

**nusilio**  
P V P A N E L F A S T E N E R S

AUSILIO

**AUSILIO** is the new range of products developed by **Officine Rasera** that focuses on fastenings **for photovoltaic panels**.

The range includes a **vast assortment of solutions** for installing photovoltaic panels.

**AUSILIO** comprises a **broad selection of modular components and articles** enabling **panels of all shapes and sizes** to be anchored to **every type of roof without the need to cut or alter** the components.

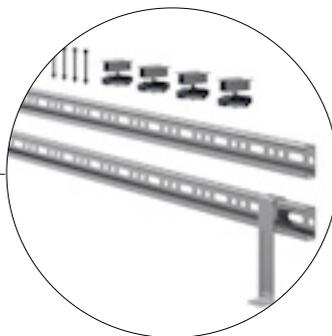
**The AUSILIO system guarantees rapid installation and safe anchoring.**

## THE ADVANTAGES OF THE AUSILIO SYSTEM

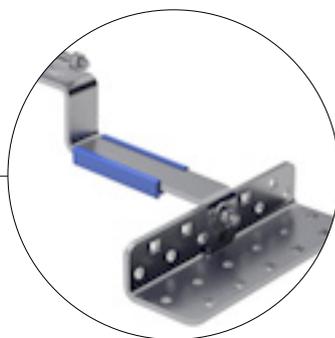
- **main profiles in zinc-magnesium steel (ZM200)**  
particularly suitable in harsh surroundings, such as:  
high-chlorine, -ammonia or -SO<sub>2</sub> environments;
- **zinc-nickel galvanized supporting profile brackets; brackets on fretted/seamed stainless steel;**
- **stainless steel brackets for fastening photovoltaic panels;**
- **stainless steel nuts, bolts and screws;**
- **load on panel** (in case of snow): **up to 1 kN/m<sup>2</sup>;**
- **calculation of wind and snow load on roof: on request;**
- **wind resistance: up to 28 m/s;**
- **simple and intuitive for rapid installation;**
- **adjustable components;**
- **long-lasting;**
- **modular;**
- **materials packaged for easy transport;**
- **tested materials with CE certification** on request;

All fastening kits, for both flat and sloping roofs, are supplied in convenient boxes for easy handling, transport and storage.

## STANDARD KIT



## FASTENING BRACKETS



## SECURING ACCESSORIES



Assembly instructions  
AUSILIO

## STANDARD KIT

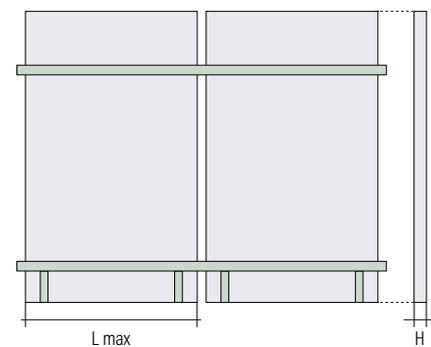
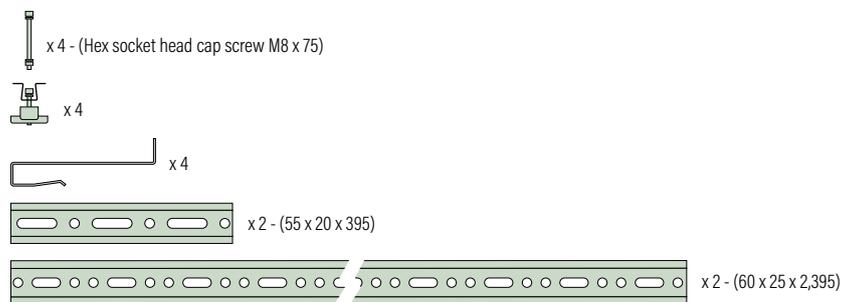
The **AUSILIO system** comprises three standard kits for fixing photovoltaic panels: the "**duo**" system, which can accommodate two panels in the vertical position, the "**mono sky**" and "**mono land**" systems, the former designed for fixing one single panel in the vertical position and in the horizontal position the latter.

All the AUSILIO kits are supplied with all the accessories required for fixing the panels.

### "DUO" KIT COMPRISING FRAME FOR FIXING TWO VERTICAL PANELS



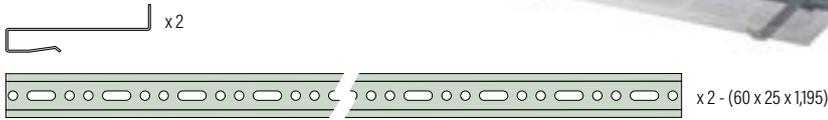
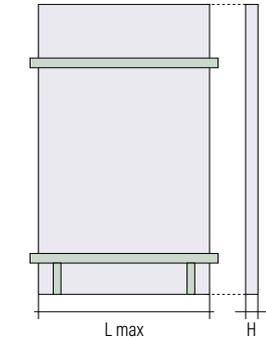
AUSILIO  
"DUO"



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0200K01	Kit for fixing two vertical panels L max. 1,150 mm; H: 30-35 mm (2.4 m)	1	zinc-magnesium

**"MONO SKY"**

KIT COMPRISING FRAME FOR FIXING ONE VERTICAL PANEL

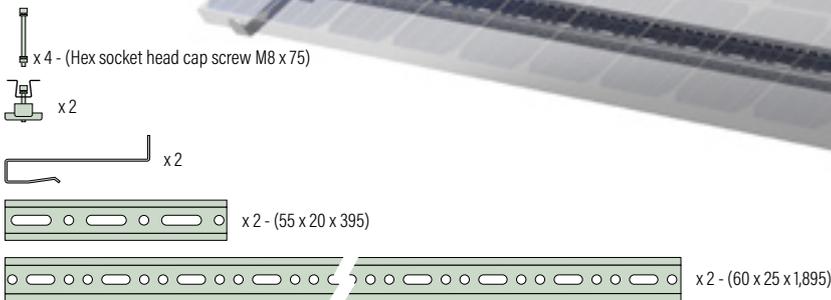
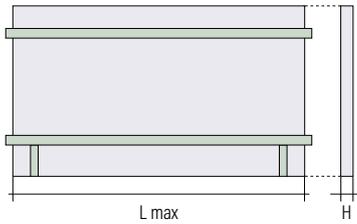


AUSILIO  
"MONO SKY"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0100K01	Kit for fixing one vertical panel L max. 1,150mm	1	zinc-magnesium

**"MONO LAND"**

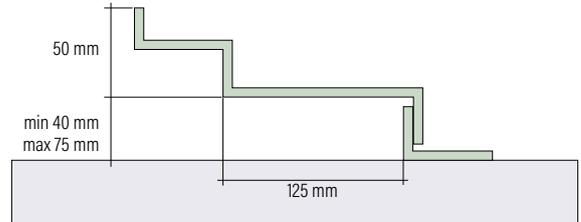
KIT COMPRISING FRAME FOR FIXING ONE HORIZONTAL PANEL



AUSILIO  
"MONO LAND"

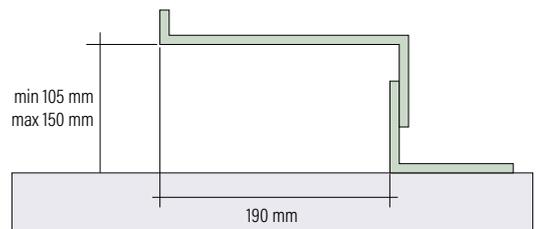
CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0300K01	Kit for fixing one horizontal panel L max. 1,850 mm; H: 30-35 mm (1.9 m)	1	zinc-magnesium

**TILE BRACKETS**  
BRACKETS FOR ROOFS WITH TILES



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0100S01</b>	Fastening brackets for tiled roofs	2	zinc/nickel galvanizing

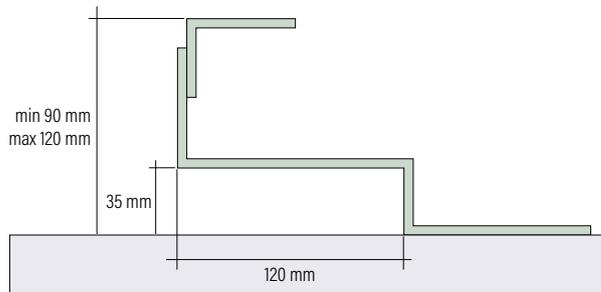
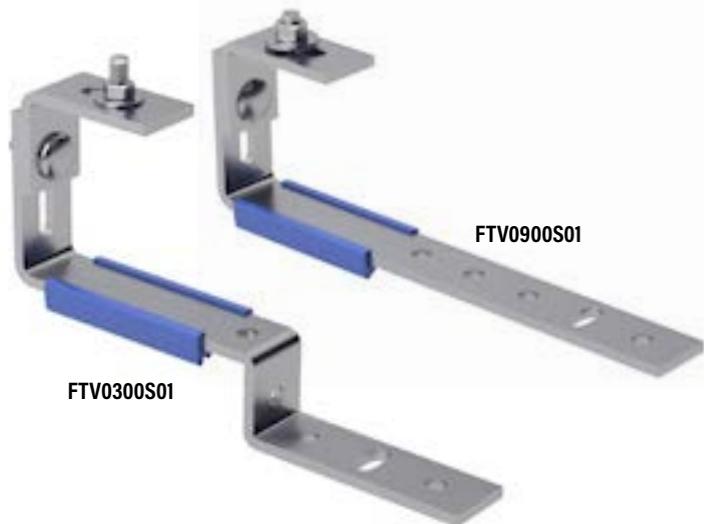
**CONCAVE TILE BRACKETS**  
BRACKETS FOR ROOFS WITH CONCAVE TILES



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0200S01</b>	Fastening brackets for roofs with concave tiles	2	zinc/nickel galvanizing

## BRACKETS FOR SLATE TILES OR CANADIAN SHINGLES

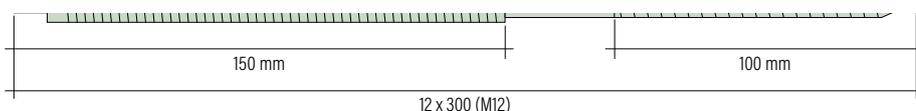
BRACKETS FOR ROOFS WITH SLATE TILES OR CANADIAN SHINGLES



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0300S01</b>	Fastening brackets for roofs with slate tiles or Canadian shingles	2	zinc/nickel galvanized
<b>FTV0900S01</b>	Fastening brackets for roofs with flat slate tiles or Canadian shingles	2	zinc/nickel galvanized

## BRACKETS FOR CORRUGATED OR WOODEN ROOFS

BRACKETS FOR CORRUGATED OR WOODEN ROOFS

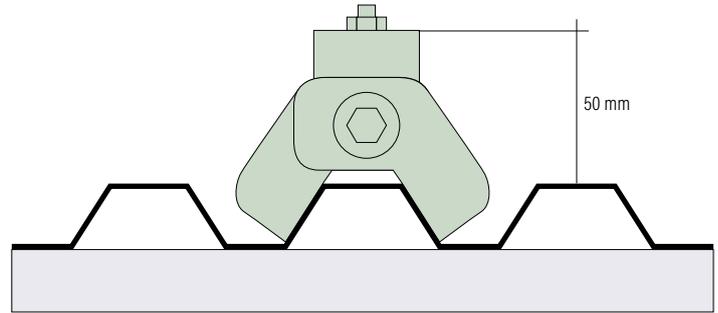


CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0400S02</b>	Fastening brackets for corrugated or wooden roofs	2	stainless steel

**BRACKETS FOR FRETTED METAL SHEET**  
BRACKETS FOR FRETTED METAL SHEET ROOFING

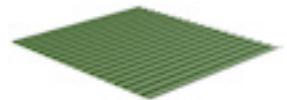


AUSILIO  
"BRACKETS FOR FRETTED  
METAL SHEET"

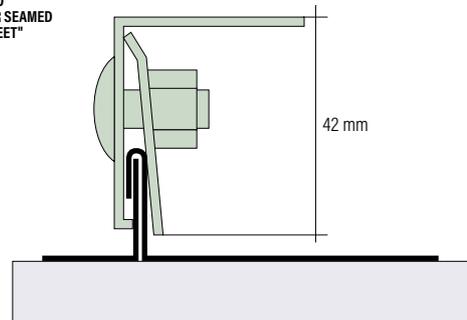


CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0500S02	Fastening brackets for fretted metal sheet roofing	2	stainless steel

**BRACKETS FOR SEAMED METAL SHEET**  
BRACKETS FOR SEAMED METAL SHEET ROOFING



AUSILIO  
"BRACKETS FOR SEAMED  
METAL SHEET"



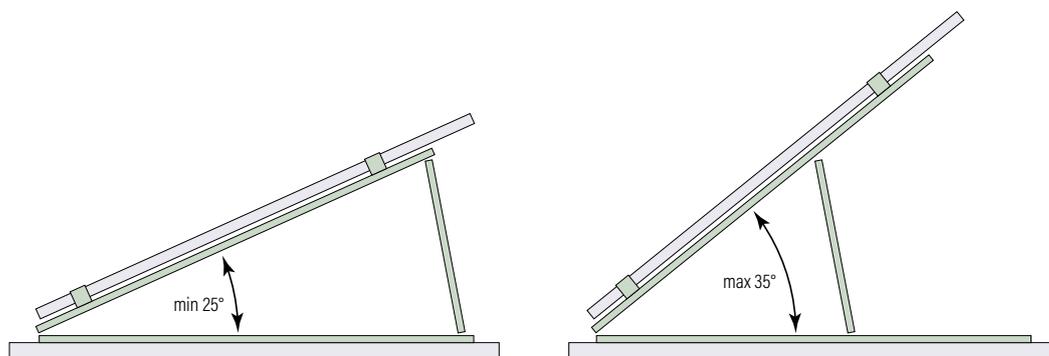
CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0600S02	Fastening brackets for seamed metal sheet roofing	2	stainless steel

## BRACKETS FOR FLAT ROOFS

BRACKETS WITH ADJUSTABLE SLOPE FOR FLAT ROOFS



AUSILIO  
"BRACKETS FOR FLAT  
ROOFS"



CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0800S01	Fastening brackets for flat roofs - L max: 1,495 mm (25°-35°)	1	zinc-magnesium
FTV0700S01	Fastening brackets for flat roofs - L max: 995 mm (25°-35°)	1	zinc-magnesium

**TENSION BRACE KIT**



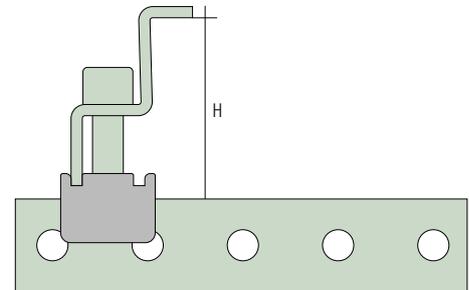
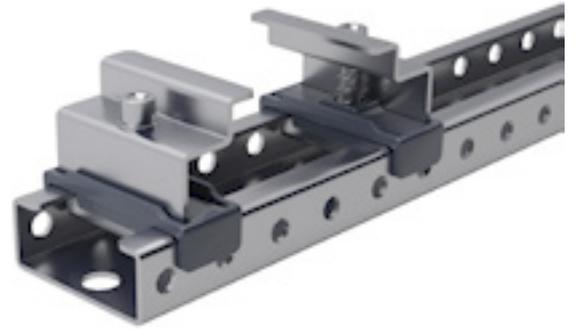
**STEEL CABLE**  
Length: 220 cm  
ø 5 mm



**CLAMPS (2 PCS)**

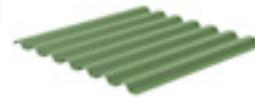


CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0001K02	Tension brace kit - Stainless steel - L: 2,200 mm	1	stainless steel

**END CLAMPS**

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0002K01</b>	Set of end clamps - H: 30 mm	4	stainless steel
<b>FTV0003K01</b>	Set of end clamps - H: 32 mm	4	stainless steel
<b>FTV0004K01</b>	Set of end clamps - H: 35 mm	4	stainless steel

## PROFILE FOR FRETTED SHEET



AUSILIO  
"PROFILE FOR FRETTE  
SHEET - ALUMINIUM"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0001C03	Aluminium supporting profile for fretted sheet metal roofing L = 500mm	1	aluminium
FTV0002C03	Aluminium supporting profile for fretted sheet metal roofing L = 6600mm	1	aluminium

## END CLAMP - ALUMINIUM



AUSILIO  
"END CLAMP - ALU-  
MINIUM"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0003C03	End clamp for aluminium - H = 30mm	1	aluminium
FTV0004C03	End clamp for aluminium - H = 32mm	1	aluminium
FTV0005C03	End clamp for aluminium - H = 35mm	1	aluminium

## INTERMEDIATE CLAMP - ALUMINIUM

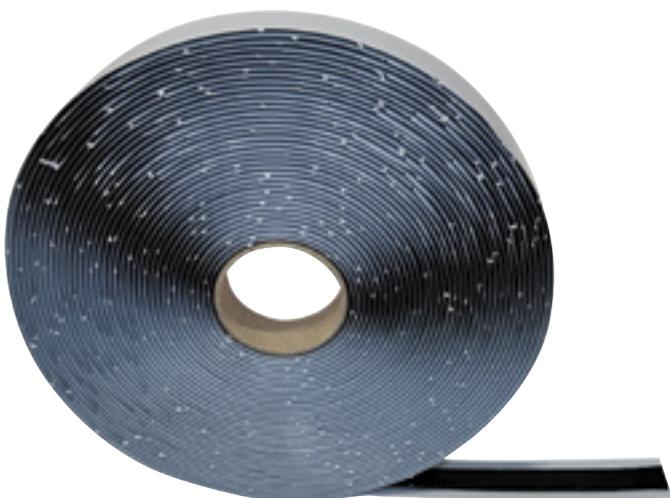


AUSILIO  
"INTERMEDIATE CLAMP -  
ALUMINIUM"

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
FTV0010C03	Intermediate clamp for aluminium - H = from 30 mm to 35 mm	1	aluminium
FTV0011C03	Intermediate clamp for aluminium - H = from 36 mm to 41 mm	1	aluminium

**RIVETS FOR ALUMINIUM PROFILE ON FRETTED SHEET**

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0012C03</b>	Pack of 250 blind rivets 5.2x19	250	aluminium

**BUTYL SEALING TAPE**

CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
<b>FTV0001N05</b>	Butyl tape L = 25m	25	butyl

## INDIVIDUAL COMPONENTS

	CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
	<b>FTV0001C01</b>	Profile 60x25 L = 2995 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0002C01</b>	Profile 60x25 L = 2095 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0003C01</b>	Profile 60x25 L = 1795 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0004C01</b>	Profile 60x25 L = 995 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0016C01</b>	Profile 60x25 L = 2395 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0017C01</b>	Profile 60x25 L = 1195 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0018C01</b>	Profile 60x25 L = 1895 mm zinc-magnesium steel	1	Zinc-magnesium steel
	<b>FTV0005C01</b>	Connecting joint 55x20x2 L=295 mm	1	Zinc-magnesium steel
	<b>FTV0001C02</b>	4 x M8 x 75 stainless steel Hex socket head cap screw	1	Stainless steel
	<b>FTV0006C01</b>	H30 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0007C01</b>	H32 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0008C01</b>	H34 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0009C01</b>	H35 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0010C01</b>	H36 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0011C01</b>	H38 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0012C01</b>	H40 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0020C01</b>	H65 end clamp - for zinc-magnesium	1	Stainless steel
	<b>FTV0013C01</b>	M8x35 central clamp ( H=30-35 mm)	1	Stainless steel
	<b>FTV0014C01</b>	M8x35 central clamp ( H=36-41 mm)	1	Stainless steel
	<b>FTV0015C01</b>	Slip-preventing safety clamp under panel	1	Zinc\nickel galvanized steel
	<b>FTV0019C01</b>	Clevis - Zinc nickel	1	Zinc\nickel galvanized steel

## INDIVIDUAL COMPONENTS

	CODE	DESCRIPTION	PIECES PER PACK	MATERIAL
	<b>FTV0001C03</b>	profile in aluminium 60x15 L=500 mm	1	Aluminium
	<b>FTV0002C03</b>	profile in aluminium 60x15 L=6600 mm	1	Aluminium
	<b>FTV0003C03</b>	H 30 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0004C03</b>	H 32 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0005C03</b>	H 34 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0006C03</b>	H 35 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0007C03</b>	H 36 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0008C03</b>	H 38 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0009C03</b>	H 40 mm end clamp - for aluminium	1	Stainless steel
	<b>FTV0010C03</b>	M8x25 central clamp ( H=30-35 mm) - for aluminium	1	Stainless steel
	<b>FTV0011C03</b>	M8x35 central clamp ( H=36-41 mm) - for aluminium	1	Stainless steel
	<b>FTV0012C03</b>	5.2X19blind rivet (250 pieces/box)	1	Aluminium
	<b>FTV0001C04</b>	Modular ballast 40 x 40 x 6 mm - 18 kg	1	Concrete

**UNI EN ISO 9001:2015  
CERTIFIED QUALITY SYSTEM  
IATF 16949:2016**

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**OFFICINE  
RASERA**

**OFFICINE RASERA srl**  
Via degli Artigiani, 35  
CROCETTA del MONTELLO  
TV - ITALY

tel +39.0423.639823  
info@rasera.com  
**www.rasera.com**

