

Offsite Capability

Modern Methods of Construction





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The SFS Group
Inventing Success Together

SFS is a worldwide leading supplier of mechanical fastening systems, assemblies, precision moulded parts and logistics solutions.

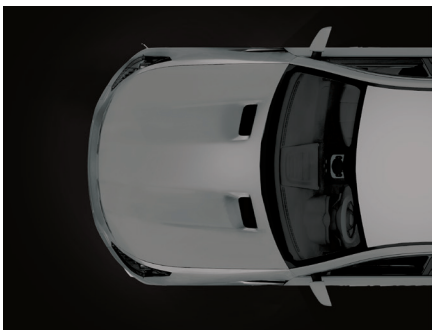
Together with our customers we develop and supply customised solutions for the most varied of industries and markets that offer sustained added value according to our value proposition "Inventing success together".

Within the Construction sector, we are the building envelope specialists and have innovative solutions for Roofing, Façade, Doors and Windows, Fall Protection and Timber Works.

Construction



Automotive



Aircraft



Medical



Electronics



Market Understanding
Modern Methods of Construction

As the demand on construction continues to grow in size and variety, the traditional methods are unable to cope. The requirements set out by the UK Government in 2013, Construction 2025 Strategy for Lower Costs, faster delivery and lower emissions compounded by the need to reduce dependency on-site labour, point to a different approach.

Modern Methods of Construction encompass a wide range of off and on-site methods, many are not new but the outcome of creating a better performing asset for the client and its users can be managed effectively through these new methods.

SFS, with a track record on innovating products and services with value in mind, are well placed to continue servicing this evolving sector, whatever the need.

Common Types of MMC

Volumetric/Modular

Large 3D elements that often form all or part of the buildings structure; they are normally constructed from steel or timber and allow many of the elements such as windows and services to be fitted before leaving the manufacturing site.

Panelised Systems

2D panels supplied to the pre-prepared construction site for assembly which creates a 3D structure. These roof, wall and floor cassettes can be supplied as 'open' panels with much of the services, windows, internal and external finishing to be completed on-site or 'closed' panels where more of the finishing has been completed in the factory.

Components

Here structural or non-structural elements are manufactured off-site to enable quick assembly on-site. Their design allows connections and routes for services to be pre-prepared aiding to the speed and accuracy.

Platforms

The more recent addition within construction, these are a pre-designed set of components or sub-assemblies with interfaces enabling a consistent, high performing asset to be created. The 'platform' approach has common core elements with a pre-defined set of selectable finishes leveraging cost benefits of large scale production while providing an element of customisation.

Sustainability
Securing Futures Together

As a responsible business, we're concerned with achieving sustainable success together.

Throughout our UK sites, we have been committed to year-on-year improvements in our operational energy efficiency. One of our initiatives is focusing on reducing our carbon footprint to protect our environment and secure the future of our industry. We do this by not sending waste to landfill, and recycling high quality materials, saving approximately 47 tonnes of carbon dioxide each year.

Positive Impact



Waste Management

Since 2017, waste services at SFS have been managed to reduce waste, leading to zero waste to landfill becoming the standard. Cardboard shredding machines were purchased to remove plastic from packaging, providing two main benefits: eliminating cardboard waste and offering a suitable alternative to plastic shrink wrap



Digital Specification

Sustainable construction practices demand precise planning and efficient processes. Project Builder, our powerful digital tool, enables quick and easy selection of optimal systems and solutions, leading to cost reduction and minimised environmental impact throughout the building process.



A Secure Future

At SFS we go beyond fixings and fasteners. Over the years, as we've grown, we've expanded to bring you the very best expertise across the building envelope. Because past and present, we've stayed true to a commitment to secure what matters - buildings and businesses, people and planet. Now we want to work together to be committed to securing a more sustainable future.



NVELOPE® Aluminium Sustainability

At SFS we're taking significant steps to enhance the sustainability of our NVELOPE® Aluminium brackets. Discover how our use of Alloy 6005 aluminium produced by Carbon 4 technology, as well as our participation in the CAB closed-loop recycling scheme, significantly enhances the sustainability of these products.



Applications
Metal, Timber & Concrete Connections

A comprehensive range of connections for most materials providing technical performance, backed by ETA documentation and calculation tools to support selection.

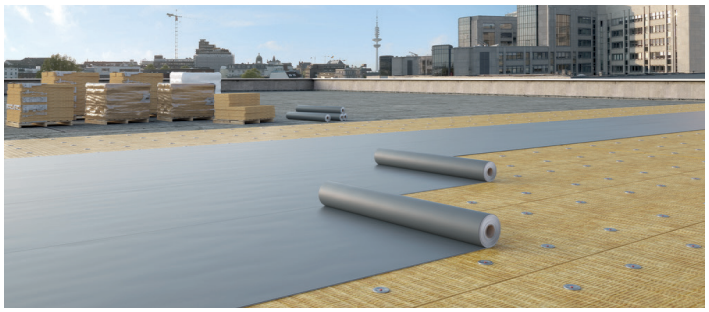
Fastening Systems for Metal Roof and Wall Cladding

- Approved by all major system manufacturers
- Wide range of system solutions for screw-in fasteners and rivet technology



Fastening Systems for Flat Roofing

- Steel, concrete, timber, and critical decks
- Forefront for setting standards in the mechanical fasteners



Fastening Systems for Internal Flooring

- Sub-floor solutions for fixings into steel frame and timber structures
- Ergonomic tools, enhanced health & safety



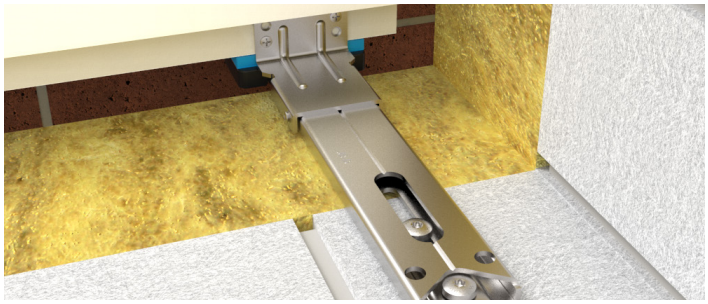
Hinges for Timber, U-PVC, Composite and Metal Doors

- High performance door and window solutions with CE Certification, PAS024, EN1935
- Most advanced hinge range for PVC, composite, timber and aluminium for residential and commercial sectors



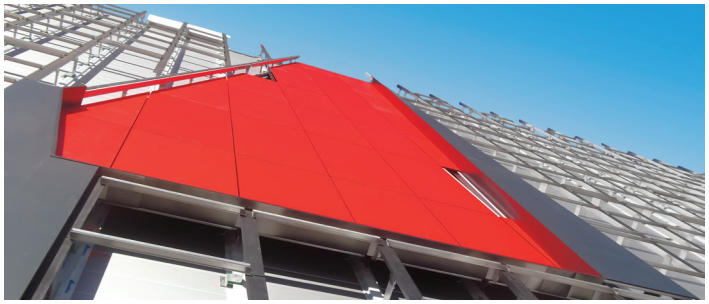
JB-D Bracket System

- Optimal installation of windows within the insulation layer
- Statistically verifiable system solution with proven values
- Flexibile installation possible from the inside of the building



Sub-frame Systems for Rainscreen Systems

- NVELOPE® the market leading brand in rainscreen subframe
- The NVELOPE® range supports concealed, exposed, and custom fastening solutions to suit your design needs.



Applications
Rainscreen Subframe

Rainscreen Profiles

SFS manufacture and supply a wide range of systems that are a proven and safe method of fixing cladding elements.

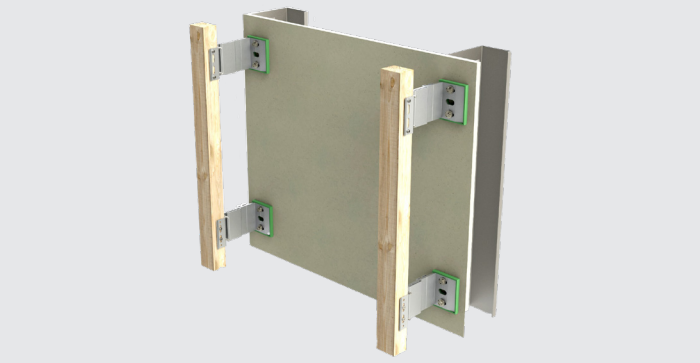
NV1

- NV1 is the NVELOPE® subframe system for vertical cladding applications
- NVELOPE® 'T' and 'L' profiles are fixed using NVELOPE® support brackets, fixed through a series of fixed and sliding points
- Flexible point brackets absorb wind loading and allow for expansion and contraction



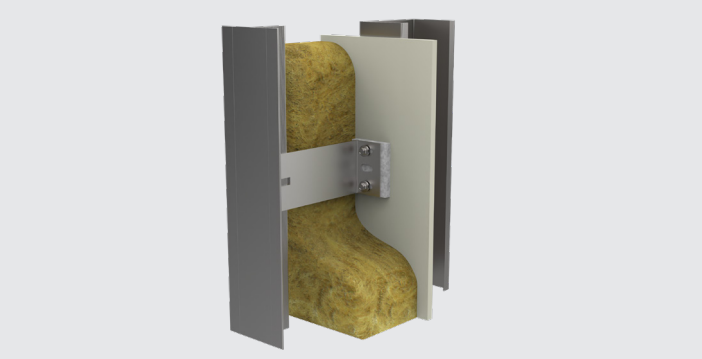
NV6

- NV6 is the NVELOPE® subframe system suitable for supporting a timber batten (to support vertical and/or horizontal cladding elements)
- Timber battens can be used to support timber cladding/ weatherboarding and ply
- NVELOPE® fixed and sliding points located on the NV6 adapters allow for expansion and contraction
- NVELOPE® bracket spacing is determined by cladding options such as the dimensions and weight of the facade cladding and local wind loads



Thermal Solutions

- 4 bracket options to provide maximum flexibility to balance budget against thermal performance. Available across virtually all NVELOPE® systems
- Non-compressable patented, A2 rated thermal pad improves thermal performance
- Supported by our Project Builder software



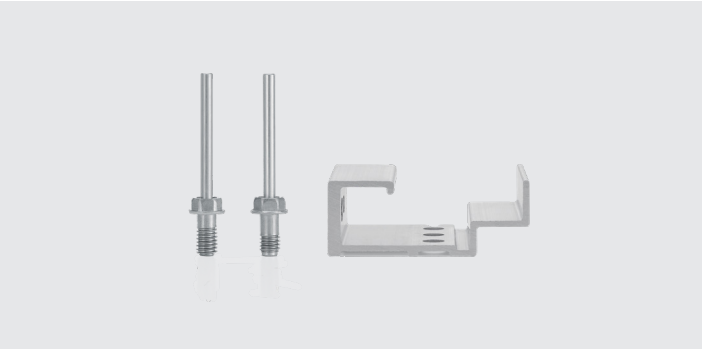
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to find out more.

Applications
Cladding Fasteners

SFS supply a diverse range of fasteners to connect rainscreen cladding.

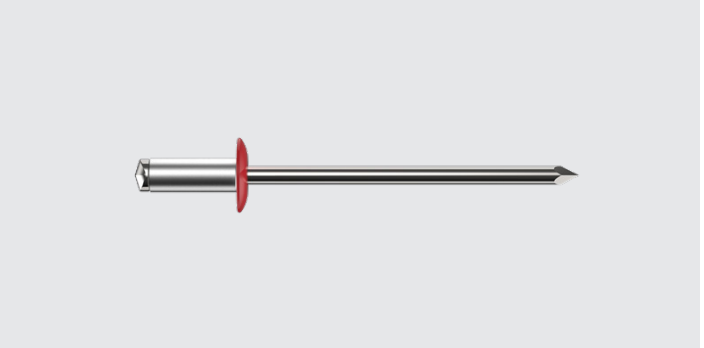
TUF-S Range

- Concealed fastener suitable for installation of a metal hanger onto cladding panel
- Simple standard blind hole sufficient - no complex undercut hole required
- Quick and easy installation with battery rivet gun
- Recommended by most flat board cladding manufacturers



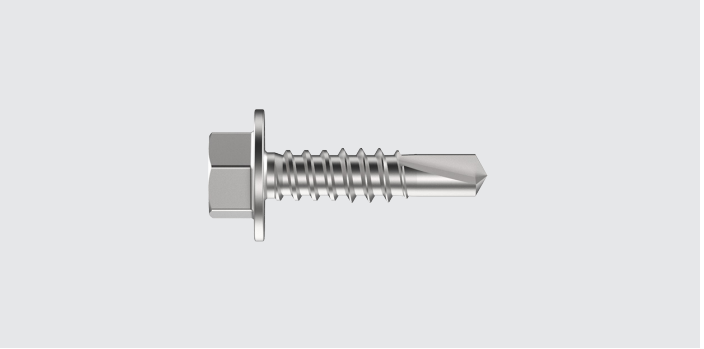
AP-5-0

- 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
- Available in powder coated paint finish to match facade



SDA5

- Stainless steel A4, self-drilling fastener for connecting pre-punched brackets to profiles within aluminium structure
- Secured against over-driving and system rattling by reduced thread and perfectly matched clamping length
- Dual drive allows installation with Hex Head or SR drive



Scan QR code
to find out more.

BRE Global Verified EPD

Applications
Flat Roof

SFS provide a range of mechanical fixing solutions to secure insulation and external waterproofing layers. Trusted by all leading membrane manufacturers.

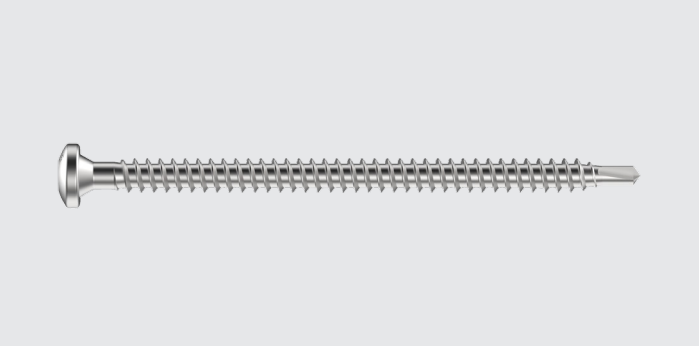
isoweld® 3000

- isoweld® field fastening system for welding PVC, TPO/FPO and EPDM based waterproofing membranes to the FI-P stress plate.
- Ideal for use in a factory environment or on-site
- Available in battery version for greater flexibility



Fasteners

- Range of fasteners suitable for installation into steel deck, timber and concrete
- Available in carbon and stainless steel options
- Can be paired with sleeves below or plates depending on application



Sleeves

- Selection of sleeves to pair with fasteners
- Provide thermal break to minimise point loss
- Available in range of head diameters to suit insulation or membrane fastening



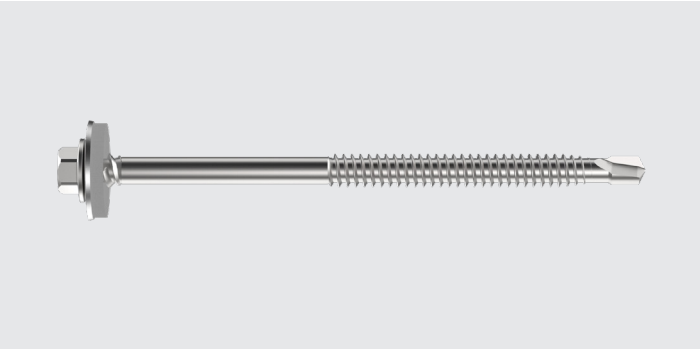
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Applications
Pitch Roof

SFS provide a range of self drilling fasteners for securing metal roofing and cladding to substructure. Trusted by all leading manufacturers.

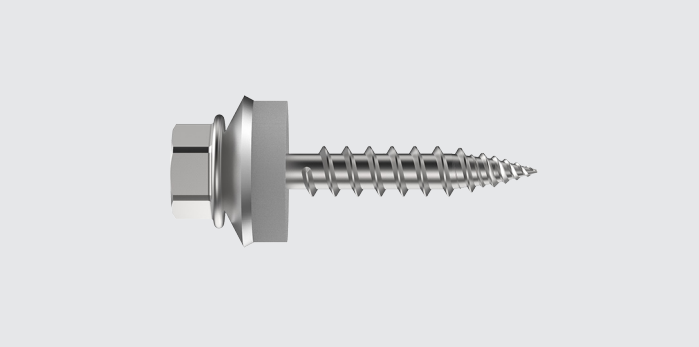
SXC Range

- Composite panel fasteners to suit light and heavy gauge substructure up to 14mm
- Can accomodate panel thicknesses up to 320mm
- High quality EPDM sealing washer for long term weather sealing
- Available in any RAL powder coated paint finish to match project requirements



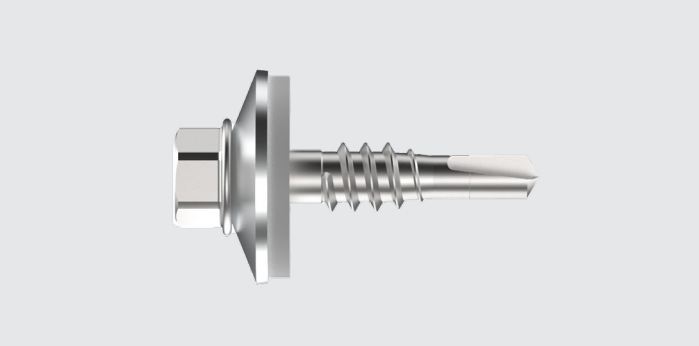
CXLW

- Hybrid fastener suitable for fastening onto metal and timber substrates
- No scratches on painted metal surfaces thanks to the sharp FastTip®
- High quality EPDM sealing washer with special AV-Shape for highest clemping range and long-term weather sealing
- Available in any RAL powder coated paint finish to match project requirements



SXL2

- Self-drilling fastener suitable for fastening of overlaps and flashing
- Secured against unwinding given by cut-off thread-end and free-spin zone
- High quality EPDM sealing washer for long-term weather sealing
- Available in any RAL powder coated paint finish to match project requirements



Scan QR code below to find out more.

Applications
Concrete

SFS supply a comprehensive range of ETA Approved fasteners for concrete supported by the 'SFS Designer Software'

MULTI-MONTI®-plus countersunk

- Enhancement of the concrete screw MULTI-MONTI A4 without the need for wall plugs
- Available in carbon and stainless steel to suit environmental conditions
- Toothed functional tip reduces the abrasion and thus permits multiple use in temporary fixations
- Available in diameters 5mm to 12mm and lengths 40mm to 120mm



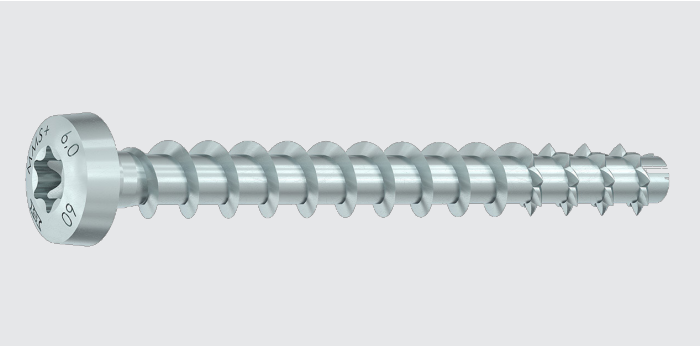
MULTI-MONTI® Plus Hex Head

- Self tapping fastener for concrete available in carbon and stainless steel
- Versatile solutions with hexagon head to allow controlled installation
- Available in diameters from 6mm to 20mm and lengths 40mm to 200mm



MULTI-MONTI® Plus Pan Head

- Self tapping fastener for concrete available in carbon and stainless steel
- Low profile pan head ideal for connecting brackets to concrete
- Available in diameter 7.5mm only and lengths 35mm to 115mm



Scan QR code below to find out more.

Fire resistance class R120

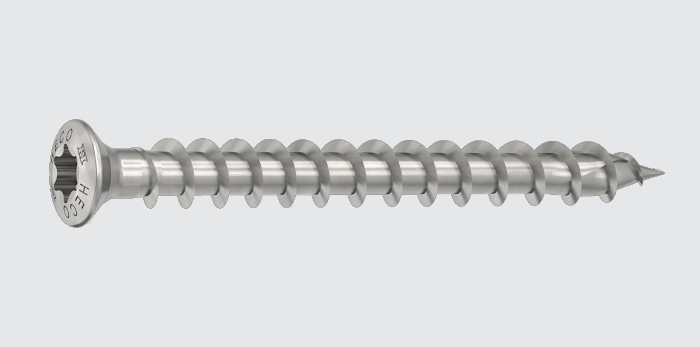
seismic

Applications
Timber

Wide range of fasteners for connecting structural timber, brackets, decking and cladding.

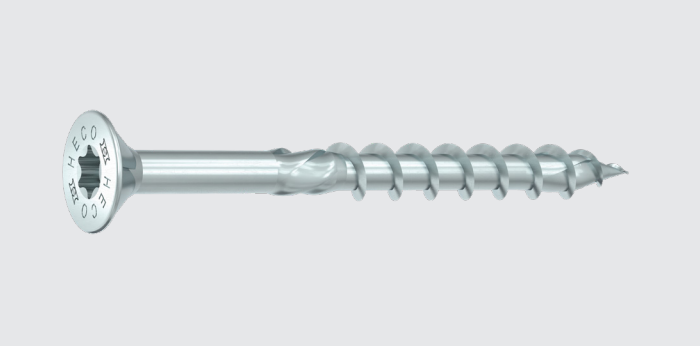
HECO Topix® Cladding Fastener

- Stainless steel fastener for securing timber planks to timber substrate
- Low profile head to minimise visual impact, comes in a range of sizes
- Secure solution compared to nails as threaded fastener will not pull out



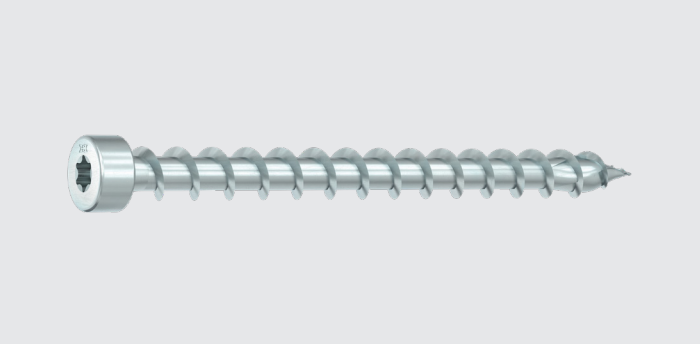
HECO Topix® Part Thread Fastener

- Versatile fastener for connecting timber, available in carbon and stainless steel
- Available in head types that include countersunk, flange, flange XL, and combi - hexagon head
- Diameters and lengths to suit any project requirements



HECO Topix® Full Thread

- Fastener for connecting timber with variable thread pitch to clamp timber together, available in carbon and stainless steel
- Available in head types that include countersunk, pan, flange, combi-hexagon and cylindrical head
- Diameters and lengths to suit any project requirements



Scan QR code below to find out more.

CE

Applications
Metal Connectors

SFS provide a range of fasteners for connecting light and heavy gauge steel within the structure.

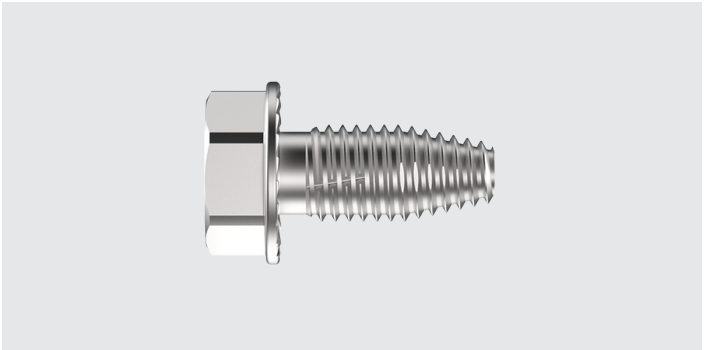
SRB

- Innovative solution that deforms sleeve to clamp metal sections together
- Single sided installation and single hand operation
- Installation method provided by tool minimises impact on user
- Available with air installation tool for quiet installation



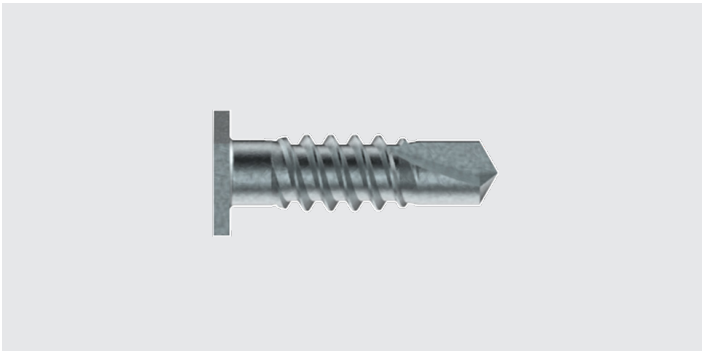
TDBL Nonut®

- Blind fastening – simple one side installation compared to nut and bolt
- Centring of the pre-punched metal profiles is achieved through the conical thread start
- High tension and shear resistance achieved by optimised fastener geometry
- Highest safety regarding over-winding and self-loosening



SDL4

- Self-drilling fastener with flat head for connecting light gauge framing
- Double thread for fast installation torque control
- Increased security against unwinding by the free-spin zone



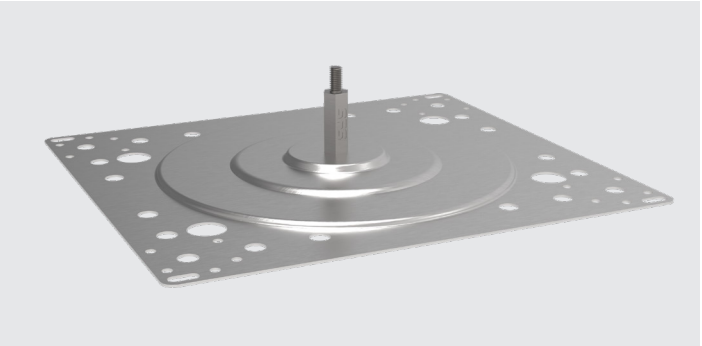
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Applications
Working at Height

SFS provides a range of leading fall protection systems that are designed to appeal to all parties who come into contact with working at height applications.

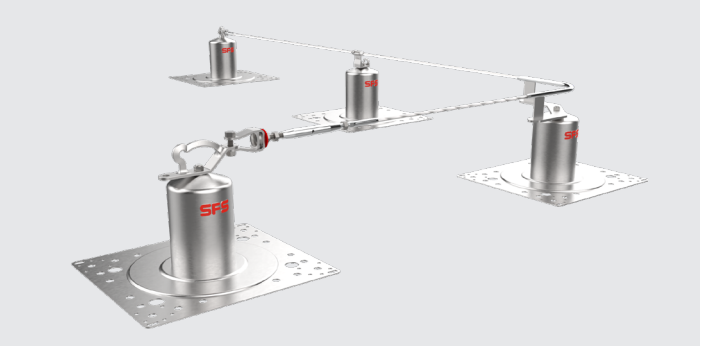
Highfix Support System

- Designed for roof top mounting of installations such as PV arrays, ventilation outlets, walkways or ducting trays.
- Interfaces directly with SFS baseplates and PV Mounting Plates.
- Can be installed on both flat roof and metal roof applications with a choice of direct fixation or thermally broken sleeve and fastener.



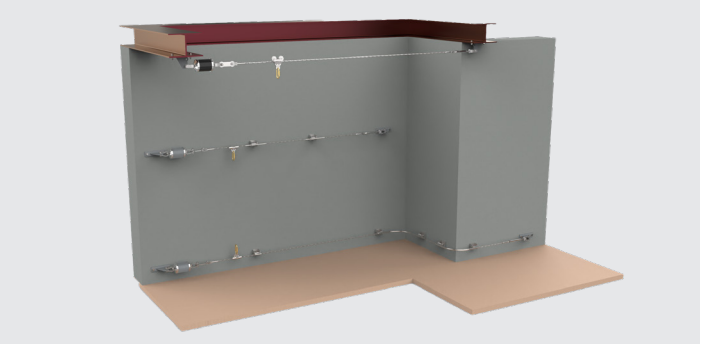
SOTER® II Horizontal Lifeline System

- Industry-leading horizontal lifeline system from SFS allows users to safely work at height without restrictions to their movement.
- Modular post and universal base plate - covers virtually all standard applications.
- Tested in conjunction with major roofing manufacturers of trapezoidal, composite, standing-seam and bituminous & single ply roof systems.



Overhead Lifeline System

- Overhead lifeline system provides continuous fall protection for users in exposed work place situations
- Multi-user continuous fall protection system, engineered to support up to 4 users, for up to 30m
- Versatile application: the system can be installed either overhead or wall-mounted to suit your specific need.



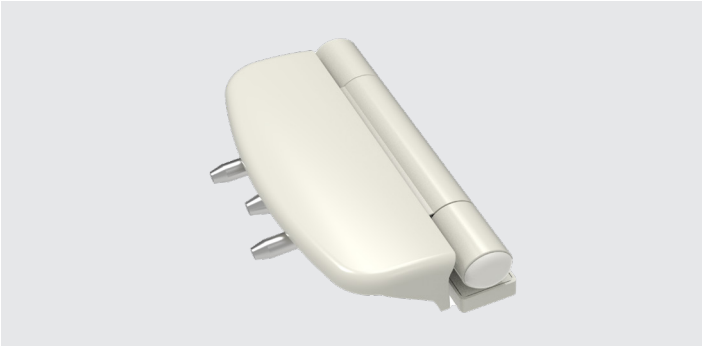
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Applications
Fenestration

SFS provide a range of industry leading fasteners, brackets and hinges for the fenestration sector

Dynamic 2D

- Hinge for rebated PVC-U or timber doors
- Excellent carrying capacity, 40Kg per hinge - easily capable of supporting triple glazing
- Easy directional adjustment including downwards adjustment to optimise seal on low thresholds
- Unique double pin design allowing doors to be hung with 3 hinges (depending on dimensions)



Dynamic 2D-C

- Load Capacity of 100kg with 2 Hinges
- Adjustment.
- +6mm/-2mm Height Adjustment +/-2mm Lateral Adjustment.
- Factory Set Gasket Pressure.
- Engineered to seamlessly fit into the rebate of your compo-site or timber door, creating a clean and unobtrusive look.



JB-D Plus window fittings

- Approved for use in various wall substrates.
- Suitable for all cantilevers up to 150mm.
- Steel-based system, non-combustible material according to DIN 4102-1 Class AA stable and flat support surface to transfer the load.
- Statistically verifiable system solution with proven values.
- Flexible installation possible from the inside of the building.



Scan QR code below to find out more.

Services
Capability

Whatever the phase of your project, SFS can offer assistance to determine the appropriate specification. Solutions will be to the individual product requirements and provide for long term security, functionality and real aesthetic appeal.

Design and Technical Support

Our market-leading support for building designers, includes a UK-based Specification Team focused on supporting specifiers with writing NBS clauses and the provision of BIM data to support a more robust specification and reduce the risk of poor envelope performance.



Product Configuration (painting, packaging, part assembly)

The efficient and timely handling of construction projects is becoming increasingly important as assignments grow in complexity. Efficient supply chain management is therefore gaining in significance.



Cutting Service

This new service will speed up installation on site, save time and money as well as minimising waste; it's overall the smarter way to operate.



Product Training

Practical demonstration and Toolbox training of how to install various types of SFS fasteners in different materials with the correct tooling. Help Identifying common issues in fastener failure and troubleshooting installation problems.



Testing and Validation

Conducting strength tests on installed fasteners to validate their performance. SFS pull-out test offers a reliable, data-driven approach to ensuring that fastening systems perform as expected in real-world conditions, delivering peace of mind for all stakeholders involved in a project.



Wind Calculation

This is a crucial step in ensuring the overall safety, durability, and cost-effectiveness of building systems that are exposed to wind forces. By taking these calculations into account, you protect both the structure and its occupants while also meeting regulatory requirements and optimising resources.



Register for a business account here →







The Invisible House, Warwick

SFS NVELOPE® NV1 System & SDA5 Fixings

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