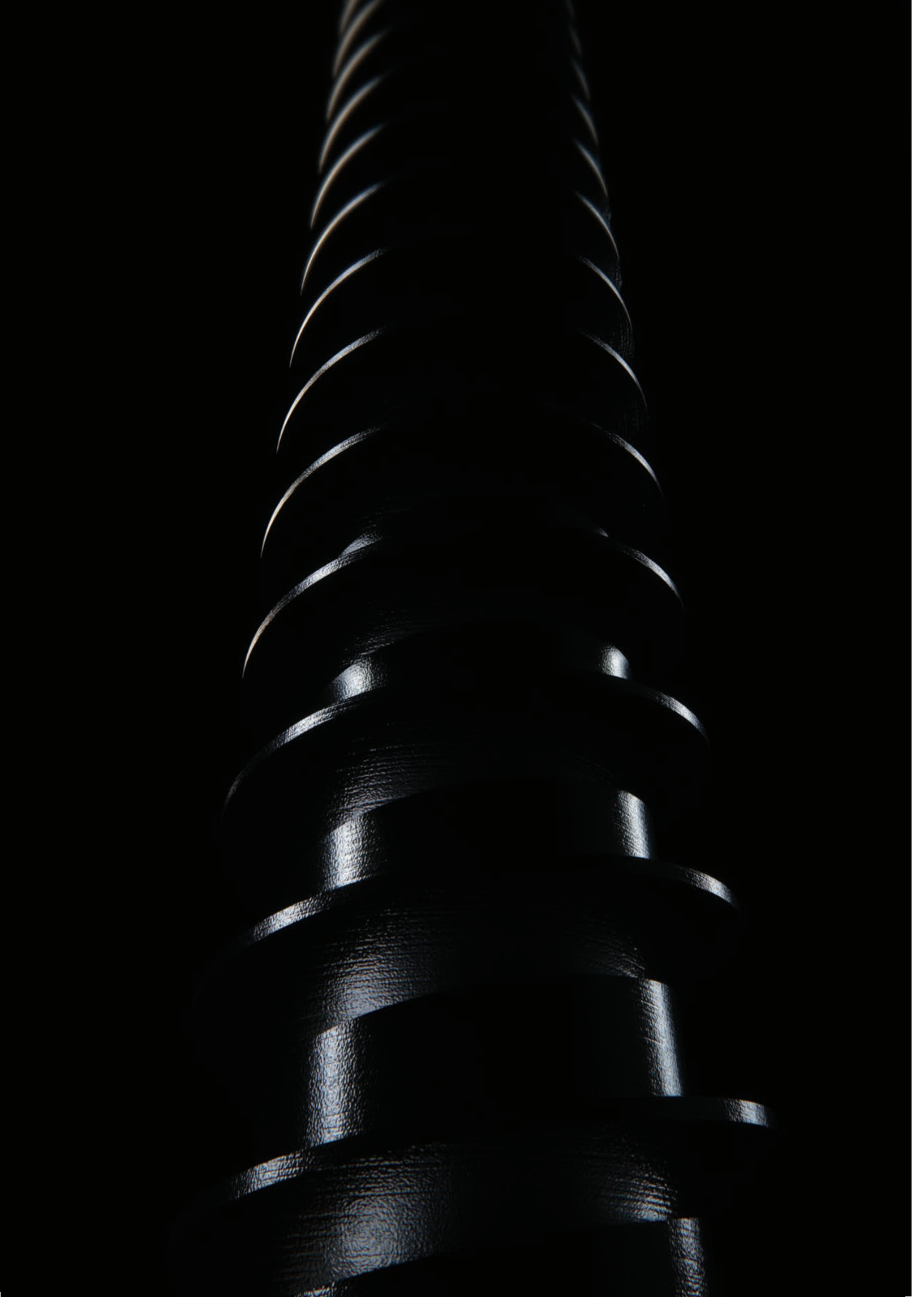


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The building envelope specialist

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.





Evidence

A new neighbourhood has emerged in New York, USA, in the past few years: Hudson Yards, with the publicly accessible Hudson Yards Vessel at its beating heart. This extraordinary building, an architectural masterpiece in steel and bronze, was created by Thomas Heatherwick and Heatherwick Studio and assembled on site by Italy-based Permasteelisa with the help of stainless steel fasteners from SFS.



Added Value

- Stainless steel A4 fasteners for high durability
- Test support at customer laboratory
- Specification support for the design team

Cost Savings

- Same fasteners for different applications
- Only one supplier for different fastening solutions
- Reduced installation time with self drilling fasteners

The background is a dark, textured surface, possibly leather or a similar material, with a fine, cracked pattern. Two bright, glowing light streaks are visible: one is a vertical line on the right side, and the other is a curved line at the bottom left. The text 'Latest products' is overlaid on the image.

Latest products

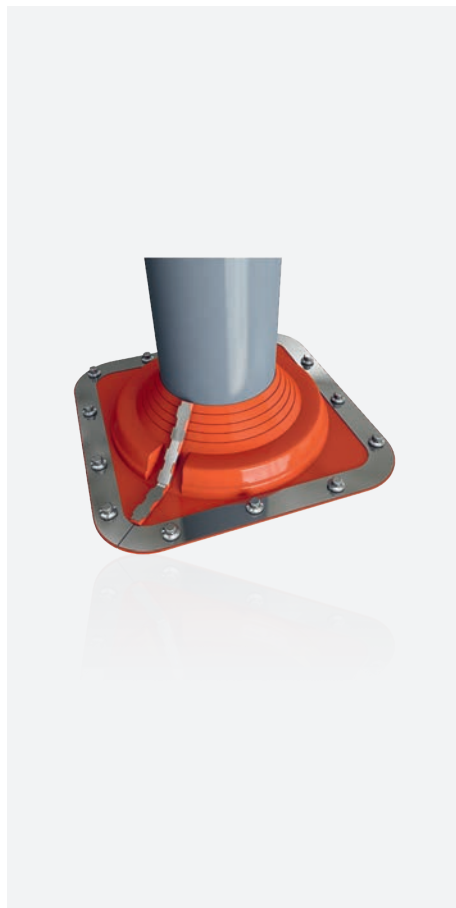
Hybrid fastener **CXLW-4,8**

New side lapper suitable for fastening onto metal and timber subconstruction. Fast and chip-free installation thanks to the FastTip.



New pipe flashing – **Flashing Combo**

Multifunctional all in one product, which enables new and retrofit installations.

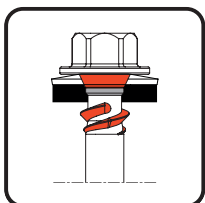


Safe setting **SOK-IT®**

New SOK-IT® for safe setting of all fasteners from diameter 4,8–6,3 mm.



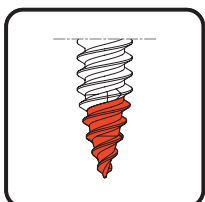
Features and Innovations



Premium-Sealing – improved air- and watertightness

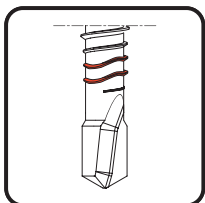
The Premium-Sealing allows valley-fixing on the roof and is characterised by the following attributes

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



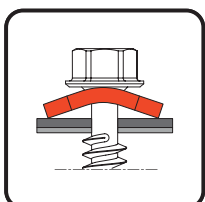
FastTip – for rapid, chipless insertion

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



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.



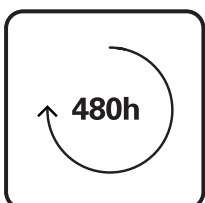
Thick to Thin – high application area

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.



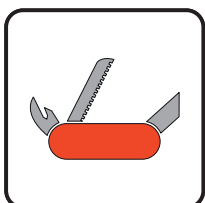
Safe setting – resistant to unwinding and vibration

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.



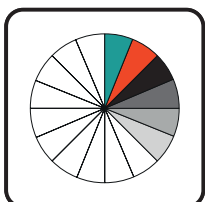
Durocoat® 480 – high corrosion resistance

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.



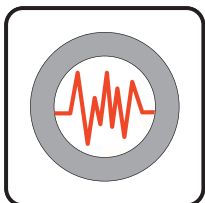
Multi Series – customer centered design

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.



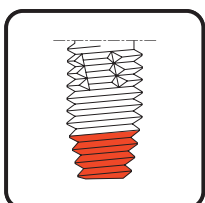
Seismic approved – high physical life

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.

Selection guide

1 Application and subconstruction

Application

| | |
|-----------------------------------|----|
| Single skin | 18 |
| Twin skin | 19 |
| Sandwich panels | 22 |
| Liner tray | 20 |
| Standing seam | 21 |
| Single-Ply insulation roof panels | 23 |
| Flashing | 24 |
| Structural connection | 25 |

Subconstruction

| | |
|----------|----|
| Steel | 28 |
| Timber | 30 |
| Concrete | 31 |

Find further information

| | |
|-----------------|----|
| Product Compass | 16 |
|-----------------|----|

2 Fastener material, corrosion resistance

| | |
|------------------|-------------------|
| Stainless steel: | A2, A4 or R5 |
| Carbon steel: | Zinc or Durocoat® |

Find further information

| | |
|--|----|
| Working Life Guidance and Limited Warranties | 12 |
| Corrosion Test and Environmental Influences | 14 |
| Recommended Fastener Material | 15 |

3 Fastener type

| | |
|-------------------------|------------------------|
| Self drilling fastener: | No pre-drilling needed |
| Self tapping fastener: | Pre-drilling needed |
| Blind rivet: | Pre-drilling needed |

4 Drilling capacity (steel) and fastener dimensions

Subconstruction

| |
|-----------------|
| Steel thickness |
| Steel quality |

Clamping length

Depending on application and subconstruction

Find further information

| | |
|---------------------|----|
| Product Compass | 16 |
| Clamping Length | 28 |
| Product Data Sheets | 34 |

5 Head shapes

Variants

| |
|-----------------------------|
| HEX head - standard and H15 |
| Pan head |
| irius® head |
| Countersunk head |

6 Additional components

Sealing washer

| | |
|----------------|------------------------------------|
| Material: | Aluminium, A2, A4, or carbon steel |
| Diameter (mm): | 10, 12, 14, 16, 19, 22, 29 |

Find further information

| | |
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| Sealing Washers | 27 |
|-----------------|----|

7 Approvals and technical values

Find further information

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| Approvals | 11 |
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8 Cross selling

Additional products to the main fixings

| |
|-------------------------------|
| Side Lappers |
| Sealant tapes, pipe flashings |
| Bits, drills, tools, etc. |


Approvals

ETA – European Technical Assessment

ETAs 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 | Screw 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 |  |
|------------|--|---|

Working life and limited warranty

In order to bring a product with a CE mark to the market, an ETA approval for the particular product in our Roofing and Cladding application area is needed. In the ETA the product is defined geometrically and technically. In addition to the characteristic values for static calculation, the application area of the fastener is also defined. Here, the umbrella organisation The European Organisation for Technical Assessment (EOTA) has defined a minimum working life for fasteners. This depends on the expected working life of the whole works and the type of fastening.

The works in the area of Roofing and Cladding are usually specified in the category medium and normal. In Roofing and Cladding we are mainly talking about fastenings that can be repaired or replaced with additional effort. If they cannot be repaired or replaced, either "easily" or "with increased effort" then we talk about a life long category.

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 | 10 | 10 |
| Medium | 25 | 10 | 25 | 25 |
| Normal | 50 | 10 | 25 | 50 |
| Long | 100 | 10 | 25 | 100 |

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”.

SFS Working Life Declaration WLD

SFS supports designers and specifiers with the correct specification of the suitable fastener and therefore provides a specific WLD depending on the fastener and application. The durability of the work is defined by the Specifier. The fastener category can be selected from the above table in EOTA guidance document 002. This results in the expected working life of the required fastener. SFS WLD documents demonstrate the long term performance of SFS fasteners and are available on demand, from 25 up to 50 years.

SFS Limited Warranty Declaration LWD

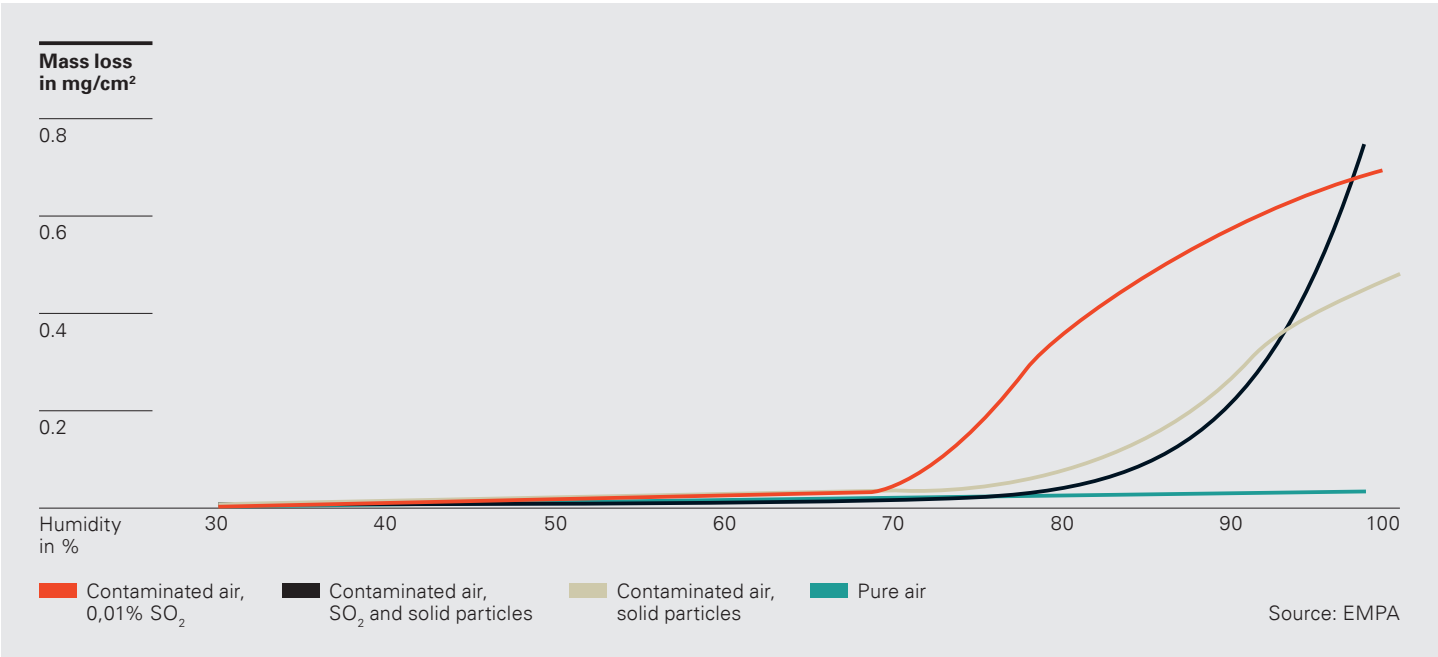
While there is no standard in the field of Roofing and Cladding that regulates the variety of fastener types and surfaces, SFS Roofing and Cladding have defined a uniform warranty period for all SFS RC fasteners. Thanks to years of experience in the field of fastening technology, SFS can offer the longest warranty periods in the field of roofing and cladding. Through the SFS-LWD documents the customer knows which warranty period is valid in each environmental category. LWD's are available for the RC global range covering standard environmental applications. As an additional value-added service, a project specific LWD can be requested. In these circumstances, further project information is provided to SFS headquarters using the required form. SFS will review the application and provide the maximum possible LWD for each product requested in the application. Compared to the Working Life Document, the Limited Warranty Declaration is only valid for SFS contracting partners and starts counting from the day of purchase.

Corrosion causes and contact corrosion

Corrosion is the irreversible damage of living material due to a chemical or electrochemical reaction. For metal atoms the metallic iron is the high energy condition and they aim for a low-energy condition which means rust. This means that corrosion will occur if nothing is done to prevent it.. With the right design planning and the right choice of materials, we can make a major contribution to corrosion protection.

There is an increased risk of corrosion from a relative humidity of over 70% and a temperature above 60° Celsius. In the same way, contaminated environmental air has a negative influence on corrosion protection. If the air also contains salt or sulfur dioxide, there is an increased risk of corrosion. In these special areas like swimming pools or tunnels, more attention must be paid to the selection of the correct fastener.

External conditions and media that accelerate corrosion



Contact corrosion

| Material of fixing part or substructure | Fastener Material | | | |
|---|-------------------|----------------------------|----|-----|
| | Carbon steel | Austenitic stainless steel | | |
| | T | A2 | A4 | R5* |
| Galvanised steel | R | R | R | R |
| Aluminium alloy | N | R | R | R |
| Stainless steel | N | R | R | R |

R Recommended, N Not suitable

*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.

Corrosion tests and environmental influences

Current state of the art

Thanks to efforts to improve air purity, the sulfur dioxide SO₂ in the air has fallen by over 90% since 1987. For this reason, the application of the salt spray test in the RC area has become more important than the Kesternich test, which focuses on sulfur dioxide.

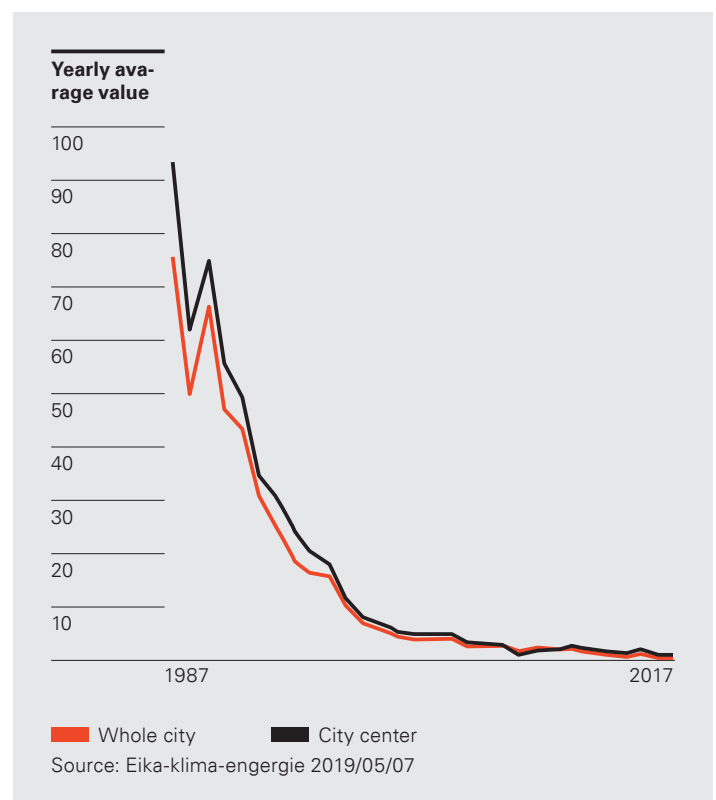
For this reason, SFS coatings are designed for today's corrosion resistance tests to withstand the salt spray test according to EN ISO 9227.

The test results obtained cannot be regarded as a guideline for corrosion resistance of the tested protective coatings in all environments. Therefore, Kesternich and salt spray testing cannot be compared. It is important to highlight these aspects, which are state of the art, in order to understand the influence of the current atmosphere on corrosion resistance. The SO₂ content in the atmosphere has decreased considerably in recent years.

Evolution of sulfur dioxide concentration of air in µg/m³

Example: City of Berlin

Decrease in SO₂ concentration by 96% – the pollutant has almost completely disappeared.



Salt spray test

Extract from the standard EN ISO 9227

Salt spray tests are generally suitable as corrosion protection tests for rapid analysis for discontinuities, pores and damage in organic and inorganic coatings. In addition, for quality control purposes, comparison can be made between samples that have the same coating.

Kesternich test

Extract from the standard EN ISO 6988

Moist air containing sulfur dioxide quickly produces visible corrosion of many metals in a form resembling that occurring in industrial environments. It is therefore a test medium well suited to detect pores or other sources of weakness in protective coatings and deficiencies in corrosion resistance associated with unsuitable alloy composition or treatments. The test results obtained in the test should not be regarded as a direct guide to the corrosion resistance of the tested materials in all environments.

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 |
|--|--|---|--|---|--|---|--|
| <ul style="list-style-type: none"> Examples of typical environments in a temperate climate (informative only) | <ul style="list-style-type: none"> Interior Heated buildings with clean atmosphere | <ul style="list-style-type: none"> Rural areas Low levels of pollution Unheated buildings where condensation may occur | <ul style="list-style-type: none"> Urban and industrial areas Moderate pollution Coastal area with low salinity Production rooms with high humidity and some air pollution | <ul style="list-style-type: none"> Industrial and coastal areas with moderate salinity | <ul style="list-style-type: none"> Industrial areas with high humidity and aggressive atmosphere Permanent condensation and high pollution | <ul style="list-style-type: none"> Coastal and offshore areas with high salinity | <ul style="list-style-type: none"> 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

*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.

Product compass

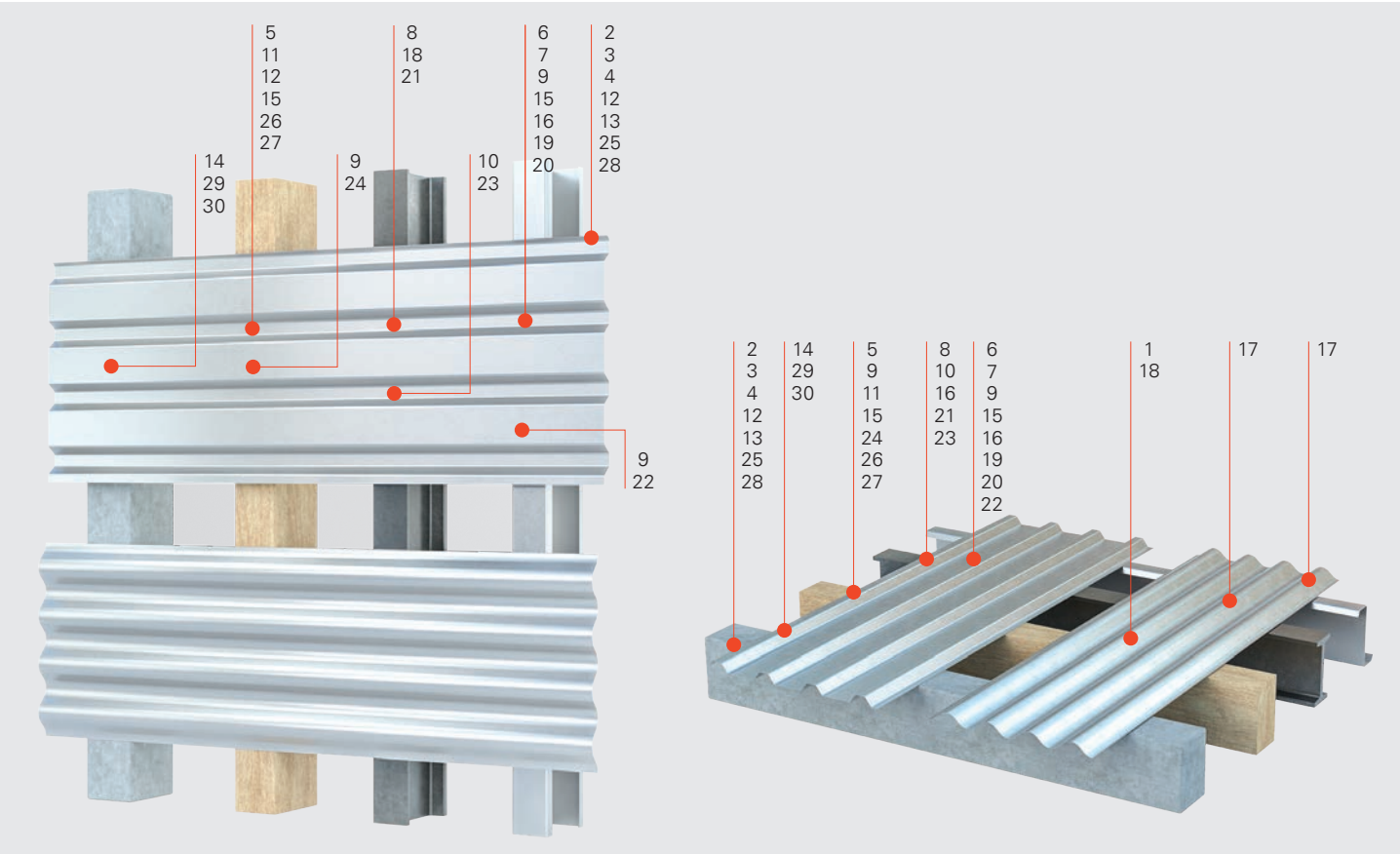
| Page | Type | Material | | | | | Single skin | | | | Twin skin | | | | Liner tray | | | | Standing seam | | | |
|------|--------------------|----------|----|----|---|---|-------------|---|---|---|-----------|-----|---|---|------------|-----|---|--|---------------|---|---|--|
| | | A2 | A4 | R5 | T | A | | | | | | | | | | | | | | | | |
| 36 | CXLW-4.8 | | | | | | S | | | W | S | | | W | S | | | | | | | |
| 38 | MMS-A4 | | | | | | | | | | | | C | | | | C | | | | | |
| 16 | MXC-7.5 | | | | | | | | C | | | | | | | | | | | | | |
| 44 | SCFW-S-6.5 | | | | | | | | W | | | | | | | | | | | | | |
| 46 | SDC2-S-5.5 | | | | | | | | | | | | | | S | | | | | | | |
| 48 | SDC3-S-5.5 | | | | | | | | | | | | | | S | P | | | | | | |
| 50 | SL2-S-4.8 | | | | | | S | | | | S | | | | S | | | | | | | |
| 52 | SL2-S-5.5 | | | | | | S | | | | S | | | | S | | | | | | | |
| 54 | SL2-S-6.3 | | | | | | S | | | | S | | | | S | | | | | | | |
| 56 | SL3/2-5-S-6.0 | | | | | | | | | | | | | | | | | | S | P | | |
| 58 | SLG-S-4.8 | | | | | | S | | | | S | | | | S | | | | | | | |
| 60 | SLG-S-6.5 | | | | | | | | | | | | | | | | | | | | | |
| 62 | SW2-S-4.8 | | | | | | | | W | | | | W | | | | | | | | | |
| 64 | SX3-6.0 | | | | | | S | P | | | S | P | | | S | P | | | | | | |
| 66 | SX5-5.5 | | | | | | | P | | | | P | | | | P | | | | | | |
| 68 | SX5-D10-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 70 | SX14-5.5 | | | | | | | B | | | | B | | | | B | | | | | | |
| 72 | SX14-D10-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 74 | SXC5-6.3 | | | | | | | P | | W | | P | | W | | | | | | | | |
| 78 | SXC16-5.8 | | | | | | | B | | | | | | | | | | | | | | |
| 82 | SXK2-6.0 | | | | | | | | | | | | | | | | | | S | | | |
| 84 | SXW-6.5 | | | | | | | | W | | | | W | | | | W | | | | | |
| 86 | TDA-S-6.5 | | | | | | S | | W | S | | | W | S | | | W | | | | | |
| 90 | TDB-S-6.3 | | | | | | | P | B | | | P | B | | | P | B | | | | | |
| 94 | TDC-S-7.1 | | | | | | | | | | | | | | | | | | | | | |
| 96 | CDM-4.8 | | | | | | | | | | S | | | | S | | | | S | | | |
| 98 | MDC-7.5 | | | | | | | | C | | | | | | | | | | | | | |
| 102 | MMS-plus-7.5/10/12 | | | | | | | | | | | C/M | | | | C/M | | | | | | |
| 106 | nonut® | | | | | | | | | | | | | | | | | | | | | |
| 108 | SC5-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 110 | SCF-6.3 | | | | | | | P | B | | | | | | | | | | | | | |
| 112 | SCFW-6.5 | | | | | | | | W | | | | | | | | | | | | | |
| 114 | SD3-5.5 | | | | | | S | P | | | S | P | | | S | P | | | | | | |
| 116 | SD3-D10-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 118 | SD6-5.5 | | | | | | | P | | | | P | | | | P | | | | | | |
| 120 | SD6-H15-5.5 | | | | | | | | | | | P | | | | P | | | | P | | |
| 122 | SD14-5.5 | | | | | | | B | | | | B | | | | B | | | | | | |
| 124 | SD14-D10-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 126 | SD14-H15-5.5 | | | | | | | | | | | B | | | | B | | | | B | | |
| 128 | SDRT2-5.5 | | | | | | | | | | | | | | S | P | | | | | | |
| 130 | SDT5-5.5 | | | | | | | P | | | | P | | | | | | | | | | |
| 134 | SDT14-5.5 | | | | | | | B | | | | | | | | | | | | | | |
| 138 | SDTW-6.5 | | | | | | | | W | | | | W | | | | | | | | | |
| 140 | SL2-4.8 | | | | | | | | | | S | | | | S | | | | S | | | |
| 142 | SL2-H15-6.3 | | | | | | | | | | S | | | | S | | | | S | | | |
| 144 | SL2-T-4.8 | | | | | | S | | | | S | | | | S | | | | | | | |
| 146 | SL3-H15-6.3 | | | | | | | | | | | P | | | | P | | | | P | | |
| 148 | SLG-T-4.8 | | | | | | S | | | | S | | | | S | | | | | | | |
| 150 | SW-T-4.8 | | | | | | | | W | | | | W | | | | | | | | | |
| 152 | SW2-T-D10-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 154 | SW3-T-6.5 | | | | | | | | W | | | | W | | | | | | | | | |
| 156 | TI-6.3 | | | | | | | | C | | | | C | | | | C | | | | | |
| 158 | BULB-TITE® | | | | | | | | | | | | | | | | | | S | P | B | |

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

| Page | Type | Material | | | | | Sandwich panels | | | | Single-ply insu- lation roof panels | | | | Flashing | | | | Structural connection | | | |
|---|--------------------|----------|----|----|---|---|-----------------|---|---|---|--|---|---|--|----------|---|---|---|--------------------------|-----|--|--|
| | | A2 | A4 | R5 | T | A | | | | | | | | | | | | | | | | |
| 36 | CXLW-4.8 | | | | | | S | | | | | | | | S | | | | | | | |
| 38 | MMS-A4 | | | | | | | | | | | | | | | | | | | C | | |
| 16 | MXC-7.5 | | | | | | | | | C | | | | | | | | | | | | |
| 44 | SCFW-S-6.5 | | | | | | | | | | | | | | | | | | | | | |
| 46 | SDC2-S-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 48 | SDC3-S-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 50 | SL2-S-4.8 | | | | | | S | | | | | | | | S | | | | | | | |
| 52 | SL2-S-5.5 | | | | | | S | | | | | | | | S | | | | | | | |
| 54 | SL2-S-6.3 | | | | | | S | | | | | | | | S | | | | | | | |
| 56 | SL3/2-5-S-6.0 | | | | | | S | | | | | | | | | | | | | | | |
| 58 | SLG-S-4.8 | | | | | | S | | | | | | | | S | | | | | | | |
| 60 | SLG-S-6.5 | | | | | | S | | | | | | | | | | | | | | | |
| 62 | SW2-S-4.8 | | | | | | | | | | | | | | | | | | | | | |
| 64 | SX3-6.0 | | | | | | | | | | | | | | | | | | | | | |
| 66 | SX5-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 68 | SX5-D10-5.5 | | | | | | | | | | | P | | | | | | | | | | |
| 70 | SX14-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 72 | SX14-D10-5.5 | | | | | | | | | | | | B | | | | | | | | | |
| 74 | SXC5-6.3 | | | | | | | P | | | W | | | | | | | | | | | |
| 78 | SXC16-5.8 | | | | | | | | B | | | | | | | | | | | | | |
| 82 | SXK2-6.0 | | | | | | | | | | | | | | | | | | | | | |
| 84 | SXW-6.5 | | | | | | | | | | | | | | | | | | | | | |
| 86 | TDA-S-6.5 | | | | | | S | | | | W | | | | | | | | | | | |
| 90 | TDB-S-6.3 | | | | | | | P | B | | | | | | | | | | | | | |
| 94 | TDC-S-7.1 | | | | | | | | | | | | | | | | | | | | | |
| 96 | CDM-4.8 | | | | | | | | | | | | | | | | | | | | | |
| 98 | MDC-7.5 | | | | | | | | | C | | | | | | | | | | | | |
| 102 | MMS-plus-7.5/10/12 | | | | | | | | | | | | | | | | | | | C/M | | |
| 106 | nonut® | | | | | | | | | | | | | | | S | P | B | | | | |
| 108 | SC5-5.5 | | | | | | | | | | | | | | | | P | | | | | |
| 110 | SCF-6.3 | | | | | | | | | | | | | | | | | | | | | |
| 112 | SCFW-6.5 | | | | | | | | | | | | | | | | | | | | | |
| 114 | SD3-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 116 | SD3-D10-5.5 | | | | | | | | | | | P | | | | | | | | | | |
| 118 | SD6-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 120 | SD6-H15-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 122 | SD14-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 124 | SD14-D10-5.5 | | | | | | | | | | | | B | | | | | | | | | |
| 126 | SD14-H15-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 128 | SDRT2-5.5 | | | | | | | | | | | | | | | | | | | | | |
| 130 | SDT5-5.5 | | | | | | | P | | | | | | | | | | | | | | |
| 134 | SDT14-5.5 | | | | | | | | B | | | | | | | | | | | | | |
| 138 | SDTW-6.5 | | | | | | | | | | W | | | | | | | | | | | |
| 140 | SL2-4.8 | | | | | | | | | | | | | | | | | | | | | |
| 142 | SL2-H15-6.3 | | | | | | | | | | | | | | | | | | | | | |
| 144 | SL2-T-4.8 | | | | | | S | | | | | | | | S | | | | | | | |
| 146 | SL3-H15-6.3 | | | | | | | | | | | | | | | | | | | | | |
| 148 | SLG-T-4.8 | | | | | | S | | | | | | | | S | | | | | | | |
| 150 | SW-T-4.8 | | | | | | | | | | | | | | | | | | | | | |
| 152 | SW2-T-D10-5.5 | | | | | | | | | | | | W | | | | | | | | | |
| 154 | SW3-T-6.5 | | | | | | | | | | | | | | | | | | | | | |
| 156 | TI-6.3 | | | | | | | | | C | | | | | | | | | | C | | |
| 158 | BULB-TITE® | | | | | | S | P | B | | | | | | S | | | | | | | |
| S = Sheets, P = Profiles, B = Beams, C = Concrete, M = Masonry, W = Wood/Timber | | | | | | | | | | | | | | | | | | | | | | |

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

Single Skin



| Self drillers | | | FastTaps | | | Self tappers | | | Rivets | | |
|---------------|---------------|------|----------|--------------|------|--------------|-----------------|------|--------|------|------|
| | Part | Page | | Part | Page | | Part | Page | | Part | Page |
| | A2 SCFW-S-6.5 | 44 | 1 | A2 CXLW-4.8 | 36 | 12 | A4 MXC-7.5 | 40 | 14 | | |
| | A2 SL2-S-4.8 | 50 | 2 | A2 SLG-S-4.8 | 58 | 13 | A2 TDA-S-6.5 | 86 | 15 | | |
| A2 | A4 SL2-S-5.5 | 52 | 3 | T SLG-T-4.8 | 148 | 28 | A2 A4 TDB-S-6.3 | 90 | 16 | | |
| | A2 SL2-S-6.3 | 54 | 4 | | | | T MDC-7.5 | 98 | 29 | | |
| | A2 SW2-S-4.8 | 62 | 5 | | | | T TI-6.3 | 156 | 30 | | |
| A2 | A4 SX3-6.0 | 64 | 6 | | | | | | | | |
| A2 | A4 SX5-5.5 | 66 | 7 | | | | | | | | |
| A2 | A4 SX14-5.5 | 70 | 8 | | | | | | | | |
| A2 | A4 SXC5-6.3 | 74 | 9 | | | | | | | | |
| A2 | A4 SXC16-5.8 | 78 | 10 | | | | | | | | |
| | A2 SXW-6.5 | 84 | 11 | | | | | | | | |
| | T SCF-6.3 | 110 | 17 | | | | | | | | |
| | T SCFW-6.5 | 112 | 18 | | | | | | | | |
| | T SD3-5.5 | 114 | 19 | | | | | | | | |
| | T SD6-5.5 | 118 | 20 | | | | | | | | |
| | T SD14-5.5 | 122 | 21 | | | | | | | | |
| | T SDT5-5.5 | 130 | 22 | | | | | | | | |
| | T SDT14-5.5 | 134 | 23 | | | | | | | | |
| | T SDTW-6.5 | 138 | 24 | | | | | | | | |
| | T SL2-T-4.8 | 144 | 25 | | | | | | | | |
| | T SW-T-4.8 | 150 | 26 | | | | | | | | |
| | T SW3-T-6.5 | 154 | 27 | | | | | | | | |

A2 Austenitic stainless steel A2

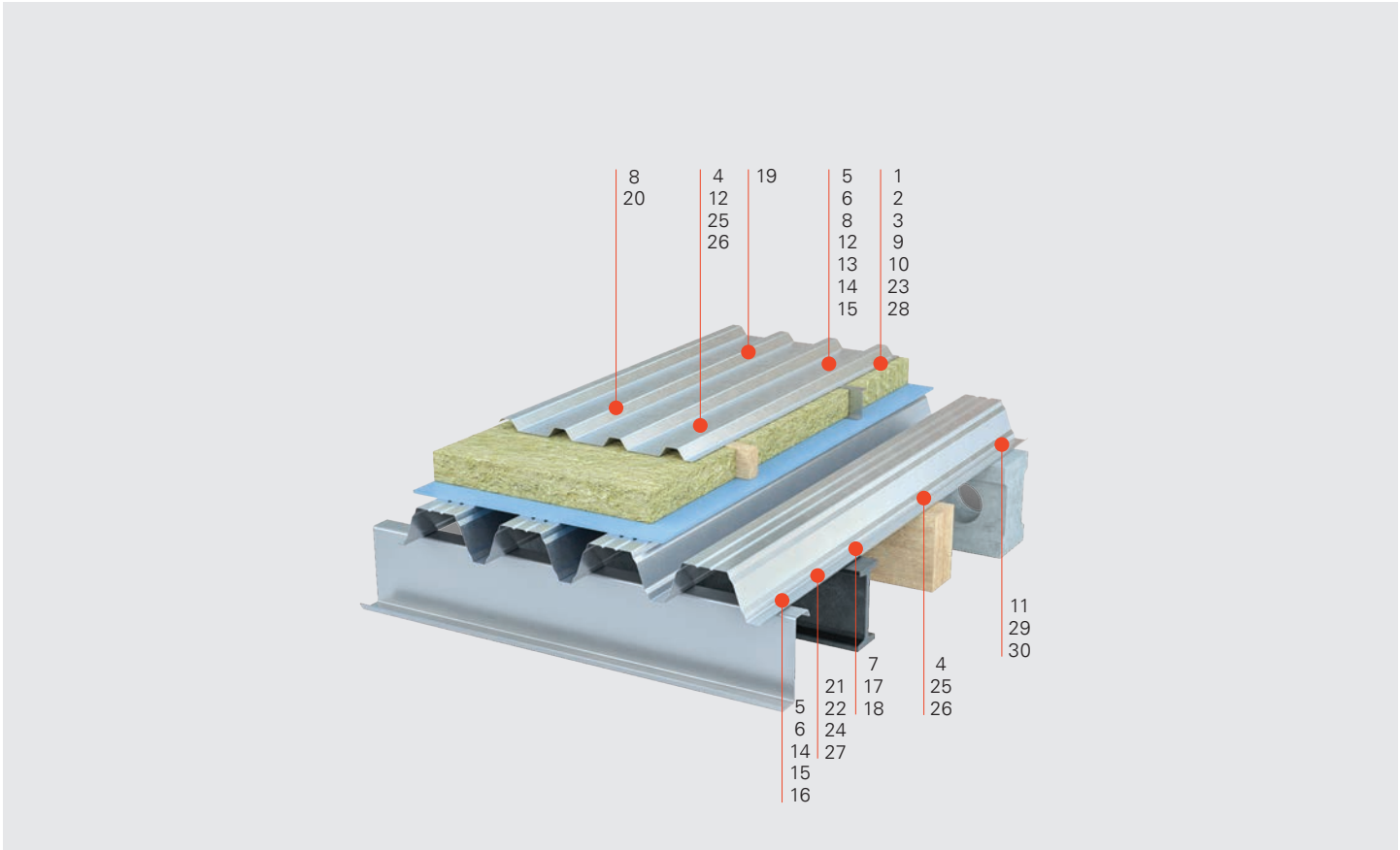
A4 Austenitic stainless steel A4

R5 Austenitic stainless steel R5

T Carbon steel

A Aluminium

Twin Skin



| Self drillers | | | FastTip | | | Self tappers | | | Rivets | | |
|---------------|----------------|------|---------|--------------|-----|------------------|----------------------|-----|--------|--|--|
| | | Page | | | | | | | | | |
| | A2 SL2-S-4.8 | 50 | 1 | | | A4 MMS-7.5/10/12 | 38 | 11 | | | |
| A2 | A4 SL2-S-5.5 | 52 | 2 | A2 CXLW-4.8 | 36 | 9 | | | | | |
| | A2 SL2-S-6.3 | 54 | 3 | A2 SLG-S-4.8 | 58 | 10 | A2 TDA-S-6.5 | 86 | 12 | | |
| | A2 SW2-S-4.8 | 62 | 4 | T CDM-4.8 | 96 | 27 | A2 A4 TDB-S-6.3 | 90 | 13 | | |
| A2 | A4 SX3-6.0 | 64 | 5 | T SLG-T-4.8 | 148 | 28 | T MMS-plus-7.5/10/12 | 102 | 29 | | |
| A2 | A4 SX5-5.5 | 66 | 6 | | | | T TI-6.3 | 156 | 30 | | |
| A2 | A4 SX14-5.5 | 70 | 7 | | | | | | | | |
| A2 | A4 SXC5-6.3 | 74 | 8 | | | | | | | | |
| | T SD3-5.5 | 114 | 14 | | | | | | | | |
| | T SD6-5.5 | 118 | 15 | | | | | | | | |
| | T SD6-H15-5.5 | 120 | 16 | | | | | | | | |
| | T SD14-5.5 | 122 | 17 | | | | | | | | |
| | T SD14-H15-5.5 | 126 | 18 | | | | | | | | |
| | T SDT5-5.5 | 130 | 19 | | | | | | | | |
| | T SDTW-6.5 | 138 | 20 | | | | | | | | |
| | T SL2-4.8 | 140 | 21 | | | | | | | | |
| | T SL2-H15-6.3 | 142 | 22 | | | | | | | | |
| | T SL2-T-4.8 | 144 | 23 | | | | | | | | |
| | T SL3-H15-6.3 | 146 | 24 | | | | | | | | |
| | T SW-T-4.8 | 150 | 25 | | | | | | | | |
| | T SW3-T-6.5 | 154 | 26 | | | | | | | | |

A2 Austenitic stainless steel A2

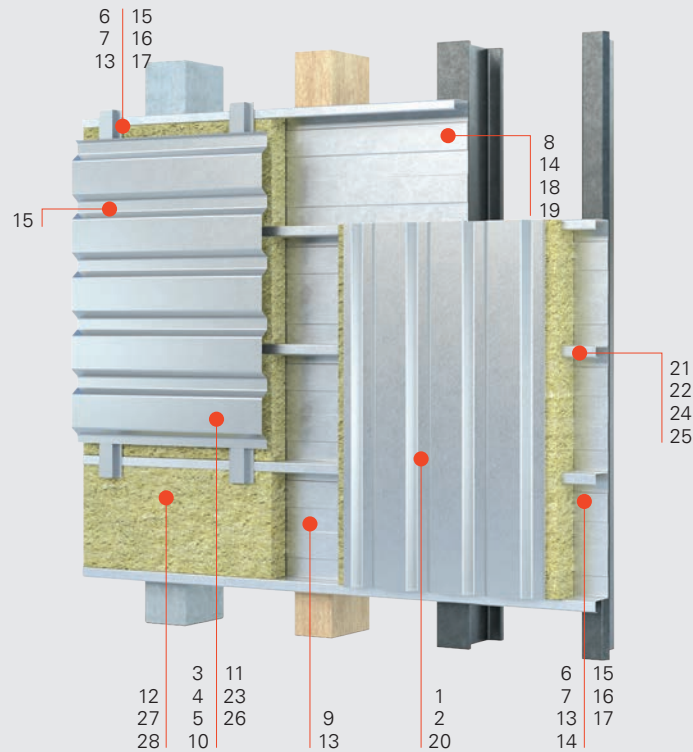
A4 Austenitic stainless steel A4

R5 Austenitic stainless steel R5

T Carbon steel

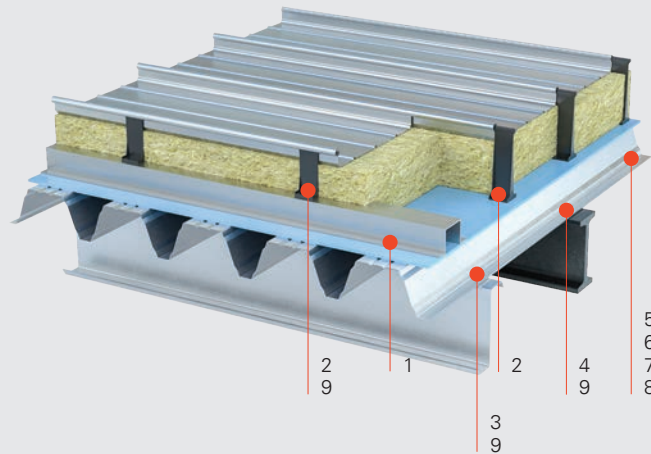
A Aluminium

Liner Tray

[illegible]

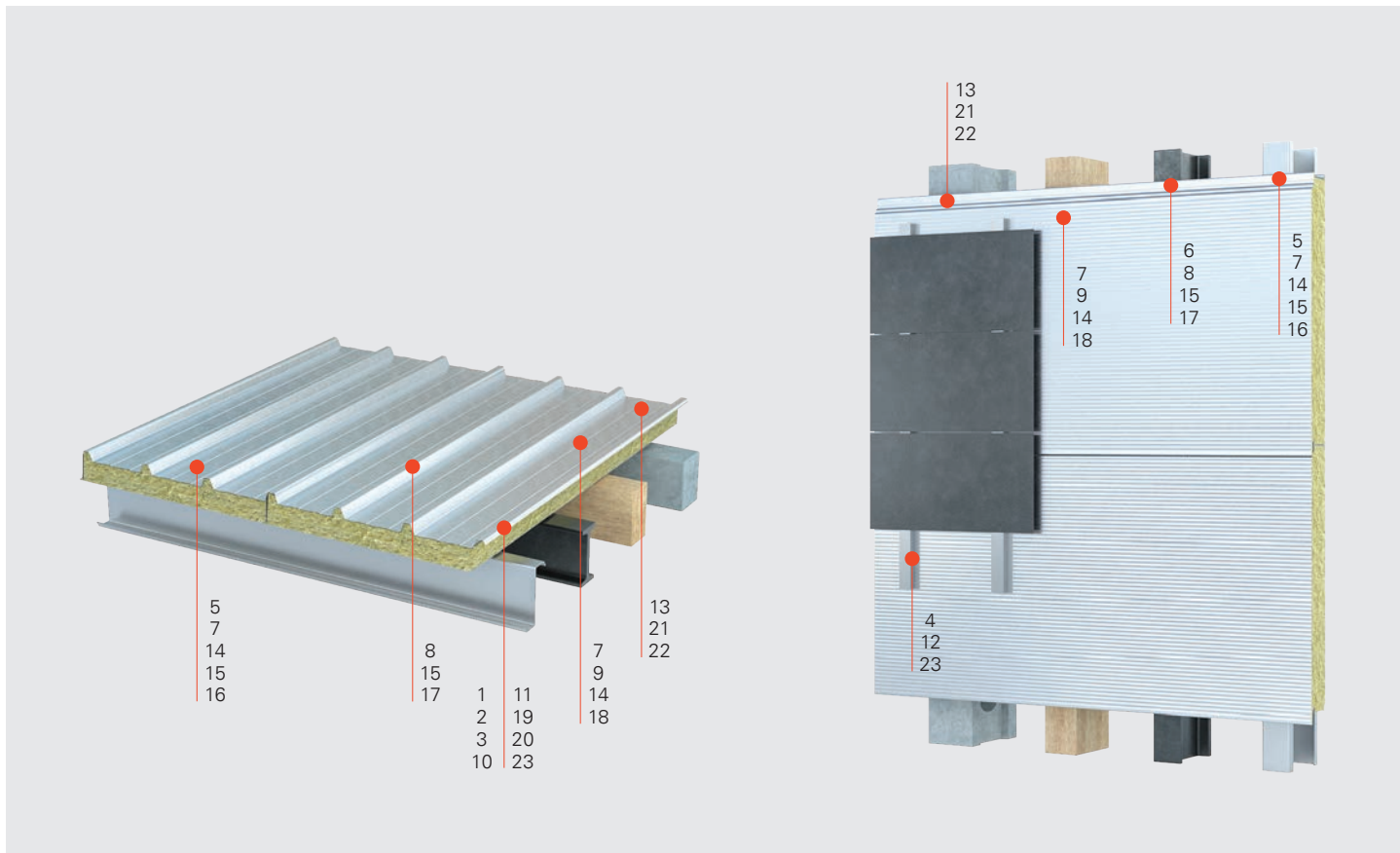
A Aluminium

Standing Seam

[illegible]

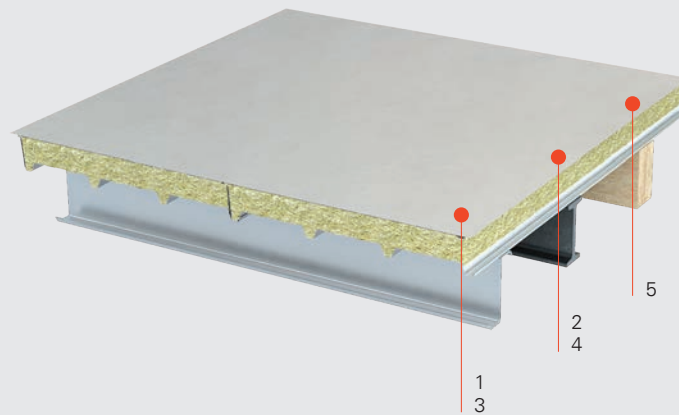
A Aluminium

Sandwich panels

[illegible]

A Aluminium

Single-Ply Insulation Roof Panels

[illegible]

A2 Austenitic stainless steel A2

A4 Austenitic stainless steel A4

R5 Austenitic stainless steel R5

T Carbon steel

A Aluminium

Flashing

[illegible]

A2 Austenitic stainless steel A2

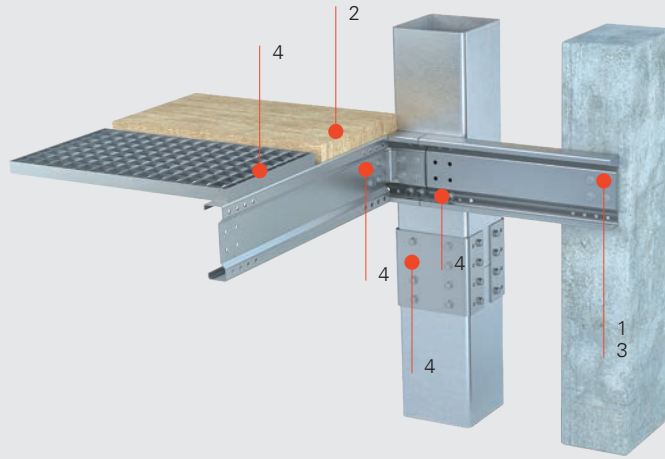
A4 Austenitic stainless steel A4

R5 Austenitic stainless steel R5

T Carbon steel

A Aluminium

Structural Connection

[illegible]

A2 Austenitic stainless steel A2

A4 Austenitic stainless steel A4

R5 Austenitic stainless steel R5

T Carbon steel

A Aluminium

Installation instructions

General information

- Install self-drilling fasteners in general at 1,200–2,000 rpm
- Recommended drilling pressure for self-drilling fasteners: 200–300 N
- Use clean tool, which fits exactly for installation of painted fasteners

Use of impact wrench

- Is only allowed in combination with SFS socket SOK-IT® for fasteners with diameter 4,8–6,3 mm

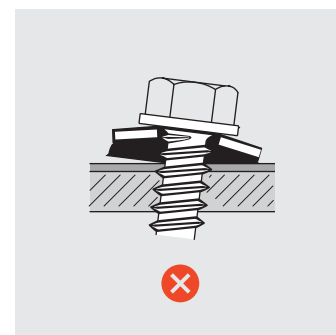
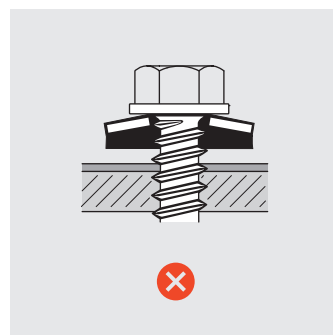
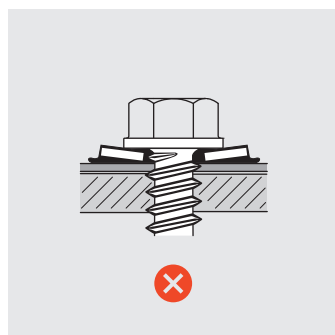
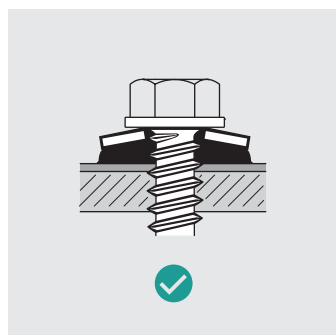
Installation of fastener without washer

- Use of impact wrench is only in combination with SFS socket SOK-IT®
- Maximum tightening torque ~ 8 Nm

Installation of taper (TDA-S, TDB-S) according EN 1090-4:2018

- The taper-thread engagement must be as long as component II thickness, if component II thickness ≤ 6 mm
- The taper-thread engagement must be at least 6 mm, if component II thickness ≥ 6 mm
- NOTE: only the load-bearing part is relevant

Correct washer setting

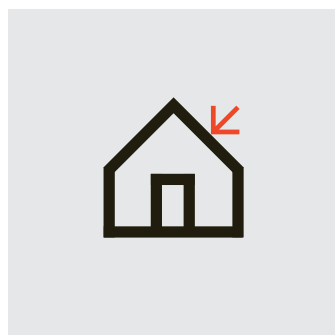


Fastener with sealing washer can only be set correctly by using setting tools equipped with depth locator. Setting with a depth locator results in a uniform setting depth for all fastener.



Cladding

| | |
|------------------|--------------|
| Primary fixing | ≥ 16 mm |
| Secondary fixing | ≥ 10 mm |



Roofing

| | |
|------------------|--------------|
| Primary fixing | ≥ 19 mm |
| Secondary fixing | ≥ 14 mm |



Rooflights

| | |
|------------------|-------|
| Primary fixing | 29 mm |
| Secondary fixing | 29 mm |

Primary fixing

A fastener that secures the profiled sheeting, bracket or secondary steel to the supporting structure e.g. sheeting to structure or spacer, spacer to structure.

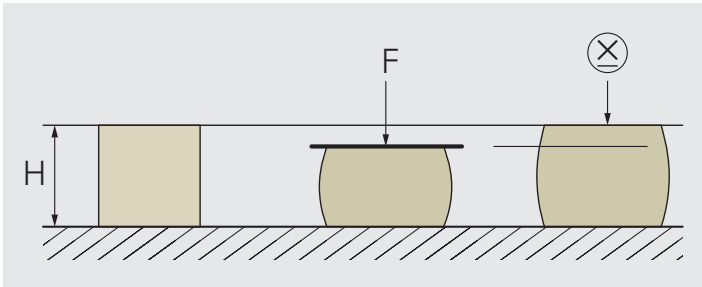
Secondary fixing

A fastener that secures the laps of profiled sheets to each other but not to the supporting structure; and also used to attach lightweight flashings to profiled sheeting.

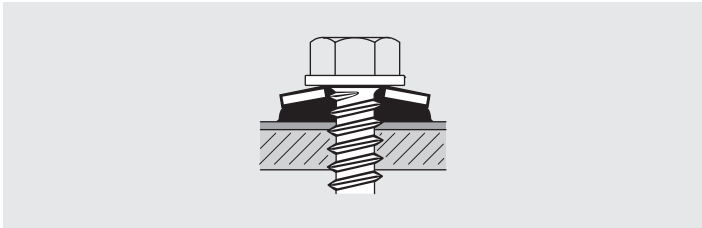
Sealing washer quality

Our EPDM bonded sealing washers are used for weathered roofing and cladding applications and guarantee a long term sealing. The non-conductive EPDM rubber is based on the elastomer EPDM with reinforcing fillers and has high weather and ozone resistance with long-term durability. Further characteristics are high chemical and temperature resistance.

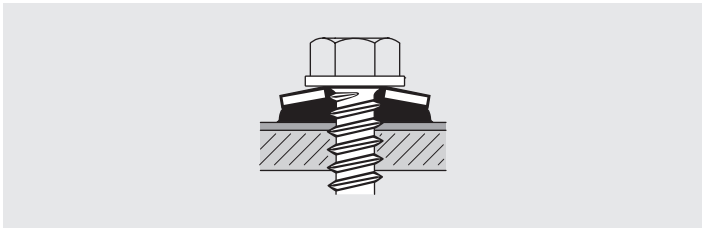
Our solution
High weather tightness given by high EPDM elasticity. ✓



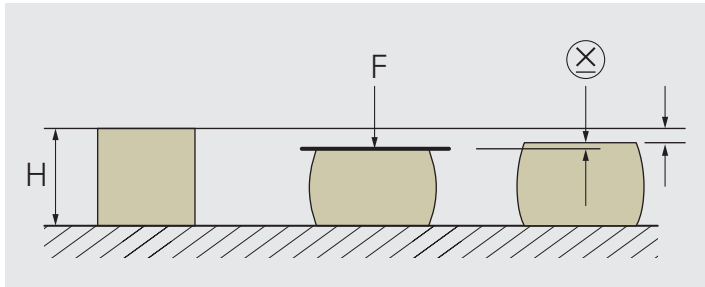
High weather tightness given by adapted inner diameter of the sealing washer with the fastener geometry. ✓



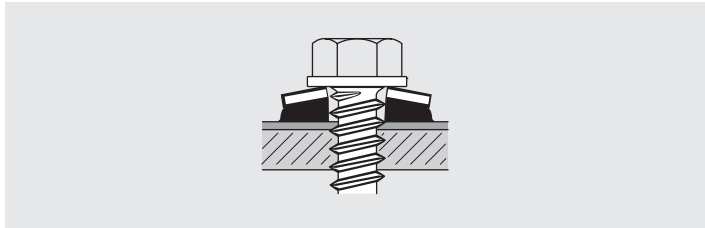
Minimal risk of dimpling of the outer skin and high weather tightness given by thick and soft EPDM. ✓



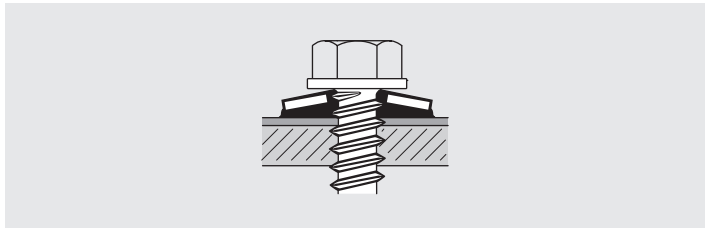
Standard solution
Restricted weather tightness due to low elasticity of sealing material. ✗



No weather tightness because of inner diameter of sealing washer does not fit with the fastener geometry. ✗

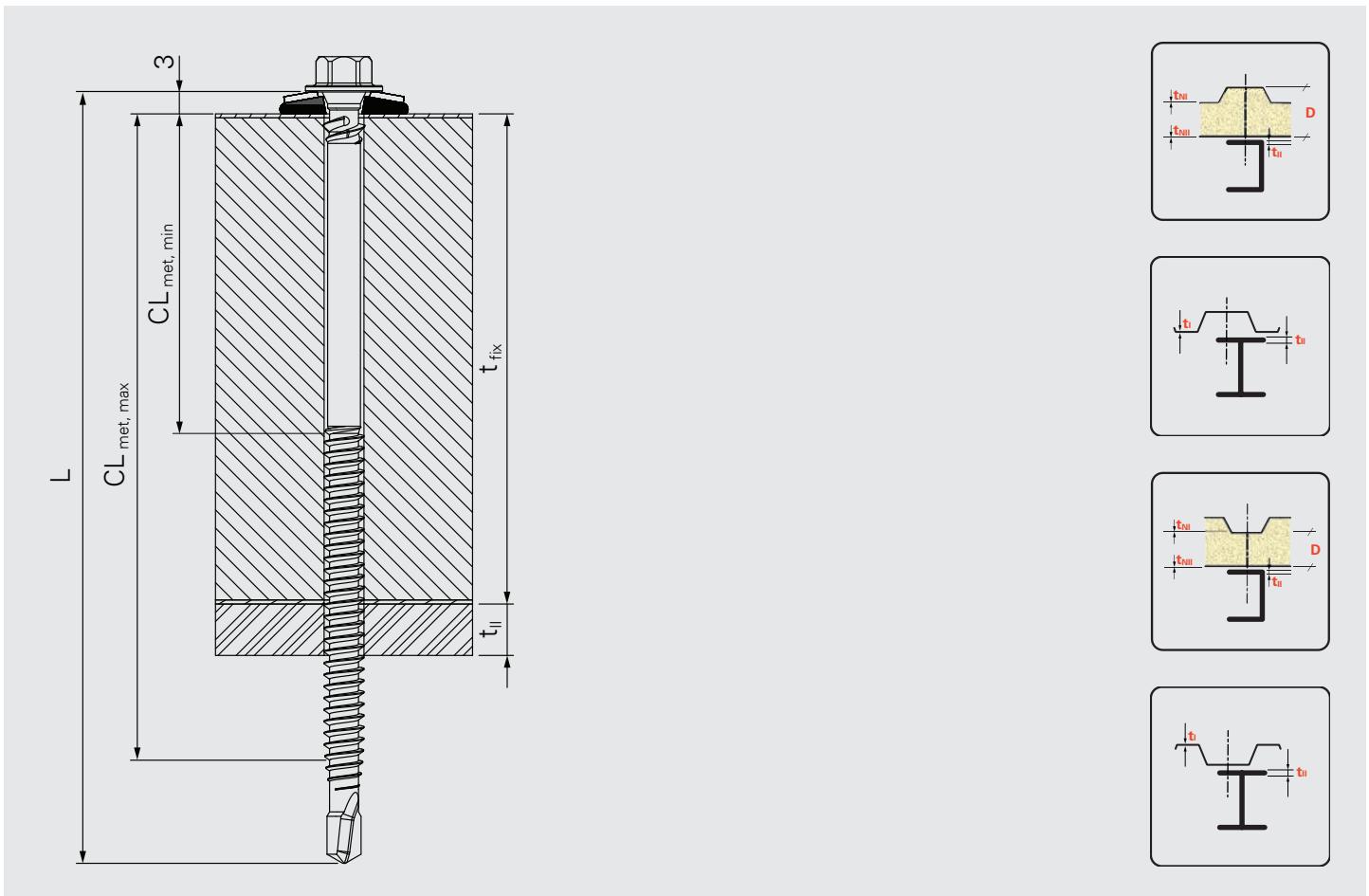


High risk of dimpling and leakage given by thin and hard sealing materials. ✗



Subconstruction metal

Clamping length CL_{met}



Fastener length selection according Eurocode 1990-1-4:2018

$t_{II} < 6 \text{ mm}$

Total component t_{II} is within the clamping length.

$$CL_{met, \min} \leq t_{fix}$$

$$CL_{met, \max} \geq t_{fix} + t_{II}$$

$t_{II} \geq 6 \text{ mm}^*$

Min. 6 mm of component t_{II} is within the clamping length.

$$CL_{met, \min} \leq t_{fix}$$

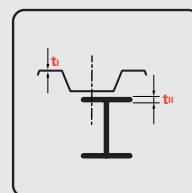
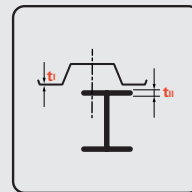
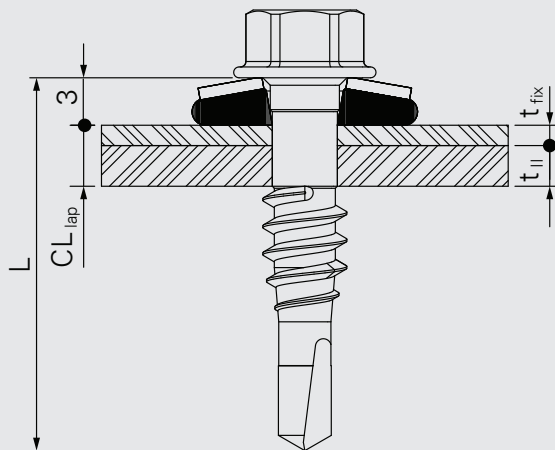
$$CL_{met, \max} \geq t_{fix} + 6 \text{ mm}$$

Explanation and short cuts

| | |
|------------|--|
| CL_{met} | Clamping length of the fastener |
| L | Length of the fastener |
| t_{fix} | Σ of: t_i , sealing tape, insulation etc. |
| 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. |

Subconstruction metal

Clamping length CL_{lap}



Fastener selection

$$CL_{lap, min} \leq t_{fix} + t_{II} \leq CL_{lap, max}$$

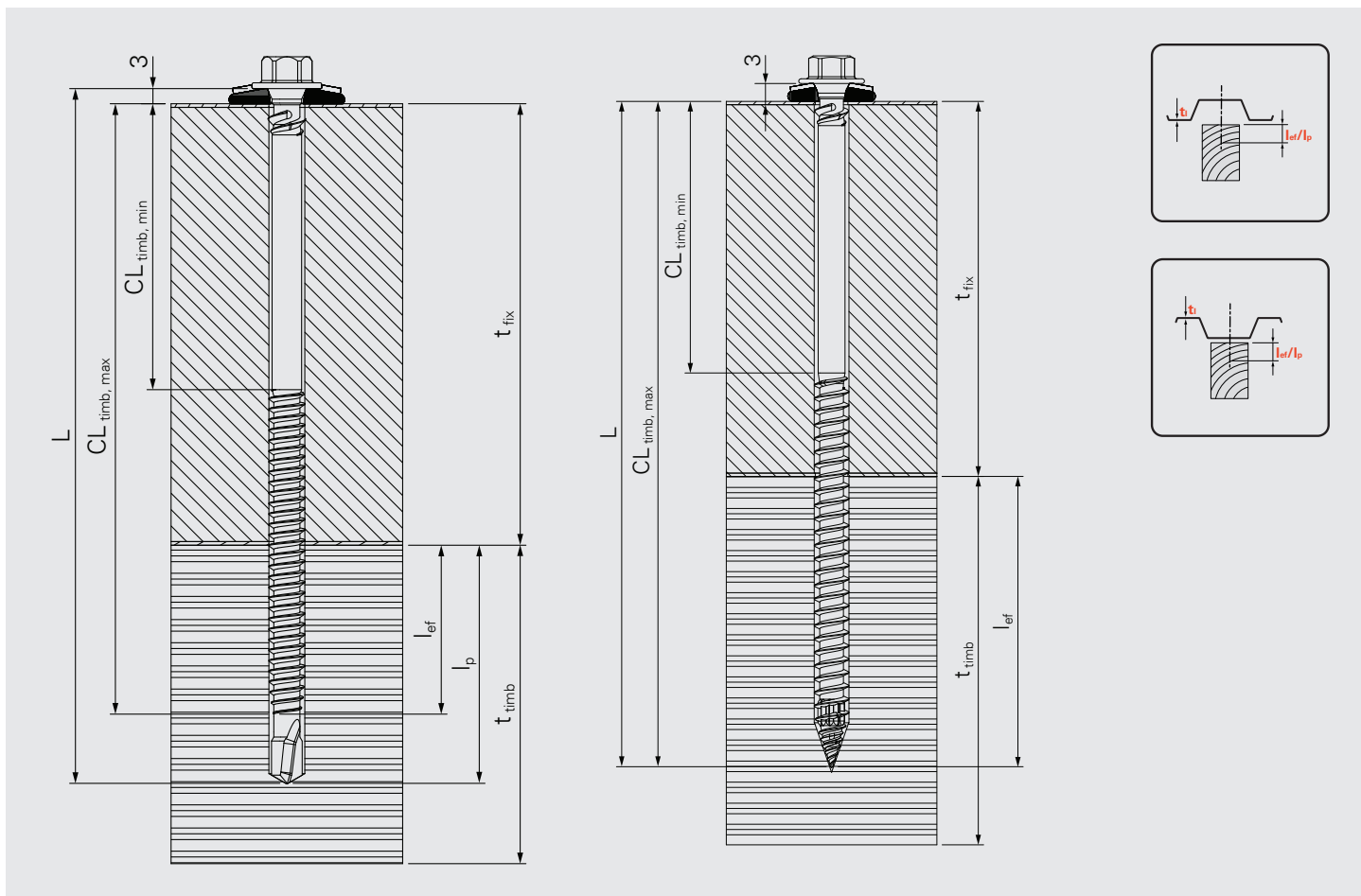
Total component t_{II} is within the clamping length.

Explanation and short cuts

| | |
|------------|--|
| CL_{lap} | Clamping length of the fastener |
| L | Length of the fastener |
| t_{fix} | Σ of: t_i , sealing tape, insulation etc. |
| 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. |

Subconstruction timber

Clamping length CL_{timb}



Fastener length selection

$$L \leq t_{fix} + t_{timb}$$

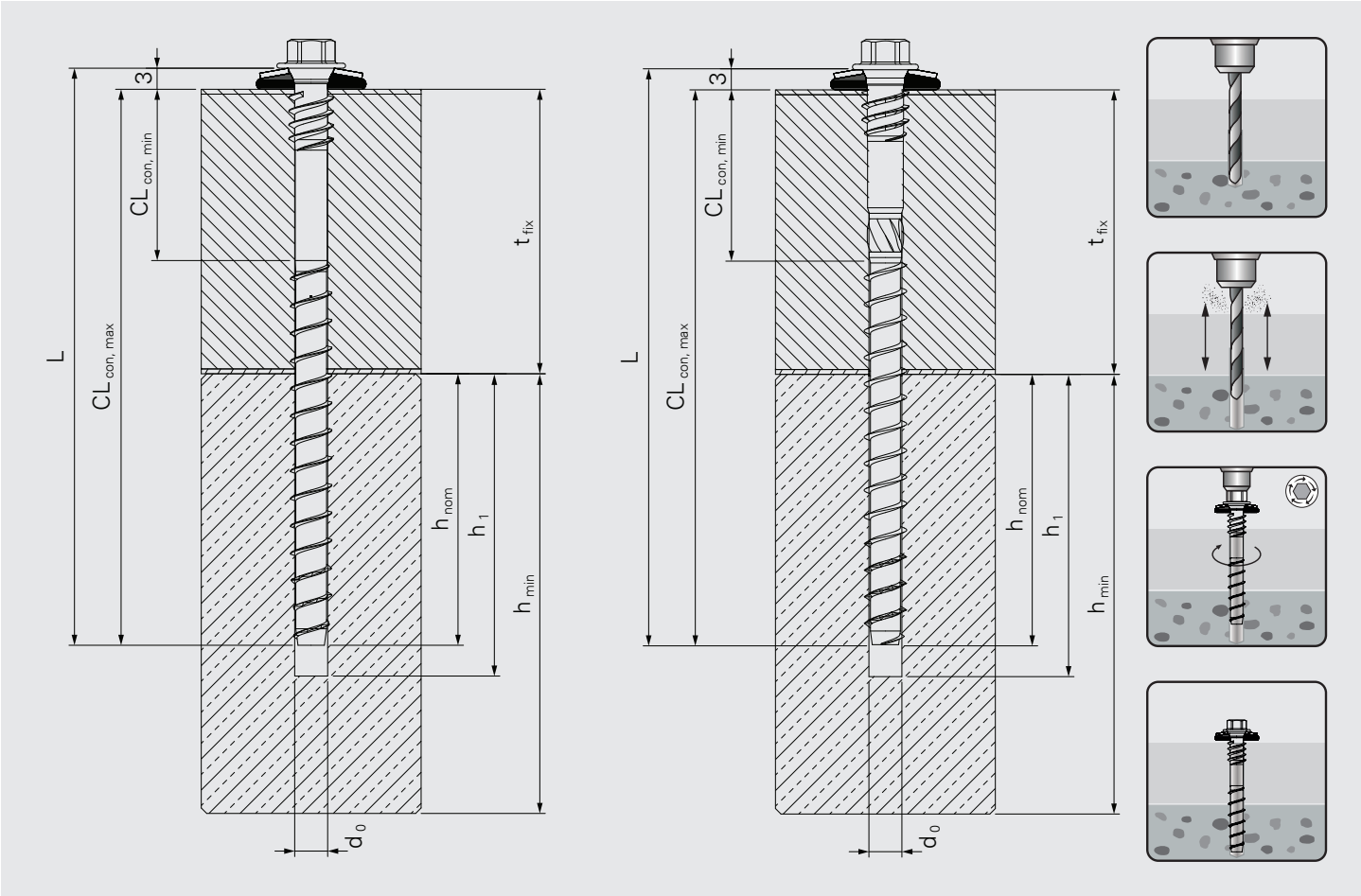
$$CL_{timb, max} \geq t_{fix} + l_{ef}$$

Explanation and short cuts

| | |
|--------------|---|
| CL_{timb} | Clamping length of the fastener |
| L | Length of the fastener |
| l_{ef}/l_p | Effective embedment depth in component II made of timber (l_{ef} without drill point) (l_p with drill point) |
| t_{fix} | Σ of: t_i , sealing tape, insulation etc. |
| t_i | Thickness of component I |
| t_{timb} | Thickness of timber substructure |

Subconstruction concrete

Clamping length CL_{con}



Fastener length selection

$$CL_{con, max} \geq t_{fix} + h_{nom}$$

$$CL_{con, min} \leq t_{fix}$$

Note:
Minimum requirement h_{nom} , h_1 and h_{min} according approvals.

Explanation and short cuts

- CL Clamping length of the fastener
- h_{min} Minimum thickness of concrete subconstruction
- h_{nom} Nominal anchor depth
- h_1 Drill hole depth
- L Length of the fastener
- t_{fix} Thickness of fixture

Power output of the tangential impact wrench for use with MULTI-MONTI®

| Diameter | MDC/MXC | | MMS | MMS | MMS | MMS | MMS | MMS | MMS |
|--|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | ≤220 | >220 | Ø 6 | Ø 7,5 | Ø 10 | Ø 12 | Ø 14 | Ø 16 | Ø 20 |
| Power output of battery impact driver* | max. 300Nm | max. 450Nm | ca. 100Nm | ca. 160Nm | ca. 250Nm | ca. 600Nm | ca. 600Nm | ca. 600Nm | ca. 800Nm |

*Recommended power output without guarantee

Product codes

Explanation

| S | X | C | | 5 | – | L12 | – | S19 | – | 6,3x80 | – | A4 | – | M | – | RAL9010 |
|---------------|-------------------|-----------------|-----------------|-------------------|---|------------|---|-----------------------|---|-----------|---|------------------------------------|---|---------------------|---|---------------------|
| Fastener type | Fastener material | Fastener design | Market-specific | Drilling capacity | | 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 | – |
| | | Sandwich panelcut-off | C |
| | | Sandwich panelrun-out | X |
| | | Fibre cement | F |
| | Steel onto timber | Standard | W |
| | | Sandwich 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 |

| | | | | | | | | | | | | | | | | |
|----------------------|--------------------------|------------------------|------------------------|--------------------------|----------|-------------------|----------|------------------------------|----------|------------------|----------|---|----------|----------------------------|----------|----------------------------|
| S | X | C | | 5 | - | L12 | - | S19 | - | 6,3x80 | - | A4 | - | M | - | RAL9010 |
| Fastener type | Fastener material | Fastener design | Market-specific | Drilling capacity | | 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 | - |
| | | Sandwich panel | C |
| | Structural connection | Standard | N |
| | | Thread free zone | NL |

Market-specific

| | | |
|---------|---------------|----------|
| Fance | Kaskinox head | S |
| | Zamac head | Z |
| CEE, UK | Plastic head | P |

Drilling capacity

| | |
|---------------------|---------------|
| Max. capacity in mm | e.g. 5 |
|---------------------|---------------|

Clamping lenght CL

| | |
|-----------------|-------------------|
| Min.-max. in mm | e.g. 35-65 |
|-----------------|-------------------|

Product codes

Explanation

| | | | | | | | | | | | | | | | | |
|---------------|-------------------|-----------------|-----------------|-------------------|---|------------|---|-----------------------|---|-----------|---|------------------------------------|---|---------------------|---|---------------------|
| S | X | C | | 5 | - | L12 | - | S19 | - | 6,3x80 | - | A4 | - | M | - | RAL9010 |
| Fastener type | Fastener material | Fastener design | Market-specific | Drilling capacity | | Head shape | | Additional components | | Dimension | | Material quality & surface coating | | Collated (optional) | | Painting (optional) |

Fasten Head shape er type

| | | | |
|--------------|--------------------------------|---------|--------|
| 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 |
| Square head | Flat | - | F |

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×length in mm | e.g. 6,3×140 |
|-----------------------|--------------|

| | | | | | | | | | | | | | | | | |
|----------------------|--------------------------|------------------------|------------------------|--------------------------|----------|-------------------|----------|------------------------------|----------|------------------|----------|---|----------|----------------------------|----------|----------------------------|
| S | X | C | | 5 | - | L12 | - | S19 | - | 6,3x80 | - | A4 | - | M | - | RAL9010 |
| Fastener type | Fastener material | Fastener design | Market-specific | Drilling capacity | | 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 | Bright zinc plated | - |
| | Durocoat® 480 | - |
| | High protection (MMS, nonut®) | HP |
| | Zinc plated | - |

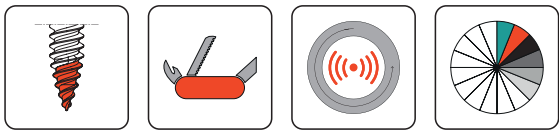
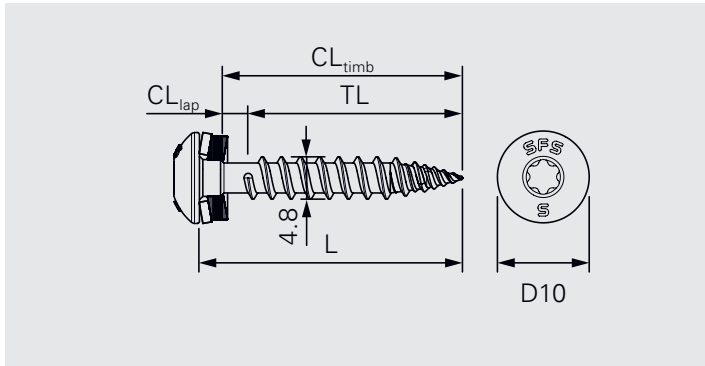
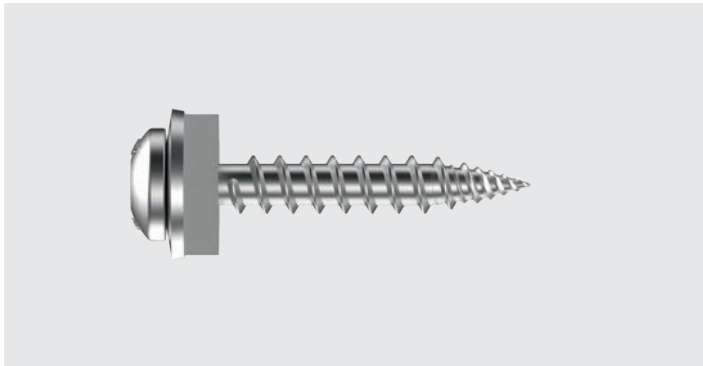
Collated

| | | |
|------------------|--------------|------------|
| SFS setting tool | CF400, CF401 | M |
| | Quik Drive® | MQD |

Painting

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

CXLW-4.8



Application

- Fastening of overlaps of profile sheets
- Fastening of flashings onto sandwich panels
- Fastening of metal profile sheets onto timber
- Fastening of flashing onto profile sheets
- Fastening of flashing onto sandwich panels

Fastener material

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

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{max} t_i + t_{II}$ |
|-------------------------------|---------------|--------------------------------|--------------------|-----------------------------|
| Steel | 0.40–1.00 | Steel | 0.40–1.00 | 2.00 |
| Steel | 2×0.40–2×0.63 | Steel | 2×0.40–2×0.63 | 2.50 |
| Steel | 0.40–1.00 | Timber | $l_{ef} \geq 25.0$ | – |

Approvals

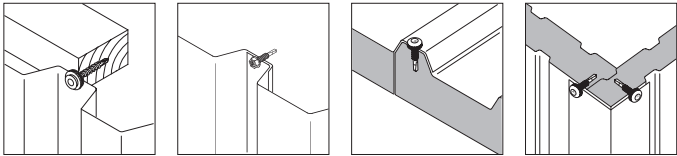
–

Features and Benefits

- Fast and chip-free installation thanks to the FastTip
- Self drilling fastener suitable for fastening of overlaps and flashings
- Hybrid fastener suitable for fastening onto metal and timber subconstruction
- No scratches on painted metal surfaces thanks to the sharp FastTip
- Secured against unwinding given by cut-off thread-end and free-spin zone
- No torque control required given by free-spin zone
- Cost saving installation due to pre-drilling of metal sheets no longer necessary
- High quality EPDM sealing washer for long-term weather sealing
- For roof applications with drill pressure of 300 N (30 kg) the new CXLW-4.8 can drill trough 2×1.25 mm steel sheets

Documentation

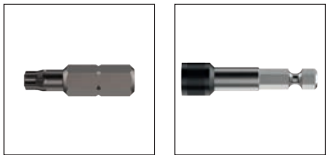
Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2
onto steel and timber

| Product code | PU | L | CL _{lap} | TL/CL _{timb} | t _{fix, tim} | A10 |
|--------------------------------|------|----|-------------------|-----------------------|-----------------------|---------|
| CXLW-D10-A10-4,8×28-A2 | 1000 | 28 | 0.40–2.50 | 0–25 | 0–1 | 1655713 |
| CXLW-D10-A10-4,8×28-A2 | 250 | 28 | 0.40–2.50 | 0–25 | 0–1 | 1676175 |
| CXLW-D10-A10-4,8×28-A2-RAL7024 | 250 | 28 | 0.40–2.50 | 0–25 | 0–1 | 1655745 |
| CXLW-D10-A10-4,8×28-A2-RAL9006 | 250 | 35 | 0.40–2.50 | 0–25 | 0–1 | 1655748 |

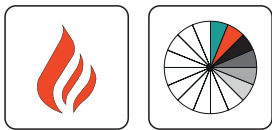
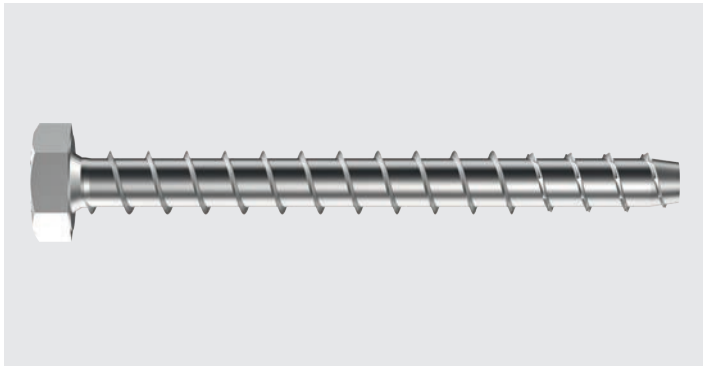
t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|------------------|----|-------|------------|---------|
| T20W-25-HEX ¼" | 10 | ¼" | T25W | 895280 |
| Bit holder ZA ¼" | 1 | ¼" | ¼" | 1162306 |

MMS-A4



Application

- Fastening of metal plates, profiles, brackets onto concrete
- Fastening of metal decks, liner trays onto concrete
- Fastening of timber battens onto concrete

Fastener material

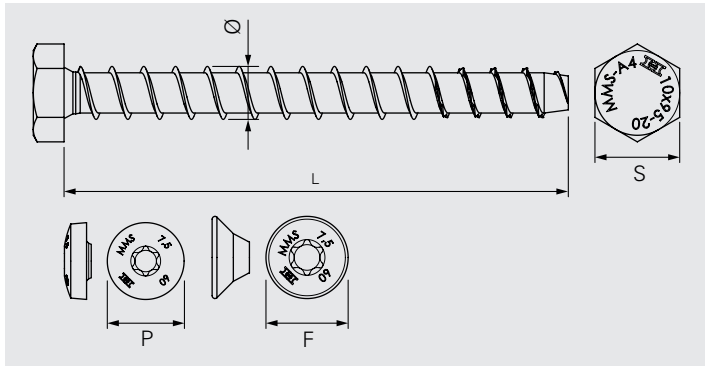
Austenitic stainless steel A4, case hardened tip

Features and Benefits

- Self tapping fastener suitable for installation onto concrete
- Easy 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

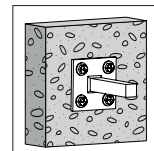
Approval document (ETA) | Declaration of performance (DoP)



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

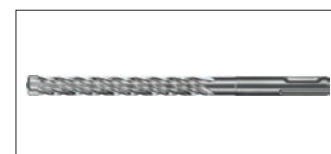
Approvals

CE
ETA-05/0011



Fastener in A4 onto concrete

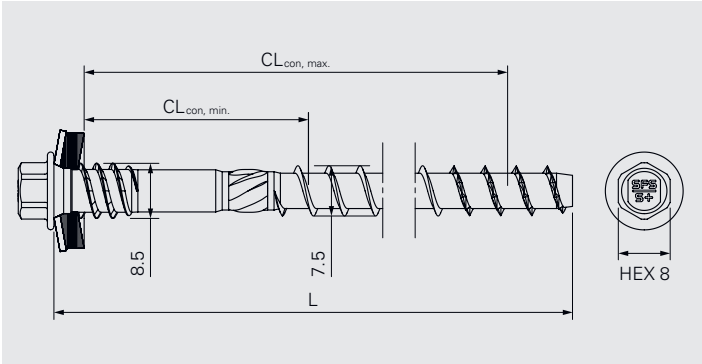
| Product code | PU | L | t _{fix} | Drive | |
|----------------------|----|-----|------------------|-------|---------|
| MMS-F-C14-7,5×75-A4 | 50 | 75 | 0–10 | T30 | 1480027 |
| MMS-F-C14-7,5×85-A4 | 50 | 85 | 0–20 | T30 | 1480028 |
| MMS-F-C14-7,5×95-A4 | 50 | 95 | 0–30 | T30 | 1486553 |
| MMS-F-C14-7,5×115-A4 | 50 | 115 | 0–50 | T30 | 1486583 |
| MMS-P-D14-7,5×75-A4 | 50 | 75 | 0–10 | T30 | 1480029 |
| MMS-P-D14-7,5×85-A4 | 50 | 85 | 0–20 | T30 | 1480030 |
| MMS-S-7,5×75-A4 | 50 | 75 | 0–10 | HEX13 | 1479976 |
| MMS-S-10×85-A4 | 25 | 85 | 0–10 | HEX16 | 1480024 |
| MMS-S-12×100-A4 | 25 | 100 | 0–10 | HEX18 | 1480026 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | 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 |
| E313-¼"-50 | 1 | ¼" | HEX13 | – | – | – | – | 508029 |
| E513-½"-78 | 1 | ½" | HEX13 | – | – | – | – | 1649258 |
| E416-½"-38 | 1 | ½" | HEX16 | – | – | – | – | 1389740 |
| T30-25-HEX¼" | 10 | ¼" | T30 | – | – | – | – | 2401110 |
| Bit holder ZA¼" | 1 | ¼" | ¼" | – | – | – | – | 1162306 |

MXC-7.5



Application

Fastening of sandwich panels onto concrete
Fastening of profile sheets onto concrete

| | | | |
|-------------------|-------------|--|--|
| Fastener Ø | 7.50 | | |
| Pre-drill Ø | 6.0 | | |
| Embedment depth | 65.0 | | |

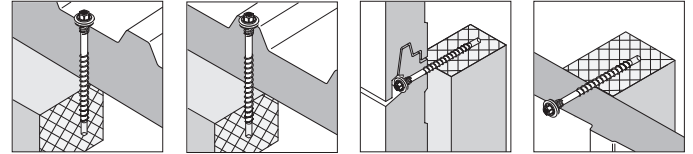
Fastener material

Austenitic stainless steel A4, case hardened tip
Sealing washer: Austenitic stainless steel A4, EPDM-seal

| |
|------------------|
| Approvals |
| — |

Features and Benefits

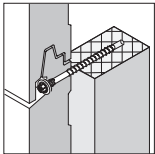
- Self tapping fastener suitable for installation of sandwich panels onto concrete
- High quality EPDM sealing washer for long-term weather sealing
- Perfect supporting of the sandwich panel outer-skin given by support thread with cut-off thread-end
- Optimized support function achieved by engineered double support thread
- High bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- Easy insertion and high load capacities given by the ideal core-/thread geometry
- Reduced abrasion achieved by toothed functional tip



Fastener in A4 onto concrete

| Product code | PU | L | CL _{con} | t _{fix, con} | S16/A4 | S19/A4 | S22/A4 |
|-----------------------|-----|-----|-------------------|-----------------------|---------|---------|---------|
| MXC-S19/A4-7,5×95-A4 | 100 | 95 | 20–92 | 20–27 | 1596755 | 1596762 | 1596768 |
| MXC-S19/A4-7,5×115-A4 | 100 | 115 | 37–112 | 37–47 | 1596786 | 1596788 | 1596790 |
| MXC-S19/A4-7,5×135-A4 | 100 | 135 | 57–132 | 57–67 | 1596802 | 1596806 | 1596807 |
| MXC-S19/A4-7,5×155-A4 | 100 | 155 | 77–152 | 77–87 | 1596812 | 1596813 | 1596818 |
| MXC-S19/A4-7,5×175-A4 | 100 | 175 | 97–172 | 97–107 | 1596862 | 1596866 | 1596868 |
| MXC-S19/A4-7,5×195-A4 | 100 | 195 | 117–192 | 117–127 | 1596947 | 1596953 | 1596956 |
| MXC-S19/A4-7,5×215-A4 | 100 | 215 | 137–212 | 137–147 | 1597023 | 1597024 | 1597025 |
| MXC-S19/A4-7,5×235-A4 | 100 | 235 | 157–232 | 157–167 | 1597028 | 1598660 | 1598674 |
| MXC-S19/A4-7,5×255-A4 | 100 | 255 | 177–252 | 177–187 | 1598678 | 1598686 | 1598715 |
| MXC-S19/A4-7,5×275-A4 | 100 | 275 | 197–272 | 197–207 | 1598722 | 1598726 | 1598727 |
| MXC-S19/A4-7,5×295-A4 | 100 | 295 | 217–292 | 217–227 | 1598733 | 1598735 | 1598791 |
| MXC-S19/A4-7,5×315-A4 | 100 | 315 | 237–312 | 237–247 | 1598798 | 1598813 | 1598814 |
| MXC-S19/A4-7,5×335-A4 | 100 | 335 | 257–332 | 257–267 | 1598917 | 1598932 | 1598970 |
| MXC-S19/A4-7,5×355-A4 | 100 | 355 | 277–352 | 277–287 | 1598993 | 1599213 | 1599214 |
| MXC-S19/A4-7,5×375-A4 | 100 | 375 | 297–372 | 297–307 | 1599216 | 1599217 | 1599218 |

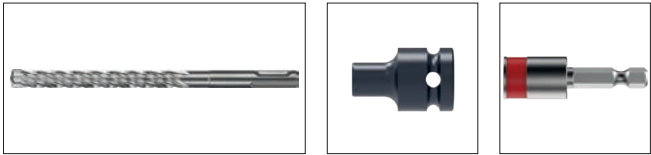
t_{fix, con}: CL_{con, min.} – (CL_{met, max.} – h_{nom, min.})



Fastener in A4
onto concrete

| Product code | PU | L | CL _{con} | t _{fix, con} | No washer |
|----------------|-----|-----|-------------------|-----------------------|-----------|
| MXC-7,5×95-A4 | 100 | 95 | 23–95 | 23–30 | 1596782 |
| MXC-7,5×115-A4 | 100 | 115 | 40–115 | 40–50 | 1596801 |
| MXC-7,5×135-A4 | 100 | 135 | 60–135 | 60–70 | 1596811 |
| MXC-7,5×155-A4 | 100 | 155 | 80–155 | 80–90 | 1596820 |
| MXC-7,5×175-A4 | 100 | 175 | 100–175 | 100–110 | 1596891 |
| MXC-7,5×195-A4 | 100 | 195 | 120–195 | 120–130 | 1596957 |
| MXC-7,5×215-A4 | 100 | 215 | 140–215 | 140–150 | 1597026 |
| MXC-7,5×235-A4 | 100 | 235 | 160–235 | 160–170 | 1598675 |
| MXC-7,5×255-A4 | 100 | 255 | 180–255 | 180–190 | 1598720 |
| MXC-7,5×275-A4 | 100 | 275 | 200–275 | 200–210 | 1598728 |
| MXC-7,5×295-A4 | 100 | 295 | 220–295 | 220–230 | 1598795 |
| MXC-7,5×315-A4 | 100 | 315 | 240–315 | 240–250 | 1598816 |
| MXC-7,5×335-A4 | 100 | 335 | 260–335 | 260–270 | 1598972 |
| MXC-7,5×355-A4 | 100 | 355 | 280–355 | 280–290 | 1599215 |
| MXC-7,5×375-A4 | 100 | 375 | 300–375 | 300–310 | 1599219 |

t_{fix, con}: CL_{con, min.} – (CL_{met, max.} – h_{nom, min.})

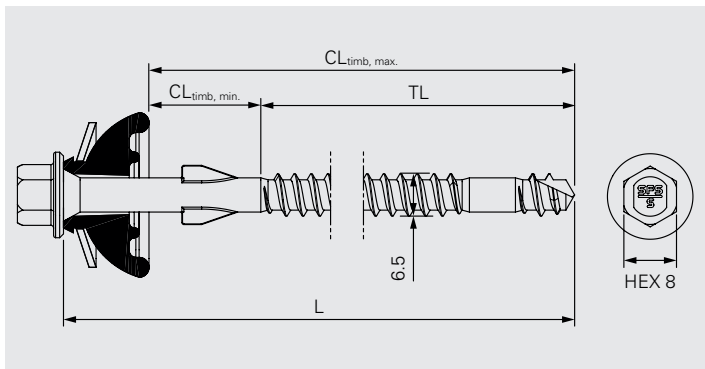
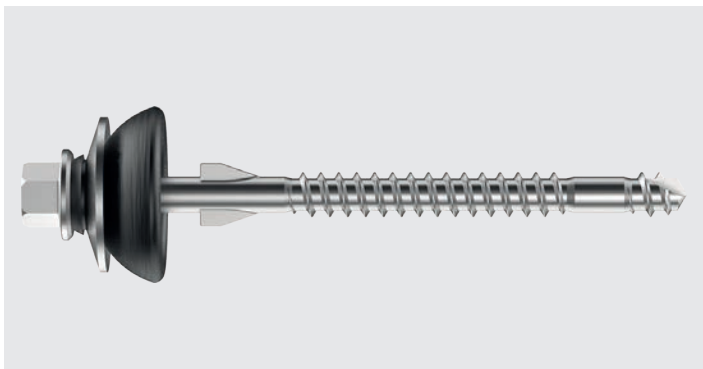


Accessories/Ancillaries

| Product code | Drive | Head drive | PU | D | L | WL | FL | |
|------------------|-------|------------|----|---|-----|-----|-----|---------|
| SDS-6x210/150-4C | – | – | 1 | 6 | 210 | 150 | 150 | 1487583 |
| SDS-6x310/250-4C | – | – | 1 | 6 | 210 | 250 | 250 | 1487584 |
| SDS-6x515/455-4C | – | – | 1 | 6 | 515 | 455 | 200 | 1608141 |
| E308-¼"-50 | ¼" | HEX8 | 1 | – | – | – | – | 1646160 |
| E508-½"-40 | ½" | HEX8 | 1 | – | – | – | – | 1648380 |



SCFW-S-6.5



Application

Fastening of fibre cement boards onto timber

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|--------|--------------------------------|--------------------|------------------------------|
| Fibre cement | 2x6.50 | Timber | $l_{ef} \geq 57.0$ | — |

Fastener material

Austenitic stainless steel A2

BAZ washer: Austenitic stainless steel A2, EPDM-seal

Approvals

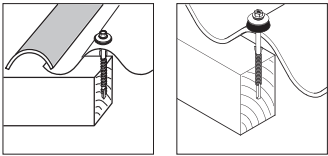


Features and Benefits

- Self drilling fastener suitable for corrugated fibre cement boards
- High quality EPDM sealing element for long-term weather sealing
- Fast installation thanks to the threaded drill point
- No pre-drilling of fibre cement board required thanks to expanding wings

Documentation

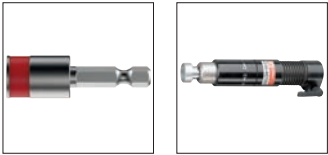
Approval document (ETA) | Declaration of performance (DoP)



Fastener in A2
onto timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | |
|--------------------|-----|-----|----|--------------------|------------------------|---------|
| SCFW-S-BAZ-6,5×130 | 100 | 130 | 50 | 0-120 | 0-63 | 1627280 |

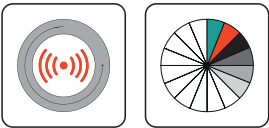
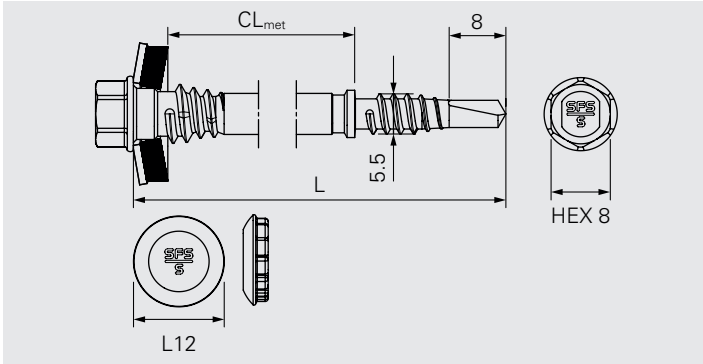
t_{fix, timb}: CL_{timb, min.} - (CL_{timb, max.} - l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-------------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| CF40-FEIN-ASCS6.3-BASIC | 1 | FEIN | - | 1371950 |

SDC2-S-5.5



Application

Distance fastening of profile sheets onto liner trays

| Component 1 (t _i) | | Component 2 (t _{II}) | | Σ _{max} t _i +t _{II} |
|-------------------------------|----------|--------------------------------|-------------|--|
| Steel | 0.50–2.0 | Steel | 0.63–2×1.25 | 4.50 |
| Aluminium | 0.80–2.0 | Steel | 0.63–2×1.25 | 4.50 |

Fastener material

Austenitic stainless steel A2, case hardened drill point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

Approvals

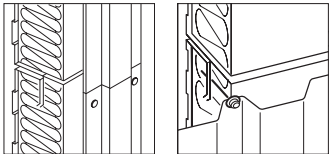


Features and Benefits

- Self drilling fastener suitable for installation of metal profile sheets at a set distance from liner trays
- Perfect supporting of the metal sheet given by support thread with cut-off thread-end
- Precisely fastening distance given by the flange on the shank
- No torque control required given by free-spin zone
- High shear resistance achieved by optimized fastener geometry
- High bending capacity for absorption of thermal expansion of the profile sheet
- High quality EPDM sealing washer for long-term weather sealing
- Secured against unwinding given by cut-off thread-end

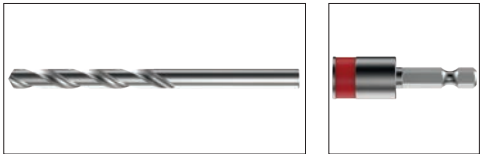
Documentation

Installation instruction | Technical Data



Fastener in A2
onto steel

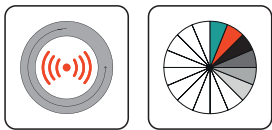
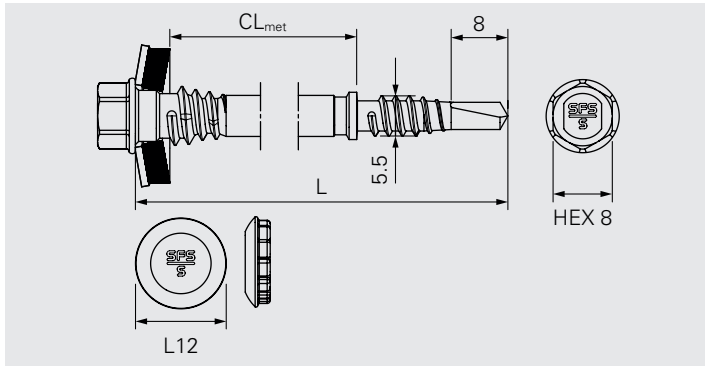
| Product code | PU | L | CL _{met} / Insulation | Liner tray (t _{lin}) substructure | S16 |
|--------------------|-----|-----|-----------------------------------|--|---------|
| SDC2-S-S16-5,5×64 | 100 | 64 | 40 | 0.63–2.50 | 1134176 |
| SDC2-S-S16-5,5×104 | 250 | 104 | 80 | 0.63–2.50 | 1478861 |



Accessories/Ancillaries

| Product code | PU | L | Drive | Head drive | |
|-----------------|----|--------|-------|------------|---------|
| Driller HSS-6,5 | 10 | 101/63 | – | – | 893457 |
| E308-¼"-50 | 1 | | ¼" | HEX8 | 1646160 |

SDC3-S-5.5



Application

Distance fastening of profile sheets onto liner trays

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|----------|--------------------------------|-------------|------------------------------|
| Steel | 0.50–2.0 | Steel | 0.63–2×1.50 | 5.0 |
| Aluminium | 0.80–2.0 | Steel | 0.63–2×1.50 | 5.0 |

Fastener material

Austenitic stainless steel A2, case hardened drill point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

Approvals

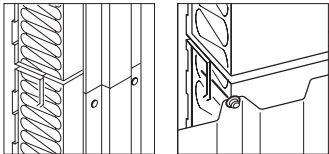


Features and Benefits

- Self drilling fastener suitable for installation of metal profile sheets at a set distance from liner trays
- Perfect supporting of the metal sheet given by support thread with cut-off thread-end
- Precisely fastening distance given by the flange on the shank
- No torque control required given by free-spin zone
- High shear resistance achieved by optimized fastener geometry
- High bending capacity for absorption of thermal expansion of the profile sheet
- High quality EPDM sealing washer for long-term weather sealing
- Secured against unwinding given by cut-off thread-end

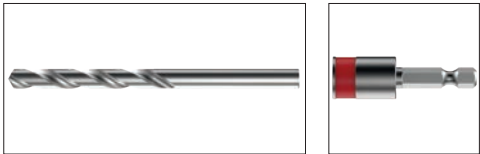
Documentation

Installation instruction I Technical Data



Fastener in A2
onto steel

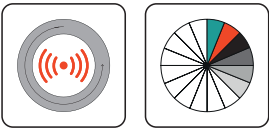
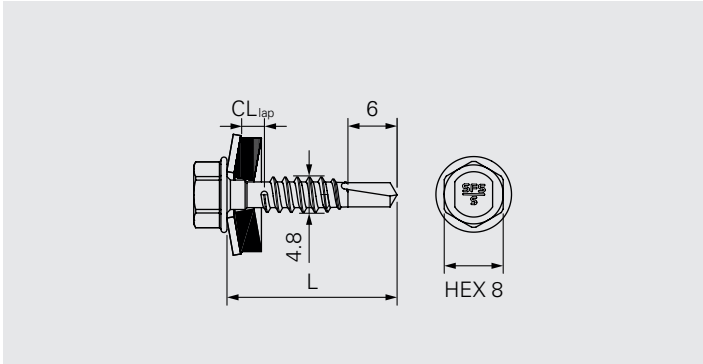
| Product code | PU | L | CL _{met} / Insulation | Liner tray (t _{in}) substructure | S16 |
|--------------------|-----|-----|-----------------------------------|---|---------|
| SDC3-S-S16-5,5×64 | 100 | 64 | 40 | 0.63–3.0 | 1526645 |
| SDC3-S-S16-5,5×104 | 250 | 104 | 80 | 0.63–3.0 | 1541205 |



Accessories/Ancillaries

| Product code | PU | L | Drive | Head drive | |
|-----------------|----|--------|-------|------------|---------|
| Driller HSS-6,5 | 10 | 101/63 | – | – | 893457 |
| E308-¼"-50 | 1 | | ¼" | HEX8 | 1646160 |

SL2-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}) | | Σ _{max} t _i +t _{ii} |
|-------------------------------|-------------|--------------------------------|-------------|--|
| Steel | 0.40–1.50 | Steel | 0.40–1.50 | 2.50 |
| Steel | 2×0.63–0.88 | Steel | 2×0.63–0.88 | 3.60 |

Fastener material

Austenitic stainless steel A2, case hardened drill point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

Approvals

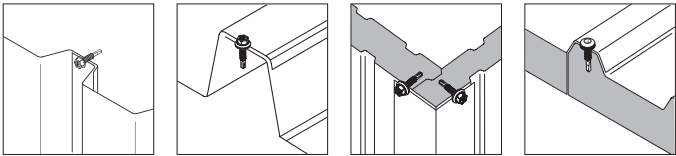
CE₁₉
ETA-10/0198

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 and free-spin zone
- High quality EPDM sealing washer for long-term weather sealing

Documentation

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



Fastener in A2
onto steel

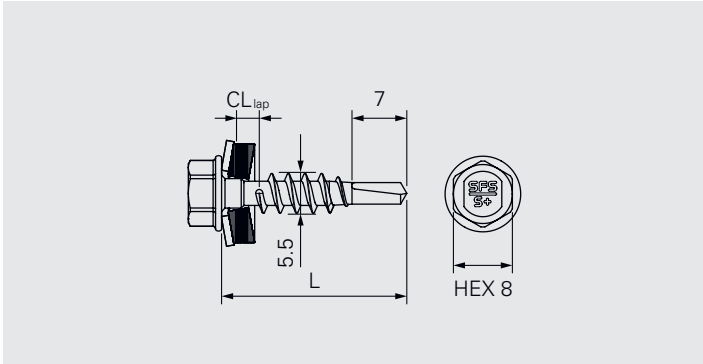
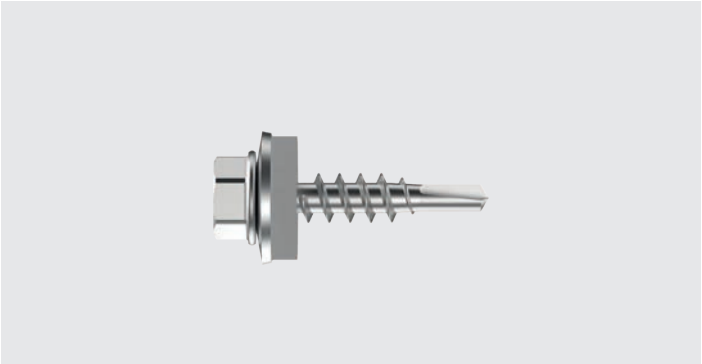
| Product code | PU | L | CL _{lap} | S14 | S16 |
|------------------|-----|----|-------------------|---------|---------|
| SL2-S-S14-4,8×22 | 250 | 22 | 0.80–2.50 | 1158560 | 1082912 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

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

| Component 1 (t _i) | | Component 2 (t _{ii}) | | Σ _{max} t _i +t _{ii} |
|-------------------------------|-----------|--------------------------------|-----------|--|
| Steel | 0.40–1.50 | Steel | 0.40–1.50 | 2.50 |
| Aluminium | 0.50–1.50 | Aluminium | 0.50–1.50 | 3.0 |

Fastener material

Austenitic stainless steel A2/A4, case hardened drill point
Sealing washer: Austenitic stainless steel A4/A4 EPDM-seal

Approvals

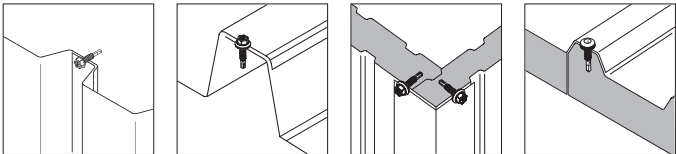
CE₁₉
ETA-10/0198

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 and free-spin zone
- 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 | CL _{lap} | S14 | S16 | S19 |
|---------------------|-----|----|-------------------|---------|---------|---------|
| SL2-S-S14-5,5×25-A2 | 250 | 25 | 0.80–2.50 | 1486245 | 1659401 | 1133480 |

Fastener in A4
onto steel and aluminium

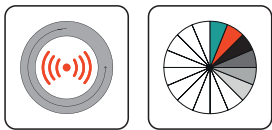
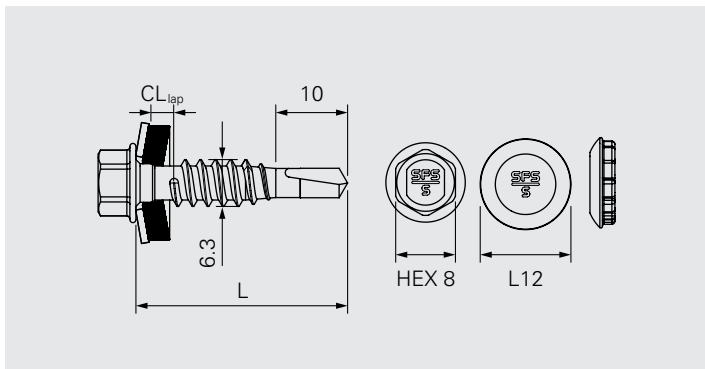
| Product code | PU | L | CL _{lap} | S14/A4 | S16/A4 | S19/A4 |
|------------------------|-----|----|-------------------|---------|---------|---------|
| SL2-S-S14/A4-5,5×25-A4 | 250 | 25 | 0.80–2.50 | 1585156 | 1614748 | 1588962 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

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

Fastener material

Austenitic stainless steel A2, case hardened drill point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

| Component 1 (t _i) | | Component 2 (t _{ii}) | | $\Sigma_{max} t_i + t_{ii}$ |
|-------------------------------|-----------|--------------------------------|-----------|-----------------------------|
| Steel | 0.40–1.50 | Steel | 0.40–1.50 | 2.50 |
| Aluminium | 0.50–1.50 | Aluminium | 0.50–1.50 | 3.0 |

Approvals

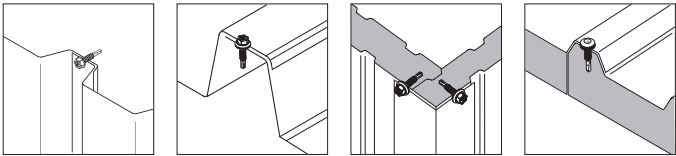
CE₁₉
ETA-10/0198

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 and free-spin zone
- 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

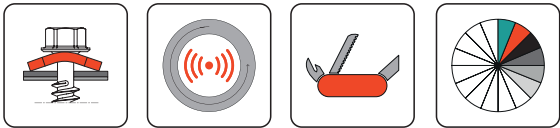
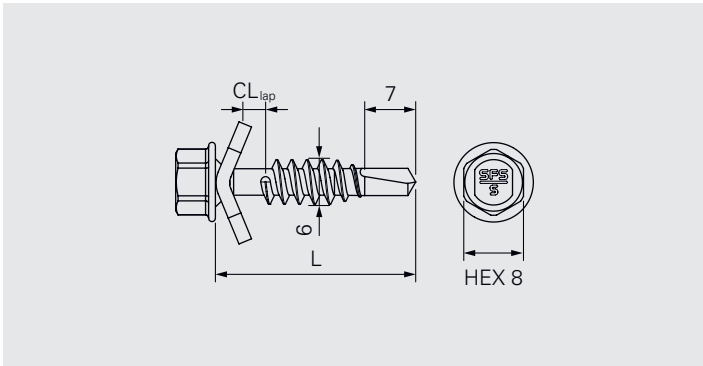
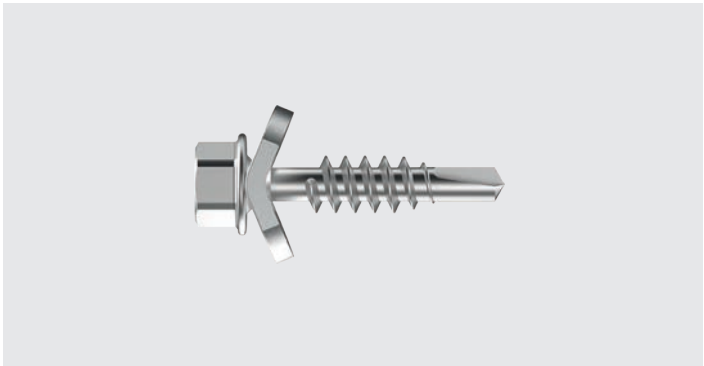
| Product code | PU | L | CL _{lap} | S14 | S16 | S19 |
|----------------------|-----|----|-------------------|---------|---------|---------|
| SL2-S-S14-6,3×28 | 500 | 28 | 0.80–2.50 | 1210627 | 1133512 | 1133511 |
| SL2-S-L12-S14-6,3×28 | 500 | 28 | 0.80–2.50 | 1135477 | – | – |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SL3/2-5-S-6.0



Application

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

Fastener material

- Austenitic stainless steel A2/A4, case hardened drill point
- Curved disc: Austenitic stainless steel A2/A4

| Component 1 (t _i) | | Component 2 (t _{ii}) | | $\Sigma_{\max} t_i + t_{ii}$ |
|-------------------------------|----------|--------------------------------|-------------|------------------------------|
| Steel | 1.0–2.0 | Steel | 0.63–2×0.90 | 3.80 |
| Aluminium | 1.50–3.0 | Steel | 0.63–2×0.90 | 4.80 |

Approvals

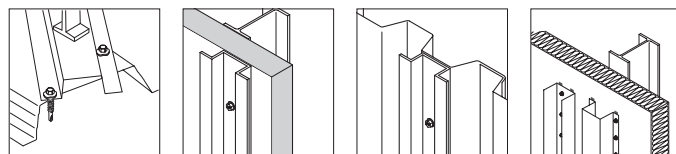
CE₁₉
ETA-10/0198

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 and free-spin zone
- 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)

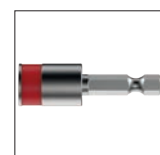


Fastener in A2 onto steel and aluminium

| Product code | PU | L | CL _{lap} | SV16 |
|---------------------|-----|----|-------------------|---------|
| SL3/2-5-S-SV16-6×27 | 500 | 27 | 1.90–4.80 | 1071554 |

Fastener in A4 onto steel and aluminium

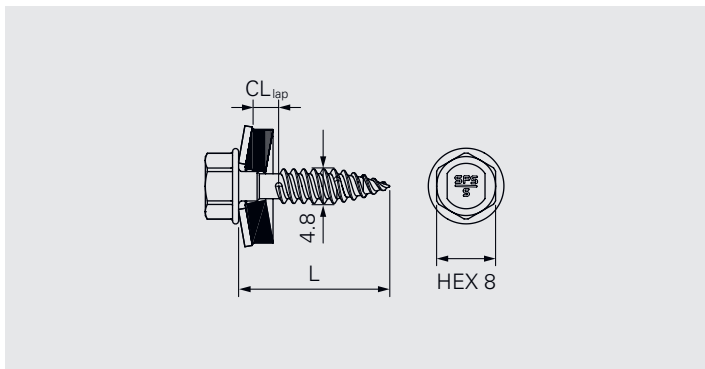
| Product code | PU | L | CL _{lap} | SV16/A4 |
|---------------------------|-----|----|-------------------|---------|
| SL3/2-5-S-SV16/A4-6×27-A4 | 500 | 27 | 1.90–4.80 | 1426185 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

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

Fastener material

Austenitic stainless steel A2, case hardened speed point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

| 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 |

Approvals

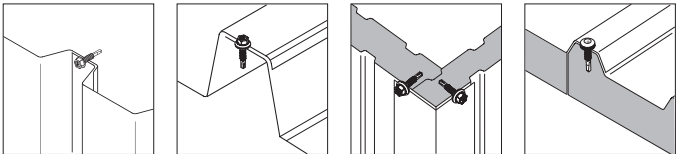
CE₁₉
ETA-10/0198

Features and Benefits

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

Documentation

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



Fastener in A2
onto steel

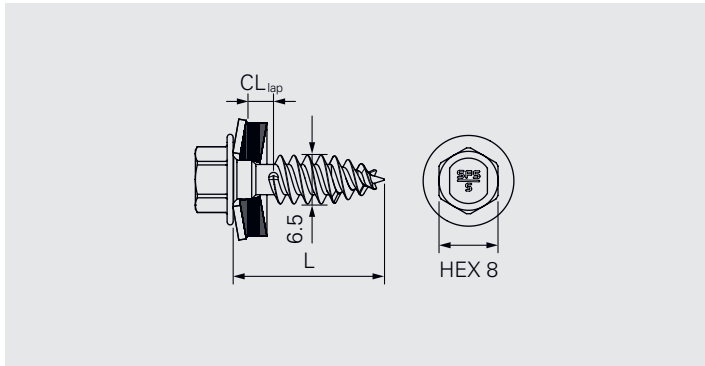
| Product code | PU | L | CL _{lap} | S14 | S16 | S19 |
|------------------|-----|----|-------------------|---------|---------|---------|
| SLG-S-S14-4,8×20 | 250 | 20 | 0.80–2.0 | 1351313 | 1378614 | 1378615 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SLG-S-6.5



Application

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

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|----------|--------------------------------|------------|------------------------------|
| Steel predrilled | 1.50–5.0 | Steel | 0.50–2×1.0 | 6.0 |
| Alu predrilled | 1.50–5.0 | Steel | 0.50–2×1.0 | 6.0 |
| Steel | 0.40–1.0 | Steel | 0.40–1.0 | 2.0 |

Fastener material

Austenitic stainless steel A2, case hardened speed point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

Approvals

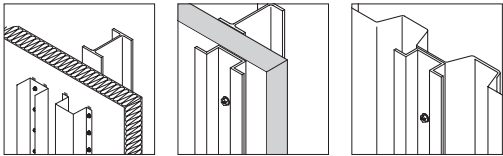


Features and Benefits

- Self drilling fastener suitable for installation of pre-punched metal profiles onto thin metal sheets
- High quality EPDM sealing washer for long-term weather sealing
- Fast and chip-free installation thanks to the FastTip
- No torque control required given by free-spin zone
- Secured against unwinding given by cut-off thread-end and free-spin zone
- Cost saving installation due to post-cleaning of chips no longer necessary
- High tension resistance achieved by optimized fastener geometry

Documentation

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



Fastener in A2
onto steel

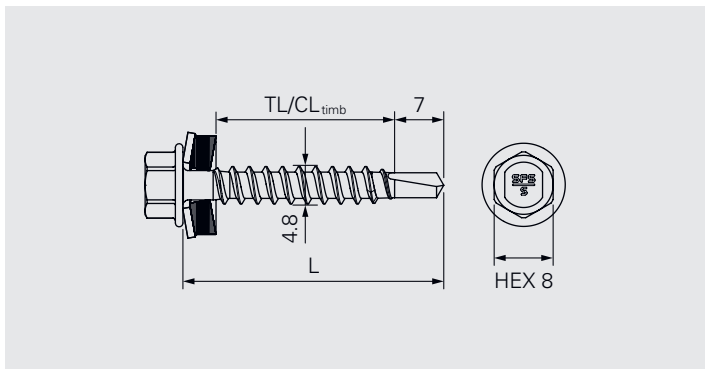
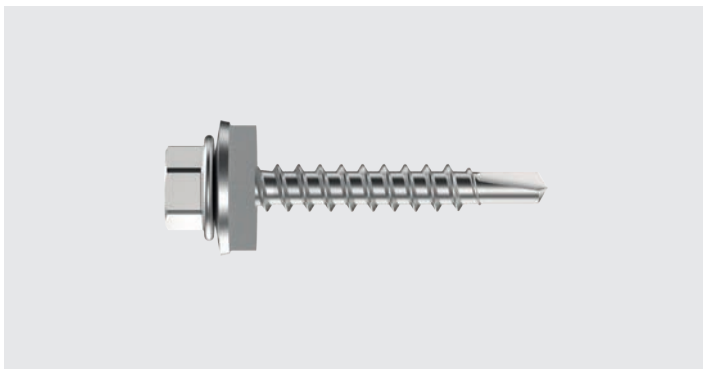
| Product code | PU | L | CL _{lap} | Pre-drill Ø | No washer | S14 | S16 |
|----------------------|------|----|-------------------|-------------|-----------|---------|---------|
| SLG/0-2-S-S14-6,5×20 | 250 | 20 | 0–2 | – | – | 1492629 | – |
| SLG/4-6-S-S16-6,5×24 | 1000 | 24 | 4–6 | 6.50–7.20 | – | – | 1618935 |
| SLG/2-5-S-6,5×20 | 250 | 20 | 2–5 | 6.50–7.20 | 1468117 | – | – |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SW2-S-4.8



Application

Fastening of profile sheets onto timber

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|-----------|--------------------------------|--------------------|------------------------------|
| Steel | 0.50–1.50 | Timber | $l_{ef} \geq 25.0$ | – |
| Aluminium | 0.50–1.50 | – | – | – |

Fastener material

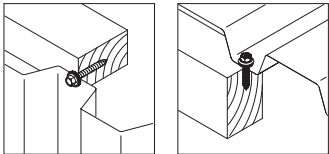
Austenitic stainless steel A2, case hardened drill point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

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



Fastener in A2
onto timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | S14 |
|---------------------|-----|----|----|--------------------|------------------------|--------|
| SW2-S-S14-4,8×35-A2 | 250 | 35 | 25 | 0-25 | 0-1 | 755834 |

t_{fix, timb}: CL_{timb, min.} - (CL_{timb, max.} - l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SX3-6.0



Application

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

Fastener material

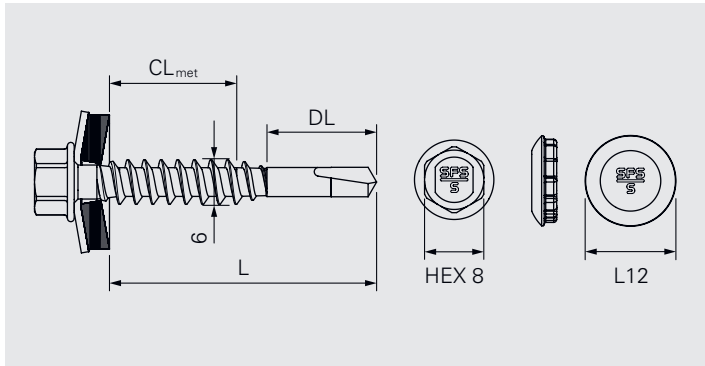
Austenitic stainless steel A2/A4, case hardened drill point
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

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

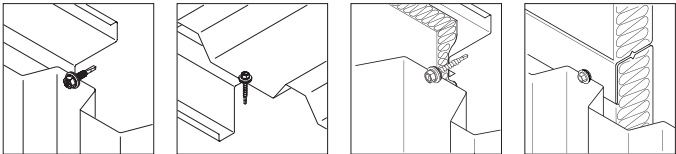
Approval document (ETA) | Declaration of performance (DoP)



| Component 1 (t _i) | | Component 2 (t _{ii}) | | Σ _{max} t _i +t _{ii} |
|-------------------------------|-----------|--------------------------------|-------------|--|
| Steel | 0.50–1.50 | Steel | 0.63–2.50 | 3.50 |
| Aluminium | 0.50–1.50 | Steel | 2×0.63–1.50 | 4.0 |
| – | – | Aluminium | 1.0–2.50 | 3.50 |
| – | – | Aluminium | 2×1.0–1.50 | 4.0 |

Approvals

CE₁₉
ETA-10/0198



Fastener in A2
onto steel and aluminium

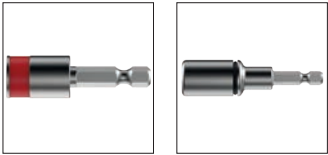
| Product code | PU | L | CL _{met} | DL | t _{fix, met} | A12 | S16 | S19 |
|---------------------|-----|----|-------------------|----|-----------------------|---------|---------|---------|
| SX3-S16-6×29-A2 | 500 | 29 | 0–9 | 9 | 0–6/8 | – | 1141978 | 1142000 |
| SX3-S16-6×40-A2 | 500 | 40 | 0–15 | 15 | 0–12/14 | – | 1133237 | 1142008 |
| SX3-S16-6×50-A2 | 250 | 50 | 0–20 | 20 | 0–17/19 | – | 1133239 | 1142063 |
| SX3-L12-A12-6×29-A2 | 500 | 29 | 0–9 | 9 | 0–6/8 | 1142002 | – | – |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

Fastener in A4
onto steel and aluminium

| Product code | PU | L | CL _{met} | DL | t _{fix, met} | S16/A4 | S19/A4 |
|--------------------|-----|----|-------------------|----|-----------------------|---------|---------|
| SX3-S16/A4-6×29-A4 | 500 | 29 | 0–9 | 9 | 0–6/8 | 1479579 | 1614057 |
| SX3-S16/A4-6×38-A4 | 500 | 38 | 0–18 | 9 | 0–15/17 | 1575772 | 1614745 |
| SX3-S16/A4-6×48-A4 | 500 | 48 | 0–28 | 9 | 0–25/27 | 1575777 | 1614058 |

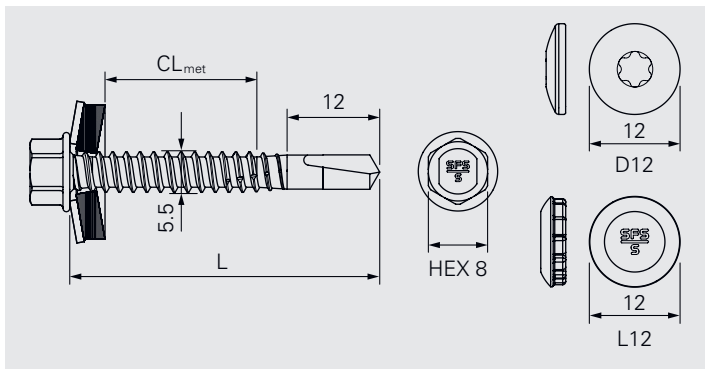
t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| E420-¼"-74 | 1 | ¼" | L12 | 973316 |

SX5-5.5



Application

- Fastening of sandwich panels onto metal profiles (hidden fixing)
- Fastening of profile sheets onto metal profiles
- Fastening of profile sheets onto metal decks, liner trays
- Fastening of standing seam clips onto metal profiles

Fastener material

Austenitic stainless steel A2/A4, case hardened drill point
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

| Component 1 (t _i / t _{NII}) | | Component 2 (t _{II}) | | Σ _{max} t _i + t _{II} |
|--|-----------|--------------------------------|-------------|---|
| 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 |

Approvals

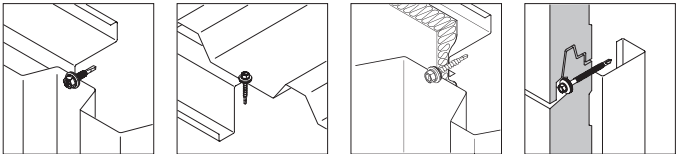
CE₁₉ CE₁₉
ETA-10/0198 ETA-13/0183

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
- 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

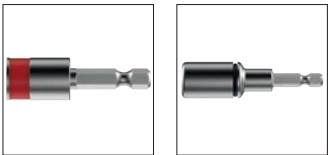
| Product code | PU | L | CL _{met} | t _{fix, met} | S12 | S16 | S19 |
|-----------------------|-----|----|-------------------|-----------------------|-----|---------|---------|
| SX5-S16-5,5×31-A2 | 500 | 31 | 0–8 | 0–3/6 | – | 1122767 | 1134299 |
| SX5-S16-5,5×35-A2 | 500 | 35 | 0–12 | 0–7/10 | – | 1123168 | 1123167 |
| SX5-S16-5,5×41-A2 | 500 | 41 | 0–18 | 0–13/16 | – | 1134477 | 1134476 |
| SX5-S16-5,5×53-A2 | 250 | 53 | 20–30 | 20–25/28 | – | 1133684 | 1155085 |
| SX5-S16-5,5×61-A2 | 250 | 61 | 0–38 | 0–33/36 | – | 1168765 | 1168767 |
| SX5-S16-5,5×78-A2 | 250 | 78 | 8–55 | 0–50/52 | – | 1133330 | 1133331 |
| SX5-L12-S16-5,5×31-A2 | 500 | 31 | 0–8 | 0–3/6 | – | 1134340 | – |
| SX5-L12-S16-5,5×35-A2 | 500 | 35 | 0–12 | 0–7/10 | – | 1134352 | – |
| SX5-L12-S16-5,5×41-A2 | 500 | 41 | 0–18 | 0–13/16 | – | 1135439 | – |

t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})

Fastener in A4
onto steel and aluminium

| Product code | PU | L | CL _{met} | t _{fix, met} | S16/A4 | S19/A4 |
|----------------------|-----|----|-------------------|-----------------------|---------|---------|
| SX5-S16/A4-5,5×31-A4 | 500 | 31 | 0–8 | 0–3/16 | 1614135 | 1588949 |
| SX5-S16/A4-5,5×35-A4 | 500 | 35 | 0–12 | 0–7/10 | 1585655 | 1614137 |
| SX5-S16/A4-5,5×61-A4 | 250 | 61 | 0–38 | 0–33/36 | 1585656 | 1614138 |

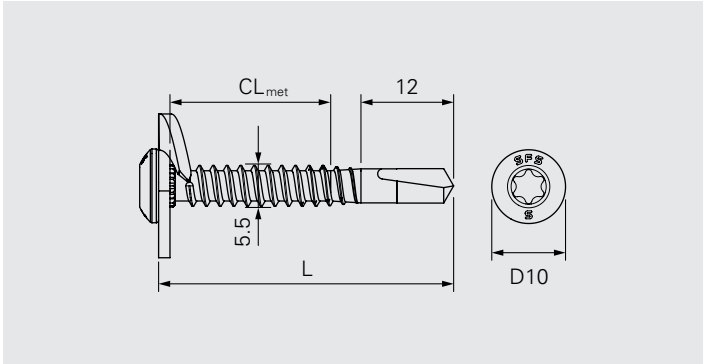
t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| E420-¼"-74 | 1 | ¼" | L12 | 973316 |

SX5-D10-5.5



Application

Fastening of single-ply insulated roof panels onto metal profiles

| Component 1 (t _i) | | Component 2 (t _{II}) | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|---|--------------------------------|------------------------------|
| Single-ply panel | – | Steel 1.5–4.0 | 5.0 |

Fastener material

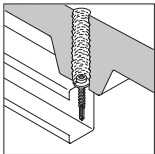
Austenitic stainless steel A2, case hardened drill point
Cutting disc: Austenitic stainless steel A2

Approvals

–

Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of 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 | CL _{met} | t _{fix, met} | SC |
|--------------------------|-----|----|-------------------|-----------------------|---------|
| SX5-D10-S19/C9-5,5×39-A2 | 500 | 39 | 0–20 | 0–15/18 | 1122625 |

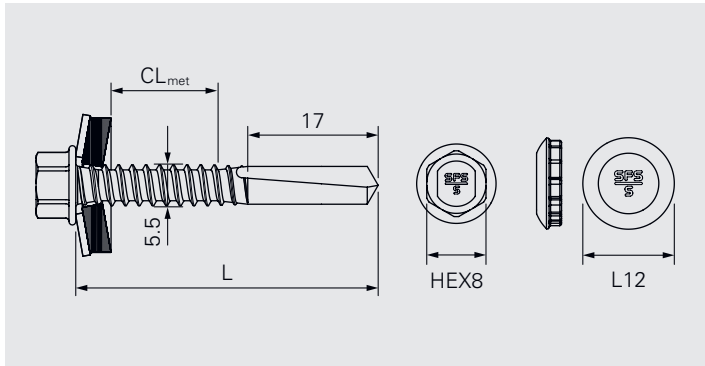
t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------|----|-------|------------|--------|
| T25W-175-HEX¼" | 5 | ¼" | T25W | 727979 |

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, case hardened drill point
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

| Component 1 (t _i /t _{NII}) | | Component 2 (t _{II}) | | Σ _{max} t _i +t _{II} |
|---|-----------|--------------------------------|----------|--|
| Steel | 0.50–1.50 | Steel | 4.0–12.0 | 13.50 |
| Aluminium | 0.50–1.50 | – | – | – |
| Sandwich | – | – | – | – |

Approvals

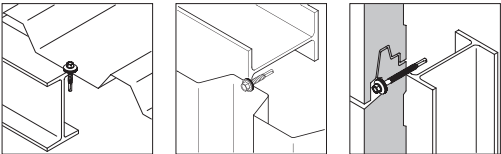
CE₁₉ CE₁₉
ETA-10/0198 ETA-13/0183

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
- High performance drill point for heavy steel beams

Documentation

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



Fastener in A2
onto steel

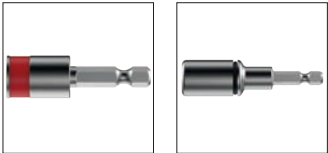
| Product code | PU | L | CL _{met} | t _{fix, met} | S16 | S19 |
|------------------------|-----|----|-------------------|-----------------------|--------|--------|
| SX14-S16-5,5×40-A2 | 500 | 40 | 0–12 | 0–1/8 | 770785 | 770796 |
| SX14-S16-5,5×48-A2 | 500 | 48 | 0–20 | 0–8/16 | 773625 | 773626 |
| SX14-S16-5,5×66-A2 | 250 | 66 | 0–38 | 0–26/34 | 770805 | 770807 |
| SX14-S16-5,5×86-A2 | 250 | 86 | 0–58 | 0–46/54 | 523277 | 519419 |
| SX14-L12-S16-5,5×40-A2 | 500 | 40 | 0–12 | 0–1/8 | – | 776328 |

t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})

Fastener in A4
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | S16 | S19 |
|-----------------------|-----|----|-------------------|-----------------------|---------|---------|
| SX14-S16/A4-5,5×40-A4 | 500 | 40 | 0–12 | 0–1/8 | 1585191 | 1585192 |
| SX14-S16/A4-5,5×55-A4 | 250 | 55 | 0–27 | 0–15/23 | 1585194 | 1614143 |

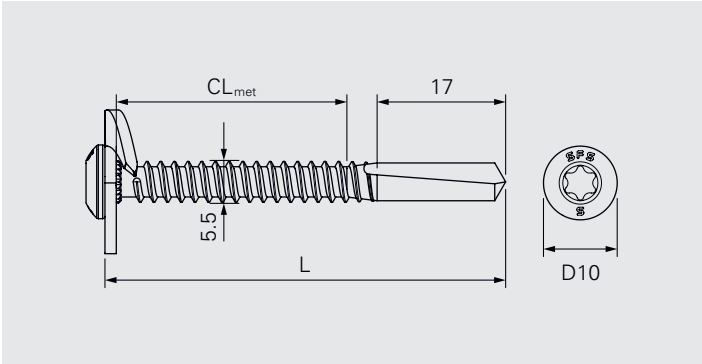
t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| E420-¼"-74 | 1 | ¼" | L12 | 973316 |

SX14-D10-5.5



Application

Fastening of single-ply insulated roof panels onto metal beams

| Component 1 (t _i) | | Component 2 (t _{ii}) | $\Sigma_{max} t_i + t_{ii}$ |
|-------------------------------|---|--------------------------------|-----------------------------|
| Single-ply panel | – | Steel 4.0–12.0 | 13.50 |

Fastener material

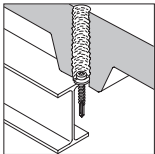
Austenitic stainless steel A2, case hardened drill point
Cutting disc: Austenitic stainless steel A2

Approvals

–

Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of 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 | CL _{met} | t _{fix, met} | SC |
|---------------------------|-----|----|-------------------|-----------------------|---------|
| SX14-D10-S19/C9-5,5×53-A2 | 500 | 53 | 0-28 | 0-16/24 | 1174930 |

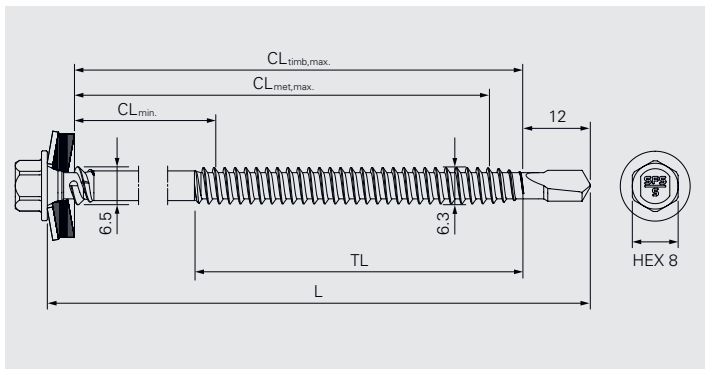
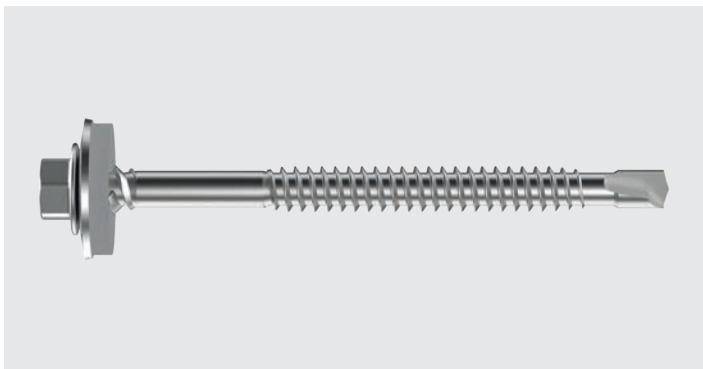
t_{fix, met}: CL_{met, min.} - (CL_{met, max.} - t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} - t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------|----|-------|------------|--------|
| T25W-175-HEX¼" | 5 | ¼" | T25W | 727979 |

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, case hardened drill point
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

| Component 1 (t_i / t_{NII}) | Component 2 (t_{II}) | $\Sigma_{max} t_i + t_{II}$ |
|---------------------------------|--------------------------|-----------------------------|
| Sandwich panel | Steel 1.0–4.0 | 5.0 |
| | Steel 2×0.75–2×2.70 | 6.50 |
| | Timber $l_{ef} \geq 35$ | – |

Approvals

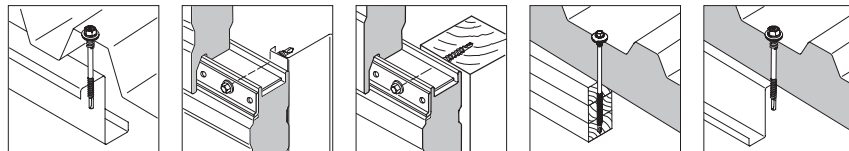
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ETA-13/0183

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
- 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
- Economical benefits given by less fastener needed and installation time savings and / or optimized subconstruction

Documentation

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



Fastener in A2 onto steel and timber

| Product code | PU | L | CL _{met} | t _{fix, met} | CL _{timb} | t _{fix, timb} | TL | S16 | S19 | S22 |
|---------------------|-----|-----|-------------------|-----------------------|--------------------|------------------------|----|---------|---------|---------|
| SXC5-S19-6,3×65-A2 | 100 | 65 | 15–40 | 15–35/39 | 15–40 | – | 37 | 1683967 | 1684006 | 1684007 |
| SXC5-S19-6,3×80-A2 | 100 | 80 | 30–55 | 30–50/54 | 30–65 | – | 37 | 1573397 | 1573583 | 1573732 |
| SXC5-S19-6,3×100-A2 | 100 | 100 | 40–75 | 40–70/74 | 40–85 | 40–50 | 47 | 1573398 | 1573584 | 1573734 |
| SXC5-S19-6,3×120-A2 | 100 | 120 | 50–95 | 50–90/94 | 50–105 | 50–70 | 57 | 1573400 | 1573585 | 1573736 |
| SXC5-S19-6,3×140-A2 | 100 | 140 | 70–115 | 70–110/114 | 70–125 | 70–90 | 57 | 1573411 | 1573586 | 1573738 |
| SXC5-S19-6,3×160-A2 | 100 | 160 | 90–135 | 90–130/134 | 90–145 | 90–110 | 57 | 1573414 | 1573587 | 1573740 |
| SXC5-S19-6,3×190-A2 | 100 | 190 | 110–165 | 110–160/164 | 110–175 | 110–140 | 67 | 1573415 | 1573588 | 1573751 |
| SXC5-S19-6,3×220-A2 | 100 | 220 | 140–195 | 140–190/194 | 140–205 | 140–170 | 67 | 1573416 | 1573590 | 1573762 |
| SXC5-S19-6,3×250-A2 | 100 | 250 | 170–225 | 170–220/224 | 170–235 | 170–200 | 67 | 1573417 | 1573591 | 1573768 |
| SXC5-S19-6,3×290-A2 | 100 | 290 | 210–265 | 210–260/264 | 210–275 | 210–240 | 67 | 1573418 | 1573592 | 1573773 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

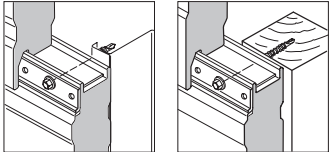
t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})

Fastener in A4 onto steel and timber

| Product code | PU | L | CL _{met} | t _{fix, met} | CL _{timb} | t _{fix, timb} | TL | S16 | S19 | S22 |
|---------------------|-----|-----|-------------------|-----------------------|--------------------|------------------------|----|---------|---------|---------|
| SXC5-S19-6,3×80-A4 | 100 | 80 | 30–55 | 30–50/54 | 30–65 | – | 37 | 1599990 | 1600001 | 1600003 |
| SXC5-S19-6,3×100-A4 | 100 | 100 | 40–75 | 40–70/74 | 40–85 | 40–50 | 47 | 1600005 | 1600007 | 1600009 |
| SXC5-S19-6,3×120-A4 | 100 | 120 | 50–95 | 50–90/94 | 50–105 | 50–70 | 57 | 1600022 | 1600023 | 1600024 |
| SXC5-S19-6,3×140-A4 | 100 | 140 | 70–115 | 70–110/114 | 70–125 | 70–90 | 57 | 1600026 | 1600027 | 1600028 |
| SXC5-S19-6,3×160-A4 | 100 | 160 | 90–135 | 90–130/134 | 90–145 | 90–110 | 57 | 1600042 | 1600043 | 1600044 |
| SXC5-S19-6,3×190-A4 | 100 | 190 | 110–165 | 110–160/164 | 110–175 | 110–140 | 67 | 1600047 | 1600049 | 1600051 |
| SXC5-S19-6,3×220-A4 | 100 | 220 | 140–195 | 140–190/194 | 140–205 | 140–170 | 67 | 1600055 | 1600056 | 1600057 |
| SXC5-S19-6,3×250-A4 | 100 | 250 | 170–225 | 170–220/224 | 170–235 | 170–200 | 67 | 1600059 | 1600064 | 1600071 |
| SXC5-S19-6,3×290-A4 | 100 | 290 | 210–265 | 210–260/264 | 210–275 | 210–240 | 67 | 1600078 | 1600080 | 1600134 |
| SXC5-S19-6,3×345-A4 | 100 | 345 | 265–320 | 265–315/319 | 265–330 | 265–295 | 67 | 1600140 | 1600161 | 1600166 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})



Fastener in A2 onto steel and timber

| Product code | PU | L | CL _{met} | t _{fix, met} | CL _{timb} | t _{fix, timb} | TL | No washer |
|-----------------|-----|-----|-------------------|-----------------------|--------------------|------------------------|----|-----------|
| SXC5-6,3×65-A2 | 100 | 65 | 18–43 | 18–38/42 | 18–53 | – | 37 | 1661978 |
| SXC5-6,3×80-A2 | 100 | 80 | 33–58 | 33–53/57 | 33–68 | – | 37 | 1599843 |
| SXC5-6,3×100-A2 | 100 | 100 | 43–78 | 43–73/77 | 43–88 | 43–53 | 47 | 1599844 |
| SXC5-6,3×120-A2 | 100 | 120 | 53–98 | 53–93/97 | 53–108 | 53–73 | 57 | 1599847 |
| SXC5-6,3×140-A2 | 100 | 140 | 73–118 | 73–113/117 | 73–128 | 73–93 | 57 | 1599848 |
| SXC5-6,3×160-A2 | 100 | 160 | 93–138 | 93–133/137 | 93–148 | 93–113 | 57 | 1599851 |
| SXC5-6,3×190-A2 | 100 | 190 | 113–168 | 113–163/167 | 113–178 | 113–143 | 67 | 1599857 |
| SXC5-6,3×220-A2 | 100 | 220 | 143–198 | 143–193/197 | 143–208 | 143–173 | 67 | 1599859 |
| SXC5-6,3×250-A2 | 100 | 250 | 173–228 | 173–223/227 | 173–238 | 173–203 | 67 | 1599860 |
| SXC5-6,3×290-A2 | 100 | 290 | 213–268 | 213–263/267 | 213–278 | 213–243 | 67 | 1599871 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})

Fastener in A4 onto steel and timber

| Product code | PU | L | CL _{met} | t _{fix, met} | CL _{timb} | t _{fix, timb} | TL | No washer |
|-----------------|-----|-----|-------------------|-----------------------|--------------------|------------------------|----|-----------|
| SXC5-6,3×80-A4 | 100 | 80 | 33–58 | 33–53/57 | 33–68 | – | 37 | 1600004 |
| SXC5-6,3×100-A4 | 100 | 100 | 43–78 | 43–73/77 | 43–88 | 43–53 | 47 | 1600010 |
| SXC5-6,3×120-A4 | 100 | 120 | 53–98 | 53–93/97 | 53–108 | 53–73 | 57 | 1600025 |
| SXC5-6,3×140-A4 | 100 | 140 | 73–118 | 73–113/117 | 73–128 | 73–93 | 57 | 1600029 |
| SXC5-6,3×160-A4 | 100 | 160 | 93–138 | 93–133/137 | 93–148 | 93–113 | 57 | 1600045 |
| SXC5-6,3×190-A4 | 100 | 190 | 113–168 | 113–163/167 | 113–178 | 113–143 | 67 | 1600052 |
| SXC5-6,3×220-A4 | 100 | 220 | 143–198 | 143–193/197 | 143–208 | 143–173 | 67 | 1600058 |
| SXC5-6,3×250-A4 | 100 | 250 | 173–228 | 173–223/227 | 173–238 | 173–203 | 67 | 1600073 |
| SXC5-6,3×290-A4 | 100 | 290 | 213–268 | 213–263/267 | 213–278 | 113–243 | 67 | 1600137 |
| SXC5-6,3×345-A4 | 100 | 345 | 268–323 | 268–318/322 | 268–333 | 268–298 | 67 | 1600185 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})

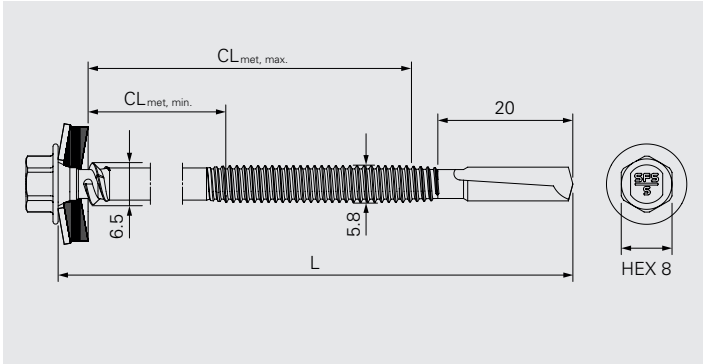
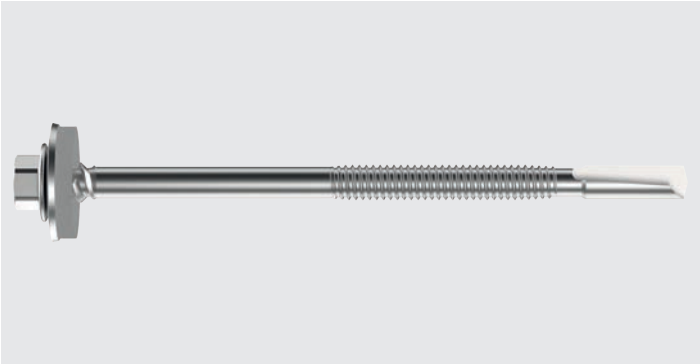


Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |



SXC16-5.8



Application

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

| Component 1 (t _i /t _{NII}) | | Component 2 (t _{II}) | | Σ _{max} t _i +t _{II} |
|---|-------|--------------------------------|----------|--|
| Sandwich panel | ≥0.40 | Steel | 3.0–14.0 | 16.0 |

Fastener material

Austenitic stainless steel A2/A4, case hardened drill point
Sealing washer: Austenitic stainless steel A2/A4, EPDM-seal

Approvals

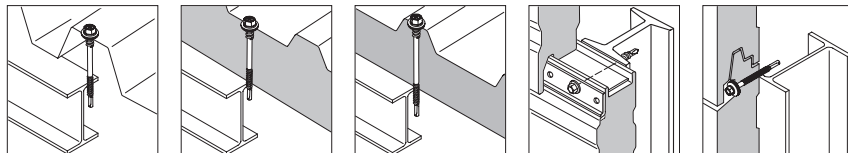
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ETA-13/0183

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
- 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 given by less fastener needed and installation time savings

Documentation

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



Fastener in A2 onto steel

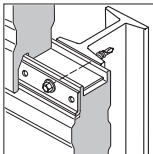
| Product code | PU | L | CL _{met} | t _{fix, met} | S16 | S19 | S22 |
|----------------------|-----|-----|-------------------|-----------------------|---------|---------|---------|
| SXC16-S19-5,8×90-A2 | 100 | 90 | 30–58 | 30–44/55 | 1573419 | 1573595 | 1573774 |
| SXC16-S19-5,8×110-A2 | 100 | 110 | 40–78 | 40–64/75 | 1573420 | 1573596 | 1573783 |
| SXC16-S19-5,8×130-A2 | 100 | 130 | 50–98 | 50–84/95 | 1573441 | 1573597 | 1573789 |
| SXC16-S19-5,8×150-A2 | 100 | 150 | 70–118 | 70–104/115 | 1573443 | 1573707 | 1573790 |
| SXC16-S19-5,8×170-A2 | 100 | 170 | 90–138 | 90–124/135 | 1573445 | 1573709 | 1573859 |
| SXC16-S19-5,8×200-A2 | 100 | 200 | 110–168 | 110–154/165 | 1573446 | 1573710 | 1573875 |
| SXC16-S19-5,8×230-A2 | 100 | 230 | 140–198 | 140–184/195 | 1573447 | 1573712 | 1574011 |
| SXC16-S19-5,8×260-A2 | 100 | 260 | 170–228 | 170–214/225 | 1573448 | 1573714 | 1574051 |
| SXC16-S19-5,8×300-A2 | 100 | 300 | 210–268 | 210–254/265 | 1573450 | 1573715 | 1574054 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{il, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{il, min.})

Fastener in A4 onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | S16 | S19 | S22 |
|-------------------------|-----|-----|-------------------|-----------------------|---------|---------|---------|
| SXC16-S19/A4-5,8×90-A4 | 100 | 90 | 30–58 | 30–44/55 | 1613574 | 1613558 | 1613576 |
| SXC16-S19/A4-5,8×110-A4 | 100 | 110 | 40–78 | 40–64/75 | 1613594 | 1613595 | 1613596 |
| SXC16-S19/A4-5,8×130-A4 | 100 | 130 | 50–98 | 50–84/95 | 1613602 | 1613603 | 1613604 |
| SXC16-S19/A4-5,8×150-A4 | 100 | 150 | 70–118 | 70–104/115 | 1613606 | 1613607 | 1613608 |
| SXC16-S19/A4-5,8×170-A4 | 100 | 170 | 90–138 | 90–124/135 | 1613622 | 1613623 | 1613626 |
| SXC16-S19/A4-5,8×200-A4 | 100 | 200 | 110–168 | 110–154/165 | 1613693 | 1613694 | 1613695 |
| SXC16-S19/A4-5,8×230-A4 | 100 | 230 | 140–198 | 140–184/195 | 1613699 | 1613707 | 1613708 |
| SXC16-S19/A4-5,8×260-A4 | 100 | 260 | 170–228 | 170–214/225 | 1613711 | 1613712 | 1613713 |
| SXC16-S19/A4-5,8×300-A4 | 100 | 300 | 210–268 | 210–254/265 | 1613720 | 1614801 | 1614803 |
| SXC16-S19/A4-5,8×355-A4 | 100 | 355 | 265–323 | 265–309/320 | 1614805 | 1606472 | 1606474 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{il, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{il, min.})



Fastener in A2
onto steel

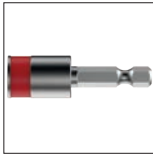
| Product code | PU | L | CL _{met} | t _{fix, met} | No washer |
|------------------|-----|-----|-------------------|-----------------------|-----------|
| SXC16-5,8×90-A2 | 100 | 90 | 33–61 | 33–47/58 | 1615954 |
| SXC16-5,8×110-A2 | 100 | 110 | 43–81 | 43–67/78 | 1615960 |
| SXC16-5,8×130-A2 | 100 | 130 | 53–101 | 53–87/98 | 1615963 |
| SXC16-5,8×150-A2 | 100 | 150 | 73–121 | 73–107/118 | 1615978 |
| SXC16-5,8×170-A2 | 100 | 170 | 93–141 | 93–127/138 | 1616036 |
| SXC16-5,8×200-A2 | 100 | 200 | 113–171 | 113–157/168 | 1616046 |
| SXC16-5,8×230-A2 | 100 | 230 | 143–201 | 143–187/198 | 1616051 |
| SXC16-5,8×260-A2 | 100 | 260 | 173–231 | 173–217/228 | 1616090 |
| SXC16-5,8×300-A2 | 100 | 300 | 213–271 | 213–257/268 | 1616112 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

Fastener in A4
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | No washer |
|------------------|-----|-----|-------------------|-----------------------|-----------|
| SXC16-5,8×90-A4 | 100 | 90 | 33–61 | 33–47/58 | 1613577 |
| SXC16-5,8×110-A4 | 100 | 110 | 43–81 | 43–67/78 | 1613600 |
| SXC16-5,8×130-A4 | 100 | 130 | 53–101 | 53–87/98 | 1613605 |
| SXC16-5,8×150-A4 | 100 | 150 | 73–121 | 73–107/118 | 1613609 |
| SXC16-5,8×170-A4 | 100 | 170 | 93–141 | 93–127/138 | 1613630 |
| SXC16-5,8×200-A4 | 100 | 200 | 113–171 | 113–157/168 | 1613697 |
| SXC16-5,8×230-A4 | 100 | 230 | 143–201 | 143–187/198 | 1613709 |
| SXC16-5,8×260-A4 | 100 | 260 | 173–231 | 173–217/228 | 1613717 |
| SXC16-5,8×300-A4 | 100 | 300 | 213–271 | 213–257/268 | 1614804 |
| SXC16-5,8×355-A4 | 100 | 355 | 268–326 | 268–312/323 | 1606471 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

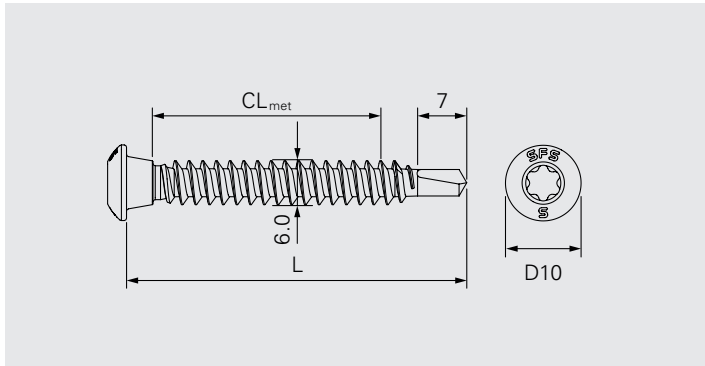


Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |



SXK2-6.0



Application

Fastening of standing seam clips onto metal decks

Fastener material

Austenitic stainless steel A2, case hardened drill point

| 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 | – |

Approvals

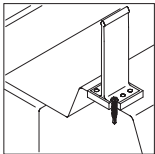
–

Features and Benefits

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

Documentation

Installation instruction | Technical Data



Fastener in A2
onto steel

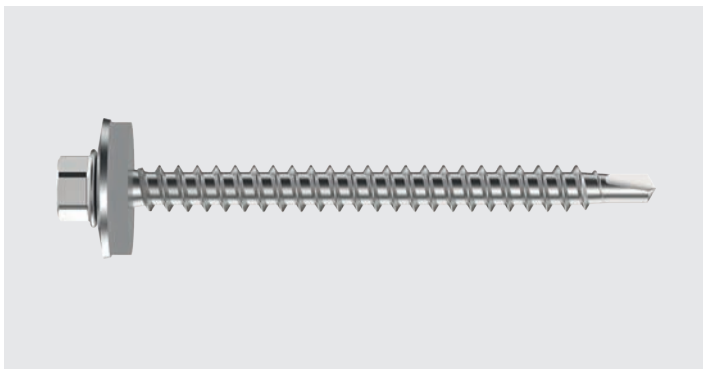
| Product code | PU | L | CL / Clip onto steel | |
|--------------------|-----|----|----------------------------|---------|
| SXK2-D10-6,0×35-A2 | 250 | 35 | 5-17 | 1615850 |
| SXK2-D10-6,0×45-A2 | 250 | 45 | 5-27 | 1615848 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | L | |
|-----------------|----|-------|------------|-----|---------|
| T25W-25-HEX¼" | 1 | ¼" | T25W | 25 | 1337940 |
| Bit holder ZA¼" | 10 | ¼" | ¼" | 58 | 1162306 |
| T25W-175-HEX¼" | 5 | ¼" | T25W | 175 | 727979 |

SXW-6.5



Application

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

Fastener material

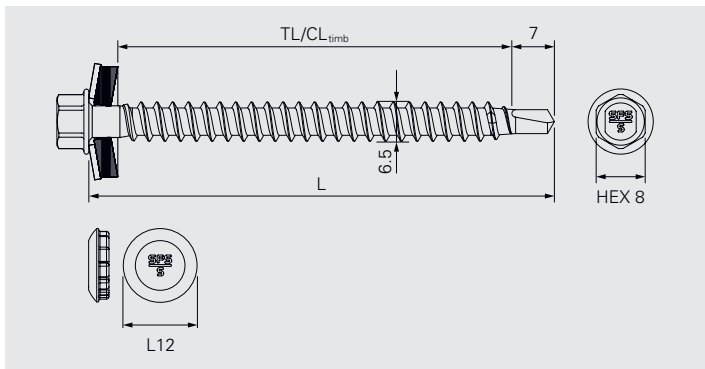
Austenitic stainless steel A2, case hardened drill point
Sealing washer: Austenitic stainless steel A2, EPDM-seal

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

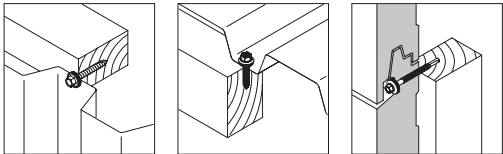
Approval document (ETA) | Declaration of performance (DoP)



| Component 1 (t _i) | | Component 2 (t _{II}) | | Σ _{max} t _i +t _{II} |
|-------------------------------|-----------|--------------------------------|-----------------------|--|
| Steel | 0.50–1.50 | Timber | l _{ef} ≥35.0 | – |
| Aluminium | 0.50–1.50 | – | – | – |
| Sandwich | – | – | – | – |

Approvals

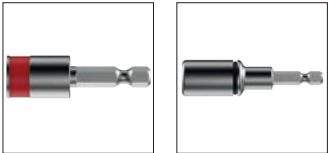
CE₁₉ CE₁₉
ETA-10/0198 ETA-13/0183



Fastener in A2
onto steel and timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | S16 | S19 |
|-----------------------|-----|----|----|--------------------|------------------------|---------|---------|
| SXW-S16-6,5×52-A2 | 250 | 52 | 40 | 2–42 | 2–5 | 1123138 | 1123139 |
| SXW-S16-6,5×75-A2 | 250 | 75 | 63 | 2–65 | 2–30 | 1069319 | 1107866 |
| SXW-S16-6,5×99-A2 | 250 | 99 | 78 | 11–89 | 11–54 | 1110537 | 1098610 |
| SXW-L12-S16-6,5×52-A2 | 250 | 52 | 40 | 2–42 | 2–5 | – | 1133037 |

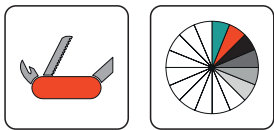
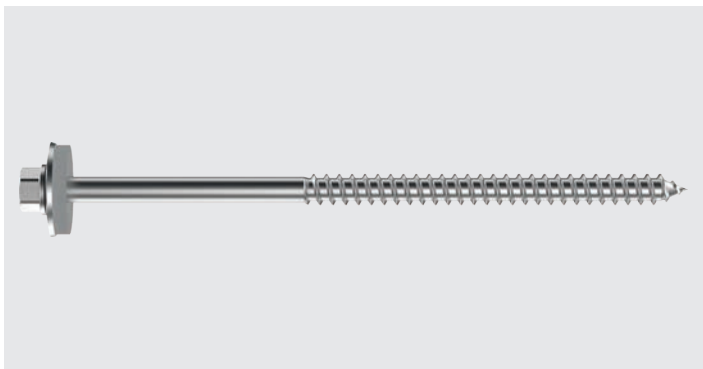
t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| E420-¼"-74 | 1 | ¼" | L12 | 973316 |

TDA-S-6.5



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
- Fastening of profile sheets onto metal decks, liner trays

Fastener material

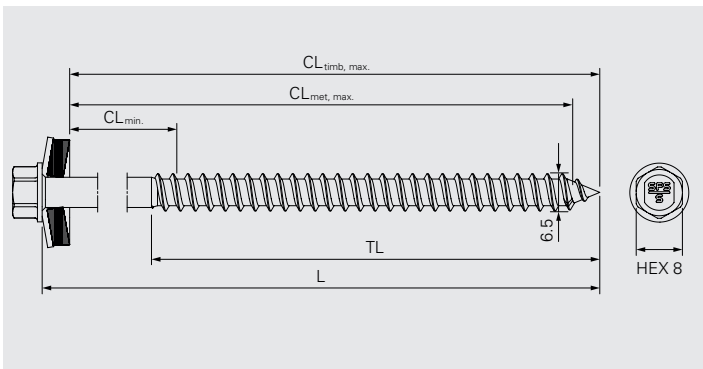
Austenitic stainless steel A2
Sealing washer: Austenitic stainless steel A2, EPDM-seal

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
- Multifunctional fastener for a variety of applicatons

Documentation

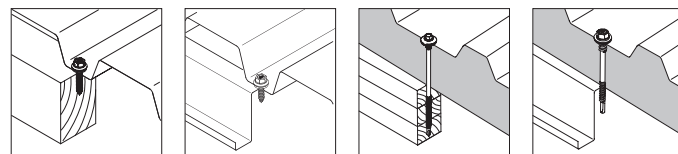
Approval document (ETA) | Declaration of performance (DoP)



| Component 1 (t _i / t _{NII}) | | 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 | l _{ef} ≥35.0 | – |

Approvals





Fastener in A2 onto steel, timber and aluminium

| Product code | PU | L | CL _{met} | CL _{timb} | t _{fix, met} | t _{fix, timb} | TL | S16 | S19 | S22 |
|-------------------|-----|-----|-------------------|--------------------|-----------------------|------------------------|----|---------|---------|---------|
| TDA-S-S16-6,5×20 | 500 | 20 | 0–10 | – | 0–7/9 | – | 20 | 1526324 | 1526378 | 1526739 |
| TDA-S-S16-6,5×25 | 500 | 25 | 0–15 | – | 0–12/14 | – | 25 | 6760 | 6680 | 6713 |
| TDA-S-S16-6,5×32 | 500 | 32 | 0–22 | – | 0–19/21 | – | 32 | 6761 | 6681 | 6714 |
| TDA-S-S16-6,5×40 | 250 | 40 | 0–30 | 0–37 | 0–27/29 | 0–2 | 40 | 1526325 | 1526379 | 1526751 |
| TDA-S-S16-6,5×50 | 250 | 50 | 0–40 | 0–47 | 0–37/39 | 0–12 | 50 | 6764 | 6684 | 6717 |
| TDA-S-S16-6,5×60 | 250 | 60 | 0–50 | 0–57 | 0–47/49 | 0–22 | 60 | 1526326 | 1526391 | 1526752 |
| TDA-S-S16-6,5×80 | 250 | 80 | 3–70 | 0–77 | 3–67/69 | 0–42 | 75 | 1526328 | 1526392 | 1526753 |
| TDA-S-S16-6,5×100 | 100 | 100 | 23–90 | 0–97 | 23–87/89 | 0–62 | 75 | 6768 | 6688 | 6721 |
| TDA-S-S16-6,5×120 | 100 | 120 | 43–110 | 43–117 | 43–107/109 | 43–82 | 75 | 1526330 | 1526393 | 1526754 |
| TDA-S-S16-6,5×140 | 100 | 140 | 63–130 | 63–137 | 63–127/129 | 63–102 | 75 | 1526342 | 1526394 | 1526756 |
| TDA-S-S16-6,5×160 | 100 | 160 | 83–150 | 83–157 | 83–147/149 | 83–122 | 75 | 1526344 | 1526395 | 1526758 |
| TDA-S-S16-6,5×180 | 100 | 180 | 103–170 | 103–177 | 103–167/169 | 103–142 | 75 | 1526346 | 1526396 | 1526771 |
| TDA-S-S16-6,5×200 | 100 | 200 | 123–190 | 123–197 | 123–187/189 | 123–162 | 75 | 1526347 | 1526397 | 1526774 |
| TDA-S-S16-6,5×220 | 100 | 220 | 143–210 | 143–217 | 143–207/209 | 143–182 | 75 | 1526348 | 1526398 | 1526776 |
| TDA-S-S16-6,5×260 | 100 | 260 | 183–250 | 183–257 | 183–247/249 | 183–222 | 75 | 1526349 | 1526399 | 1526779 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{ll, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{ll, min.})

t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})

Pre-drill diameter

| Application | Steel/Steel and Alu/Steel | | | | Steel/Timber | Alu/Alu | | |
|--------------------------------|---|--------------|--------------|----------|---------------------|----------------------|----------|------|
| Component 1 (t _i) | 0.5–1.50 | | | | 0.5–1.50 | 0.5–1.50 | | |
| Component 2 (t _{ii}) | 0.63 | 0.75 | 0.88–1.25 | 1.50–3.0 | ≥35.0 | 1.0–1.50 | 2.0–2.50 | 3.0 |
| | | 2×0.75–2×1.0 | 2×1.25–2×1.5 | | | | | |
| | S280GD – S450GD (EN10346) HX300LAD to HX460LAD (EN10346) | | | | Timber (EN14081) | Aluminium (EN573) | | |
| Pre-drill Ø | 3.50 | 4.0 | 4.50 | 5.0 | 4.0 | 4.50 | 5.0 | 5.30 |

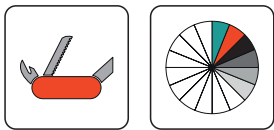
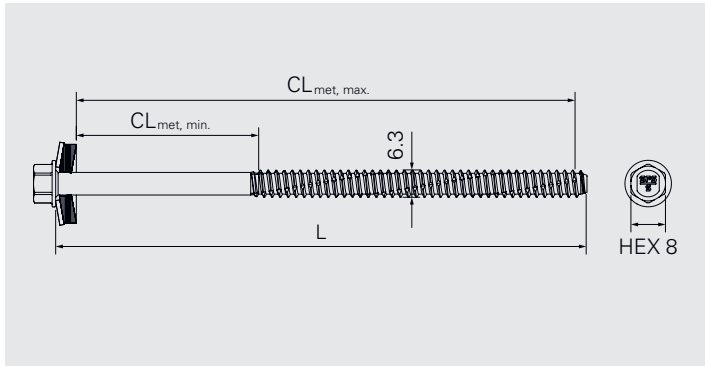
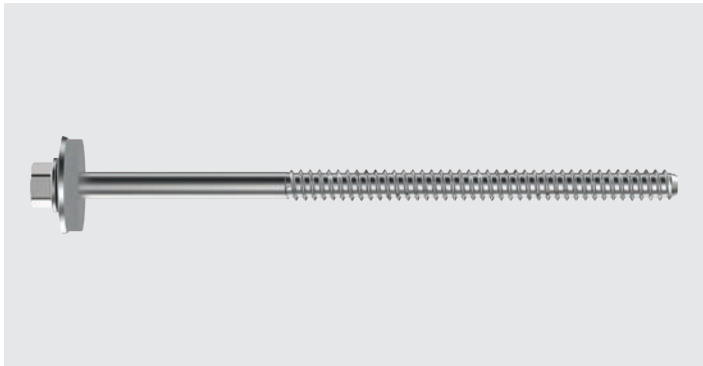


Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |



TDB-S-6.3



Application


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


Fastener material

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

| Component 1 (t _i / t _{NII}) | | Component 2 (t _{II}) | | Σ _{max} t _i + t _{II} |
|--|-----------|--------------------------------|-------|---|
| Steel | ≥0.40 | Steel | ≥1.25 | ≥1.65 |
| Aluminium | 0.50–1.50 | Aluminium | ≥1.50 | ≥2.0 |

Approvals


ETA-10/0198

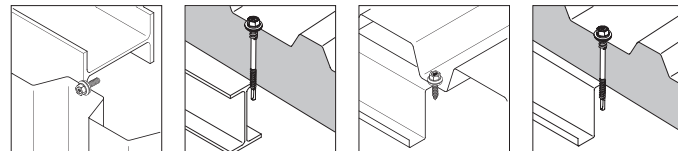

ETA-13/0183

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
- Multifunctional fastener for a variety of applicatons

Documentation

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



Fastener in A2 onto steel and aluminium

| Product code | PU | L | CL _{met} | t _{fix, met} | S16 | S19 | S22 |
|-------------------|-----|-----|-------------------|-----------------------|---------|---------|---------|
| TDB-S-S16-6,3×20 | 500 | 20 | 0–12 | 0–6/10 | 1526350 | 1526400 | 1526792 |
| TDB-S-S16-6,3×25 | 500 | 25 | 0–17 | 0–11/15 | 1021650 | 1021647 | 1063057 |
| TDB-S-S16-6,3×32 | 500 | 32 | 0–24 | 0–18/22 | 1021659 | 1063816 | 1045402 |
| TDB-S-S16-6,3×40 | 250 | 40 | 0–32 | 0–26/30 | 1526352 | 1526401 | 1526781 |
| TDB-S-S16-6,3×50 | 250 | 50 | 0–42 | 0–36/40 | 1022745 | 1022746 | 1045407 |
| TDB-S-S16-6,3×60 | 250 | 60 | 0–52 | 0–46/50 | 1526353 | 1526402 | 1526783 |
| TDB-S-S16-6,3×80 | 250 | 80 | 2–72 | 2–66/70 | 1526354 | 1526403 | 1526785 |
| TDB-S-S16-6,3×100 | 100 | 100 | 22–92 | 22–86/90 | 1022759 | 1022758 | 1051692 |
| TDB-S-S16-6,3×120 | 100 | 120 | 42–112 | 42–106/110 | 1526355 | 1526405 | 1526786 |
| TDB-S-S16-6,3×140 | 100 | 140 | 62–132 | 62–126/130 | 1526356 | 1526406 | 1526787 |
| TDB-S-S16-6,3×160 | 100 | 160 | 82–152 | 82–146/150 | 1526357 | 1526407 | 1526788 |
| TDB-S-S16-6,3×180 | 100 | 180 | 102–172 | 102–166/170 | 1526359 | 1526408 | 1526789 |
| TDB-S-S16-6,3×200 | 100 | 200 | 122–192 | 122–186/190 | 1270144 | 1191450 | 1284314 |
| TDB-S-S16-6,3×220 | 100 | 220 | 142–212 | 142–206/210 | 1191440 | 1194640 | 1226649 |
| TDB-S-S16-6,3×260 | 100 | 260 | 182–252 | 182–246/250 | 1526371 | 1526410 | 1526791 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

Fastener in A4 onto steel and aluminium

| Product code | PU | L | CL _{met} | t _{fix, met} | S16 | S19 | S22 |
|---------------------|-----|----|-------------------|-----------------------|-----|---------|---------|
| TDB-S-S16-6,3×25-A4 | 500 | 25 | 0–17 | 0–11/15 | – | 1479523 | 1596647 |
| TDB-S-S16-6,3×40-A4 | 250 | 40 | 0–32 | 0–26/30 | – | 1614055 | 1614052 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

Pre-drill diameter

| Application | Steel/Steel and Alu/Steel | | | | | Alu/Alu | | | |
|--------------------------------|---|-----------|----------|-----------|-------|----------------------|---------|------|------|
| Component 1 (t _i) | 0.5–1.50 | | | | | 0.5–1.50 | | | |
| Component 2 (t _{II}) | 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 |
| | S235 - S355 (EN10025) S280GD - S450GD (EN10346) HX300LAD - HX460LAD (EN10346) | | | | | Aluminium (EN573) | | | |
| Pre-drill Ø | 5.0 | 5.3 | 5.50 | 5.70 | 5.80 | 4.50 | 5.0 | 5.30 | 5.50 |

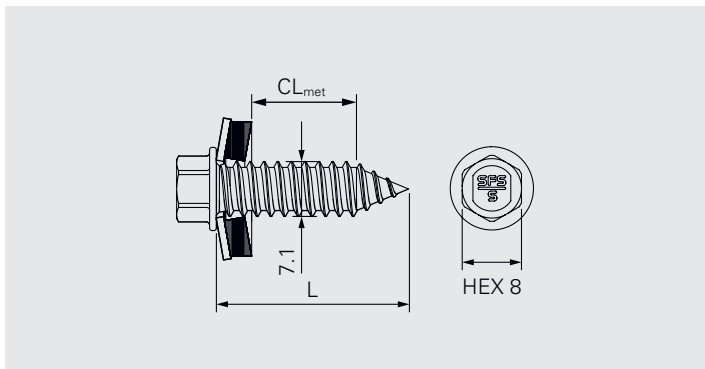


Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |



TDC-S-7.1



Application

Replacement of overdriven fastener in profile sheets, sandwich panels

| 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 |

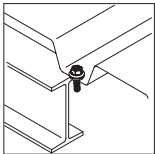
Fastener material

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

Approvals

Features and Benefits

- Self tapping fastener suitable as replacement of overdriven fastener
- High quality EPDM sealing washer for long-term weather sealing
- Applicable on profile sheets and sandwich panels



Fastener in A2
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | Pre-drill Ø | S19 |
|------------------|-----|----|-------------------|-----------------------|-------------|---------|
| TDC-S-S19-7,1×25 | 500 | 25 | 0-14 | 0-10/13 | 6.50 | 1066788 |

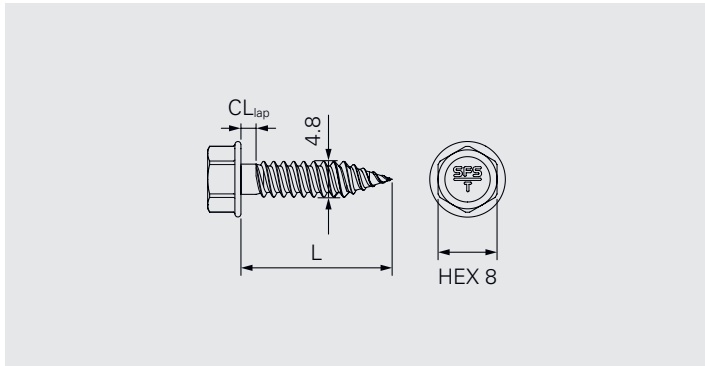
t_{fix, met}: CL_{met, min.} - (CL_{met, max.} - t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} - t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

CDM-4.8



Application

Fastening of overlaps of metal decks and liner trays

| Component 1 (t _I) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_I + t_{II}$ |
|-------------------------------|-------------|--------------------------------|-------------|------------------------------|
| Steel | 0.63–1.20 | Steel | 0.63–1.20 | 2.00 |
| Steel | 2×0.63–0.88 | Steel | 2×0.63–0.88 | 3.60 |

Fastener material

Carbon steel, Durocoat® 480

Approvals

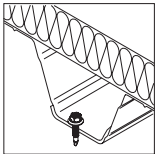
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ETA-10/0198

Features and Benefits

- Self drilling fastener suitable for fastening of overlaps
- Fast and chip-free installation thanks to the FastTip
- Cost saving installation due to post-cleaning of chips no longer necessary
- No torque control required given by free-spin zone
- Secured against unwinding given by free-spin zone
- High tension and shear resistance achieved by optimized fastener geometry
- Collated fastener available for installation with QuikDrive® setting tool
- High corrosion durability thanks to special galvanic zinc coating
- Perfect sit on the metal deck thanks to the head-undercut

Documentation

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



Fastener in carbon steel
onto steel

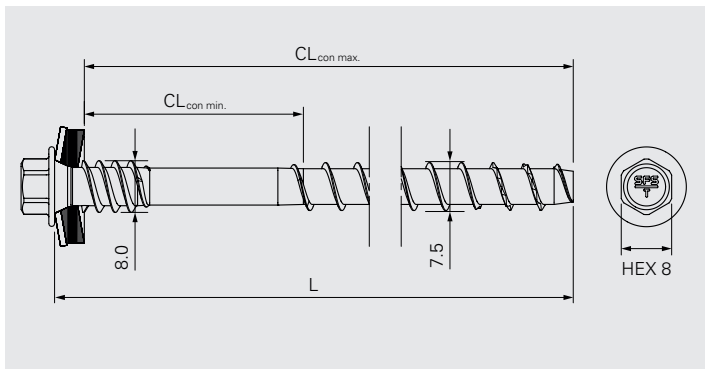
| Product code | PU | L | CL _{lap} | Collated | |
|----------------|------|----|-------------------|----------|---------|
| CDM-4,8×20 | 1000 | 20 | 1.20–2.00 | – | 1476369 |
| CDM-4,8×20-MQD | 500 | 20 | 1.20–2.00 | Yes | 1476370 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| Quik Drive BGP75E | 1 | FEIN | – | 1490366 |

MDC-7.5



Application

Fastening of sandwich panels onto concrete
Fastening of profile sheets onto concrete

| | | | |
|-------------------|-------------|--|--|
| Fastener Ø | 7.50 | | |
| Pre-drill Ø | 6.0 | | |
| Embedment depth | 35/55 | | |

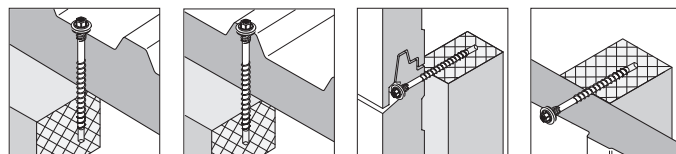
Fastener material

Carbon steel, Durocoat® 480
Sealing washer: Austenitic stainless steel A2, EPDM-seal

| |
|------------------|
| Approvals |
| — |

Features and Benefits

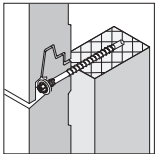
- Self tapping fastener suitable for installation of sandwich panels onto concrete
- High quality EPDM sealing washer for long-term weather sealing
- Perfect supporting of the sandwich panel outer-skin given by support thread with cut-off thread-end
- Optimized support function achieved by patented double support thread
- High bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- High corrosion durability thanks to special galvanic zinc coating
- Easy insertion and high load capacities given by the ideal core-/thread geometry
- Reduced abrasion achieved by toothed functional tip



Fastener in carbon steel onto concrete

| Product code | PU | L | CL _{con} | t _{fix, con} | S16 | S19 | S22 |
|-----------------|-----|-----|-------------------|-----------------------|---------|---------|---------|
| MDC-S19-7,5×85 | 100 | 85 | 12–82 | 12–27/47 | 1574300 | 1562034 | 1562305 |
| MDC-S19-7,5×105 | 100 | 105 | 32–102 | 32–47/67 | 1574321 | 1562228 | 1562331 |
| MDC-S19-7,5×125 | 100 | 125 | 52–122 | 52–67/87 | 1574324 | 1562227 | 1562329 |
| MDC-S19-7,5×145 | 100 | 145 | 72–142 | 72–87/107 | 1574326 | 1562225 | 1562328 |
| MDC-S19-7,5×165 | 100 | 165 | 92–162 | 92–107/127 | 1574328 | 1562229 | 1562332 |
| MDC-S19-7,5×185 | 100 | 185 | 112–182 | 112–127/147 | 1574329 | 1562224 | 1562327 |
| MDC-S19-7,5×205 | 100 | 205 | 132–202 | 132–147/167 | 1574332 | 1562223 | 1562326 |
| MDC-S19-7,5×225 | 100 | 225 | 152–222 | 152–167/187 | 1574334 | 1562222 | 1562325 |
| MDC-S19-7,5×245 | 100 | 245 | 172–242 | 172–187/207 | 1574335 | 1562221 | 1562324 |
| MDC-S19-7,5×265 | 100 | 265 | 192–262 | 192–207/227 | 1574340 | 1562210 | 1562323 |
| MDC-S19-7,5×285 | 100 | 285 | 212–282 | 212–227/247 | 1574353 | 1562209 | 1562322 |
| MDC-S19-7,5×305 | 100 | 305 | 232–302 | 232–247/267 | 1574355 | 1562208 | 1562309 |
| MDC-S19-7,5×325 | 100 | 325 | 252–322 | 252–267/287 | 1574413 | 1562207 | 1562308 |
| MDC-S19-7,5×345 | 100 | 345 | 272–342 | 272–287/307 | 1574416 | 1562206 | 1562307 |
| MDC-S19-7,5×365 | 100 | 365 | 292–362 | 292–307/327 | 1574418 | 1562205 | 1562306 |

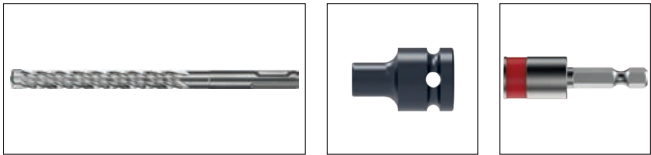
t_{fix, con}: CL_{con, min.} – (CL_{met, max.} – h_{nom, min.})



Fastener in carbon steel
onto concrete

| Product code | PU | L | CL _{con} | t _{fix, con} | No washer |
|--------------|-----|-----|-------------------|-----------------------|-----------|
| MDC-7,5×85 | 100 | 85 | 15–85 | 15–30/50 | 1580854 |
| MDC-7,5×105 | 100 | 105 | 35–105 | 35–50/70 | 1580856 |
| MDC-7,5×125 | 100 | 125 | 55–125 | 55–70/90 | 1580857 |
| MDC-7,5×145 | 100 | 145 | 75–145 | 75–90/110 | 1580862 |
| MDC-7,5×165 | 100 | 165 | 95–165 | 95–110/130 | 1580864 |
| MDC-7,5×185 | 100 | 185 | 115–185 | 115–130/150 | 1580870 |
| MDC-7,5×205 | 100 | 205 | 135–205 | 135–150/170 | 1580874 |
| MDC-7,5×225 | 100 | 225 | 155–225 | 155–170/190 | 1580912 |
| MDC-7,5×245 | 100 | 245 | 175–245 | 175–190/210 | 1580913 |
| MDC-7,5×265 | 100 | 265 | 195–265 | 195–210/230 | 1580919 |
| MDC-7,5×285 | 100 | 285 | 215–285 | 215–230/250 | 1580931 |
| MDC-7,5×305 | 100 | 305 | 235–305 | 235–250/270 | 1580933 |
| MDC-7,5×325 | 100 | 325 | 255–325 | 255–270/290 | 1580951 |
| MDC-7,5×345 | 100 | 345 | 275–345 | 275–290/310 | 1580953 |
| MDC-7,5×365 | 100 | 365 | 295–365 | 295–310/330 | 1590960 |

t_{fix, con}: CL_{con, min.}– (CL_{met, max.}–h_{nom, min.})

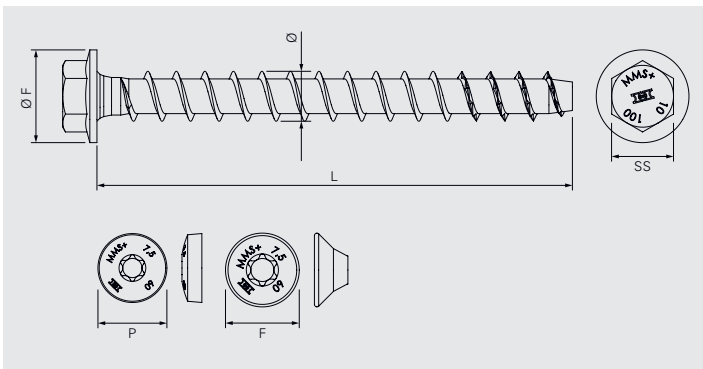
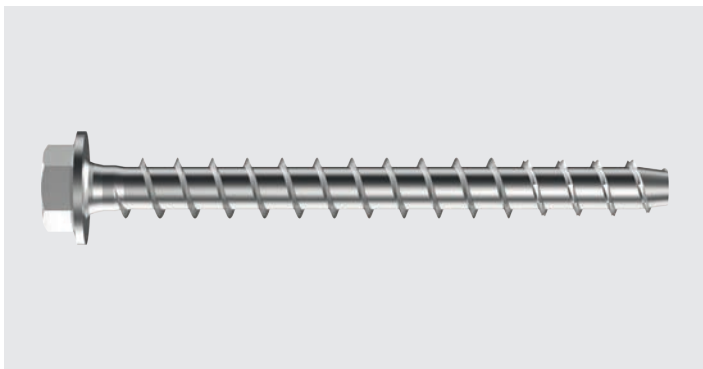


Accessories/Ancillaries

| Product code | Drive | Head drive | PU | D | L | WL | FL | |
|------------------|-------|------------|----|---|-----|-----|-----|---------|
| SDS-6x210/150-4C | – | – | 1 | 6 | 210 | 150 | 150 | 1487583 |
| SDS-6x310/250-4C | – | – | 1 | 6 | 210 | 250 | 250 | 1487584 |
| SDS-6x515/455-4C | – | – | 1 | 6 | 515 | 455 | 200 | 1608141 |
| E308-¼"-50 | ¼" | HEX8 | 1 | – | – | – | – | 1646160 |
| E508-½"-40 | ½" | HEX8 | 1 | – | – | – | – | 1648380 |



MMS-plus



Application

- Fastening of metal plates, profiles, brackets onto concrete
- Fastening of metal decks, liner trays onto concrete
- Fastening of timber battens onto concrete

Fastener material

Carbon steel, bright zinc plated

| 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 |

Approvals

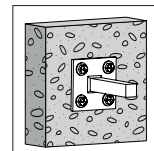


Features and Benefits

- Self tapping fastener suitable for installation onto concrete
- Easy settable even in case of worn drills
- More flexibility given by two embedment depths
- Settable by means of power-tools and immediately loadbearing
- Seismic approved from diameter 10 mm
- 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 10 mm
- Small spacing and edge distances thanks to no spreading effect

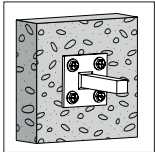
Documentation

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



Fastener in carbon steel onto concrete

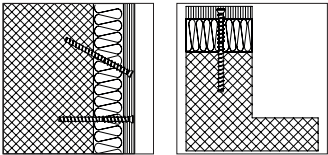
| Product code | PU | L | t _{fix} | Ø F | Drive | |
|------------------------|-----|-----|------------------|-----|-------|---------|
| MMS-plus-F-C16-7,5×50 | 100 | 50 | 0–15 | – | T40 | 1480036 |
| MMS-plus-F-C16-7,5×60 | 50 | 60 | 0–5/25 | – | T40 | 1480037 |
| MMS-plus-F-C16-7,5×70 | 50 | 70 | 0–15/35 | – | T40 | 1564084 |
| MMS-plus-F-C16-7,5×80 | 50 | 80 | 0–25/45 | – | T40 | 1503577 |
| MMS-plus-F-C16-7,5×100 | 50 | 100 | 0–45/65 | – | T40 | 1486584 |
| MMS-plus-F-C16-7,5×120 | 50 | 120 | 0–65/85 | – | T40 | 1564086 |
| MMS-plus-F-C16-7,5×140 | 50 | 140 | 0–85/105 | – | T40 | 1564087 |
| MMS-plus-F-C16-7,5×160 | 50 | 160 | 0–105/125 | – | T40 | 1486585 |
| MMS-plus-F-C20-10×60 | 25 | 60 | 0–10 | – | T45 | 1503581 |
| MMS-plus-F-C20-10×70 | 25 | 70 | 0–5/20 | – | T45 | 1480038 |
| MMS-plus-F-C20-10×80 | 25 | 80 | 0–15/30 | – | T45 | 1503583 |
| MMS-plus-F-C24-12×90 | 25 | 90 | 0–1/15 | 22 | T50 | 1480039 |
| MMS-plus-F-C24-12×100 | 25 | 100 | 0–10/25 | 22 | T50 | 1503584 |
| MMS-plus-F-C24-12×120 | 25 | 120 | 0–30/45 | 22 | T50 | 1564088 |
| MMS-plus-P-D15-7,5×40 | 100 | 40 | 0–5 | – | T30 | 1480040 |
| MMS-plus-P-D15-7,5×50 | 100 | 50 | 0–15 | – | T30 | 1480041 |
| MMS-plus-P-D15-7,5×60 | 50 | 60 | 0–5/25 | – | T30 | 1480042 |
| MMS-plus-SS-7,5×40 | 100 | 40 | 0–5 | 14 | HEX10 | 1480031 |
| MMS-plus-SS-7,5×50 | 50 | 50 | 0–15 | 14 | HEX10 | 1480032 |
| MMS-plus-SS-7,5×60 | 50 | 60 | 0–5/25 | 14 | HEX10 | 1480033 |
| MMS-plus-SS-7,5×70 | 50 | 70 | 0–15/35 | 14 | HEX10 | 1503514 |
| MMS-plus-SS-7,5×80 | 50 | 80 | 0–25/45 | 14 | HEX10 | 1507359 |
| MMS-plus-SS-7,5×100 | 50 | 100 | 0–45/65 | 14 | HEX10 | 1515810 |
| MMS-plus-SS-7,5×120 | 50 | 120 | 0–65/85 | 14 | HEX10 | 1563777 |
| MMS-plus-SS-7,5×140 | 50 | 140 | 0–85/105 | 14 | HEX10 | 1563779 |
| MMS-plus-SS-10×60 | 25 | 60 | 0–10 | 19 | HEX13 | 1503515 |
| MMS-plus-SS-10×70 | 25 | 70 | 0–5/20 | 19 | HEX13 | 1480034 |
| MMS-plus-SS-10×80 | 25 | 80 | 0–15/30 | 19 | HEX13 | 1491708 |
| MMS-plus-SS-10×90 | 25 | 90 | 0–25/40 | 19 | HEX13 | 1563780 |
| MMS-plus-SS-10×100 | 25 | 100 | 0–35/50 | 19 | HEX13 | 1547793 |
| MMS-plus-SS-10×120 | 25 | 120 | 0–55/70 | 19 | HEX13 | 1563781 |
| MMS-plus-SS-10×140 | 25 | 140 | 0–75/90 | 19 | HEX13 | 1522355 |
| MMS-plus-SS-10×160 | 25 | 160 | 0–95/110 | 19 | HEX13 | 1563782 |



Fastener in carbon steel
onto concrete

| Product code | PU | L | t _{fix} | Ø F | Drive | |
|--------------------|----|-----|------------------|-----|-------|---------|
| MMS-plus-SS-12×60 | 25 | 60 | 0–5 | 22 | HEX15 | 1599840 |
| MMS-plus-SS-12×80 | 25 | 80 | 0–5 | 22 | HEX15 | 1516300 |
| MMS-plus-SS-12×90 | 25 | 90 | 0–1/15 | – | HEX15 | 1480035 |
| MMS-plus-SS-12×100 | 25 | 100 | 0–10/25 | – | HEX15 | 1503516 |
| MMS-plus-SS-12×120 | 25 | 120 | 0–30/45 | – | HEX15 | 1503517 |
| MMS-plus-SS-12×140 | 25 | 140 | 0–50/65 | 22 | HEX15 | 1516202 |
| MMS-plus-SS-12×160 | 25 | 160 | 0–70/85 | 22 | HEX15 | 1516203 |

t_{fix} Calculated with two different embedment depths



Fastener in carbon steel
onto concrete

| Product code | PU | L | t _{fix} 0° | t _{fix} 30° | Drive | |
|-----------------------|----|-----|---------------------|----------------------|-------|---------|
| MMS-DT-C15-7,5×200-HP | 50 | 200 | 0–145/165 | 0–125/142 | T40 | 1598480 |
| MMS-DT-C15-7,5×250-HP | 50 | 250 | 0–195/215 | 0–168/185 | T40 | 1525948 |
| MMS-DT-C15-7,5×300-HP | 50 | 300 | 0–245/265 | 0–212/229 | T40 | 1525949 |
| MMS-DT-C15-7,5×350-HP | 50 | 350 | 0–295/315 | 0–255/272 | T40 | 1525950 |
| MMS-DT-C15-7,5×400-HP | 50 | 400 | 0–345/365 | 0–299/316 | T40 | 1598486 |

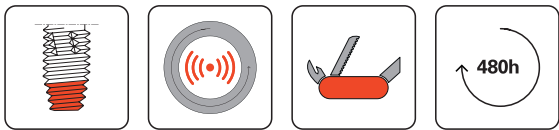
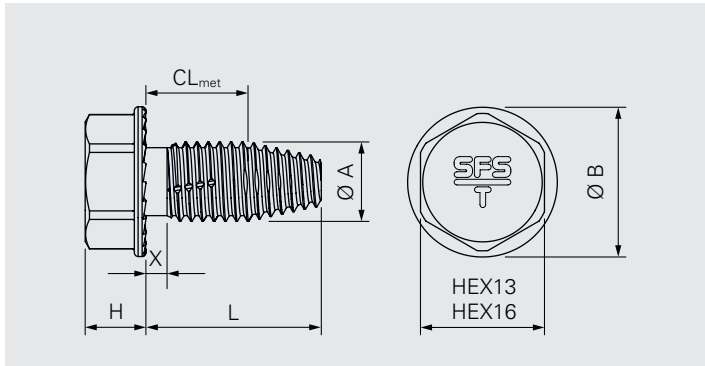
t_{fix} Calculated with two different embedment depths

Accessories/Ancillaries



| Product code | PU | Drive | Head Drive | D | L | WL | FL | |
|-------------------|----|-------|------------|----|-----|-----|-----|---------|
| SDS-6x210/150-4C | 1 | – | – | 6 | 210 | 150 | 150 | 1487583 |
| SDS-8x210/150-4C | 1 | – | – | 8 | 210 | 150 | 150 | 1487585 |
| SDS-10x210/150-4C | 1 | – | – | 10 | 210 | 150 | 150 | 1487586 |
| E313-¼"-50 | 1 | ¼" | HEX13 | – | – | – | – | 508029 |
| E513-½"-78 | 1 | ½" | HEX13 | – | – | – | – | 1649258 |
| E416-½"-38 | 1 | ½" | HEX16 | – | – | – | – | 1389740 |
| T30-25-HEX¼" | 10 | ¼" | T30 | – | – | – | – | 2401110 |
| T40-25-HEX¼" | 10 | ¼" | T40 | – | – | – | – | 769474 |
| Bit holder ZA¼" | 1 | ¼" | ¼" | – | – | – | – | 1162306 |
| T30-40-½" | 10 | ½" | T30 | – | – | – | – | 1489154 |
| T40-40-½" | 10 | ½" | T40 | – | – | – | – | 1489155 |
| T45-40-½" | 10 | ½" | T45 | – | – | – | – | 1489157 |
| T50-40-½" | 10 | ½" | T50 | – | – | – | – | 1489158 |

nonut[®]



Application

Structural connections of metal profiles

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|---|--------------------------------|---|------------------------------|
| Steel | – | Steel | – | – |

Fastener material

Carbon steel, Durocoat[®] 480

Approvals

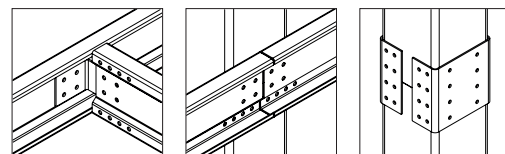


Features and Benefits

- Self tapping fastener suitable for structural connections
- 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 achives by optimized fastener geometry
- Highest safety regarding over-winding and self-loosening

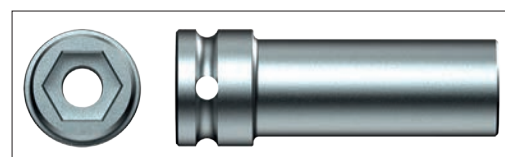
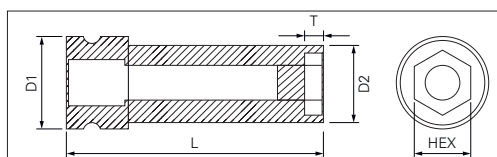
Documentation

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



Fastener in carbon steel onto steel

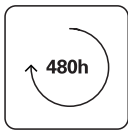
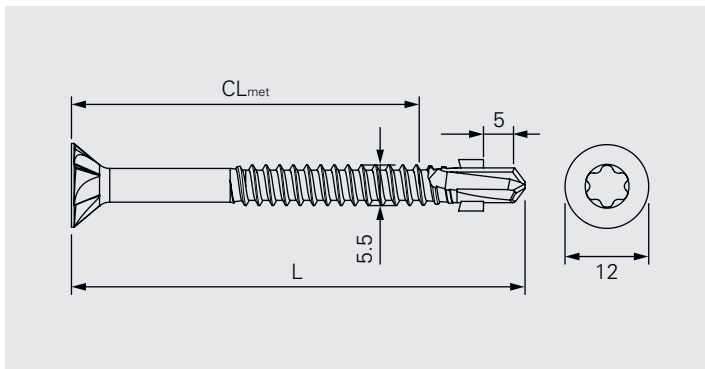
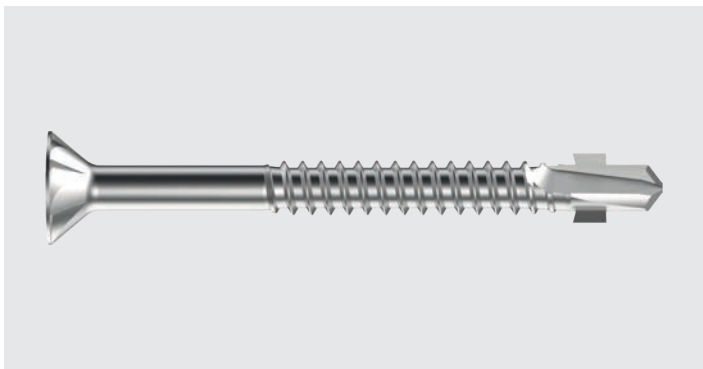
| Product code | PU | L | CL _{met} | Head | Ø A | Ø B | x | H | |
|-------------------------|-----|----|-------------------|-------|-------|------|-------|-----|---------|
| nonut®-TDBL-T-8,6×16 | 200 | 16 | 0–9 | HEX13 | 8.60 | 16.0 | 2.0 | 7 | 1542214 |
| nonut®-TDBLF-T-F-8,6×16 | 200 | 16 | 0–9 | HEX13 | 8.60 | 16.0 | <1.0 | 4.7 | 1541860 |
| nonut®-TDBL-T-8,6×50 | 100 | 50 | 23–43 | HEX16 | 8.60 | 16.0 | 20.0 | 7 | 1607124 |
| nonut®-TDBL-T-10,6×23 | 100 | 23 | 0–13 | HEX16 | 10.60 | 20.0 | 3.0 | 8 | 1542223 |
| nonut®-TDBLF-T-10,6×23 | 100 | 23 | 0–13 | HEX16 | 10.60 | 20.0 | <1.50 | 8 | 1542229 |
| nonut®-TDBL-T-10,6×30 | 100 | 30 | 0–20 | HEX16 | 10.60 | 20.0 | 3.0 | 8 | 1542217 |
| nonut®-TDBL-T-10,6×50 | 100 | 50 | 0–40 | HEX16 | 10.60 | 20.0 | 3.0 | 8 | 1561761 |
| nonut®-TDBLF-T-13,4×20 | 100 | 20 | 0–10 | HEX16 | 13.40 | 20.0 | <2.0 | 8 | 1542470 |
| nonut®-TDBL-T-13,4×30 | 100 | 30 | 0–20 | HEX16 | 13.40 | 20.0 | 3.0 | 8 | 1542212 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | L | T | D1 | D2 | |
|-----------------|----|-------|------------|----|---|----|----|---------|
| E313-¼"-50 | 1 | ¼" | HEX13 | 50 | 6 | – | 20 | 508029 |
| E513-½"-78 | 1 | ½" | HEX13 | 78 | 6 | 25 | 21 | 1649258 |
| E416-½"-40 | 1 | ½" | HEX16 | 40 | 7 | 30 | 24 | 1389740 |
| E516-½"-78 red. | 1 | ½" | HEX16 | 78 | 8 | 22 | 22 | 1649257 |
| E516-½"-78 | 1 | ½" | HEX16 | 78 | 8 | 30 | 25 | 1649256 |

SC5-5.5



Application

Fastening of timber boards onto supporting steel structures

| Component 1 (t _i) | | Component 2 (t _{II}) | $\Sigma_{\max} t_{II}$ |
|-------------------------------|---|--------------------------------|------------------------|
| Timber | – | Steel 2.0–5.0 | 5.0 |

Fastener material

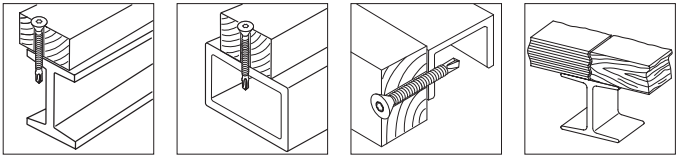
Carbon steel, Durocoat® 480

Approvals

–

Features and Benefits

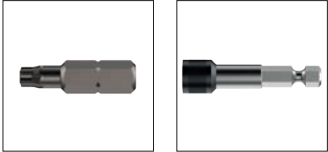
- Flush-mounted installation without damaging the timber surface given by the milling grooves
- Ergonomical setting tool available



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | |
|--------------------|------|----|-------------------|-----------------------|---------|
| SC5/46-12CC-5,5×60 | 1000 | 60 | 29–45 | 29–40/43 | 1580102 |

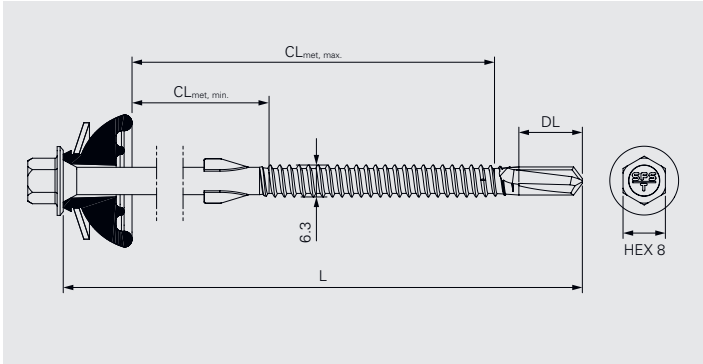
t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-----------------|----|-------|------------|---------|
| T30-25-HEX¼" | 1 | ¼" | T30 | 24010 |
| Bit holder ZA¼" | 10 | ¼" | ¼" | 1162306 |

SCF-6.3



Application

- Fastening of fibre cement boards onto metal profiles (SCF3)
- Fastening of fibre cement boards onto metal beams (SCF12)

| Component 1 (t _i) | | Component 2 (t _{ii}) | | Σ _{max} t _i +t _{ii} |
|-------------------------------|--------|--------------------------------|----------|--|
| Fibre cement | 2×6.50 | Steel (SCF3) | 1.50–3.0 | 16.0 |
| | | Steel (SCF12) | 3.0–12.0 | 25.0 |

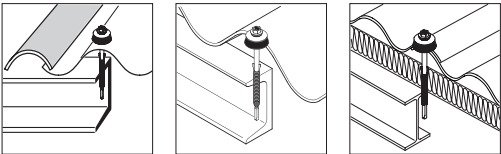
Fastener material

- Carbon steel, Durocoat® 480
- BAZ sealing element: Austenitic stainless steel A2, EPDM-seal

Approvals

Features and Benefits

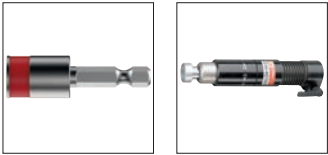
- Self drilling fastener suitable for corrugated fibre cement boards
- High quality EPDM sealing element for long-term weather sealing
- No pre-drilling of fibre cement board required thanks to expanding wings
- High corrosion durability thanks to special galvanic zinc coating



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | DL | |
|-------------------|-----|-----|-------------------|-----------------------|----|---------|
| SCF3-BAZ-6,3×115 | 100 | 115 | 53–93 | 53–90/91 | 12 | 1664091 |
| SCF12-BAZ-6,3×120 | 100 | 120 | 50–93 | 53–81/90 | 17 | 1664093 |

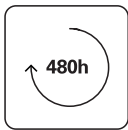
t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-------------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| CF40-FEIN-ASCS6.3-BASIC | 1 | FEIN | – | 1371950 |

SCFW-6.5



Application

Fastening of fibre cement boards onto timber

Fastener material

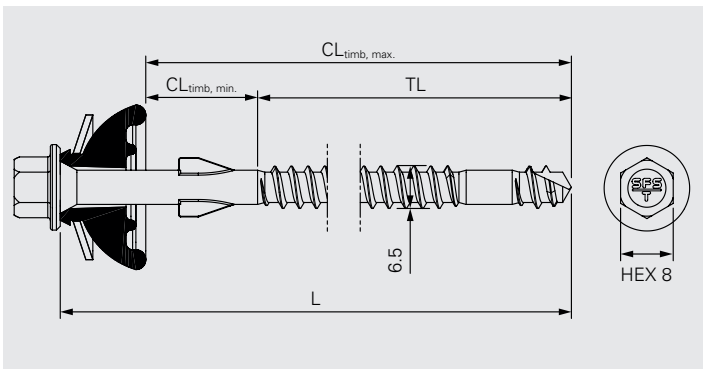
Carbon steel, Durocoat® 480
BAZ sealing element: Austenitic stainless steel A2, EPDM-seal

Features and Benefits

- Self drilling fastener suitable for corrugated fibre cement boards
- High quality EPDM sealing element for long-term weather sealing
- Fast installation thanks to the threaded drill point
- No pre-drilling of fibre cement board required thanks to expanding wings
- High corrosion durability thanks to special galvanic zinc coating

Documentation

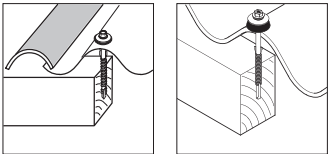
Approval document (ETA) | Declaration of performance (DoP)



| Component 1 (t _i) | | Component 2 (t _{ii}) | | $\Sigma_{\max} t_i + t_{ii}$ |
|-------------------------------|--------|--------------------------------|--------------------|------------------------------|
| Fibre cement | 2x6.50 | Timber | $l_{ef} \geq 57.0$ | — |

Approvals

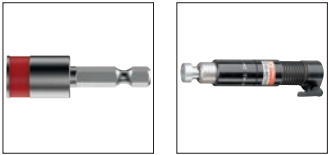




Fastener in carbon steel
onto timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | |
|------------------|-----|-----|----|--------------------|------------------------|---------|
| SCFW-BAZ-6,5×95 | 100 | 95 | 50 | 0–85 | 0–28 | 1664073 |
| SCFW-BAZ-6,5×130 | 100 | 130 | 50 | 0–120 | 0–63 | 1506552 |

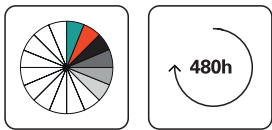
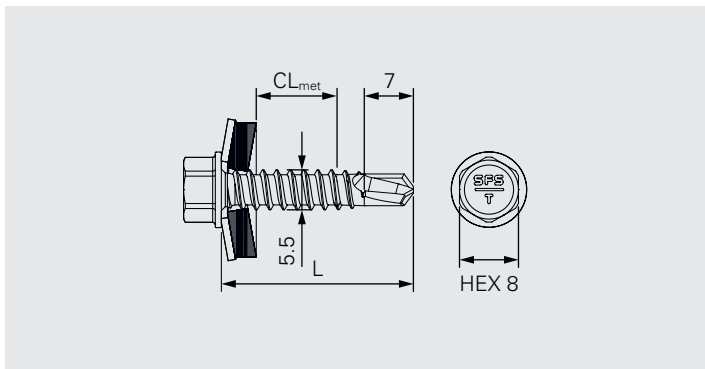
t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-------------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| CF40-FEIN-ASCS6.3-BASIC | 1 | FEIN | – | 1371950 |

SD3-5.5



Application

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

Fastener material

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

| 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 | 2×0.63–2×2.0 | 5.0 |

Approvals

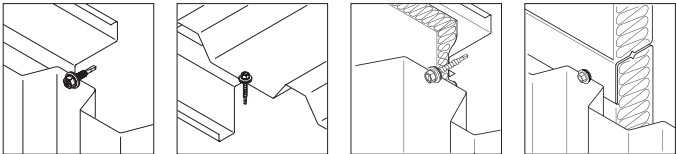
CE₁₉
ETA-10/0198

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 | CL _{met} | t _{fix, met} | T16 |
|----------------|-----|----|-------------------|-----------------------|---------|
| SD3-T16-5,5×25 | 500 | 25 | 0–11 | 0–7/10 | 1506612 |
| SD3-T16-5,5×45 | 500 | 45 | 0–31 | 0–27/31 | 1506617 |

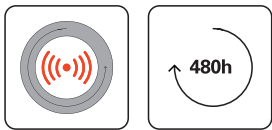
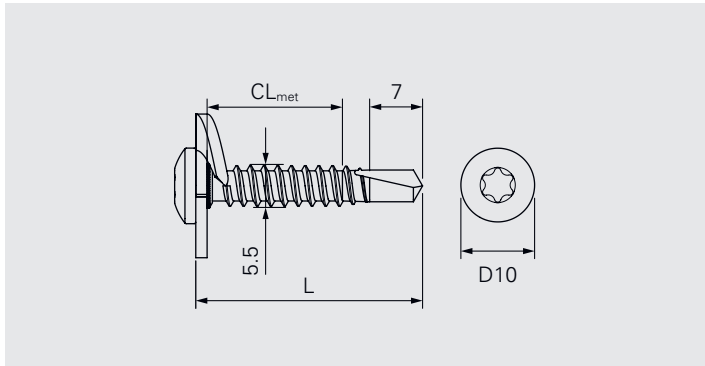
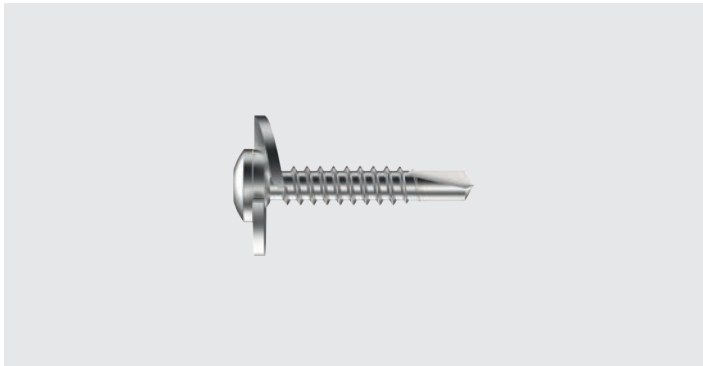
t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SD3-D10-5.5



Application

Fastening of single-ply insulated roof panels onto metal profiles

| Component 1 (t _i) | | Component 2 (t _{ii}) | $\Sigma_{\max} t_i + t_{ii}$ |
|-------------------------------|---|--------------------------------|------------------------------|
| Single-ply panel | – | Steel 1.25–3.0 | 4.0 |

Fastener material

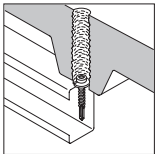
Carbon steel, Durocoat® 480
Cutting disc: Carbon steel

Approvals

–

Features and Benefits

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



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | TC |
|-----------------------|-----|----|-------------------|-----------------------|---------|
| SD3-D10-T19/C9-5,5×30 | 500 | 30 | 0-16 | 0-13/15 | 1645611 |

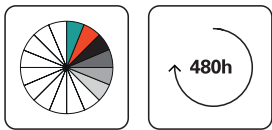
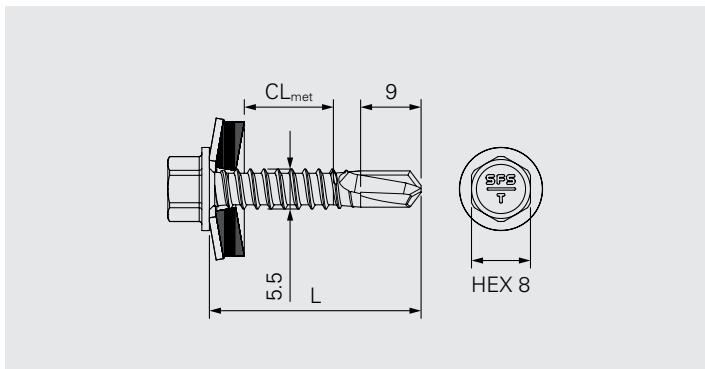
t_{fix, met}: CL_{met, min.} - (CL_{met, max.} - t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} - t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-------------------|----|-------|------------|--------|
| T25W-175-HEX 1/4" | 5 | 1/4" | T25W | 727979 |

SD6-5.5



Application

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

Fastener material

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

| 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 | 2×1.0–2×3.0 | 7.0 |

Approvals

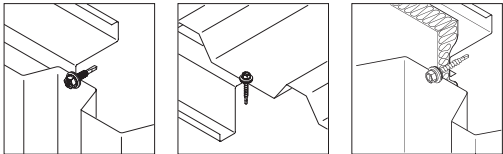
CE₁₉
ETA-10/0198

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 | CL _{met} | t _{fix, met} | T16 |
|----------------|-----|----|-------------------|-----------------------|---------|
| SD6-T16-5,5×28 | 100 | 28 | 0–13 | 0–10/11 | 1423085 |
| SD6-T16-5,5×28 | 500 | 28 | 0–13 | 0–10/11 | 1423084 |
| SD6-T16-5,5×38 | 500 | 38 | 0–23 | 0–20/21 | 1423700 |

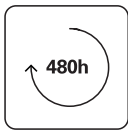
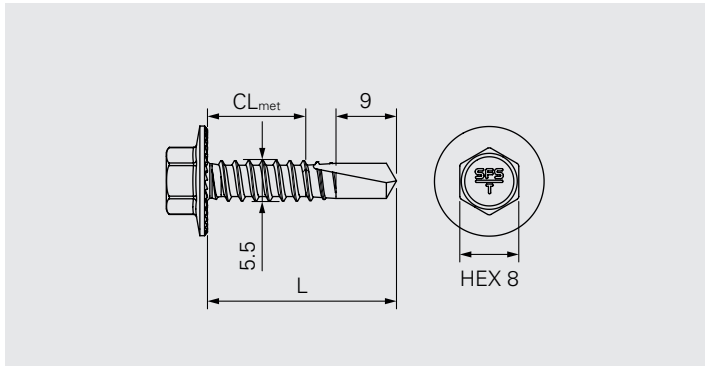
t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SD6-H15-5.5



Application

Fastening of metal decks, liner trays onto metal profiles

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

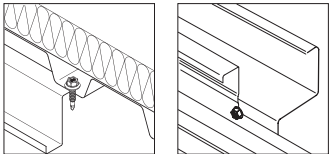
CE₁₉
ETA-10/0198

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 shear 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 | CL _{met} | t _{fix, met} | T16 |
|----------------|-----|----|-------------------|-----------------------|---------|
| SD6-H15-5,5×22 | 500 | 22 | 0–9 | 0–6/7 | 1422763 |

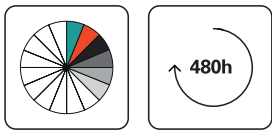
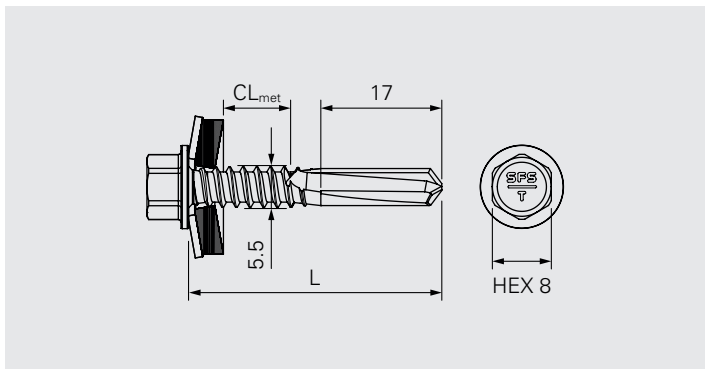
t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| Drive shaft H15 head | 5 | ¼" | H15 | 1517546 |

SD14-5.5



Application

Fastening of profile sheets onto metal beams

| Component 1 (t _i) | | Component 2 (t _{ii}) | | $\Sigma_{\max} t_i + t_{ii}$ |
|-------------------------------|-----------|--------------------------------|----------|------------------------------|
| Steel | 0.50–1.50 | Steel | 4.0–12.0 | 13.50 |

Fastener material

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

Approvals

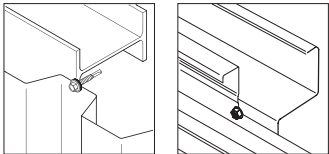
CE₁₉
ETA-10/0198

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 | CL _{met} | t _{fix, met} | T16 |
|-----------------|-----|----|-------------------|-----------------------|---------|
| SD14-T16-5,5×34 | 500 | 25 | 0–10 | 0–1/6 | 1423111 |
| SD14-T16-5,5×48 | 500 | 48 | 0–24 | 0–12/20 | 1423120 |
| SD14-T16-5,5×58 | 250 | 58 | 0–34 | 0–22/30 | 1423121 |

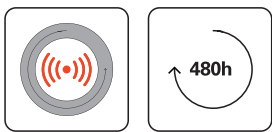
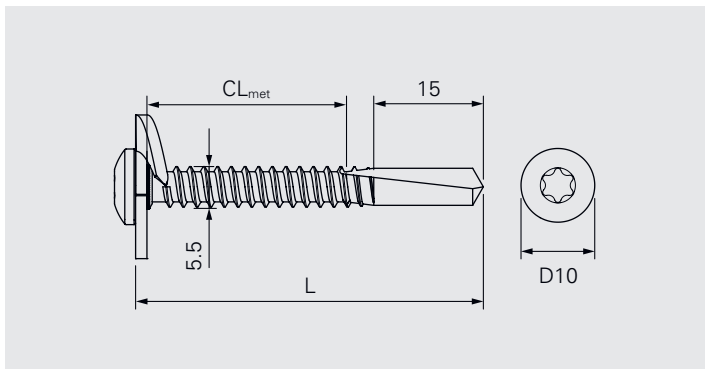
t_{fix, met}: CL_{met, min.}– (CL_{met, max.} –t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} –t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SD14-D10-5.5



Application

Fastening of single-ply insulated roof panels onto metal beams

| Component 1 (t _i) | | Component 2 (t _{ii}) | $\Sigma_{max} t_i + t_{ii}$ |
|-------------------------------|---|--------------------------------|-----------------------------|
| Single-ply panel | – | Steel 4.0–12.0 | 13.50 |

Fastener material

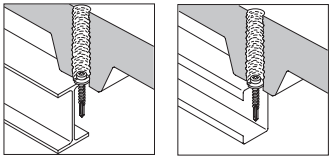
Carbon steel, Durocoat® 480
Cutting disc: Carbon steel

Approvals

–

Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of membrane and insulation required thanks to cutting-washer
- High performance drill point for heavy steel beams
- High corrosion durability 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 | CL _{met} | t _{fix, met} | TC |
|------------------------|-----|----|-------------------|-----------------------|---------|
| SD14-D10-T19/C9-5,5×46 | 500 | 46 | 0-25 | 0-13/21 | 1645606 |

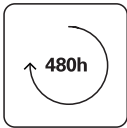
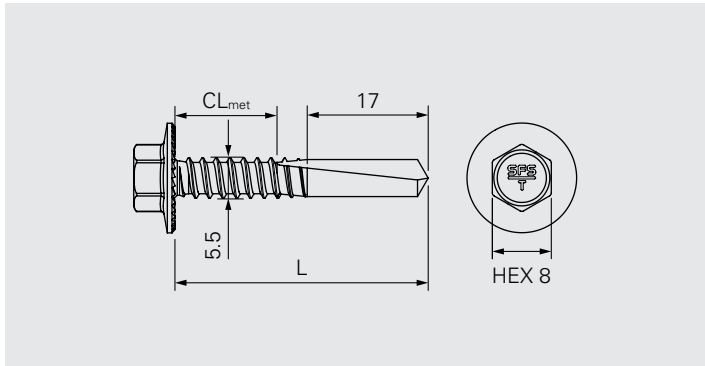
t_{fix, met}: CL_{met, min.} - (CL_{met, max.} - t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} - t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|-----------------|----|-------|------------|--------|
| T25W-175-HEX ¼" | 5 | ¼" | T25W | 727979 |

SD14-H15-5.5



Application

Fastening of metal decks, liner trays onto metal beams

| Component 1 (t _i) | | Component 2 (t _{ii}) | | $\Sigma_{max} t_i + t_{ii}$ |
|-------------------------------|-----------|--------------------------------|----------|-----------------------------|
| Steel | 0.50–1.50 | Steel | 4.0–12.0 | 13.50 |

Fastener material

Carbon steel, Durocoat® 480

Approvals

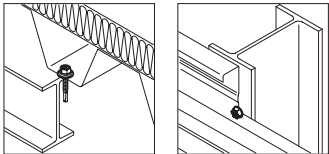
CE₁₉
ETA-10/0198

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 shear 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 | CL _{met} | t _{fix, met} | |
|-----------------|-----|----|-------------------|-----------------------|---------|
| SD14-H15-5,5×34 | 500 | 34 | 0-23 | 0-11/19 | 1420173 |

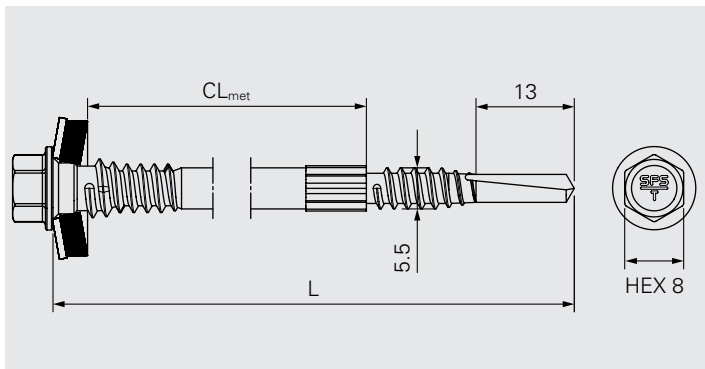
t_{fix, met}: CL_{met, min.} - (CL_{met, max.} - t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} - t_{tl, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| Drive shaft H15 head | 5 | ¼" | H15 | 1517546 |

SDRT2-5.5



Application

Distance fastening of profile sheets onto liner trays

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|-----------|--------------------------------|-------------|------------------------------|
| Steel | 0.50–1.50 | Steel | 0.75–2×1.50 | 4.50 |
| Aluminium | 0.80–1.50 | Steel | 0.75–2×1.50 | 4.50 |

Fastener material

Carbon steel, Durocoat® 480

Sealing washer: Carbon steel galvanized, EPDM-seal

Approvals

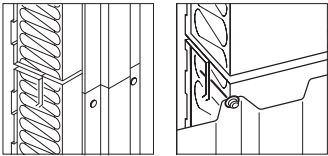


Features and Benefits

- Self drilling fastener suitable for installation of profile sheets at a set distance from liner trays
- No pre-drilling of metal sheet required thanks to the knurl on the shank
- Perfect supporting of the metal sheet given by support thread with cut-off thread-end
- Precisely fastening distance given by the knurl on the shank
- No torque control required given by free-spin zone
- High corrosion durability thanks to special galvanic zinc coating
- High quality EPDM sealing washer for long-term weather sealing
- Secured against unwinding given by cut-off thread-end
- High shear resistance achieved by optimized fastener geometry
- Cost saving installation due to pre-drilling of profile sheets no longer necessary

Documentation

Installation instruction | Technical Data



Fastener in carbon steel
onto steel

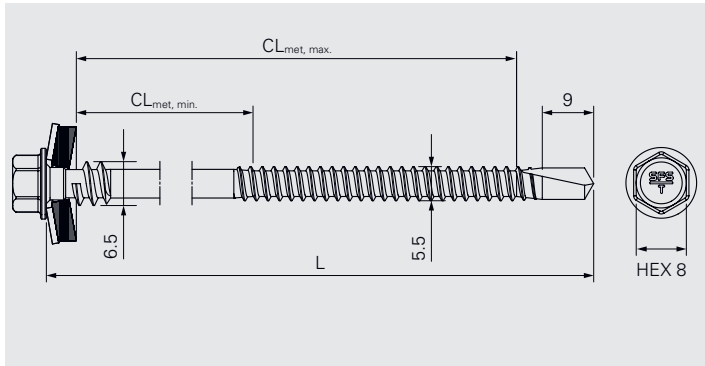
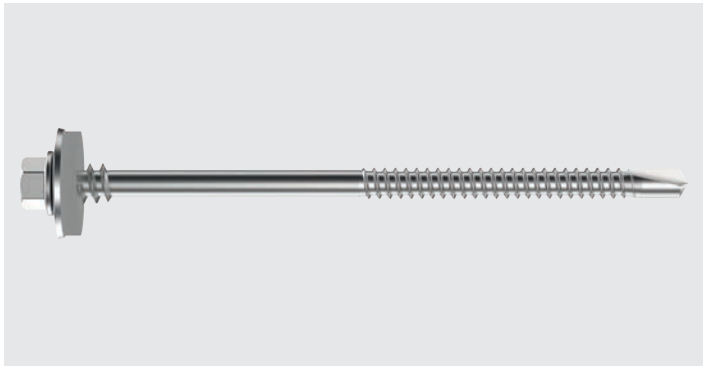
| Product code | PU | L | CL _{met} / Insulation | Liner tray (t _{li}) substructure | T16 |
|-------------------|-----|-----|-----------------------------------|---|---------|
| SDRT2-T16-5,5×69 | 250 | 69 | 40 | 0.63–3.0 | 1580868 |
| SDRT2-T16-5,5×89 | 100 | 89 | 60 | 0.63–3.0 | 1576185 |
| SDRT2-T16-5,5×109 | 100 | 109 | 80 | 0.63–3.0 | 1524405 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SDT5-5.5



Application

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

Fastener material

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

| Component 1 (t _i /t _{NII}) | | Component 2 (t _{II}) | | Σ _{max} t _i +t _{II} |
|---|-------|--------------------------------|----------|--|
| Sandwich panel | ≥0.40 | Steel | 1.50–4.0 | 5.0 |

Approvals

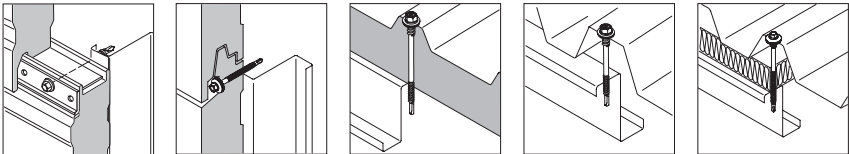
CE₁₉
ETA-13/0183

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 bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- High corrosion durability thanks to special galvanic zinc coating

Documentation

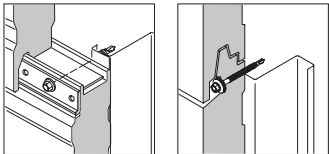
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | A19 |
|------------------|-----|-----|-------------------|-----------------------|---------|
| SDT5-A19-5,5×68 | 100 | 68 | 30–51 | 30–47/49 | 1423940 |
| SDT5-A19-5,5×88 | 100 | 88 | 40–71 | 40–67/69 | 1423943 |
| SDT5-A19-5,5×108 | 100 | 108 | 50–91 | 50–87/89 | 1423950 |
| SDT5-A19-5,5×128 | 100 | 128 | 70–111 | 70–107/109 | 1423954 |
| SDT5-A19-5,5×148 | 100 | 148 | 90–131 | 90–127/129 | 1423960 |
| SDT5-A19-5,5×178 | 100 | 178 | 110–161 | 110–157/159 | 1424449 |
| SDT5-A19-5,5×208 | 100 | 208 | 140–191 | 140–187/189 | 1424466 |
| SDT5-A19-5,5×238 | 100 | 238 | 170–221 | 170–217/219 | 1424468 |
| SDT5-A19-5,5×278 | 100 | 278 | 210–261 | 210–257/259 | 1424469 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | No washer |
|--------------|-----|-----|-------------------|-----------------------|-----------|
| SDT5-5,5×68 | 100 | 68 | 33–54 | 33–50/52 | 1423939 |
| SDT5-5,5×88 | 100 | 88 | 43–74 | 43–70/72 | 1423941 |
| SDT5-5,5×108 | 100 | 108 | 53–94 | 53–90/92 | 1423949 |
| SDT5-5,5×128 | 100 | 128 | 73–114 | 73–110/112 | 1423955 |
| SDT5-5,5×148 | 100 | 148 | 93–134 | 93–130/132 | 1423957 |
| SDT5-5,5×178 | 100 | 178 | 113–164 | 113–160/162 | 1525261 |
| SDT5-5,5×208 | 100 | 208 | 143–194 | 143–190/192 | 1525262 |
| SDT5-5,5×238 | 100 | 238 | 173–224 | 173–220/222 | 1525263 |
| SDT5-5,5×278 | 100 | 278 | 213–264 | 213–260/262 | 1466263 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

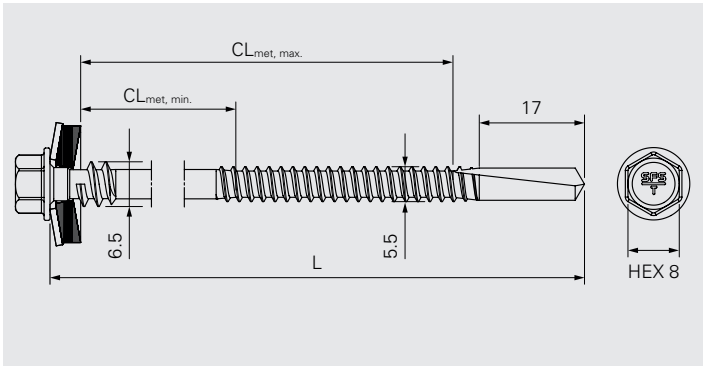
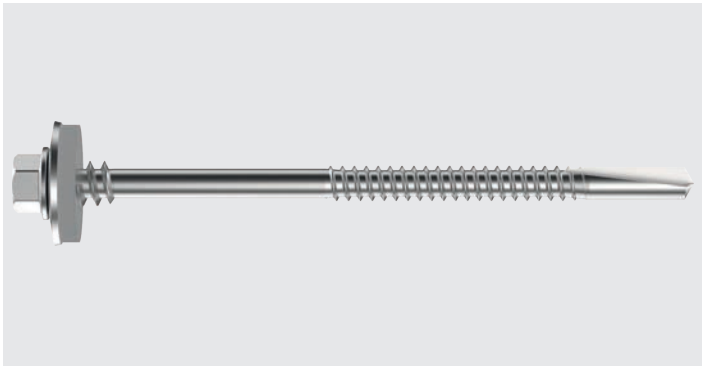


Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |



SDT14-5.5



Application

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

| Component 1 (t _i / t _{NII}) | Component 2 (t _{II}) | Σ _{max} t _i +t _{II} |
|--|--------------------------------|--|
| Sandwich panel ≥0.40 | Steel 4.0–12.0 | 14.0 |

Fastener material

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

Approvals

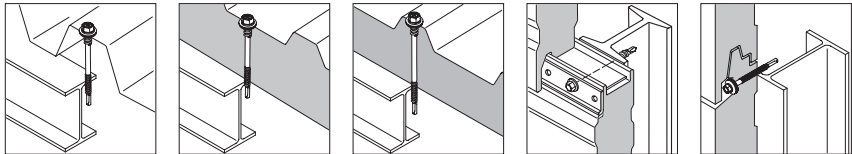
CE₁₉
ETA-13/0183

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 durability thanks to special galvanic zinc coating

Documentation

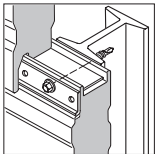
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | A19 |
|-------------------|-----|-----|-------------------|-----------------------|---------|
| SDT14-A19-5,5×78 | 100 | 78 | 30–53 | 30–41/49 | 1422750 |
| SDT14-A19-5,5×98 | 100 | 98 | 40–73 | 40–61/69 | 1423712 |
| SDT14-A19-5,5×118 | 100 | 118 | 50–93 | 50–81/89 | 1423880 |
| SDT14-A19-5,5×138 | 100 | 138 | 70–113 | 70–101/109 | 1423882 |
| SDT14-A19-5,5×158 | 100 | 158 | 90–133 | 90–121/129 | 1423884 |
| SDT14-A19-5,5×188 | 100 | 188 | 110–163 | 110–151/159 | 1424470 |
| SDT14-A19-5,5×218 | 100 | 218 | 140–193 | 140–181/189 | 1424471 |
| SDT14-A19-5,5×248 | 100 | 248 | 170–223 | 170–221/229 | 1424472 |
| SDT14-A19-5,5×288 | 100 | 288 | 210–263 | 210–251/259 | 1424498 |
| SDT14-A19-5,5×348 | 100 | 348 | 270–323 | 270–311/319 | 1465147 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})



Fastener in carbon steel
onto steel

| Product code | PU | L | CL _{met} | t _{fix, met} | No washer |
|---------------|-----|-----|-------------------|-----------------------|-----------|
| SDT14-5,5×78 | 100 | 78 | 33–56 | 33–44/52 | 1422748 |
| SDT14-5,5×98 | 100 | 98 | 43–76 | 43–64/72 | 1423711 |
| SDT14-5,5×118 | 100 | 118 | 53–96 | 53–84/92 | 1423879 |
| SDT14-5,5×138 | 100 | 138 | 73–116 | 73–104/112 | 1423881 |
| SDT14-5,5×158 | 100 | 158 | 93–136 | 93–124/132 | 1423883 |
| SDT14-5,5×188 | 100 | 188 | 113–166 | 113–154/162 | 1491055 |
| SDT14-5,5×218 | 100 | 218 | 143–196 | 143–184/192 | 1491056 |
| SDT14-5,5×248 | 100 | 248 | 173–226 | 173–214/222 | 1491057 |
| SDT14-5,5×288 | 100 | 288 | 213–266 | 213–254/262 | 1491059 |
| SDT14-5,5×348 | 100 | 348 | 273–326 | 273–314/322 | 1476752 |

t_{fix, met}: CL_{met, min.} – (CL_{met, max.} – t_{tl, max.} or load-bearing clamping length according ETA)/(CL_{met, max.} – t_{tl, min.})

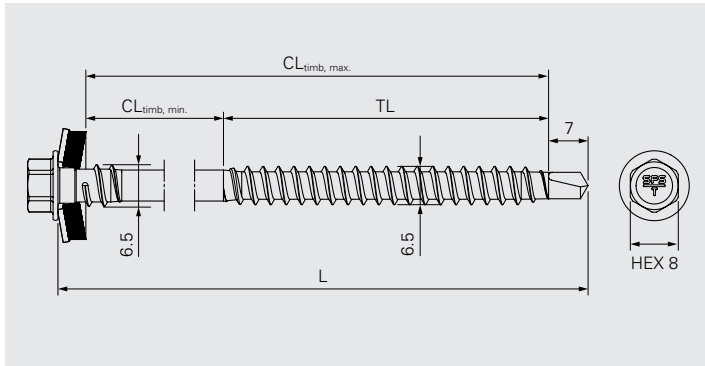
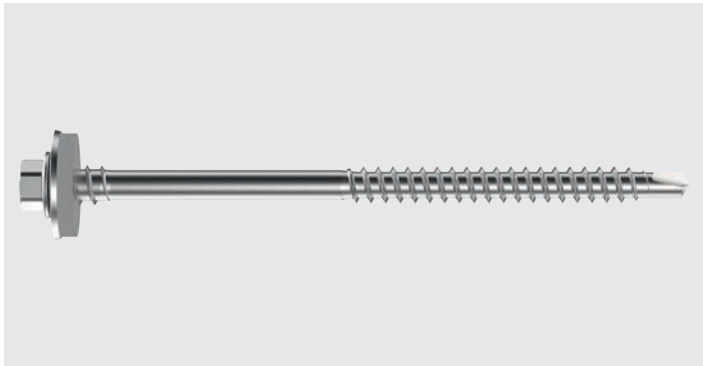


Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |



SDTW-6.5



Application

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

| Component 1 (t_i / t_{NII}) | | Component 2 (t_{II}) | $\Sigma_{max} t_i + t_{II}$ |
|---------------------------------|-------------|------------------------------|-----------------------------|
| Sandwich panel | ≥ 0.40 | Timber $l_{ef} \geq 35.0$ | — |

Fastener material

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

Approvals

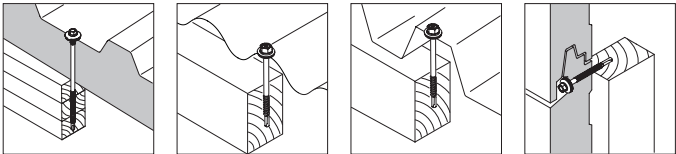
CE₁₉
ETA-13/0183

Features and Benefits

- Self drilling fastener suitable for installation of sandwich panels onto timber
- 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
- Reduced risks of timber splitting given by the drill point
- High bending capacity for absorption of thermal expansion of the sandwich panel outer-skin
- High corrosion durability thanks to special galvanic zinc coating

Documentation

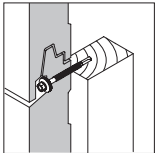
Approval document (ETA) | Declaration of performance (DoP)



Fastener in carbon steel
onto timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | A19 |
|------------------|-----|-----|----|--------------------|------------------------|---------|
| SDTW-A19-6,5×75 | 100 | 75 | 50 | 17–65 | 17–30 | 937840 |
| SDTW-A19-6,5×115 | 100 | 115 | 65 | 42–105 | 42–70 | 911329 |
| SDTW-A19-6,5×125 | 100 | 125 | 65 | 52–115 | 52–80 | 937842 |
| SDTW-A19-6,5×135 | 100 | 135 | 65 | 62–125 | 62–90 | 937845 |
| SDTW-A19-6,5×150 | 100 | 150 | 65 | 77–140 | 77–105 | 1222803 |

t_{fix, timb}: CL_{timb, min.}– (CL_{timb, max.} –l_{ef, min.})



Fastener in carbon steel
onto timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | No washer |
|--------------|-----|-----|----|--------------------|------------------------|-----------|
| SDTW-6,5×75 | 100 | 75 | 50 | 20–68 | 20–33 | 743764 |
| SDTW-6,5×115 | 100 | 115 | 65 | 45–108 | 45–73 | 1047815 |
| SDTW-6,5×125 | 100 | 125 | 65 | 55–118 | 55–83 | 1346440 |
| SDTW-6,5×135 | 100 | 135 | 65 | 65–128 | 65–93 | 701545 |
| SDTW-6,5×150 | 100 | 150 | 65 | 80–143 | 80–108 | 1237209 |

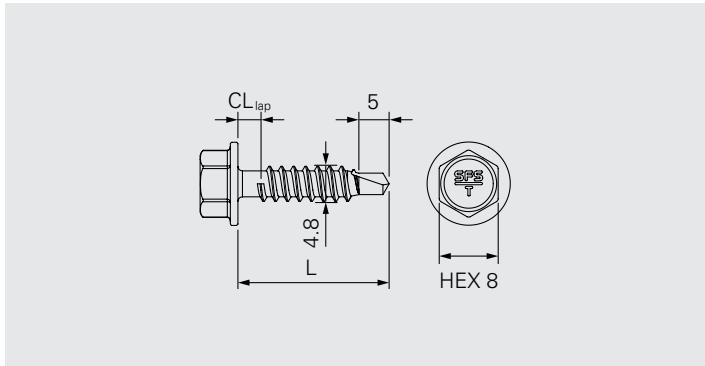
t_{fix, timb}: CL_{timb, min.}– (CL_{timb, max.} –l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SL2-4.8



Application

Fastening of overlaps of metal decks, liner trays

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|-----------|--------------------------------|-----------|------------------------------|
| Steel | 0.63–1.50 | Steel | 0.63–1.50 | 2.50 |

Fastener material

Carbon steel, Durocoat® 480

Approvals

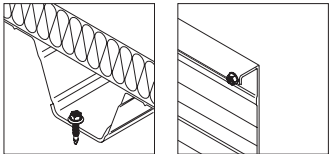
CE₁₉
ETA-10/0198

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 corrosion durability thanks to special galvanic zinc coating

Documentation

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



**Fastener in carbon steel
onto steel**

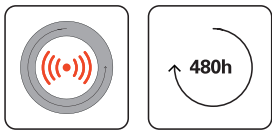
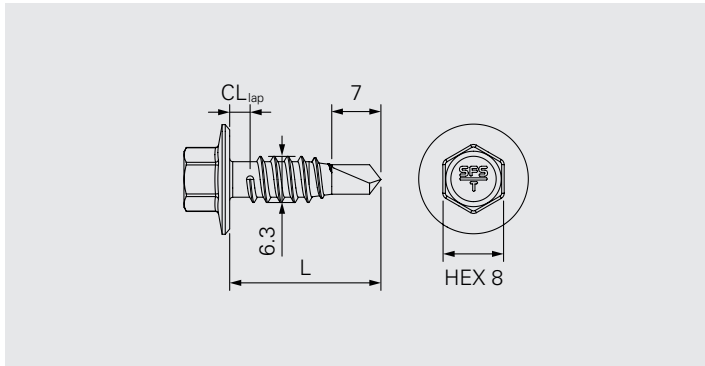
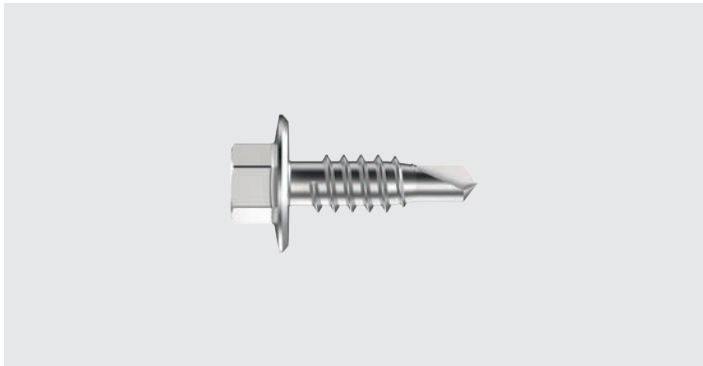
| Product code | PU | L | CL _{lap} | |
|--------------|------|----|-------------------|--------|
| SL2-4,8×20 | 1000 | 20 | 1.20–2.50 | 482671 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SL2-H15-6.3



Application

Fastening of overlaps of metal decks, liner trays

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|-----------|--------------------------------|-----------|------------------------------|
| Steel | 0.63–1.50 | Steel | 0.63–1.50 | 2.50 |

Fastener material

Carbon steel, Durocoat® 480

Approvals

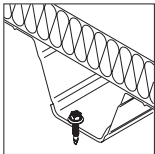
CE₁₉
ETA-10/0198

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 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

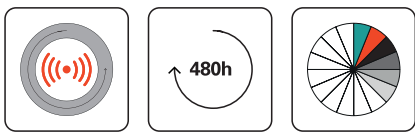
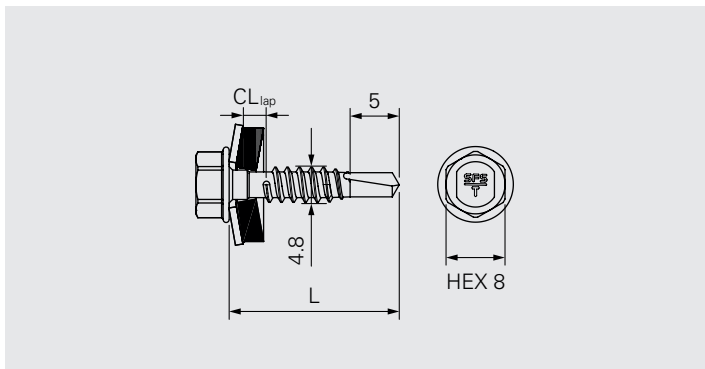
| Product code | PU | L | CL _{lap} | |
|----------------|-----|----|-------------------|--------|
| SL2-H15-6,3×20 | 500 | 32 | 1.20–2.50 | 943791 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| Drive shaft H15 head | 5 | ¼" | H15 | 1517546 |

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) | | Component 2 (t _{ii}) | | Σ _{max} t _i +t _{ii} |
|-------------------------------|-----------|--------------------------------|-----------|--|
| Steel | 0.40–1.50 | Steel | 0.40–1.50 | 2.50 |

Approvals

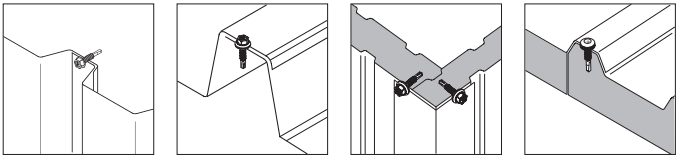
CE₁₉
ETA-10/0198

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 and free-spin zone
- 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

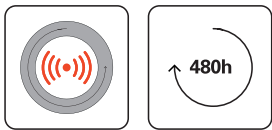
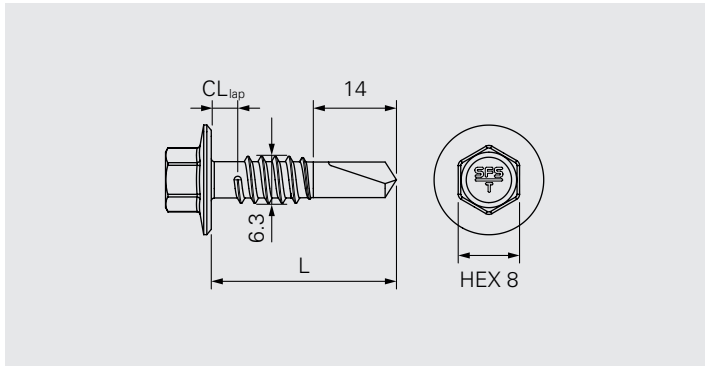
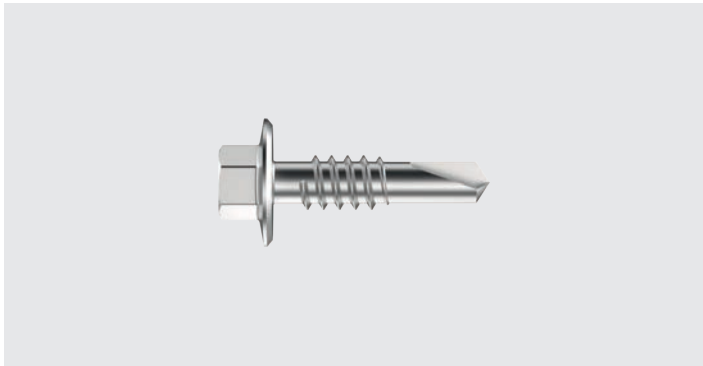
| Product code | PU | L | CL _{lap} | A14 |
|------------------|-----|----|-------------------|------|
| SL2-T-A14-4,8×20 | 250 | 20 | 0.80–2.50 | 3041 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SL3-H15-6.3



Application

Fastening of overlaps of metal decks, liner trays
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

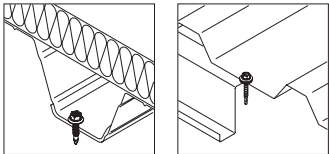


Features and Benefits

- 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 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

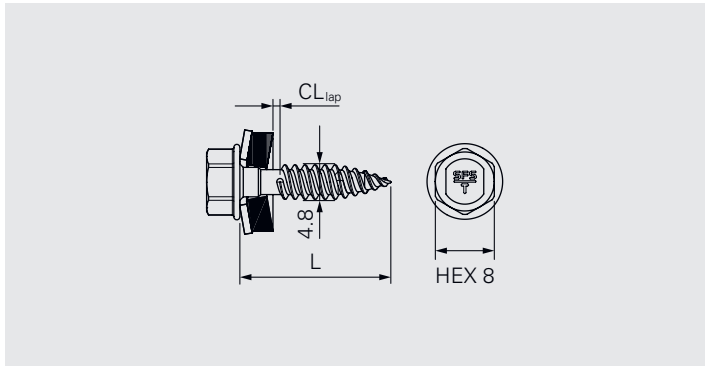
| Product code | PU | L | CL _{lap} | |
|----------------|-----|----|-------------------|--------|
| SL3-H15-6,3×24 | 500 | 24 | 2.0–3.50 | 984607 |
| SL3-H15-6,3×32 | 500 | 32 | 2.0–3.50 | 3615 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |
| Drive shaft H15 head | 5 | ¼" | H15 | 1517546 |

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

Fastener material

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

| 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 |

Approvals

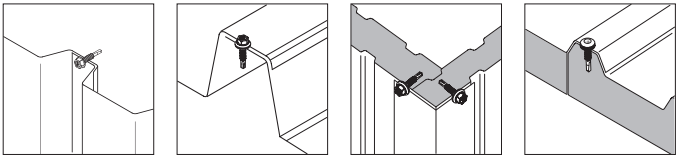
CE₁₉
ETA-10/0198

Features and Benefits

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

Documentation

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



Fastener in carbon steel
onto steel

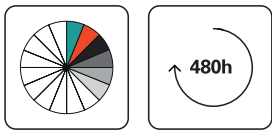
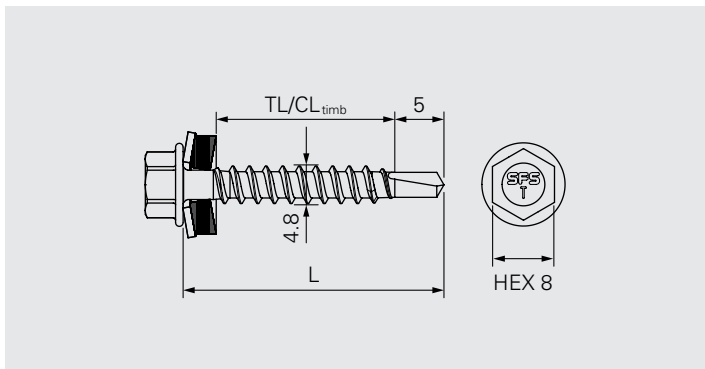
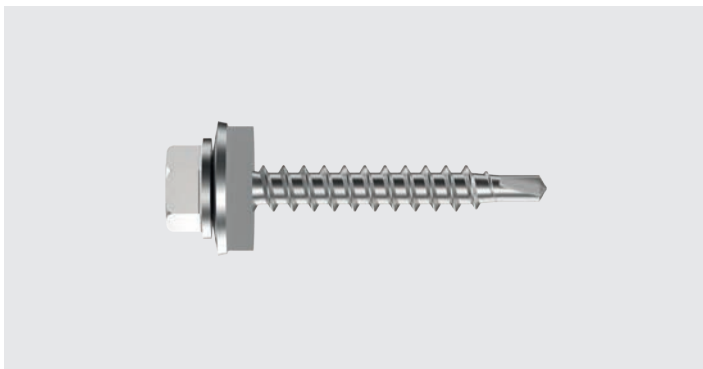
| Product code | PU | L | CL _{lap} | A14 |
|------------------|-----|----|-------------------|---------|
| SLG-T-A14-4,8×20 | 250 | 20 | 0.80-2.0 | 1385274 |



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SW-T-4.8



Application

Fastening of profile sheets onto timber

| Component 1 (t _i) | | Component 2 (t _{II}) | Σ _{max} t _i +t _{II} |
|-------------------------------|-----------|---------------------------------|--|
| Steel | 0.50–1.50 | Timber l _{ef} ≥25.0 | – |

Fastener material

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

Approvals

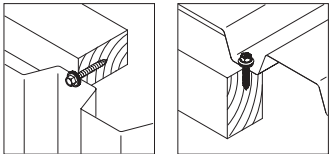
CE₁₉
ETA-10/0198

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 | CL _{timb} | t _{fix, timb} | A14 |
|-----------------|-----|----|----|--------------------|------------------------|--------|
| SW-T-A14-4,8×35 | 250 | 35 | 25 | 0–25 | 0–1 | 856490 |
| SW-T-A14-4,8×51 | 250 | 51 | 41 | 0–41 | 0–16 | 16576 |

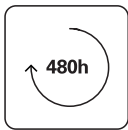
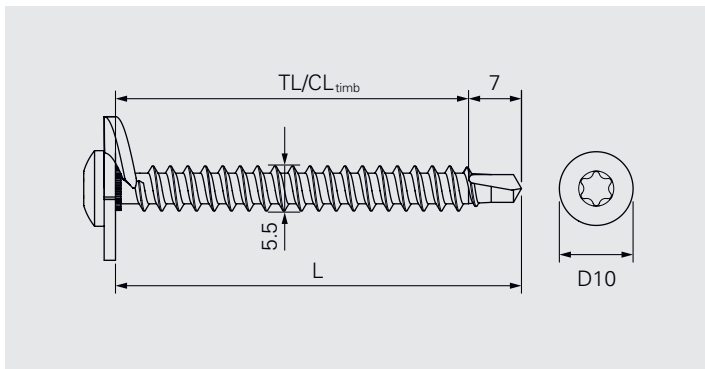
t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

SW2-T-D10-5.5



Application

Fastening of single-ply insulated roof panels onto timber

Fastener material

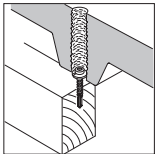
Carbon steel, Durocoat® 480
Cutting disc: Carbon steel

| Component 1 (t _i) | | Component 2 (t _{II}) | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|---|--------------------------------|------------------------------|
| Single-ply panel | – | Timber $l_{ef} \geq 25.0$ | – |

Approvals

Features and Benefits

- Self drilling fastener suitable for installation of single-ply insulated roof panels
- No pre-drilling of membrane and insulation required thanks to cutting-washer
- Reduced risks of timber splitting given by the drill point
- High corrosion durability 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 timber

| Product code | PU | L | TL | CL _{timb} | t _{fix, timb} | |
|-------------------------|-----|----|----|--------------------|------------------------|---------|
| SW2-T-D10-T19/C9-5,5×55 | 500 | 55 | 47 | 0-47 | 0-22 | 1178371 |

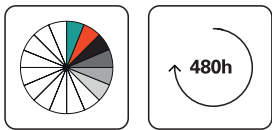
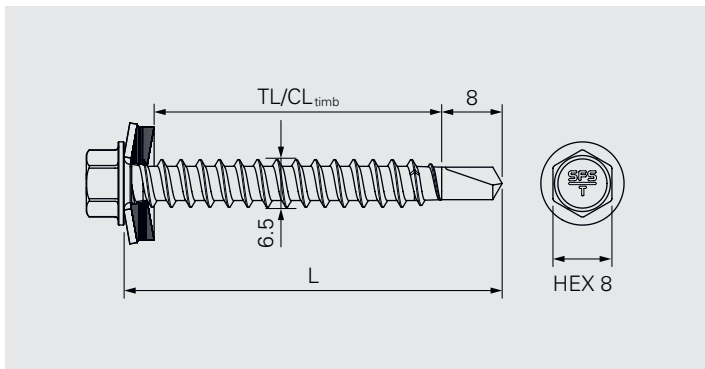
t_{fix, timb}: CL_{timb, min.} - (CL_{timb, max.} - l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|----------------|----|-------|------------|--------|
| T25W-175-HEX¼" | 5 | ¼" | T25W | 727979 |

SW3-T-6.5



Application

Fastening of profile sheets onto timber

| Component 1 (t _i) | | Component 2 (t _{II}) | $\Sigma_{\max} t_i + t_{II}$ |
|-------------------------------|-----------|--------------------------------|------------------------------|
| Steel | 0.50–1.50 | Timber $l_{ef} \geq 35.0$ | – |

Fastener material

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

Approvals

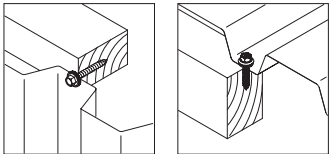
CE₁₉
ETA-10/0198

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 | CL _{timb} | t _{fix, timb} | T16 |
|------------------|-----|----|----|--------------------|------------------------|-------|
| SW3-T-T16-6,5×50 | 250 | 50 | 39 | 0–39 | 0–4 | 71056 |

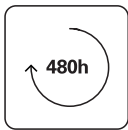
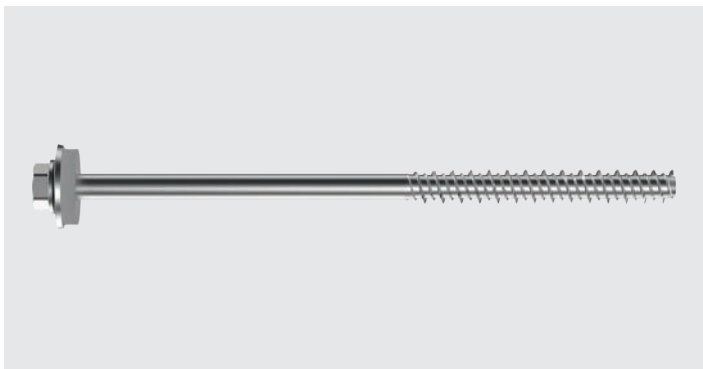
t_{fix, timb}: CL_{timb, min.} – (CL_{timb, max.} – l_{ef, min.})



Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|--------------|----|-------|------------|---------|
| E308-¼"-50 | 1 | ¼" | HEX8 | 1646160 |

TI-6.3



Application

- Fastening of sandwich panels onto concrete
- Fastening of profile sheets onto concrete
- Fastening of metal decks, liner trays onto concrete
- Fastening of metal plates, profiles, brackets onto concrete

Fastener material

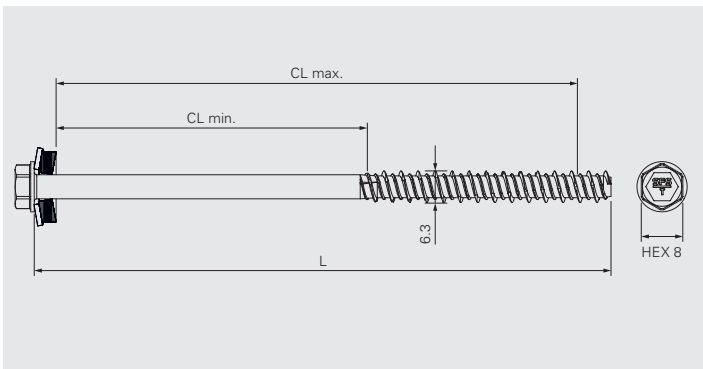
Carbon steel, Durocoat® 480
Sealing washer: Carbon steel galvanized, EPDM-seal

Features and Benefits

- Self tapping fastener suitable for installation onto concrete
- 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)

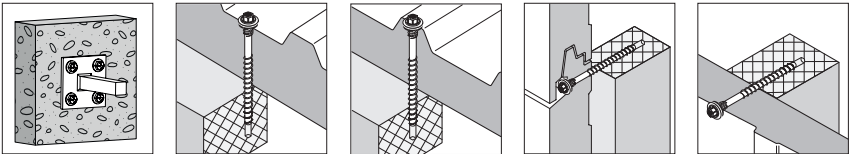


| Fastener Ø | 6.30 |
|-----------------|------|
| Pre-drill Ø | 5.00 |
| Embedment depth | ≥20 |

Approvals

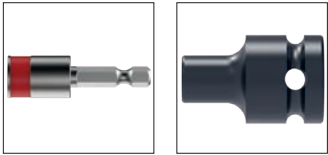
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Impact
wrench not
allowed



Fastener in carbon steel
onto concrete

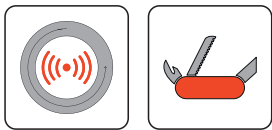
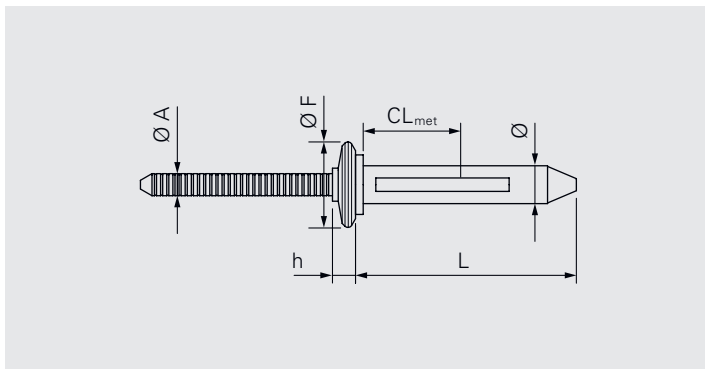
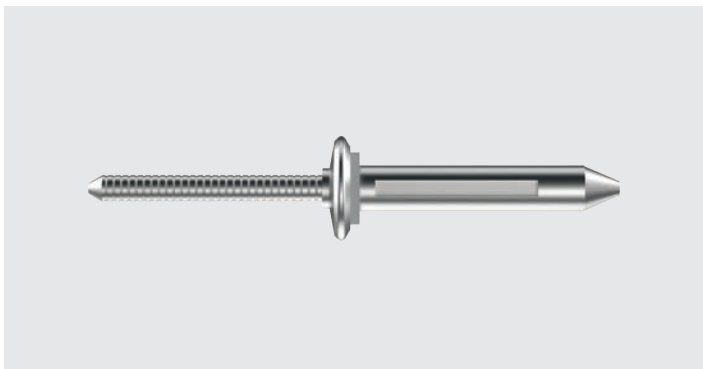
| Product code | PU | L | t _{fix} | T16 |
|----------------|-----|-----|------------------|---------|
| TI-T16-6,3×32 | 250 | 32 | 1–7 | 894465 |
| TI-T16-6,3×55 | 250 | 55 | 1–30 | 920454 |
| TI-T16-6,3×75 | 250 | 75 | 20–50 | 920455 |
| TI-T16-6,3×95 | 250 | 95 | 40–70 | 920467 |
| TI-T16-6,3×115 | 250 | 115 | 60–90 | 1021896 |
| TI-T16-6,3×135 | 100 | 135 | 80–110 | 1292166 |
| TI-T16-6,3×155 | 100 | 155 | 100–130 | 764398 |
| TI-T16-6,3×175 | 100 | 175 | 120–150 | 1065070 |
| TI-T16-6,3×195 | 100 | 195 | 140–170 | 1643911 |
| TI-T16-6,3×215 | 100 | 215 | 160–190 | 1659859 |
| TI-T16-6,3×235 | 100 | 235 | 180–210 | 1659860 |
| TI-T16-6,3×255 | 100 | 255 | 200–230 | 1659862 |
| TI-T16-6,3×275 | 100 | 275 | 220–250 | 1659863 |



Accessories/Ancillaries

| Product code | PU | |
|--------------|----|---------|
| E308-¼"-50 | 1 | 1646160 |
| E508-½"-40 | 1 | 1648380 |

BULB-TITE®



Application

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

Fastener material

Aluminium 5056 (EN573)
Sealing washer: EPDM

| Component 1 (t _i) | | Component 2 (t _{II}) | | $\Sigma_{max} t_i + t_{II}$ |
|-------------------------------|-------|--------------------------------|-------|-----------------------------|
| Steel | ≥0.40 | Steel | ≥0.40 | — |
| Aluminium | ≥0.50 | Aluminium | ≥0.50 | — |
| Aluminium | ≥0.50 | Steel | ≥0.50 | — |

Approvals

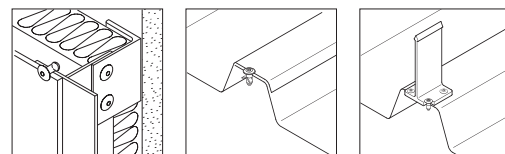
CE₁₃
ETA-13/0255

Features and Benefits

- Multifunctional 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 and vibration-resistant connection given by the locking ribs
- 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 | CL _{met} | Pre-drill Ø | Ø A | Ø F | h | |
|------------------------|------|------|-------|-------------------|-------------|------|-------|------|---------|
| RV6604/6/3W-BULB-TITE | 1000 | 5.20 | 17.50 | 1.30–4.80 | 5.30–5.50 | 2.90 | 11.60 | 3.40 | 1570655 |
| RV6604/6/4W-BULB-TITE | 1000 | 5.20 | 19.10 | 1.60–6.40 | 5.30–5.50 | 2.90 | 11.60 | 3.40 | 1570656 |
| RV6604/6/6W-BULB-TITE | 1000 | 5.20 | 22.20 | 4.70–9.50 | 5.30–5.50 | 2.90 | 11.60 | 3.40 | 1570658 |
| RV6604/6/8W-BULB-TITE | 1000 | 5.20 | 25.40 | 7.90–12.70 | 5.30–5.50 | 2.90 | 11.60 | 3.40 | 1570659 |
| RV6604/6/10W-BULB-TITE | 1000 | 5.20 | 28.60 | 11.10–15.90 | 5.30–5.50 | 2.90 | 11.60 | 3.40 | 1570629 |
| RV6604/6/12W-BULB-TITE | 1000 | 5.20 | 31.80 | 14.30–19.10 | 5.30–5.50 | 2.90 | 11.60 | 3.40 | 1570652 |
| RV6603/9/6W-BULB-TITE | 1000 | 7.70 | 27.70 | 1.00–9.50 | 7.80–8.20 | 4.50 | 15.90 | 4.80 | 1570647 |
| RV6605/9/6W-BULB-TITE | 1000 | 7.70 | 28.20 | 1.10–8.30 | 7.80–8.20 | 4.50 | 19.40 | 5.30 | 1570660 |
| RV6603/9/10W-BULB-TITE | 1000 | 7.70 | 34.50 | 6.40–15.90 | 7.80–8.20 | 4.50 | 15.90 | 4.80 | 1570649 |

Anci llaries



Flashing Combo All in one

Current state of the art

When retrofitting is required just cut and apply clips for ease of application—Clips included in purchase.

Larger square base will cover a larger opening

So more forgiving for penetration openings and allows for steeper roof pitch.

Unique cone design

Provides 10 mm continuous contact with flashed pipe providing a watertight seal.

Clear markings in metric and imperial measurements

Makes for easier cutting to pipe size.

Available for different temperature ranges

Black EPDM (–50 °C up to +115 °C/intermittently up to +150 °C)
Red silicone (–50 °C up to +200 °C/intermittently up to +250 °C)



Sealing tapes How to choose

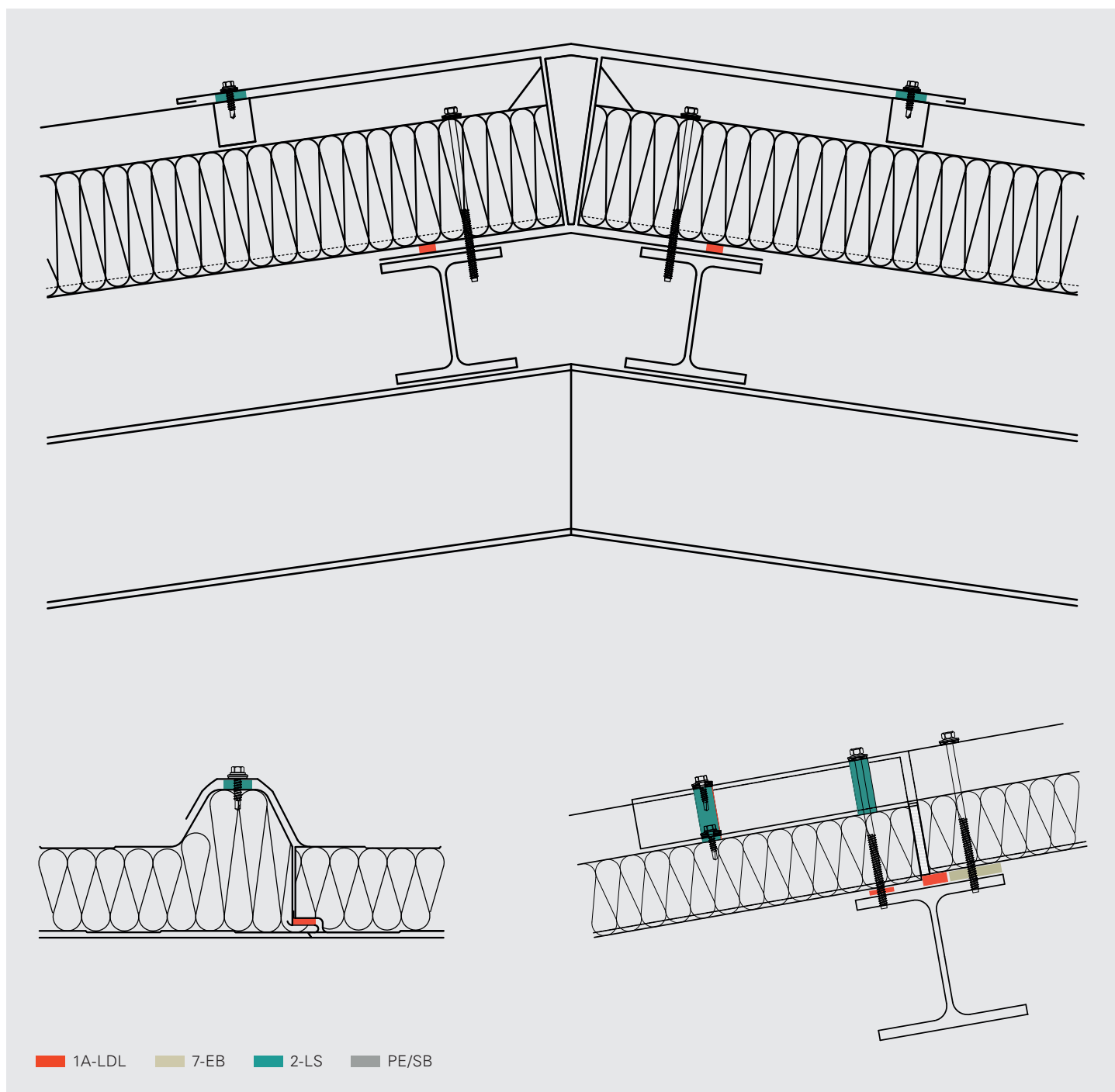
Main Features

| | I Air-tight sealing | II Tight against dust and driving rain | III Sealing of vapour barrier | IV Thermal break |
|-------------|---|--|--|--|
| Type | 1A | 2 | 3 | 7 |
| Tape type | LDL | LS | BB | EB, PE*, PE-SB* |
| Description | Sealing tape for sandwich panels, liner try, and inside flashing Page 174 | Sealing tape for overlaps and outside flashings Page 176 | Sealing tape between overlaps of fastener connections Page 170 | Sealing tape for thermal breaks Page 172 |

*If there are no special requirements regarding thermal bridges

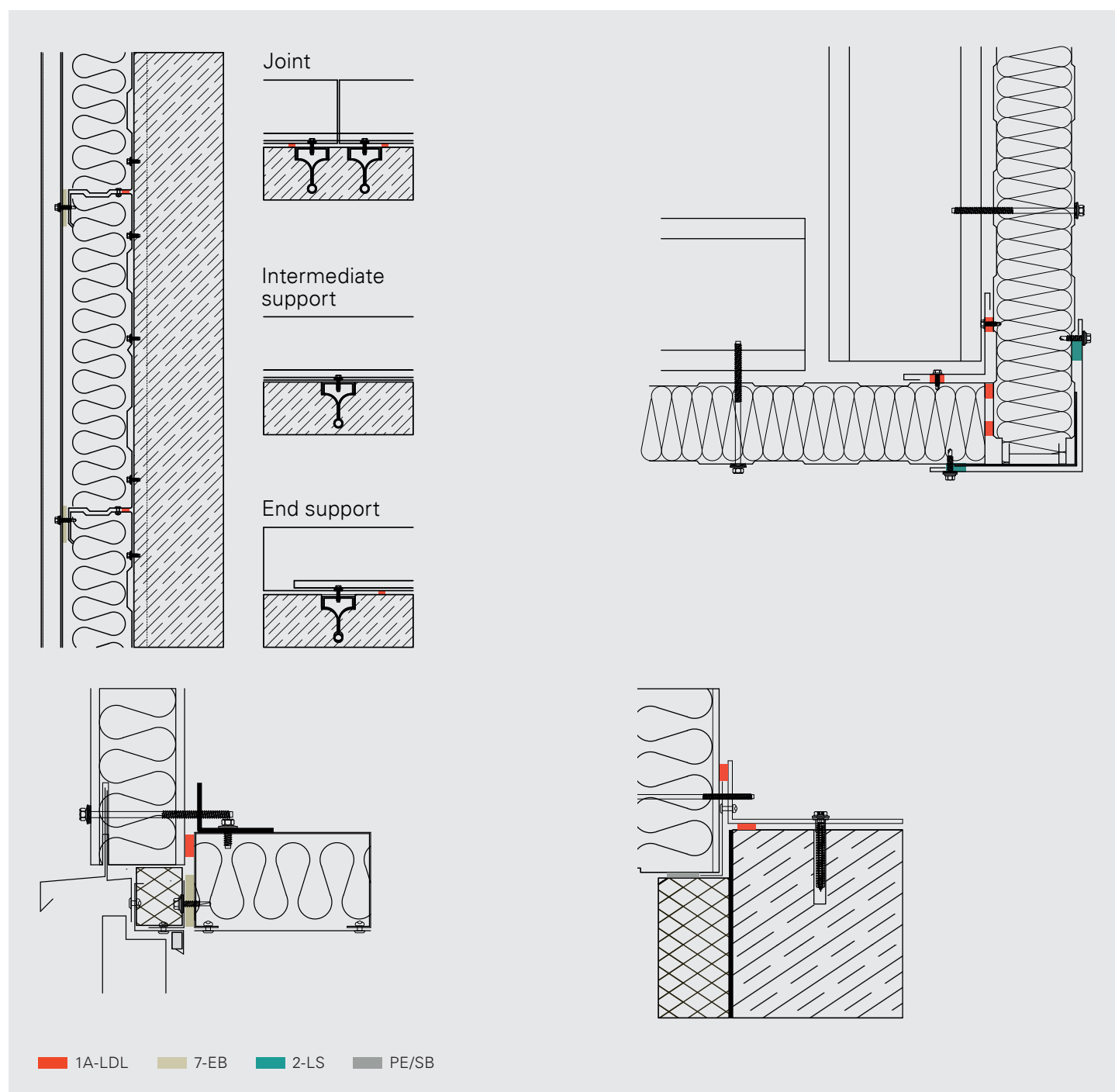
Application Sealing tapes

Expamples roof

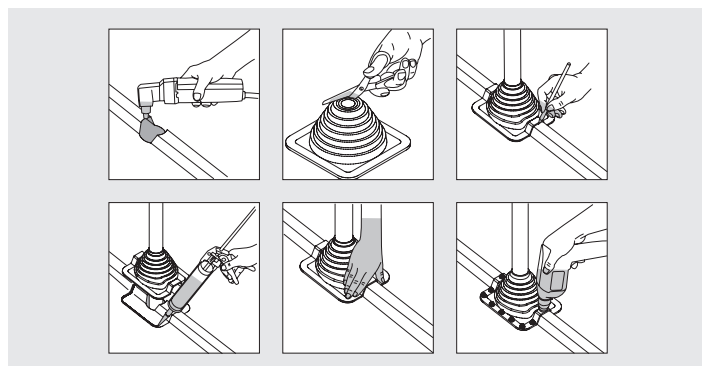
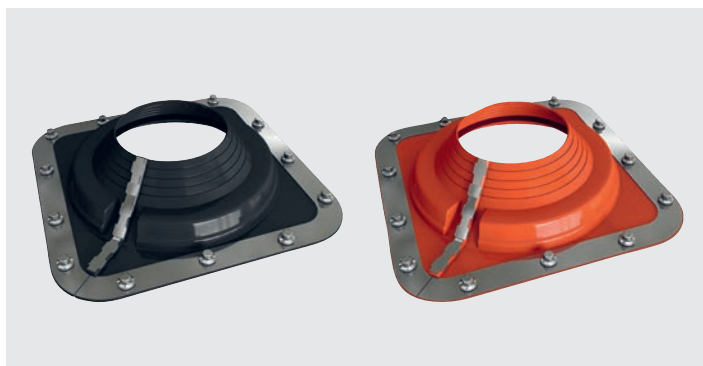


Application Sealing tapes

Examples wall



Flashing Combo



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 EN 1090 part 4 and 5 «Openings in roofs» must be complied with when using the pipe sleeves
For standard and retrofit application

Approvals

—

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)

Features and Benefits

- Perfect sealing of pipe outlets on walls and facades
- The soft embedded aluminium frame conforms easily the most metal roof profiles
- Sleeve exibility accommodates vibration and pipe movement caused by expansion/contraction
- For standard and retrofit application
- 20 years warranty



Flashing Combo EPDM black

| Product code | PU | Ø min. | Ø max. | Base | Required fixing kit | |
|-----------------------------------|----|--------|--------|-----------|---------------------|---------|
| Flashing Combo N°1 5-60-BLACK | 15 | 5 | 60 | 139 | Set N°1 | 1541691 |
| Flashing Combo N°3 5-127-BLACK | 15 | 5 | 127 | 218 | Set N°2 | 1541692 |
| Flashing Combo N°4 75-175-BLACK | 10 | 75 | 175 | 285 | Set N°2 | 1522467 |
| Flashing Combo N°5 108-190-BLACK | 10 | 108 | 190 | 365 | Set N°2 | 1550019 |
| Flashing Combo N°6 125-230-BLACK | 10 | 125 | 230 | 365 | Set N°2 | 1522473 |
| Flashing Combo N°7 150-280-BLACK | 10 | 150 | 280 | 454 | Set N°2 | 1550021 |
| Flashing Combo N°8 175-330-BLACK | 5 | 175 | 330 | 454 | Set N°3 | 1522474 |
| Flashing Combo N°9 240-503-BLACK | 5 | 240 | 503 | 685 | Set N°3 | 1541693 |
| Flashing Combo N°10 400-750-BLACK | 1 | 350 | 760 | 1000×1045 | Set N°4 | 1541694 |



Flashing Combo Silicone red

| Product code | PU | Ø min. | Ø max. | Base | Required fixing kit | |
|--------------------------------|----|--------|--------|------|---------------------|---------|
| Flashing Combo N°1 5-60-RED | 15 | 5 | 60 | 139 | Set N°1 | 1565212 |
| Flashing Combo N°3 5-127-RED | 15 | 5 | 127 | 218 | Set N°2 | 1565213 |
| Flashing Combo N°4 75-175-RED | 10 | 75 | 175 | 285 | Set N°2 | 1565218 |
| Flashing Combo N°5 108-190-RED | 10 | 108 | 190 | 365 | Set N°2 | 1565232 |
| Flashing Combo N°6 125-230-RED | 10 | 125 | 230 | 365 | Set N°2 | 1565233 |
| Flashing Combo N°7 150-280-RED | 10 | 150 | 280 | 454 | Set N°2 | 1565234 |
| Flashing Combo N°8 175-330-RED | 5 | 175 | 330 | 454 | Set N°3 | 1565235 |
| Flashing Combo N°9 240-503-RED | 5 | 240 | 503 | 685 | Set N°3 | 1565236 |

Fixing kit onto metal sheets

| Product code | PU | Coltogum 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 |

Fixing kit onto aluminium sheets

| Product code | PU | Coltogum transparent | Rivet RV6604 | |
|-----------------|----|-------------------------|-----------------|---------|
| MF-SET-1-RV6604 | 1 | 1 pcs. | 12 pcs. | 1019640 |
| MF-SET-2-RV6604 | 1 | 1 pcs. | 24 pcs. | 1019651 |
| MF-SET-3-RV6604 | 1 | 1 pcs. | 36 pcs. | 1019652 |

Single components

| Product code | PU | |
|---------------------------|------|---------|
| SX3/9-A12-6x29 | 500 | 1141972 |
| RV6604/6/4W-BULB-TITE | 1000 | 1570656 |
| Coltogum sealing compound | 1 | 588087 |



Butyl tape BB



Technical characteristics

| | |
|----------------------------------|-----------------------|
| Building material class DIN 4102 | B2 (normal flammable) |
| Temperature resistance | −40°C up to +130°C |
| Storage temperature | +10°C up to +25°C |
| Storage time | at +20°C unlimited |

Application

Between overlaps of fastener connections in facade and roof construction

Approvals

–

Product description

Volume-resistant, solvent-free butyl rubber sealing tape
Double sided self-adhesive
Flame retardant

Features and Benefits

- Water repellent
- Does not corrode
- Solvent free
- Bitumen-free and bitumen-compatible
- Aging, weathering and UV resistant
- Volume resistant
- Immediately functional
- Permanent adhesive
- Simple processing
- Conforms to the requirements of IVD leaflet No. 5

Documentation

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

Butyl tape BB

| Product code | PU | Wide tape (mm) | Wide joint (mm) | Roll length (m) | |
|--------------|----|----------------|-----------------|-----------------|---------|
| BB-10×1,5 | 22 | 10 | 1.5 | 25 | 1163572 |

Sealing tape EB



Technical characteristics

| | |
|---|-----------------------|
| Building material class DIN 4102 | B2 (normal flammable) |
| Thermal conductivity EN ISO 12572 | 0.042 W/m x K |
| Temperature resistance | -30°C up to +130°C |
| Building material compatibility DIN 18542 | passed |
| Storage temperature | +1°C up to +20°C |
| Storage time | 2 years |
| Processing temperature | +5°C up to +50°C |

Application

Between sandwich panels and steel beams
Between metal profiles onto liner trays

Approvals

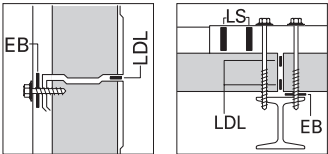
National technical approval P-NDS04-535

Product description

Polypropylen foam with selfadhesive singleside and foil liner
impregnated
Decoupling tape for thermal breaks

Features and Benefits

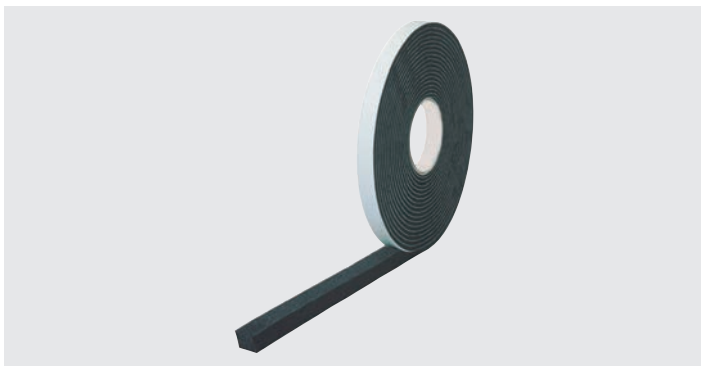
- Complies with the requirements of the current energy-saving regulation (EnEV)
- High compression resistance
- Closed-cell with smooth surface
- Water-resistant
- Optimises thermal bridges
- High ageing resistance
- Environmentally friendly – chemically neutral
- Permanent adhesive
- Simple processing
- Conforms to the requirements of the new IFBS-guideline for joint tightness and lightweight steel constructions



Sealing tape EB

| Product code | PU | wide tape (mm) | wide joint (mm) | roll length (m) | |
|--------------|----|----------------|-----------------|-----------------|---------|
| EB-15×3-SK | 48 | 15 | 3 | 30 | 1211739 |
| EB-30×3-SK | 24 | 30 | 3 | 30 | 1163565 |
| EB-40×3-SK | 18 | 40 | 3 | 30 | 1163566 |
| EB-50×3-SK | 14 | 50 | 3 | 30 | 1163567 |
| EB-60×3-SK | 12 | 60 | 3 | 30 | 1163568 |
| EB-80×3-SK | 9 | 80 | 3 | 30 | 1163570 |
| EB-90×3-SK | 8 | 90 | 3 | 30 | 1385482 |

Sealing tape LDL



Technical characteristics

| | |
|---|----------------------|
| Building material class DIN 4102 | B1 (flame retardant) |
| Vapour diffusion resistance factor | $\mu < 100$ |
| Temperature resistance | -30°C up to +90°C |
| Air tightness DIN 18542 | BGR |
| Joint permeability DIN 18542 | BG1 |
| Driving rain resistance DIN 18542 | 600 Pa |
| Weather resistant DIN 18542 | passed |
| Compatibility with construction materials DIN 18542 | passed |
| Storage temperature | +1°C up to +20°C |
| Storage time | 9 months |
| Processing temperature | >5°C |

Application

Between sandwich panels or overlaps of sandwich panels
Between sandwich panels and inside flashings
Between sandwich panels and wall construction
Between liner trays
Between liner trays and concrete

Product description

Open-cell polyurethane soft foam, impregnated
One-sided self-adhesive
Halogen-free, solvent-free

Approvals

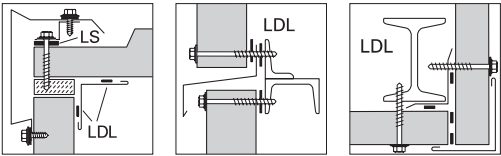
National technical approval P-NDS04-1044

Features and Benefits

- Seals against wind, dust and splashwater
- Continually expands and contracts to accommodate movement whilst still sealing the joints
- Breathable – for vapour diffusion
- High adhesive strength during fitting
- Acoustic and thermal insulation properties
- Monitored by external institutes
- Constant quality, conforms to DIN standards and is regularly tested by external institutes (can be represented by icons)
- External monitoring by ift Rosenheim GmbH: Resistance to driving rain and joint air permeability coefficient (a-value)

Documentation

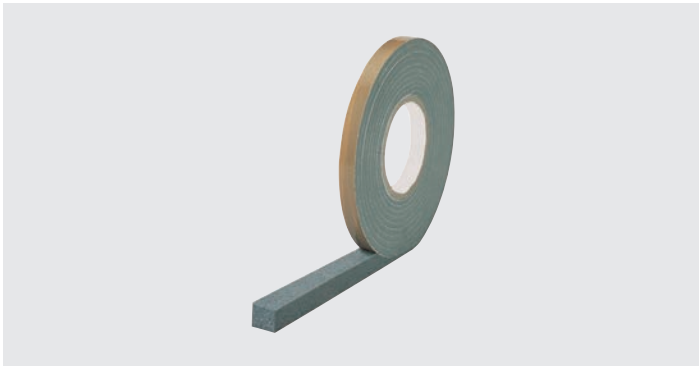
Approval document (ETA) | Declaration of performance (DoP)



Sealing tape LDL

| Product code | PU | wide tape (mm) | wide joint (mm) | | roll length (m) | |
|--------------|----|----------------|-----------------|-----|-----------------|---------|
| | | | BG1 | BGR | | |
| LDL-10/2-4 | 8 | 10 | 2-4 | 2-3 | 22 | 1467478 |
| LDL-14/2-4 | 11 | 14 | 2-4 | 2-3 | 22 | 1467490 |
| LDL-14/2-6 | 11 | 14 | 2-6 | 2-4 | 18 | 1467491 |
| LDL-14/3-9 | 11 | 14 | 3-9 | 3-5 | 12 | 1467492 |
| LDL-19/7-15 | 8 | 19 | 7-15 | 7-8 | 6 | 1524572 |
| LDL-30/7-15 | 5 | 30 | 7-15 | 7-8 | 6 | 1525296 |

Sealing tape LS



Technical characteristics

| | |
|---|-------------------------|
| Building material class DIN 4102 | B2 (normal flamability) |
| Vapour diffusion resistance factor | $\mu < 100$ |
| Temperature resistance | -30°C up to +90°C |
| Joint permeability DIN 18542 | BG2 |
| Driving rain resistance DIN 18542 | 300 Pa |
| Weather resistant DIN 18542 | passed |
| Compatibility with construction materials DIN 18542 | passed |
| Storage temperature | +1°C up to +20°C |
| Storage time | 1 year |

Application

Between overlaps of sandwich panels
Between sandwich panels and outside flashings

Approvals

National technical approval P-NDS04-534

Product description

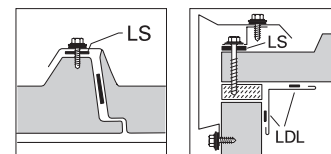
Open-cell polyurethane soft foam, impregnated
One-sided self-adhesive
Halogen-free, solvent-free

Features and Benefits

- Seals against dust and driving rain
- Continually expands and contracts to accommodate movement whilst still sealing the joints
- Breathable – for vapour diffusion
- High adhesive strength of the self-adhesive on standard building substrates
- Acoustic and thermal insulation properties
- Solvent free
- Constant quality control to DIN EN ISO 9001 and DIN standards

Documentation

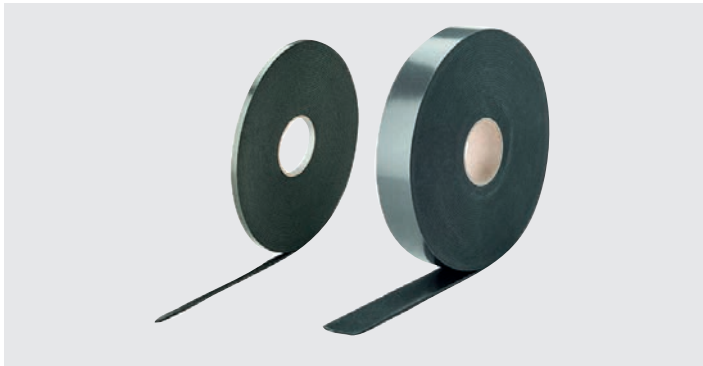
Approval document (ETA) | Declaration of performance (DoP)



Sealing tape LS

| Product code | PU | wide tape (mm) | wide joint (mm) | roll length (m) | |
|--------------|----|----------------|-----------------|-----------------|---------|
| LS-10/1,5-2 | 11 | 10 | 1.50–2.0 | 25 | 1163529 |
| LS-10/3-5,5 | 11 | 10 | 3.0–5.50 | 13 | 1163530 |
| LS-15/1,5-2 | 7 | 15 | 1.50–2.0 | 25 | 1163532 |
| LS-15/3-4 | 7 | 15 | 3.0–4.0 | 18 | 1163535 |
| LS-15/3-5,5 | 7 | 15 | 3.0–5.50 | 13 | 1163537 |
| LS-20/3-4 | 5 | 20 | 3.0–4.0 | 18 | 1224066 |
| LS-20/5-8 | 5 | 20 | 5.0–8.0 | 7 | 1163539 |
| LS-20/8-12 | 5 | 20 | 8.0–12.0 | 5 | 1224068 |
| LS-30/1,5-2 | 3 | 30 | 1.50–2.0 | 25 | 1163540 |
| LS-30/3-5,5 | 3 | 30 | 3.0–5.50 | 13 | 1163551 |

Sealing tape PE



Technical characteristics

| | |
|---|-------------------------|
| Building material class DIN 4102 | B2 (normal flamability) |
| Thermal conductivity EN ISO 12572 | 0,055 W/m x K |
| Vapour diffusion resistance factor | $\mu < 100$ |
| Temperature resistance | -80°C up to +100°C |
| Weather resistant DIN 18542 | passed |
| Compatibility with construction materials DIN 18542 | passed |
| Storage temperature | +1°C up to +20°C |
| Storage time | 1 year |

Application

Between sandwich panels and steal beams
Between metal profiles onto liner trays

Approvals

—

Product description

Polyethylen foam
Softener-free, elastic and self-adhesive on one side

Features and Benefits

- High adhesive strength
- Easy and quick to apply
- Suitable as nail sealing tape
- For airtight sealing of tolerance-free and uniform wide joints
- High ageing resistance
- Environmentally friendly – chemically neutral

Sealing tape PE

| Product code | PU | Wide tape (mm) | Wide joint (mm) | Roll length (m) | |
|--------------|----|----------------|-----------------|-----------------|---------|
| PE-15×2 | 60 | 15 | 2 | 30 | 1163556 |
| PE-15×3 | 60 | 15 | 3 | 30 | 1163558 |
| PE-25×2 | 38 | 25 | 2 | 30 | 1163559 |
| PE-40×4 | 24 | 40 | 4 | 20 | 1163561 |
| PE-60×5 | 5 | 60 | 5 | 20 | 1324731 |
| PE-SB-50/6 | 1 | 50 | 6 | 50 | 1507257 |
| PE-SB-90/6 | 1 | 90 | 6 | 50 | 1187232 |
| PE-SB-115/6 | 1 | 115 | 6 | 50 | 1187233 |
| PE-SB-140/6 | 1 | 140 | 6 | 50 | 1187234 |
| PE-SB-165/6 | 1 | 165 | 6 | 50 | 1187236 |
| PE-SB-190/6 | 1 | 190 | 6 | 50 | 1187237 |
| PE-SB-220/6 | 1 | 220 | 6 | 50 | 1214554 |

Setting tools Accessories



Tools, Setting tools and Consumables

You can Really on FEIN

FEIN power tools are subject to tough practical testing before they are launched. Customers in various sectors worldwide benefit from these state-of-the-art tools. Not only does this make us proud, we also firmly believe that FEIN products give users reliable power tools that they will continue to use for years to come.

3 Year FEIN PLUS warranty

FEIN products meet the most exact quality standards, so FEIN provides customers with a three-year warranty for free. Customers only have to register their FEIN product.

Taking out the 3-year FEIN PLUS:

- Register the new FEIN power tool (including Li-ion batteries and chargers) online within six weeks of purchase on www.fein.com/warranty →
- FEIN immediately provides with a warranty certificate which confirms the 3-year FEIN PLUS warranty

Repairs and spare parts service

Should anything go wrong, FEIN provides a central partner to provide competent and rapid assistance:

- Pick up the devices at a time to suit
- Short throughput times
- Binding quotations provided
- Functional and electrical safety check
- On request, inspection plates in accordance with DGUV specification 3
- Repair work is guaranteed for twelve months
- Spare parts are available for at least eight years after the end of production



**3
Year
FEIN PLUS
Warranty**

FEIN cordless Power System Simple–Efficient–Safe

Simple and flexible

100% compatibility between FEIN Li-ion batteries, machine and charger – allows for flexibility to combine all FEIN cordless products as required.

Powerful and efficient

Thanks to the perfect combination of top-quality components, FEIN cordless tools are just as powerful as mains-powered tools. FEIN Li-ion batteries together with brushless FEIN PowerDrive Motor, gearboxes and electronics ensure the same level of efficiency. In this respect, FEIN cordless tools are the best on the market.

For extra safety

The FEIN SafetyCell Technology reliably protects the tool and battery against overload, overheating and total discharge, therefore ensuring a long service life. FEIN Li-ion batteries have also been protected from dust.

Clever purchases

Flexibility with FEIN already starts with the purchase: thanks to the compatibility of batteries and machines within the 18V category it is possible to combine individually and as required – consequently you create countless variation options. Simply purchase what you need and when you need it without increased costs as part of additional purchases.

Cordless FEIN Select⁺ power system @SFS

| | | | |
|---|---|--|---|
|  |  |  |  |
| ABH 18 | ABLK 18-1.6E | ABSS 18-1.6E | AFSC 18 QSL |
|  |  |  |  |
| ASCD 18-300 W2 | ASCM 18 QM | ASCM 18-6.3 | CGG 18-125 |

FEIN-ABH 18 Select⁺

1649548



Application

Extremely compact and powerful cordless rotary hammer drill with an impact energy of 2 J for drilling up to 20 mm in concrete.

Technical datas

| | |
|------------------------|------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | 18 V |
| Motor | brushless |
| Speed, no loaded | 0–1200 rpm |
| Impacts | 0–4400 rpm |
| Impact energy | 2 J |
| Tool holder | SDS-plus |
| Hole-Ø concrete | 20 mm |
| Hole-Ø masonry | 68 mm |
| Hole-Ø steel | 13 mm |
| Hole-Ø wood | 22 mm |
| Weight without battery | 2,30 kg |





Scope of delivery

- 1× ABH 18
- 1× Handle
- 1× Depth stop
- 1× Plastic carrying case

Features and Benefits

- 100 holes (10×75 mm into concrete) with one battery charge (6 Ah)
- Battery charge can be read off the battery
- Rapid work progress thanks to brushless motor with high impact energy
- FEIN PowerDrive motor with 30% higher efficiency and long service life
- Fatigue-free working thanks to compact design and few vibrations
- Protection for the user and tool by means of safety clutch and overload protection
- Combination hammer with three functions: hammer drilling, drilling and chiselling
- The optional drilling dust nozzle means that little dust is produced
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|---|
| FEIN-Battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Akku Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-ABLK 18-1.6E Select⁺

1354488



Application

Compact and curve-compatible nibbler for roof and façade construction. Precise cuts in trapezoid and corrugated sheet metals and profiles.

Technical datas

| | |
|--|-----------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | 18 V |
| Motor | brushless |
| Stroke | 800–1 300 1 rpm |
| Cutting speed | 1,50 m/min |
| Steel up to 400 N/mm ² | 1,60 mm |
| Steel up to 600 N/mm ² | 1,0 mm |
| Steel up 800 N/mm ² | 0,70 mm |
| Non-ferrous metals up to 250 N/mm ² | 2,50 mm |
| Cutting width | 5,0 mm |
| Immersion-Ø with die | 22,0 mm |
| Radius of smallest curve (inside/outside) | 30/35 mm |
| Weight without battery | 1,65 kg |









Scope of delivery

- 1× ABLK 18 1.6 E
- 1× Die holder
- 1× Die
- 1× Punch
- 1× Plastic carrying case

Features and Benefits

- 45 m of cutting (in 0.8 mm metal sheet) with one battery (6 Ah)
- Battery charge can be read off the battery
- Proven MultiMaster motor with outstanding performance and stability
- 1.5 m/min cutting speed for excellent work progress
- Variable cutting speed due to electronically adjustable speed control
- Brief overlapping area up to 2.6 mm
- Convenient QuickIN quick clamping system
- Rotating punch for a service life which is now up to 30% longer
- Low operating costs. Punch and die are replaced independently of one another
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|---|
| FEIN-Battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |
| FEIN-ABLK-Punch | 5 | 1653791 |  |
| FEIN-ABLK-Die | 5 | 1653792 |  |
| FEIN-ABLK-Die Holder | 1 | 1653793 |  |
| FEIN-ABLK--Profile set 160 | 1 | 1654453 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-ABSS 18-1.6E Select⁺

1649556



Application

Easy-to-use, curve-compatible cordless slitting shears for distortion-free cuts and cut-outs in sheet metal up to 1.6 mm.

Technical datas

| | |
|--|-------------------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | MultiVolt |
| Motor | brushless |
| Stroke | 2000–3500 1/min |
| Cutting speed | 5–8 mm |
| Steel up to 400 N/mm ² | 1,60 mm |
| Steel up to 600 N/mm ² | 1,20 mm |
| Steel up 800 N/mm ² | 0,80 mm |
| Non-ferrous metals up to 250 N/mm ² | 2,0 mm |
| Cutting width | 5,0 mm |
| Radius of smallest curve | 90 (30) ¹ mm |
| Immersion-Ø | 15 (8) ¹ mm |
| Weight without battery | 1,20 kg |







Scope of delivery

- 1× ABSS 18 1.6E
- 1× Knife, straight, up to 1.6 mm
- 1× Pair of cutting bars
- 1× Key
- 1× Plastic carrying case

Features and Benefits

- 140 m of cutting (in 0.8 mm metal sheet) with one battery (6 Ah)
- Battery charge can be read off the battery
- Proven MultiMaster motor with outstanding performance and stability
- Rapid work progress due to excellent view of the cutting line through the openfronted cutting head
- Left and right curve cuts and distortion-free cutting possible with just one continuous chip
- Convenient QuickIN quick clamping system
- Cutting blade with excellent tool life
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|---|
| FEIN-Battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |
| FEIN-ABSS-Cutting blade | 1 | 1653770 |  |
| FEIN-ABSS-Blade for curves | 1 | 1654450 | |
| FEIN-ABSS-Cutting bars | 1 | 1653768 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-AFSC 18 QSL Select⁺

1649551



Technical datas

| | |
|------------------------|---------------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | MultiVolt |
| Motor | brushless |
| Oscillations | 10'000–19'500 1/min |
| Tool holder | StarlockMax |
| Tool change | QuickIN |
| Amplitude | 2×2,0° |
| Weight without battery | 1,10 kg |

Application

The most powerful cordless oscillator with rapid clamping system for interior work and renovation.
















Scope of delivery

- 1× SuperCut AFSC 18 QSL
- 1× Plastic carrying case

Features and Benefits

- Battery charge can be read off the battery
- FEIN PowerDrive motor with 30% higher efficiency and long service life
- FEIN Anti-vibration system. Up to 70% less vibration due to complete decoupling of the outer motor housing.
For permanently safe working
- Convenient QuickIN quick clamping system
- Metal gear unit. High load capacity and maximum service life
- Largest range of accessories with Starlock, StarlockPlus and StarlockMax mounts in FEIN quality
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|---|
| FEIN-Battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |
| FEIN-HSS-Saw blade circular | 1 | 1650198 |  |
| FEIN-BIM-Saw blade circular | 1 | 1650199 |  |
| FEIN-Cutting paste | 1 | 1650200 |  |
| FEIN-BIM-Saw blade E-Cut 30x10 | 1 | 1650201 |  |
| FEIN-BIM-Saw blade E-Cut 50x35 | 1 | 1650209 |  |
| FEIN-BIM-Saw blade E-Cut 50x65 | 1 | 1650211 |  |
| FEIN-BIM-Saw blade E-Cut 78x42 | 1 | 1650212 |  |
| FEIN-BIM-Saw blade E-Cut 90x32 | 1 | 1650213 |  |
| FEIN-Carbide Pro-Saw blade E-Cut 45x35 | 1 | 1650214 |  |
| FEIN-Carbide Pro-Saw blade E-Cut 60x32 | 1 | 1650215 |  |
| FEIN-Carbide Pro-Saw blade E-Cut 75x32 | 1 | 1650216 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-ASCD 18-300 W2 Select⁺

1603594



Application

Cordless impact wrench/driver with brushless motor and 6-stage torque setting. For metric screwdriving applications up to M18.

Technical datas

| | |
|------------------------|-------------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | MultiVolt |
| Motor | brushless |
| Speed, no load | 0–1700 rpm |
| Impacts | 0–3400 rpm |
| max. torque | 290 Nm |
| Torque levels | 6 |
| Tool holder | 1/2" Outer square |
| max. metric screw | M18 (8.8) |
| max. Ø wood screw | 8×300 mm |
| Weight without battery | 1,0 kg |

Recommendation of torque level

| Level | M _{max} Nm |
|-------|---------------------|
| 1 | 25 |
| 2 | 50 |
| 3 | 85 |
| 4 | 135 |
| 5 | 210 |
| 6 | 290 |





Scope of delivery

- 1× ASCD 18-300 W2
- 1× Belt clip
- 1× Bit holder
- 1× Plastic carrying case

Features and Benefits

- 600 connections (M18) with one battery (6 Ah)
- Battery charge can be read off the battery
- FEIN PowerDrive motor with 30% higher efficiency and long service life
- Electronic 6-stage torque setting prevents screw heads from being torn off
- 10% more torque in reverse running to loosen screws which are extremely tight
- 1/2" in square for holding sockets
- Bright working area thanks to integrated LED light
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|---|
| FEIN-battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-ASCM 18 QM Select⁺

1649550



Application

4-speed cordless drill/driver with brushless motor and QuickIN MAX interface. No compromise on performance for drilling and tapping up to 12 mm and drilling with carbide hole saws.

Technical datas

| | |
|----------------------------|-----------------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | 18 V |
| Motor | brushless |
| Gearbox | 4-speed |
| Interface | QuickIN |
| Speed, no load | 400/800/1950/3850 rpm |
| Impacts | 0–3400 rpm |
| max. torque (hard/soft) | 90/45 Nm |
| Torque levels | 15+1 |
| Drill chuck clamping width | 1,5–13 mm |
| Fastening | 10×400 mm |
| Capacity in wood Ø | 50 mm |
| Tapping | M12 |
| Weight without battery | 1,50 kg |










Scope of delivery

- 1× ASCM 18 QM
- 1× Handle
- 1× Belt clip
- 1× Bit holder
- 1× QuickIN drill chuck (120 Nm)
- 1× Plastic carrying case

Features and Benefits

- 2.500 connections (5×40 mm into wood) with one battery charge (6 Ah)
- Battery charge can be read off the battery
- FEIN PowerDrive motor with 30% higher efficiency and long service life
- 4-speed solid metal gearbox. Optimum cutting speeds for drilling in metal and self-drilling screwdriving
- Convenient QuickIN quick clamping system
- Electronic torque setting
- Bright working area thanks to integrated LED light
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|--|
| FEIN-Battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |
| FEIN-QuickIN Angled head | 1 | 1649590 |  |
| FEIN-QuickIN drill chuck 120 Nm | 1 | 1650164 |  |
| FEIN-QuickIN Hole saw adapter | 1 | 1650195 |  |
| FEIN-QuickIN Tapping adapter | 1 | 1650196 |  |
| FEIN-QuickIN Bit holder 1/4" | 1 | 1565197 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-ASCS 18-6.3 Select⁺

1486715



Application

Speed-optimised cordless drill/driver for screw connections in metal up to a diameter of 6.3 mm.

Technical datas

| | |
|-------------------------|-------------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | 18 V |
| Motor | brushless |
| Speed, full load | 0–1500 rpm |
| Speed, no load | 0–1700 rpm |
| max. torque (hard/soft) | 30/10 Nm |
| max. screw-Ø | 6,3 mm |
| Rapid change chuck | 1/4" inner square |
| Weight without battery | 1,10 kg |








Scope of delivery

- 1× ASCS 6.3
- 1× Depth stop
- 1× Insert for hexagon bolts SW8
- 1× Plastic carrying case

Features and Benefits

- 180 connections (in metal sheet) with one battery charge (6 Ah)
- Battery charge can be read off the battery
- FEIN PowerDrive motor with 30% higher efficiency and long service life
- Electronic torque shut-off for precise results even without a depth stop
- Tested for more than 1 million screw connections
- Powerful up to 30 Nm
- FEIN SafetyCell technology. Protects the battery and tool from overload,overheating and total discharge

Accessories

| Product code | PU | | |
|--|----|---------|---|
| FEIN-Battery-Starter-Set 18V/3.0Ah | 1 | 1649558 |  |
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 | |
| FEIN-Li-Ion Battery Pack 18V/3.0Ah | 1 | 1367517 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 | |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |
| FEIN-depth stop Ø 20 mm | 1 | 1511699 |  |
| FEIN-depth stop Ø 28 mm | 1 | 1486868 |  |
| CF40-FEIN-ASCS6.3-Basic | 1 | 1371950 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

FEIN-CCG 18-125 BL Select⁺

1649545



Technical datas

| | |
|------------------------|---------------|
| Battery voltage 18 V | 18 V |
| Battery compatibility | Li-Ionen |
| Battery interface | MultiVolt |
| Motor | brushless |
| Speed, no load | 2500–8500 rpm |
| Grinding disc-Ø | 125 mm |
| Elast. Backing pad-Ø | 125 mm |
| Flange | M14 |
| Weight without battery | 1,95 kg |

Application

Dust-resistant and powerful, compact cordless angle grinder for effective cutting, grinding and deburring work in assembly jobs.





Scope of delivery

- 1× CCG 18-125 BL
- 1× Wheel guard
- 1× Tool-free quick-clamping nut
- 1× Anti-vibration handle
- 1× Plastic carrying case

Features and Benefits

- Battery charge can be read off the battery
- FEIN PowerDrive motor with 30% higher efficiency than comparable universal motors with a rated output of 1100 W and long service life
- Very smooth running and low-vibration working thanks to motor being decoupled from the housing and mounted separately and four additional vibration dampers
- Extensive user protection features include soft start, restart protection, electronic overload protection and brake
- Separate motor electronics with dust guard in handle area
- Bright working area thanks to integrated LED light
- Safety hood, which can be adjusted without the use of tools, and quick-clamping nuts make for short setup times
- FEIN SafetyCell technology. Protects the battery and tool from overload, overheating and total discharge

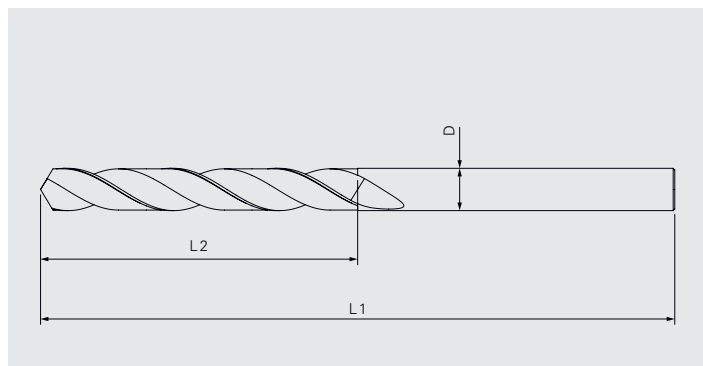
Accessories

| Product code | PU | | |
|--|----|---------|--|
| FEIN-HighPower Battery-Starter-Set 18V/5.2Ah | 1 | 1640507 |  |
| FEIN-HighPower Li-Ion Battery Pack 18V/5.2Ah | 1 | 1649587 |  |
| FEIN-Quick charger ALG 80 | 1 | 1649582 |  |
| FEIN-ALED 12-18V | 1 | 1649554 |  |

Warranty

- 3-year FEIN PLUS warranty including battery and charger

HSS drill bits



Application

Drilling in construction steel and timber

Approvals

—

Material

HSS high speed steel

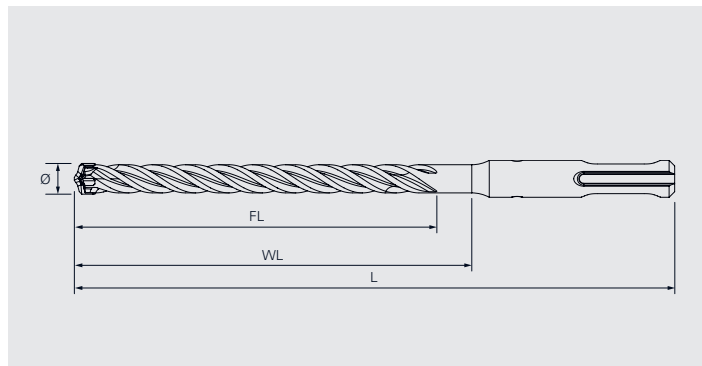
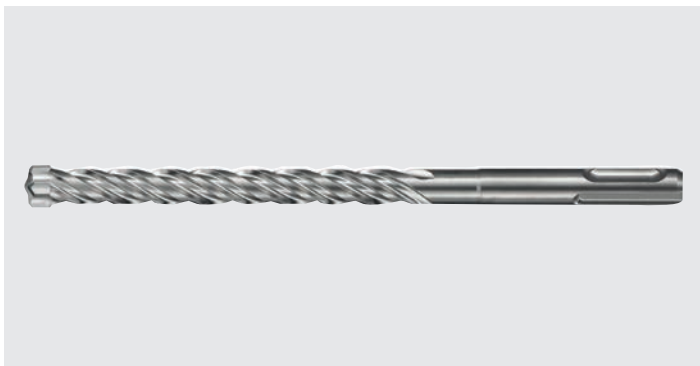
Features and Benefits

- 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-4,9×62/26 | 10 | 4.90 | 62 | 26 | 69585 |
| HSS-5,0×60/31 | 10 | 5.0 | 60 | 31 | 1046721 |
| HSS-5,0×90/31 | 10 | 5.0 | 90 | 31 | 1046723 |
| HSS-5,0×125/31 | 10 | 5.0 | 125 | 31 | 1046724 |
| HSS-5,0×175/31 | 5 | 5.0 | 175 | 31 | 1206462 |
| HSS-5,0×220/31 | 5 | 5.0 | 220 | 31 | 1046726 |
| HSS-5,0×250/31 | 5 | 5.0 | 250 | 31 | 1206458 |
| HSS-5,3×60/31 | 10 | 5.30 | 60 | 31 | 1046734 |
| HSS-5,3×95/31 | 10 | 5.30 | 95 | 31 | 1046735 |
| HSS-5,3×125/31 | 10 | 5.30 | 125 | 31 | 1206451 |
| HSS-5,3×175/31 | 10 | 5.30 | 175 | 31 | 1046738 |
| HSS-5,3×220/31 | 5 | 5.30 | 220 | 31 | 1206450 |
| HSS-5,3×250/31 | 5 | 5.30 | 250 | 31 | 1046740 |
| HSS-5,3×290/31 | 5 | 5.30 | 290 | 31 | 1046751 |
| HSS-5,5×60/31 | 10 | 5.50 | 60 | 31 | 1046752 |
| HSS-5,5×95/31 | 10 | 5.50 | 95 | 31 | 1046753 |
| HSS-5,5×125/31 | 10 | 5.50 | 125 | 31 | 1046754 |
| HSS-5,5×175/31 | 10 | 5.50 | 175 | 31 | 1046755 |
| HSS-5,5×220/31 | 5 | 5.50 | 220 | 31 | 1046756 |
| HSS-5,5×250/31 | 10 | 5.50 | 250 | 31 | 1046757 |
| HSS-5,5×290/31 | 5 | 5.50 | 290 | 31 | 1046758 |
| HSS-5,7×60/31 | 10 | 5.70 | 60 | 31 | 1046760 |
| HSS-5,7×95/31 | 10 | 5.70 | 95 | 31 | 1046772 |
| HSS-5,7×125/31 | 10 | 5.70 | 125 | 31 | 1046773 |
| HSS-5,7×175/31 | 10 | 5.70 | 175 | 31 | 1206429 |
| HSS-5,7×220/31 | 5 | 5.70 | 220 | 31 | 1206428 |
| HSS-5,7×250/31 | 5 | 5.70 | 250 | 31 | 1046777 |
| HSS-5,7×290/31 | 5 | 5.70 | 290 | 31 | 1206427 |
| HSS-5,8×60/31 | 10 | 5.80 | 60 | 31 | 7870 |
| HSS-5,8×100/31 | 10 | 5.80 | 100 | 31 | 7872 |
| HSS-5,8×125/31 | 10 | 5.80 | 125 | 31 | 7891 |
| HSS-5,8×200/31 | 10 | 5.80 | 200 | 31 | 7894 |
| HSS-5,8×260/31 | 10 | 5.80 | 260 | 31 | 7896 |
| HSS-5,8×300/31 | 10 | 5.80 | 300 | 31 | 1238831 |
| HSS-6,5×101/63 | 10 | 6.50 | 101 | 63 | 893457 |

SDS drill bits



Application

Pre-drill of reinforced concrete or natural stone

Approvals



Material

4x carbide cutting edge, steel shank

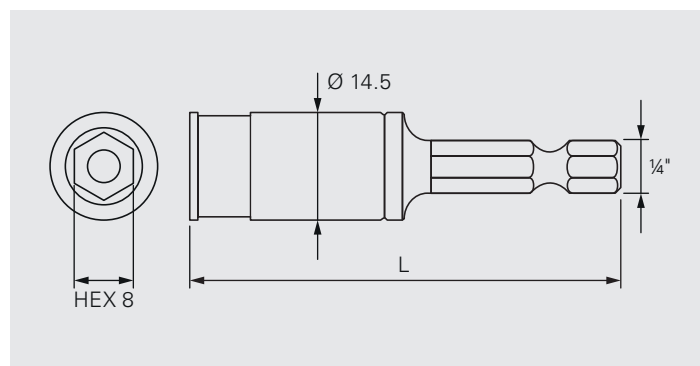
Features and Benefits

- 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-6x210/150-4C | 1 | 6 | 210 | 150 | 150 | 1487583 |
| SDS-6x310/250-4C | 1 | 6 | 310 | 250 | 250 | 1487584 |
| SDS-6x515/455-4C | 1 | 6 | 515 | 455 | 200 | 1608141 |
| SDS-8x210/150-4C | 1 | 8 | 210 | 150 | 150 | 1487585 |
| SDS-10x210/150-4C | 1 | 10 | 210 | 150 | 150 | 1487586 |

SOK-IT®



Application

Installation of all fasteners from diameter 4.8–6.3 mm
6Nm for stainless steel fastener (black)
8Nm for carbon steel fastener (gold)

Approvals



Material

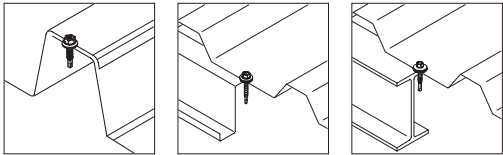
With an 1/4" drive
With a safety ball for ideal hold

Features and Benefits

- No fastener breakages due to limited setting torque
- Reliable fastening when using both standard screwdrivers and impact wrenches
- Reduces downtime and costs due to safe installation with all standard setting tools
- Two different torque levels (6+8Nm) for different applications and fasteners
- min. 5000 pcs. safe installations when used correctly

Accessories/Ancillaries

| Product code | PU | Drive | Head drive | |
|------------------|----|-------|------------|---------|
| SOK-IT-¼"-57-6Nm | 1 | ¼" | HEX8 | 1667323 |
| SOK-IT-¼"-57-8Nm | 1 | ¼" | HEX8 | 1667322 |

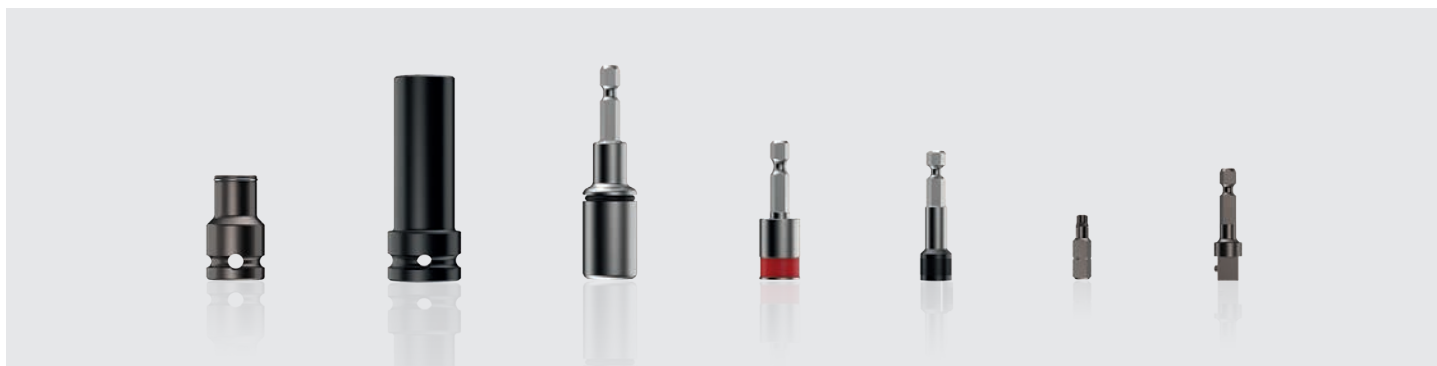


Recommended for the following SFS fastener




| Stainless steel fastener | Torque force |
|--------------------------|--------------|
| SX14-5,5 | 6Nm |
| SX5-5,5 | 6Nm |
| SX3-6,0 | 6Nm |
| SXW-6,5 | 6Nm |
| SL2-S-6,3 | 6Nm |

| Carbon steel fastener | Torque force |
|-----------------------|--------------|
| SD14-H15-5,5 | 8Nm |
| SD14-5,5 | 8Nm |
| SD6-H15-5,5 | 8Nm |
| SD5-5,5 | 8Nm |
| SL3-H15-6,3 | 8Nm |
| SL2-H15-6,3 | 8Nm |
| SL2-4,8 | 8Nm |
| CDM-4,8 | 8Nm |















Bits, sockets and drive bars



Bit holder and different T-drives

| Product code | PU | Drive | Head drive | L | | |
|-------------------------------|----|-----------------|-----------------|-----|---------|---|
| Bit holder ZA $\frac{1}{4}$ " | 1 | $\frac{1}{4}$ " | $\frac{1}{4}$ " | 58 | 1162306 |  |
| T25W-175-HEX $\frac{1}{4}$ " | 5 | $\frac{1}{4}$ " | T25W | 175 | 727979 |  |
| T15-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T15 | 25 | 938982 | |
| T20-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T20 | 25 | 769471 | |
| T20W-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T20W | 25 | 895280 | |
| T25-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T25 | 25 | 24008 | |
| T25W-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T25W | 25 | 7662 | |
| T30-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T30 | 25 | 24010 | |
| T40-25-HEX $\frac{1}{4}$ " | 10 | $\frac{1}{4}$ " | T40 | 25 | 769474 | |
| T30-40- $\frac{1}{2}$ " | 10 | $\frac{1}{2}$ " | T30 | 40 | 1489154 |  |
| T40-40- $\frac{1}{2}$ " | 10 | $\frac{1}{2}$ " | T40 | 40 | 1489155 | |
| T45-40- $\frac{1}{2}$ " | 10 | $\frac{1}{2}$ " | T45 | 40 | 1489157 | |
| T50-40- $\frac{1}{2}$ " | 10 | $\frac{1}{2}$ " | T50 | 40 | 1489158 | |

Sockets

| Product code | PU | Drive | Head drive | L | | |
|----------------------|----|-------|------------|-----|---------|---|
| Drive shaft H15 head | 5 | ¼" | H15 | 290 | 1517546 |  |
| E308-¼"-50 | 1 | ¼" | HEX8 | 50 | 1646160 |  |
| E466-¼"-40 | 1 | ¼" | Square | 40 | 858496 |  |
| E313-¼"-50 | 1 | ¼" | HEX13 | 50 | 508029 |  |
| E420-¼"-74 | 1 | ¼" | irius® | 74 | 973316 |  |
| E380-⅜"-34 | 1 | ⅜" | HEX8 | 34 | 8018 |  |
| ZA¼" | 1 | ¼" | ⅜" | 50 | 7645 |  |
| E416-½"-38 | 1 | ½" | HEX16 | 38 | 1389740 |  |
| E508-½"-40 | 1 | ½" | HEX8 | 40 | 1648380 |  |
| E513-½"-78 | 1 | ½" | HEX13 | 78 | 1649258 |  |
| E516-½"-78 | 1 | ½" | HEX16 | 78 | 1649256 |  |
| E516-½"-78-red | 1 | ½" | HEX16 | 78 | 1649257 |  |
| SOK-IT-¼"-57-6NM | 1 | ¼" | HEX8 | 57 | 1667323 |  |
| SOK-IT-¼"-57-8NM | 1 | ¼" | HEX8 | 57 | 1667322 |  |



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