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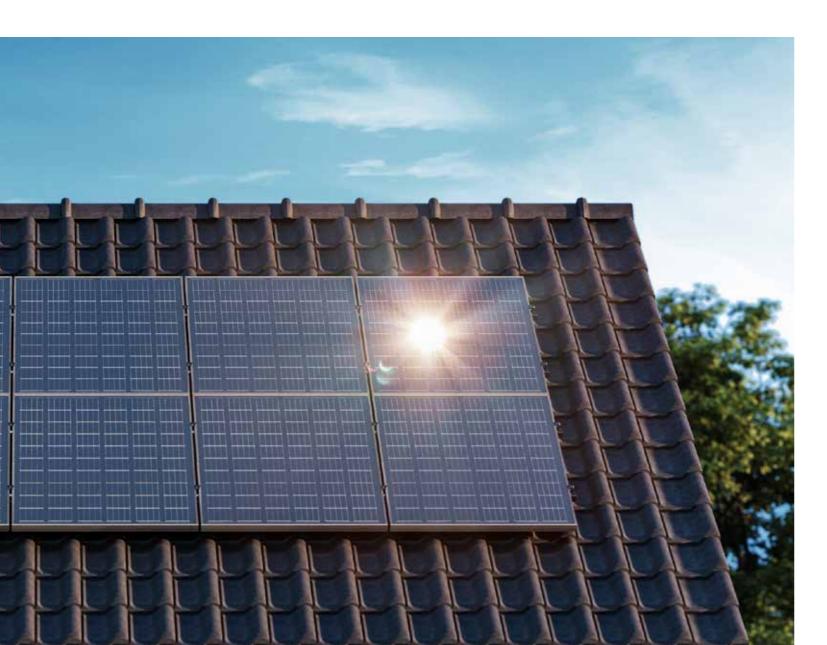


#### **FOREWORD**

For Esdec, 2024 is a special year; 20 years ago, our organisation was founded on the vision of making solar panel installation faster and easier. By installers, for installers. From the very first moment, we have been actively contributing to the transition to sustainable solar energy for generations to come. In the Benelux, Esdec has become the market leader and as part of Enstall, we are even worldwide!

#### **Special milestones**

I would like to mention some special milestones we have reached over the years. For flat roofs, the introduction of FlatFix Fusion, the modular and flexible system that has proven itself over many years. Then within our product line for pitched roofs, ClickFit, the EVO concept, which allows all common solar modules to be installed with only four standard components. These concepts are continuously developed further in application possibilities and extended with smart accessories to simplify installation even further.



Partly due to the explosive growth in the solar market, Esdec has developed considerably since its foundation. Every day, we work on further optimising our FlatFix and ClickFit product lines. We continuously expand our portfolio so that we can optimally anticipate the local situation in Europe.

#### **Broad development**

Our ambition lies not only in developing good mounting systems, but also in anything that simplifies the work of the installer. Therefore, in recent years we have set up an extensive training programme with product training courses, webinars and e-learnings. We bundle all these services in our new online portal that provides access to existing tools, such as the Esdec Calculator and the Esdec Academy, and our latest app Esdec OnSite.

Esdec's goal remains to accelerate the installation of solar energy. That energy transition remains a hot topic is beyond dispute. We are doing everything we can together to build a sustainable future. Our motto remains unchanged: building value for solar professionals.

I look forward to the next 20 years of working together for a more sustainable world.

Harm Haarlink

**Managing Director** 



The sun. An inexhaustible source of energy that we can quickly unlock. So we are doing just that, on mass. Through the roofs of our homes and businesses. All over the world. And in our view, this can always be done smarter, faster and simpler. Simply by making things more intelligent from the start. Based on this vision, we develop smart mounting systems for solar panels that create less hassle and more value for solar professionals. Ever since 2004, when Esdec was founded.

Our systems consist of lightweight, sturdy components that make mounting solar panels simpler and faster. With interchangeable parts that can be attached in a safe and convenient way. Always with only a minimum number of actions. Thus, we have significantly reduced assembly time and facilitate error-free installation.

And we go beyond developing innovative mounting systems. We help solar professionals in a few digital steps with a technical proposal, smart project support, and free accessible education and training. Online, on site or at our Innovation Centre in Deventer. With these services, we take away as much hassle as possible and create extra value. The success of this vision is evidenced by Esdec now being recognized as the preffered mounting system by over 12,000 installers in more than 20 countries.

# BUILDING VALUE FOR SOLAR PROFESSIONALS

With 20 years of experience and over 11 GW of solar panels installed, we can call ourselves international market leaders.







# MOUNTING SOLAR PANELS. IT CAN BE SMARTER, FASTER AND EASIER.

Our ClickFit series for pitched roofs and our Flatfix series for flat roofs prove it. Fast and reliable solar panel installation with less hassle and more efficiency.



#### **EASY INSTALLATION**

All Esdec mounting systems have been developed with optimum ease of installation for the installer in mind.







#### **MAXIMUM TIME SAVINGS**

ClickFit and FlatFix mounting systems have a limited number of installation steps, reducing installation time.



#### **LESS RISK**

With our mounting systems, the roof is protected from damage and leakage. The smart designs have been extensively tested and meet the strictest safety requirements.



#### **MINIMUM AMOUNT OF TOOLS**

Thanks to clever techniques and the small number of components, you always only need a minimal amount of tools.



#### **WARRANTY**

All our products are made of high-quality materials and are extensively tested. Esdec therefore gives a 20-year product warranty on its systems.





# $\checkmark$

# EASY CLICK SYSTEM

ClickFit EVO has a smart click connection that allows you to easily and quickly install the solar panels on the roof.



# FEWER COMPONENTS

ClickFit EVO systems consist of only four components, regardless of the type of pitched roof. This makes installation extra easy. Moreover, all these mounting systems feature the unique, clever ClickFit EVO click connection. This means fewer screws and therefore faster installation.



# **CLICKFITEVO, THE FOUR COMPONENTS**

#### 1. ROOF MOUNTING

Roof fastening varies according to the type of roof and situation.



Universal roof hook

# 2. ASSEMBLY

Mounting Rails for all types of pitched roofs. Quick and easy installation by clicking instead of screwing. This saves tools, number of operations and time.



**Mounting Rail** 

#### 3. MODULE CLAMPS

The universal module clamps are suitable for all solar modules with a frame thickness between 30 and 50 mm. They are assembled as standard and include solar module equalisation.

- Applicable as mid clamp and end clamp in combination with the end clamp support
- Available in grey and black



Module clamp

#### 4. END CAP

The end caps provide a stylish, windproof finish. They are available with and without clamp support in grey and black.

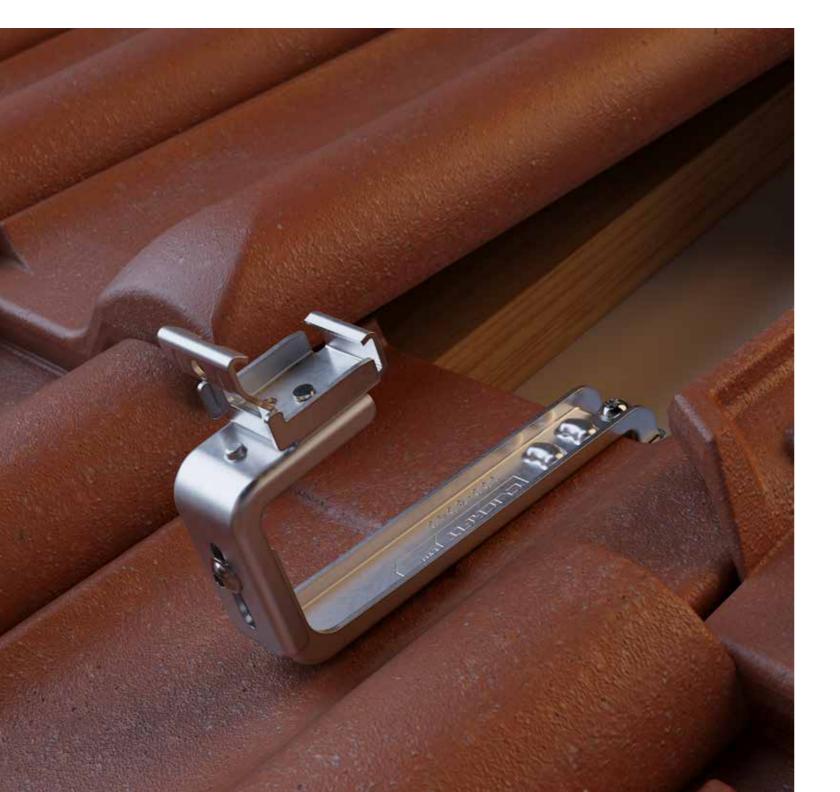


End cap



### **CLICKFIT EVO FOR TILED ROOF**

For the tiled roof, Esdec offers several solutions so you can always choose the product that best suits your roof. Installation by clamping, screwing, processing during colder temperatures: Esdec offers a solution for every situation



#### **Universal roof hook**

With the universal roof hook, you easily install without drilling into the roof structure, keeping the roof intact. The hook is infinitely adjustable in height and fits all common roof tile/ tile combinations. Thanks to the rotatable click connection, you easily and quickly install the rails in a horizontal or vertical position.



Universal roof hook

- Infinitely height-adjustable
- Fastening by clamping
- Vertical and horizontal mounting possible
- Self-aligning click connection
- Integrated cable management
- The LT variant is also resistant to extra cold processing temperatures (-5°C)



#### Truss hook

- Fastening by screwing onto the roof structure
- Infinitely height-adjustable
- Vertical and horizontal mounting possible through swivel click connection
- Self-aligning click connection
- Integrated cable management



Truss hook



#### **CLICKFIT EVO STEEL ROOF**

ClickFit EVO Steel roof is a smart mounting system for all types of steel roofs including trapezoidal steel roofs and corrugated steel roofs.

#### Trapezoidal or corrugated steel roof

For trapezoidal and corrugated steel roofs, Esdec has developed a simple solution where pre-drilling is unnecessary. You attach the mounting profiles directly to the trapezoidal or corrugated steel roof. This results in less handling on the roof and therefore even faster installation.

The compact Clickfit EVO steel roof mounting profiles have pre-punched holes and a preapplied EPDM rubber. This saves a lot of preliminary work.

You mount the profiles with the self-tapping screw, without pre-drilling.\*

#### **Self-tapping screw**

- · No pre-drilling required
- Underlying roof structure remains intact
- Multihead screw T30 and SW10

\*The profiles can also be installed with blind rivets. Here, the roof should be pre-drilled (6.5 mm).



Self-tapping screw

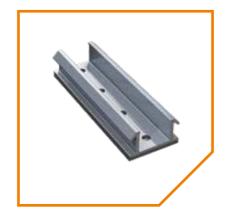
You can choose between a low and high mounting profile:

- With the low mounting profile, you position the solar panels tight on the roof for a nice look.
- The high mounting profile leaves enough free space to mount all available large optimisers under the panels.

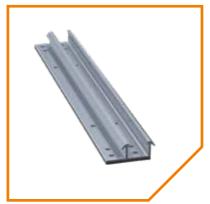
The high profile (landscape) also features a notch that makes it easy to align on the roof.

#### Low mounting profile

- Positioned tight on the roof for a nice look
- No pre-drilling required
- Both landscape and portrait positioning of solar panels



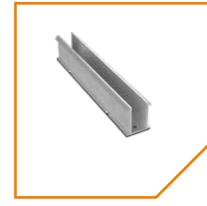
Low mounting profile landscape



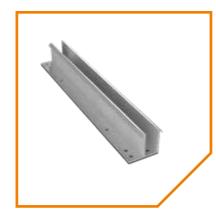
Low mounting profile portrait

### High mounting profile

- Suitable for installing large optimisers under the panel
- No pre-drilling required
- Both landscape and portrait positioning of solar panels



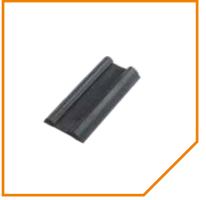
High mounting profile landscape



High mounting profile portrait



To attach the landscape mounting profiles to the corrugated steel roof, Esdec has developed EPDM adapter profiles. Thus, the mounting profiles allow you to mount solar panels on any corrugated steel roof in both a portrait and landscape arrangement.



Adapter profiles corrugated steel roof 'Low' landscape



Adapterprofiel corrugated steel roof 'High' landscape

#### For all other steel roofs, use the multipurpose hanger bolt!

The ClickFit EVO hanger bolt comes fully assembled. With the flexible adapter, you easily and quickly catch roof unevenness of up to 10 degrees. The universal, rotatable and self-aligning ClickFit EVO click connection allows you to then mount the solar modules in landscape as well as portrait with the familiar components such as the universal rails, module clamp and end caps. Besides the steel roof, this hanger bolt is also suitable for corrugated, EPDM, bitumen and Mediterranean tile roofs.

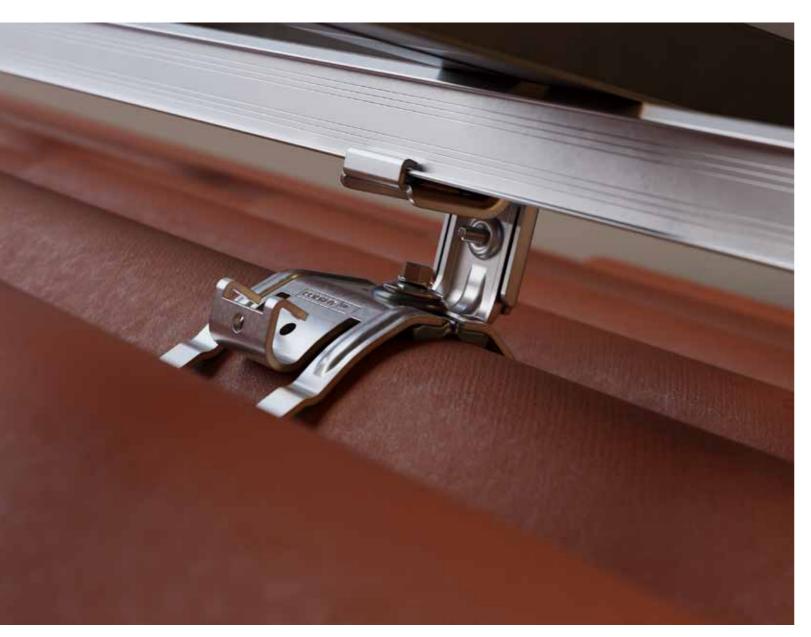


Hanger bolt





ClickFit EVO Corrugated sheet roof is specially developed for corrugated sheet roofs as you regularly see in the agricultural sector.



The ClickFit EVO mounting bracket is an ideal solution for corrugated roofs. The brackets are attached to roof sheet screws screwed into the underlying purlins. By using the existing screws, there is no need to re-drill. This saves time and it ensures that you do not have to damage the roof structure.

The mounting bracket is suitable for both existing and new roofs and, like all ClickFit EVO systems, is very quick and easy to install. Suitable for corrugation type 177/51, the bracket leans on the valleys of the corrugation of the sheet and closes precisely around the high part of the corrugation. This distributes pressure evenly, ensuring reduced point loads and a stable system. Eternit, a leading manufacturer

of corrugated sheet products, has extensively tested and approved the mounting bracket. The ClickFit EVO mounting bracket therefore bears the quality seal 'Eternit approved'





Corrugated mounting bracket

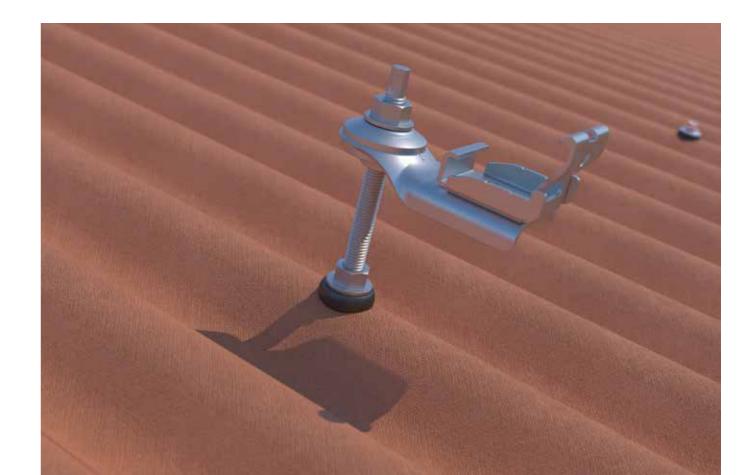
- Infinitely height-adjustable
- Even pressure distribution
- Less point load
- Self-aligning click connection
- Mounting rail can only be installed vertically
- Integrated cable management
- Applicable for both new and existing buildings



Hanger bolt

# Do you have a corrugated roof with a different wave type? Then use the multifunctional hanger bolt.

This hanger bolt is also suitable for steel, EPDM, bitumen and Mediterranean tile roofs.





The ClickFit EVO standing seam roof system is suitable for most common types of standing seam roofs.



#### Always a suitable clamp!

Esdec offers a suitable clamp for almost every flange, for single or double-folded flanges, click and round flanges. The patented S-5! clamps are the basis for our assembly solution. Depending on the type of seam, you choose the matching clamp. Our unique ClickFit EVO click connection is already fitted to the clamp, so all you have to do is screw the clamp onto the standing seam. Once again, you only need one tool for installation. That saves time! Moreover, the seam clamps do not perforate the roof, keeping it intact and watertight.

#### Both horizontal and vertical rails possible

With the seam clamps, the rails can be placed both horizontally and vertically, thanks to the rotatable ClickFit EVO click connection. This gives you flexibility in choosing landscape or portrait arrangement of the solar modules.

When the rails are mounted horizontally over the standing seam, the high rigidity of the system is maximised. As a result, it is often possible to skip standing seams. This means less installation time and lower costs!

- Fully assembled
- Roof remains intact
- Vertical and horizontal mounting possible through swivel click connection
- Self-aligning click connection
- Possibility of skipping seams



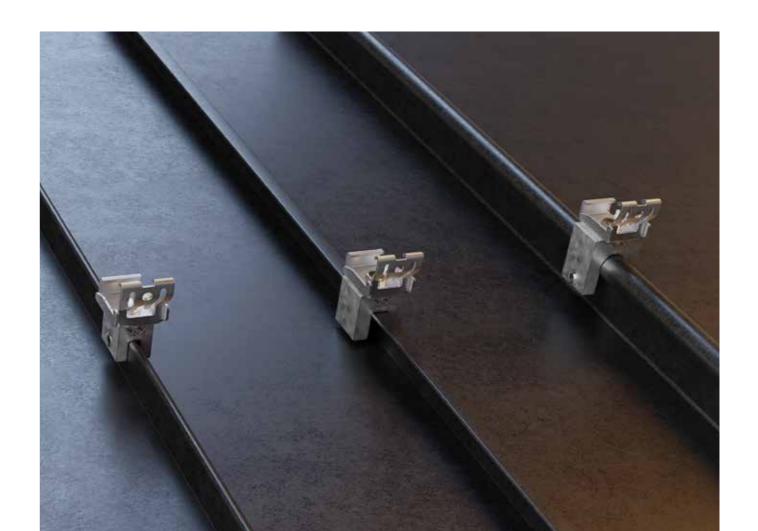
Round seam clamp 23mm



Double folded seam clamp 9mm



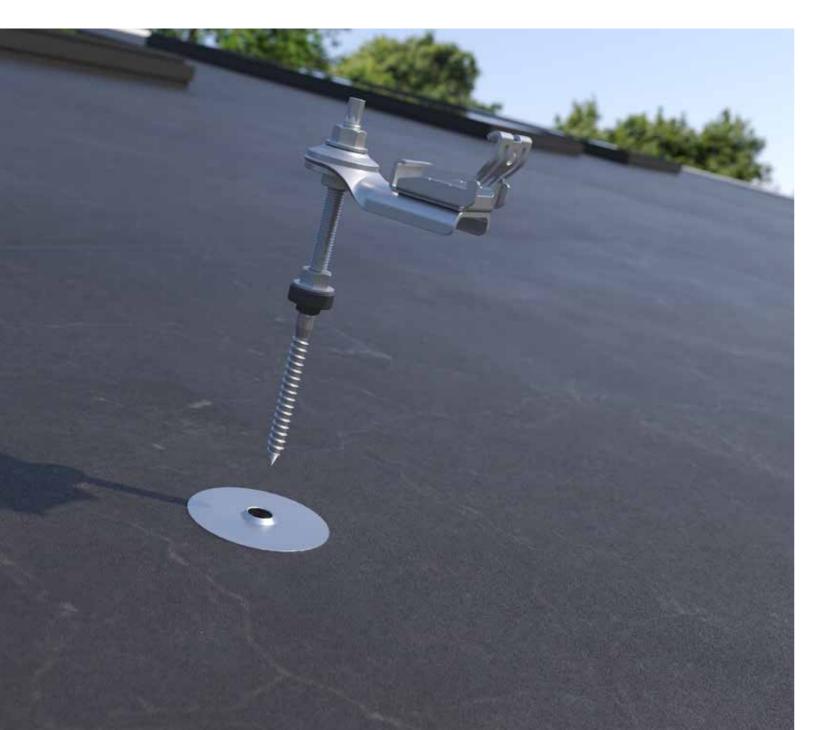
Single folded seam clamp 14mm







With the ClickFit EVO hanger bolt, you install solar panels quickly and easily on existing and new EPDM and bitumen roofs. These roof types are commonly found on commercial buildings with pitched roofs. The hanger bolt is also suitable for Mediterranean tiled roofs. The hanger bolt is delivered fully assembled and the flexible adapter allows you to quickly and easily compensate for unevenness in the roof of up to 10 degrees. The standard, universal click connection makes it easy to continue working with the universal rails, module clamp and end caps.





# MOUNTING ON AN EPDM AND BITUMEN ROOF OR MEDITERRANEAN TILE ROOF

For installation, you need to look carefully at the substructure of the roof. Different substructures of the roof require different working methods. Moreover, the thermal performance and water tightness of the roof are important considerations. For EPDM and bitumen roofs, you can work with an underlay and sealant, for Mediterranean tile roofs you use a chemical anchor. Always read the installation instructions first and consult a roofing specialist for advice before installing.

- · Fully pre-assembled hanger bolt
- Adjustable height
- 360-degree rotation
- Covers up to 10 degrees of unevenness
- Self-aligning click connection
- Vertical and horizontal mounting possible through swivel click connection
- Both landscape and portrait positioning of solar panels
- Suitable for new and existing buildings
- Available in three lengths and two thicknesses for wooden purlins/trusses
- Integrated cable management



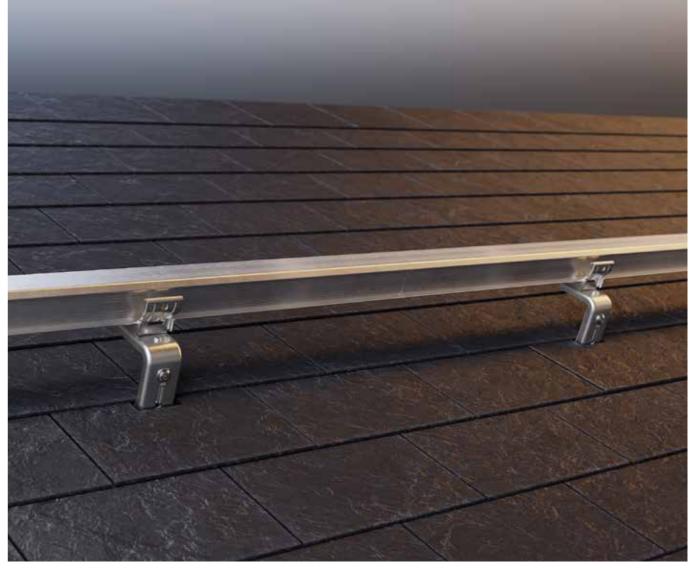
Hanger bolt



Especially for slate roofs, Esdec has developed an extra-flat hook that is only 4 mm thick. The ClickFit EVO slate roof hook is therefore ideally suited for most slate roofs. The hook is easy to install on roofs with a substructure of rafters, battens, solid wood or concrete.

Because the slate roof hook is equipped with the convenient ClickFit EVO system, you install your solar modules easily and quickly, using only four components and one piece of grip. The rotatable click connection makes it easy to mount the rails horizontally or vertically. This flexibility provides all the room you need for optimum efficiency.





### **SLATE ROOFS: A SPECIALIST JOB**

Getting slate roofs properly watertight again after installation of the mounting system requires specialist knowledge of slate roofs. Before you start, contact a pipe roofer to discuss the project.

- Fully pre-assembled roof hook
- Convenient slotted hole to minimise the risk of splitting
- Infinitely height-adjustable
- Self-aligning click connection
- Vertical and horizontal mounting possible through swivel click connection
- Both landscape and portrait positioning of solar panels
- Integrated cable management



Slate roof hook





# FLATFIX FUSION, THE VERSATILE CLICK SYSTEM FOR FLAT ROOFS



# USER-FRIENDLY SYSTEM

The smart, lightweight components allow you to install flexible row lengths. This allows you to easily mount around obstacles on the roof, such as chimneys or air-conditioning installations.



### **DURABLE CLAMPING FORCE**

Thanks to the high and low base, with a metal insert, the clamping force remains optimal even in more extreme weather conditions or after removing and reattaching panels for maintenance, for example.



#### **SMART CLICK CONNECTION**

FlatFix Fusion is guick and easy to install thanks to its unique click connection.







### UNIQUE THERMAL DECOUPLING

FlatFix Fusion's thermal decoupling protects your roof from damage. A moving hinge prevents friction between the base plates and roof. The hinge also takes into account the contraction and expansion of roofs.



### INTEGRATED CABLE MANAGEMENT

With knockout cable outlets in the wind deflector and cable entry guides, cables are safely bundled and routed.

- Complete modular system with click connection
- Flexible installation, on any type of roof and around obstacles
- Landscape orientation in single or dual set up, portrait orientation in single set up
- Unique thermal decoupling prevents roofing damage
- Integrated settlement
- Safe cable management by cable outlets and guides through wind deflectors
- Extensively tested to international standards for fire safety, wind resistance and corrosion, among others

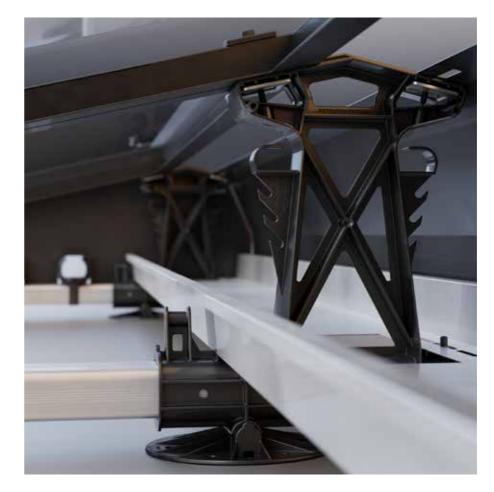


### **FLEXIBLE AND EASY TO INSTALL**

The different components of FlatFix Fusion give you the option of installing flexible row lengths. The Landscape variant can also be installed in single and dual set ups. This allows you to get the most efficiency out of every roof. FlatFix Fusion is ideal for residential and smaller commercial projects.

The strong, lightweight system offers you maximum flexibility. The modular components can be easily and quickly clicked together thanks to the convenient click system.





Basic profiles are available in different sizes for maximum flexibility.





Roof support



High Base Landscape



Base profile



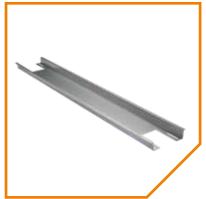
Low Base Landscape



LANDSCAPE

To give the system sufficient weight, we use ballasting. This can be placed in the ballast holder, thus reinforcing the construction of the system.

With the FlatFix Fusion mid and end clamps, the solar modules are attached to the system. The universal mid clamp ensures optimum equalisation, clamping force and distance between the solar panels. The end clamp is placed at the end of the row with panels attached to the high and low base. The end clamp is available in different heights. So there is always a clamp suitable for the thickness of the solar panel.



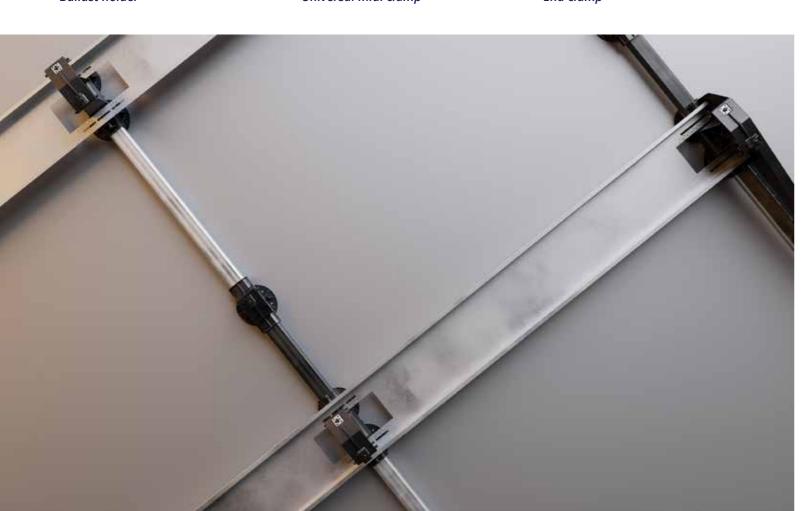




Ballast holder

Universal midl clamp

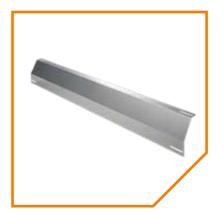
End clamp



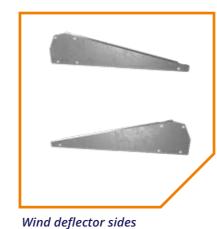


Wind deflectors for the rear and sides of the system for an aerodynamic whole and an aesthetic finish of the system.

The stabiliser connects the FlatFix Fusion segments in the width direction in a dual set up.









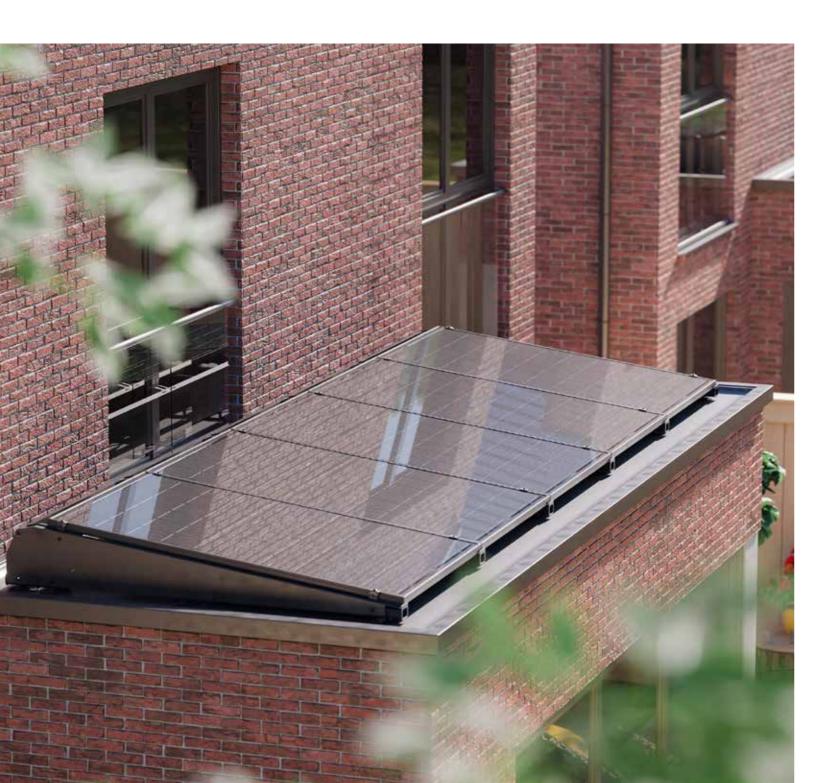
Stabiliser





#### **PORTRAIT**

The FlatFix system is also available in Portrait set up. This allows you to further optimise the available space on small, flat roofs. For example, on an extension or the roof of a carport. On an extension of about 2.5 by 6 metres, this set-up allows you to install 5 solar panels instead of 3 in a landscape set up. This way, you get maximum yield from your roof surface.











High Base Portrait

Base profile

Low Base Portrait





#### **PORTRAIT**

The product components are adapted in size to the portrait set up for maximum stability and optimum efficiency of the smaller roof area.









Wind deflectors Portrait for the rear and sides of the system for an aerodynamic whole.



#### **ACCESSORIES AND ADDITIONAL FASTENERS**

In addition to all the basic supplies for the ClickFit and FlatFix systems, Esdec also offers the necessary accessories. With these accessories, the systems can be installed even faster and easier.

#### **FASTENERS:**

#### Self-drilling screw 6.3 x 42 mm SW10/T30

This screw is needed for securing the rail when the rail is placed vertically, to prevent the rail from sliding down.



#### Applicable to:

ClickFit EVO tiled roof, corrugated roof, standing seam roof, EPDM and bitumen roof, Mediterranean tiled roof.

This screw can also be used when grounding the FlatFix Fusion system.



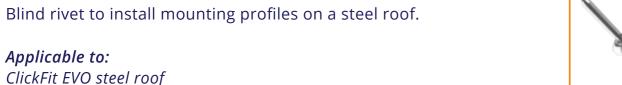
By using this self-tapping sheet metal screw, pre-drilling is not necessary.



#### Applicable to:

ClickFit EVO steel roof FlatFix Fusion





#### **Mounting screws**

Mounting screws for fixing wind deflectors and clamps.



## Applicable to:

FlatFix Fusion

# **NEW: MLPE-clips**

MLPE stands for Module-Level Power Electronics, including optimisers and micro-inverters. By using optimisers, external factors have less influence on the efficiency of the installed solar panels. For example, shadowing can be better absorbed. And a failure of one solar panel will not immediately effect the whole string, the remaining panels continue to deliver optimum yield.

Microinverters convert the generated direct current to alternating current and the voltage converted to 230V, allowing it to be used right away in the home. This eliminates the need to hang a large inverter in the house to capture the generated convert power from all panels to 230V AC at once.

Not all optimisers are the same and, moreover, they vary in weight. These MLPE clips provide a solution to properly and securely fix all types of optimisers to the rails.

#### **ClickFit EVO MLPE-clip Light Weight**

Optimisers or micro-inverters of up to 2 kilograms are easily clicked onto the rail with the light weight MLPE clip.



#### **ClickFit EVO MLPE-clip Heavy Weight**

Optimisers or micro-inverters from 2 to 8 kilograms easily click onto the rail with the heavy weight MLPE clip.



Optimisers or micro-inverters of up to 2 kilograms are easily clicked onto the rail with the light weight MLPE-clip



#### **CLICKFIT EVO ACCESSORIES:**

#### Mounting rail coupler

With this coupler, you seamlessly attach several mounting rails to each other.



#### Mounting aid with cable clip

The ClickFit EVO mounting aid makes it easy to place the solar modules in exactly the right place on the rails.



#### **Schroefbit Torx 30**

The right torx bit for quick and easy installation of ClickFit EVO on pitched roofs.



#### **ACCESSORIES TILED ROOF**

#### Roof hook rubber packer

Using the rubber packer reduces the point load on the roof tile. It also eliminates the need for grinding in roof tiles with a water barrier. The high-quality EPDM rubber has a balanced composition that prevents it from drying out or cracking. By folding the rubber, a gap of 5 to 15 mm can be filled.



#### **ACCESSORIES STEEL ROOF**

# EPDM adapter profile for low landscape mounting profile for corrugated steel roof

By using this adapter, the low mounting profile is also suitable for installation in landscape orientation.



# **EPDM** adapter profile for high landscape mounting profile for corrugated steel roof

By using this adapter, the tall mounting profile is also suitable for installation in landscape orientation.



#### ACCESSORIES EPDM, BITUMEN AND MEDITERRANEAN ROOF TILES

#### **Sealant for EPDM roofing**

Water repellent sealant to restore the water barrier of the EPDM roof after installation of the hanger bolt.



#### Hanger bolt Support washer stainless steel 80 mm

This washer can be used for bitumen roofs with a very soft base. By placing the stainless steel washer between the bitumen and the hanger bolt, the weight is better distributed.



#### **FLATFIX FUSION ACCESSORIES**

#### **Grounding spring**

The FlatFix Fusion grounding spring allows the plastic base elements, both high and low base, to be grounded. The grounding springs are inserted into the sides of the plastic base before the base profiles are clicked onto the base elements.



#### Earthing clamp (6 mm<sup>2</sup>)

With the grounding clamp and a standard 6 mm² installation cable, it is very simple to ground solar panels on a FlatFix Fusion system. The earthing clamps are attached to each first or last solar panel of a row. In addition, the earthing clamps can also be mounted on the end clamps. When attaching the earthing clamps, the teeth of the clamps



penetrate the anodising layer or coating of the solar panel and the sheath of the earthing cable. The standard 6 mm<sup>2</sup> ground cable runs as a central cable along the PV system to which all individual rows can be connected.

#### **Earthing angle**

The grounding angle allows the wind deflector or stabiliser to be grounded. To attach the wind deflectors to the base profiles, the grounding angle is used.



#### **TPO Mat**

Mat for TPO allows the friction to be increased. This results in lower ballast on the smooth TPO membrane.



#### **Roof support adapter**

With the roof support adapter, it is possible to add base plates where necessary to reduce point loads. The roof support adapter can be clicked sideways onto the base connectors and can also be used as a spacer for perimeter ballast.



#### Low base extension

This extension can be attached to the low base. This allows wider solar modules to be installed and is applied to PV modules with widths from 1018mm to 1053mm.



#### **Cable entry guide**

The cable entry guide is attached to the base profile. This ensures safe feeding of cables through the side plate, without touching the sharp edges of the side plate.

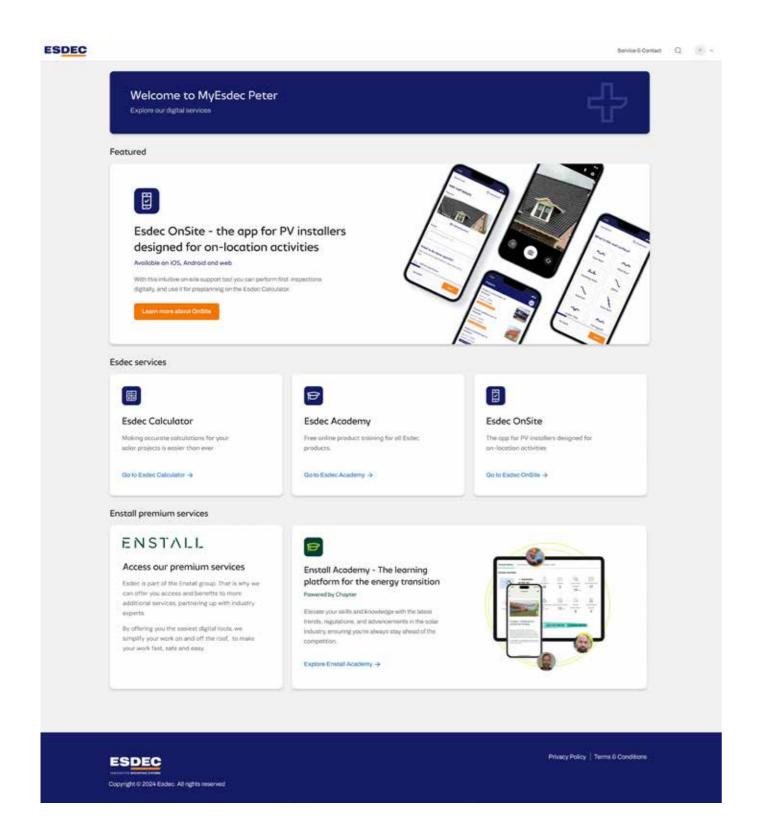


#### **SERVICES**

#### My Esdec

With just one account access to all the tools and services Esdec has to offer, that's MyEsdec. An online portal that provides access to existing tools, such as the Esdec Calculator and Esdec Academy, and our latest app Esdec OnSite. To make the necessary knowledge and skills accessible to everyone, using MyEsdec is free.





#### **Esdec OnSite**

Esdec OnSite is an app specifically designed to make the work of on-site installers easier. The app is a kind of digital logbook where you can document notes and manage checklists, amongst other things. The data entered is automatically integrated into the Esdec Calculator and from the Esdec Academy you receive personal advice on training courses to follow.



#### **Esdec Calculator**

Making a calculation for your solar panel project is easier than ever. This online calculation tool will help you complete this process as quickly, efficiently and successfully as possible. Within minutes, you will receive a tailored bill of materials and building plan.

#### A tailor-made calculation in four steps

With the Esdec calculator, you are not only guaranteed accurate calculations, you also save a lot of time in the design phase. In just four steps, you calculate everything you need to know before the start of a new project.

#### How it works:

- Choose your location, roof type and solar panels
- Draw the roof and any obstacles
- The calculator automatically selects the most suitable mounting system
- Download material list, construction and ballast plan immediately

#### The benefits:

- Save time: manage all your projects from one place
- One calculator for projects on pitched and flat roofs
- All calculations are based on extensive testing and the latest safety standards



Unlimited calculation: in the Esdec Calculator you can calculate your project yourself with no limit on the roof height. In addition, the tool takes into account the terrain category, snow load and wind zone, giving you accurate advice specific to your project.

Go to the calculator via this QR code.



#### **Esdec academy full of online training courses**

Learn all about our mounting systems and how to work with them safely and smartly, wherever and whenever you want. With the Esdec Academy e-learning platform, you do this easily from home, the office or any other location of your preference. Not only will you learn about our systems and their installation, you will also find various online learning modules on important related topics such as fire safety and storm resistance.



#### **Training**

'How do I best install on this roof type?

Get updated during our free training sessions and webinars. Learn from product training sessions on real rooftop units. Follow online webinars on safety, reliability and regulations. Or follow a product demonstration of our mounting systems in the Esdec Mobile Solar Bus. That way you can be sure that you are always working as safely and efficiently as possible.

#### **Physical training (Innovation Centre Deventer)**

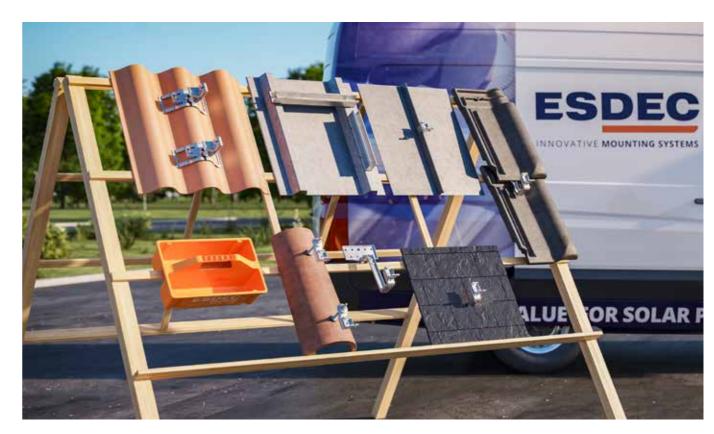
Our Innovation Centre in Deventer offers free training sessions. Here, we have various set-ups allowing you to get started yourself and experience the convenience of our products. Our Product Trainer Mark van Stralen will be happy to receive you!





#### **Mobile Solar Training Bus**

With the Esdec Solar Bus, you learn about our products at your location. Whether you are an installation company looking to train new employees or an organisation organising a customer event, the Esdec Solar Bus offers flexible, tailor-made training solutions.



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#### SUSTAINABILITY AND RELIABILITY

Esdec is committed to sustainability, reliability and safety. We make conscious choices to guarantee these elements in all aspects of our organisation. Think about the procurement of raw materials, production methods, packaging, trading methods, etc... We also invest heavily in research and development every year.

#### Quality

All our mounting systems consist of lightweight, sturdy components and can be fixed with just one tool or even toolless. We prefer to use local, high-quality raw materials so that we can guarantee the origin and performance of our materials and minimise environmental impact with, for example, transport of raw materials and materials. These continuous efforts for quality and the environment have been awarded the Quality Management (ISO 9001) and Environmental Management (ISO 14001) certificates. Every year, an independent body such as DNV tests whether we still meet the high standards set for both certificates.

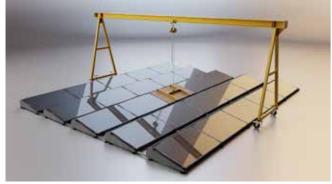




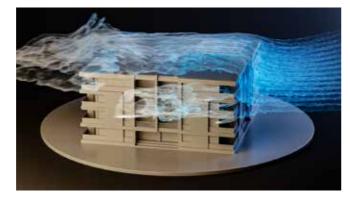
#### **Testing**

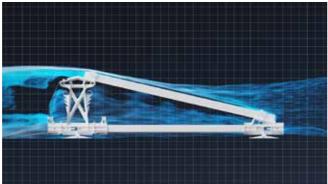
All our products are extensively tested. For example, on the influence of wind on a system with Computational Fluid Dynamics (CFD), simulation models and wind tunnel tests. This ensures that our systems can withstand wind and storms. Other tests we do focus on fire safety and corrosion.

The tests take place in various ways and locations; in our own test centre, for example, but also at recognised test labs such as KIWA / BDA and VDE, or together with other links in the chain such as corrugated roofing supplier Eternit.









#### **Product certifications**

To leave no doubt about the accuracy and reliability of our test results, we believe it is important that they are confirmed by independent, recognised bodies. Our products are certified by leading test labs for certifications in different countries, each of which has its own requirements. For example, our products include certifications for France (ETN), United Kingdom (MCS) and Germany (DIBt).







All test results form, among other things, the basis for the Esdec Calculator, which we also tested in its entirety for accuracy. It resulted in a Peutz certificate and the guarantee that all calculations are performed correctly.

#### Warranty

Through our intensive testing programme and independent confirmation from recognised test labs, Esdec provides a 20-year product warranty with complete confidence.





IST

TILED ROOF

1008040
1008040-LT
1008045
1008131
1008132
1008133
1008007
1008134
1008135

MODULE CLAMP & END CAP	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-B
ClickFit EVO Mounting Rail End Cap grey	1008060
ClickFit EVO Mounting Rail End Cap black	1008060-B

ACCESSORIES	
ClickFit EVO Mounting Rail Coupler	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Roof Hook Spacer	1008063
ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO Self drilling screw 6,3x42mm SW10/T30	1003016



**ARTICLE LIST** 

#### **STEEL** ROOF

ROOF FASTENERS	
ClickFit EVO Steel roof - Low mounting profile landscape	1008048
ClickFit EVO Steel roof - Low mounting profile portrait	1008049
ClickFit EVO Steel roof - High mounting profile landscape	1008050
ClickFit EVO Steel roof - High mounting profile portrait	1008051
ClickFit EVO - Self-tapping screw 6,0x25 mm SW10 HEX/T30	1008085
ClickFit EVO Rivet	1008087

HANGER BOLT & MOUNTING RAIL	
ClickFit EVO Hanger Bolt M10x200mm	1008011
ClickFit EVO Hanger Bolt M10x250mm	1008012
ClickFit EVO Hanger Bolt M12x250mm	1008013
ClickFit EVO Hanger Bolt M12x300mm	1008014
ClickFit EVO Hanger Bolt M12x350mm	1008015
ClickFit EVO Mounting Rail 1188mm	1008131
ClickFit EVO Mounting Rail 2338mm	1008132
ClickFit EVO Mounting Rail 3488mm	1008133
ClickFit EVO Mounting Rail 3500mm	1008007
ClickFit EVO Mounting Rail 4638mm	1008134
ClickFit EVO Mounting Rail 5770mm	1008135

MODULE CLAMP & END CAP	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-B
ClickFit EVO Mounting Rail End Cap grey	1008060
ClickFit EVO Mounting Rail End Cap black	1008060-B





#### **STEEL** ROOF

ClickFit EVO End Cap without end clamp support grey	1008066
ClickFit EVO End Cap without end clamp support black	1008066-B
ClickFit EVO End Clamp Support grey	1008065
ClickFit EVO End Clamp Support black	1008065-B

ACCESSORIES	
ClickFit EVO Mounting Rail Connector Piece	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO Bit torx 30	1008069
ClickFit EVO EPDM adapter profile corrugated steel roof 'Basic' landscape	1008081
ClickFit EVO EPDM EPDM adapter profile corrugated steel roof 'Optimizer-ready' landscape	1008082



#### **CORRUGATED** ROOF

ROOF FASTENERS	
ClickFit EVO Corrugated Sheet Mounting Bracket	1008090
ClickFit EVO Hanger Bolt M10x200mm	1008011
ClickFit EVO Hanger Bolt M10x250mm	1008012
ClickFit EVO Hanger Bolt M12x250mm	1008013
ClickFit EVO Hanger Bolt M12x300mm	1008014
ClickFit EVO Hanger Bolt M12x350mm	1008015 [DTO]



**ARTICLE LIST** 

#### **CORRUGATED** ROOF

MOUNTING RAIL	
ClickFit EVO Mounting Rail 1188mm	1008131
ClickFit EVO Mounting Rail 2338mm	1008132
ClickFit EVO Mounting Rail 3488mm	1008133
ClickFit EVO Mounting Rail 3500mm	1008007
ClickFit EVO Mounting Rail 4638mm	1008134
ClickFit EVO Mounting Rail 5770mm	1008135

MODULE CLAMP & END CONNECTORS	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-B
ClickFit EVO Mounting Rail End Cap grey	1008060
ClickFit EVO Mounting Rail End Cap black	1008060-B
ClickFit EVO End Cap without end clamp support grey	1008066
ClickFit EVO End Cap without end clamp support black	1008066-B
ClickFit EVO End Clamp Support grey	1008065
ClickFit EVO End Clamp Support black	1008065-B

MOUNTING MATERIALS	
ClickFit EVO Self drilling screw 6,3x42mm SW10/T30	1003016

ACCESSORIES	
ClickFit EVO Mounting Rail Connector Piece	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO bit torx 30	1008069





**STANDING SEAM** ROOF

ROOF FASTENERS	
ClickFit EVO Round Seam Clamp 23mm	1008031
ClickFit EVO Double-folded seam Clamp 9mm	1008033
ClickFit EVO Single Folded Seam Clamp 14mm	1008035

MOUNTING RAIL	
ClickFit EVO Mounting Rail 1188mm	1008131
ClickFit EVO Mounting Rail 2338mm	1008132
ClickFit EVO Mounting Rail 3488mm	1008133
ClickFit EVO Mounting Rail 3500mm	1008007
ClickFit EVO Mounting Rail 4638mm	1008134
ClickFit EVO Mounting Rail 5770mm	1008135

MODULE CLAMP & END CAP	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-B
ClickFit EVO Mounting Rail End Cap grey	1008060
ClickFit EVO Mounting Rail End Cap black	1008060-B
ClickFit EVO End Cap without end Clamp support grey	1008066
ClickFit EVO End Cap without end Clamp support black	1008066-B
ClickFit EVO End Clamp Support grey	1008065
ClickFit EVO End Clamp Support black	1008065-B

ACCESSORIES	
ClickFit EVO Mounting Rail Connector Piece	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Self drilling screw 6.3x42mm SW10/T30	1003016



**ARTICLE LIST** 

#### **STANDING SEAM** ROOF

ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO bit torx 30	1008069



#### **EPDM AND BITUMEN ROOF**

ROOF FASTENERS	
ClickFit EVO Hanger Bolt M10x200mm	1008011
ClickFit EVO Hanger Bolt M10x250mm	1008012
ClickFit EVO Hanger Bolt M12x250mm	1008013
ClickFit EVO Hanger Bolt M12x300mm	1008014
ClickFit EVO Hanger Bolt M12x350mm	1008015 [DTO]

MOUNTING RAIL	
ClickFit EVO Mounting Rail 1188mm	1008131
ClickFit EVO Mounting Rail 2338mm	1008132
ClickFit EVO Mounting Rail 3488mm	1008133
ClickFit EVO Mounting Rail 3500mm	1008007
ClickFit EVO Mounting Rail 4638mm	1008134
ClickFit EVO Mounting Rail 5770mm	1008135

MODULE CLAMP & END CAP	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-В
ClickFit EVO Mounting Rail End Cap grey	1008060
ClickFit EVO Mounting Rail End Cap black	1008060-B
ClickFit EVO End Cap without end Clamp support grey	1008066





#### **EPDM AND BITUMEN ROOF**

ClickFit EVO End Cap without end Clamp support black	1008066-B
ClickFit EVO End Clamp Support grey	1008065
ClickFit EVO End Clamp Support black	1008065-B

ACCESSORIES	
ClickFit EVO Mounting Rail Connector Piece	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Self drilling screw 6.3x42mm SW10/T30	1003016
ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO bit torx 30	1008069
Kit for EPDM Roofing	1008086
Hanger Bolt Washer Inox 80mm	1003070



#### **ARABIC** TILES

ROOF FASTENERS	
ClickFit EVO Hanger Bolt M10x200mm	1008011
ClickFit EVO Hanger Bolt M10x250mm	1008012
ClickFit EVO Hanger Bolt M12x250mm	1008013
ClickFit EVO Hanger Bolt M12x300mm	1008014
ClickFit EVO Hanger Bolt M12x350mm	1008015



**ARTICLE LIST** 

#### **ARABIC** TILES

MOUNTING RAIL	
ClickFit EVO Mounting Rail 1188mm	1008131
ClickFit EVO Mounting Rail 2338mm	1008132
ClickFit EVO Mounting Rail 3488mm	1008133
ClickFit EVO Mounting Rail 3500mm	1008007
ClickFit EVO Mounting Rail 4638mm	1008134
ClickFit EVO Mounting Rail 5770mm	1008135

MODULE CLAMP & END CAP	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-B
ClickFit EVO Mounting Rail End Cap grey	1008060
ClickFit EVO Mounting Rail End Cap black	1008060-B
ClickFit EVO End Cap without end Clamp support grey	1008066
ClickFit EVO End Cap without end Clamp support black	1008066-B
ClickFit EVO End Clamp Support grey	1008065
ClickFit EVO End Clamp Support black	1008065-B

ACCESSORIES	
ClickFit EVO Mounting Rail Connector Piece	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Self drilling screw 6,3x42mm SW10/T30	1003016
ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO bit torx 30	1008069

# **ARTICLE LIST**



**SLATE** ROOF

ROOF FASTENERS	
ClickFit EVO Slate Roof Hook	1008042

MOUNTING RAIL	
ClickFit EVO Mounting Rail 1188mm	1008131
ClickFit EVO Mounting Rail 1188mm	1008132
ClickFit EVO Mounting Rail 1188mm	1008133
ClickFit EVO Mounting Rail 1188mm	1008007
ClickFit EVO Mounting Rail 1188mm	1008134
ClickFit EVO Mounting Rail 5770mm	1008135

MODULE CLAMP & END CAP	
ClickFit EVO Module Clamp Universal grey	1008020
ClickFit EVO Module Clamp Universal black	1008020-B
ClickFit EVO Mounting Rail End cap grey	1008060
ClickFit EVO Mounting Rail End cap black	1008060-B
ClickFit EVO End Cap without end clamp support grey	1008066
ClickFit EVO End Cap without end clamp support black	1008066-B
ClickFit EVO End Clamp Support grey	1008065
ClickFit EVO End Clamp Support black	1008065-B

ACCESSORIES	
ClickFit EVO Mounting Rail Connector Piece	1008061
ClickFit EVO MLPE Clip Light Weight	1008067
ClickFit EVO MLPE Clip Heavy Weight	1008068
ClickFit EVO Auxiliary set with cable clip	1008064
ClickFit EVO bit torx 30	1008069



**ARTICLE LIST** 

### LANDSCAPE

SYSTEM COMPONENTS	
FlatFix Fusion Roof Support	1007012
FlatFix Fusion Low Base	1007022
FlatFix Fusion High Base	1007031
FlatFix Fusion Wind Deflector Rear */**	1007201
FlatFix Fusion Wind Deflector Left** with base profile 940mm	1007224
FlatFix Fusion Wind Deflector Left** with base profile 1030mm and 1077mm	1007226
FlatFix Fusion Wind Deflector Right** with base profile 940mm	1007225
FlatFix Fusion Wind Deflector Right** with base profile 1030mm and 1077mm	1007227
FlatFix Fusion Ballast Container*	1007202
FlatFix Fusion Stabilizer*	1007203
FlatFix Fusion Base Profile 210mm	1007121**
FlatFix Fusion Base Profile 370mm	1007137**
FlatFix Fusion Base Profile 550mm	1007155**
FlatFix Fusion Base Profile 750mm	1007175**
FlatFix Fusion Base Profile 940mm	1007194
FlatFix Fusion Base Profile 1030mm	1007195
FlatFix Fusion Base Profile 1077mm	1007196
* Also available in 1600, 1700, 1900, 2000 & 2100 ** Also available in black	

FASTENERS	
Esdec Mounting Screw*/** 6x55mm	1000655
Esdec Mounting Screw*/** 6x70mm	1000670
Esdec Mounting Screw*/** 6x12mm	1000612
Esdec Screw 6,0 x 25mm (self tapping)	1008085
Esdec Screw 6,3 x 42 mm SW10/T30 (self drilling)	1003016
* Depending on panel thickness and related end clamp ** Also available in black	

# **ARTICLE LIST**



#### **LANDSCAPE**

CLAMPS	
Flatfix Fusion universal module clamp with bonding**	1003022
FlatFix End Clamp 30-50mm*/**	10043
FlatFix End Clamp 30-50mm*/**	10044 (balck)
* Depending on panel thickness (in mm) ** Also available in black	

ACCESSORIES	
FlatFix Fusion Grounding Spring	1007502*
FlatFix Fusion Grounding Clamp (6mm2)	1007505
FlatFix Fusion TPO Mat	1007015
FlatFix Fusion Grounding Bracket	1007503
FlatFix Fusion Roof support adapter	1007011
FlatFix Fusion Low base extension	1007022-WP
FlatFix Fusion Cable exit guide	1005570
FlatFix Fusion MLPE Clip Light Weight	1007042



#### **PORTRAIT**

1007012
1007027
1007037
1007231
1007232
1007233
1007230



**ARTICLE LIST** 

#### **PORTRAIT**

FlatFix Fusion Base Profile 370mm zwart	1007637
FlatFix Fusion Base Profile 550mm zwart	1007655
FlatFix Fusion Base Profile 750mm zwart	1007675
FlatFix Fusion Base Profile 1670mm	1007197

FASTENERS	
Esdec Mounting Screw* 6x55mm black	1000655-B
Esdec Mounting Screw* 6x70mm black	1000670-В
Esdec Mounting Screw* 6x12mm black	1000612-B
Esdec Screw 6,0 x 25mm (self tapping)	1008085
Esdec Screw 6,3 x 42 mm SW10/T30 (self drilling)	1003016
* Depending on panel thickness and related end clamp ** Also available in black	

CLAMPS	
Flatfix Fusion Universal module clamp with bonding	1003022-B
FlatFix Fusion End clamp 30-40mm* zwart	10044 (zwart)
* Depending on panel thickness (in mm)	

ACCESSORIES	
FlatFix Fusion Grounding Spring	1007502*
FlatFix Fusion Grounding Clamp (6mm2)	1007505
FlatFix Fusion TPO Mat	1007015
FlatFix Fusion Grounding Bracket	1007503
FlatFix Fusion Roof support adapter	1007011
FlatFix Fusion Low base extension	1007022-WP
FlatFix Fusion Cable exit guide	1005570
FlatFix Fusion MLPE Clip Light Weight	1007042



