

SFS

Rain screen Catalog

Subframe and fasteners

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General Information



Belgian pavilion at Expo 2025 in Osaka

Success
Story



Appropriate color scheme for the façade

A pavilion that heals, connects and inspires: Under the motto “Human Regeneration,” Belgium showcased its strengths in life sciences and sustainable change at Expo 2025 in Osaka (Japan). Among the displays was an interactive exhibition and an architectural statement full of technical finesse. SFS supplied the perfect façade solution – precise, flexible and reusable. The project showed how innovation and design go hand in hand.

The architectural firm Carré 7 was commissioned to design the Belgian pavilion for Expo 2025. The façade cladding not only had to have a precisely defined color scheme, but also had to be concealed. With Rockpanel as the material supplier and Carré 7 having a specific color scheme in mind, a fastening system was needed that was both technically and aesthetically convincing – SFS was the first choice.

In addition to the design requirements, the planned reusability of the pavilion also presented a challenge. After the Expo, the building is to be reassembled in Belgium and used as a permanent exhibition in the future. This required a solution that would allow complete dismantling and reuse. We supplied the appropriate vertical aluminum substructure, which allows easy installation and precise positioning of the façade panels, even on uneven surfaces.

The organically shaped architecture with rounded corners pre-

sented additional technical challenges for everyone involved in the project. Thanks to the early involvement of SFS in the planning phase, various options were able to be developed, tested and checked for their feasibility. This made it possible to successfully combine the design specifications with a functional, easy-to-install solution.

Removable and easy to install

Thanks to the use of lightweight materials and prefabricated, modular system components, the system can be installed quickly and easily. The mechanical façade system can be adjusted in several directions, ensuring a slim, precise appearance. The aluminum corner brackets with a “helping hand” offer an adjustment range of up to 40 mm, allowing unevenness in the substrate to be easily compensated. At the same time, the precise-fitting corner solution enables the façade surfaces to be connected seamlessly, even with different wind directions.

Working in close collaboration with its partners, SFS made use of its technical expertise and problem-solving skills to make an important contribution to the success of the pavilion. It combines innovation, sustainability and architectural quality in a unique way. We are grateful to have been able to participate in this project.



Increase in value

- Specializing in customized fasteners
- Intelligent solutions enable customers to install and dismantle products easily
- Constructive cooperation ensures that all challenges are mastered

Cost saving

- Assembly time reduced considerably
- Simplification of tools and assembly

The building envelope specialist

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

We create value with advanced fixing and rainscreen subframe systems for the building envelope. As a leading specialist in this application we offer the highest possible expertise.

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



Building the future of Rainscreen Façades

We understand that a rainscreen façade is more than just an outer layer – it's a high-performance system where every detail matters. Our product portfolio is built on three strong pillars that define our expertise and provide comprehensive solutions for your projects:

Fasteners

Engineered for precision and durability, our fastening solutions ensure secure and reliable connections designed to withstand the toughest conditions.

Subframe Systems

With our innovative subframe systems, we provide maximum flexibility and efficiency, enabling precise alignment, optimized thermal performance, and compatibility with a wide range of façade materials.

Finishing

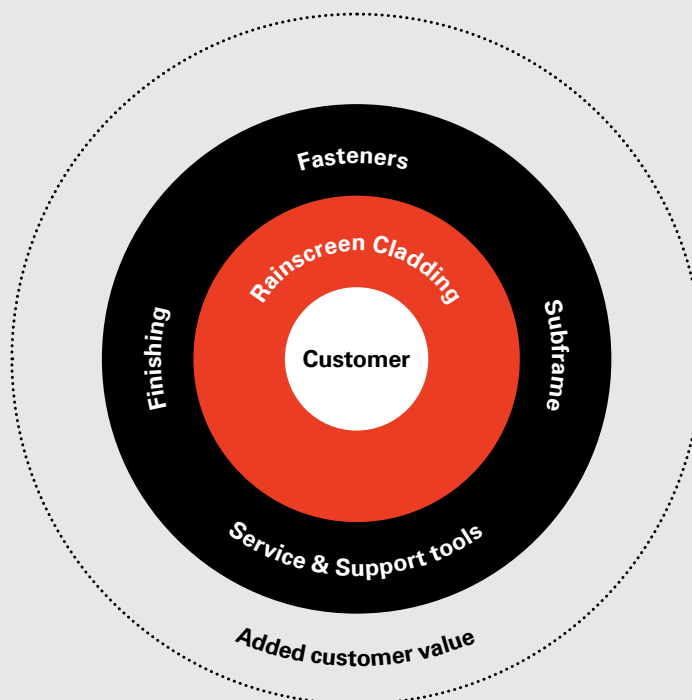
Our extensive coating solutions open up endless design possibilities, combining aesthetic freedom with long-lasting performance and weather resistance.

Services

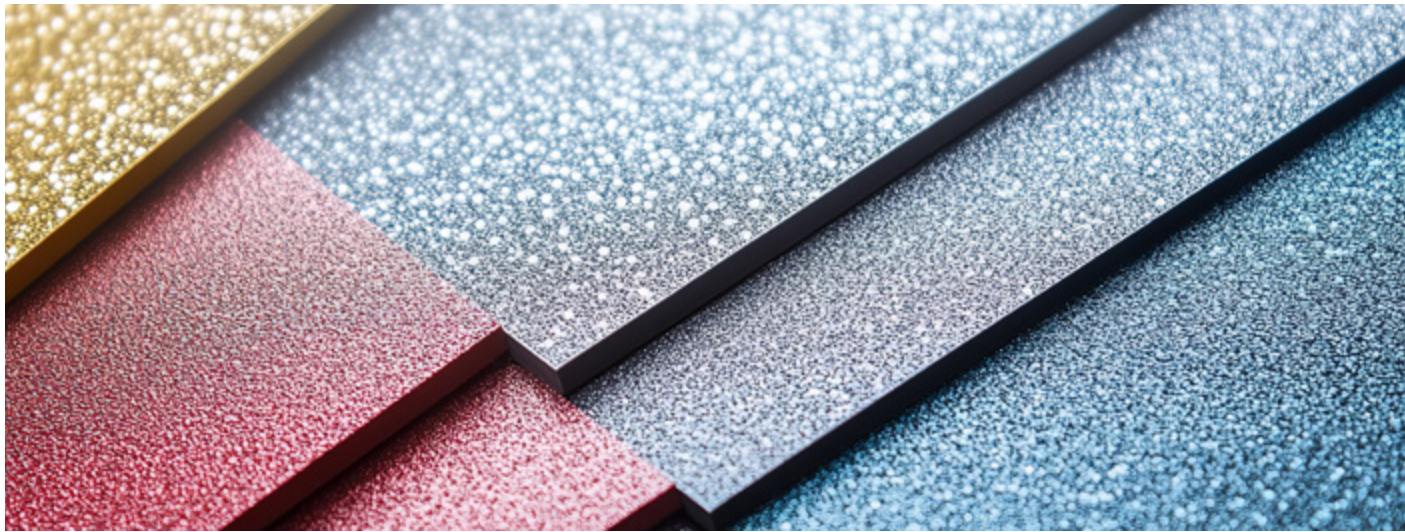
We support you at every project stage with:

- Advanced design and calculation software
- Expert technical consulting and engineering support
- Sample production and project-specific mock-ups
- Comprehensive testing and certification services

Together, these elements form a complete solution designed to help you plan, design, and deliver rainscreen façade projects with confidence, efficiency, and creativity.



Painting of fasteners with unlimited colour variety



Fast, versatile and for the highest aesthetic demands

Do you value fasteners that blend perfectly with the façade of your building project and ensure an attractive appearance with an uninterrupted look? Our fasteners combine maximum functionality with perfect aesthetics. Their almost unlimited variety allows you to match the colour and surface structure of a façade exactly and integrate the fasteners into the panels so that they are virtually invisible.

To do this, our experts first record the colour and structure of your façade panels. The next step is to precisely match the paintwork of the fasteners in our in-house coating and painting facility.

From solid and metallic colours to pearlescent effects and multi-effect paints in a multi-layer structure, our fasteners are available in a wide variety to meet the highest aesthetic demands.

This also applies to the quality of our fasteners. The coating process creates a robust surface with excellent weather resistance, which guarantees colour stability even in exposed outdoor applications. Thanks to in-house coating on site, you also benefit from short delivery times and a high degree of flexibility.

Uni

Adapted to RAL or sample plate



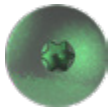
Metallic decores

Pearlescent effects are possible



Colour float or flip-flop

The colour impression changes depending on the angle at which the panel/fastener is viewed



Structure decors

Structures can be modelled on the fasteners. The fasteners can be modelled on the structures.



Corten steel

Corten steel finishes are possible



Sprinkle effect

Suitable for all types of multicoloured decorations with or without texture





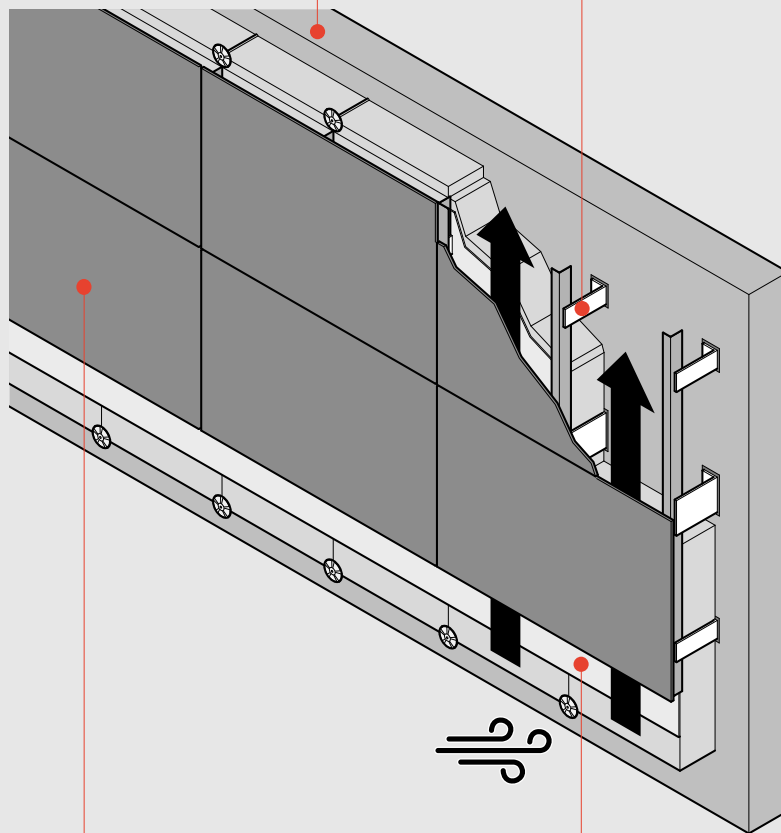
Rainscreen Function

Supporting structure

- As the name suggests, the supporting structure absorbs a large proportion of the static loads

Subframe

- Substructure connects insulated supporting structure and cladding
- Adjustment options compensate for façade unevenness
- Optional integration of lightning protection concepts possible



Façade cladding

- Façade cladding separated from the supporting structure and insulation by a rear ventilation space
- Provides durable protection against rain and weather
- Gives the building a unique character thanks to its individual appearance

Thermal insulation

- Minimises heat loss from the inside to the outside and has a soundinsulating effect
- Enables flexible insulation thickness
- Mechanical protection of the thermal insulation through suspended cladding



Rainscreen Performance Characteristics

Rain Cover

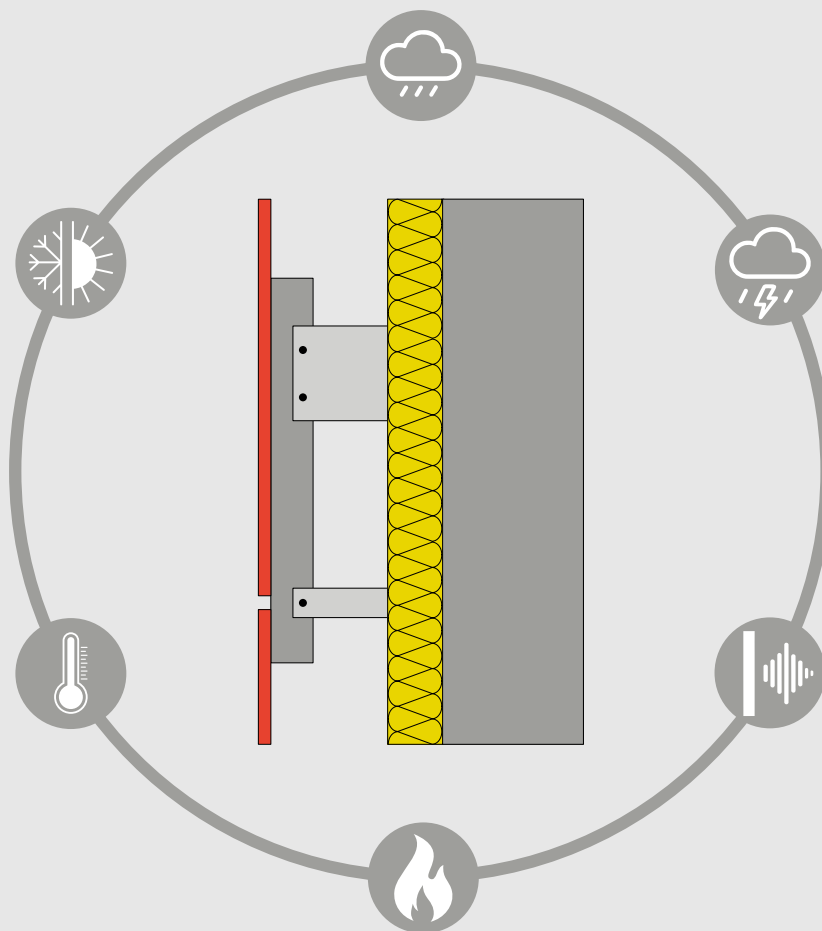
Ventilated rainscreen façades offer superior protection against driving rain. The ventilation cavity blocks moisture transfer, while a two-stage sealing system provides double protection for façade panels.

Lightning protection

Ventilated rainscreen façades with conductive metallic substructures provide effective and cost-efficient lightning protection while supporting IT system safety and electromagnetic shielding.

Sound insulation

Ventilated façades significantly enhance sound insulation, achieving performance values up to 66 dB depending on insulation thickness, cladding type, and joint design.



Fire protection

Ventilated rainscreen façades offer superior protection against driving rain. The ventilation cavity blocks moisture transfer, while a two-stage sealing system provides double protection for façade panels.

Thermal insulation

Customizable cladding zones and insulation thicknesses deliver excellent U-values, exceed energy regulations, and ensure optimal thermal comfort year-round.

Moisture Protection

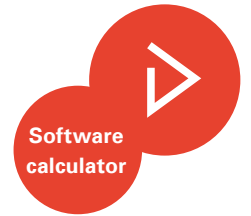
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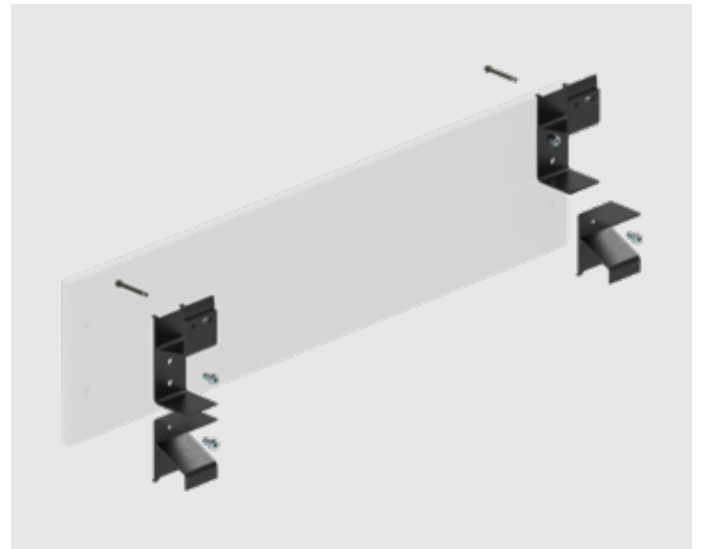
Plank Clip System

Latest products



PlankClip System

The system allows the installation of panels in heights from 100 to 300 mm, whereby different panel lengths can be combined to create a visually appealing laying pattern. The quick and easy installation saves you valuable time and money. The system also complies with fire protection class A2, ensuring maximum safety.



Aesthetic and versatile

- Non-visible fastening system
- Black coating of the components visible in the joint gap ensures a discreet look
- Panels can be applied as cladding to either aluminum or timber profiles
- Horizontal and vertical alignment of the panels possible
- Various offset options can be realized
- Planks can be cut out of standard boards

Secure

- Mechanical fastening of the panels
- Tested and approved system with Rockpanel A2 9 mm boards (ETA-24/0911)
- Fire rating class A2 – s1, d0 for combination in aluminum or timber subframe

Planning and maintenance efficiency

Quantity calculation software:

- Software is available to calculate the required quantity of components for a given project, streamlining procurement and planning

Drilling pattern output:

- The software provides drilling patterns, ensuring precise placement of components during installation, enhancing structural integrity and aesthetics

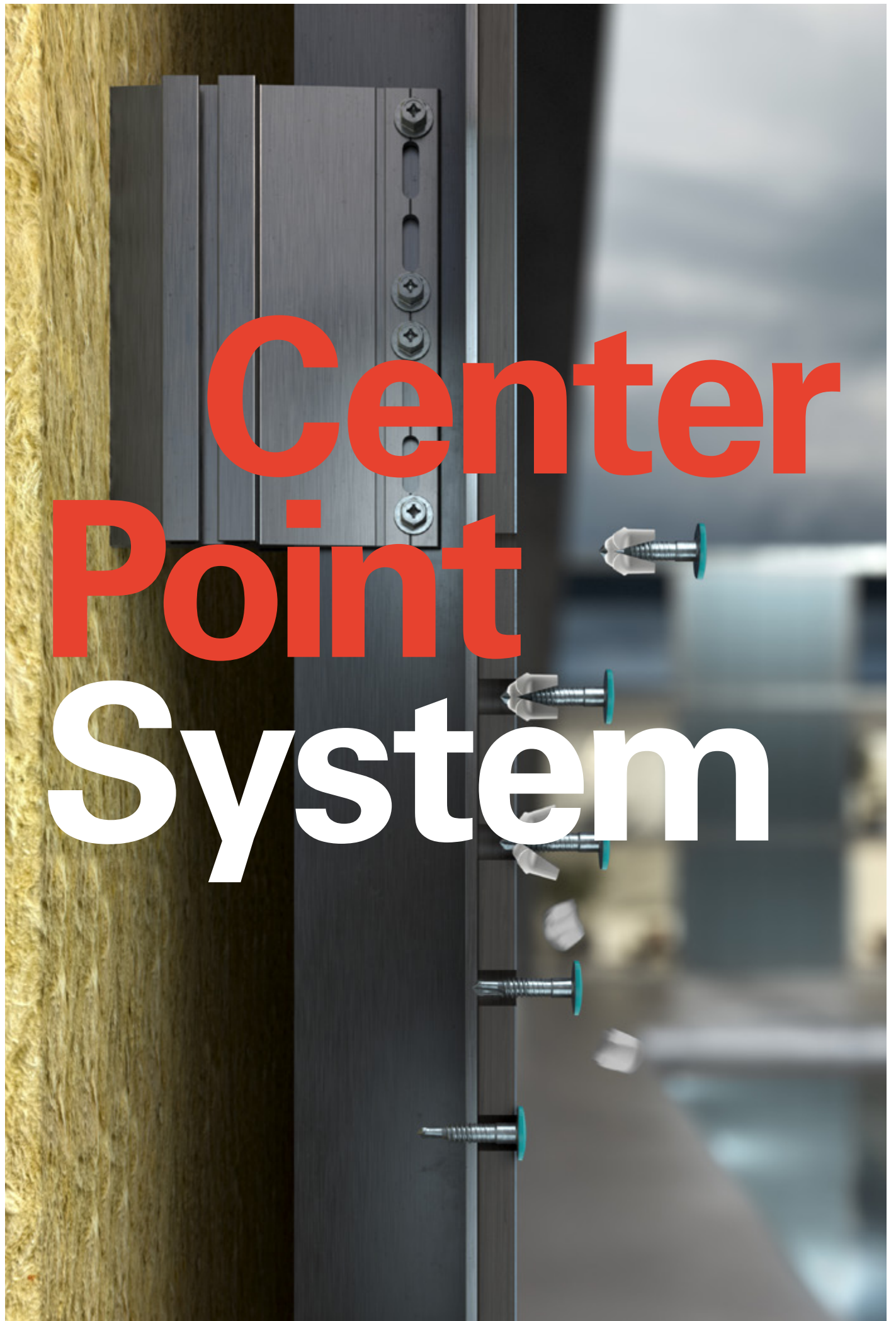
Project specific static calculations:

- Static calculations are available through Rockpanel's service center, ensuring compliance with safety and regulatory standards for each specific project

Replaceable panels:

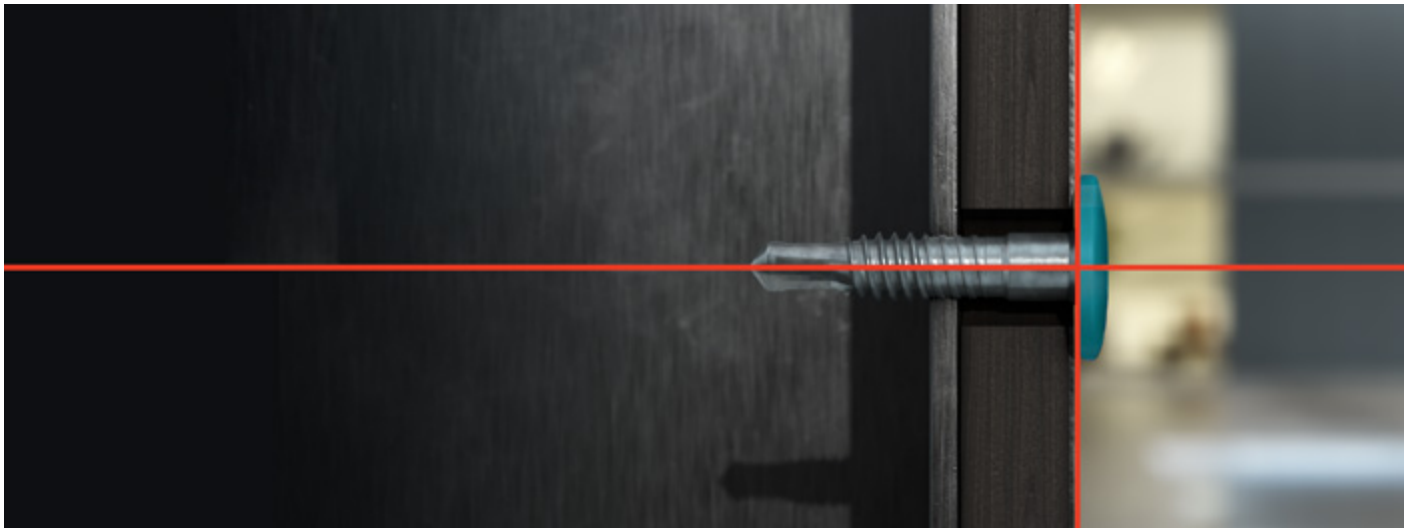
- Each panel of the system can be swapped out individually, offering flexibility for maintenance or modifications without dismantling the entire structure





Center Point System

Latest products



CPS Center Point System

With the new Center Point System, the installation of rainscreen facades is super easy. The pre-fitted centring sleeve, drill tip and special thread geometry ensure perfect positioning of the fastener to the façade panel. Thanks to the patented thread, the fastener is protected from potential overdriving issues resulting in a secure installation.



Optimised bit

- Bit engages better with fastener with optimal guidance during installation and makes installation considerably easier

Reduced thread

- Allows deliberate overdriving and the use of cordless impact drivers

Fastener head

- Paintable in all colours
- Prevents scratches on the panel surface

Double-start thread

- Ensures ideal alignment of the fastener to the panel
- Prevents the fastener from unscrewing due to expansion and contraction

Centring sleeve

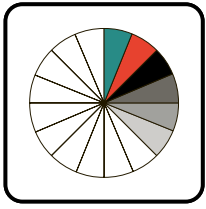
- Centres the fastener perfectly in the panel hole
- Leaves no residual material in the drill hole
- No harmful substances – can decompose over the lifecycle of a building

Drill tip

- Bites immediately and drills through the substructure effortlessly
- Also available as a bimetal version for steel substructures



Features and Innovations



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.



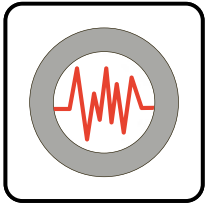
Safe setting – resistant to unwinding and vibration

The geometry of the fastener, such as 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.



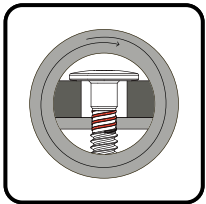
Fire approved – reliable and secure

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.



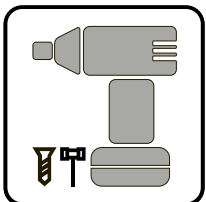
Seismic approved – high physical life

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.



Reduced thread – safe and tension-free installation

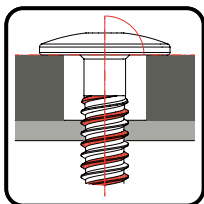
The reduced thread allows the fastener to be over-torqued, resulting in a tension-free installation. Within the defined clamping range, it is ensured that the connection does not rattle.



Impact drivers can be used – ergonomic installation

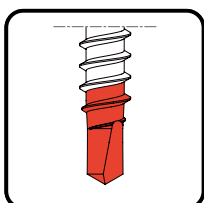
The geometry of the fastener allows the use of an impact gun machine. These machines are ergonomic to use as there is no torque on the wrist. Also the machines are usually smaller than regular drills and can therefore be used in hard to reach places.





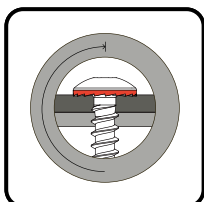
Double-start thread – ideal alignment

The double-start thread ensures ideal alignment of the fastener with respect to the panel. Furthermore it prevents the fastener from unscrewing due to expansion and contraction.



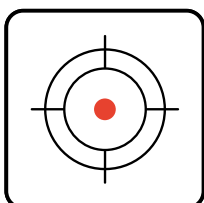
Bi-Metall – high corrosion resistance

High corrosion resistance as the material in the clamping area is made of austenitic stainless steel. At the same time, it is possible to drill into steel thanks to the carbon steel drill tip.



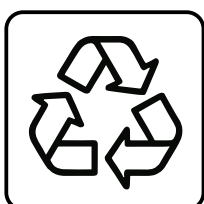
Underhead ribs – protection against overwinding

The underhead ribs act as a kind of brake pad and thus reduce the risk of overwinding.



Centered fastening – for a long-lasting façade

The fastener is installed concentric to the pre-drilled cladding panel. This allows the thermal expansion to be fully utilised. In order to achieve this, the recommended tools and the corresponding installation guidelines must be observed.



Recyclable aluminium – sustainable material choice

The aluminum components are fully recyclable and can be reused without losing their quality. By using recyclable materials, the environmental impact is reduced, and valuable resources are conserved.

Installation instructions

Installation of self drilling fasteners

General information

- Install self-drilling fasteners in general at 1'200–2'000 rpm
- Recommended drilling pressure for self-drilling fasteners: 150–300 N
- Use clean tool, which fits exactly for installation of painted fasteners

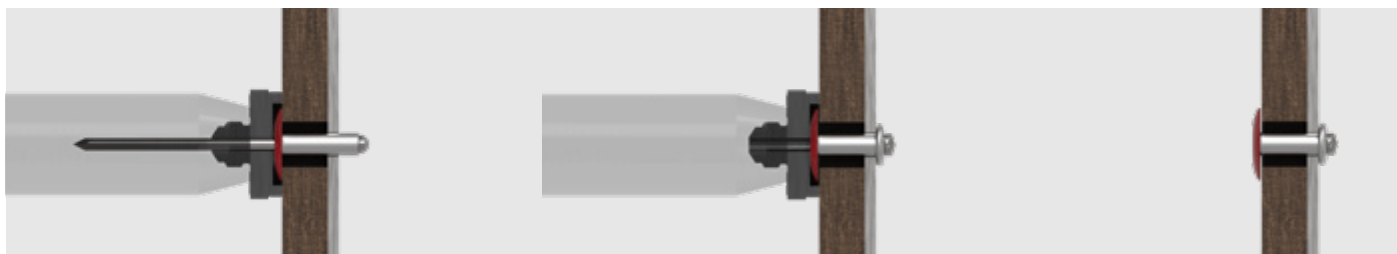
Use of impact wrench

- Is only permitted for products where it is specifically indicated

Installation of rivets



- The rivet needs to be installed cenctrically to the pre-drilled cladding panel
- For pre-drilling the subframe the use of the DG (Drilling Gauge) is recommended



- The panels must be able to move freely, therefore the rivets must not be tightened too much
- To ensure a constraint-free installation, the use of a mechanical rivet tool equipped with the appropriate nosepiece is mandatory



Environmental declaration



EPD stands for Environmental Product Declaration. We are proud to announce EPD for our roofing and cladding products. It is a standardized and verified document in accordance with international standard EN ISO 14025 and EN 15804+A2 and verified by independent third-party organizations such as British Research Establishment (BRE) in UK.

The declaration covers aspects such as energy use, greenhouse gas emissions, air and water pollution, waste generation and more. The goal is to offer transparent and dependable information, assisting architects, engineers, building owners, and others in making informed decisions regarding product and material sustainability.

The verified Life Cycle Assessment (LCA) acknowledges our dedication to sustainability and environmental responsibility across all facets of our business. The EPD provides detailed information on the environmental impact of our fasteners, focusing on manufacturing process, called cradle to gate, end-of-life stage (module C) and the benefits and loads beyond the system boundary (module D) following the latest standard.



Technical approval



A European Technical Assessment (ETA) provides recognized evidence of the performance of a construction product and enables CE marking, allowing products to be market throughout all European member states. Almost all of our rainscreen fasteners are covered by an ETA.

The European Construction Products Regulation (CPR) establishes harmonized rules for construction products that are intended to be permanently incorporated into construction works and whose performance affects the performance of the construction works concerning basic requirements. The CPR's main objectives are to facilitate the placing of construction products on the European single market based on harmonized technical standards, ensure their free movement and eliminate technical barriers. Harmonized technical standards are harmonized standards (hEN) and European Assessment Documents (EAD) which regulate the essential performance characteristics to be evaluated and the Assessment and Verification of Constancy of Performance (AVCP). The standardised testing and assessment methodes ensure a consistent performance evaluation of construction products.

Under the CPR, any construction product covered by harmonized standards (hEN) must have a CE marking and a Declaration of Performance (DoP) that details the performance of the product. For construction products covered by European Assessment Documents (EAD), the CE marking is voluntary.

Most of our rainscreen fasteners fall under the CPR and are covered by EADs. The performance of these products are declared in European Technical Assessments (ETA) issued by an official Technical Assessment Body (TAB), such as the German Institute for Building Technology (DIBt) or ETA Danmark, ETADK). The AVCP is ensured through specified Factory Production Control (FPC) and regular audits by a Notified Body (NB) such as the Karlsruhe Institute of Technology (KIT) in Germany.

Overview of European Technical Assessments

ETA-15/0476	Fastener for the rear fixing of facade panels	
ETA-21/0951	Blind rivets for connections of metal sheets and plates*	
ETA-22/0793	Fasteners for metal members and sheeting	
ETA-24/0682	Fastening kit for facade panels (Center Point System)	
EN 14592	Fasteners for timber subconstruction	

* EAD not cited in OJEU

ETAs and EADs are voluntary certifications for construction products, reflecting our commitment and effort toward harmonized technical specifications.

In addition, our products are approved by several OEMs and carry CE marking.

Overview of National Technical Approvals

AbP P-BWU02	Fasteners for connecting brackets to aluminium profiles
BBA	NVELOPE® Rainscreen subframe systems
Passive Hous	NVS Stainless steel bracket and Thermal system



BBA – British Board of Agrément



BBA certification is a mark of excellence based on rigorous National and European standards that validate a construction products formulation, capability and uniqueness.

Earning and maintaining BBA certification demonstrates a commitment to ongoing innovation.

It is recognised, respected and sought after by specifiers, architects and contractors. Assessment reassures all parties that we are an expert in our specialty and we continue to offer the latest advances and best practices, enabling us to deliver the safest, most efficient and highest quality product possible. Our NVELOPE® Rainscreen Subframe System was first awarded a British Board of Agrément certification over ten years ago and was the first system in the UK to gain recognition.

Passive House



The Passive House Institute (PHI) is an independent research institute that has played an especially crucial role in the development of the passive House concept, an internationally recognised, performance-based, energy standard for the construction industry.

Passive House Certification assures that strict quality requirements of the Passive House Standard have been achieved for buildings and particularly building components.

Our **NVELOPE® NVS Stainless Steel bracket** combined with our unique **Thermal Pad** (NVS + Thermal) has been awarded Passive House component accreditation, falling within the Facade Anchor category. The significant reduction in thermal point loss which may be achieved by utilising our **NVS + Thermal system** is clearly recognised by the PHI.

Environmental conditions

The local environmental conditions respectively the corrosiveness of the atmospheric environment must be taken into account when selecting the fastener material. Atmospheric corrosion can be largely prevented by the correct choice of the fastener material.

The international standard ISO 9223 standard divides the corrosiveness of the atmospheric environment into different corrosion categories. The subdivision is made into 6 corrosivity categories from very low to extreme exposure to corrosion.

The corrosivity categories take into account the superimposed environmental factors such as climate zone, air pollution or coastal areas. The fastener material should be suitable for a particular corrosivity category to prevent the occurrence of atmospheric corrosion.

Corrosivity categories according to ISO 9223

Corrosivity category	C1 Very low	C2 Low	C3 Medium	C4 ¹⁾ High	C5 Very high
Temperate climate zone	(Dry climate)	With low air pollution (rural)	With moderate air pollution (industrial)	With high air pollution (industrial)	–
Subtropical climate zone	–	(Dry climate)	With moderate air pollution (urban)	With moderate air pollution (urban)	With high air pollution (industrial)
Costal areas		–	With slightly salty air	With moderate salty air	With very salty air

Typical outdoor environmental conditions, interpreted by SFS from ISO 9223.

Fastener material

Stainless steel A4	
Stainless steel A2	
Aluminium	
Aluminium AlMg3	
Aluminium AlMg5	

Recommendation based on experience of SFS. The final decision must be made by the customer. SFS accepts no responsibility.

Legend

	Suitable fastener material, expected working life for typical applications at least 25 years ²⁾
	Suitable fastener material in specific circumstances, professional expertise is required
	Unsuitable fastener material

¹⁾ For swimming pool hall atmospheres, special fastener material is required.

²⁾ This value is based on an average working life for typical applications and complies with the specifications in our ETAs.





Product codes

Subframe/Brackets

NV-VB-060S-11



1 Group

	Code
NVELOPE®	NV
Kladfix®	KX

2 Bracket

	Code
Vertical	VB
Horizontal	VH

3 Length

	Code
Bracket with isolator 60; 90;.... 300	060
Bracket without isolator 55; 85;.... 295	055

4 Type

	Code
Single bracket of 75 mm height (floating point)	S
Double bracket of 150 mm height (fix point)	D

5 Fixing hole

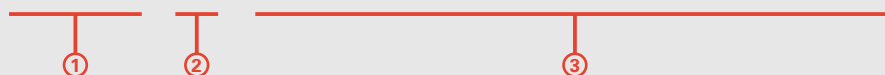
	Code
Ø of hole to fix bracket to block or concrete substrate	11
Ø of hole to fix bracket to steel or timber substrate	6.5



Product codes

Subframe/Profiles

NV-L-60-40-2.2-3000



1 Group

	Code
NVELOPE®	NV
Kladfix®	KX

2 Profile type

	Code
T-profile	T
L-profile	L
Omega profile	OM
Zed profile	Z
Carrier profile	CP
Box profile	BR
T-Box profile	BRT

3 Profile measurements

	Code
Profile height	60
Visible part	40
Thickness	2.2
Length	3000



Product codes

Fasteners

SDA4/9.8-11-D15-S12-5.8x29-A4-...

①

②

③

④

⑤

⑥

⑦

⑧

1 Type	Special features	Material	Code
Self-drilling fastener	Drill point	Stainless steel (Bimet)	SX
		Full stainless steel	SDA
	Drill point on timber	Full stainless steel	TW
			SLA
Self-tapping fastener	–	Full stainless steel	TDA
Concealed fastener			TUF-S
			TU-S
			TUC-S
			TD-A4
Rivets	–	Aluminium	AP
			ASO
		Stainless steel	SSO

2 Drilling capacity (optional)		Code
Drilling capacity	–	mm

3 Clamping Range (optional)	Code
Clamping range	min. – max. mm

4 Head	Code
Hexagon head with flange	H13
Irius® head, Ø 12 mm	L12
Pan head	D mm
Countersunk head	S mm



Product codes

Fasteners

SDA4/9.8-11-D15-S12-5.8x29-A4-...



5 Washer (optional)	Material	Code
Sealing washer	Stainless steel A2, EPDM-seal	S mm
	Stainless steel A4, EPDM-seal	S mm/A4
	Aluminium, EPDM-seal	A mm
	EPDM	W mm

6 Dimension	Product family	Code
Diameter × Length		mm × mm
Diameter × Length	Rivets	mm mm 0

7 Material *	Code
Stainless steel A2	A2
Stainless steel A4	A4

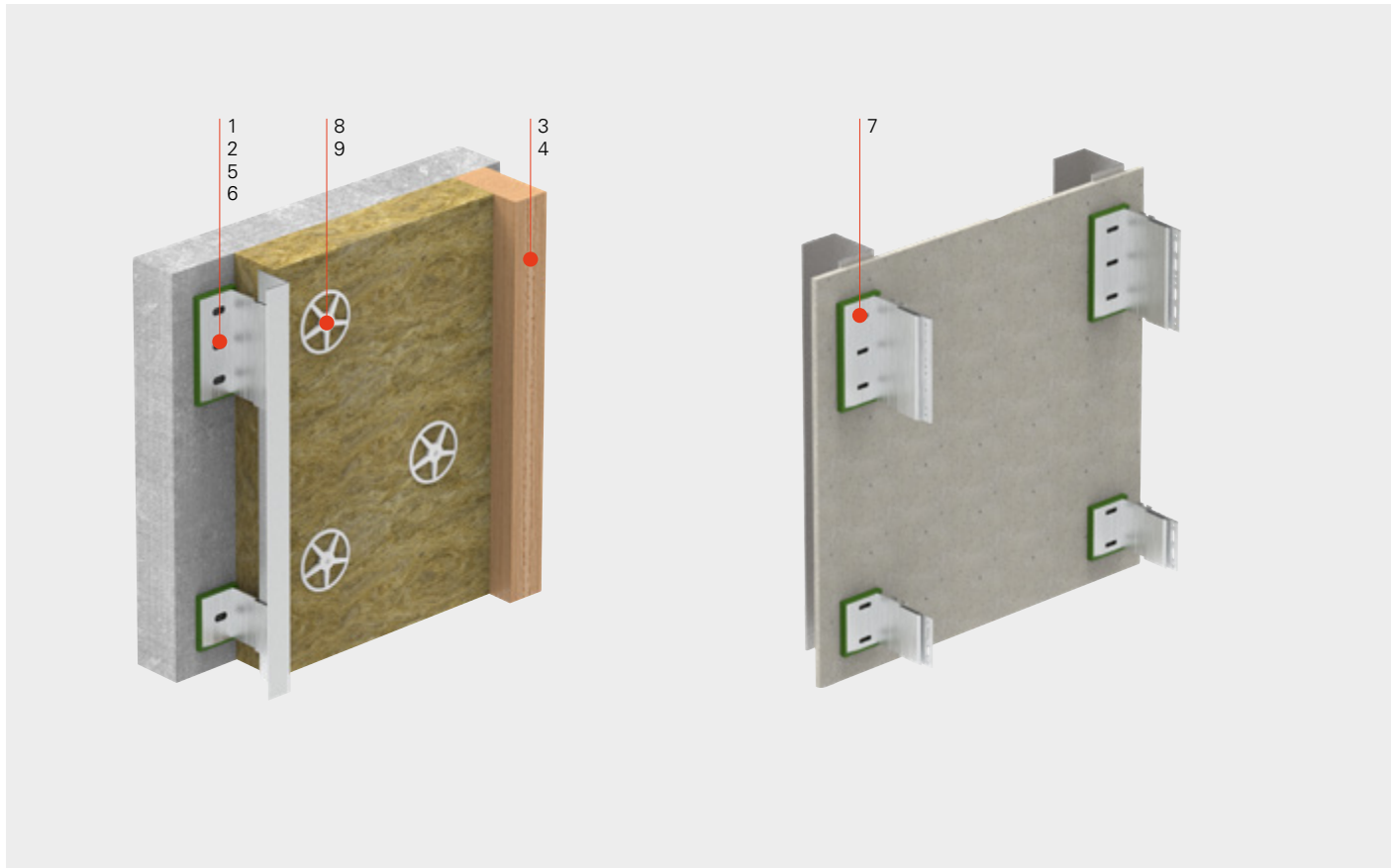
* partly old code in use (S/S4)

8 Painting	Code
Color name	



Explanation of levels

First level fixing



Façade anchor			Page		
T	A4	SXR-FUS	72		1
		SXRL-FUS	74		2
		SXR-T	78		3
		SXRL-T	80		4
		FAZ-II	84		5
		FXA	86		6

Self driller			Page		
T	A4	SX5-6.3	90		7

Insulation fixing			Page		
PP	MDH		92		8
PA	MDD		94		9

Material description

A2	Austenitic stainless steel A2
A4	Austenitic stainless steel A4

T	Carbon steel
PP	Polypropylen

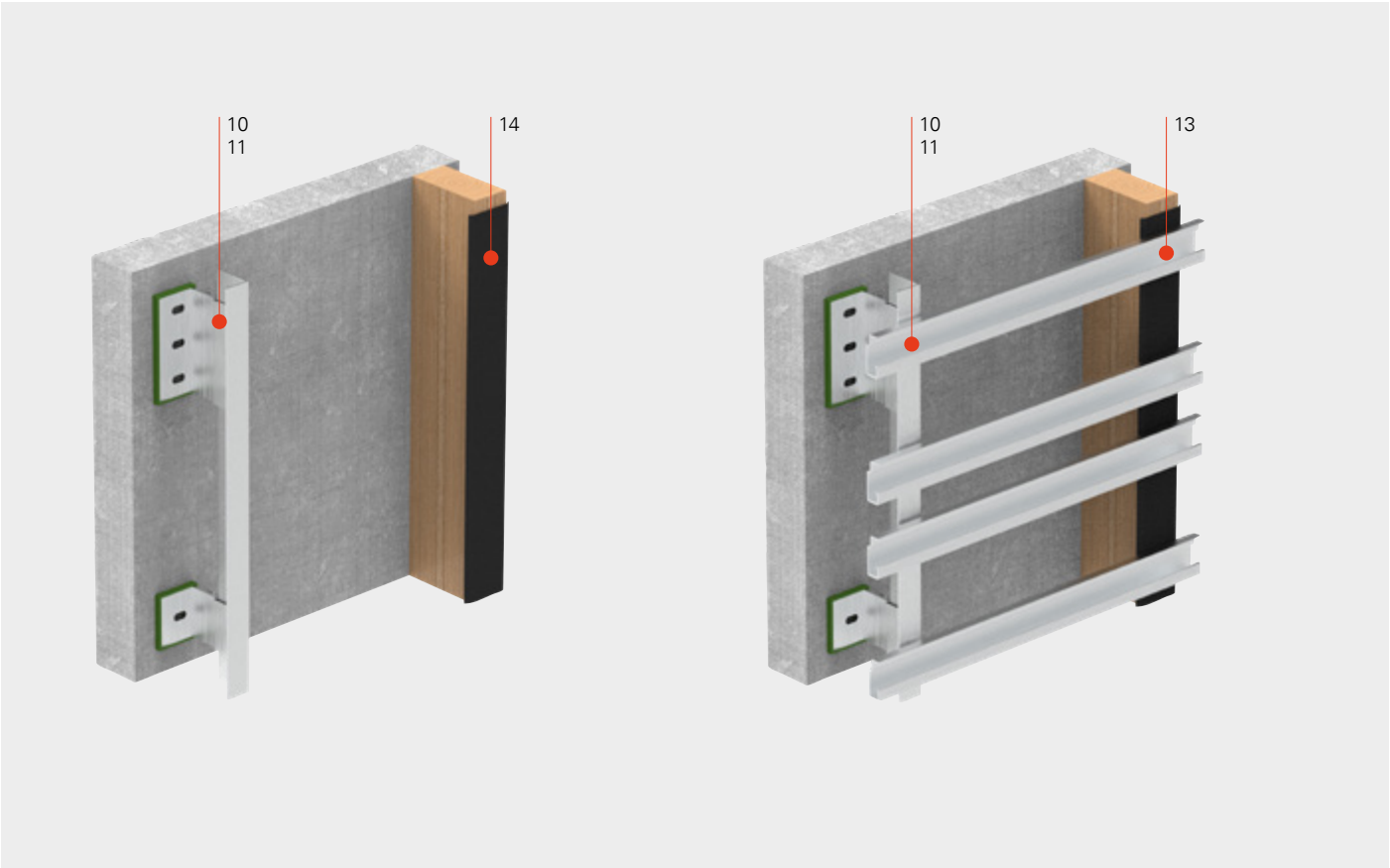
PA	Polyamide
E	EPDM

A	Aluminium
---	-----------



Explanation of levels

Second level fixing



Self driller		Page	
A4	SDA5-5.5	98	10
	SDA5-4.8	100	11
A2	SW3-4.8	102	13

Accessories		Page	
E	EPDM-Tape	176	14

Material description

A2	Austenitic stainless steel A2
A4	Austenitic stainless steel A4

T	Carbon steel
PP	Polypropylen

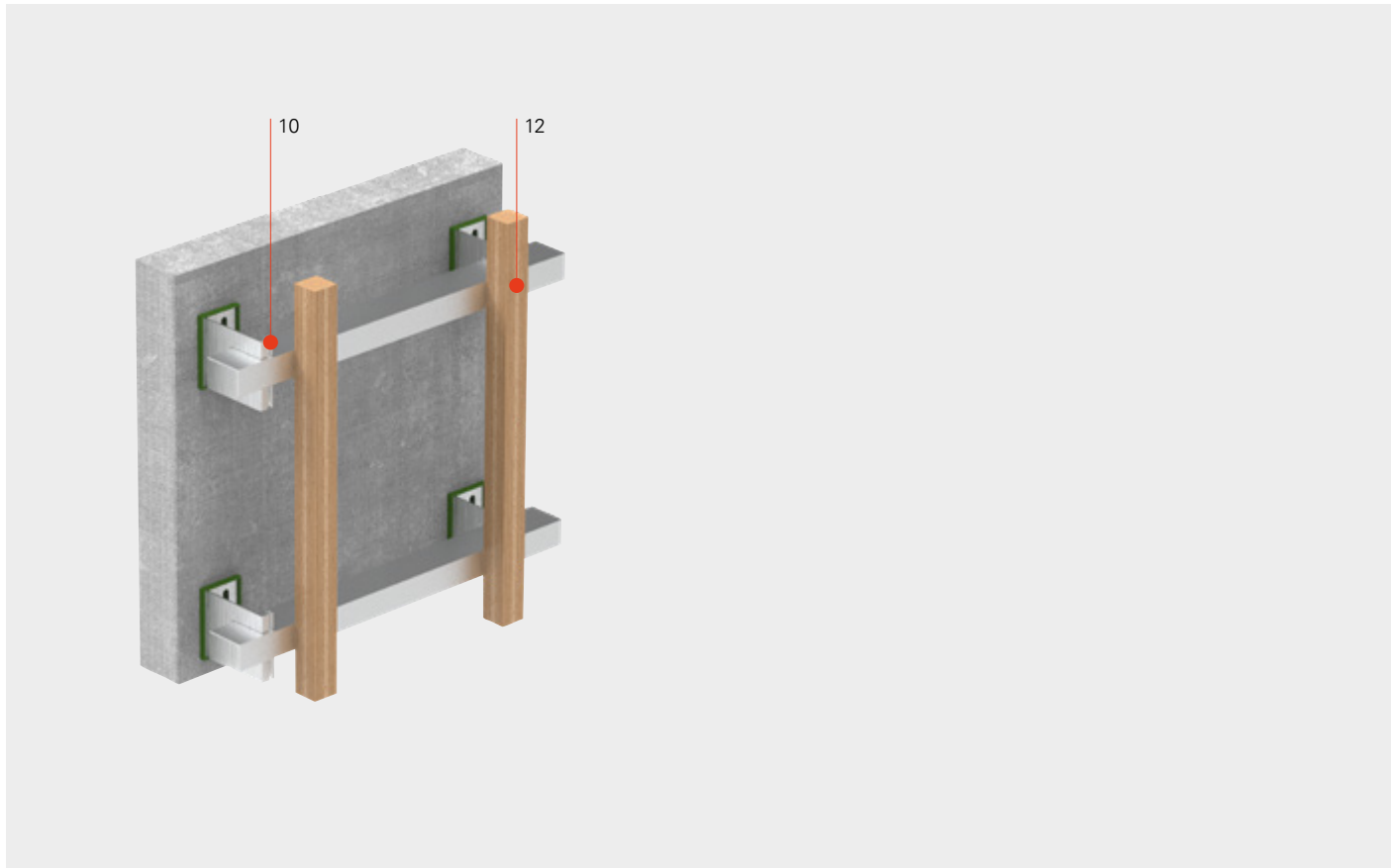
PA	Polyamide
E	EPDM

A	Aluminium
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Explanation of levels

Second level fixing



Self driller			Page	●
A4	SDA5-5.5		98	10
A2	SDA2-4.8		104	12

Material description

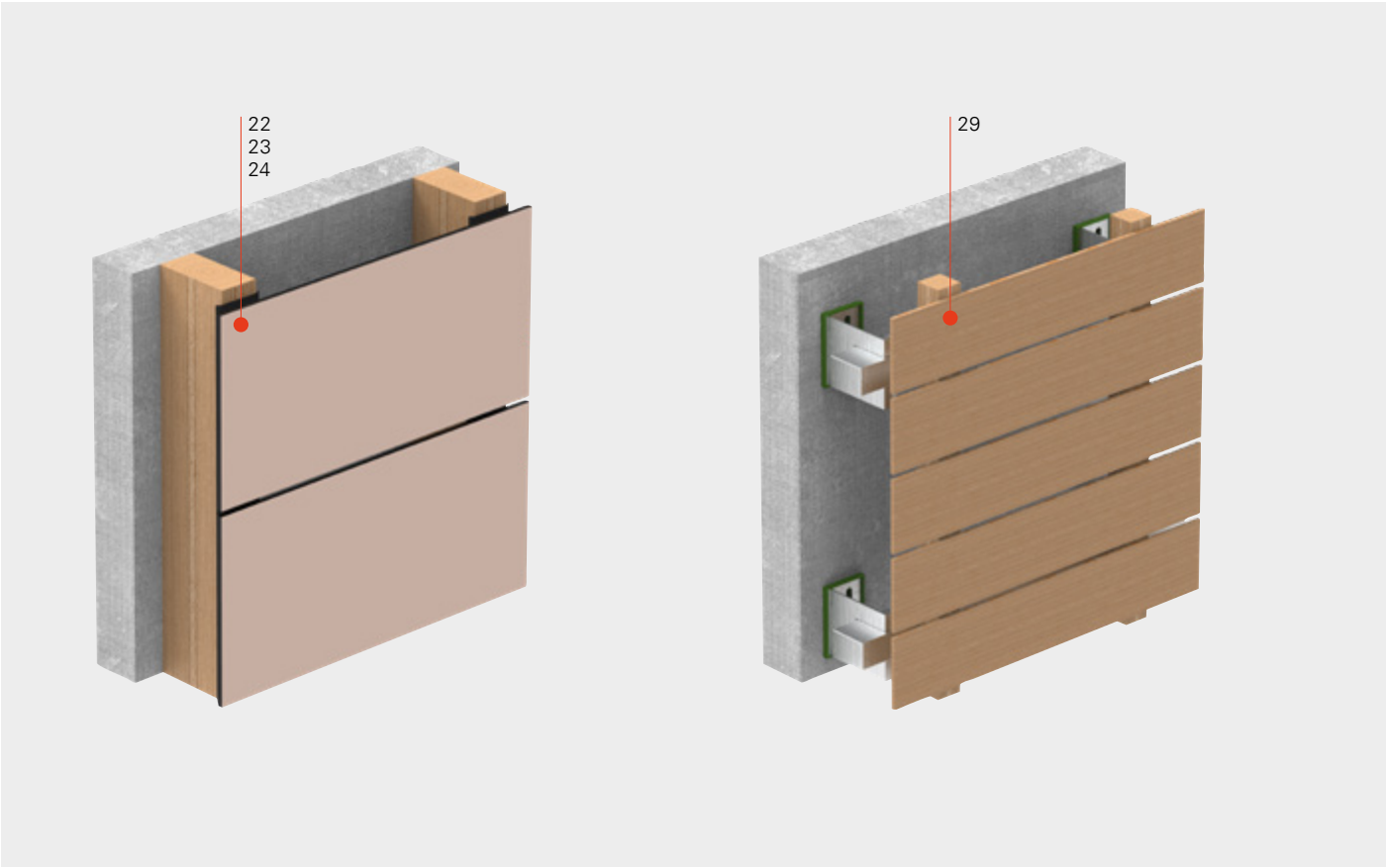
A2	Austenitic stainless steel A2	T	Carbon steel	PA	Polyamide	A	Aluminium
A4	Austenitic stainless steel A4	PP	Polypropylen	E	EPDM		



Explanation of levels

Third level fixing

Visible fixing onto timber subframe



Self driller		Page	
A2	TW-S-4.8	130	22
	A4 TW-A4-4.8	132	23
A2	SCFW-S-5.0	134	24
A2	HTP-5.0	136	29

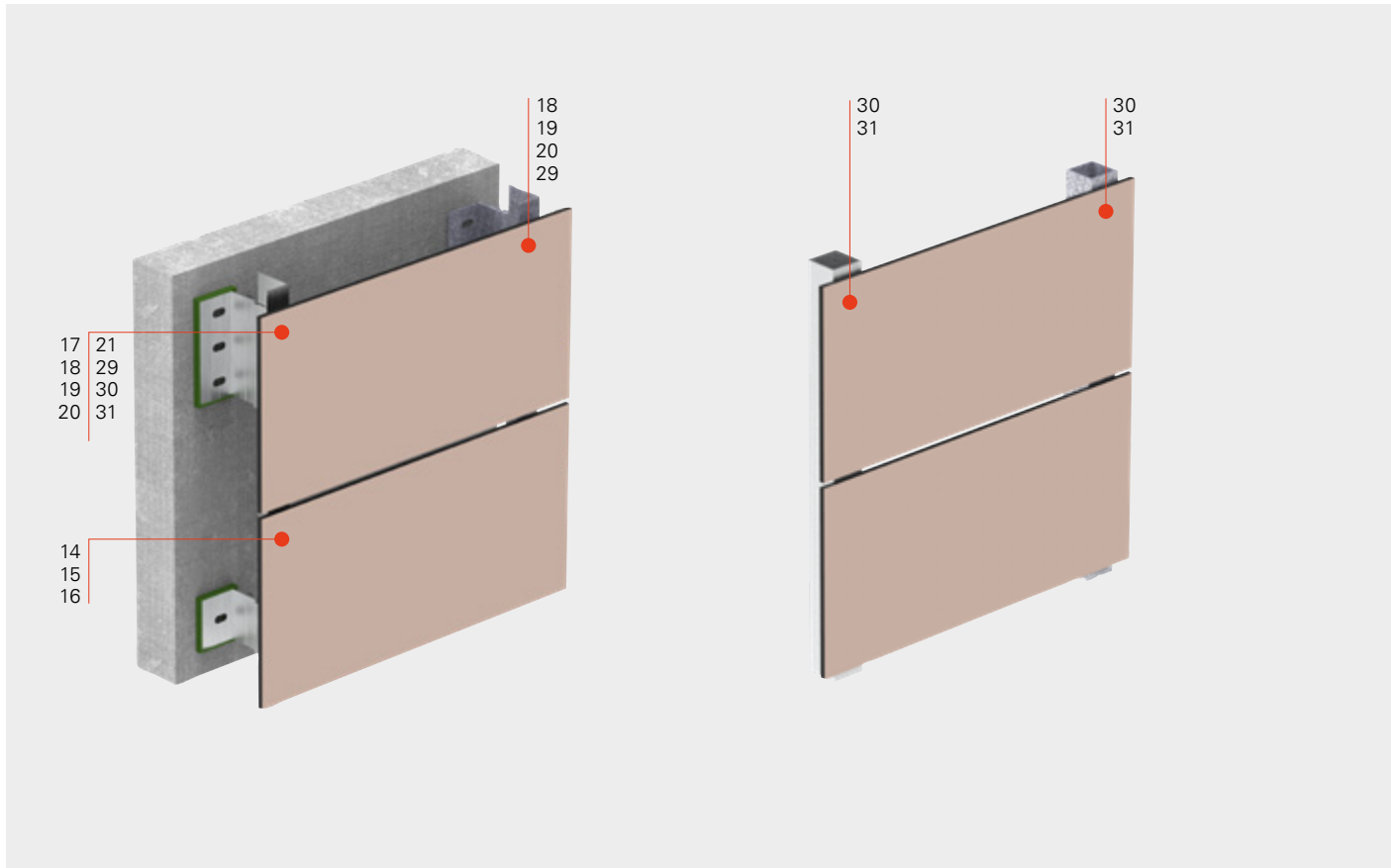
Material description

A2	Austenitic stainless steel A2	T	Carbon steel	PA	Polyamide	A	Aluminium
A4	Austenitic stainless steel A4	PP	Polypropylen	E	EPDM		



Explanation of levels

Third level fixing Visible fixing onto metal subframe



Self driller on Aluminium		Page	
A4	SDA4-5.8	122	17
	SX4-5.8	118	18
A2	A4 SX3-5.5	126	19
A2	SX3-4.8	128	20
A4	SLA3-4.8	138	21

Self driller on steel		Page	
A4	SX4-5.8	118	18
A2	SX3-5.5	126	19
A2	SX3-4.8	128	20

Self taper		Page	
A2	TDA-S-5.8	114	29
	BFS-NUT-5.0	156	30
	BFS-SLEEVE-5.0	158	31

Self taper		Page	
A	AP-5.0	108	14
	ASO-5.0	110	15
A4	SSO-5.0	112	16

Material description

A2	Austenitic stainless steel A2
A4	Austenitic stainless steel A4

T	Carbon steel
PP	Polypropylen

PA	Polyamide
E	EPDM

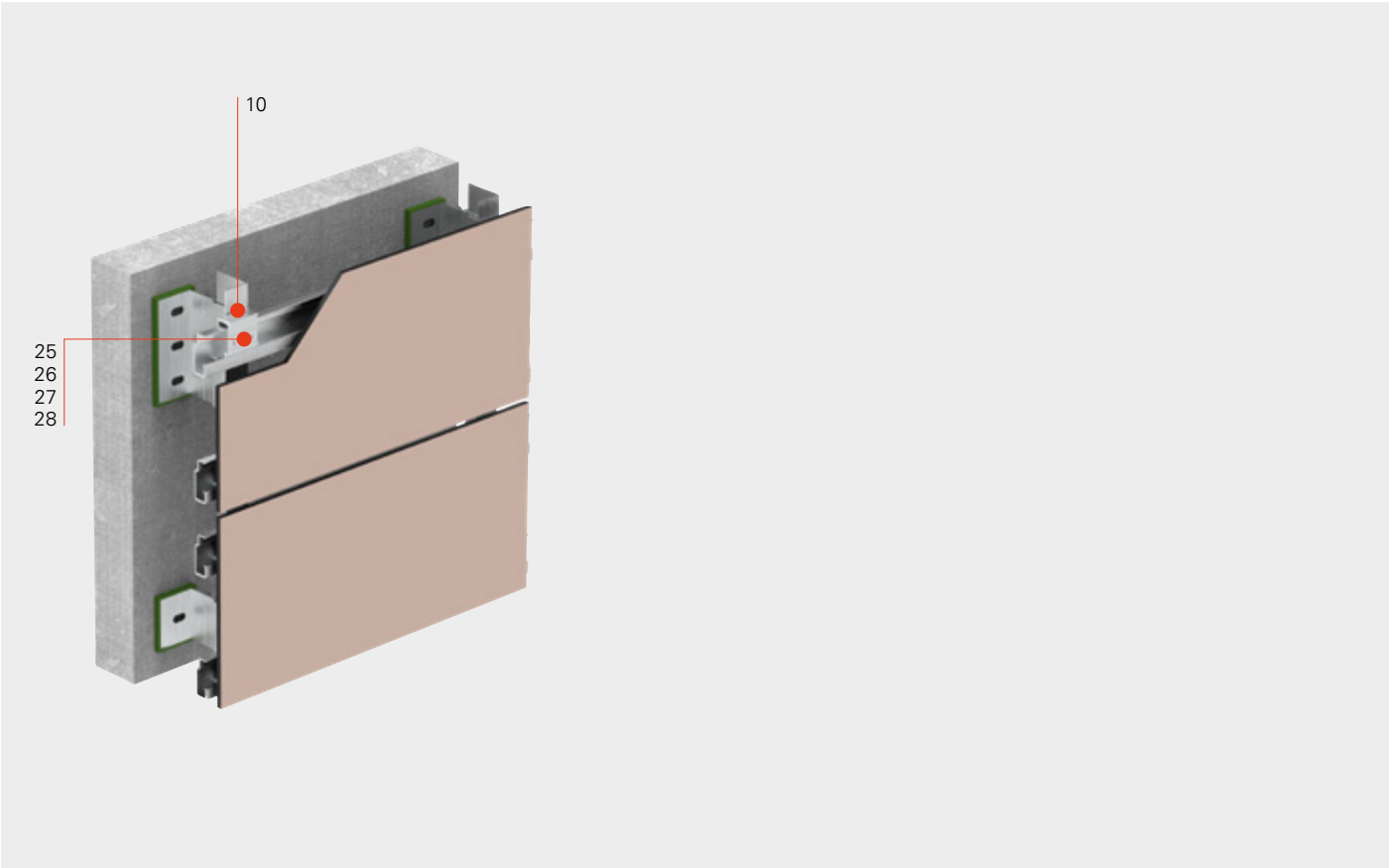
A	Aluminium
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Explanation of levels

Third level fixing

Concealed fixing



Self driller		Page	
A2	SDA5-5.5	98	10

Blind fasteners		Page	
A4	TUF-S	144	25
	TU-S	146	26
	TUC-S	148	27
	TD-A4	150	28

Material description

A2	Austenitic stainless steel A2
A4	Austenitic stainless steel A4

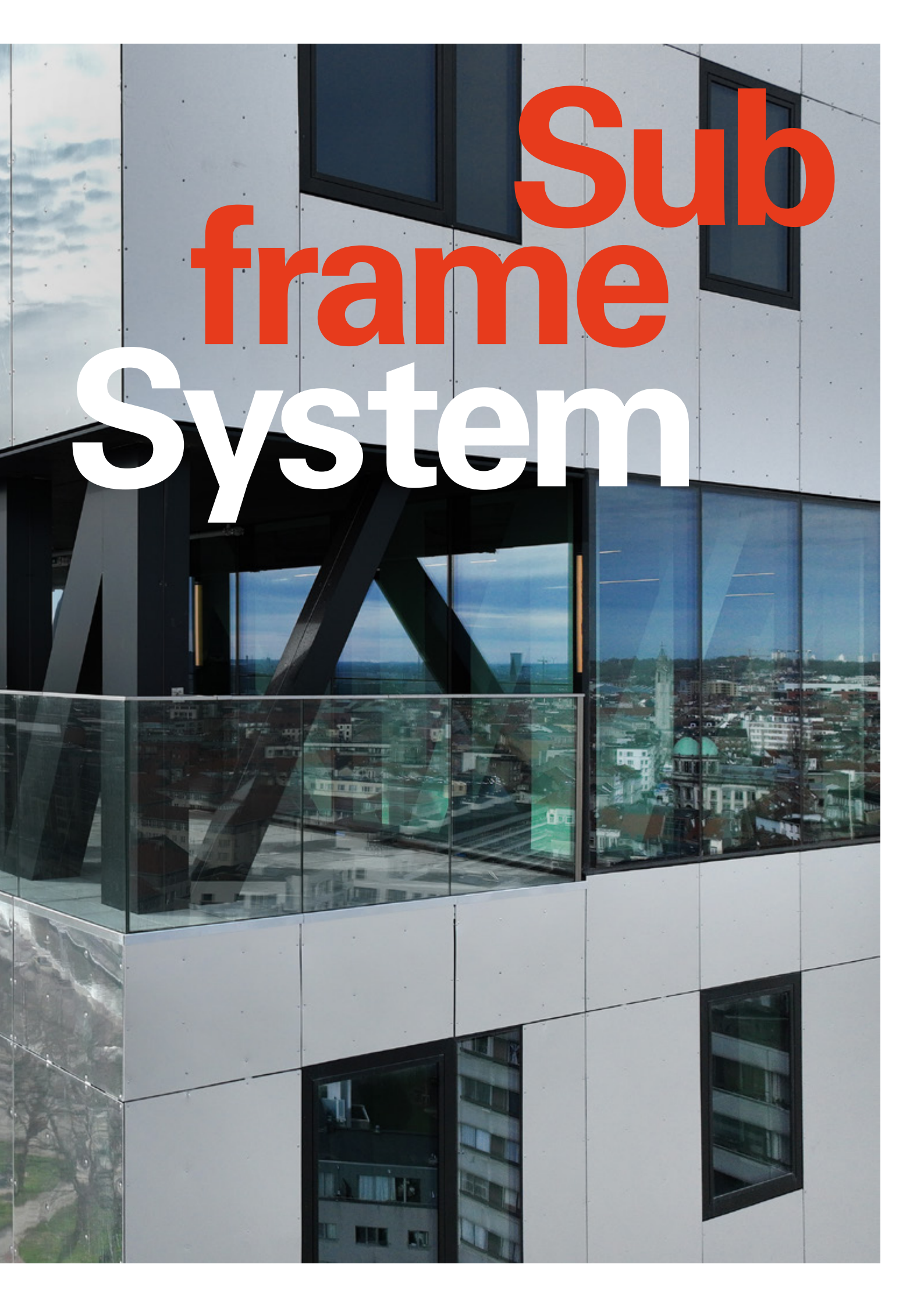
T	Carbon steel
PP	Polypropylen

PA	Polyamide
E	EPDM

A	Aluminium
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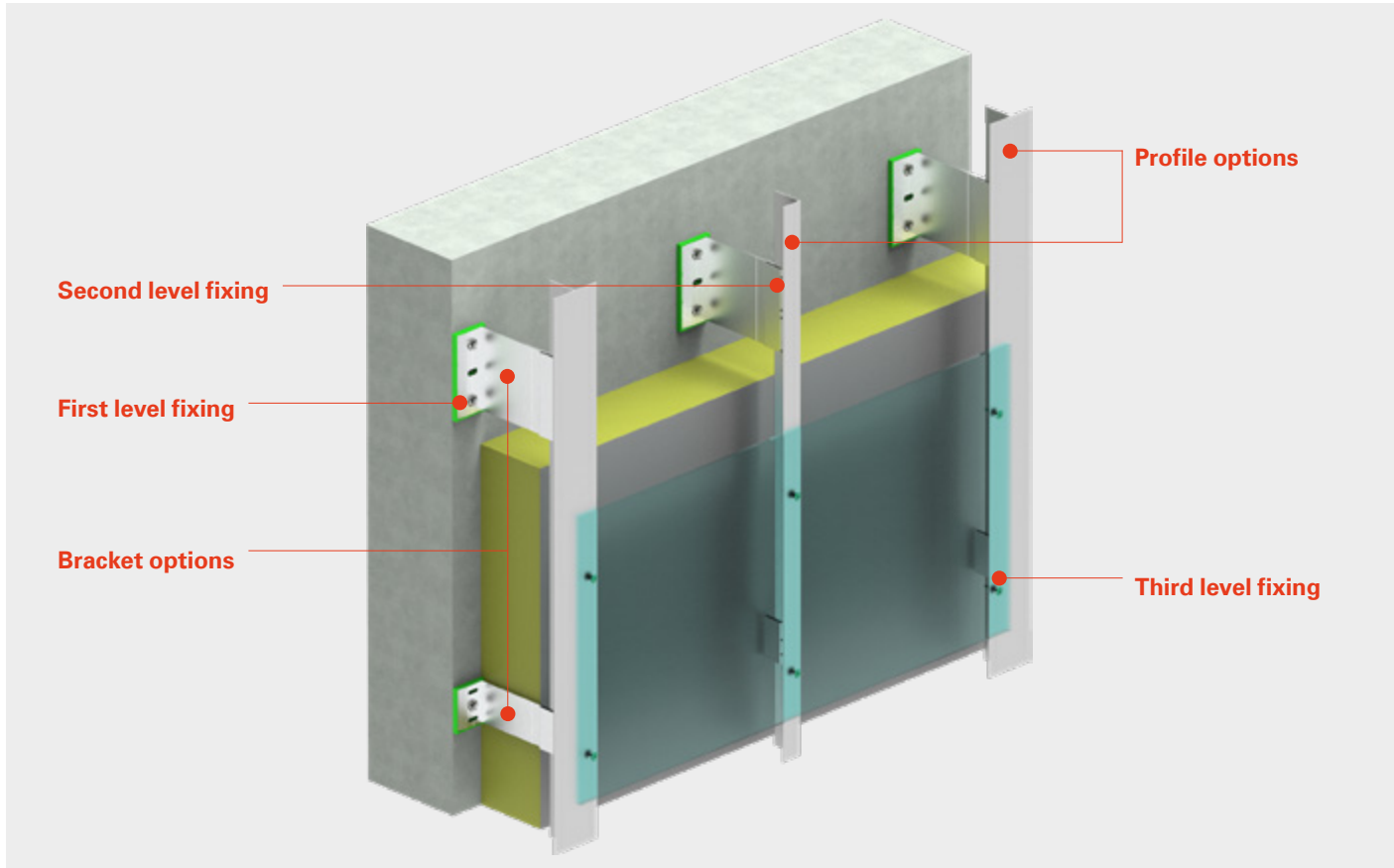




Sub frame System

NV1

NV1 is the NVELOPE® – vertical subframe system suited for a wide range of face fixed cladding applications



Features & Benefits

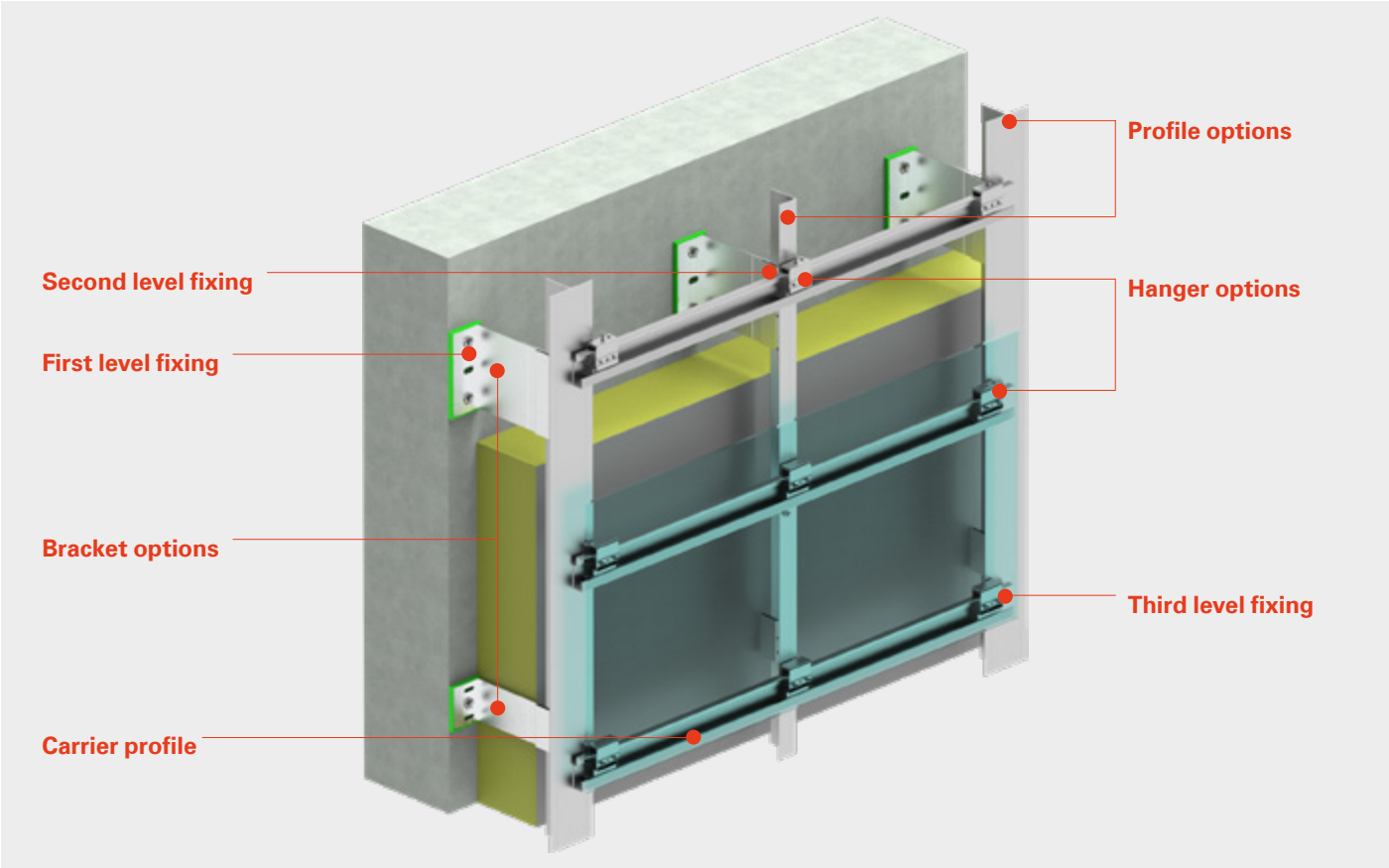
- NV1 is the basis of most of our NVELOPE® support systems
- It forms the backframe for the face fixing of decorative panels and a wide range of other NVELOPE® systems
- It is compatible with a wide range of NVELOPE® profiles
- It is suitable for 3rd level fixing and riveting systems
- Ideal solution for OEM system support

System Type	Bracket Options	Profile Options	1 st Level Fix	2 nd Level Fix	3 rd Level Fix
Face Fixed	NV-Brackets NVS-Brackets	L-Profiles T-Profiles	All fixings	SDA5 SX3-4.8	Visible fixings



NV3

NV3 is the NVELOPE[®]– subframe system suitable for concealed fix/mechanically secret fixed applications



- Features & Benefits**
- NV3 provides a “hook on” mechanical fix system for concealed panels
 - Fully adjustable hangers
 - Hangers to suit different types of anchor fixing

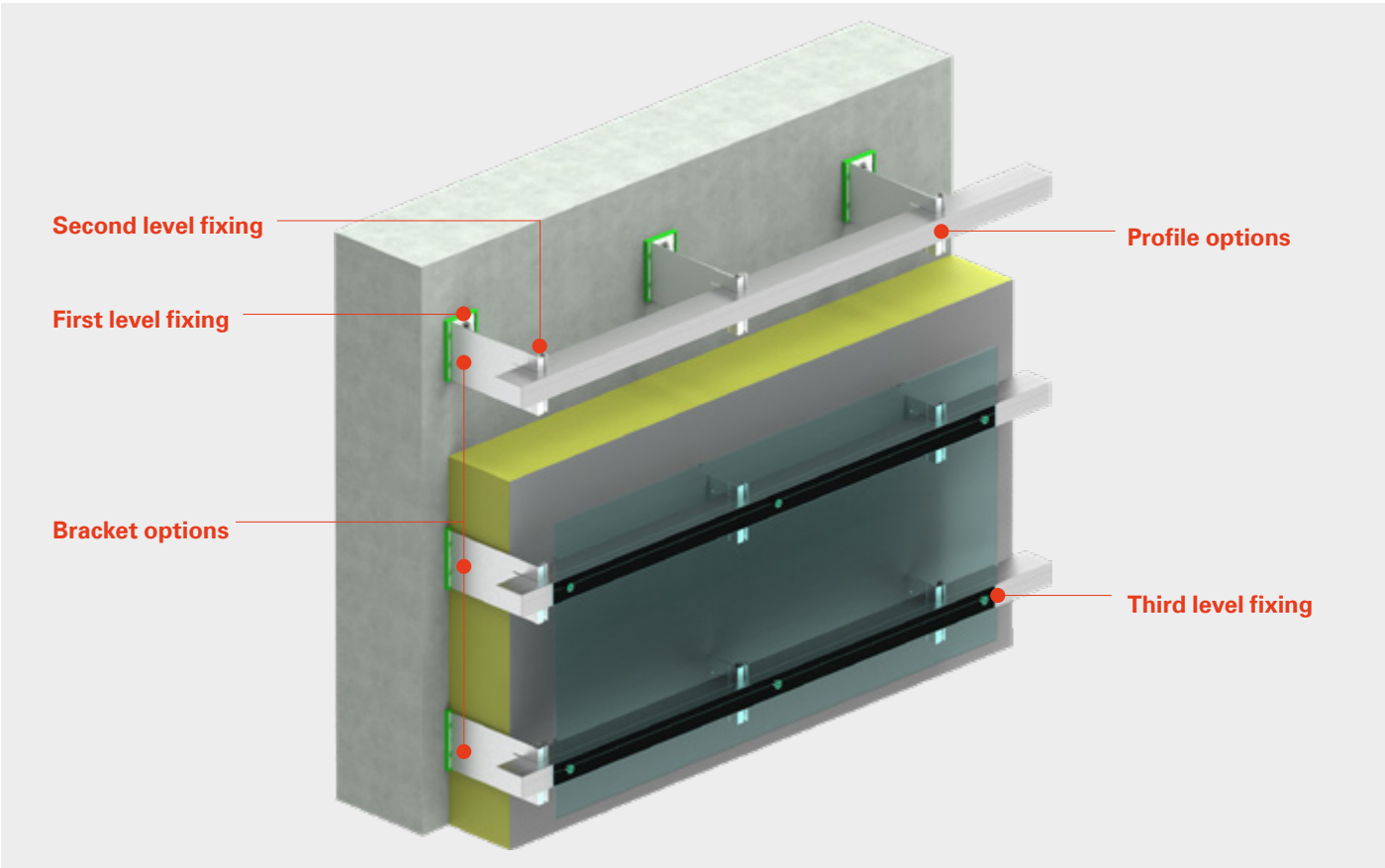
- Increased flexibility in panel layout design
- Can be used in conjunction with our unique TUF secret fixing fastening system
- Ideal solution for OEM system support

System Type	Bracket Options	Profile Options	Hangers	1 st Level Fix	2 nd Level Fix	3 rd Level Fix
Mechanical	NV-Brackets	L-Profiles	Various	All fixings	SDA5	TU-S
Concealed Fix	NVS-Brackets	T-Profiles			SW3	TUC-S



NH3

NH3 is the NVELOPE® – subframe system used to support vertical elements



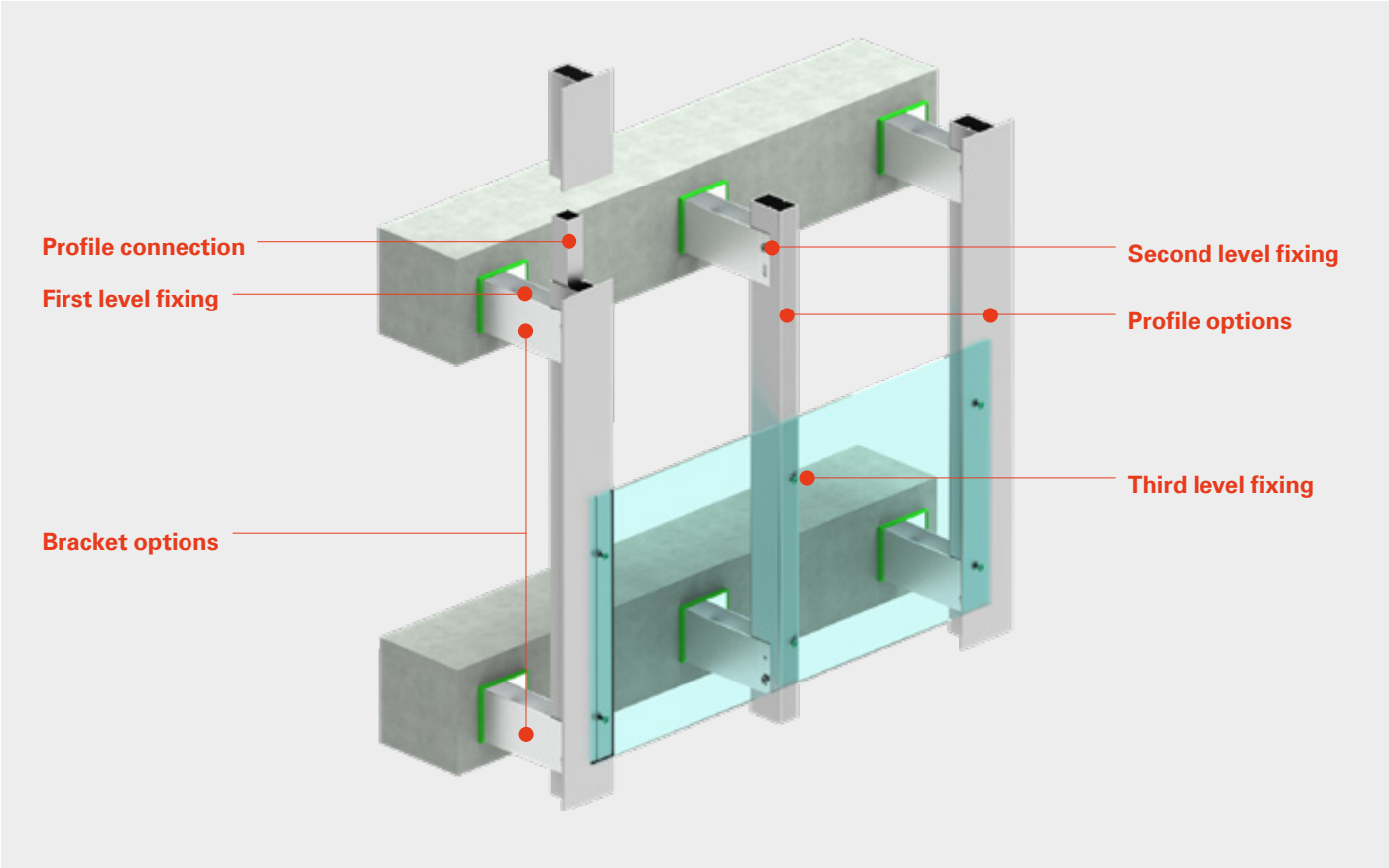
Features & Benefits

- NH3 system provides a horizontal backframe
 - Provides a solution for vertically aligned face fix panel systems
- A unique bracket design for horizontal applications
 - NH3 bracket matches the NVELOPE® range of bracket sizes
 - Ideal solution for OEM system support

System Type	Bracket Options	Profile Options	1 st Level Fix	2 nd Level Fix	3 rd Level Fix
Mechanical Concealed Fix	NH-Brackets	L-Profiles T-Profiles	All fixings	SDA5 45 mm	Rivet/Visible Panel fixing

NVF2F

NVF2F is the NVELOPE® – subframe system suitable for vertical floor to floor cladding applications



Features & Benefits

- The NVF2F system is designed to span across floor levels
 - It consists of aluminium box profiles and dual leg brackets
 - NVF2F can also support NVELOPE® concealed fix systems
- Can be used where it is not possible to fix brackets between floor levels
 - Ideal solution for OEM system support

System Type	Bracket Options	Profile Options	1 st Level Fix	2 nd Level Fix	3 rd Level Fix
Mechanical	NVF2F-Brackets	Box Profile	All fixings	F2F-M8KIT	Rivet/Visible Panel fixing
Concealed Fix		T-Box Profile			







Bracket Options

Fixed Point & Sliding Point

Profiles (rails) are attached to brackets by a combination of fixed and sliding points to allow and assure dead load and dynamic load performance. Sliding points are important to accommodate differing thermal effects of materials (dilation) being combined. Dead and dynamic loads as well as dilation effects must be fully accounted for.

The rainscreen façade must be able to “float” on the subconstruction. Each element should have one fixed point. All other fixing points must be executed as sliding points. Fixed point brackets and profiles are connected (Level 2 Fixings) by round holes in the brackets. The fixed point absorbs both vertical weight (deadload) and horizontal wind loads.

Sliding point brackets and profiles are connected (Level 2 Fixings) at the elongated holes (slots) in the brackets. Their primary function is to absorb dynamic horizontal wind loads.

Cementitious Surfaces

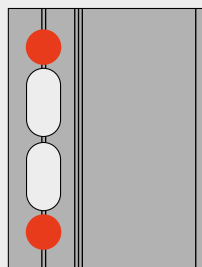
All aluminium components in direct contact with cementitious primary substrates, where a risk of corrosion exists, shall be isolated. All NVELOPE® aluminium brackets are isolated via the addition of a polypropylene “Green Isolator” to the foot of the bracket.

This isolator also provides additional thermal insulation which in turn can improve thermal point loss (Chi value) for individual brackets and ultimately, support greater thermal efficiency.

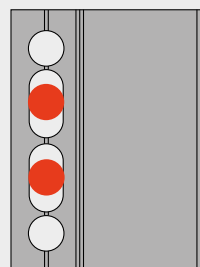
Helping Hands

NVELOPE® vertical brackets come in standard dimensions of 40–300 mm and are available in two sizes, Single and Double. Each bracket has 40mm of adjustment. The profiles (rails) are held in place by friction afforded by the “helping hands” feature of the bracket. Once adjusted for line and level they are fixed using the appropriate Level 2 stainless steel fixing.

NVELOPE® Aluminium Brackets



Fixed point
Absorbs dead loads

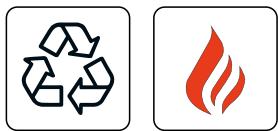
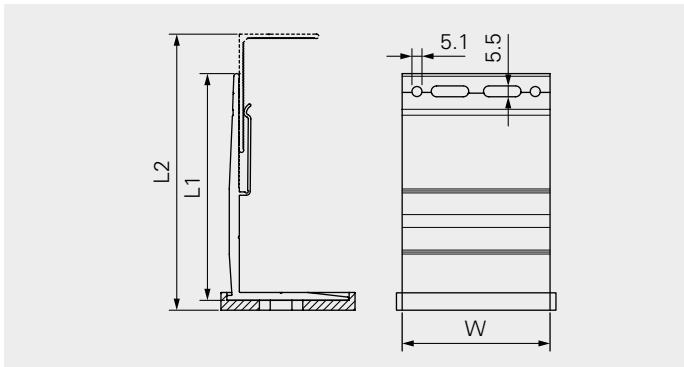


Sliding point
Absorbs dynamic loads
and expansion loads





NV-Brackets



Material

Bracket: Aluminium EN-AW 6005A T6
Isolators: Polypropylene – prefitted

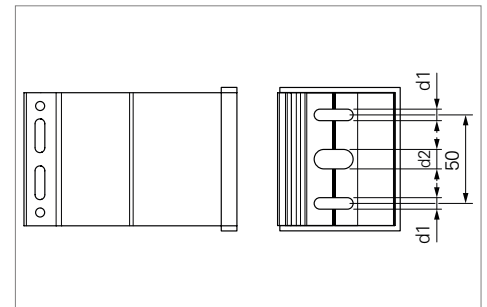
Approvals



Features and Benefits

- Designed as the structural backbone for multiple NVELOPE® systems
- Vertical brackets are secured to the building substrate using SFS Level 1 fixings
- Combination of fixed and sliding points ensures reliable handling of both dead loads and dynamic loads
- Long slots in the brackets enable vertical adjustment to accommodate construction tolerances
- Multiple bracket sizes allow for flexible stand-off distances from 40 mm to 300 mm, adapting to a variety of façade design needs
- 40 mm adjustability simplifies on-site tolerance compensation
- “Helping hand” design facilitates quick and precise alignment of rails during installation
- Suitable for a wide range of substrates including concrete, brick, steel studs, and timber
- Made from aluminium, the bracket supports circular economy practices through full recyclability and material reuse



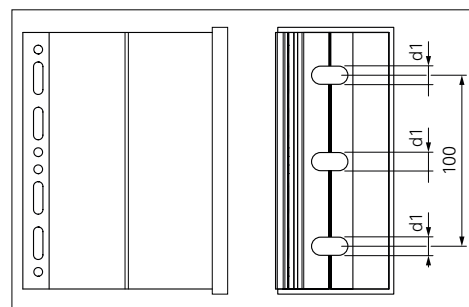


NV Single Brackets in aluminium

Product code	PU	L1	L2*	W	d1	d2	
NV-VB040S	150	35	47-67**	75	6.5	11	1582505
NV-VB060S		55	62-102				1582506
NV-VB090S	120	85	92-132				1582508
NV-VB120S	80	115	122-162				1582509
NV-VB150S	70	145	152-192				1582510
NV-VB180S	60	175	182-222				1582511
NV-VB210S	50	205	212-252				1582512
NV-VB240S		235	242-282				1582514
NV-VB270S	40	265	272-312				1582517
NV-VB300S		298	302-342				1582520

* Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket

** Bracket has no pre-fitted Isolator. With an optional mounted isolator the dimension L1 has to be increased by 5.0 mm

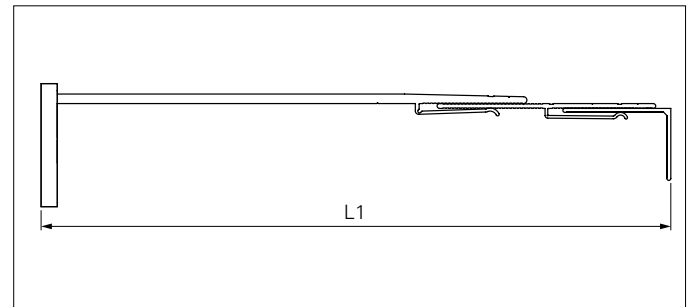


NV Double Brackets in aluminium

Product code	PU	L1	L2*	W	d1	
NV-VB040D-11	75	35	47–67**	150	11	1521238
NV-VB040D-6.5					6.5	1521239
NV-VB060D-11		55	62–102		11	1521246
NV-VB060D-6.5					6.5	1521247
NV-VB090D-11	60	85	92–132		11	1521254
NV-VB090D-6.5					6.5	1521255
NV-VB120D-11	40	115	122–162		11	1521262
NV-VB120D-6.5					6.5	1521263
NV-VB150D-11	35	145	152–192		11	1521272
NV-VB150D-6.5					6.5	1521273
NV-VB180D-11	30	175	182–222		11	1521281
NV-VB180D-6.5					6.5	1521282
NV-VB210D-11	25	205	212–252		11	1521290
NV-VB210D-6.5					6.5	1521291
NV-VB240D-11		235	242–282		11	1521299
NV-VB240D-6.5					6.5	1521300
NV-VB270D-11	20	265	272–312	11	1521308	
NV-VB270D-6.5				6.5	1521309	
NV-VB300D-11		295	302–342	11	1521316	
NV-VB300D-6.5				6.5	1521317	

* Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket

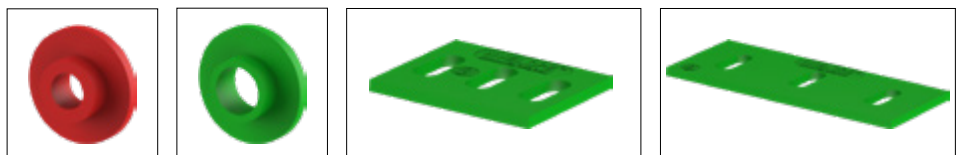
** Bracket has no pre-fitted Isolator. With an optional mounted isolator the dimension L1 has to be increased by 5.0 mm



Extension piece

Product code	PU	Compatible with	L1*	W	
NV-EX-PC-75	150	NV-VB270S	332–372	75	1521188
		NV-VB300S	362–402		
NV-EX-PC-150	100	NV-VB270D-11	332–372	150	1521187
		NV-VB270D-6.5			
		NV-VB300D-11	362–402		
		NV-VB300D-6.5			

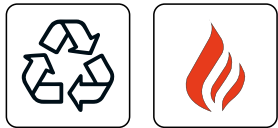
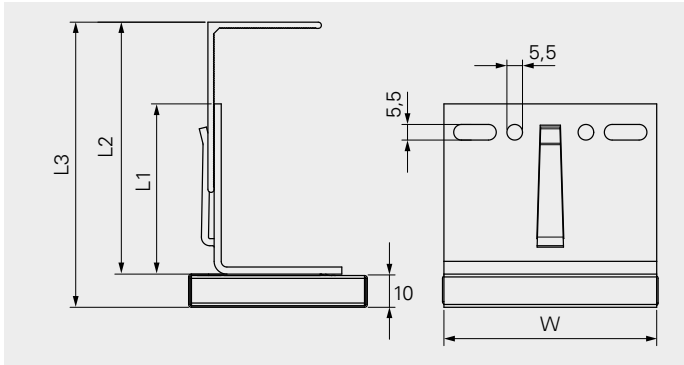
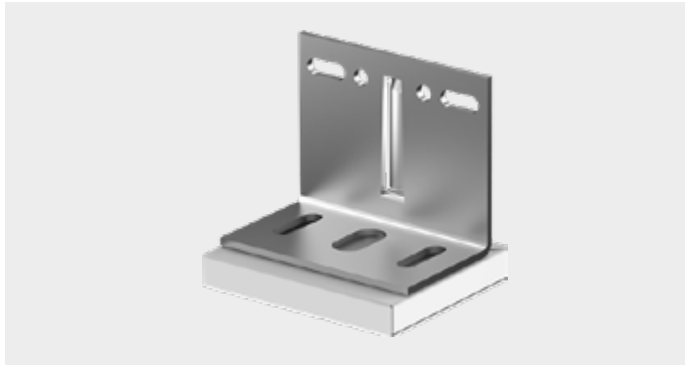
* Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket



Accessories

Product code	PU	Compatible with	
NV-ADP/6.5	1	–	1521485
NV-ADP/8.5			1630995
NV-VB-40-S-ISO	600	NV-VB040-S	1521323
NV-VB-40-D-ISO	300	NV-VB040D-11 / NV-VB040D-6.5	1521322

NVS-Brackets



Material

Bracket: Stainless Steel (1.4401)
Isolators: no isolator/Isolator with Aerogel

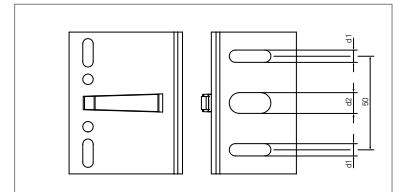
Approvals



Features and Benefits

- Vertical brackets are fixed to the building envelope substrate via SFS Level 1 fixings
- Profiles (rails) are attached to brackets with SFS level 2 fixings
- A combination of fixed and sliding points allow and assure dead load and dynamic load performance
- Can be incorporated as part of NVELOPE Thermal Solutions
- Compatible with NV1,2,3,4,5,6,7,8, 10 & NS1

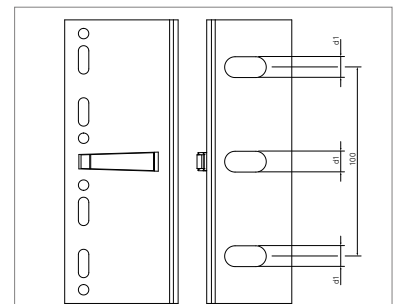




NVS Single Brackets without isolator in stainless steel

Product code	PU	L1	L2*	W	d1	d2	
NVS-VB060S	100	60	70–105	75	6.5	11	1642117
NVS-VB090S	70	90	100–135				1642118
NVS-VB120S	60	120	130–165				1642119
NVS-VB150S	50	150	160–195				1642139
NVS-VB180S	40	180	190–225				1642140
NVS-VB210S		210	220–255				1642141
NVS-VB240S	30	240	250–285				1642142

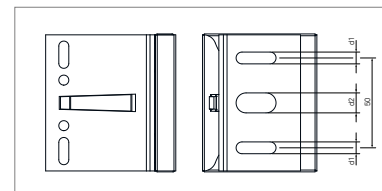
* Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket



NVS Double Brackets without isolator in stainless steel

Product code	PU	L1	L2*	W	d1	
NVS-VB060D-11	50	60	70–105	150	11	1642211
NVS-VB060D-6.5					6.5	1642144
NVS-VB090D-11	35	90	100–135		11	1642218
NVS-VB090D-6.5					6.5	1642148
NVS-VB120D-11	30	120	130–165		11	1642220
NVS-VB120D-6.5					6.5	1642150
NVS-VB150D-11	25	150	160–195		11	1642231
NVS-VB150D-6.5					6.5	1642152
NVS-VB180D-11	20	180	190–225		11	1642232
NVS-VB180D-6.5					6.5	1642153
NVS-VB210D-11		210	220–255		11	1642233
NVS-VB210D-6.5					6.5	1642197
NVS-VB240D-11	15	240	250–285		11	1642234
NVS-VB240D-6.5					6.5	1642155

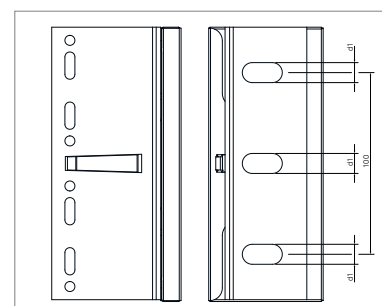
*Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket



NVS Single Brackets with isolator in stainless steel

Product code	PU	L	L3*	W	d1	d2	
NVS-thermal-VB060S	70	–	80–115	75	6.5	11	1667550
NVS-thermal-VB090S	50		110–145				1667552
NVS-thermal-VB120S	40		140–175				1667569
NVS-thermal-VB150S	35		170–205				1667570
NVS-thermal-VB180S	30		200–235				1667571
NVS-thermal-VB210S			230–265				1667572
NVS-thermal-VB240S	25		260–295				1667573

*Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket



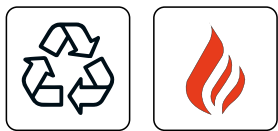
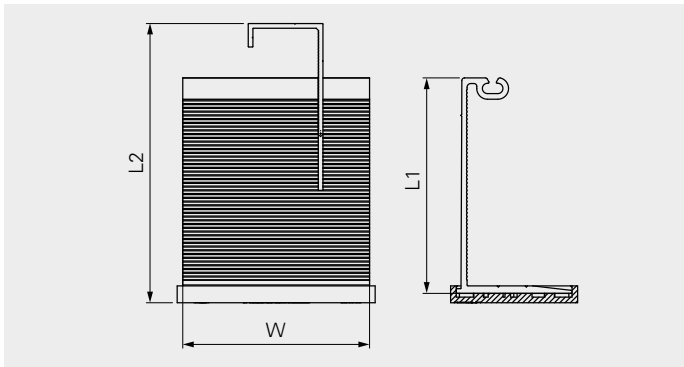
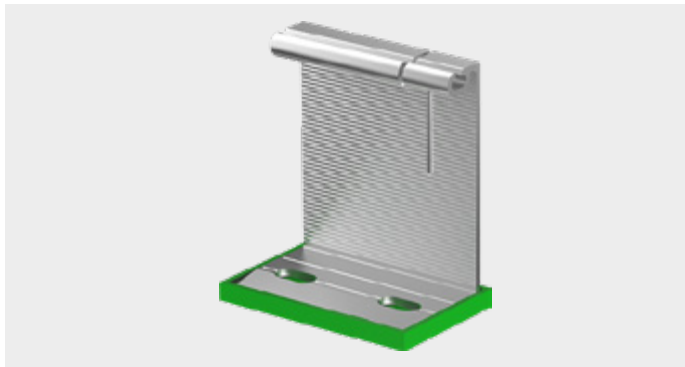
NVS Double Brackets with isolator in stainless steel

Product code	PU	L	L3*	W	d1		
NVS-thermal-VB060D-11	25	–	80–115	150	11	1667508	
NVS-thermal-VB060D-6.5					6.5	1667502	
NVS-thermal-VB090D-11			110–145		11	1667509	
NVS-thermal-VB090D-6.5					6.5	1667503	
NVS-thermal-VB120D-11	20		140–175		11	1667510	
NVS-thermal-VB120D-6.5					6.5	1667504	
NVS-thermal-VB150D-11	170–205		11		1667545		
NVS-thermal-VB150D-6.5			6.5		1667505		
NVS-thermal-VB180D-11	15		200–235		11	1667546	
NVS-thermal-VB180D-6.5					6.5	1667500	
NVS-thermal-VB210D-11			230–265		11	1667548	
NVS-thermal-VB210D-6.5					6.5	1667520	
NVS-thermal-VB240D-11	10		260–295		11	1667549	
NVS-thermal-VB240D-6.5					6.5	1667514	

*Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket



NH-Brackets



Material

Bracket: Aluminium EN-AW 6005A T6
Isolators: Polypropylene – prefitted

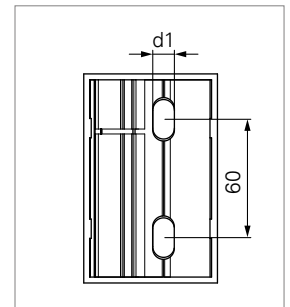
Approvals



Features and Benefits

- Designed specifically for use with the NVELOPE® NH3 subframe system
- Horizontal brackets are secured to the building substrate using SFS Level 1 fixings
- Combination of fixed and sliding points ensures reliable handling of both dead loads and dynamic loads
- Long slots in the brackets enable vertical adjustment to accommodate construction tolerances
- Multiple bracket sizes from 75 mm to 300 mm, allow for flexible stand-off distances adapting to a variety of façade design needs
- 40 mm adjustability simplifies on-site tolerance alignment
- Suitable for a wide range of substrates including steel studs, concrete, and brick
- Made from aluminium, the bracket supports circular economy practices through full recyclability and material reuse



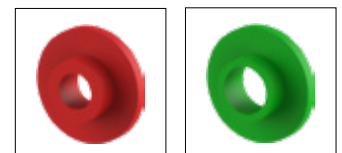


NH Brackets in aluminium

Product code	PU	L1	L2*	W	d1	
NV-HB075-11	50	70	77–117	100	11	1602050
NV-HB075-6,5					6.5	1602052
NV-HB090-11		85	92–132		11	1602053
NV-HB090-6,5					6.5	1602054
NV-HB120-11		115	122–162		11	1602056
NV-HB120-6,5					6.5	1602057
NV-HB150-11	25	145	152–192		11	1602058
NV-HB150-6,5					6.5	1602059
NV-HB180-11		175	182–222		11	1602061
NV-HB180-6,5					6.5	1602062
NV-HB210-11		205	212–252		11	1602063
NV-HB210-6,5					6.5	1602064
NV-HB240-11	20	235	242–282		11	1602065
NV-HB240-6,5					6.5	1602066
NV-HB270-11		265	272–312		11	1602067
NV-HB270-6,5					6.5	1602068
NV-HB300-11		295	302–342		11	1602069
NV-HB300-6,5					6.5	1602070

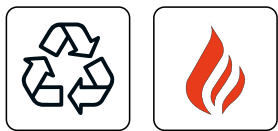
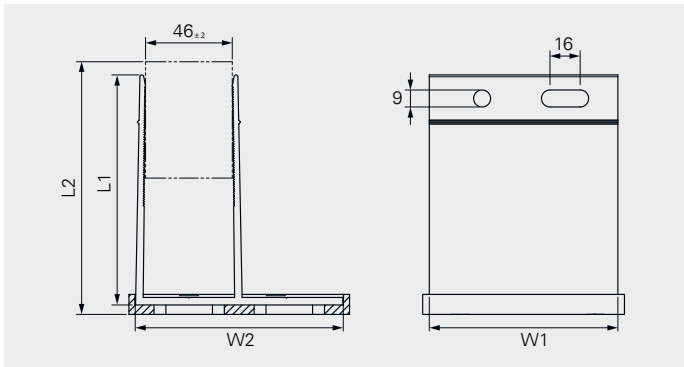
*Valid with the L60-40 profile, where the 60 mm leg is mounted on the bracket

Accessories



Product code	PU	Compatible with	
NV-ADP/6.5	1	-	1521485
NV-ADP/8.5			1630995

NVF2F-Brackets



Material

Bracket: Aluminium EN-AW 6005A T6
Isolators: Polypropylene – prefitted

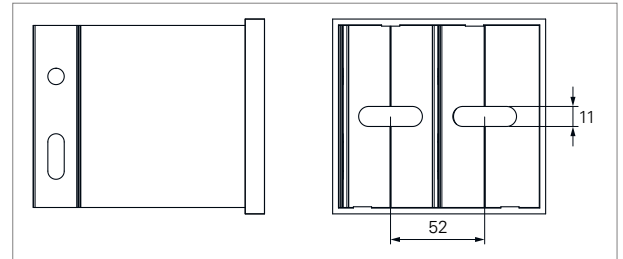
Approvals



Features and Benefits

- Designed as the structural backbone for floor-to-floor cladding applications
- Vertical brackets are secured to the building substrate using SFS Level 1 fixings
- Combination of fixed and sliding points ensures reliable handling of both dead loads and dynamic loads
- Long slots in the brackets enable horizontal adjustment to accommodate construction tolerances
- Multiple bracket sizes from 72 mm to 272 mm, allow for flexible stand-off distances adapting to a variety of façade design needs
- 38 mm adjustability simplifies on-site tolerance compensation
- Suitable for a wide range of substrates including concrete, brick, steel studs, and timber
- Made from aluminium, the bracket supports circular economy practices through full recyclability and material reuse

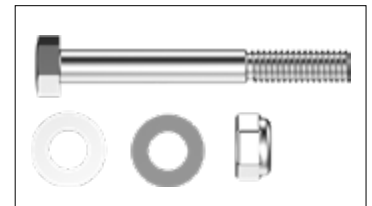




Brackets in aluminium

Product code	PU	L1	L2*	W1	W2	
F2F-072	32	72	79-127	100	110	1600061
F2F-122	24	122	125-177			1600062
F2F-172	20	172	175-227			1600063
F2F-222	18	222	225-277			1600065
F2F-272	13	272	275-327			1649583

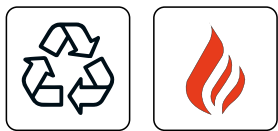
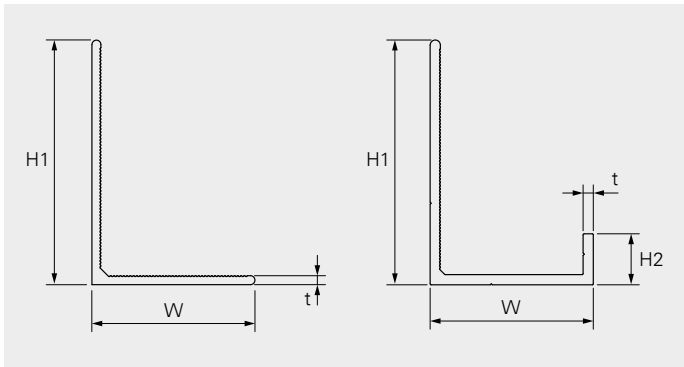
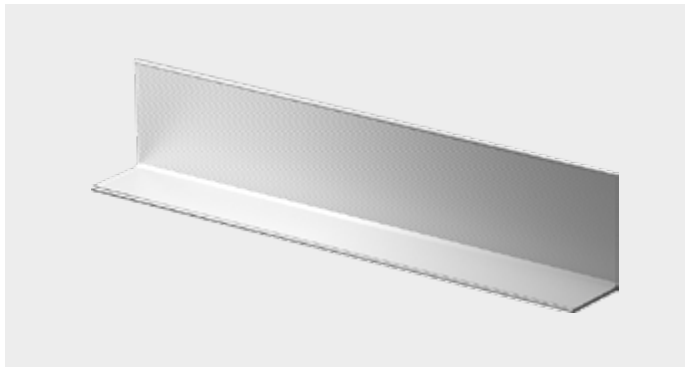
*Valid with the F2F-BR 75 mm profile



Accessories

Product code	PU	
F2F-M8KIT	1	1600079

L-Profiles



Material

Aluminium EN-AW 6005A T6

Approvals



Features and Benefits

- Offers support for face-fixed panel spans and edges and acts as a structural framework compatible with multiple NVELOPE® systems
- Compatible with both aluminium and stainless steel NVELOPE® brackets
- Ribbed surface design ensures precise adjustment when seated in the helping hand bracket
- Notch in the profile assists with alignment and orientation during installation
- Wide product range of allows for versatile application across multiple façade systems
- Aluminium profile is 100% recyclable, contributing to sustainable construction



L-Profiles in aluminium

Product code	PU	L	t	W	H1	H2	PPC	NA	Blank
NV-L60-40-2.2-3000	1	3'000	2.2	40	60	–	1675869	1681169	1521357
NV-L60-40-2.2-3600		3'600					1521366	1681168	1521365
NV-L60-40-2.2-4850		4'850					1521372	1681167	1521370
NV-L60-40-2.2-6000		6'000					1607602	1697077	1521375
NV-L80-50-2.5-3000		3'000	2.5	50	80		–	–	1521381

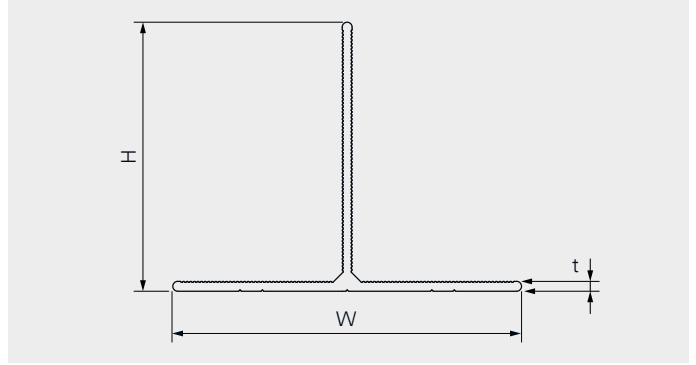
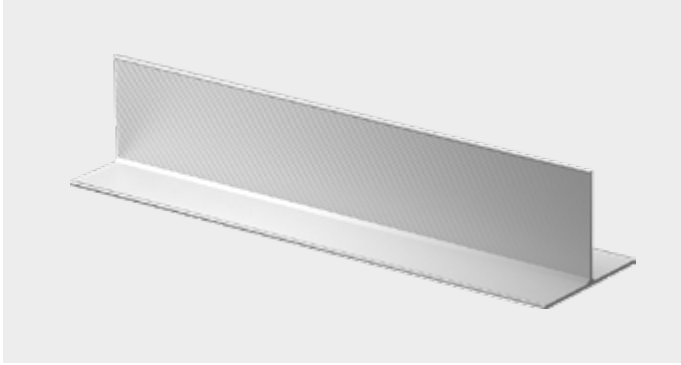
PPC: Powder coated
NA: Natural anodised

Lipped L-Profiles in aluminium

Product code	PU	L	t	W	H1	H2	PPC	NA	Blank
NV-HBL60-40-2.5-3000	1	3'000	2.5	40	60	12.5	–	–	1521346
NV-HBL60-40-2.5-6000		6'000							1521347

PPC: Powder coated
NA: Natural anodised

T-Profiles



Material

Aluminium EN-AW 6005A T6

Approvals



Features and Benefits

- Offers support for face-fixed panel spans and edges and acts as a structural framework compatible with multiple NVELOPE® systems
- Compatible with both aluminium and stainless steel NVELOPE® brackets
- Ribbed surface design ensures precise adjustment when seated in the helping hand bracket
- Notch in the profile assists with alignment and orientation during installation
- Wide product range of allows for versatile application across multiple façade systems
- Made from aluminium, the profile supports circular economy practices through full recyclability and material reuse

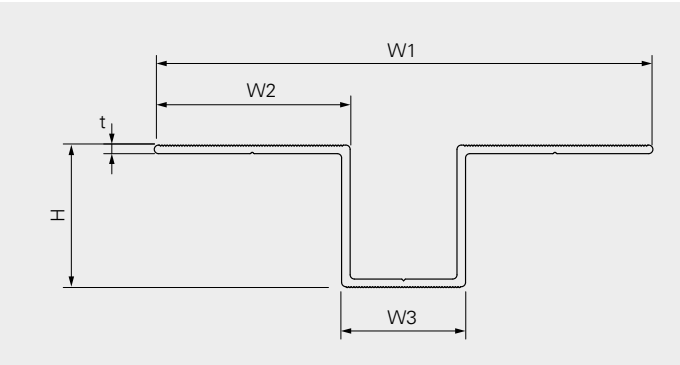
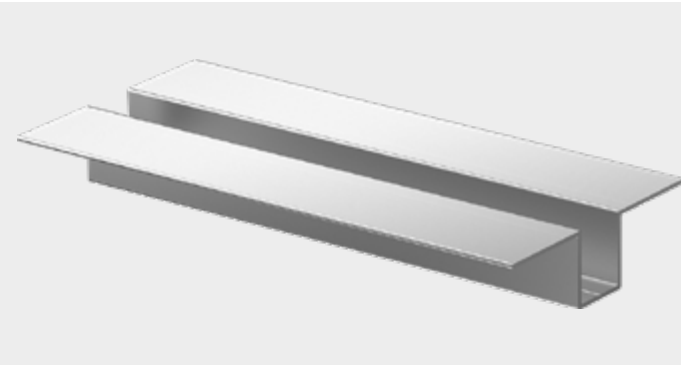


T-Profiles in aluminium

Product code	PU	L	t	W	H	PPC	NA	Blank
NV-T60-080-2.2-3000	1	3'000	2.2	80	60	1521419	–	1521418
NV-T60-080-2.2-6000		6'000				1620735		1521422
NV-T60-100-2.2-3000		3'000		100		1521425		1521423
NV-T60-100-2.2-3600		3'600				1521428		1521427
NV-T60-100-2.2-4850		4'850				1521433		1521431
NV-T60-100-2.2-6000		6'000				1521435		1521434
NV-T40-100-2.2-3000		3'000	40	40	1607607	1681166	1521413	
NV-T40-100-2.2-6000		6'000			1607608	1681165	1521417	
NV-T60-120-2.2-3000		3'000	120	60	1607621	–	1521440	
NV-T60-120-2.2-6000		6'000			1607647		1521444	
NV-T60-140-2.2-3000		3'000	140	60	1521446		1521445	
NV-T60-140-2.2-6000		6'000			1607649		1521447	

PPC: Powder coated
NA: Natural anodised

Omega Profiles



Material

Aluminium EN-AW 6063 T6

Approvals



Features and Benefits

- Offers support for face-fixed panel spans and edges and acts as a structural framework compatible with multiple NVELOPE® systems
- Ribbed surface design ensures precise adjustment when seated in the helping hand bracket
- Notch in the profile assists with alignment and orientation during installation
- Wide product range of allows for versatile application across multiple façade systems
- Made from aluminium, the profile supports circular economy practices through full recyclability and material reuse

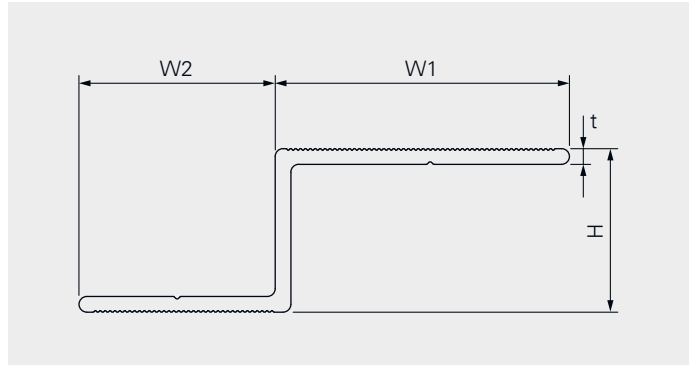
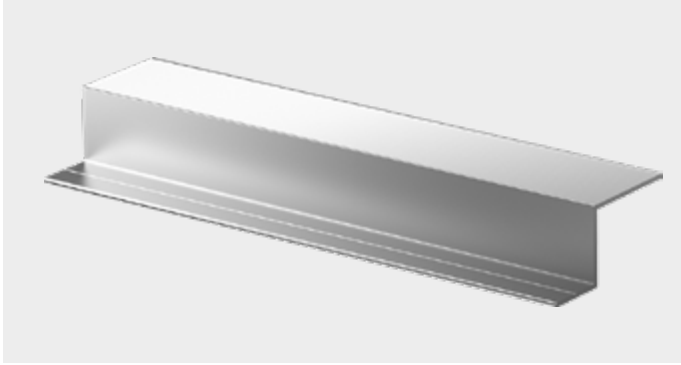


Omega Profiles in aluminium

Product code	PU	L	t	W1	W2	W3	H	PPC	NA	Blank
NV-OM-25-120-2.4-3000	1	3'000	2.4	120	45	34.8	25	–	1691032	1521393
NV-OM-25-120-2.4-6000		6'000							1691031	1521394
NV-OM-40-140-2.4-3000		3'000		140	54		40	–	1521396	
NV-OM-40-140-2.4-6000		6'000							1521397	
								1742643		

PPC: Powder coated
NA: Natural anodised

Z-Profiles



Material

Aluminium EN-AW 6063 T6

Approvals



Features and Benefits

- Offers support for face-fixed panel spans and edges and acts as a structural framework compatible with multiple NVELOPE® systems
- Ribbed surface design ensures precise adjustment when seated in the helping hand bracket
- Notch in the profile assists with alignment and orientation during installation
- Wide product range of allows for versatile application across multiple façade systems
- Made from aluminium, the profile supports circular economy practices through full recyclability and material reuse

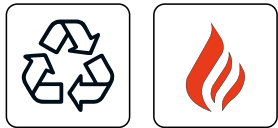
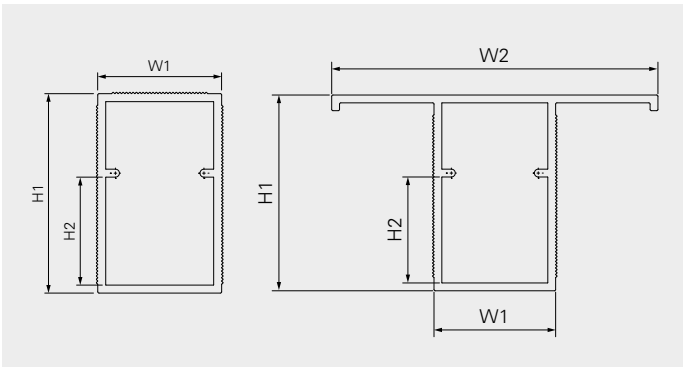
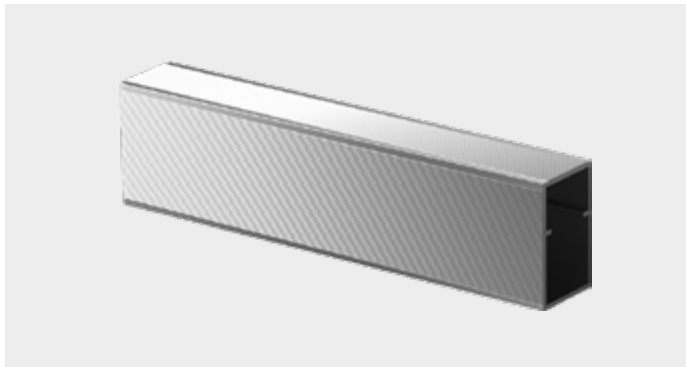


Z-Profiles in aluminium

Product code	PU	L	t	W1	W2	H	PPC	NA	Blank
NV-Z25-45-30-2.4-3000	1	3'000	2.4	45	30	25	–	–	1521448
NV-Z25-45-30-2.4-6000		6'000						1699720	1521449
NV-Z40-55-30-2.4-3000		3'000		55		40	1742410	–	1521450
NV-Z40-55-30-2.4-6000		6'000					–		1521451

PPC: Powder coated
NA: Natural anodised

NVF2F-Profiles



Material

Aluminium EN-AW 6005A T6

Approvals



Features and Benefits

- Compatible with NVELOPE® F2F brackets
- Ribbed surface design ensures precise adjustment
- Notch in the profile assists with alignment and orientation during installation
- Wide product range of allows for versatile application across multiple façade systems
- Aluminium profile is 100% recyclable, contributing to sustainable construction

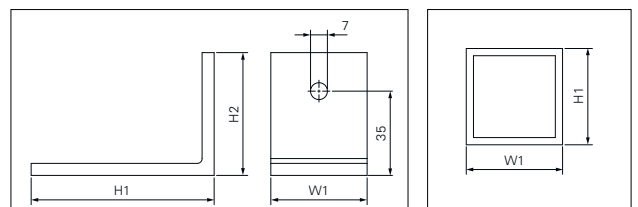


Box Profile in aluminium

Product code	PU	L	t	W1	W2	H1	H2	Blank
F2F-BR-3000	1	3000	3	46.3	–	75	40	1791294
F2F-BR-3600		3600						1600066
F2F-BR-6000		6000						1600069
F2F-BR-7200		7200						1600070
F2F-BR-125-3200		3200			125	1675234		
F2F-BR-125-3600		3600				1670506		
F2F-BR-125-6000		6000				1670505		
F2F-BR-125-6500		6500				1658690		

T-Box Profile in aluminium

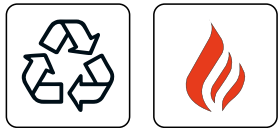
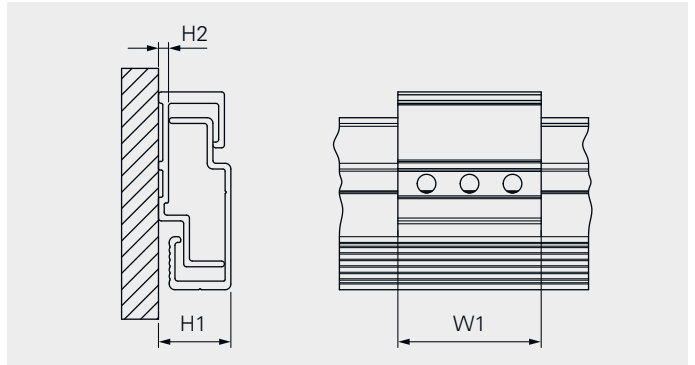
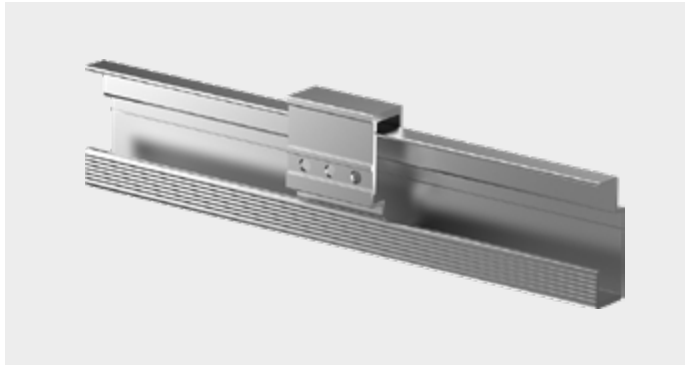
Product code	PU	L	t	W1	W2	H1	H2	Blank
F2F-BRT-3000	1	3000	3	46.3	125	75	–	1810967
F2F-BRT-3600		3600						1600072
F2F-BRT-6000		6000						1600074
F2F-BRT-7200		7200						1600075



Rail connection in aluminium

Product code	PU	L	t	W1	H1	H2	Blank
F2F-CLEAT	1	–	5	40	76	51	1600077
F2F-4040		3600	3		40	–	1600076

NV3-Profile & Hangers



Material

Aluminium EN-AW 6005A T6

Approvals



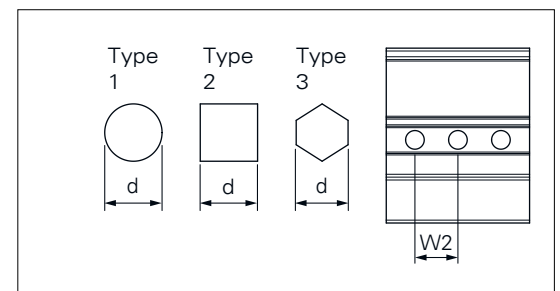
Features and Benefits

- NV3 is the NVELOPE® subframe system designed for concealed fix or mechanically secret-fixed façade applications
- Enables a clean, seamless façade design through the use of adjustable hangers
- Rainscreen panels are hung and secured to horizontal profiles using hangers and adjustable support components
- Adjustable hangers allow for quick and precise alignment on-site, simplifying installation and compensating for building tolerances
- Made from aluminium, the bracket supports circular economy practices through full recyclability and material reuse



NV3-Profile in aluminium

Product code	PU	L	Blank
NV-CP-NV3-3000	1	3000	1521331
NV-CP-NV3-6000		6000	1521334



NV3-Hanger in aluminium

Product code	PU	Type	H1	H2	W1	W2	d	No. Drills	ADJF*	STAT
NV3-TUF-S-3.5	300	1	3.5	26	50	2×15	6.5	3	1549012	1549015
NV3-TUF-S-5			5	27.5					1549046	1549047
NV3-PTS							30		2	1521457
NV3-KEIL	108	3	3.6	26	150	–	9.25	1	1521454	1521456
NV3-KEIL-ADJF-150									3	1521455
NV3-TER	300	2	3	25.5	50	–	10.2	1	1521465	1521468
NV3-TER-TEC		1							11	1521469

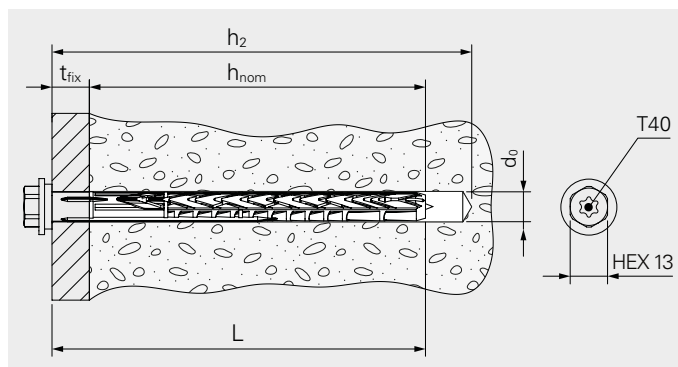
*ADJF comes with a suitable leveling fastener





First level fixing

SXR-FUS



Application

Fastening of a bracket onto substrate

Component 1 (t_1)

Bracket

Component 2 (t_2)

Substrate

Fastener material

Body: Polyamide PA6

Fastener: galvanized steel or austenitic stainless steel A4

Approvals

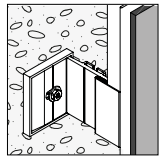


Features and Benefits

- Anchor suitable for installation of a bracket onto various substrates
- Geometry of the expansion element enables the use in many substrates
- Short expansion element requires only a small drilling depth
- Distinctive rotation lock increases the ease of assembly and provides additional safety

Documentation

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

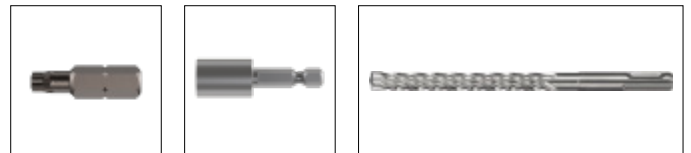


Frame anchor in polyamide and galvanized steel onto cladding panel

Product code	PU	L	t _{fix}	h _{nom}	h ₂	d ₀	
SXR-10×60-FUS	50	60	10	50	70	10	1333512
SXR-10×80-FUS		80	30		90		1333569
SXR-10×100-FUS		100	50		110		1333570
SXR-10×120-FUS		120	70		130		1333571
SXR-10×140-FUS		140	90		150		1333572
SXR-10×160-FUS		160	110		170		1333573
SXR-10×200-FUS		200	150		210		1333576
SXR-10×230-FUS		230	180		240		1333577

Frame anchor in polyamide and A4 onto cladding panel

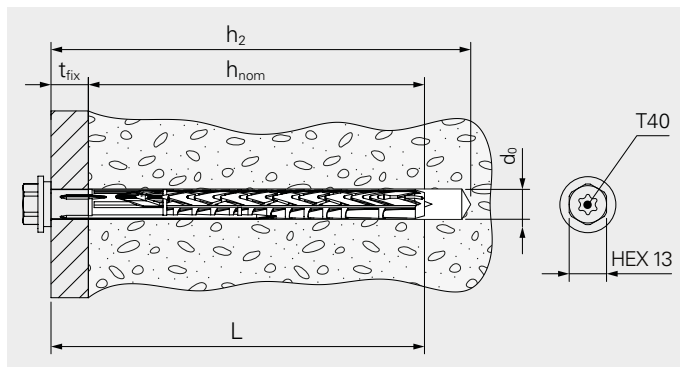
Product code	PU	L	t _{fix}	h _{nom}	h ₂	d ₀	
SXR-10×60-FUS-A4	50	60	10	50	70	10	1333579
SXR-10×140-FUS-A4		140	90		150		1333580



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	D	WL	FL	
T40-25-HEX 1/4"	1	25	1/4"	T40	–	–	–	769474
E313-1/4"-50		50		HEX13				508029
SDS-10×215/150-4C		215	–	–	10	150	150	1487586

SXRL-FUS



Application

Fastening of a bracket onto substrate

Component 1 (t_i)

Bracket

Component 2 (t_{II})

Substrate

Fastener material

Body: Polyamide PA6

Fastener: galvanized steel or austenitic stainless steel A4

Approvals

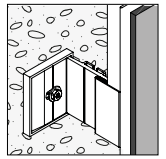


Features and Benefits

- Anchor suitable for installation of a bracket onto various substrates
- Versatile product thanks to the long expansion element
- Retention forces are evenly distributed in the drill hole thanks to the geometry of the plug
- Ribs prevent plug rotation during installation

Documentation

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

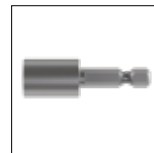


Frame anchor in polyamide and galvanized steel onto substrate

Product code	PU	L	max.t _{fix}			h ₂	d ₀	
			h _{nom} ≥ 50	h _{nom} ≥ 70	h _{nom} ≥ 90			
SXRL-10×60-FUS	50	60	10	–	–	70	10	1657909
SXRL-10×80-FUS		80	30	10	–	90		1492203
SXRL-10×100-FUS		100	50	30	10	110		1494422
SXRL-10×120-FUS		120	70	50	30	130		1711416
SXRL-10×160-FUS		160	110	90	70	170		1667834

Frame anchor in polyamide and A4 onto substrate

Product code	PU	L	max.t _{fix}			h ₂	d ₀	
			h _{nom} ≥ 50	h _{nom} ≥ 70	h _{nom} ≥ 90			
SXRL-10×60-FUS-A4	50	60	10	–	–	70	10	1744493
SXRL-10×80-FUS-A4		80	30	10	–	90		1568224
SXRL-10×100-FUS-A4		100	50	30	10	110		1697684
SXRL-10×120-FUS-A4		120	70	50	30	130		1756596
SXRL-10×140-FUS-A4		140	90	70	50	150		1756597



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	D	WL	FL	
T40-25-HEX 1/4"	1	25	1/4"	T40	–	–	–	769474
E313-1/4"-50		50		HEX13				508029
SDS-10×215/150-4C		215	–	–	10	150	150	1487586

Installation instruction for SXR-FUS and SXRL-FUS



- Drill holes perpendicular to the surface of the substrate
- Remove dust from the drill hole



- Insert anchor (screw and plug) by using a hammer until the collar of the plastic sleeve is flush with the surface of the fixture

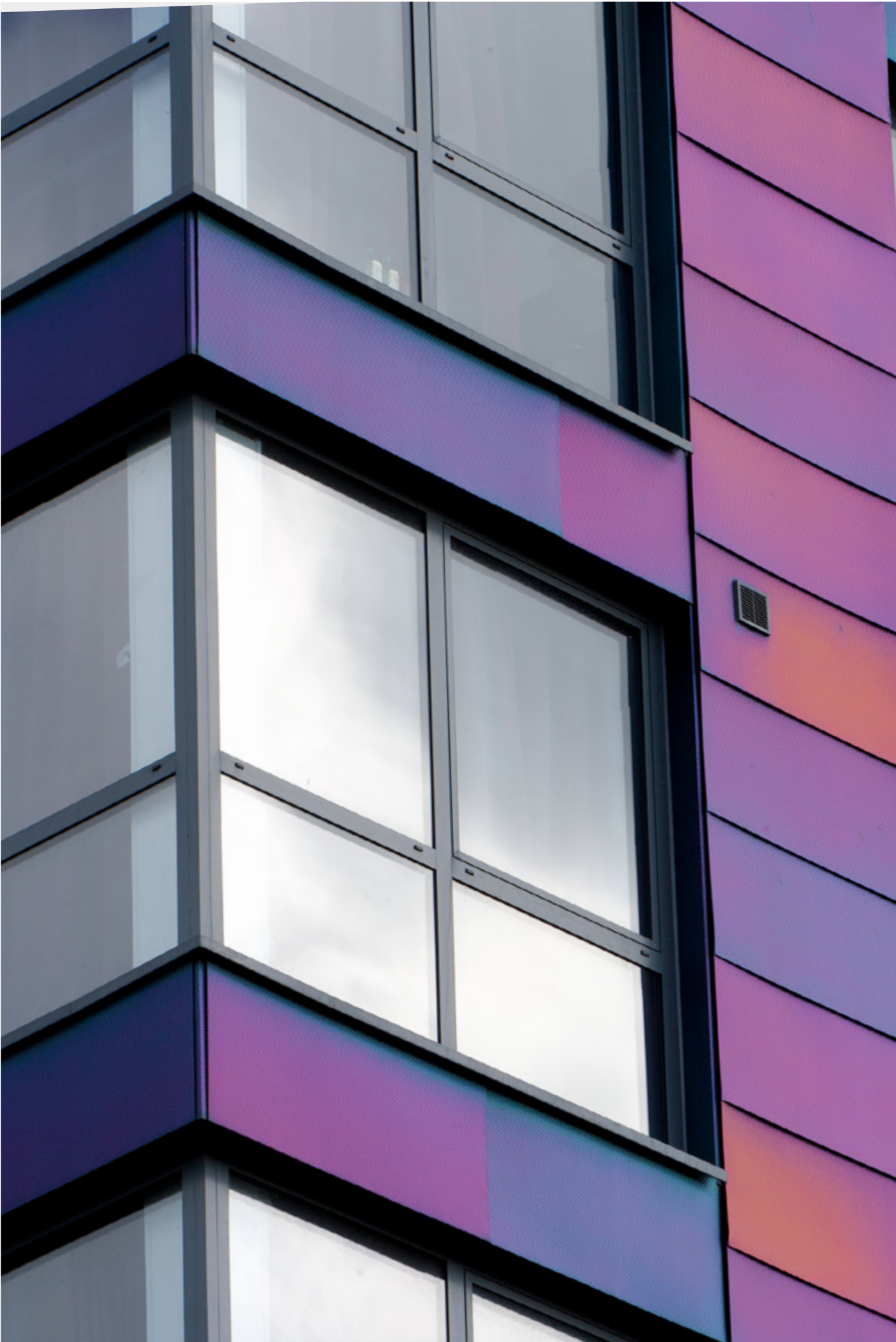


- The screw is screwed-in until the head of the screw touches the sleeve.

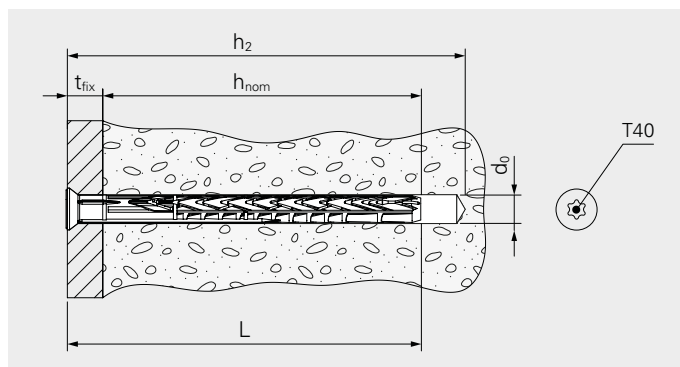


- The anchor is correctly mounted, when the head of the screw fits tight on the surface and cannot be screwed-in any further





SXR-T



Application

Fastening of a timber batten onto substrate

Component 1 (t_i)

Timber batten

Component 2 (t_{II})

Substrate

Fastener material

Body: Polyamide PA6

Fastener: galvanized steel

Approvals

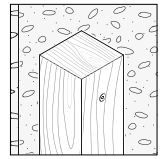
CE₀₇
ETA-07/0121

Features and Benefits

- Anchor suitable for installation of a timber batten onto various substrates
- Geometry of the expansion element enables the use in many substrates
- Short expansion element requires only a small drilling depth
- Distinctive rotation lock increases the ease of assembly and provides additional safety

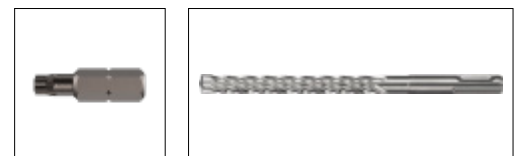
Documentation

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



Frame anchor in polyamide and galvanized steel onto substrate

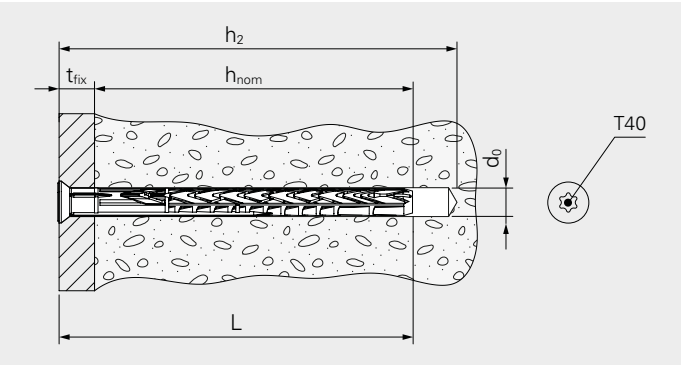
Product code	PU	L	t _{fix}	h _{nom}	h ₂	d ₀	
SXR-10×80-T	50	80	30	50	90	10	1333511
SXR-10×100-T		100	50		110		1333558
SXR-10×120-T		120	70		130		1333559
SXR-10×140-T		140	90		150		1333562
SXR-10×160-T		160	110		170		1333564
SXR-10×180-T		180	130		190		1333565
SXR-10×200-T		200	150		210		1333566
SXR-10×230-T		230	180		240		1333567
SXR-10×260-T		260	210		270		1333568



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	D	WL	FL	
T40-25-HEX ¼"	1	25	¼"	T40	–	–	–	769474
SDS-10×215/150-4C		215	–	–	10	150	150	1487586

SXRL-T

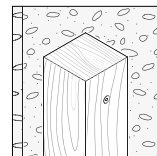


Application	Component 1 (t _i)	Component 2 (t _{II})
Fastening of a timber batten onto substrate	Timber batten	Substrate

Fastener material	Approvals
Body: Polyamide PA6 Fastener: galvanized steel	 ETA-07/0121

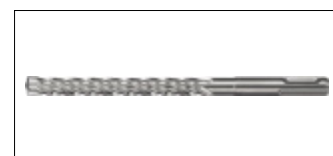
Features and Benefits
• Anchor suitable for installation of a timber batten onto various substrates • Versatile product thanks to the long expansion element • Retention forces are evenly distributed in the drill hole thanks to the geometry of the plug • Ribs prevent plug rotation during installation

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



Frame anchor in polyamide and galvanized steel onto substrate

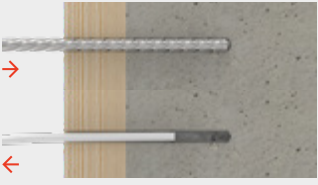
Product code	PU	L	max. t _{fix}			h ₂	d ₀	
			h _{nom} ≥50	h _{nom} ≥70	h _{nom} ≥90			
SXRL-10×80-T	25	80	30	10	–	90	10	1562247
SXRL-10×100-T	50	100	50	30	10	110		1716144
SXRL-10×120-T		120	70	50	30	130		1743966
SXRL-10×140-T		140	90	70	50	150		1376693

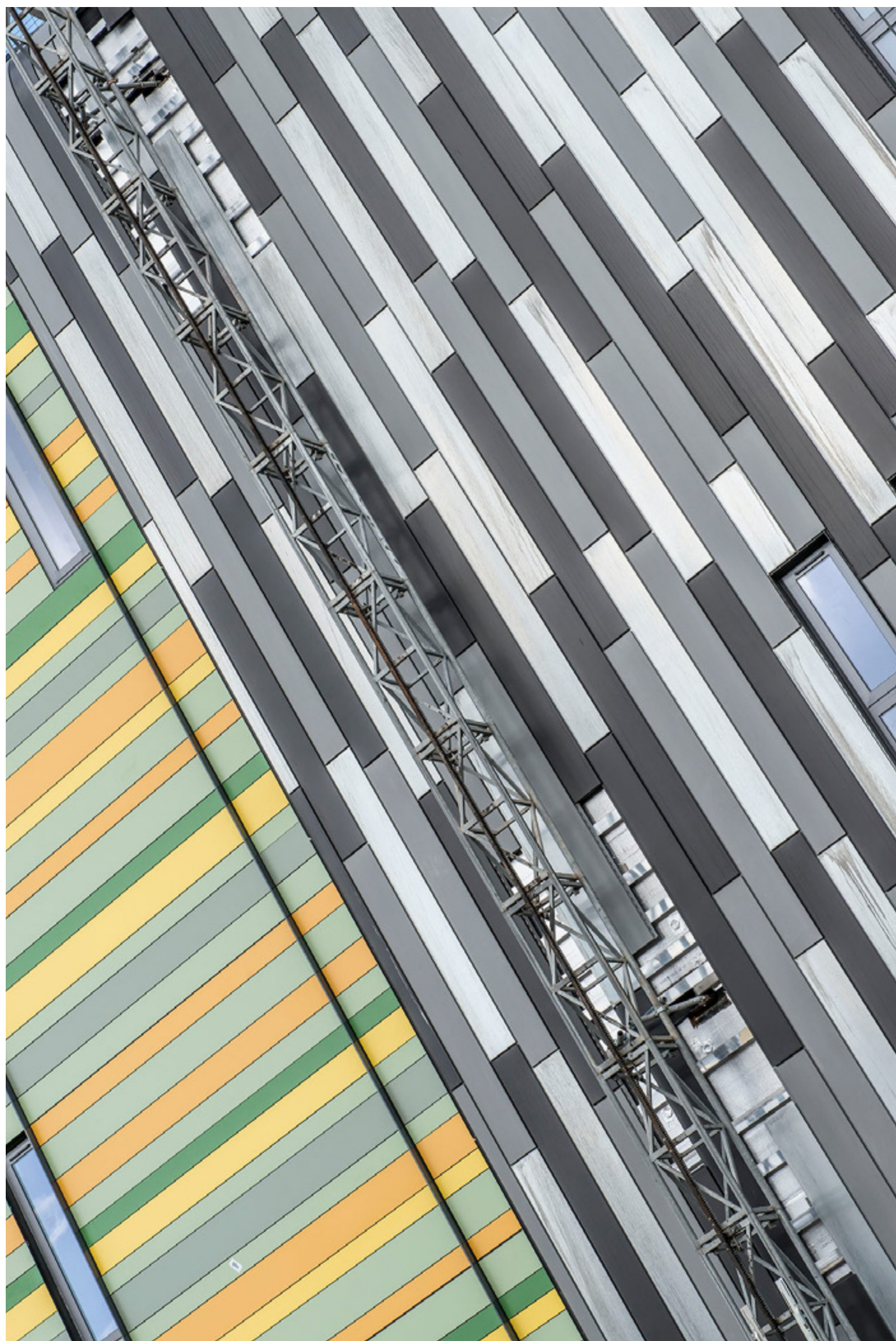


Accessories/Ancillaries

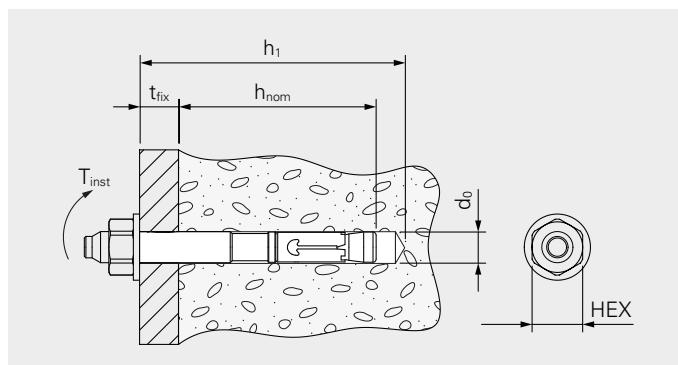
Product code	PU	L	Drive	Head drive	D	WL	FL	
T40-25-HEX ¼"	1	25	¼"	T40	–	–	–	769474
SDS-10×215/150-4C		215	–	–	10	150	150	1487586

Installation instruction for SXR-T and SXRL-T

			
• Drill holes perpendicular to the surface of the substrate • Remove dust from the drill hole	• Insert anchor (screw and plug) by using a hammer until the collar of the plastic sleeve is flush with the surface of the fixture	• The screw is screwed-in until the head of the screw touches the sleeve.	• The anchor is correctly mounted, when the head of the screw fits tight on the surface and cannot be screwed-in any further



FAZ-II



Application

Fastening of a bracket onto substrate

Component 1 (t_i)

Bracket

Component 2 (t_{II})

Substrate

Fastener material

Fastener: galvanized steel or austenitic stainless steel A4

Approvals

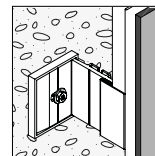
CE₀₅
ETA-05/0069

Features and Benefits

- Anchor suitable for installation of a bracket onto various substrates
- Approved for cracked and non-cracked concrete C20/25 to C50/60
- Approved for use in seismic category C1
- Reduced anchorage depths save time and costs during drilling
- Simple assembly saves time as well as wear and tear

Documentation

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



Bolt anchor in galvanized steel onto substrate

Product code	PU	d ₀	min. h _{nom}	max. t _{fix}	h ₁	Drive	T _{inst} [Nm]	
FAZ-II-8/10	50	8	45	10	h _{nom} +5	HEX13	20	1333426
FAZ-II-10/10		10	52			HEX17	45	1526930

Bolt anchor in A4 onto substrate

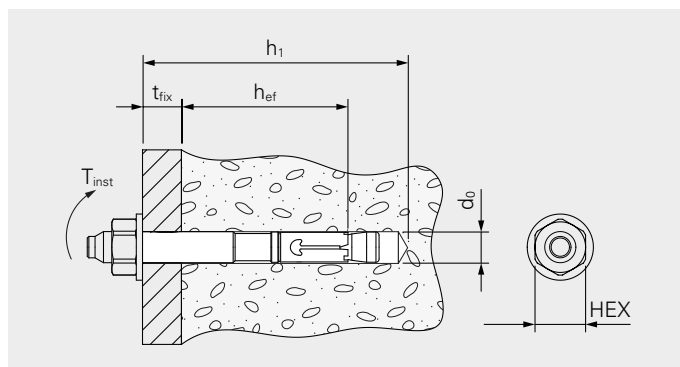
Product code	PU	d ₀	min. h _{nom}	max. t _{fix}	h ₁	Drive	T _{inst} [Nm]	
FAZ-II-8/10-A4	50	8	45	10	h _{nom} +5	HEX 13	20	1333466
FAZ-II-10/10-A4		10	52			HEX 17	45	1333468



Accessories/Ancillaries

Product code	PU	Drive	Head drive	D	L	WL	FL	
SDS-8×215/150-4C	1	—	—	8	215	150	150	1487585
SDS-10×215/150-4C				10				1487586
E313-¼"-50		¼"	HEX13	—	—	—	—	508029

FXA



Application

Fastening of a bracket onto substrate

Component 1 (t_i)

Bracket

Component 2 (t_{II})

Substrate

Fastener material

Fastener: galvanized steel or austenitic stainless steel A4

Approvals

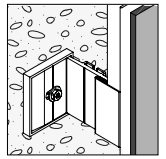
CE₁₃
ETA-13/0772

Features and Benefits

- Anchor suitable for installation of a bracket onto various substrates
- Approved for non-cracked concrete C20/25 to C50/60
- Simple assembly saves time as well as wear and tear

Documentation

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



Bolt anchor in galvanized steel onto substrate

Product code	PU	d ₀	min. h _{ef}	max. t _{fix}	min. h ₁	Drive	T _{inst} [Nm]	
FXA-8/5×66	50	8	40	5	56	HEX 13	15	1427314
FXA-8/10×71				10				1427315
FXA-10/10×86		10	50		68	HEX 17	30	1681093

Bolt anchor in A4 onto substrate

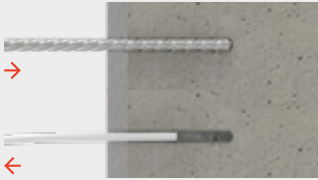
Product code	PU	d ₀	min. h _{ef}	max. t _{fix}	min. h ₁	Drive	T _{inst} [Nm]	
FXA-8/10X71-A4	50	8	40	10	56	HEX 13	10	1526931
FXA-10/10X86-A4		10	50		68	HEX 17	20	1681094



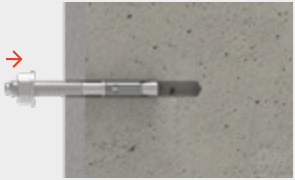
Accessories/Ancillaries

Product code	PU	Drive	Head drive	D	L	WL	FL	
SDS-8×215/150-4C	1	—	—	8	215	150	150	1487585
SDS-10×215/150-4C				10				1487586
E313-¼"-50		¼"	HEX13	—	—	—	—	508029

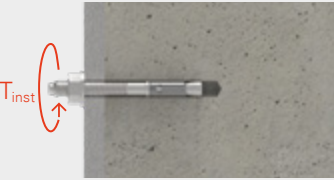
Installation instruction for FAZ-II and FXA



- Drill holes perpendicular to the surface of the substrate
- Remove dust from the drill hole



- Insert anchor by using a hammer until the collar is flush with the surface of the fixture



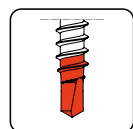
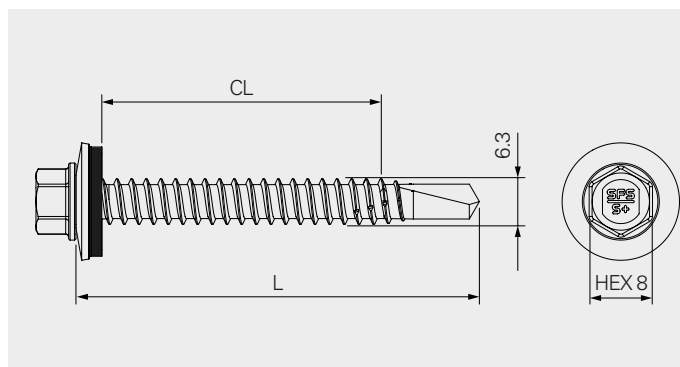
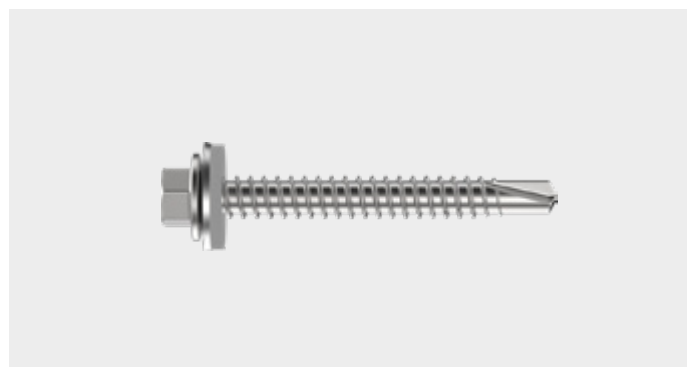
- The anchor is screwed-in until the prescribed installation torque T_{inst} is reached







SX5-6.3



Application

Fastening of bracket through cement bonded particle board to steel stud

Component 1 (t₁)

Bracket	
Pre-drill Ø	6.5
Cement bonded	
Particle board	≤16.0

Component 2 (t₂)

Steel	1.0–3.0
-------	---------

Fastener material

Fastener: Austenitic stainless steel A4, case hardened drill point
Washer: Austenitic stainless steel A4 with EPDM-seal

Approvals



ETA-22/0793

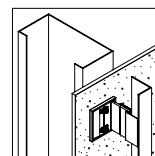
Features and Benefits

- Self drilling fastener suitable for fastening bracket through cement bonded particle board sheeting onto steel stud
- Penetrates board and substructure in one operation without pre-drilling
- Versatile applications possible given by the large clamping range
- Optical recognition of whether fastener is properly tightened thanks to the washer

Documentation

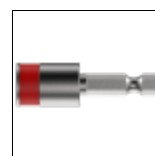
Approval document (ETA) | Declaration of performance (DoP)





Fastener in A4 onto steel

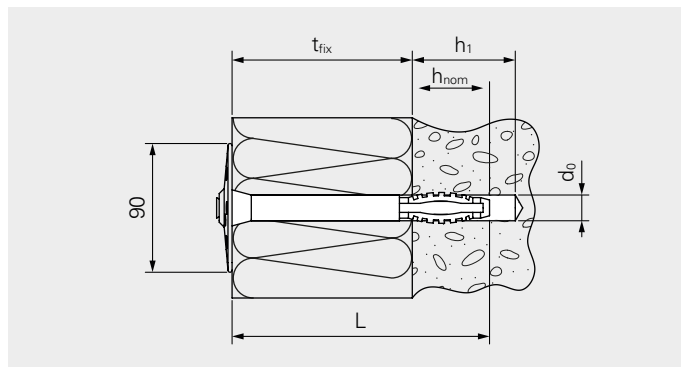
Product code	PU	L	CL	
SX5/36-S16/A4-6,3×55-A4	250	55	0-36	1570614



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
E308-1/4"-50	1	50	1/4"	HEX8	1646160

MDH



Application

Mechanical fixing of soft mineral fibre-mats on walls

Component 1 (t_I)

Soft mineral fibre-mats

Component 2 (t_{II})

Concrete
Bricks
Other high-density materials

Fastener material

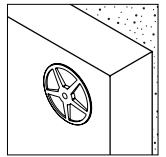
Polypropylene

Approvals

–

Features and Benefits

- Insulation fixing suitable for installation of insulation material onto high-density substrate material
- Contact pressure by deformation of the longitudinal ribs fix the plug in the drill hole
- Temperature resistance from –40° to +70° Celsius



Insulation anchor onto substrate

Product code	PU	L	d ₀	min. h ₁	min. h _{nom}	max. t _{fix}	
MDH-8×60	250	60	8	25	20	40	523835
MDH-8×80		80				60	523836
MDH-8×100		100				80	523837
MDH-8×120		120				100	523838
MDH-8×140		140				120	1234497
MDH-8×160		160				140	1234498
MDH-8×180*	250	180	8	35	30	150	523841
MDH-8×200*		200				170	523843
MDH-8×220*		220				190	523844
MDH-8×240*		240				210	523845

*consists of two parts

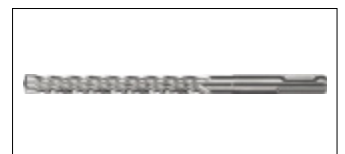
Installation instruction

- Drill a pilot hole

- Set plug until head lies flush on insulation

- Use a hammer for installation

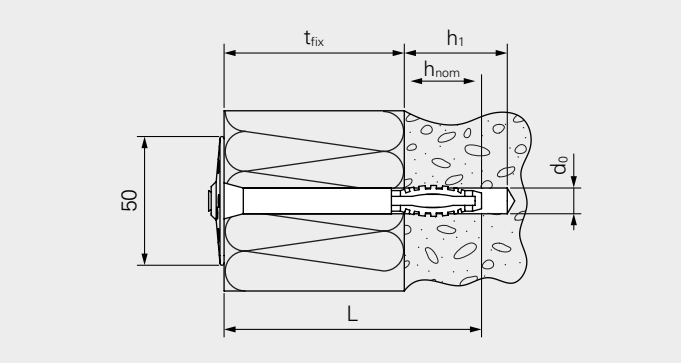
- MDH has to be hammered precisely onto insulation



Accessories/Ancillaries

Product code	PU	L	D	WL	FL	
SDS-8×215/150-4C	1	215	8	150	150	1487585

MDD



Application

Mechanical fixing of hard board insulation plates on walls

Component 1 (t_f)

Hardboard insulation plates

Component 2 (t_{II})

Concrete
Bricks
Other high-density materials

Fastener material

Plug: Polyamide
Nail: Polyamide

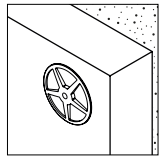
Approvals

–

Features and Benefits

- Insulation fixing suitable for installation of insulation material onto high-density substrate material
- Spreading of the plug leads to anchoring
- Temperature resistance from –40° to +70° Celsius





Insulation anchor onto substrate

Product code	PU	L	d ₀	min. h ₁	min. h _{nom}	max. t _{fix}	
MDD-10×70	250	70	10	40	30	40	974804
MDD-10×90		90				60	974805
MDD-10×110		110				80	974806
MDD-10×130		130				100	974807
MDD-10×160		160				130	1403024
MDD-10×180		180				150	1419658
MDD-10×210		210				180	974811

Installation instruction

- Drill a pilot hole

- Set plug until head lies flush on insulation

- Drive-in the nail with a hammer

- Nail has to be hammered precisely into the head



Accessories/Ancillaries

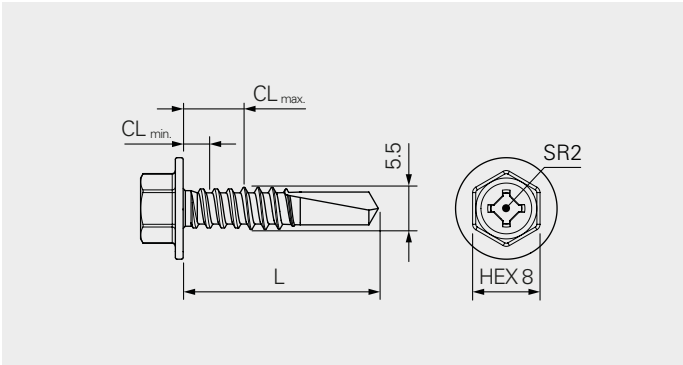
Product code	PU	L	D	WL	FL	
SDS-10×215/150-4C	1	215	10	150	150	1487586





Second level fixing

SDA5-5.5



Application

- Fastening of pre-punched bracket to aluminium rail
- Fastening of aluminium rail to aluminium rail
- Fastening of a hanger to an aluminium rail

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I +t _{II}
Aluminium	≥2.0	Aluminium	1.5–4.0	5.0
Aluminium	≥2.0	Aluminium	1.5–4.0	–
Pre-drill Ø	5.2–5.5			
Steel	≥1.5	Aluminium	1.5–4.0	–
Pre-drill Ø	5.5			

Fastener material

Austenitic stainless steel A2/A4

Approvals



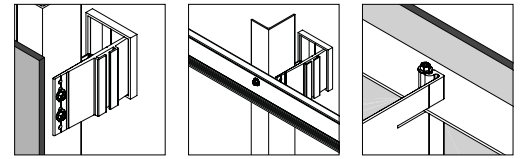
Features and Benefits

- Self drilling fastener suitable for installation of metal bracket or aluminium profile onto aluminium structure
- Both impact gun and regular drill gun machine can be used for installation
- Secured against rattling given by reduced thread and perfectly matched clamping length
- No torque control required given by reduced thread
- Secured against unwinding given by reduced thread
- Connecting components are pulled together during setting process given by reduced thread
- Fastener can be over-tightened

Documentation

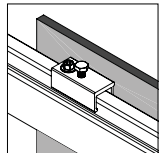
Approval document (ETA) | Declaration of performance (DoP)





Fastener in A4 onto aluminium

Product code	PU	L	CL	
SDA5/3,5-6-H13-S4-5,5×20	500	20	3.5–6.0	1499657
SDA5/3,5-8-H13-S4-5,5×22		22	3.5–8.0	1507572
SDA5/25-28-H13-S4-5,5×45		45	25.0–28.0	1645134



Fastener in A2 onto aluminium

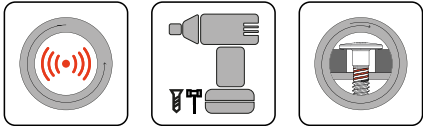
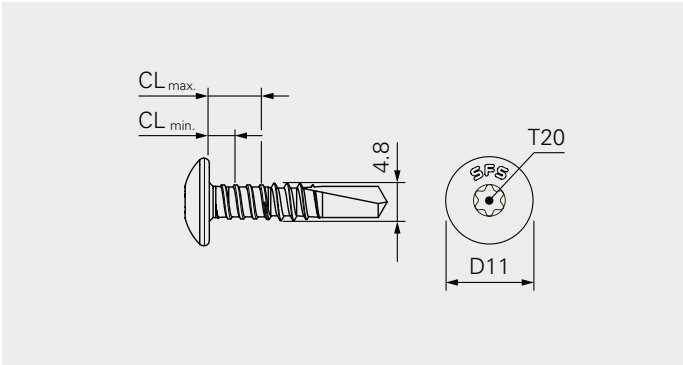
Product code	PU	L	CL	
SDA5/3,5-16-H13-S-5,5×30	100	30	3.5–16	1692307



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
E308-¼"-50	1	50	¼"	HEX8	1646160
SR2-25-HEX¼"	10	–		SR2	1146918
Bit holder ZA¼"	1	58		¼"	1162306

SDA5-4.8



Application

- Fastening of pre-punched bracket to aluminium rail
- Fastening of aluminium rail to aluminium rail

Component 1 (t _I)		Component 2 (t _{II})		Σ _{max} t _I +t _{II}
Aluminium	≥2.0	Aluminium	1.5–4.0	5.0
Aluminium	≥2.0	Aluminium	1.5–4.0	–
Pre-drill Ø	5.0			
Steel	≥1.5	Aluminium	1.5–4.0	–
Pre-drill Ø	5.0			

Fastener material

Austenitic stainless steel A4

Approvals



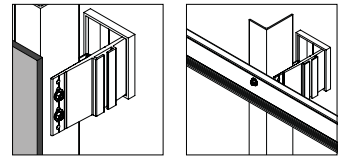
Features and Benefits

- Self drilling fastener suitable for installation of metal bracket or aluminium profile onto aluminium structure
- Both impact gun and regular drill gun machine can be used for installation
- Secured against rattling given by reduced thread and perfectly matched clamping length
- No torque control required given by reduced thread
- Secured against unwinding given by reduced thread
- Connecting components are pulled together during setting process given by reduced thread
- Fastener can be over-tightened

Documentation

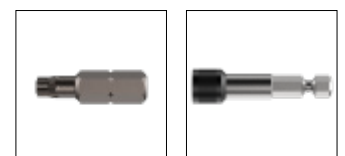
Technical Data





Fastener in A4 onto aluminium

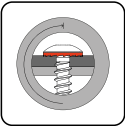
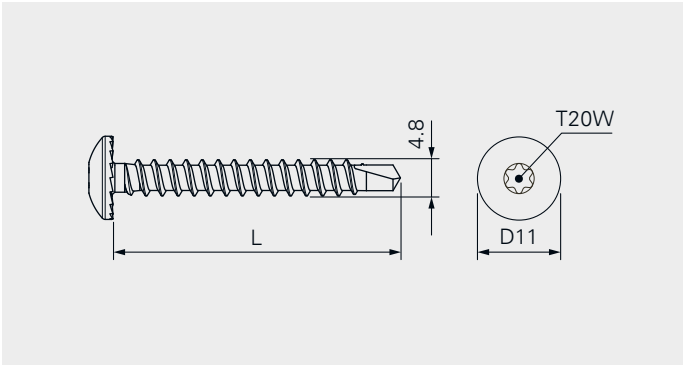
Product code	PU	L	CL	
SDA5/3,5-7-D11/T20-4,8×22-A4	250	22	3.5–7.0	1711845



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
T20-25-HEX 1/4"	10	25	1/4"	T20	769471
Bit holder ZA 1/4"	1	58		1/4"	1162306

SW3-4.8



Application

Fastening of aluminium profile to timber batten

Component 1 (t _i)		Component 2 (t _{II})	
Aluminium	≤3.0	Timber	≥12

Fastener material

Austenitic stainless steel A2

Approvals

EN 14592:2008

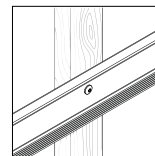
Features and Benefits

- Self drilling fastener suitable for installation of aluminium profiles onto timber
- No pre-drilling of the aluminium rail needed
- Secured against over-torquing given by rips under the head

Documentation

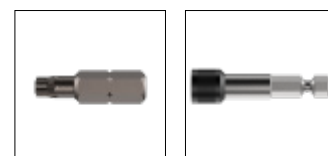
Declaration of performance (DOP) | Technical Data





Fastener in A2 onto timber

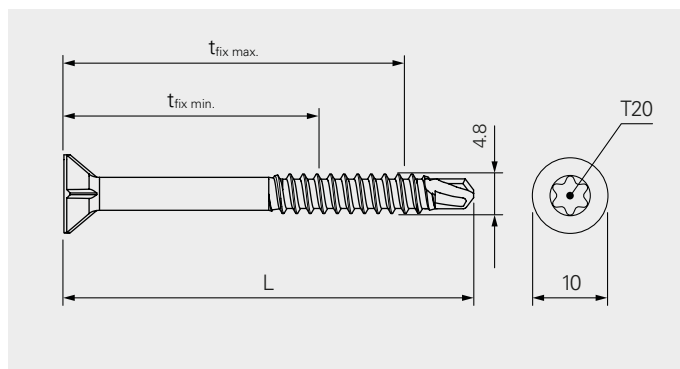
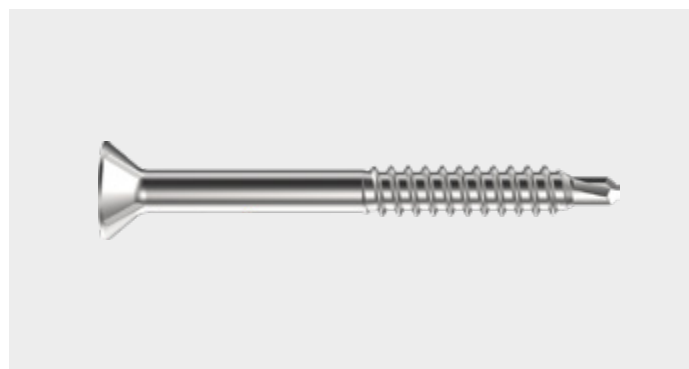
Product code	PU	L	
SW3-S-D11/R-4,8×38	250	38	1563413



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
T20W-25-HEX $\frac{1}{4}$ "	1	25	$\frac{1}{4}$ "	T20W	895280
Bit holder ZA $\frac{1}{4}$ "		58		$\frac{1}{4}$ "	1162306

SDA2-4.8



Application

Fastening of timber batten to aluminium profile

Component 1 (t_f)

Timber

20–40

Component 2 (t_{fl})

Aluminium

1.8–2.2

Fastener material

Austenitic stainless steel A2

Approvals

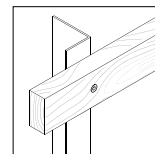
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Features and Benefits

- Self drilling fastener suitable for installation of timber battens onto aluminium structure
- Variable application range given by large clamping range
- Low insertion torque during installation given by adjusted clamping range
- Flush-mounted installation without damaging the timber surface given by the milling grooves

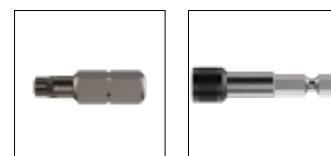
Documentation

Technical Data



Fastener in A2 onto aluminium

Product code	PU	L	t _{fix, timb}	
SDA2/20-30-S10/T20-4,8×38-A2	250	38	20-30	1711843
SDA2/30-40-S10/T20-4,8×48-A2		48	30-40	1711844



Accessories/Ancillaries

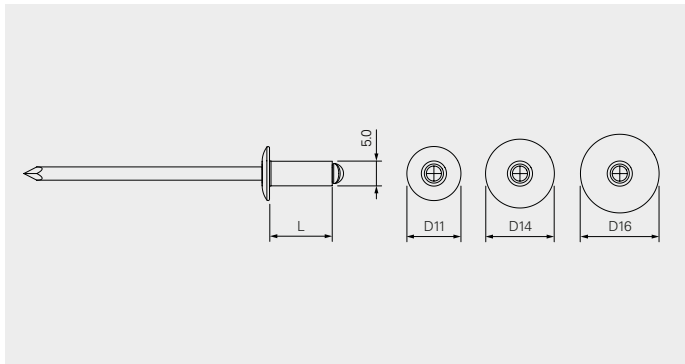
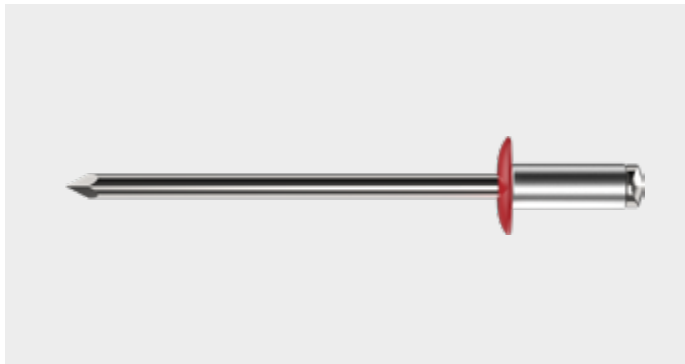
Product code	PU	L	Drive	Head drive	
T20-25-HEX 1/4"	1	25	1/4"	T20	769471
Bit holder ZA 1/4"		58		1/4"	1162306





Third level fixing

AP-5.0



Application

Fastening of cladding panel to aluminium profile

Component 1 (t₁)

Cladding panel

Component 2 (t₂)

Aluminium	≥1.0
Pre-drill Ø	5.1

Fastener material

Body: Aluminium AlMg5

Mandrel: Austenitic stainless steel A2

Approvals

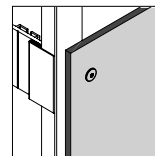
ETA-21/0951

Features and Benefits

- Blind rivet suitable for installation of pre-drilled cladding panels onto pre-drilled aluminium structure
- High clamping range with clamping force independent of the clamping thickness
- Non-detachable and vibration-resistant connection

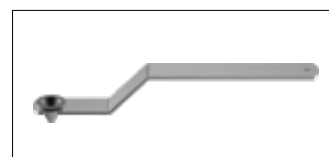
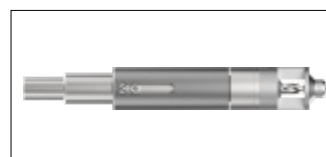
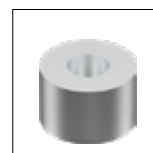
Documentation

Approval document (ETA)



Blind rivet in aluminium onto aluminium

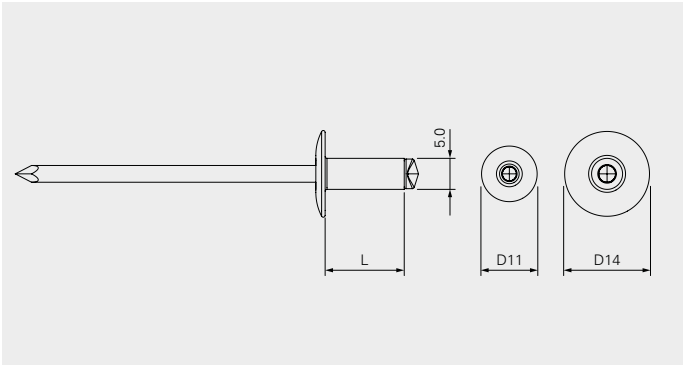
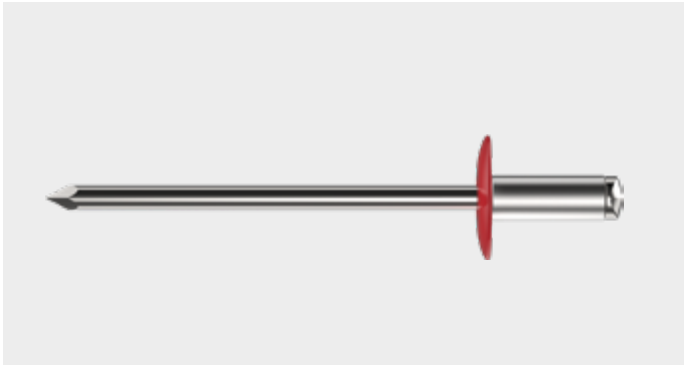
Product code	PU	L	CL	Head	Blank	Coloured
AP11-50120-S	250	12	2.0–8.0	D11	995901	1363826
AP11-50180-S		18	7.0–13.5		883751	1363851
AP14-50120-S		12	2.0–8.0	D14	941481	1363853
AP14-50160-S		16	6.0–12.0		1127413	1363854
AP14-50180-S		18	7.0–13.5		851318	1363855
AP14-50210-S		21	10.0–16.0		1586734	1363856
AP14-50230-S		23	12.0–18.0		1358070	1363857
AP16-50120-S		12	2.0–8.0	D16	1656044	1648414
AP16-50160-S		16	6.0–12.0		914963	1363858
AP16-50180-S		18	7.0–13.5		870920	1363859
AP16-50210-S		21	10.0–16.0		994642	1363861



Accessories/Ancillaries

Product code	PU	Pre-drill Ø panel	
AccuBird®Pro	1	–	1679661
FP-A Sleeves	–		–
NOSEPIECE-MOVING-POINT AP/ASO	1		974620
DG-146×20-7,0		7.0–7.9	1320657
DG-146×20-8,0		8.0–8.9	1320658
DG-146×20-9,0		9.0–9.9	1320659
DG-146×20-10,0		10.0–10.9	1321704
ZL-5,1/7-18		7.0–18.0	701532

ASO-5.0



Application

Fastening of cladding panel to aluminium profile

Component 1 (t ₁)	Component 2 (t ₁)	
Cladding panel	Aluminium	≥1.0
	Pre-drill Ø	5.1

Fastener material

Body: Aluminium AlMg3
Mandrel: Austenitic stainless steel A2

Approvals

ETA-21/0951

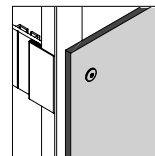
Features and Benefits

- Blind rivet suitable for installation of pre-drilled cladding panels onto pre-drilled aluminium structure
- High clamping range with clamping force independent of the clamping thickness
- Non-detachable and vibration-resistant connection

Documentation

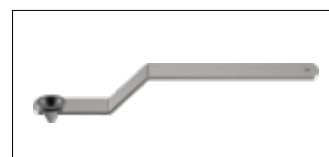
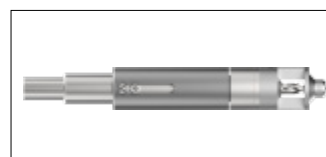
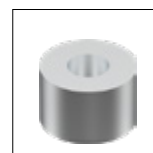
Approval document (ETA)





Blind rivet in aluminium onto aluminium

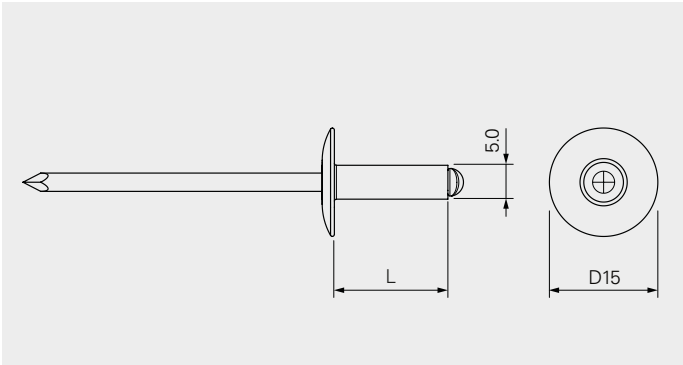
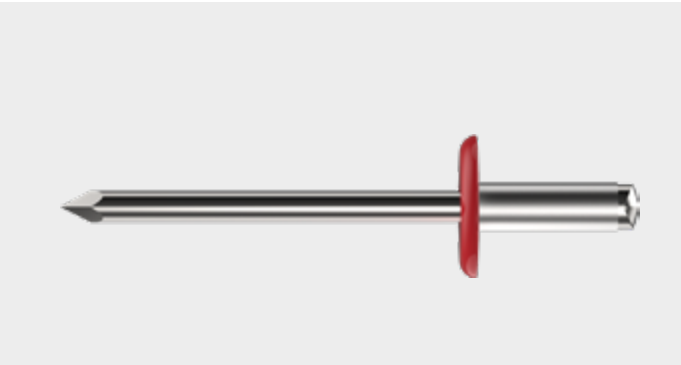
Product code	PU	L	CL	Head	Blank	Coloured
ASO-D11-50080	250	8	2.0–4.5	D11	-	1363862
ASO-D11-50100		10	2.0–6.0		-	1363863
ASO-D11-50120		12	2.0–8.0		262251	1363864
ASO-D11-50140		14	4.0–10.0		1208418	1363865
ASO-D11-50160		16	6.0–12.0		1208450	1363868
ASO-D14-50080		8	2.0–4.5	D14	-	1470880
ASO-D14-50100		10	2.0–6.0		-	1363870
ASO-D14-50120		12	2.0–8.0		-	1363881
ASO-D14-50140		14	4.0–10.0		-	1363882
ASO-D14-50160		16	6.0–12.0		1270352	1363883



Accessories/Ancillaries

Product code	PU	Pre-drill Ø panel	
AccuBird®Pro	1	–	1679661
FP-A Sleeves	–		–
NOSEPIECE-MOVING-POINT AP/ASO	1		974620
DG-146×20-7,0		7.0–7.9	1320657
DG-146×20-8,0		8.0–8.9	1320658
DG-146×20-9,0		9.0–9.9	1320659
DG-146×20-10,0		10.0–10.9	1321704
ZL-5,1/7-18		7.0–18.0	701532

SSO-5.0



Application

Fastening of cladding panel to aluminium or steel rail

Component 1 (t _i)	Component 2 (t _{II})	
Cladding panel	Aluminium	≥1.0
	Pre-drill Ø	5.1
Cladding panel	Steel	≥1.0
	Pre-drill Ø	5.1

Fastener material

Body: Austenitic stainless steel A4
Mandrel: Austenitic stainless steel A4

Approvals

ETA-21/0951

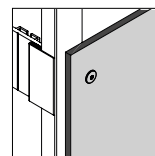
Features and Benefits

- Blind rivet suitable for installation of pre-drilled cladding panels onto pre-drilled aluminium or steel structure
- High clamping range with clamping force independent of the clamping thickness
- Non-detachable and vibration-resistant connection

Documentation

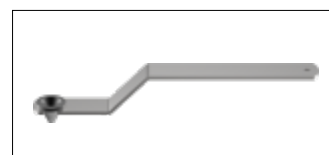
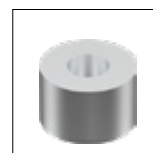
Approval document (ETA)





Blind rivet in A4 onto aluminium and steel

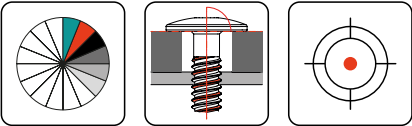
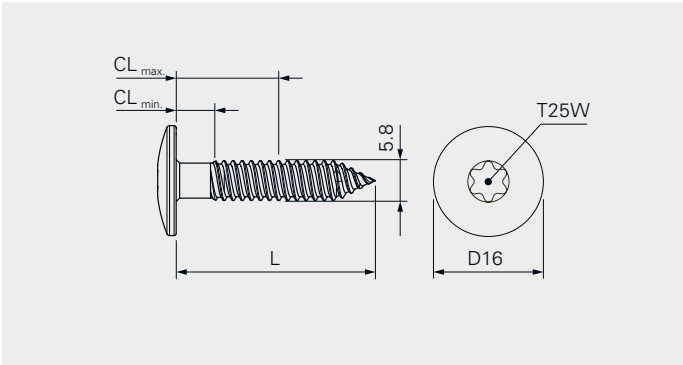
Product code	PU	L	CL	Blank	Coloured
SSO-D15-50140	250	14	4.0–9.5	1262436	1363885
SSO-D15-50180		18	8.0–13.5	1262437	1363886
SSO-D15-50220		22	12.0–18.0	1262439	1363887
SSO-D15-50270		27	17.0–22.0	–	1685313



Accessories/Ancillaries

Product code	PU	Pre-drill Ø panel	
AccuBird®Pro	1	–	1679661
FP-A Sleeves	–		–
NOSEPIECE-MOVING-POINT AP/ASO	1		974620
DG-146×20-7,0		7.0–7.9	1320657
DG-146×20-8,0		8.0–8.9	1320658
DG-146×20-9,0		9.0–9.9	1320659
DG-146×20-10,0		10.0–10.9	1321704
ZL-5,1/7-18		7.0–18.0	701532

TDA-S-5.8



Application

Fastening of cladding panel to aluminium or steel profile

Component 1 (t ₁)	Component 2 (t _{II})	
Cladding panel	Aluminium	1.8–3.0
	Pre-drill Ø	4.5
Cladding panel	Steel	1.2–3.0
	Pre-drill Ø	4.5

Fastener material

Austenitic stainless steel A2

Approvals



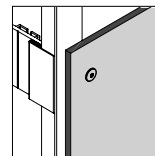
Features and Benefits

- Self tapping fastener suitable for installation of cladding panels onto pre-drilled aluminium or steel structure
- Increased reverse torque given by double-threaded thread
- Alignment of the fastener to the panel is always set straight given by double-threaded thread

Documentation

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





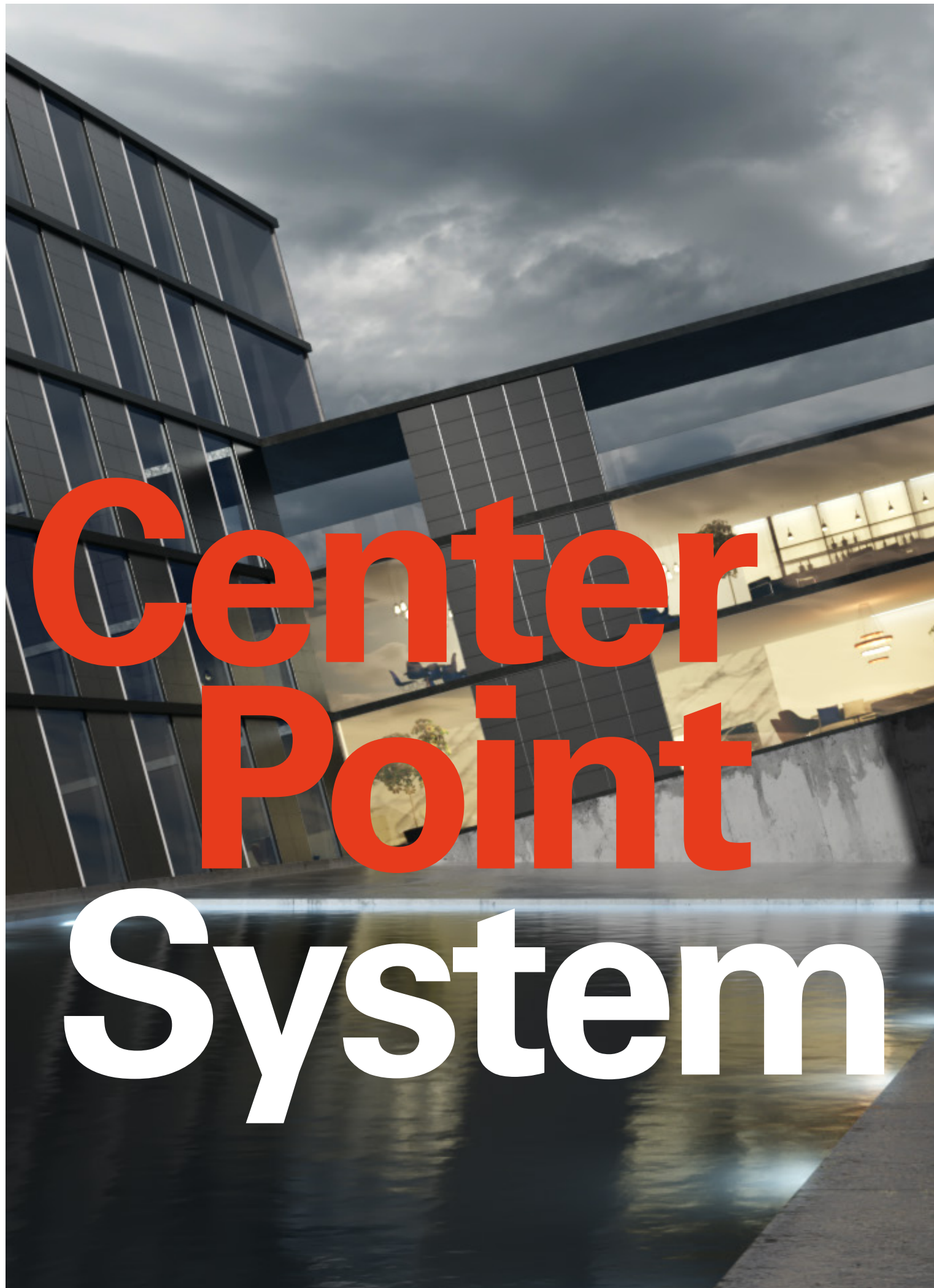
Fastener in A2 onto aluminium and steel

Product code	PU	L	CL	Blank	Coloured
TDA-S-D16-5,8×25	250	25	5.5-16	2175288	2175285
TDA-S-D16-5,8×29		29	8.5-20	1572881	1691521



Accessories/Ancillaries

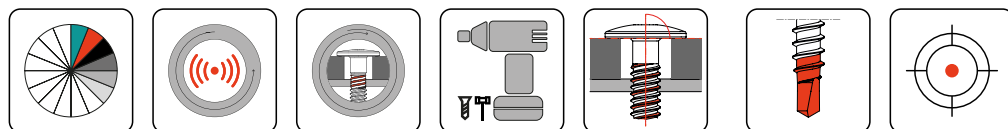
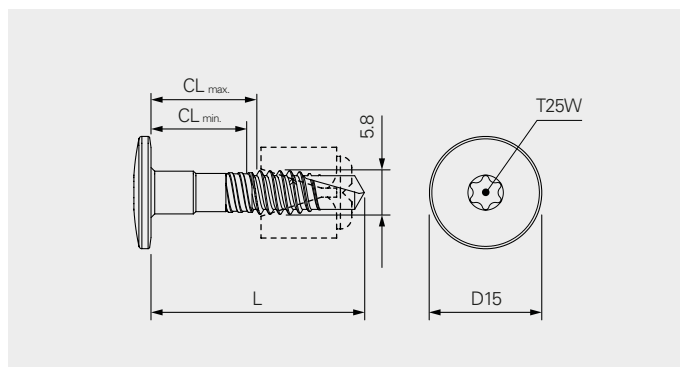
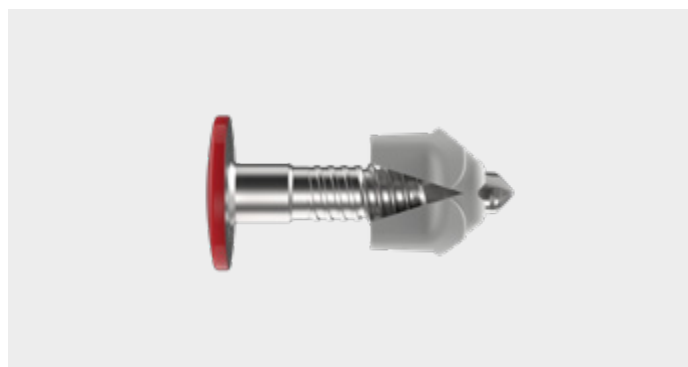
Product code	PU	L	Drive	Head drive	Pre-drill Ø panel	
T25W-25-HEX1/4"	1	25	1/4"	T25W	–	7662
Bit holder ZA1/4"		58		1/4"		1162306
DG-146×20-7,0		146	–	–	7–7.9	1320657
DG-146×20-8,0		146			8–8.9	1320658
DG-146×20-9,0		146			9–9.9	1320659
DG-146×20-10,0		146			10–10.9	1321704
HSS-DG-4,5×110		110			–	1573824



Center Point System



SX4-5.8



Application

Self drilling fastener for fixing a façade panel to steel or aluminium rails

Component 1 (t₁)

Cladding panel,
HPL, Fibrecement, Rockpanel

Component 2 (t₂)

Aluminium	1.8–3.0
Steel	1.0–2.0

Fastener material

Austenitic stainless steel A4/A2, case hardened drill point
Centering sleeve: Eco-friendly material/PMMA

Approvals



ETA-22/0793



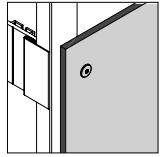
ETA-24/0682

Features and Benefits

- Self drilling fastener suitable for installation of pre-drilled cladding panels onto steel or aluminium structure
- No negative impact on the environment, thanks to the unique material of the sleeve that naturally breaks down
- Installation of fastener precisely centric to the pre-drilled panel given by centering sleeve
- Dilatation can be fully utilised as no residual material from the centring sleeve remains in the drill hole
- Both impact gun and regular drill gun machine can be used for installation
- No torque control required given by reduced thread
- Secured against unwinding given by reduced thread
- Alignment of the fastener to the panel is always set straight given by double-threaded thread
- Fastener head is slightly conical, thus no abrasion on the panel surface after dilatation
- Fastener can be over-tightened

Documentation

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



Fastener in A4 with eco-friendly centering sleeve onto aluminium or steel

Product code	PU	L	Pre-drill Ø panel	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SX4-D15-CSB10/6-5,8×25-A4	250	25	10.0	7.8–9.0	7.0–8.0	6.0	2157392
SX4-D15-CSB10/8-5,8×29-A4		29		9.8–11.0	9.0–10.0	8.0	2157395
SX4-D15-CSB10/10-5,8×33-A4		33		11.8–13.0	11.0–12.0	10.0	2157403
SX4-D15-CSB10/13-5,8×38-A4		38		13.8–16.0	13.0–15.0	12.0–13.0	2157406

Fastener in A4 with PMMA centering sleeve onto aluminium or steel

Product code	PU	L	Pre-drill Ø panel	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SX4-D15-CS10/6-5,8×25-A4	250	25	10.0	7.8–9.0	7.0–8.0	6.0	1696657
SX4-D15-CS10/8-5,8×29-A4		29		9.8–11.0	9.0–10.0	8.0	1692558
SX4-D15-CS10/10-5,8×33-A4		33		11.8–13.0	11.0–12.0	10.0	1693559
SX4-D15-CS10/13-5,8×38-A4		38		13.8–16.0	13.0–15.0	12.0–13.0	1693563

Fastener in A4 without centering sleeve onto aluminium or steel

Product code	PU	L	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SX4-D15-6-5,8×25-A4	250	25	7.8–9.0	7.0–8.0	6.0	1696656
SX4-D15-8-5,8×29-A4		29	9.8–11.0	9.0–10.0	8.0	1693363
SX4-D15-10-5,8×33-A4		33	11.8–13.0	11.0–12.0	10.0	1693365
SX4-D15-13-5,8×38-A4		38	13.8–16.0	13.0–15.0	12.0–13.0	1678524

Fastener in A2 with eco-friendly centering sleeve onto aluminium or steel

Product code	PU	L	Pre-drill Ø panel	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SX4-D15-CSB10/8-5,8×29-A2	250	25	10.0	9.8–11.0	9.0–10.0	6.0	2157442

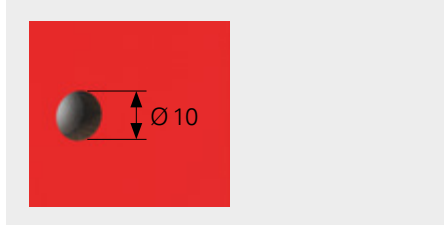
Fastener in A2 with PMMA centering sleeve onto aluminium or steel

Product code	PU	L	Pre-drill Ø panel	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SX4-D15-CS10/8-5,8×29-A2	250	25	10.0	9.8–11.0	9.0–10.0	8.0	2157271

Fastener in A2 without centering sleeve onto aluminium or steel

Product code	PU	L		CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SX4-D15-8-5,8×29-A2	250	25		9.8–11.0	9.0–10.0	8.0	2157272

Installation instruction



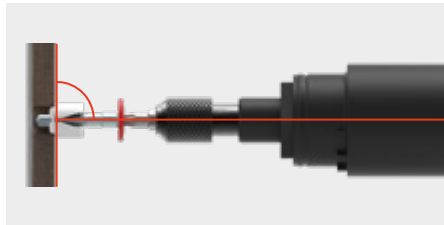
- Panel needs to be pre-drilled to Ø 10 mm



- Wearing safety glasses is recommended during the entire setting process



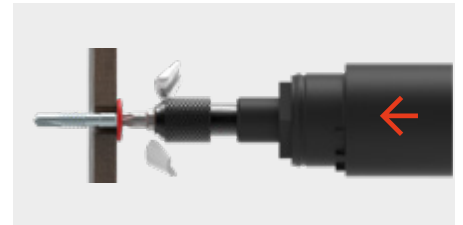
- The bit supplied in the box must be used



- Ensure a right angle during the entire setting process
- Make sure that the bit is mounted without play in the screwdriver



- Apply pressure at low rotation-speed until the centering sleeve breaks



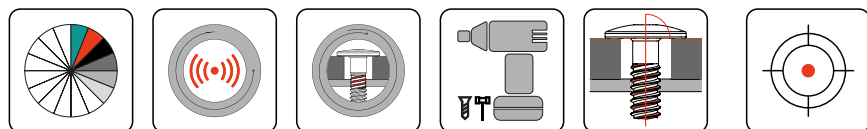
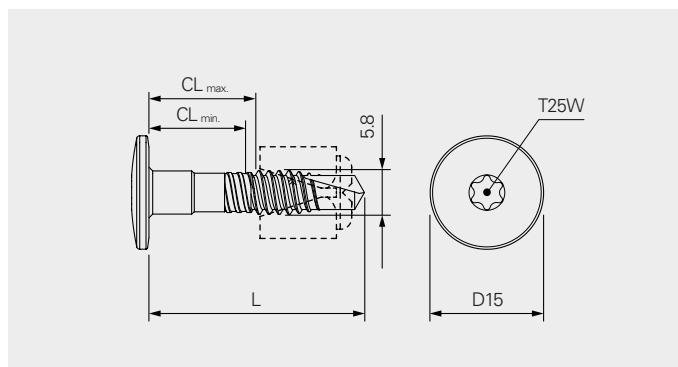
- Once the centering sleeve is broken, apply more pressure and increase the rotation-speed



Accessories/Ancillaries

Product code	PU	D	L	Drive	Head drive		
FP-S-10.0×6-6.0	100	10	6	—	—	1696117	
GP-S-10.0×6-6.0						1696118	
VHM-10.0×80	1		80				1677551
GP-H-10.0-CPS			—				1697297
T25W-25-HEX¼"		—	25	¼"	T25W	7662	
Bit holder ZA¼"			58		¼"	1162306	

SDA4-5.8



Application

Self drilling fastener for fixing a façade panel to aluminium rails

Component 1 (t₁)

Cladding panel,
HPL, Fibrecement, Rockpanel

Component 2 (t₂)

Aluminium 1.8–3.0

Fastener material

Austenitic stainless steel A4/A2

Centering sleeve: Eco-friendly material/PMMA

Approvals



ETA-22/0793



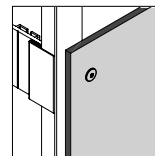
ETA-24/0682

Features and Benefits

- Self drilling fastener suitable for installation of pre-drilled cladding panels onto aluminium structure
- No negative impact on the environment, thanks to the unique material of the sleeve that naturally breaks down
- Installation of fastener precisely centric to the pre-drilled panel given by centering sleeve
- Dilatation can be fully utilised as no residual material from the centring sleeve remains in the drill hole
- Both impact gun and regular drill gun machine can be used for installation
- No torque control required given by reduced thread
- Secured against unwinding given by reduced thread
- Alignment of the fastener to the panel is always set straight given by double-threaded thread
- Fastener head is slightly conical, thus no abrasion on the panel surface after dilatation
- Fastener can be over-tightened

Documentation

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



Fastener in A4 with eco-friendly centering sleeve onto aluminium

Product code	PU	L	Pre-drill Ø panel	CL	t _{L, panel}	
SDA4-D15-CSB10/6-5,8×25-A4	250	25	10.0	7.8–9.0	6.0	2157359
SDA4-D15-CSB10/8-5,8×29-A4		29		9.8–11.0	8.0	2157375
SDA4-D15-CSB10/10-5,8×33-A4		33		11.8–13.0	10.0	2157377
SDA4-D15-CSB10/13-5,8×38-A4		38		13.8–16.0	12.0–13.0	2157378

Fastener in A4 with PMMA centering sleeve onto aluminium

Product code	PU	L	Pre-drill Ø panel	CL	t _{L, panel}	
SDA4-D15-CS10/6-5,8×25-A4	250	25	10.0	7.8–9.0	6.0	1696036
SDA4-D15-CS10/8-5,8×29-A4		29		9.8–11.0	8.0	1693404
SDA4-D15-CS10/10-5,8×33-A4		33		11.8–13.0	10.0	1693540
SDA4-D15-CS10/13-5,8×38-A4		38		13.8–16.0	12.0–13.0	1693557

Fastener in A4 without centering sleeve onto aluminium

Product code	PU	L	CL	t _{L, panel}	
SDA4-D15-6-5,8×25-A4	250	25	7.8–9.0	6.0	1696067
SDA4-D15-8-5,8×29-A4		29	9.8–11.0	8.0	1661703
SDA4-D15-10-5,8×33-A4		33	11.8–13.0	10.0	1661834
SDA4-D15-13-5,8×38-A4		38	13.8–16.0	12.0–13.0	1661836

Fastener in A2 with eco-friendly centering sleeve onto aluminium

Product code	PU	L	Pre-drill Ø panel	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SDA4-D15-CSB10/8-5,8×29-A2	250	25	10.0	9.8–11.0	9.0–10.0	8.0	2157424

Fastener in A2 with PMMA centering sleeve onto aluminium

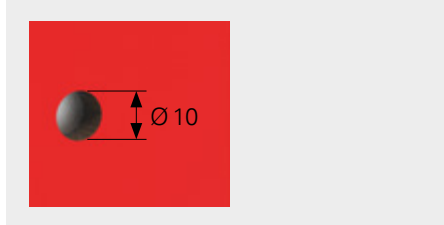
Product code	PU	L	Pre-drill Ø panel	CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SDA4-D15-CS10/8-5,8×29-A2	250	25	10.0	9.8–11.0	9.0–10.0	8.0	2157232

Fastener in A2 without centering sleeve onto aluminium

Product code	PU	L		CL _{Aluminium}	CL _{Steel}	t _{l, panel}	
SDA4-D15-8-5,8×29-A2	250	25		9.8–11.0	9.0–10.0	8.0	2157210



Installation instruction



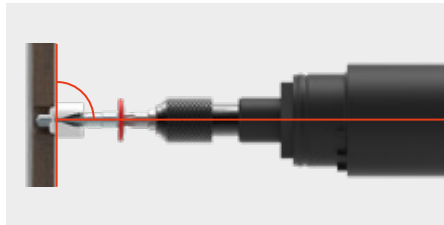
- Panel needs to be pre-drilled to Ø 10 mm



- Wearing safety glasses is recommended during the entire setting process



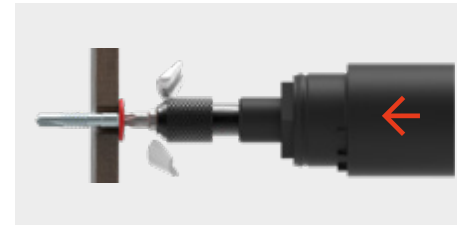
- The bit supplied in the box must be used



- Ensure a right angle during the entire setting process
- Make sure that the bit is mounted without play in the screwdriver



- Apply pressure at low rotation-speed until the centering sleeve breaks



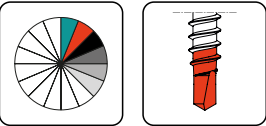
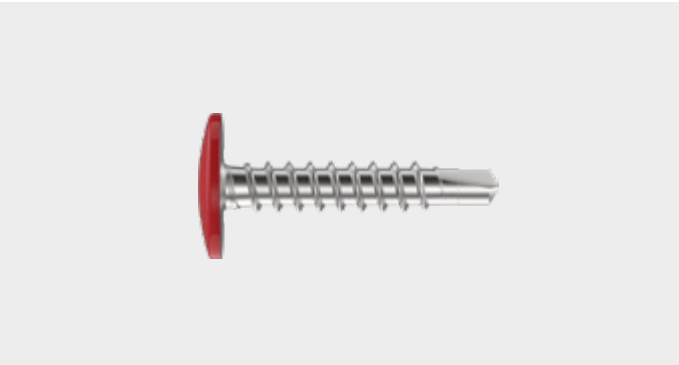
- Once the centering sleeve is broken, apply more pressure and increase the rotation-speed



Accessories/Ancillaries

Product code	PU	D	L	Drive	Head drive		
FP-S-10.0×6-6.0	100	10	6	—	—	1696117	
GP-S-10.0×6-6.0						1696118	
VHM-10.0×80	1		80				1677551
GP-H-10.0-CPS			—				1697297
T25W-25-HEX¼"		—	25	¼"	T25W	7662	
Bit holder ZA¼"			58		¼"	1162306	

SX3-5.5



Application

Fastening of cladding panel to aluminium or steel profile

Fastener material

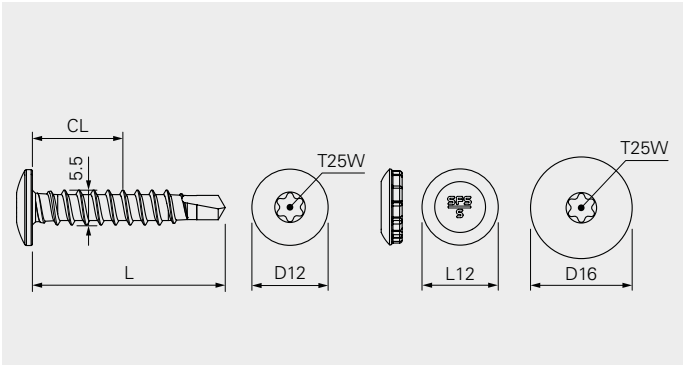
Austenitic stainless steel A2/A4, case hardened drill point

Features and Benefits

- Self drilling fastener suitable for installation of pre-drilled cladding panels onto steel or aluminum structure
- No pre-drilling of the rail needed
- Secured against unwinding given by coned shape

Documentation

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



Component 1 (t_i)

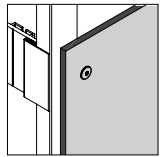
Cladding panel

Component 2 (t_{II})

Aluminium	2.2–3.0
Steel	1.5–2.5

Approvals

ETA-22/0793

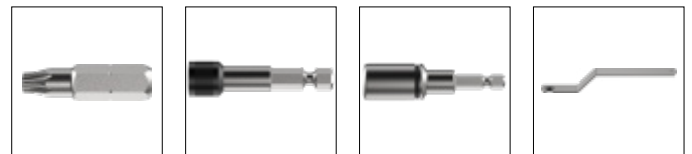


Fastener in A2 onto aluminium and steel

Product code	PU	L	CL	Head	Washer	Blank	Coloured
SX3/15-D12-5,5×30-A2	250	30	0-15	D12	-	1271253	1627480
SX3/15-D16-5,5×30		30		D16		1270106	1518302
SX3/15-L12-S16/1-5,5×32		32		L12	S16/A2	1235593	1403191

Fastener in A4 onto aluminium and steel

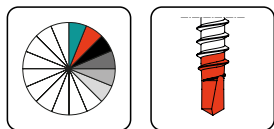
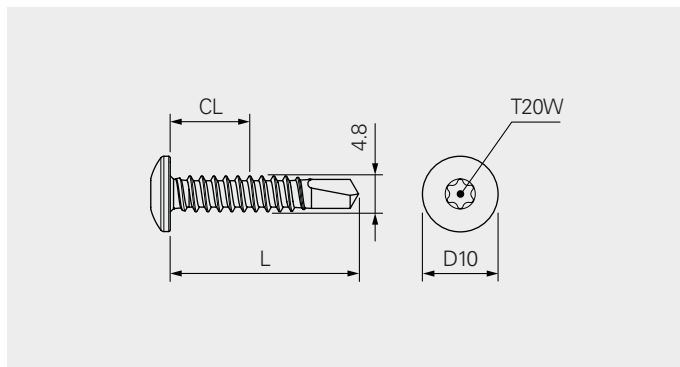
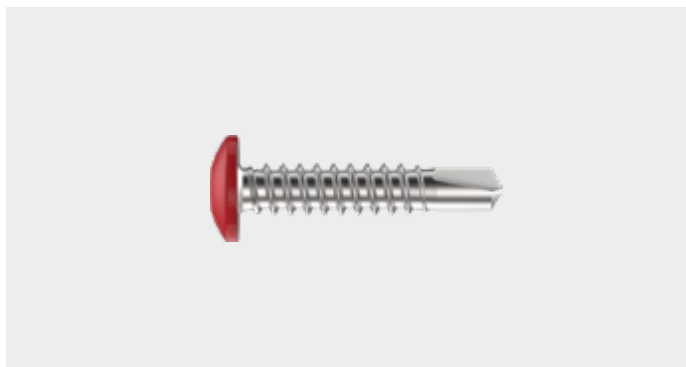
Product code	PU	L	CL	Head	Washer	Blank	Coloured
SX3/15-D12-5,5×30-A4	250	30	0-15	D12	-	1548549	1606159
SX3/15-L12-S16/A4-5,5×32-A4		32		L12	S16/A4	-	1614691



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	Pre-drill Ø Panel	
T25W-25-HEX 1/4"	1	25	1/4"	T25W	-	7662
Bit holder ZA 1/4"		58		1/4"		1162306
E420-1/4"-74		74		L12		973316
ZL-SX/SD-5,5/8,0		-	-	-	8.0	774499

SX3-4.8



Application

Fastening of cladding panel to aluminium or steel profile

Component 1 (t _I)		Component 2 (t _{II})		$\Sigma_{\max} t_I + t_{II}$
Cladding panel	–	Aluminium	2.2–3.0	–
		Steel	1.5–2.5	
Steel	1.2–1.8	Steel	1.2–1.8	3.0
Steel	1.2–3.0	Steel	1.2–3.0	–
Pre-drill Ø	5.0			

Fastener material

Austenitic stainless steel A2, case hardened drill point

Approvals



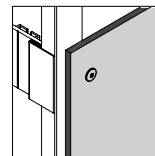
Features and Benefits

- Self drilling fastener suitable for installation of pre-drilled cladding panels onto steel or aluminum structure
- No pre-drilling of the rail needed
- Secured against unwinding given by coned shape

Documentation

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





Fastener in A2 onto aluminium and steel

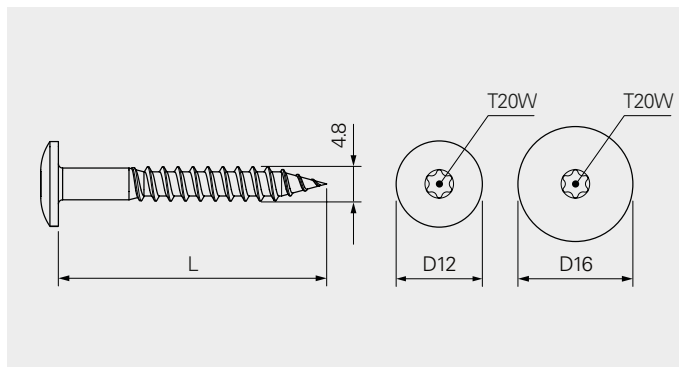
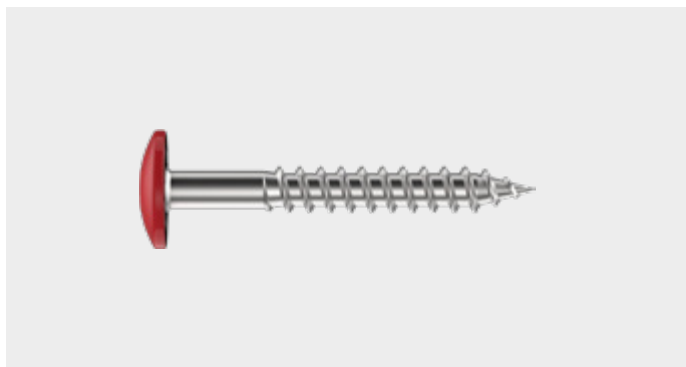
Product code	PU	L	CL	Blank	Coloured
SX3/11-D10-4,8×25	250	25	0-11	–	1416351
SX3/11-D10-4,8×25	500			1193547	–



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	Pre-drill Ø Panel	
T20W-25-HEX 1/4"	1	25	1/4"	T20W	–	895280
Bit holder ZA 1/4"		58		1/4"		1162306
ZL-SLA-4,8/7,0		–	–	–	7.0	1090740

TW-S-4.8



Application

Fastening of cladding panels to timber batten

Component 1 (t_i)

Cladding panel

Component 2 (t_{ii})

Timber

Fastener material

Fastener: Austenitic stainless steel A2

Washer: Austenitic stainless steel A2 with EPDM-seal

Approvals



EN 14592:2008

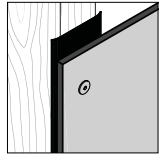
Features and Benefits

- Self drilling fastener suitable for installation of pre-drilled cladding panels onto timber batten
- Thanks to the threaded tip, the fastener grips immediately and is pulled into the timber
- Large product range allows versatile applications
- Thread geometry prevents splitting of timber
- EPDM tape is easily penetrated

Documentation

Declaration of performance (DoP) | Technical Data



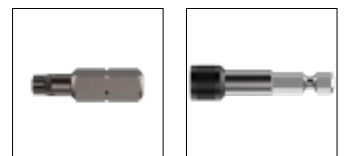


Fastener in A2 onto timber

Product code	PU	L	Head	Blank	Coloured
TW-S-D12-4,8×25	250	25	D12	902988	1363888
TW-S-D12-4,8×30		30		986742	1363889
TW-S-D12-4,8×38		38		1240032	1363890
TW-S-D12-4,8×44		44		–	1363891
TW-S-D12-4,8×60		60			1363892
TW-S-D16-4,8×38		38	D16		1363897

Fastener in A2 with washer onto timber

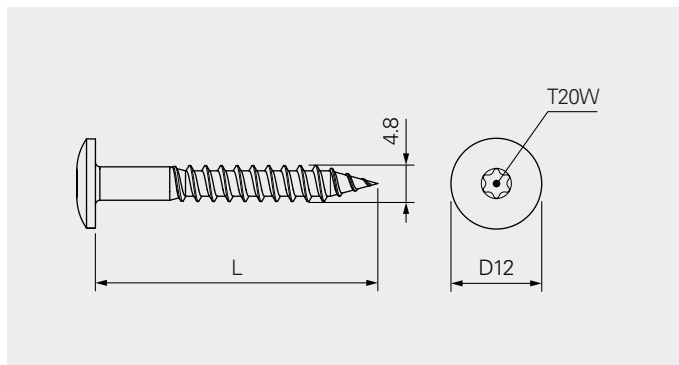
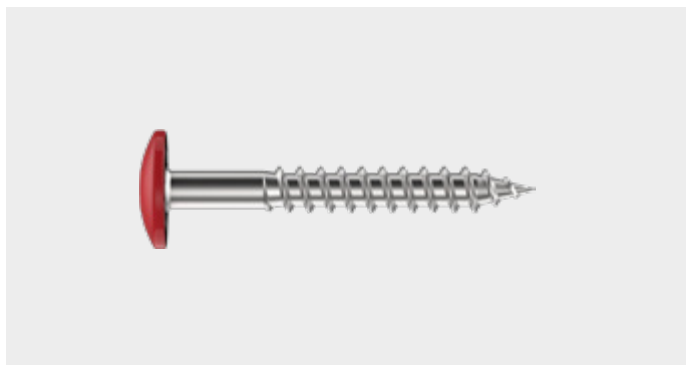
Product code	PU	L	Head	Washer	Blank	Coloured
TW-S-D12-S12-4,8×38	250	38	D12	S12	774892	1394550
TW-S-D12-S12-4,8×44		44			730224	1650508
TW-S-D12-S12-4,8×60		60			–	1583024
TW-S-D12-S16-4,8×38		38	D16	S16	1114336	1616457
TW-S-D16-S16-4,8×38					–	1685854



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
T20W-25-HEX $\frac{1}{4}$ "	1	25	$\frac{1}{4}$ "	T20W	895280
Bit holder ZA $\frac{1}{4}$ "		58		$\frac{1}{4}$ "	1162306

TW-A4-4.8



Application

Fastening of cladding panels to timber batten

Component 1 (t_i)

Cladding panel

Component 2 (t_{ii})

Timber

Fastener material

Fastener: Austenitic stainless steel A4

Washer: Austenitic stainless steel A4 with EPDM-seal

Approvals



EN 14592:2008

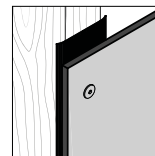
Features and Benefits

- Self drilling fastener suitable for installation of pre-drilled cladding panels onto timber batten
- Thanks to the threaded tip, the fastener grips immediately and is pulled into the timber
- Thread geometry prevents splitting of timber
- EPDM tape is easily penetrated

Documentation

Declaration of performance (DoP) | Technical Data



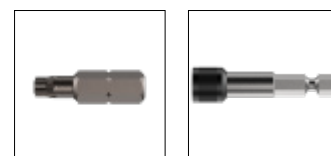


Fastener in A4 onto timber

Product code	PU	L	Blank	Coloured
TW-A4-D12-4,8×38	250	38	914772	1363894

Fastener in A4 with washer onto timber

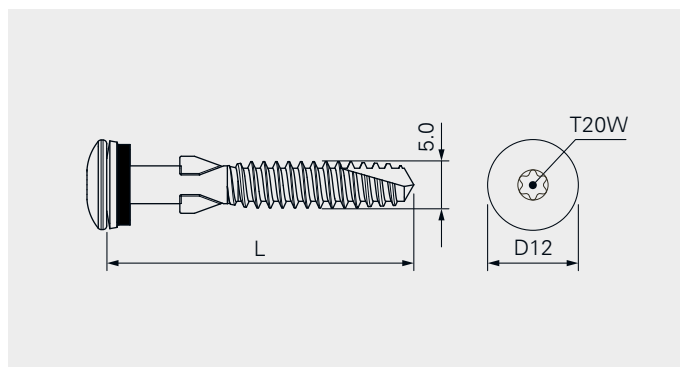
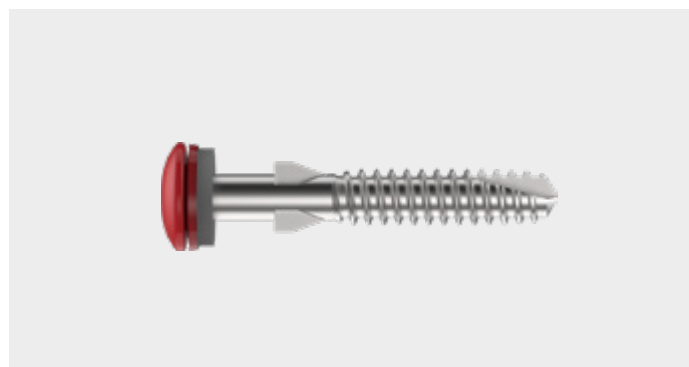
Product code	PU	L	Washer	Coloured
TW-A4-D12-S12-4,8×38	250	38	S12	1419939
TW-A4-D12-S16-4,8×38	250	38	S16	1685717



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
T20W-25-HEX $\frac{1}{4}$ "	1	25	$\frac{1}{4}$ "	T20W	895280
Bit holder ZA $\frac{1}{4}$ "		58		$\frac{1}{4}$ "	1162306

SCFW-S-5.0



Application

Fastening of a fibre cement board onto timber batten

Component 1 (t_i)

Cladding panel

Component 2 (t_{ii})

Timber

Fastener material

Fastener: Austenitic stainless steel A2

Washer: Aluminium with EPDM-seal

Approvals

ETA-22/0793

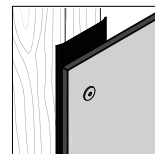
Features and Benefits

- Self drilling fastener suitable for fastening fibre cement panels onto timber
- No pre-drilling of fibre cement board required thanks to expanding wings
- Fast installation thanks to the threaded drill point

Documentation

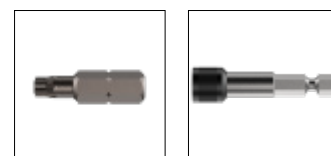
Approval document (ETA) | Declaration of performance (DoP)





Fastener in A2 onto timber

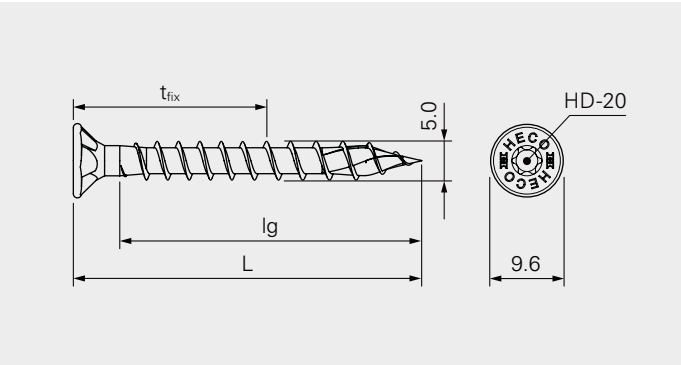
Product code	PU	L	t _{l, panel}	Blank	Coloured
SCFW-S-D12K-A12-5×42	250	42	≤8.0	861183	1391815



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
T20W-25-HEX 1/4"	1	25	1/4"	T20W	895280
Bit holder ZA 1/4"		58		1/4"	1162306

HTP-5.0

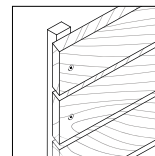


Application	Component 1 (t _i)	Component 2 (t _{ii})
Fastening of timber onto timber	Timber	Timber

Fastener material	Approvals
Fastener: Austenitic stainless steel A2	CE ETA-19/0553

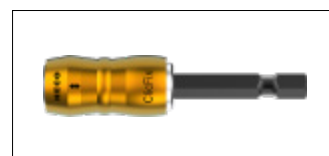
Features and Benefits
• Self drilling fastener suitable for installation of timber battens onto timber • Patented full thread pulls timber fixtures together without gaps and without pretension • The fastener is quicker at the front than at the back • Special drive for single-handed operation • Antifriction-coated for minimal driving torques

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



Fastener in A2 onto timber

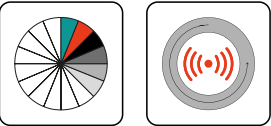
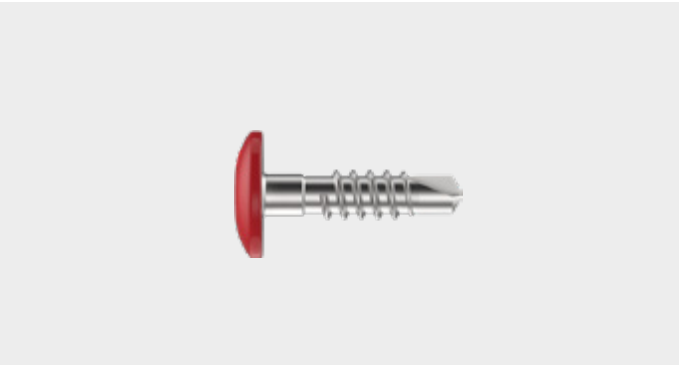
Product code	PU	L	lg	t _{fix, max.}	
HTP-S-CS-VFT-5,0x45/39	200	45	39	25	741192
HTP-S-CS-VFT-5,0x50/44		50	44	30	741193
HTP-S-CS-VFT-5,0x60/54		60	54	40	741194
HTP-S-CS-VFT-5,0x70/64		70	64	50	741195



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
HD20-25mm	10	25	1/4"	HD-20	1205164
HECO-ClickFix	1	60		1/4"	1205057

SLA3-4.8



Application

Fastening of aluminium composite panel to aluminium profile

Fastener material

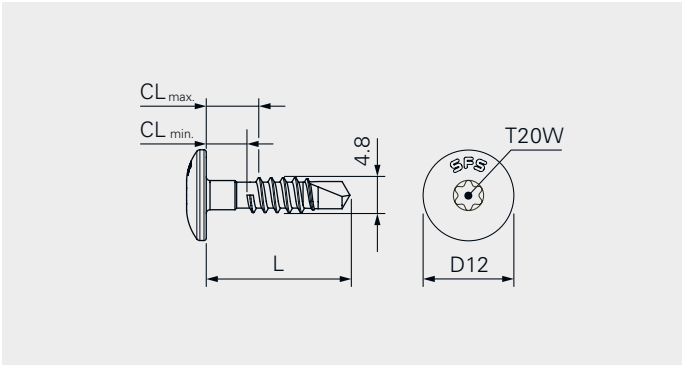
Austenitic stainless steel A2/A4

Features and Benefits

- Self drilling fastener suitable for installation of aluminium composite panels onto aluminium structure
- No torque control required given by free-spin zone
- Secured against unwinding given by free-spin zone

Documentation

Technical Data

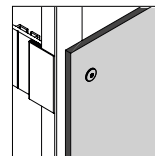


Component 1 (t_i)

Aluminium composite panel

Component 2 (t_{ii})

Aluminium 1.8–2.0



Fastener in A2 onto aluminium

Product code	PU	L	CL	Blank	Coloured
SLA3/6-S-D12-4,8×19	250	19	5-6	1025055	1484045
SLA3/8-S-D12-4,8×21		21	7-8	1343696	1653096

Fastener in A4 onto aluminium

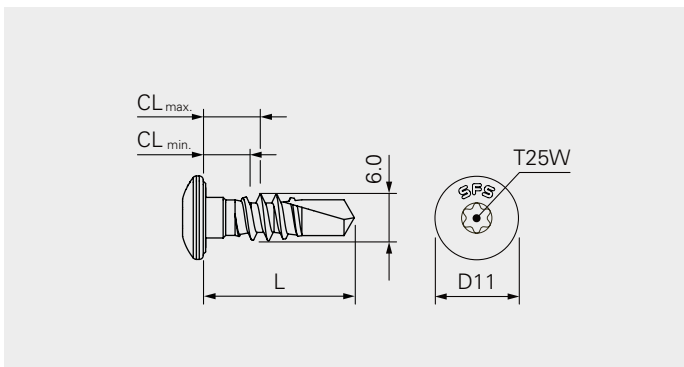
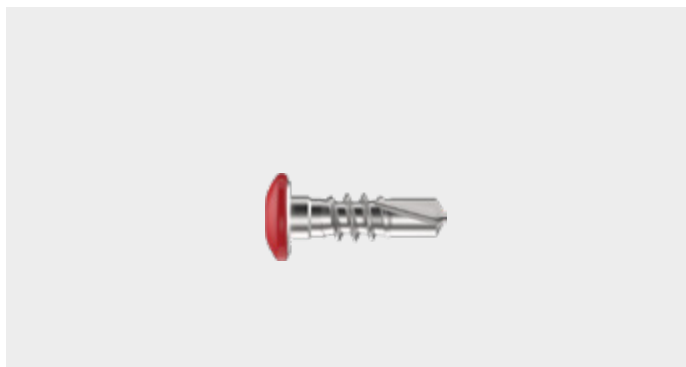
Product code	PU	L	CL	Blank	Coloured
SLA3/6-S4-D12-4,8×19	250	19	5-6	1637109	1419487



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	Pre-drill Ø Panel	
T20W-25-HEX 1/4"	1	25	1/4"	T20W	—	895280
Bit holder ZA 1/4"		58		1/4"		1162306
ZL-SLA-4,8/7,0		—	—	—	7.0	1090740

SLA5-6.0



Application

Fastening of aluminium composite panel to aluminium profile

Component 1 (t₁)

Aluminium composite panel

Component 2 (t₂)

Aluminium 1.8–3.0

Fastener material

Austenitic stainless steel A2

Approvals

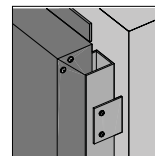
–

Features and Benefits

- Self drilling fastener suitable for installation of aluminium composite panels onto aluminium structure
- No torque control required given by free-spin zone
- Secured against unwinding given by free-spin zone
- Blade under the head to cut the protection film

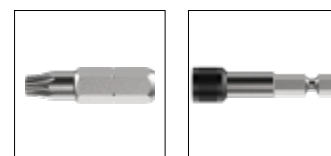
Documentation

Technical Data



Fastener in A2 onto aluminium

Product code	PU	L	CL	Blank	Coloured
SLA5/5-7-D11-S-6×20	500	20	5-7	1473414	1592312



Accessories/Ancillaries

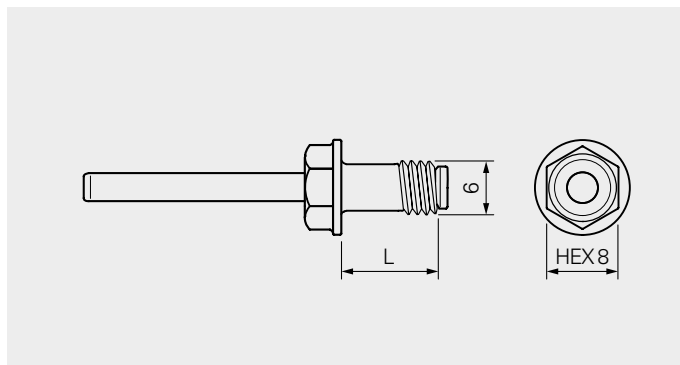
Product code	PU	L	Drive	Head drive	
T25W-25-HEX $\frac{1}{4}$ "	10	25	$\frac{1}{4}$ "	T25W	7662
Bit holder ZA $\frac{1}{4}$ "	1	58		$\frac{1}{4}$ "	1162306

Concealed fixing solutions





TUF-S



Application

Concealed fastener for fixing a metal hanger to cladding panel

Component 1 (t₁)

Metal hanger
Pre-drill Ø 6.5–7.0

Component 2 (t₂)

Cladding panel –
Pre-drill Ø 5.9–6.0

Fastener material

Body: Austenitic stainless steel A4

Mandrel: Carbon steel

Approvals

CE
ETA-15/0476

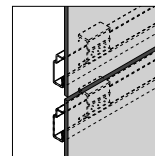
Features and Benefits

- Concealed fastener suitable for installation of a metal hanger onto cladding panel
- Secured against unwinding
- Time saving installation compared to conventional blind attachments
- Simple standard blind hole sufficient - no complex undercut hole required
- Quick and easy installation with battery rivet gun
- Blind holes can even be drilled on site
- Removable possible via hex head

Documentation

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





Fastener in A4 onto cladding panel

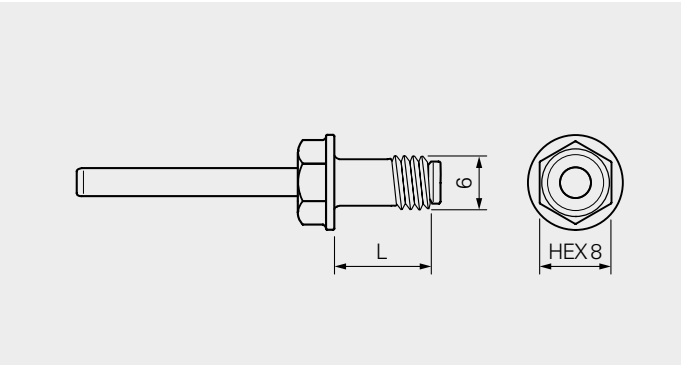
Product code	PU	L	
TUF-S-6×7-A4	250	7	1692229
TUF-S-6×7.5-A4		7.5	1692230
TUF-S-6×8-A4		8	1692241
TUF-S-6×8.5-A4		8.5	1692243
TUF-S-6×9-A4		9	1692245
TUF-S-6×10-A4		10	1692253
TUF-S-6×11-A4		11	1692254
TUF-S-6×12-A4		12	1692255
TUF-S-6×13-A4		13	1692256



Accessories/Ancillaries

Product code	PU	L	Drill depth	Drive	D	
Accu-Bird®	1	–	–	–	–	1679661
Depth locator universal		–	–	HEX8	–	1478567
VHM-6,0×40		40	5	–	6	1615070
VHM-6,0×40,5		40.5	5.5	–	6	1586737
VHM-6,0×41		41	6	–	6	1615072
VHM-6,0×41,5		41.5	6.5	–	6	1615073
VHM-6,0×42		42	7	–	6	1615074
VHM-6,0×42,5		42.5	7.5	–	6	1615075
VHM-6,0×43		43	8	–	6	1615077
VHM-6,0×43,5		43.5	8.5	–	6	1615078
VHM-6,0×45		45	10	–	6	1479984
MEASURING-SET-DRILLS-5.9-6.0		–	–	–	–	1715384

TU-S



Application

Concealed fastener for fixing a metal hanger to cladding panel

Component 1 (t ₁)		Component 2 (t ₂)	
Metal hanger		Cladding panel	–
Pre-drill Ø	6.5–7.0	Pre-drill Ø	5.9–6.0

Fastener material

Body: Austenitic stainless steel A4
Mandrel: Carbon steel

Approvals

CE
ETA-18/0883
(Rockpanel Premium A2)

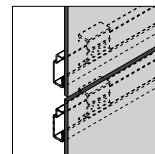
Features and Benefits

- Concealed fastener suitable for installation of a metal hanger onto cladding panel
- Secured against unwinding
- Time saving installation compared to conventional blind attachments
- Simple standard blind hole sufficient - no complex undercut hole required
- Quick and easy installation with battery rivet gun
- Blind holes can even be drilled on site
- Removable possible via hex head

Documentation

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





Fastener in A4 onto cladding panel

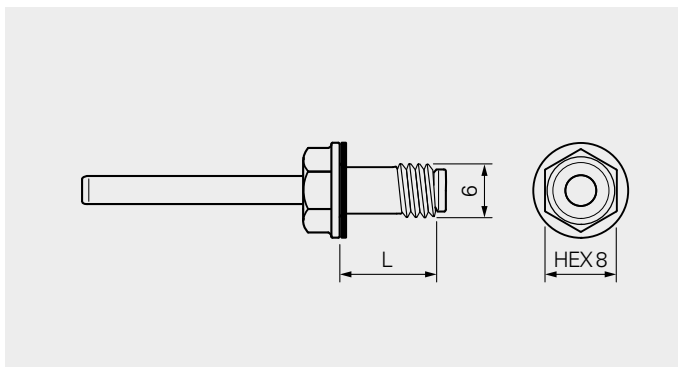
Product code	PU	L	
TU-S-6×9-A4	250	9	1692257
TU-S-6×11-A4		11	1692258
TU-S-6×13-A4		13	1692260



Accessories/Ancillaries

Product code	PU	L	Drill depth	Drive	D	
Accu-Bird®	1	–	–	–	–	1679661
Depth locator universal		–	–	HEX8	–	1478567
VHM-6,0×40		40	5	–	6	1615070
VHM-6,0×40,5		40.5	5.5	–	6	1586737
VHM-6,0×41		41	6	–	6	1615072
VHM-6,0×41,5		41.5	6.5	–	6	1615073
VHM-6,0×42		42	7	–	6	1615074
VHM-6,0×42,5		42.5	7.5	–	6	1615075
VHM-6,0×43		43	8	–	6	1615077
VHM-6,0×43,5		43.5	8.5	–	6	1615078
VHM-6,0×45		45	10	–	6	1479984
MEASURING-SET-DRILLS-5.9-6.0		–	–	–	–	1715384

TUC-S



Application

Concealed fastener for fixing a metal hanger to cladding panel

Component 1 (t₁)

Metal hanger

Pre-drill Ø

6.5–7.0

Component 2 (t₂)

Cladding panel

Pre-drill Ø

5.9–6.1

Fastener material

Body: Austenitic stainless steel A4

Mandrel: Carbon steel

Washer: EPDM

Approvals

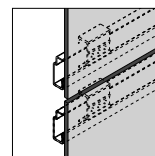
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Features and Benefits

- Concealed fastener suitable for installation of a metal hanger onto cladding panel
- Secured against unwinding
- Time saving installation compared to conventional blind attachments
- Simple standard blind hole sufficient - no complex undercut hole required
- Quick and easy installation with battery rivet gun
- Blind holes can even be drilled on site
- Removable possible via hex head

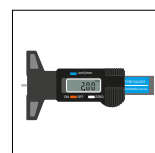
Documentation

Technical Data



Fastener in A4 onto cladding panel

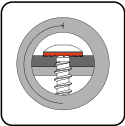
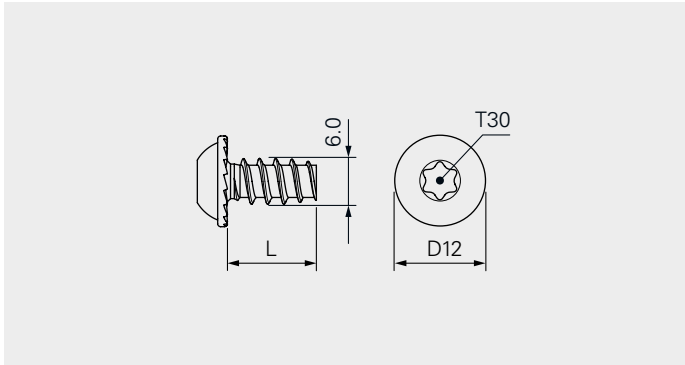
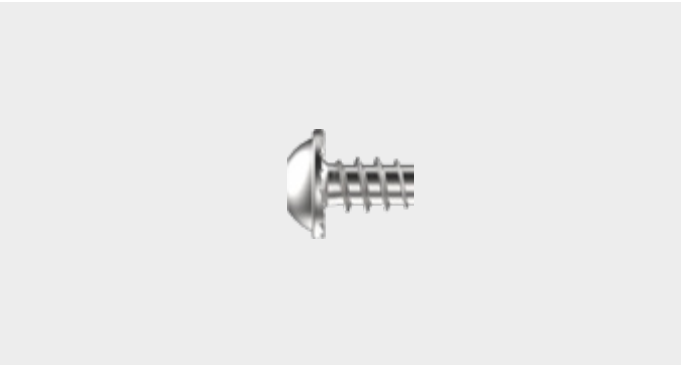
Product code	PU	L	
TUC-S-W10-6×14-A4	250	14	1745715



Accessories/Ancillaries

Product code	PU	Drill depth	Drive	
AccuBird®Pro	1	–	–	1679661
Depth locator universal		–	HEX8	1478567
VHM-6,0×45		10.0	–	1479984
MEASURING-SET-DRILLS-5,9–6,1		–	–	1715384

TD-A4



Application

Concealed fastener for fixing a metal hanger to cladding panel

Component 1 (t ₁)		Component 2 (t ₂)	
Metal hanger		Cladding panel	≥8.0
Pre-drill Ø	6.5–7.0	Pre-drill Ø	4.9–5.0

Fastener material

Austenitic stainless steel A4

Approvals

–

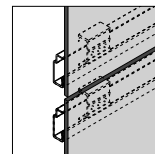
Features and Benefits

- Concealed fastener suitable for installation of a metal hanger onto cladding panel
- Secured against over-torquing given by rips below the head
- Time saving installation compared to conventional blind attachments
- Simple standard blind hole sufficient - no complex undercut hole required
- Blind holes can even be drilled on site

Documentation

Technical Data





Fastener in A4 onto cladding panel

Product code	PU	L	
TD-A4-D12/R-6×8	500	8	1585584
TD-A4-D12/R-6×9,5		9.5	1585585
TD-A4-D12/R-6×11,5		11.5	1585560
TD-A4-D12/R-6×14,5		14.5	1585587



Accessories/Ancillaries

Product code	PU	L	Drill depth	Drive	Head drive	D	
T30-25-HEX¼"	10	25	–	¼"	T30	–	24010
Bit holder ZA¼"		58	–		¼"	–	1162306
Depth locator universal	1	–	5.0	HEX8	–		1478567
HSS-4,9×40,5		40.5	5.5	–		4.9	1586911
HSS-4,9×42,5		42.5	7.5				1586913
HSS-4,9×45,5		45.5	10.5				1586914



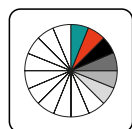
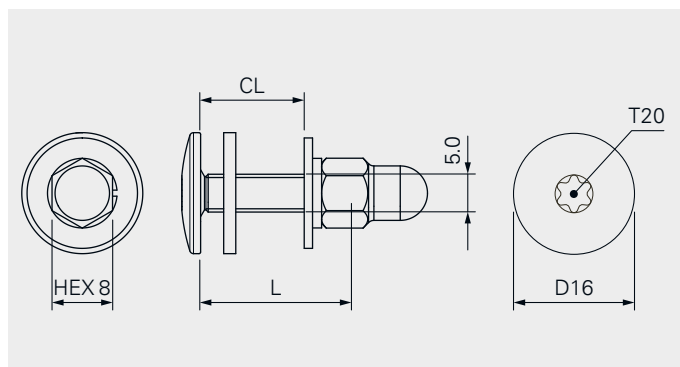






Balcony fixing

BFS-NUT-5.0



Application

Fastening of cladding panel onto aluminium or steel tube

Component 1 (t₁)

Cladding panel

Component 2 (t_{II})

Steel	≥2.0
Aluminium	≥2.0
Pre-drill Ø	5.1

Fastener material

Fastener: Austenitic stainless steel A2

Washer: Plastic

Spring ring: Austenitic stainless steel A4

Cover nut: Austenitic stainless steel A2

Approvals



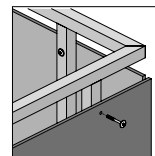
Features and Benefits

- Aesthetical fixing suitable for installation of balcony panels onto metal tube
- Convenient positioning of the washer from the rearside of the panel thanks to the adhesive washer
- Safety against unwinding of the cover nut given by the steel lock ring and spedcaps® coating
- Wide clamping range given by special cover nut with long threaded part

Documentation

Technical Data

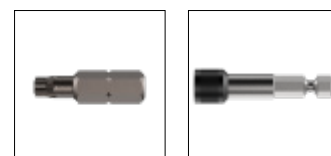
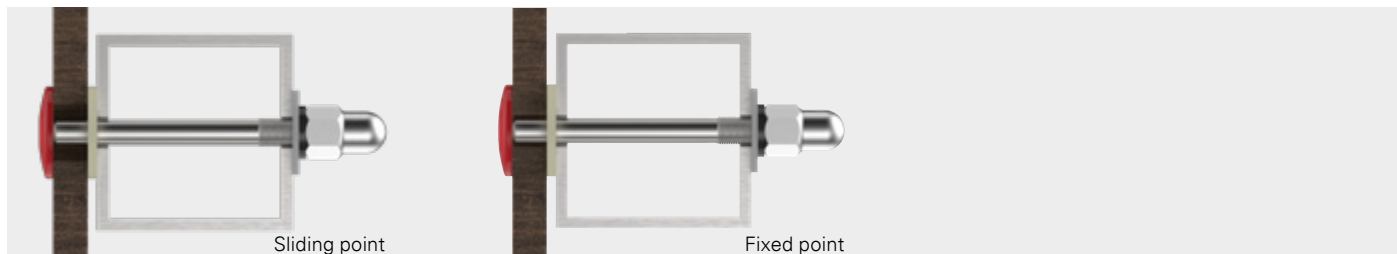




Fastener in A2 onto aluminium and steel

Product code	PU	L	CL	
BFS/7-11-S-D16-M5×20-NUT	100	20	7-11	1389874
BFS/12-16-S-D16-M5×25-NUT		25	12-16	1389878
BFS/17-21-S-D16-M5×30-NUT		30	17-21	1389883
BFS/22-26-S-D16-M5×35-NUT		35	22-26	1389885
BFS/27-31-S-D16-M5×40-NUT		40	27-31	1389892
BFS/32-36-S-D16-M5×45-NUT		45	32-36	1389894
BFS/37-41-S-D16-M5×50-NUT		50	37-41	1389895
BFS/42-46-S-D16-M5×55-NUT		55	42-46	1389896
BFS/47-51-S-D16-M5×60-NUT		60	47-51	1389897

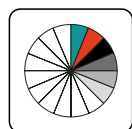
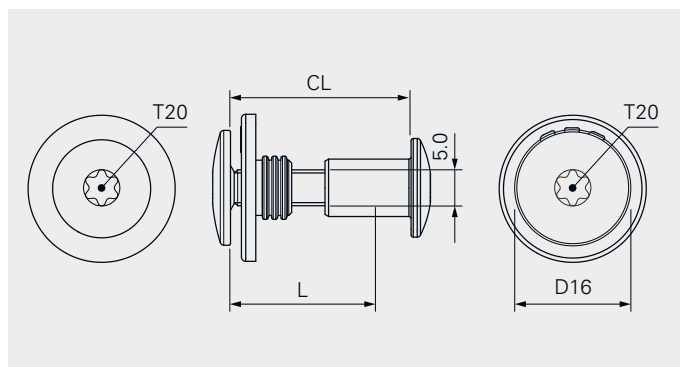
Installed BFS-NUT



Accessories/Ancillaries

Product code	PU	L	Drive	Head drive	
T20-25-HEX $\frac{1}{4}$ "	10	25	$\frac{1}{4}$ "	T20	769471
Bit holder ZA $\frac{1}{4}$ "	1	58		$\frac{1}{4}$ "	1162306

BFS-SLEEVE-5.0



Application

Fastening of cladding panel onto aluminium or steel tube

Component 1 (t₁)

Cladding panel

Component 2 (t_{II})

Steel	≥2.0
Aluminium	≥2.0
Pre-drill Ø	8.5

Fastener material

Fastener: Austenitic stainless steel A2

Centering sleeve: Plastic

Cover sleeve: Austenitic stainless steel A2

Approvals



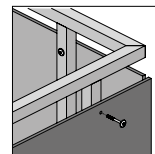
Features and Benefits

- Aesthetical fixing suitable for installation of balcony panels onto metal tube
- Perfect fit of centering sleeve and pre-drilled tube given by ribs
- Safety against unwinding of the threaded sleeve given by the steel lock ring and spedcaps® coating
- Wide clamping range given by special cover sleeve with long threaded part

Documentation

Technical Data

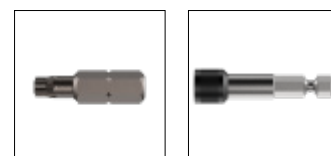
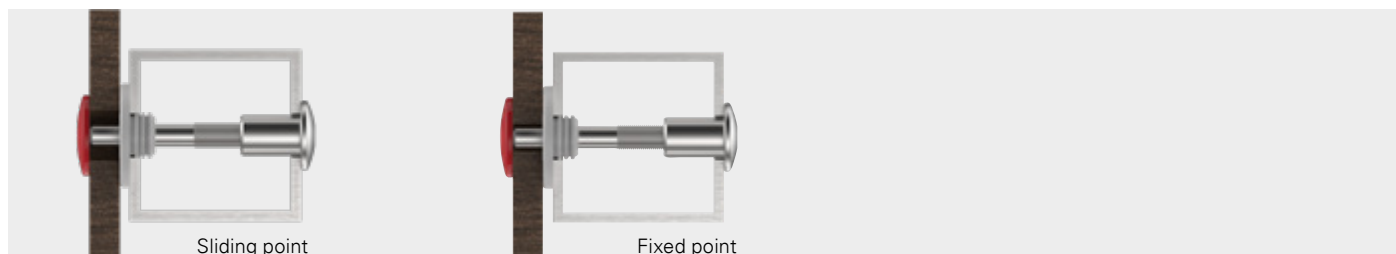




Fastener in A2 onto aluminium and steel

Product code	PU	L	CL	
BFS/21-25-S-D16-M5X20-SLEEVE	100	20	21-25	1395666
BFS/26-30-S-D16-M5X25-SLEEVE		25	26-30	1365671
BFS/31-35-S-D16-M5X30-SLEEVE		30	31-35	1365679
BFS/36-40-S-D16-M5X35-SLEEVE		35	36-40	1395681
BFS/41-45-S-D16-M5X40-SLEEVE		40	41-45	1395682
BFS/46-50-S-D16-M5X45-SLEEVE		45	46-50	1395683
BFS/51-55-S-D16-M5X50-SLEEVE		50	51-55	1395686
BFS/56-60-S-D16-M5X55-SLEEVE		55	56-60	1395687
BFS/61-65-S-D16-M5X60-SLEEVE		60	61-65	1395688

Installed BFS-SLEEVE



Accessories/Ancillaries

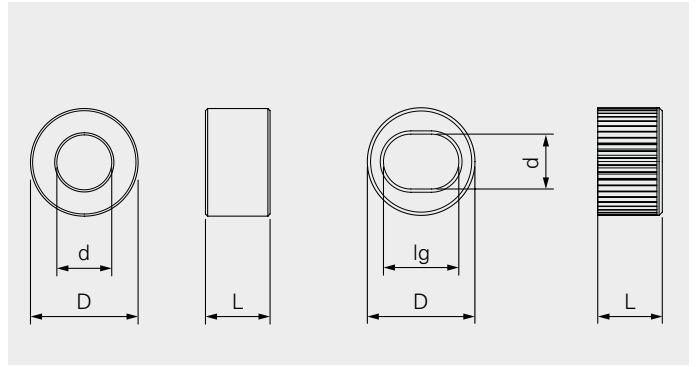
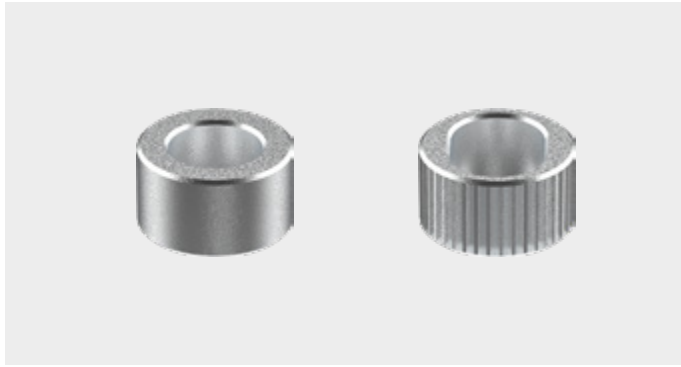
Product code	PU	L	Drive	Head drive	
T20-25-HEX $\frac{1}{4}$ "	10	25	$\frac{1}{4}$ "	T20	769471
Bit holder ZA $\frac{1}{4}$ "	1	58		$\frac{1}{4}$ "	1162306





Accessories

FP Sleeves



Application

Sleeve to create a fixed point in a pre-drilled cladding panel

Material

A = Aluminium

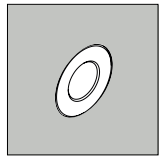
S = Austenitic stainless steel A2

Installation of a gliding point sleeve



Features and Benefits

- Sleeve suitable for creating a fixed-point in a pre-drilled panel
- Uniform pilot drilling diameter for all pilot holes in a cladding panel
- Fixed point can be defined on-site, therefore very flexible
- Longevity of the fixed-point sleeves as a result of using aluminium or steel

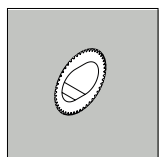


Fixed Point sleeves in Aluminium

Product code	PU	L	D = Pre-drill Ø	d	
FP-A-7,9×6	100	6	8	5.1	1343278
FP-A-8.0×7,5-5,1		7.5			1677475
FP-A-8.0×12-5,1		12			1677477
FP-A-8.5×3,5-5,1		3.5	8.5		1677473
FP-A-8.5×6-5,1		6			1677455
FP-A-8.9×9,5		5.9	9		1547655
FP-A-9,5×3,5-5,1		3.5	9.5		1677480
FP-A-9,5×7,4-5,1		7.4			1677492
FP-A-10,0×6-5,1		6	10		1677458
FP-A-9,9×7,7		7.7			1547652
FP-A-10,0×12-5,1		12			1677478
FP-A-13,0×6-5,1			6		13

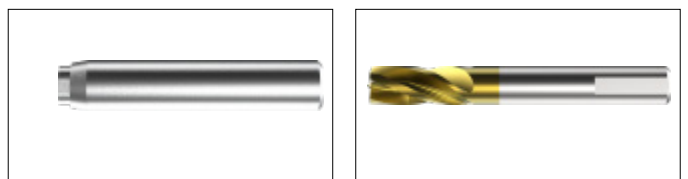
Fixed Point sleeves in A2

Product code	PU	L	D = Pre-drill Ø	d	
FP-S-8,5×6-5,1	100	6	8.5	5.1	1677459
FP-S-9,5×7,4-5,1		7.5	9.5		1677497
FP-S-10,0×6-5,1		12	10		1677498



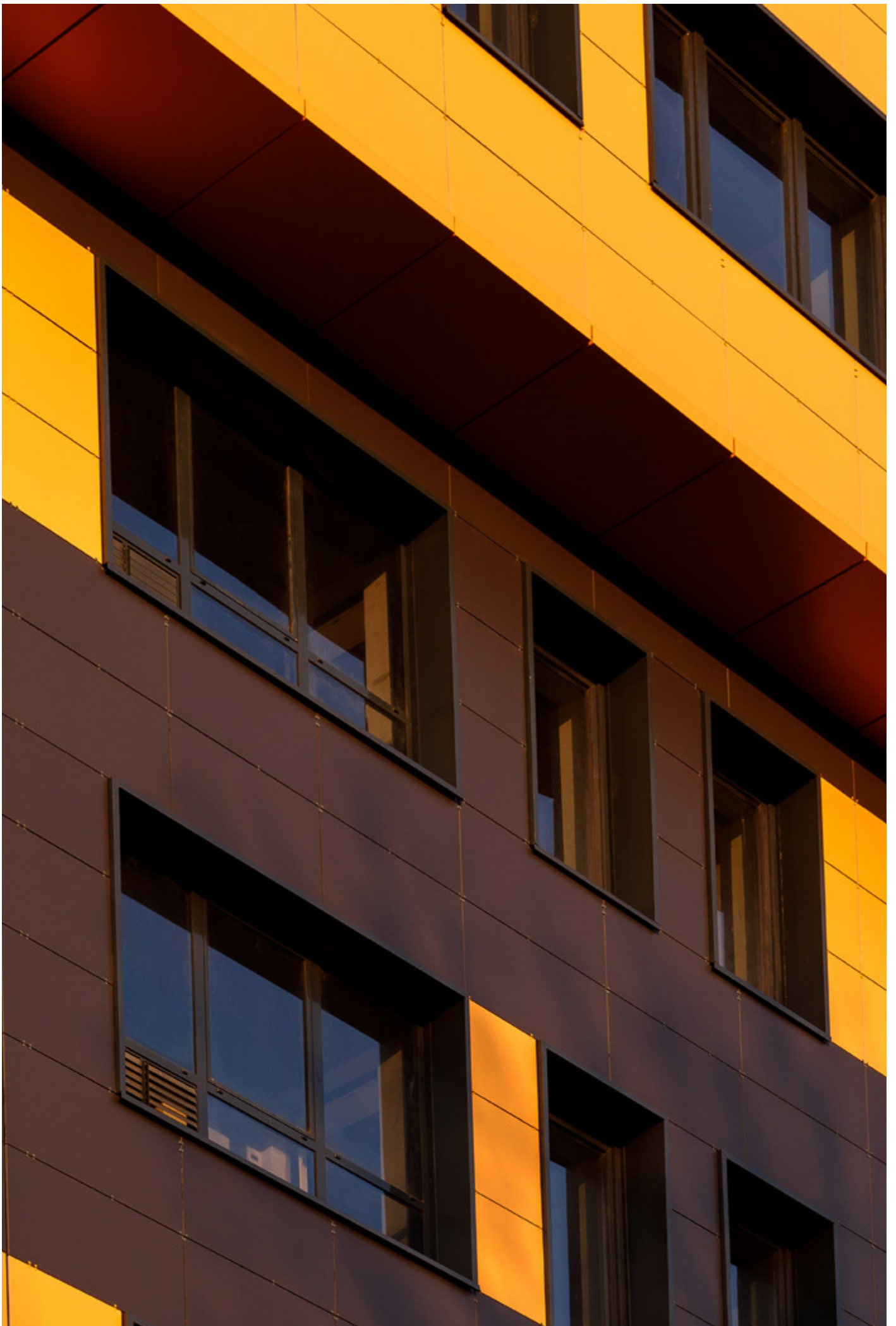
Gliding point sleeves in Aluminium

Product code	PU	L	D = Pre-drill Ø	d	lg	
GP-A-8,0×7,5-5,1	100	7.5	8	5.1	6.2	1677532
GP-A-10,0×6-5.2		6	10	5.2	7.8	1677531

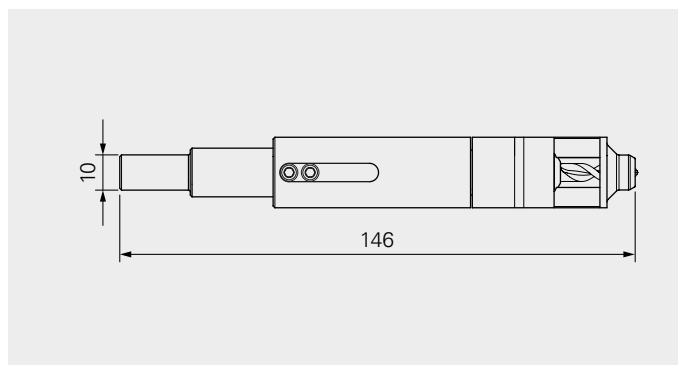


Accessories/Ancillaries

Product code	PU	D	L	
GP-H-8,0	1	8	—	1677534
GP-H-10,0		10		1677533
VHM-6,0×80		6	80	1677591
VHM-7,0×80		7		1677548
VHM-8,0×80		8		1677549
VHM-8,5×80		8.5		1677550
VHM-9,0×80		9		1677559
VHM-9,5×80		9.5		1677581
VHM-10,0×80		10		1677551
VHM-13,0×80		13		1677556



DG



Application

Pre-drilling of a metall subframe concentric to the pre-drilled cladding panel

Use of the DG



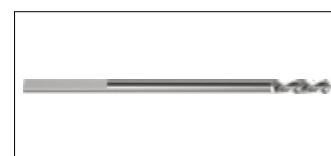
Features and Benefits

- Drilling gauge to achieve a hole in the subframe concentric to the pre-drilled panel
- Very convenient installation as a result of working single-handed
- Nosepiece is detached from the rotation
- Variety in use with the cone on the top of every nose piece
- Interchangeable nose piece adapted to the pre-drilled hole diameters of the cladding panel
- Quick and easy change of nose piece and drill bit



DG complete

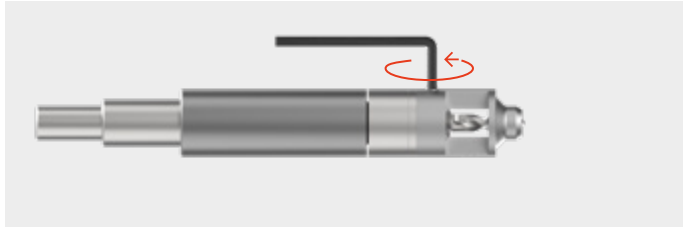
Product code	PU	L	Pre-drill Ø panel	Pre-drill Ø subframe	
DG-146×20-7,0	1	146	7–7.9	5.1	1320657
DG-146×20-8,0			8–8.9		1320658
DG-146×20-9,0			9–9.9		1320659
DG-146×20-10,0			10–10.9		1321704



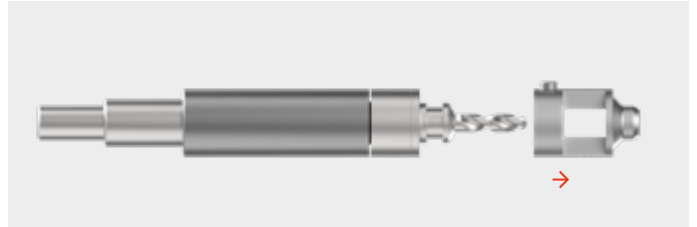
Accessories/Ancillaries

Product code	PU	L	Pre-drill Ø panel	Pre-drill Ø subframe	
Nosepiece DG-7,0	1	–	7–7.9	–	1321195
Nosepiece DG-8,0			8–8.9		1321194
Nosepiece DG-9,0			9–9.9		1321193
Nosepiece DG-10,0			10–10.9		1321190
HSS-DG-4,5×110	1	110	–	4.5	1573824
HSS-DG-5,1×110				5.1	1257217

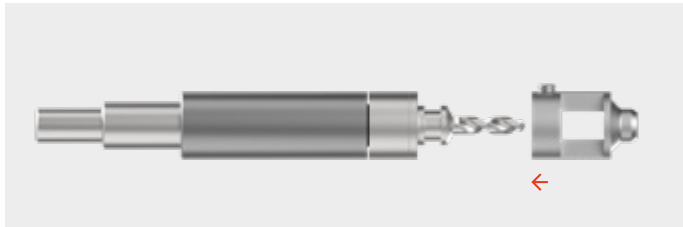
Switch of Nosepiece DG



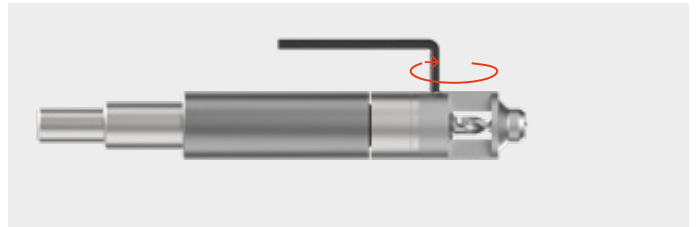
- Slightly loosen the pin with a hex wrench SW2.5



- Remove the Nosepiece DG by pulling it forward



- Push the Nosepiece DG in as far as it will go



- Tighten the pin to the stop using a hex wrench SW2.5

Switch of the HSS drill



- Completely loosen the pin with a hex wrench SW2.5



- Pull out the drill



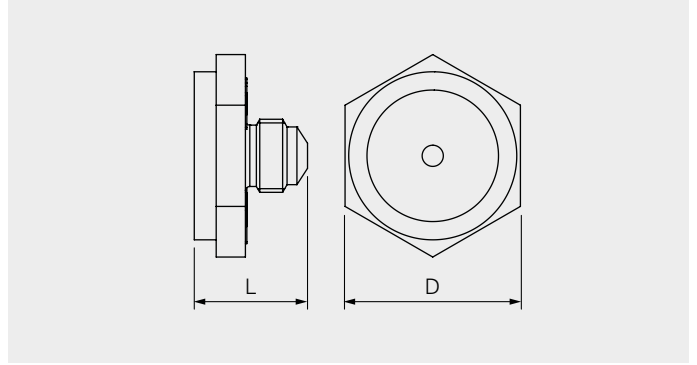
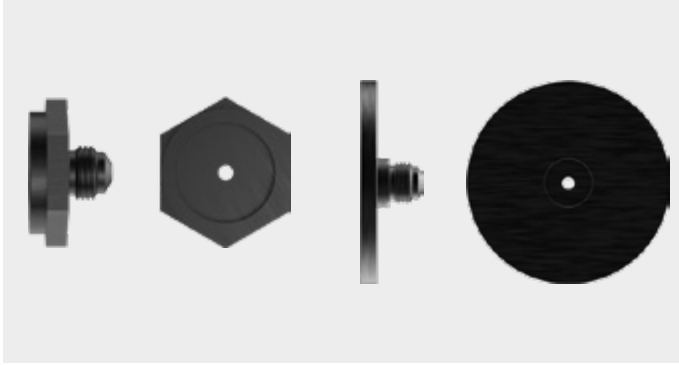
- When inserting the drill bit, make sure that the planar surface of the drill bit points in the direction of the pin



- The HSS drill must be flush with the Nosepiece DG
- Tighten the pin to the stop using a hex wrench SW2.5



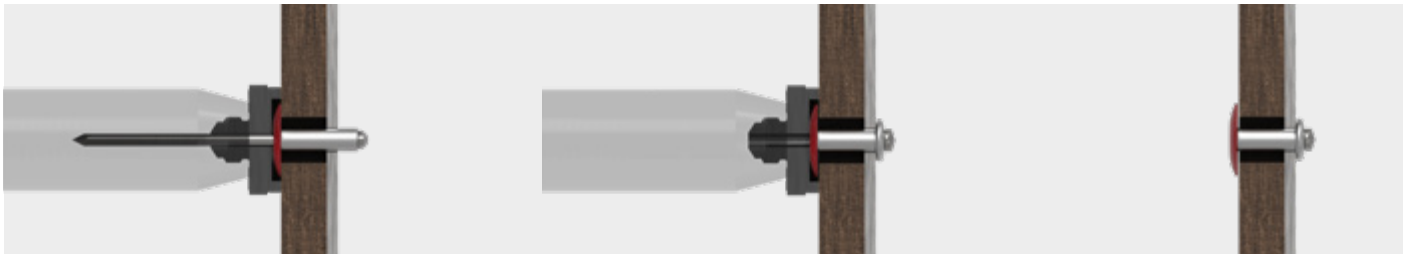
Nosepiece



Application

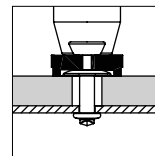
Nosepiece for a correct installation of a rivet

Installation instruction



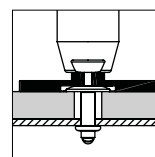
Features and Benefits

- Nosepiece suitable for installation of a rivet
- Ensures a small gap between the rivet-head and the panel surface
- Movement of the panel is possible thanks to the constraint-free installation of the rivet
- Compatible with the AccuBird® and PowerBird® riveting tools from GESIPA®
- Nosepiece in big outer-diameter for use in ACM panels
- Can easily be screwed onto the riveting tool



Nosepiece

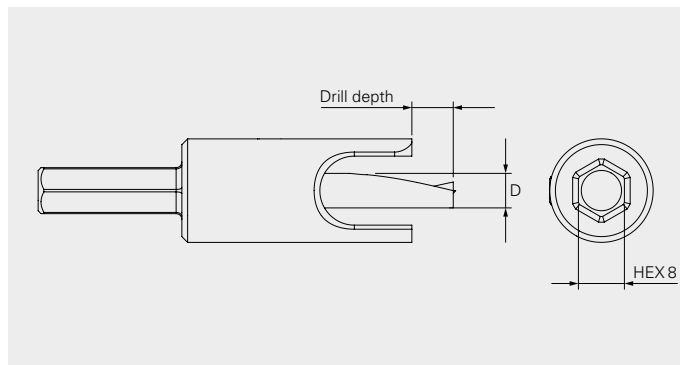
Product code	PU	L	D	To be used for rivets						
				AP-5.0			ASO-5.0		SSO-5.0	
				D11	D14	D16	D11	D14	D15	
NOSEPIECE-MOVING-POINT AP/ASO	1	15.5	23	✓	✓	✓	✓	✓	✗	974620
NOSEPIECE-MOVING-POINT-SSO-D15-50xL			30	✗	✗	✗	✗	✗	✓	1291200



Nosepiece for Aluminium composite panels

Product code	PU	L	D	To be used for rivets						
				AP-5.0			ASO-5.0			
				D11	D14	D16	D11	D14		
NOSEPIECE-MOVING-PT-AP11/ASO-D11-COMP	1	15.5	50	✓	✗	✗	✓	✗		1429523
NOSEPIECE-MOVING-PT-AP14/ASO-D14-COMP				✗	✓	✗	✗	✓		1414585
NOSEPIECE-MOVING-PT-AP16-COMP				✗	✗	✓	✗	✗		1429551

Depth locator



Application

Depth locator and drill bits for a correct blind hole

Life expectancy of the drills

	in HPL	in Fibrecement
VHM-6.0	500 drills	500 drills
HSS-4.9	200 drills	–

Recommended rotation-speed max. 1500–1800 rpm

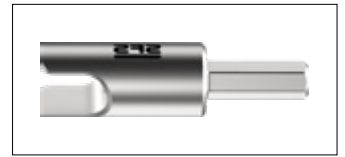
Installation instruction



Features and Benefits

- Depth locator and corresponding drill bits to create a correct blind hole
- Defined drill depth, no adjustment needed
- Drill bit can easily be exchanged





Depth locator

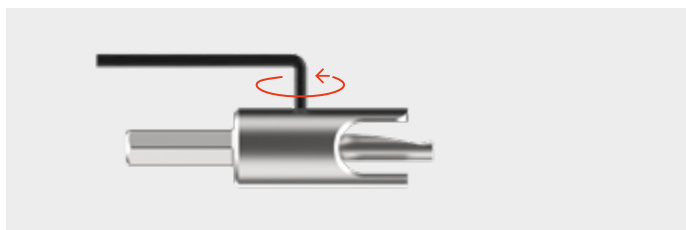
Product code	PU	
Depth locator for drill bit universal	1	1478567



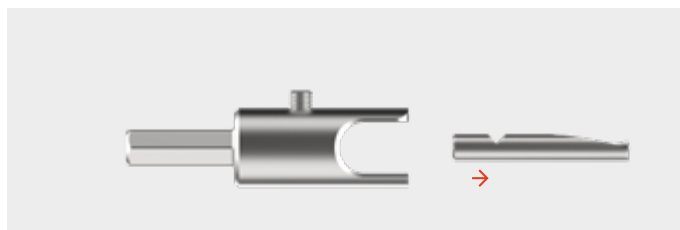
Drill bits

Product code	PU	L	Drill depth	D	
VHM-6,0×40	1	40	5	6	1615070
VHM-6,0×40,5		40.5	5.5		1586737
VHM-6,0×41		41	6		1615072
VHM-6,0×41,5		41.5	6.5		1615073
VHM-6,0×42		42	7		1615074
VHM-6,0×42,5		42.5	7.5		1615075
VHM-6,0×43		43	8		1615077
VHM-6,0×43,5		43.5	8.5		1615078
VHM-6,0×45		45	10		1479984
HSS-4,9×40,5		40.5	5.5	4.9	1586911
HSS-4,9×42,5		42.5	7.5		1586913
HSS-4,9×45,5		45.5	10.5		1586914

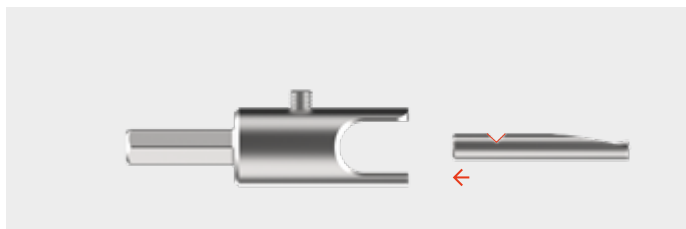
Switch of the drill bit



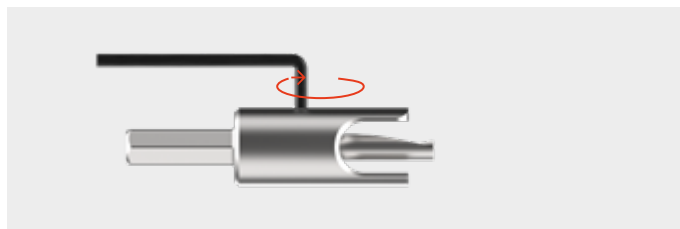
- Slightly loosen the pin with a hex wrench SW2.5



- Remove the drill bit by pulling it forward



- When insertig the drill bit, make sure that the notch of the drill bit points in the direction of the pin



- Tighten the pin to the stop using a hex wrench SW2.5



EPDM-Tape



Technical characteristics

Building material class DIN 4102	B2 (normal flammable)
Fire classification EN 13501-1	Class E
Water vapour resistance factor	32'000 µ
Temperature resistance	-30°C up to +80°C
UV resistance	24 months
Elongation	250%
Storage temperature	+5°C up to +25°C
Storage time	2 years

Application

Sealing tape to protect the timber batten against humidity

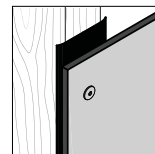
Material

Elastomer sheet made of black EPDM rubber

Features and Benefits

- High resistance to mechanical damage
- Excellent movement capability in both transverse and longitudinal direction
- High ageing resistance
- Solvent free





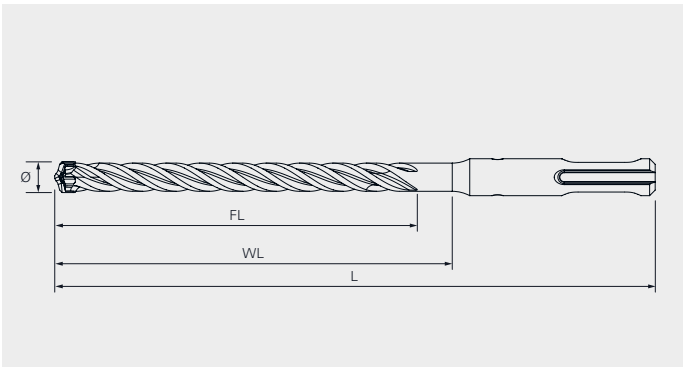
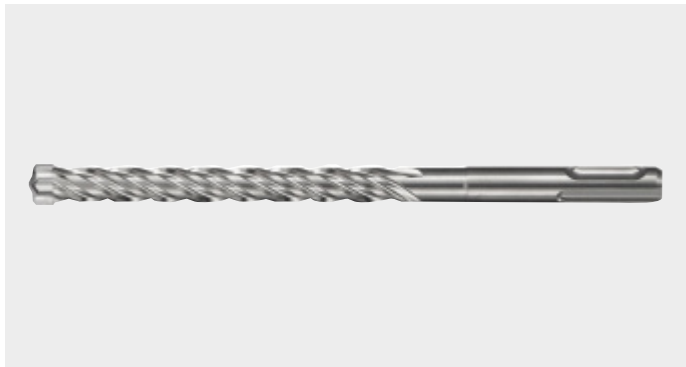
Sealing tape EPDM

Product code	PU	Width (mm)	Thickness (mm)	Roll length (m)	
EPDM-TAPE-0,75×60×25000	1	60	0.75	25	1122506
EPDM-TAPE-0,75×80×25000		80			1193862
EPDM-TAPE-0,75×100×25000		100			1122504
EPDM-TAPE-0,75×120×25000		120			1288745

Sealing tape EPDM self adhesive on one side

Product code	PU	Width (mm)	Thickness (mm)	Roll length (m)	
EPDM-TAPE-ADHESIVE-0,75×60×25000	1	60	0.75	25	1122507
EPDM-TAPE-ADHESIVE-0,75×100×25000		100			1122508
EPDM-TAPE-ADHESIVE-0,75×120×25000		120			1329007

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-6×215/150-4C	1	6	215	150	150	1487583
SDS-6×315/250-4C			315	250	250	1487584
SDS-6×515/455-4C			515	455	200	1608141
SDS-8×215/150-4C		8	215	150	150	1487585
SDS-10×215/150-4C		10				1487586

Bits, sockets and drive bars



Bit holder and different T-drives

Product code	PU	Drive	Head drive	L		
Bit holder ZA 1/4"	1	1/4"	1/4"	58	1162306	
T20-25-HEX 1/4"	10		T20	25	769471	
T20W-25-HEX 1/4"	1		T20W		895280	
T25W-25-HEX 1/4"			T25W*		7662	
T25P-25-HEX 1/4"	10		T25P**		1658024	
T30-25-HEX 1/4"			T30		24010	
T40-25-HEX 1/4"			T40		769474	
HD20-25mm			HD-20		1205164	
SR2-25-HEX 1/4"			SR2		1146918	
T30-40-1/2"		1/2"	T30	40	1489154	
T40-40-1/2"			T40		1489155	
E308-1/4"-50	1	1/4"	HEX8	50	1646160	
E313-1/4"-50			HEX13		508029	
E420-1/4"-74			L12	74	973316	
E508-1/2"-40		1/2"	HEX8	40	1648380	
E513-1/2"-78			HEX13	78	1649258	
HECO-ClicFix		1/4"	1/4"	10	1205057	

*W-Bit for wet painted fasteners

**P-Bit for powder painted fasteners



