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LIST OF MATERIALS

APRIL 2025

DEAL SOLAR

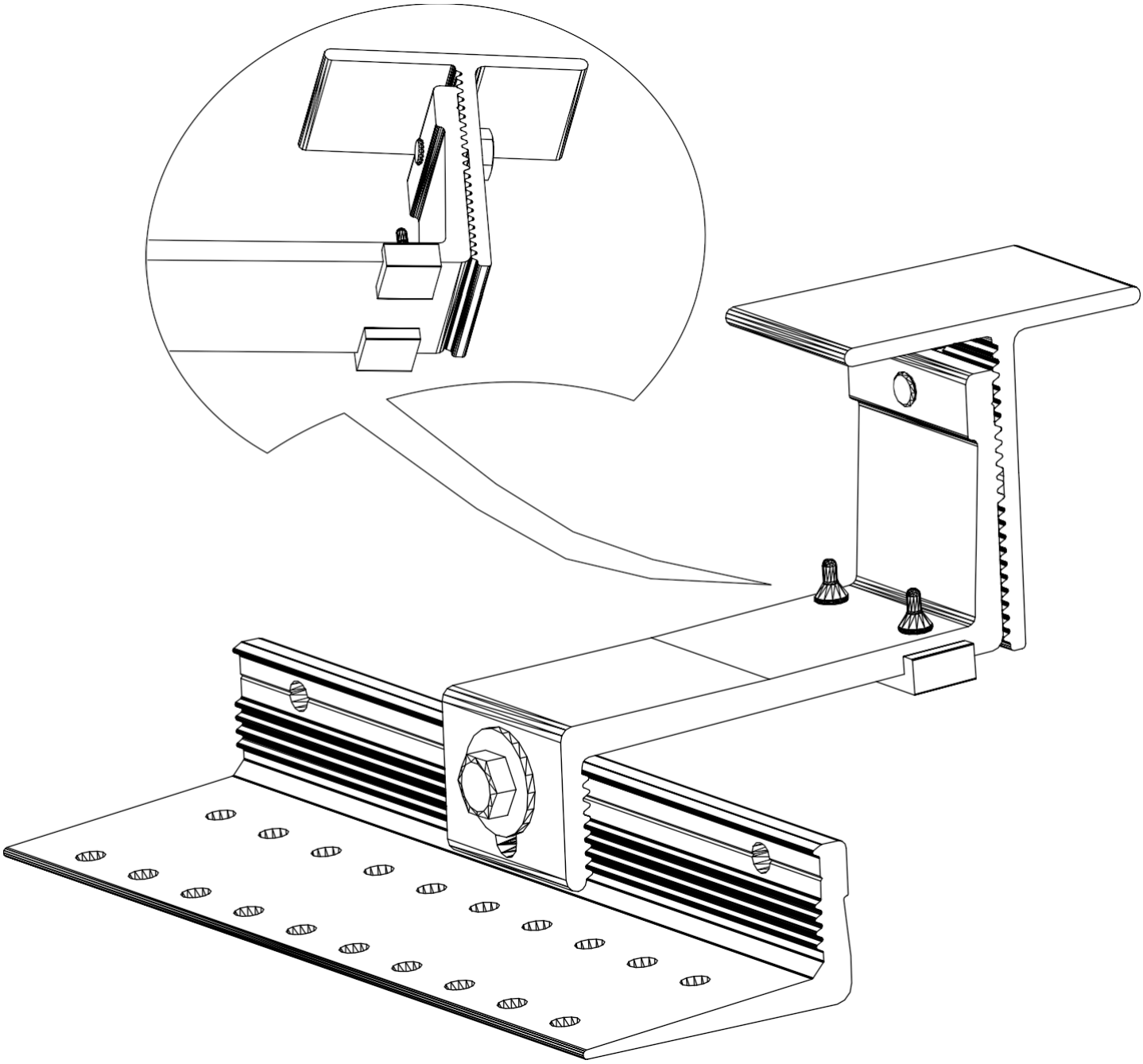
TÜV AUSTRIA HELLAS EN ISO 9001:2008

TÜV HELLAS Member of TÜV NORD Group

ROOF SYSTEM

PV ALUMINIUM MOUNTING SYSTEM

Elastic Protective Base Protector for Ceramic Roof Support (Type I and II) The innovative invention of DEAL



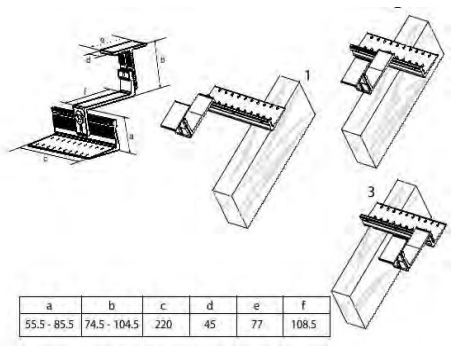
TILE ROOF BASE ˜TYPE I AND II° **ELASTIC ABSORBER.**

This kit is an auxiliary part of the Type I and II Tile Roof Support Bases. It is placed under the "Z" shaped section of the Base and allows for smooth adhesion to the tile. This prevents the tiles from breaking. Two (2) elastic protective fittings shall be fitted to each Base

TILE CAP

HIGH BA□H FOR ROOFING WITHOUT TOPPING - STEP I

CODE 150.3110



a	b	c	d	e	f
55.5 - 85.5	74.5 - 104.5	220	45	77	108.5

~~T-ROOFS~~

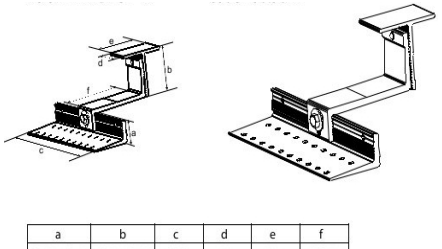
24 SEM/CIBOSIA

~~SIMI~~

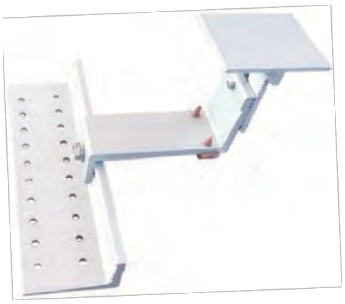
The base shall be used for roofs without a skin. It can be adjusted in height to 'a' (from 55,5-85,5mm) and 'b' (from 74,5-104,5mm). It can be supported in 3 different ways, as shown above left. It is statically tested and TUV-certified. The bases are placed at a maximum distance of 1,20 m from each other. The base is equipped with elastic pads to dampen shocks and prevent the tile from breaking.

LOW BASE FOR ROOFING WITH TILES - STEP III

CODE 150.3111



a	b	c	d	e	f
37.5 - 49.5	73.5 - 121.5	220	45	77	108.5



KITCHEN

~~24 SEM/CIBOSIA~~

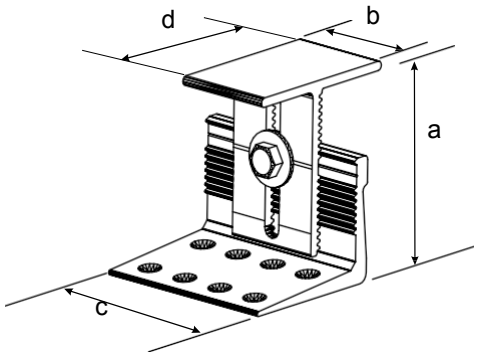
SIMI

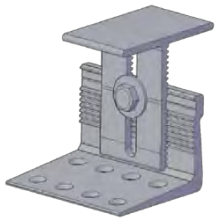
The base is used for roofs with stone. Adjusted through height to "a" (37,5mm-49.5mm and is longer than that in Type I) and in "b" (73,5mm-121,5mm and is longer than in Type I). It is also supported in 3 different ways. It is statically studied and certified by TUV. The supports are placed at a maximum distance of 1,20 m from each other. Rubber pads can be placed at the point where the profile touches the tile to dampen shocks so that the tile does not break.

ALTERNATIVES TO THE ROOFING SYSTEM

BAPH TILE ROOFING IN THE REGION OF II (TEGOLA)

CODE 150.3020





a	b	c	d
79.5 - 109.5	45	85	77

PACKAGING

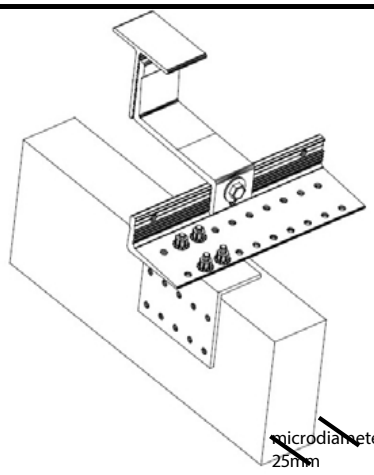
48 SEM/CIBOSIA

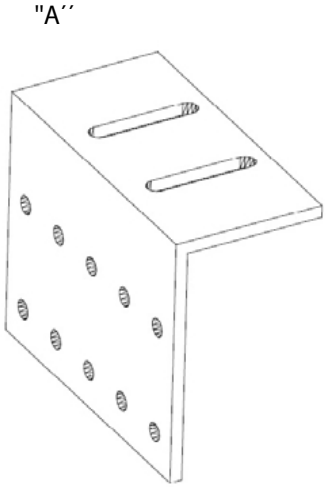
SEMI

The base shall be used on roofs with pitch ceramics. It is adjustable in height to "a" (from 79, 5-109.5mm). It is statically tested and certified by TUV. The supports are placed at distances between each other of a maximum of 1,20 m

LATERAL SUPPORT FITTINGS FOR THE WAVES

CODE 150.3070





COUNTRY

48 SEM/KIBOSIA

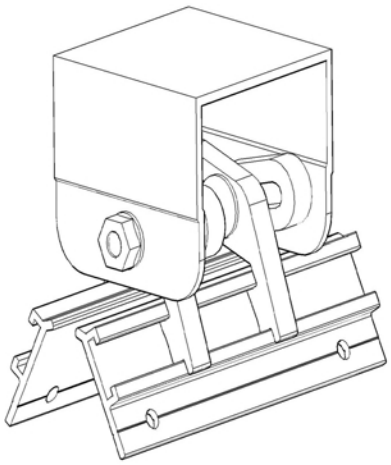
SIMI

The corner bracket is used for the mounting of brackets on tile roofs where Type I and II tile roof brackets cannot be attached vertically to the central joists. ΔIt has two (2) oval holes, 36.68 mm long, for flexibility in connecting to the base. The package contains 48 sets, i.e. the 'A' corner and 4 INOX screws with safety nuts.

INDUSTRIAL DRYING

BAPIPSILICON ROOFING IN STEP IV

CODE 150.3060



PACKAGING

60 SEM/CIBOSIA

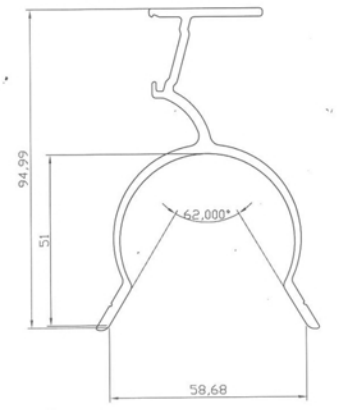
SEMI

The Type IV Sheet Metal Roof Support Base is the innovative achievement of DEAL. The base is very flexible in use and is the perfect solution for the installation of photovoltaic panels on trapezoidal sheet metal roofs or industrial roofs. Due to its clever design, it can be mounted on all types of sheet metal roofing. Available in a carton pack which includes 6 0 bases fully assembled. The package includes four (4) 6.3X32mm INOX self-drilling screws and two (2) 6.3X19mm INOX self-drilling screws.

The following INOX Type Sheet Metal Roof Base is also offered as a solution for mounting PV on an Industrial Roof. It is fully anodized, is similar in mounting philosophy to the TYPE IV and even has the advantage that when the panels are placed LANDSCAPE, there is no need to put in support rails, thus reducing costs.

Type INOX sheet metal base

CODE 150.3062



PACKING

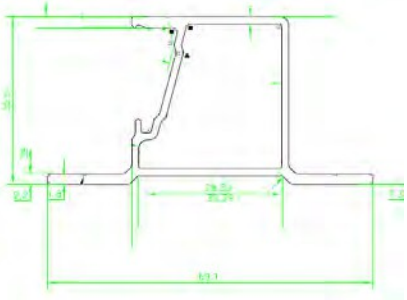
Προϊόν

125SEM/CIB

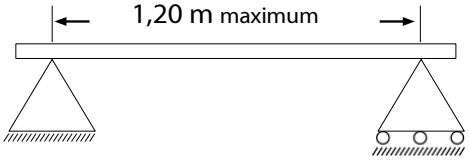
SEMI

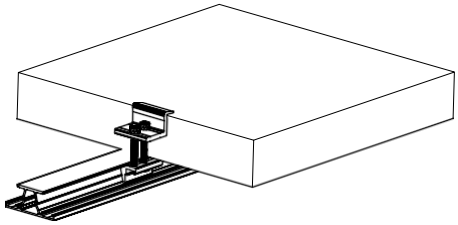
SUPPORT SYSTEM TYPE III

COMBINED BASE I, JI, TEGOLA AND BIO-SHELTER BASES WITH SUPPORT RAIL, ANCHOR KITS AND RAIL CONNECTOR



RAY SECTIO N





ANCHORAGE OF PANEL TO RAIL

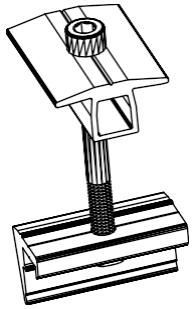
Aluminium rails Aluminium rails

Code	m	SYSC.	PRICE PER PIECE
150.1220	3,0	PCS	
150.1221	4,0	TEM	

150.1222 5,0 PCS

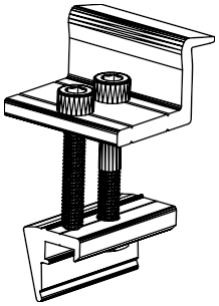
CODE 150.2031 RAIL EDGE COVER

PRICE	



Anchor set medium
Middle clamp set

Code	Panel thickness
150.2110	50-36 mm
150.2120	40-26 mm
PACKAGING	200 PCS / BOX
PRICE	



End clamp set

Code	Panel thickness
150.2111	50-36 mm
150.2121	40-26 mm
PACKAGING	150 PCS / BOX
PRICE	

RAIL WITH JOINT

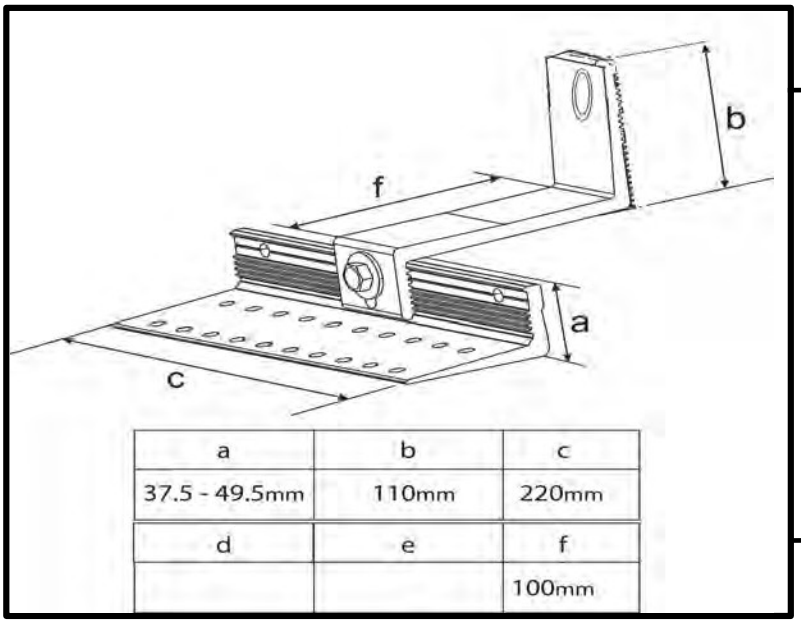
Rail connector set
Rail connector set

Code 150.2143

PACKAGING	102 PCS/BOX
PRICE	

BA E CERAMIC CAP - T-BOLT

CODE 150.3112



a	b	c
37.5 - 49.5mm	110mm	220mm
d	e	f
		100mm

T-CETA

40 SEM/CIBOSIA

SIMI

This base is used in cases where we do not wish to use 6.3x19 self-drilling screws, which are used in Type I and II Ceramic Roofing Bases. The base is adjustable in height to 'a'. This base consists of 2 separate parts, the base angle, which is made up of three parts, the base angle and the base angle.
(3) cap screws fixed to the main wheels (carpets) and the 'Z' shaped profile of the base, which enables the tile to be stepped over. The base is combined with the special rail, which is fixed to the upper part of the 'Z' profile by means of the T-BOLT screw, for the subsequent installation of the PV panels using the anchorage sets (middle and edge).

T-BOLT BASE

T-BOLT BASE ME T-BOLT RAIL

SUPPORT SYSTEM T-BOLT TYPE

The T-BOLT type support system consists of the T-BOLT type cantilever base, the T-BOLT type rail, the T-BOLT connector and the M8 T-BOLT screws with the M8 safety nut.

T-BOLT type base
CODE 150.3112
TIMH :

With M8 T-BOLT screws and M8 safety nut.

Aluminium rails T-BOLT,

Aluminium rails T-BOLT,

Code	m	SYNC.	UNIT PRICE
150.1144	4.4	TEM	

CODE 150.2031A EDGE TRIM RAGA

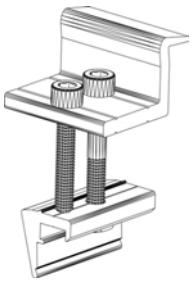
PRICE

Middle clamp set-Middle clamp set

Code	Panel thickness
150.2110	50-36 mm
150.2120	40-26 mm
PACKAGING	200 PCS / BOX
PRICE	

End clamp set - End clamp set

Code	Panel thickness
150.2111	50-36 mm
150.2121	40-26 mm
PACKAGING	150 PCS / BOX
PRICE	



Rail connector set - Rail connector set

Code 150.2143

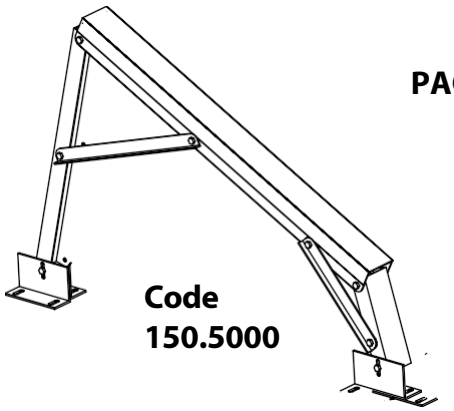
PACKING	102 PCS/BOX
PRICE	

SYSTEM FOR SUPPORTING LIGHT BULBS IN ROOMS
KAVALETO TYPE I, FOR 1 PANEL PORTRAIT

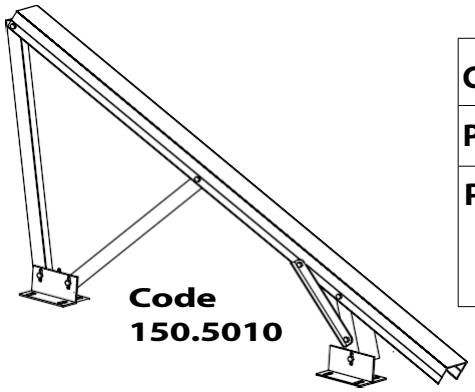
CODE 150.5000

PACKAGE 2 CALIBRATORS/PACKAGE

PRICE



KAVALETO II FOR 2 PANELS LANDSCAPE



CODE	**150.5010**
PACKAGING	**2 CALIBRE/PACKAGE**
PRICE	

CALABASH TYPE I, II

The easel has been designed and tested for EUROCODE durability and certified by TUV NORD. It is made entirely of aluminium profiles. I t is connected by means of INOX M8 screws and safety nuts. The support feet are independently adjustable with each other and have an additional height adjustment of 0.025m, so that everything is easily aligned. They can be used in conjunction with the other easels because they are made at the same angle to form a single surface. The distances between easels must not exceed 2,0 m and t h e profile projections must not exceed 0,50 m.

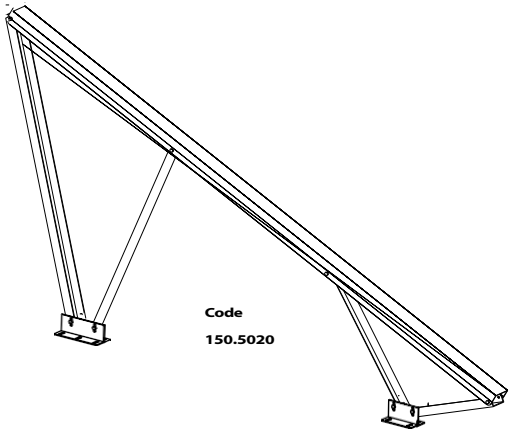
ATTENTION : When positioning and installing easels, account should be taken of the wind resistance table of the easels, by region. The table can be found on the next page and indicates the alternatives to be used. In order to ensure the acceptable levels of resistance, it is necessary to use the chemical interlocks on a roof or equivalent cement counterweights in a field.

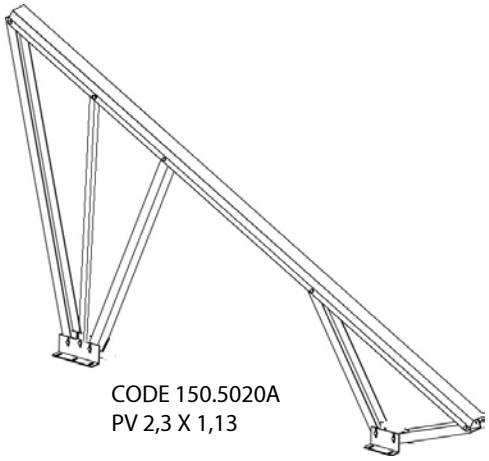
SPECIAL SUPPORT TRIANGLE CODE 150.5051

CODE	**150.5051**
PACKAGING	**1 TRIANGLE/PACKAGE**
PRICE	

KAVALETO TYPE III FOR 2 PORTRAIT PANELS

CODE	150.5020
PACKAGING	2 CAVALETTES/PACKET
PRICE	





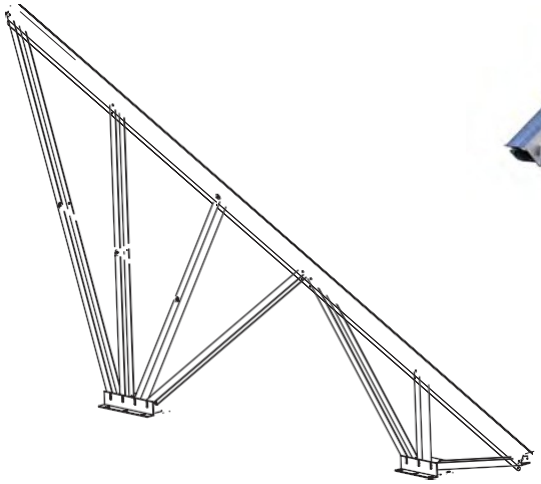
CODE 150.5020A
PV 2,3 X 1,13

CALIBRE TYPE III

The easel has been designed and tested for strength according to EUROCODE and certified by TUV NORD. It is manufactured entirely of aluminium profile. It is connected by means of INOX M8 screws and nuts. security. The support feet are independently adjustable with each other and have additional and adjustment through height 0,025m, to align all very easily. They can work together with the other easels, because they are made with the same angle to form a single surface. The distances between the easels shall not exceed 2,5 m¸ and the profile projections shall not exceed 0,50 m.

ATTENTION : When positioning and installing easels, account should be taken of the wind resistance table of the easels, by region. The table can be found on the next page and indicates the alternatives to be used. In order to ensure the acceptable levels of resistance, it is necessary to use the chemical interlockings in a roof or equivalent cement counterweights in a field.

KAVALETO IV FOR 3 PANELS PORTRAIT



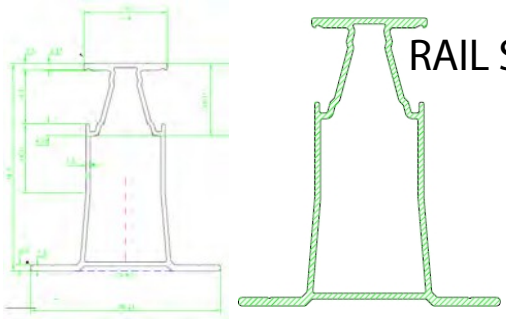
CODE	**150.5030**
PACKAGING	**1 CALIBRE/PACKAGE**
PRICE	

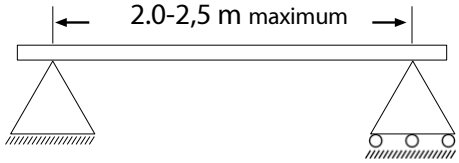
CALABASH TYPE II , IV

The easel has been designed and tested for EUROCODE durability and certified by TUV NORD. It is manufactured entirely of aluminium profile. It is connected by means of INOX M8 screws and nuts. security. The support feet are independently adjustable with each other and have additional and adjustment through height 0,025m, to align all very easily. They can work together with the other easels, because they are made with the same angle to form a single surface. The distances between the easels shall not exceed 2,5 m, and the profile projections shall not exceed 0,50 m.

ATTENTION : When positioning and installing easels, account should be taken of the wind resistance table of the easels, by region. The table can be found on the next page and indicates the alternatives to be used. In order to ensure the acceptable levels of resistance, it is necessary to use the chemical interlocks on a roof or equivalent cement counterweights in a field.

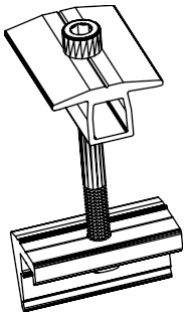
TYPE III RAIL SUPPORT SYSTEM





Aluminum rails type III

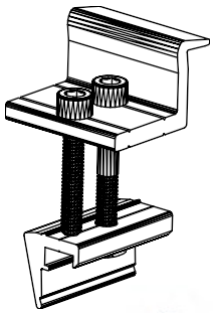
Code	m	SYNC.	PRICE PER PIECE
150.1185	3.0	TEM	
150.1191	4. 0	PCS	
150,1192	5. 0	PCS	

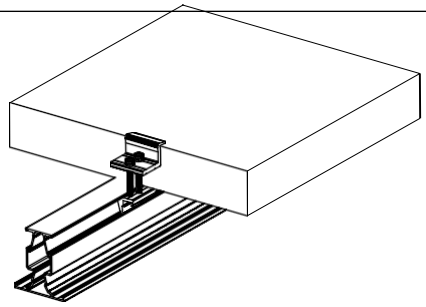


Anchor set medium

Middle clamp set

Code	Panel thickness
150.2110	50-36 mm
150.2120	40-26 mm
PACKAGING	200 PCS / BOX
PRICE	





End clamp set

Code	Panel thickness
150.2111	50-36 mm
150.2121	40-26 mm
PACKAGING	150 PCS / BOX
PRICE	

Rail connector set

Rail connector set

Code 150.2144

PACKAGING	20 PIECES/BOX
PRICE	

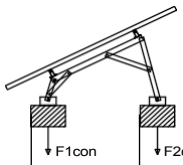
RAIL WITH BONDING

MOUNTING ACCESSORIES

CODE	PHOTO	DESCRIPTION CODE	PRICES
150.3040		Dissolver for wood INOX M10X250	
150.3042		Dissolver for wood INOX M10 300	
150.3043		Diose grinder for wood INOX M12 300	
150.3041		Adjustable aluminium plate for diozistophone	
150.3043		Lame for diode shaker and T-BOLT rail	

THE PROPOSED COUNTERWEIGHTS OF TABLES I, II AND III GIVE 167 % SAFETY (AS DETERMINED BY THE BROADCASTER)

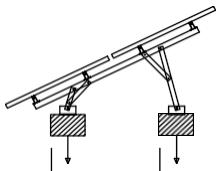
I



H= 0 m

		F1con	F2con
COASTAL EXHIBITOR IN OPEN SEA:	152 KM/H	6.7 KN	10 KN
COASTAL EXHIBITOR:	139 KM/H	5.7 KN	8.5 KN
COASTAL RURAL:	134 KM/H	5.2 KN	7.8 KN
COASTAL BIOMHXANIKH/ SUBURBAN:	127 KM/H	4.7 KN	7 KN
COASTAL URBAN:	122 KM/H	4.3 KN	6.4 KN
CONTINENTAL EXHIBITOR:	114 KM/H	3.7 KN	5.6 KN
CONTINENTAL RURAL:	111 KM/H	3.4 KN	5 KN
CONTINENTAL BIOMHXANIKH/SUBURBAN:	104 KM/H	3 KN	4.5 KN
CONTINENTAL URBAN:	100KM/H	2.7 KN	4.1 KN

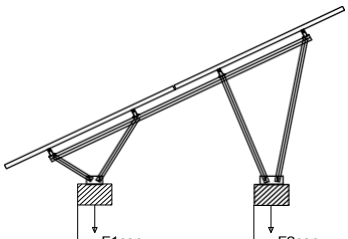
II



H= 0 m

		F1con	F2con
COASTAL EXHIBIT IN OPEN SEA:	152 KM/H	9.7 KN	14 KN
SEASIDE EXHIBITOR:	139 KM/H	8.2 KN	11.8 KN
SEASIDE RURAL:	134 KM/H	7.6 KN	10.9 KN
COASTAL BIOMHXANIKH/ SUBURBAN:	127 KM/H	6.8 KN	9.7 KN
COASTAL URBAN:	122 KM/H	6.2 KN	8.9 KN
CONTINENTAL EXHIBITOR:	114 KM/H	5.4 KN	8.7 KN
CONTINENTAL RURAL:	111 KM/H	4.9 KN	7.1 KN
CONTINENTAL BIOMHXANIKH/SUBURBAN:	104 KM/H	4.3 KN	6.3 KN
CONTINENTAL URBAN:	100KM/H	4 KN	5.8 KN

III



H= 0 m

		F1con	F2con
OFFSHORE EXPOSURE IN OPEN SEA: OFFSHORE	159 KM/H	16 KN	26.3 KN
EXPOSURE:	148 KM/H	14 KN	22.8 KN
COASTAL RURAL:	134 KM/H	11.4 KN	18.5 KN
COASTAL BIOMHXANIKH/ SUBURBAN:	127 KM/H	10.2 KN	16.5 KN
COASTAL URBAN:	122 KM/H	9.3 KN	15.2 KN
CONTINENTAL EXHIBITOR:	121 KM/H	9.2 KN	15 KN
CONTINENTAL RURAL:	111 KM/H	7.3 KN	12 KN
CONTINENTAL BIOMHXANIKH/ SUBURBAN:	104 KM/H	6.5 KN	10,8 KN
CONTINENTAL URBAN:	100KM/H	5.9 KN	9.9 KN