

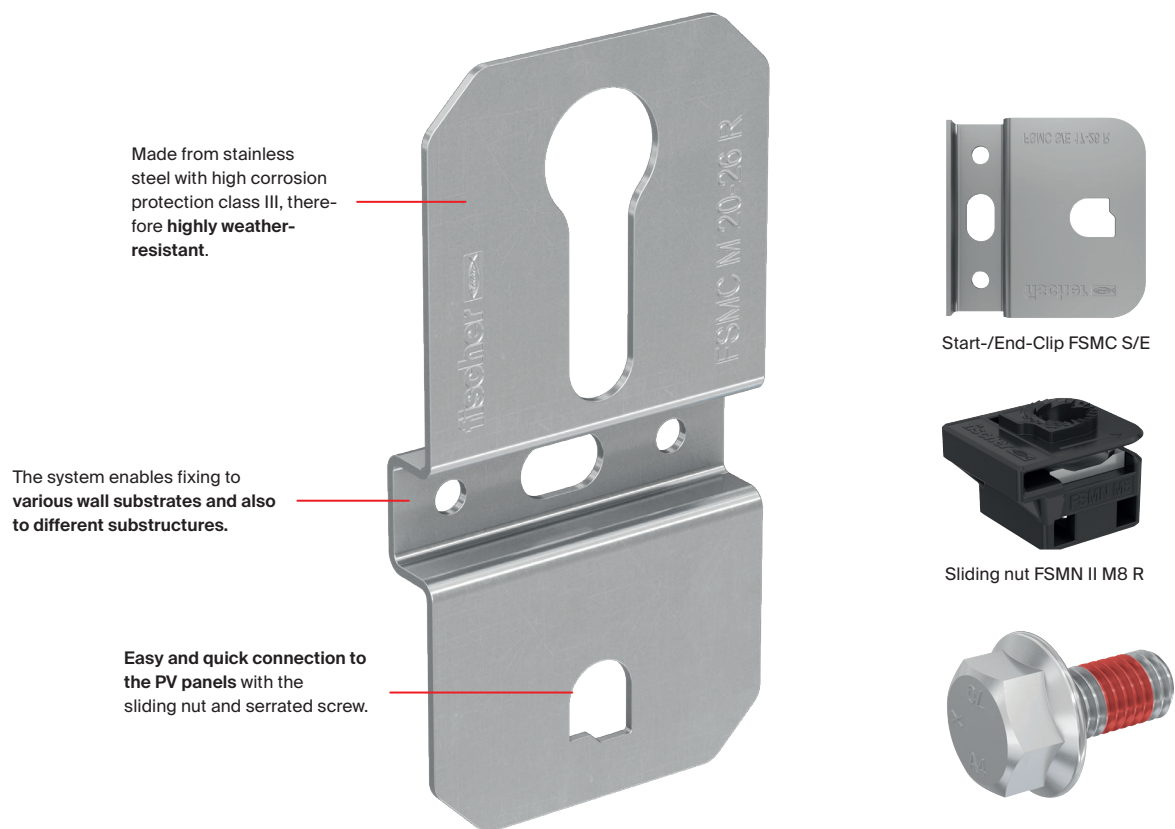


Fixing of
PV panels
on façades.



PV clip system.

Photovoltaics reinvented: It is not only roofs and outdoor spaces that offer potential for generating solar power – façades are also increasingly becoming efficient energy suppliers. Photovoltaic façades combine economic efficiency with modern architecture and are the ideal complement to classic PV applications. They utilise large, previously unused areas, deliver a consistent annual yield and are particularly impressive in terms of efficiency in the autumn and winter months. With the modular system from fischer, aesthetic, contiguous panel fields can be flexibly implemented – suitable for all common framed PV panels.



Recommendations

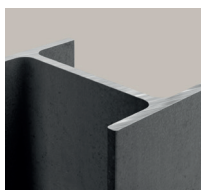
Suitable for building substrates such as:



Concrete



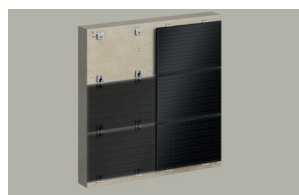
Masonry



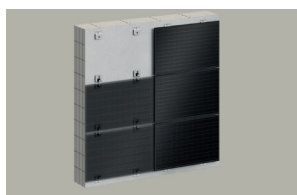
Steel frames



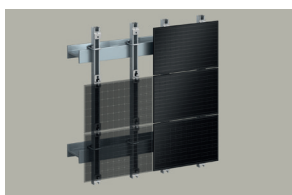
Wood



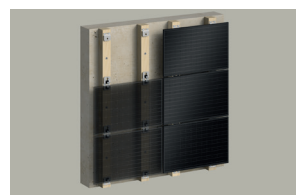
Concrete



Masonry



Also suitable for direct fixing to the substructure (aluminium profiles, steel profiles, wooden battens)



Advantages, functions & installation.

Your advantages at a glance

- The practical sliding nut enables quick and constraint-free installation.
- The clasp-coating on the screw prevents it from loosening.
- The simple stainless steel plug-in system is highly weather-resistant thanks to the high corrosion protection class III.
- The integrated equipotential bonding is performed automatically during installation.
- Suitable for all types of framed PV panels with mounting holes.
- The modular system enables the construction of contiguous panel arrays with adjustable joint sizes.
- The start/end clip can be used both as a start clip and as an end clip, thus minimizing the number of products required.
- ETA certification and external usability certificate for façade applications.

Functioning

- Slide sliding nuts FSMN onto all mounting holes on the back of the panel.
- Attach fischer PV-Clip FSMC S/E on one side of the starting panel, using clasp-coated locking screw. Attach fischer PV clip FSMC M on the other side of the starting panel with clasp-coated locking screw.
- Fix the PV clips FSMC S/E and FSMC M to the building substrate using plugs, wood screws etc.
- For the subsequent PV panels, insert the clasp-coated locking screw on one side and attach it to the FSMC M from the starting module. Attach an FSMC M with a clasp-coated locking screw on the opposite side and fix it to the building substrate using wood screws, plugs, etc.

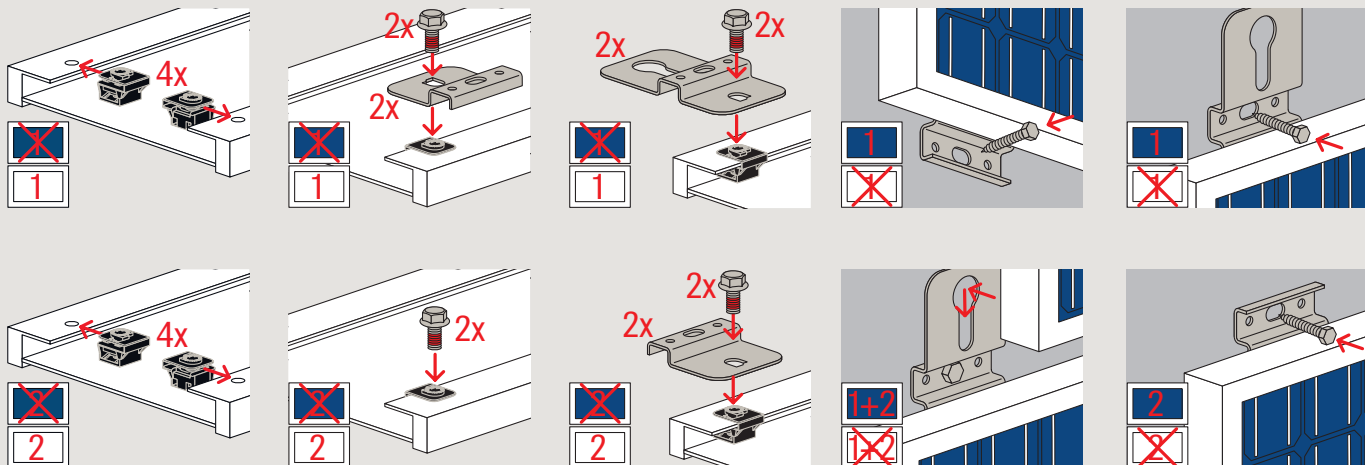


Certificates / Features



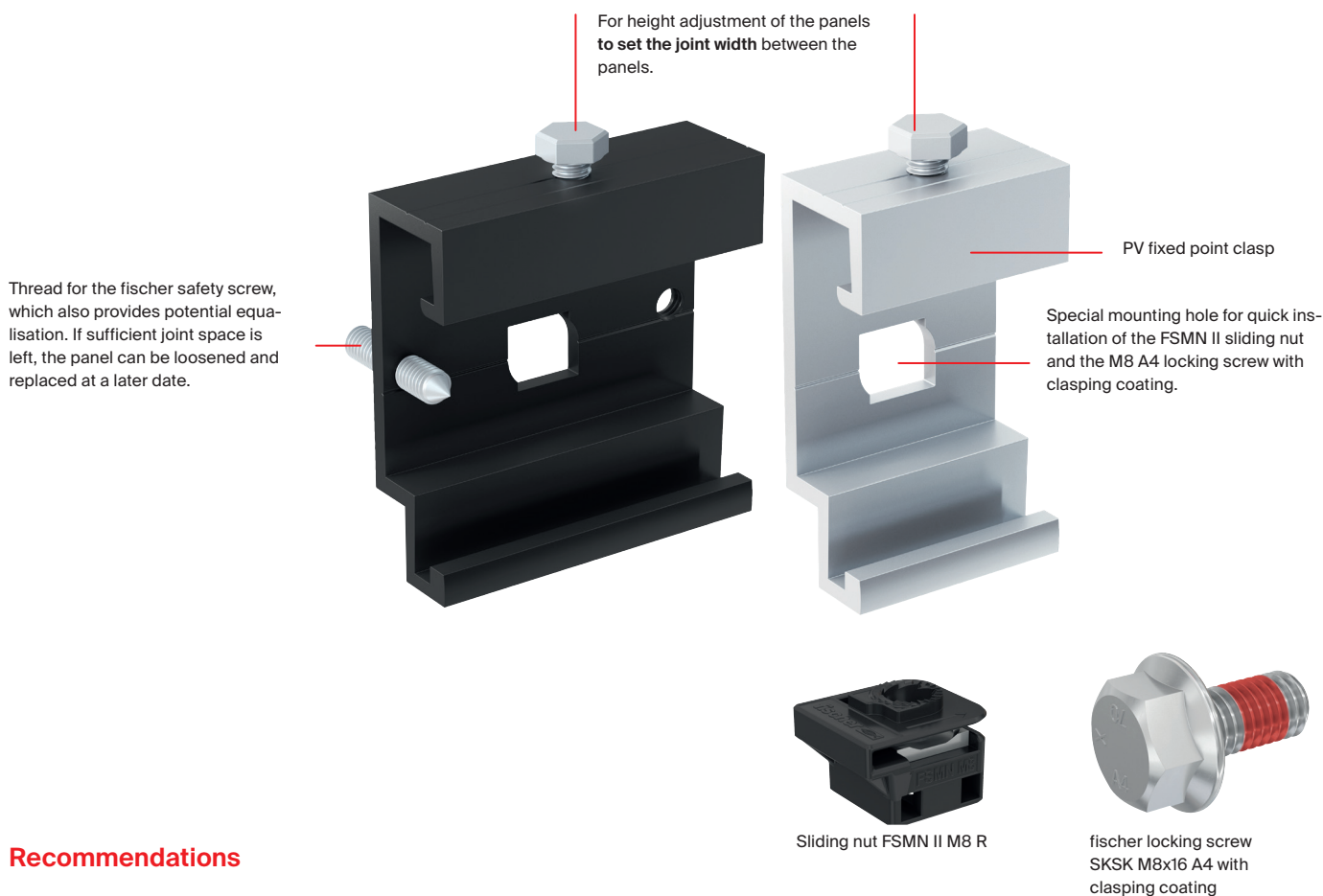
ETA-24/1001

You can find detailed information in our installation and product video:



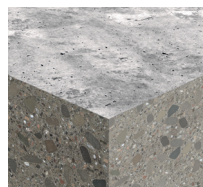
Horizontal clasp system ATK 103 PV.

For the construction of ventilated
PV façades.

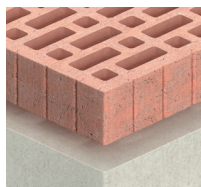


Recommendations

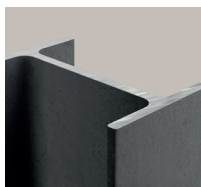
Suitable for building substrates such as:



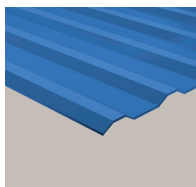
Concrete



Masonry



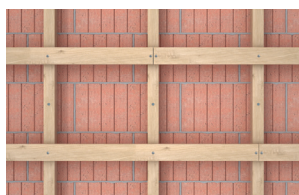
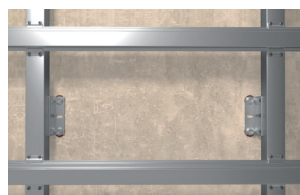
Steel frames



Trapezoidal sheets



Wood



Also suitable for directly fixing to the substructure
(aluminium profiles, steel profiles, wooden battens)

Advantages, functions and installation.

Your advantages at a glance

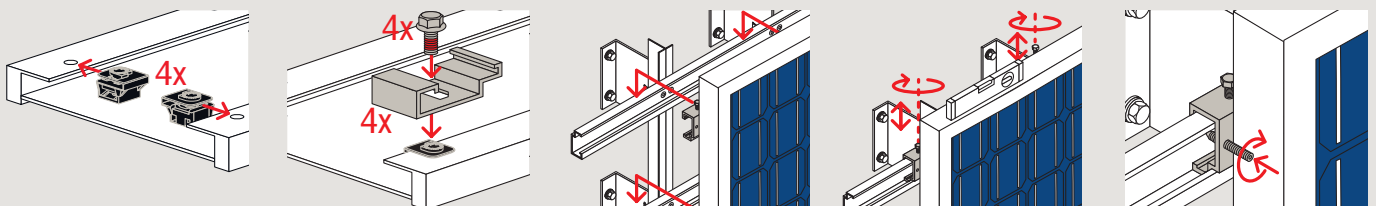
- The clasps can be pre-assembled, saving time on site.
- Quick and easy installation of façade panels thanks to the coordinated geometries of the clasps and horizontal profiles.
- Hexagonal locking screw with pre-applied screw lock.
- Lift and shift protection and integration of the PV panel into the equipotential bonding via the grub screw.

Functioning

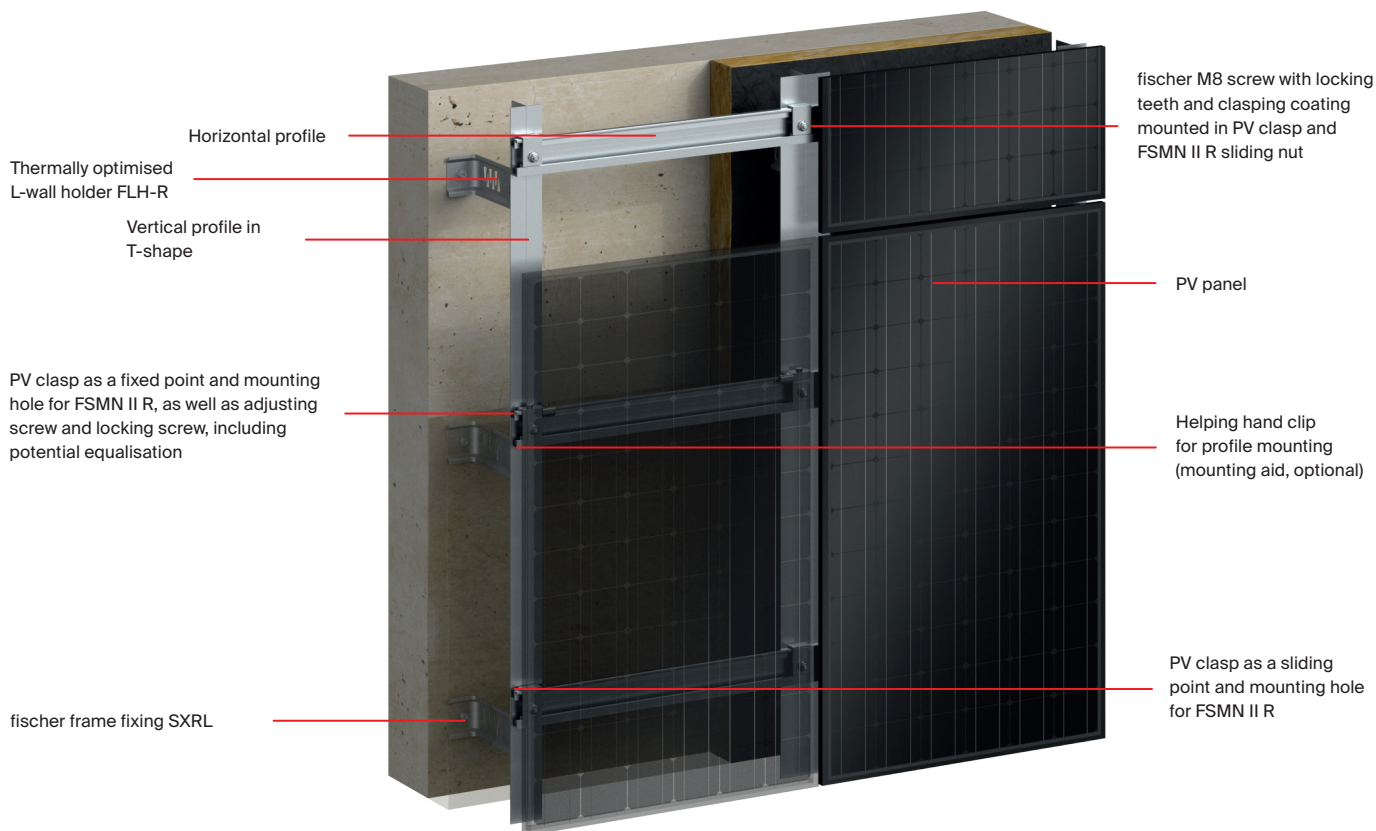
- Slide the FSMN II R sliding nut onto all mounting holes on the rear of the panel.
- Attach the FHC PV FP clasps with adjusting screw and M6 threaded holes to the FSMN II R sliding nut at one of the mounting holes on the upper side of the PV panel. Assemble the clasp by screwing in the hexagon locking screw with pre-applied SKSK M8x16 A4 screw lock. Initially screw in the grub screw on the fixed point clasp.
- Attach the FHC PV F-SP clasps with adjusting screw to the FSMN II R sliding nut on the remaining mounting hole on the upper side of the PV panel.
- Attach the two FHC PV F-SP clasps without adjusting screws to the FSMN II R sliding nuts on the two mounting holes on the lower side of the PV panel.
- Hook the panel into the ATK103 horizontal substructure.
- Adjust the adjusting screws to align the PV panel.
- Screw the grub screw against the horizontal profile.



Certificates / Features



ATK 103 PV system components.



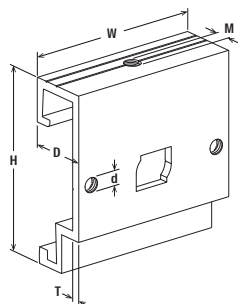
Exemplary material list					
	Art.-No.	Stainless steel R	Aluminium EN AW 6063 T66	Description	Sales unit [pcs]
Item					
Serrated nut M8 R	541614	R	–	fischer M8 nut with locking serration	250
fischer M8 nut with locking serration	570553	R	–	fischer M8 screw with locking serration	100
Spike washer M8 R	49915	R	–	Spike washer M8 (potential equalization, optional)	250
FHC 20x3 36/9/FP AL fixed-point, adjustable	565254	–	•	Clasp as fixed point with adjustment screw	125
FHC 20x3 36/9/SP AL sliding point	565250	–	•	Clasp as sliding point	125
SDA5/3,5-8-H13-S4-5,5x22	568666	R	–	Connecting screw for brackets and profiles (SDA5/3.5-8-H13-S4-5.5.x22)	500
Helping hand clip	547170	R	–	Helping hand clip (mounting aid) for profile mounting (optional)	100
H-Profile ATK103P-20/ t = 3 mm, 6M	547557	–	•	Horizontal profile ATK103 P20	1
T-Profile 60/52/2 6M	548276	–	•	Vertical T-Profile	1
FLH 220x70x1,5/10,5/F-SP R	562805	R	–	Thermally optimised wall holder in L-shape FLH-R sliding point	40
SXRL 10x80 FUS R frame fixing	522730	R	–	fischer frame fixing SXRL	50

Remark:

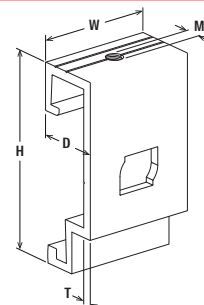
This is an exemplary list of materials. The actual material list depends on the characteristics of the façade.

Please contact the fischer technical department for advice: facades@fischer.de.

Assortment



FHC PV FP



FHC PV F-SP

PV-clasp system FHC PV

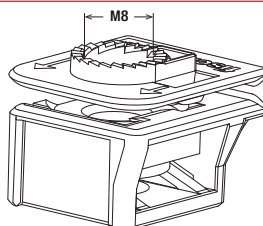


FHC 20x3 PV FP black AL

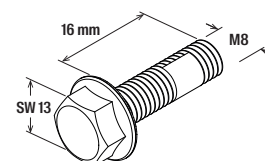


FHC 20x3 PV F-SP AL

Item	Item no.	Depth D [mm]	Thickness T [mm]	Width W [mm]	Height H [mm]	Thread M	Colour	Contents	Sales unit [pcs]
FHC 20x3 60/PV/2x5/FP black AL	576923	20	3	60	62	M5	Black	1x Clasp 1x Grub screw 1x Adjusting screw M6 x 15	20
FHC 20x3 36/PV/F-SP AL	576924	20	3	36	62	M5	Aluminium	3x Clasp 1x Adjustment screw M6 x 15	60



FSMN II R

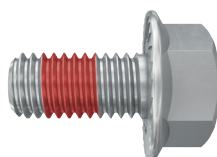


SKSK A4

Sliding nut FSMN II R



FSMN II R

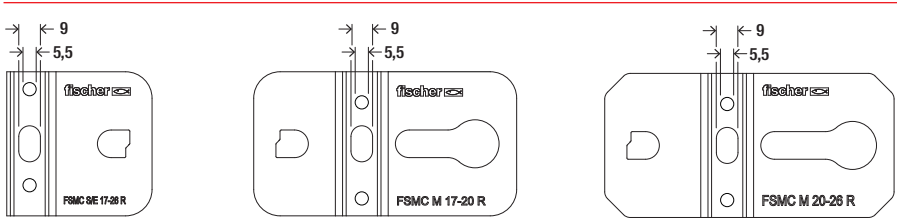


SKSK A4 serrated with pre-applied screw lock

Item	Item no.	Thread M	Length l [mm]	Width across flats AF [mm]	Sales unit [pcs]
FSMN II M8 R	576836	M8	–	–	100
Self-locking screw serrated with preapplied screw lock SKSK M8x16 A4	574239	M8	16	13	100

Assortment and accessories

PV clip.



PV clip FSMC - stainless steel with corrosion protection class III



FSMC S/E

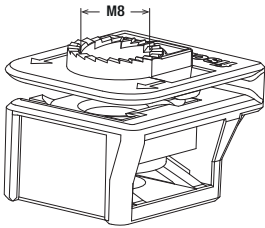


FSMC M 17-20

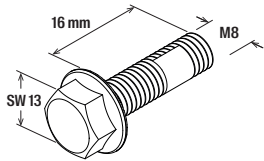


FSMC M 20-26

Item	Item no.	Width	Height	Thickness	Perforated frame edge distance	Hole-Ø	Slot	Type	Material	Sales unit
		W [mm]	H [mm]	T [mm]	[mm]	D [mm]	l x s [mm]			[pcs]
FSMC S/E 17-26 R	573440	60	60	1,5	17 - 26	5,5	9 x 15	Start/end clip	Stainless steel	20
FSMC M 17-20 R	573441	110	60	1,5	17 - 20	5,5	9 x 15	Middle clip	Stainless steel	50
FSMC M 20-26 R	573442	120	60	1,5	20 - 26	5,5	9 x 15	Middle clip	Stainless steel	50



FSMN II R

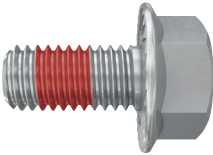


SKSK A4

Sliding nut FSMN II R

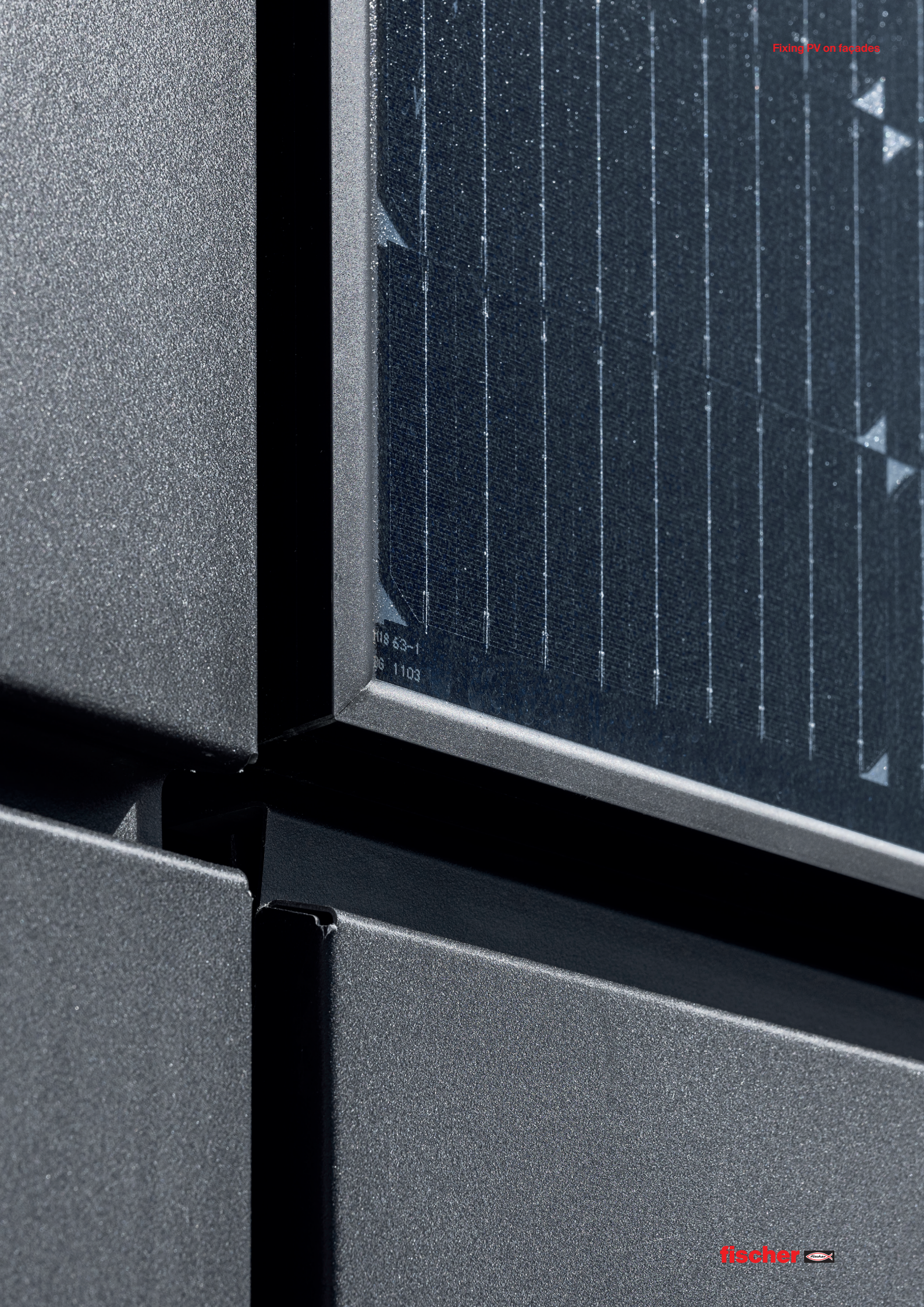


FSMN II R



SKSK A4 serrated with pre-applied screw lock

Item	Item no.	Thread	Length	Width across flats	Sales unit
		M	l [mm]	AF [mm]	[pcs]
FSMN II M8 R	576836	M8	–	–	100
Self-locking screw serrated with preapplied screw lock SKSK M8x16 A4	574239	M8	16	13	100



Ventilated rainscreen façades by fischer.

Advantages:



On-site support



Technology leadership beyond the state-of-the-art



Fast supply and installation of the system



Global availability and supply of a complete system from a single source



Cost efficiency of the overall system with fischer quality



Approved and third-party certified systems and in-house test laboratory

Fixing systems for many other façade panel materials.



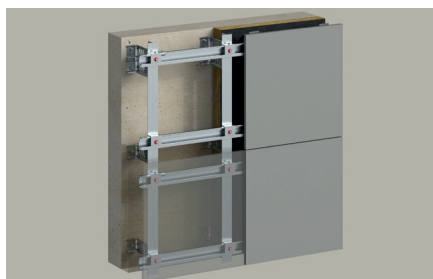
Natural stone



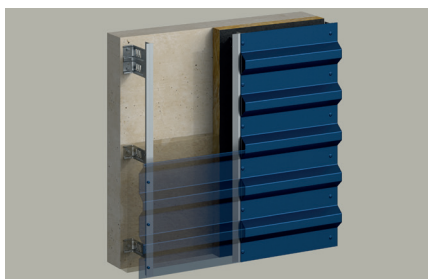
Ceramics



High pressure laminate (HPL)



Fiber cement



Trapezoidal sheets



Metal cassettes

More solar systems. Clever mounting solutions for PV systems on roofs.



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fischer stands for

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fischertechnik
Consulting
Electronic Solutions

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