

BC PRODUCT RANGE & MOUNTING STRUCTURE DESIGN

SUPPORTING YOU WITH STRONG PARTNERSHP

- > Stock availability and quick turn-around time
- > Best pricing
- > Value adding with system component aggregation
- > Training and customer events
- > Supports Schletter and support by Schletter



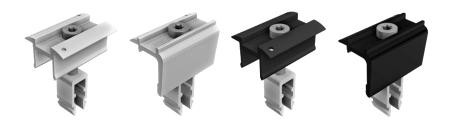




ROOFTOP

SCHLETTER

UNLIMITED POSSIBILITIES.



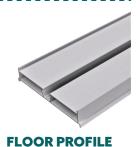
MODULE CLAMPS

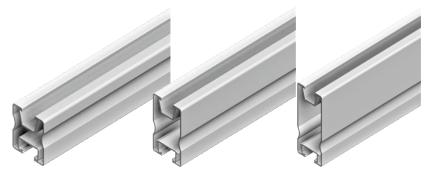


HEIGHTENING ELEMENT



FLOOR PROFILE CONNECTORS





PROFILES











CLAMPFIT



SCHLETTER PROLINE









All inclusive Kit systems - 2 & 3 PV Module Mounting kits (or double up to 4 & 6)



SCHILLER

Rail-less kit box

Boxes with rails included



SCHLETTER

GROUND-MOUNT SYSTEM

- 2V8 (2 rows of 8 modules in portrait) / 16 PV Modules
- 2V12 (2 rows of 12 modules in portrait) / 24 PV Modules
- 2V18 (2 rows of 18 modules in portrait) / 36 PV Modules





FACTS AND FIGURES



1968

> 800

FOUNDED IN BAVARIA

EMPLOYEES

> 60 GW

> 580

SYSTEMS INSTALLED WORLDWIDE

PRODUCTS FOR ALL SOLAR MOUNTING NEEDS

105

> 34 M

GLOBAL PATENTS SECURED

SCHLETTER ROOF HOOKS INSTALLED



GLOBALY REPRESENTED

LOCALY RELEVANT





TRACK RECORD

+12 Years in South Africa

SCALEABLE

Accessible global supply chain

SUPPORT LOCAL

Local supply and fabrication

FLEXIBLE

Local partnerships, stock and warehousing

LOCAL SUPPORT

Local team of 19 employees

EXPERIENCE

Globally Represented Team

EXPERTISE

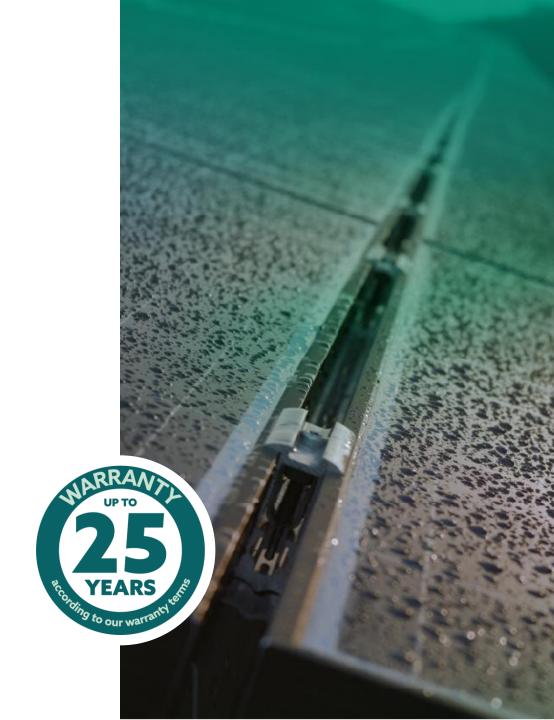
Strong Engineering Capabilities

UNCOMPROMISING QUALITY.

WHY IS STRUCTURE QUALITY IMPORTANT?

- PV Module Warranties: >25 Years?
- PPAs: 15-30 years?
- Roof sheet warranties: 20 40 years?
- Customer Source of Financing: up to 25 years?

Structure should outlast all of the above regardless environmental and other external factors!



CERTIFIED QUALITY

- Highest quality materials
- Up to 25-year warranty
- ISO 9001:2015 Quality Management
- ISO 14001:2015 Environmental Management
- DIN EN 1090:2012 Execution of steel and aluminum structures
- MCS Product Certification
- ETA European Technical approval
- UL Certifications
- ETN certifications
- Individual component tests and approvals
- Own laboratory and practical tests



















THE RISKS:





PRODUCT PHILOSOPHY



STRUCTURAL SAFETY

Material utilization Technical solution Structural design Design details



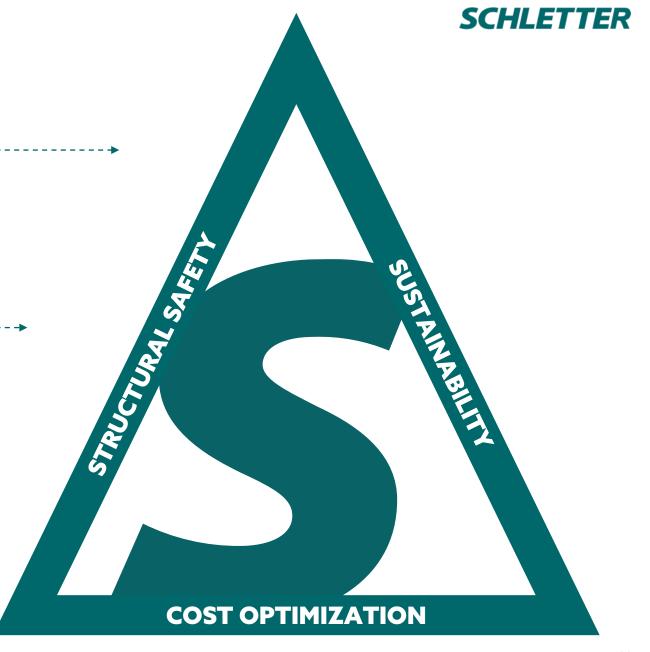
SUSTAINABILITY

Material selection Durability Recycling Maintenance



COST OPTIMIZATION

Material effort Manufacturing Logistics Mounting efficiency













GROUND-MOUNT SYSTEMS



PVMAX

GROUND-MOUNT SYSTEM

Designed for soil unsuitable for pile driving (e.g. landfills or prepaved areas), this system provides a cost-effective steel version (PVMax-S)

- Complete structural analysis and calculation including foundation calculation with dowel recommendation
- Ballasted ground mount system
- · Fast installation
- Can be kept in stock as kits
- Available in the following configurations:
 - 2V8 (2 rows of 8 modules in portrait) / 16 PV Modules
 - 2V12 (2 rows of 12 modules in portrait) / 24 PV Modules
 - 2V18 (2 rows of 18 modules in portrait) / 36 PV Modules

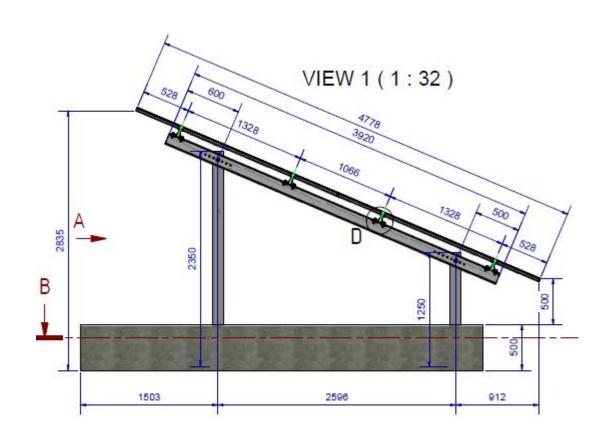


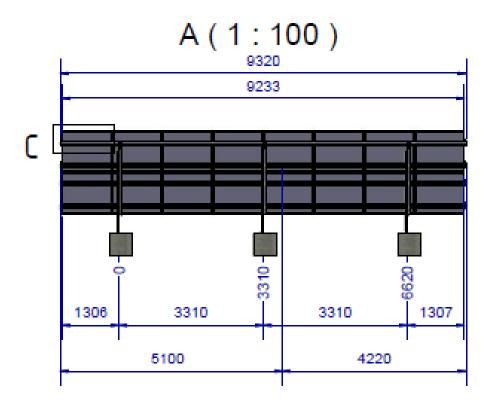




PVMAX

GROUND-MOUNT SYSTEM







PVMAX

GROUND-MOUNT SYSTEM







GENERAL PV MOUNTING TOPICS



ROOFTOP

MODULE CLAMPS

Industry leading design: One module clamps for all module frames between 30 - 47 mm (Mid and End)

10mm x 50mm

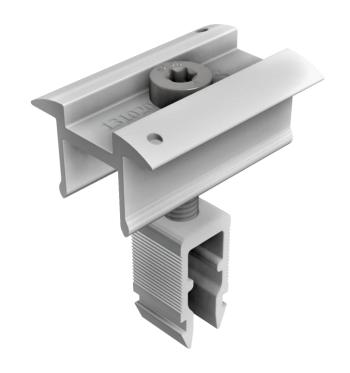
Features:

- · Self-location for easy installation
- Integrating grounding pin
- Single clamp for all module frames
- Mounting with Torx T40
- Completely pre-assembled for quick installation
- · Available in black anodized aluminium

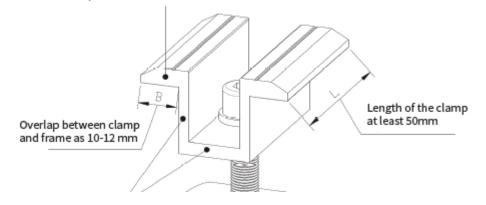
Benefits:

- Quick and easy installation
- Low component count on site and stock
- One tool required





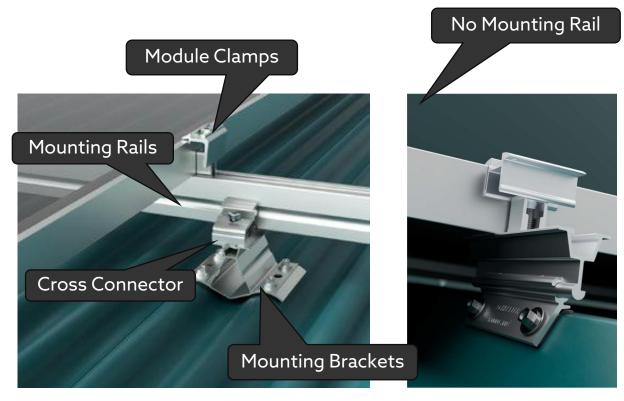
Crimp thickness at least 4.5mm





GENERAL TOPICS: SYSTEM COMPONENTS







Rail-less System

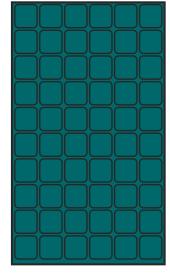


Short Rail System

GENERAL TOPICS: PV MODULE ORIENTATION



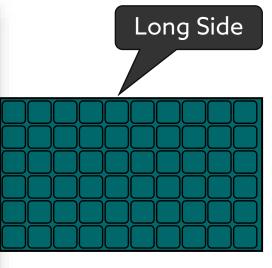




Vertical (V) /

Portrait (P)



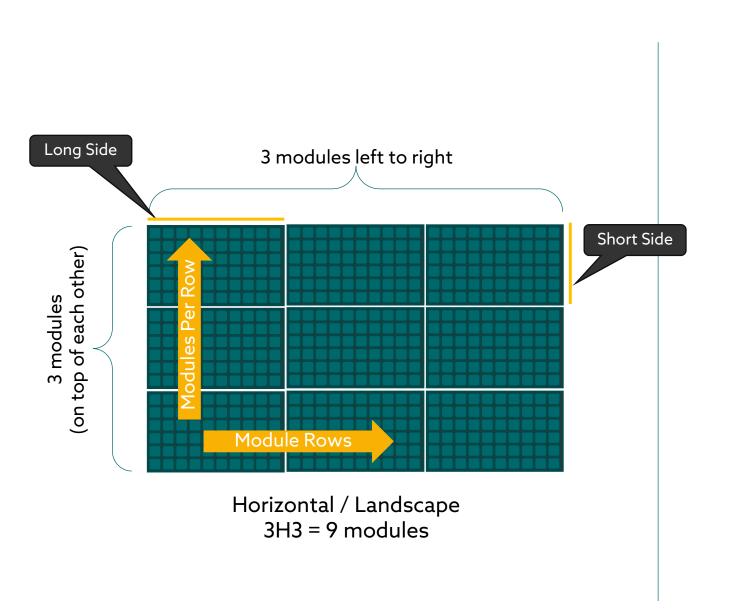


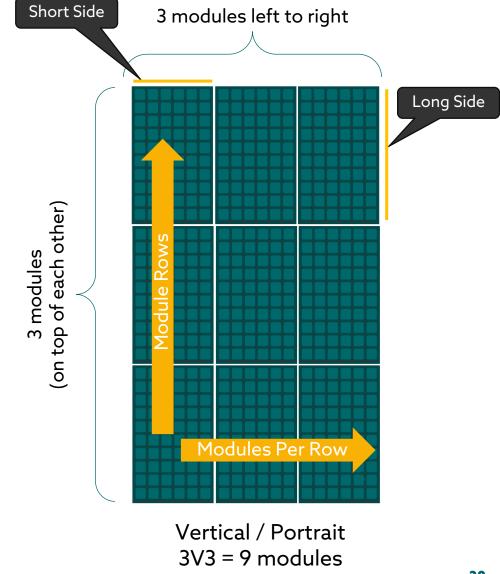
Horizontal (H) / Landscape (L)



GENERAL TOPICS: PV MODULE ARRAYS

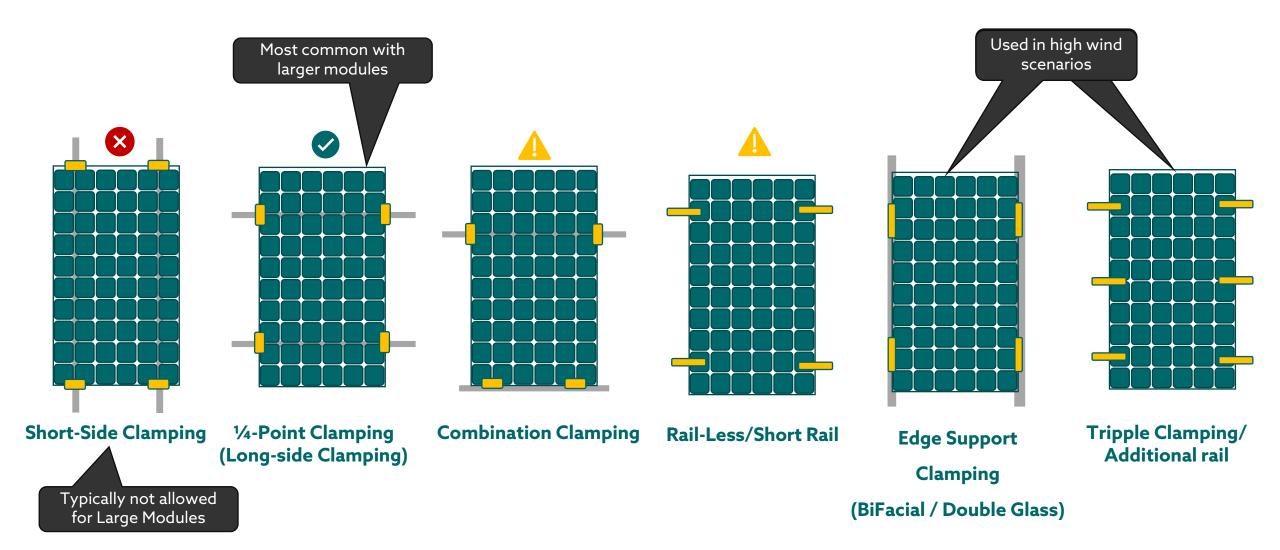






GENERAL TOPICS: CLAMPING METHODS

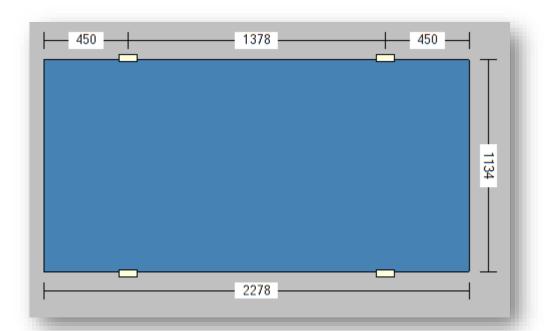


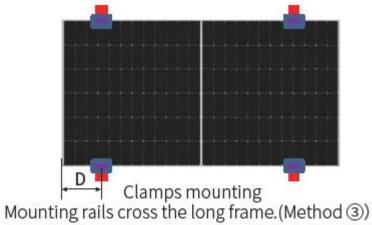


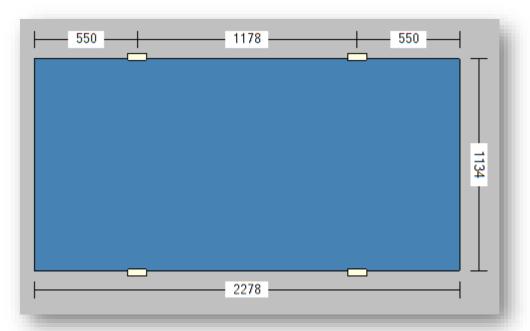
NB: Clamping method affects module warranties and depends on mounting solution, module limitations and module pressure (wind load)

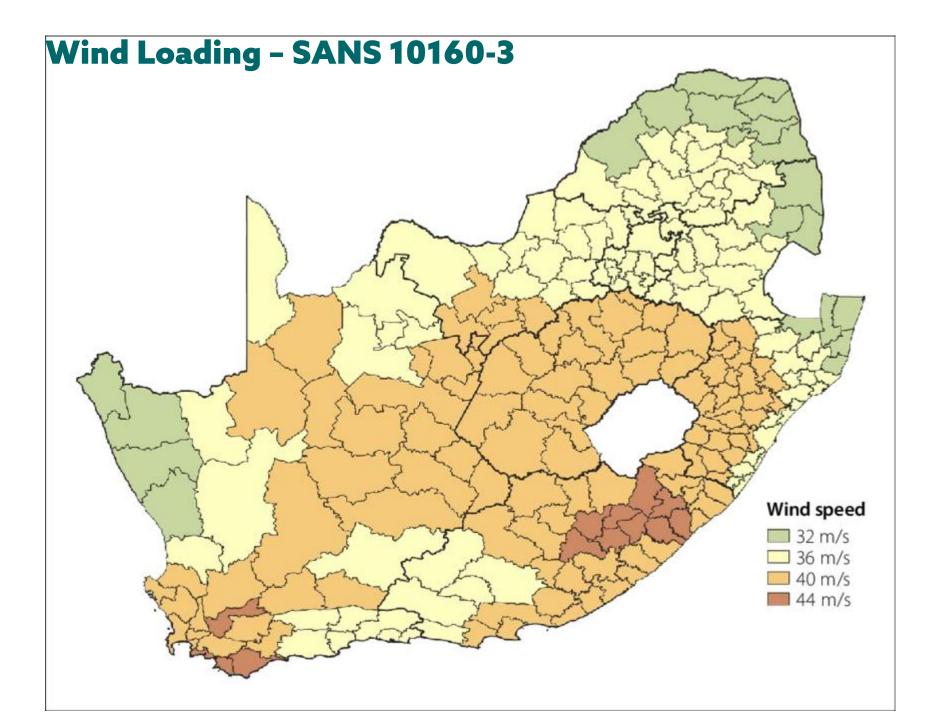
Wind Loading - Module Installation Manual - Acceptable clamping zones

- Example of acceptable clamping zones
- 2278mm long module
- Installation Manual indicates clamping rails across the long side is acceptable between 450mm to 550mm









- Basic Wind Speeds
- Wind speeds are further affected by the following to calculate the module pressure and loadings on mounting structure
 - Terrain Category (e.g. obstacles)
 - Height
 - Location of module (e.g. edge or corner of rooftop or edge of open area array)
 - Tilt Angle (Module tilt and rooftop tilt or hills / dips on open area)

Terrain Category - SANS 10160-3

 Category A: Lakes, Costal Land or area with negligible obstacles and vegetation.

CT 0,87kN/m2

 Category B: Typically Farmland. Area with low vegetation such as grass, and isolated obstacles (buildings, trees) with separation of at least 20 obstacle heights.

CT 0,7kN/m2

• Category C: Towns / Suburbs / Forests. Area with regular cover of vegetation / buildings, or with isolated obstacles (buildings, trees) with separation of at least 20 obstacle heights.

CT 0,49kN/m2

 Category D: CBD / Area in which at least 15% of the surface is covered with buildings which are >15m in height.

CT 0,39kN/m2

The terrain category affects the actual wind pressure.

*1kN/m2 = 100kg/m2 force / 1000 Pa



Α



R



C



D



GENERAL TOPICS: CLAMPING METHODS

Installation Method		Bolts	Mounting	Clamps Mounting							
		Mounting the lo	g rails cross ng frame	M	ounting rails cr	Mounting rails cross the short frame	Clamps are mounted at the corners of				
		Outer Inner Four-hole Four-hole		250 ≤D≤350	350 ≤D≤450	450 ≤D≤550	500 ≤D≤600	150 ≤ E ≤ 250	short frame		
Module Type		Method ①	Method ②		Meth	Method ④	Method ⑤				
54/66-cell Framed Mono-facial Modules	LR5-54HPH-xxxM*	±2400	+5400,-2400	+5400,-2400	/	/	/	±2400	+2400,-1800		
	LR5-54HPB-xxxM*	±2400	+5400,-2400	+5400,-2400	/	/	/	±2400	+2400,-1800		
	LR5-54HNB-xxxM*	±2400	+5400,-2400	+5400,-2400	/	/	/	±2400	+2400,-1800		
	LR5-54HTH-xxxM*	±2400	+5400,-2400	+5400,-2400	/	/	/	±2400	+2400,-1800		
	LR5-54HTB-xxxM*	±2400	+5400,-2400	+5400,-2400	/	/	/	±2400	+2400,-1800		
	LR5-66HPH-xxxM	+5400,-2400	±2400	/	+5400,-2400	/	/	±1800	±1600		
	LR5-66HTH-xxxM	+5400,-2400	±2400	/	+5400,-2400	/	/	+1800,-1400	+1600,-1400		
72-cell Framed Mono-facial Module	LR5-72HPH-xxxM	+5400,-2400	±2400	/	/	+5400,-2400	/	/	/		
	LR5-72HTH-xxxM	+5400,-2400	±2400	/	/	+5400,-2400	/	/	/		
	LR5-72HPH-xxxM*	+5400,-2400	/	/	/	+5400,-2400	/	/	/		
	LR5-72HTH-xxxM*	+5400,-2400	/	/	/	+5400,-2400	/	/	/		
	LR5-72HTHF-xxxM*	+5400,-2400	/	/	/	+5400,-2400	/	Not Allow	Not Allow		
	LR7-72HTH-xxxM*	+5400,-2400	/	1	/	/	+5400,-2400	/	/		
	LR7-72HTHF-xxxM*	+5400,-2400	/	/	/	/	+5400,-2400	Not Allow	Not Allow		

- Values in PV installation Manuals are test values, and a factor of safety needs to be applied
- -2400Pa values / 1,5 factor of safety = 1600Pa
- Wind forces q(z) of 0,65kN/m2 may require triple clamping.

Rooftop Shape, height, direction



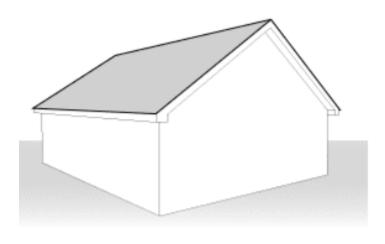
- Roof types: Gable, Flat, Mono, etc.
- Roof Slope
- Roof tilt facing: North/South or East/West
- Module Tilt and Orientation relative to rooftop fixing point



Rooftop Shape, height, direction

SCHLETTER

Roof types: Gable



GABLE ROOF

Edge area

Edge area

Roof centre

Edge area

Fe/4

e/10

Corner area

Edge area

Edge area

Fe/4

e/10

Corner area

Edge area

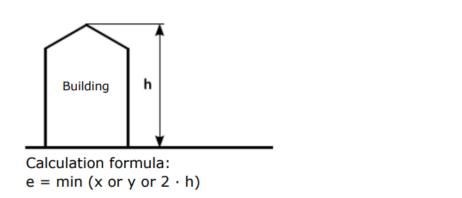
Edge area

Edge area

Corner area

e/10

e/4



Rooftop Wind Zones, effect of shape, height, tilt

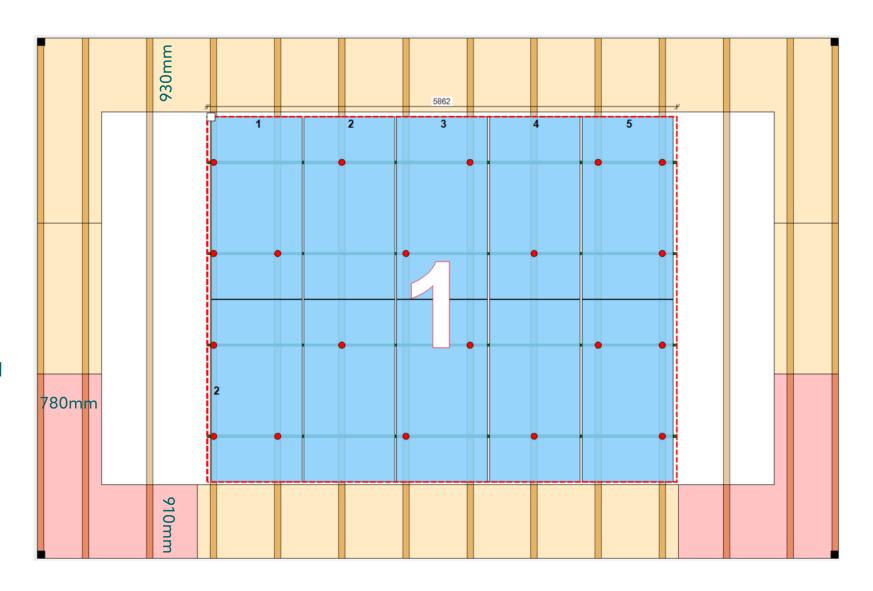




GABLE ROOF

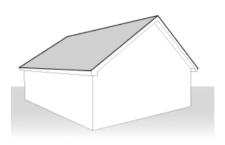
Single Storey (4m) Tile Roof - Cape Town 10m x 6,5m (to ridge)

- Centre: White Zone: 0,51kN/m2
- Edge: Yellow Zone 1,94 times higher load
- Corner: Red Zone 2,1 times higher load



Rooftop Wind Zones, effect of shape, height, tilt

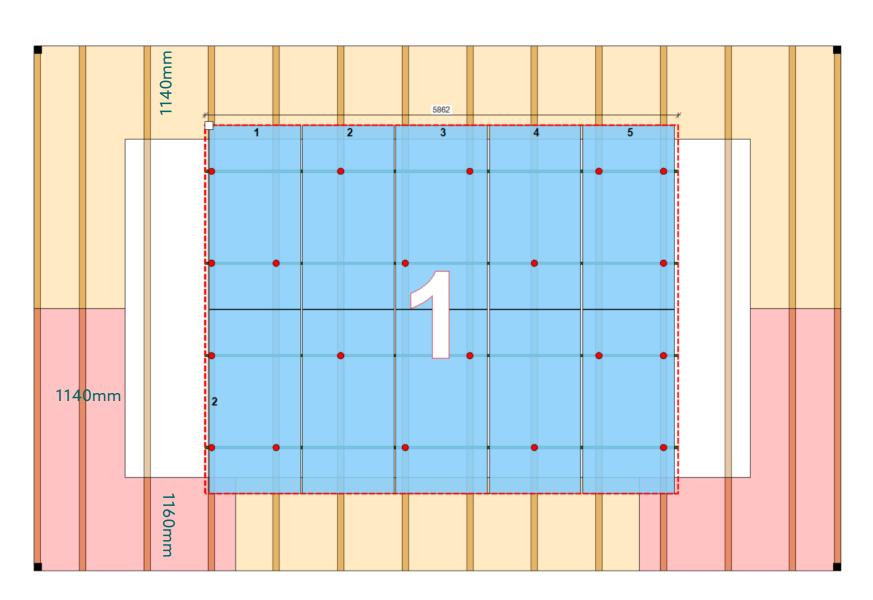




GABLE ROOF

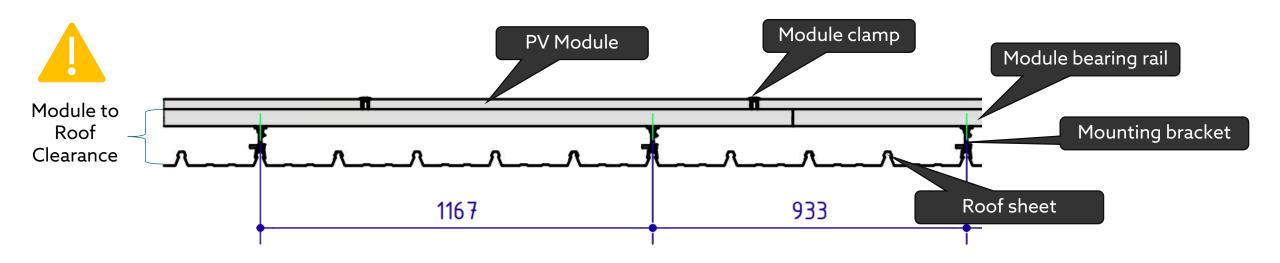
Double Storey (7m) Tile Roof – Cape Town 10m x 6,5m (to ridge)

- Centre: White Zone: 0,6kN/m2
- Edge: Yellow Zone 1,91 times higher load
- Corner: Red Zone 2,1 times higher load



GENERAL TOPICS: MODULE TO ROOF CLEARANCE





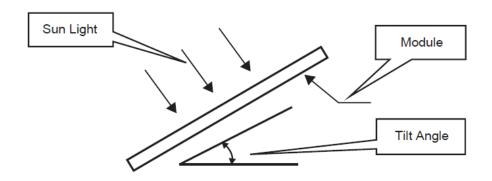
Keep in mind:

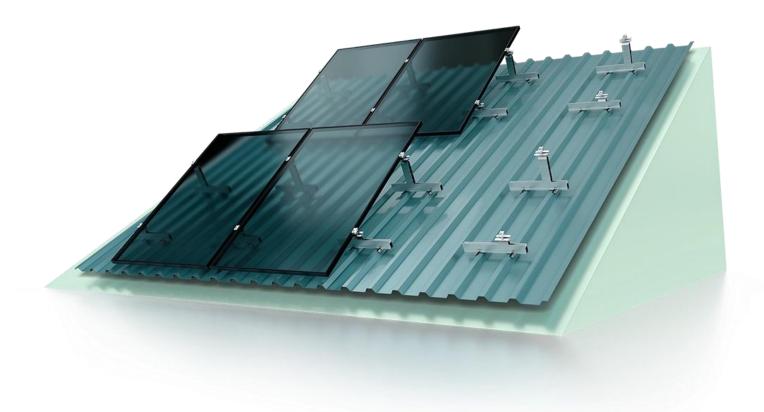
- Different mounting solutions/methods has different heights above the roof sheet (i.e., railed vs railless)
- Consider natural convection/heat trapped behind the module
- Consider installation and environmental conditions (tilt-angle, ambient temperatures, etc.)
- Consider module array layout (i.e., ventilation gaps)
- Review requirements in PV module installation manual
- Obtain approval from module OEM if needed

Soiling - Module Installation Manual



Most Tier 1 manufacturers recommend a minimum 10 degree tilt on their modules to reduce soiling from dust / pollution.





Tilting in Portrait orientation allows sharing of mounting structure between PV modules, but increases shading / row spacing vs tilting in landscape

SCHLETTER CONFIGURATOR 3.0

PROFESSIONAL SOLAR PLANNING FOR PITCHED AND FLAT ROOFS

0.00

- Professional, flexible and quick planning to the highest standards
- Simplified roof layout directly on Google Maps®
- Verifiable structural analysis and professional documentation
- World's most comprehensive load determination database
- Intuitive quick guide throughout the program
- Use variety of arrays, roofs and systems in one plan
- Manually edit bill of materials (BoM)
- Personalised settings allow for individual saving and editing



TYPICAL SALES WORKFLOW



Typical Process for Selecting a Mounting Solution



























Define environmental conditions

SANS10160-3

- Site Location
- Dimensions
 - Height

Corrosion Class

Site Location

Define Roof Type

Sheet Metal (IBR)

Sheet Metal (Corrugated)

Sheet Metal (Seam Roof)

Flat roof (Concrete)

Tile Roof

Define Fixing Method

Fixed to sheet

Fixed onto the sheet

Fixed to substructure

Ballast weight

Select Module Orientation

Portrait

Landscape

Select Mounting bracket

ClampFit

Seam Clamp

Roof hook

Etc.

Select Module Rail

Pro 30/50/70

Rail-less

Add Elevation **Profiles**

Fix Z Pro

A-Frames

Add Accessories

Module clamps

Bonding / Grounding

Cable management

Etc.



ROOFTOP - MATERIAL COMPATIBILITIES



NOTE: Acceptability of drainage from an upper to lower surface should be taken into account when components like PV panels are attached to sheeting to ensure that the sheeting is not compromised

Upper surface Lower surface	Galv	Galv +paint	Al/Zn	Al/Zn+ paint	AI	Stainless steel	Copper	Lead	Fiber cement & Cement Tiles	Slate & Glazed tiles	Glass & Plastic
Galvanized Galv+paint Al/Zn Al/Zn + paint Aluminium Stainless steel	Yes	No	No	No	No	No	No	Yes	Yes	No	No
	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes
	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

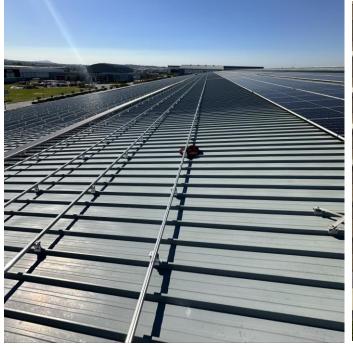














STANDING SEAM ROOFTOP SYSTEMS

- Kliplok 700 / 406
- Saflok 700 / 410
- Diamondek 700

STANDING SEAM



KLIPLOK, SAFLOK DIAMONDEK 700 MOUNTING SYSTEM

Designed for easy and flexible installation allowing for improved air flow and underneath modules

- Installed with single bolt / one tool required
- Railed or Railless Systems
- Integration with elevation profiles to increase tilt angle
- Optional MPLE/Cable tray bracket
- Fits wide range of South African roof profiles
- · Approved by major roof sheeting manufacturers



Stock Items

Seam clamps:

• 112012-114: Seam clamp 551/4 for Kliplock or similar

Also used with:

- 119001-004: Mounting Bracket for Optimizer
- 129063-002 RapidConnect90
- 129063-020 Rapid cross connector 90 Pro
- 109008-024 RapFix Pro Extension flat (used for 3rd party seam clamps)
- FixZ Elevation Profiles



STANDING SEAM

KLIPLOK, SAFLOK DIAMONDEK 700 MOUNTING SYSTEM





08 October 2024

- 1. No perforation of the sheet surface
- 2. Placement of clamps should be 75mm 100mm away from the purlin
- 3. No clamping will be allowed on the Male/Female overlap (side lap)
- 4. A clearance height of >100mm should be present from the pan of the profile and the PV Modules.
- 5. Cabling linking panels should be truncated / cable trays and not be left to lie loose on the sheet surface.
- 6. It is highly recommended that the Solar Installer engages with the holder and issuer of the roof sheeting warranty and recommended that pre- and post-installation inspections / records are conducted in conjunction with the project stakeholders and roof sheeting



Schletter South Africa Unit B, Alphen Square West Corner George & 15th Roads Randjespark Ext. 66

Attention: Xander de Bruys

Solar Mounting Systems - Seam Clamp 551

We confirm receipt of your test report to determine the clamping capacity of the abovementioned mounting clamp when Klip-Lok 700 roof sheets are allowed to deflect between purlins spaced at 2m centres. Furthermore, we note the interpretation of the test results were done in accordance with SANS 10237:2023 -South African National Standard for the design, testing and installation of self-supporting metal cladding.

The test method and resultant capacity complies with the GRS guidelines for the selection and installation of solar mounting clamps to GRS produced concealed-fix sheeting. We herewith confirm the Schletter Seam Clamp 551 is approved for use with GRS Klip-Lok 700 and Klip-Tite and when installed in accordance with the GRS specifications and guidelines will not invalidate the GRS warranty.

Schletter Solar South Africa (Ptv) Ltd

Suite 403 Howard Terraces Pinelands 7405 Cape Town, South Afric

Ref: 112012-007 Seam clamp 551

Att: Mr. Dean Lewis

It is hereby confirmed that the Schletter 112012-007 Seam clamp 551 is approved for use on the Saflok 700 roofing system

It should be noted that the positioning of said clamps must be arranged in such a manner as not to impede thermal cycling of the roof sheeting, with attachment limited to profile structural ribs onlyrefer Product-Specification-Manual.pdf (safintra.co.za)

Furthermore, guidelines from Safal Steel (Ptv) Ltd regarding the use of PV Panels on ZincAL® or Colorplus® material should be adhered to, thereby ensuring product performance

Trust that this meets your requirements

Kind regards.



APPROVAL OF SCHLETTER SOLAR SOUTH AFRICA SOLAR BRACKETS USED ON SPINGLOK700 AND DIAMONDEK 407 CONCEALED FIX ROOFING SYSTEM

This keep was do thick to consecution his contribution of New unlabeled or somethed with some found remaining the Springfold 700 and Damondek 407 concealed fix roofing system. Schietter Solar South Affice's solar brackets mentoned above has met the performance and application criteria a defined by Youngman Roofing, on the proviso of strict ablerence to application guidelines provided.

In order to ensure effective roofing system conformance and performance please be cognisant of the relevant

No perforation of the sheet surface by PV System, Walkway System, or supporting Balustrades etc. will be allowed and will breach any system and/or material warranty that may be in place. Placement of clamps should be 77mm - 100mm away from the purint to allow free thermal expansion and

No clamping will be allowed on the Male/Female overlap (side lap) So Catagoing with the alloses on the Nature Feature oversing (use tag) me, properly and the bottom of the PV Pratter-than to the contract medicate space for evaluation and proper durange of nanosator.

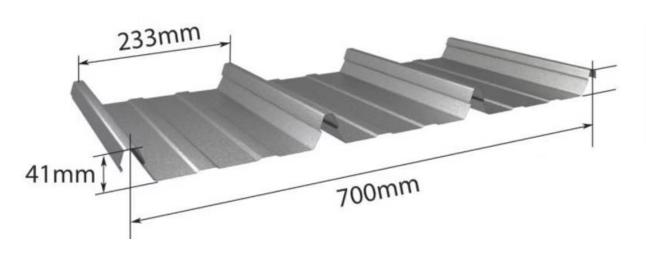
Cabling Insings punels via principal to contract the properly durange of framework.

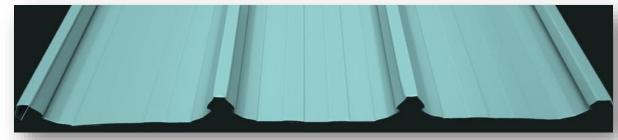
Cabling Insings punels via principal to principal to the bruncated / colle trays and not be left to be bose on the observation of the principal to the contraction of the principal to the principal to the contraction of the principal to the princi

It is further recommended that pre- and pois-institution unspections are contacted by Youngman Rooting order to document root status. The roofing sub-contract and solar contract of should be included in this exe when the reparts to system performance and material warrantees, it remains critical that the intent to install a solar system/walkway is clearly communicated. Any project specific concerns can then be addressed at an early stage, in an effort to maintain validity of said warrantees.

Rooftop – Roof Sheeting Profiles Global Roofing Solutions Kliplok 700, Saflok 700 Diamondek 700





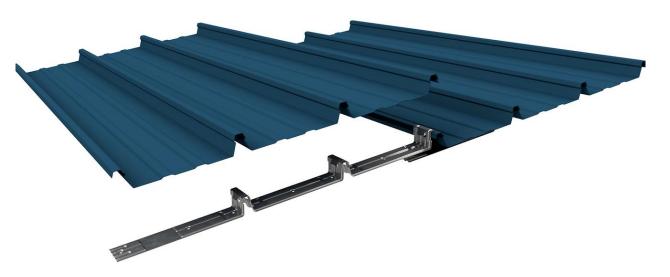


Seam clamps:

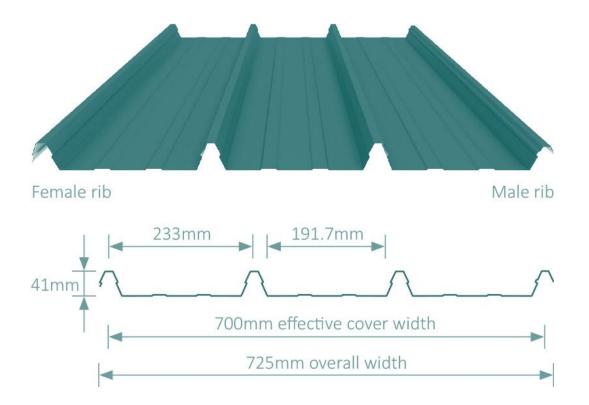
112012-114: Seam clamp 551/4 for Kliplock or similar

Usage Guidelines:

- The bracket must only be fitted to the center ribs of sheets and not at the side lap of the sheets.
- The bracket must not be fitted directly over the sheeting clips (at purlin) but a minimum of 100mm away.
- If the bracket is directly over the sheeting's fixing clip it will interfere with the thermal expansion action between the sheeting's clip and the sheet.



Rooftop - Roof Sheeting Profiles Safintra Saflok 700





Seam clamps:

• 112012-114: Seam clamp 551/4 for Kliplock or similar

Usage Guidelines

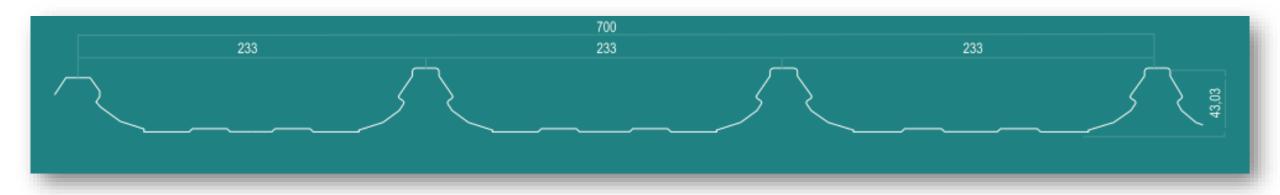
- It should be noted that the positioning of said clamps must be arranged in such a manner as not to impede thermal cycling of the roof sheeting, with attachment limited to profile structural ribs only
- Furthermore, guidelines from Safal Steel (Pty) Ltd regarding the use of PV Panels on ZincAL® or Colorplus® material should be adhered to, thereby ensuring product performance.

Rooftop - Roof Sheeting Profiles Youngman Diamondek 700

SCHLETTER

Seam clamps:

• 112012-114: Seam clamp 551/4 for Kliplock or similar

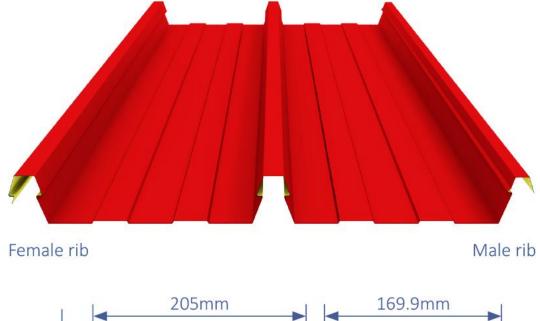




 Use Schletter Seam Clamp Pro551/4 in wide setting

Rooftop - Roof Sheeting Profiles Safintra Saflok 410, Kliplok 406







Seam clamps:

• 112012-114: Seam clamp 551/4 for Kliplock or similar

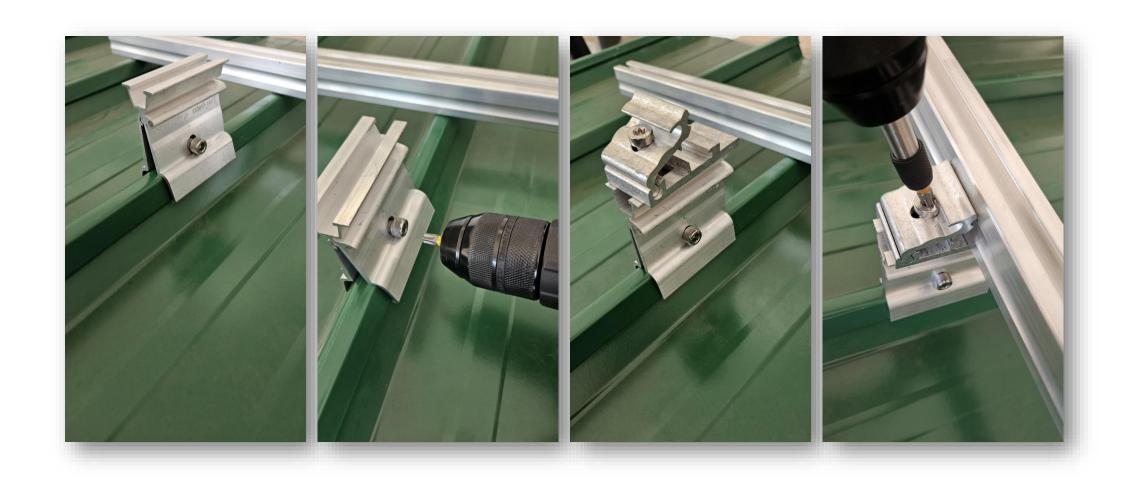
Usage Guidelines

- It should be noted that the positioning of said clamps must be arranged in such a manner as not to impede thermal cycling of the roof sheeting, with attachment limited to profile structural ribs only
- Furthermore, guidelines from Safal Steel (Pty) Ltd regarding the use of PV Panels on ZincAL® or Colorplus® material should be adhered to, thereby ensuring product performance.



ROOFTOP

SEAM CLAMPS INSTALLATION



ROOFTOP

SEAM CLAMPS INSTALLATION













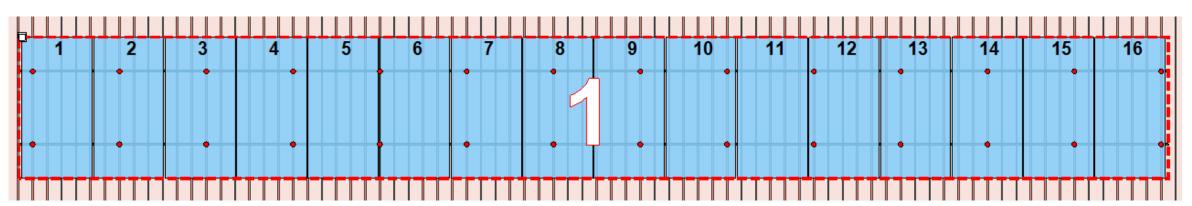


EXAMPLE OF 1V16 ROW OF PV MODULES -

avg. 1,4m ridge fixing span



•	112012-114: Seam Clamp Pro 551/4	28 PCS
•	129063-020 Rapid cross connector 90 Pro	28 PCS
•	120020-04700: Pro35 Mounting Rail 4,7m	8pcs
•	129200-000: Slide in Connector Proline	6pcs
•	129200-010: Plastic End Cap	4pcs
•	131021-020: End Clamp Pro W	4pcs
•	131021-021: Mid Clamp Pro W	30 pcs



STANDING SEAM



ROOFTOP SYSTEM

Designed for easy and flexible installation allowing for improved air flow and underneath modules

- Installed with single bolt
- Railed or Railless Systems
- Integration with elevation profiles to increase tilt angle
- Optional MPLE/Cable tray bracket
- Fits wide range of South African roof profiles
- Approved by major roof sheeting manufacturers













Other Items Available on Order

Seam clamps:

- 112012-106: Seam clamp 550 for Brownbuilt / Diamondek
 407 or similar
- 112012-109: Seam clamp 553 for Craftlock or similar
- 112002-103: Seam clamp Pro 510 for Kalzip or similar
- 112006-102 Seam clamp Pro 524 for Fischer Kliptek or similar
- 112001-105: Seam clamp Pro 503 for standing seam roof
- 112001-110 Seam clamp Pro 504 for standing seam roof

Also used with:

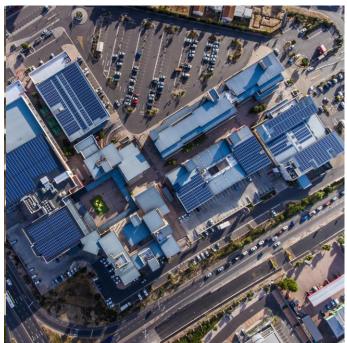
- 119001-004: Mounting Bracket for Optimizer
- 129063-002 RapidConnect90
- 129063-020 Rapid cross connector 90 Pro
- 109008-024 RapFix Pro Extension flat (used for 3rd party seam clamps)
- FixZ Elevation Profiles











TRAPEZOIDAL / IBR ROOFTOP SYSTEMS

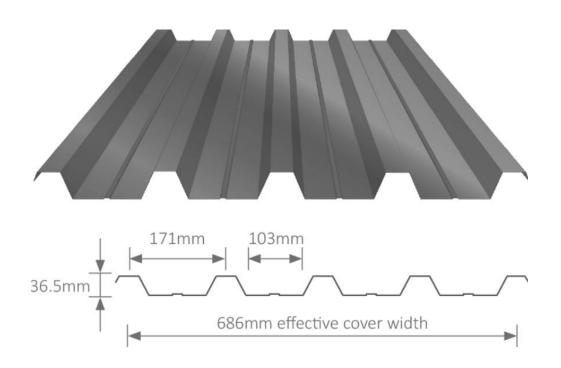
- **TUFDEK 686**
- WIDEDEK
- IBR 686

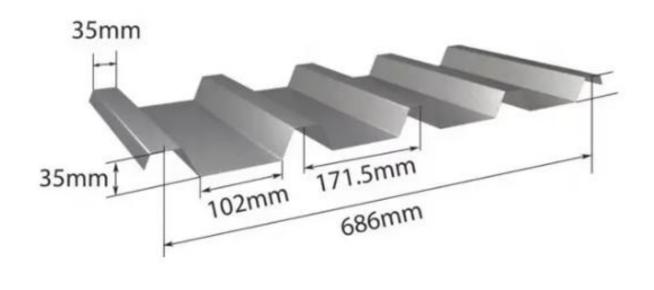
SCHLETTER

TRAPEZIODAL/IBR



Sheet Metal Roofing Profile





TRAPEZIODAL/IBR

SINGLEFIX PORTRAIT RAILED ROOFTOP MOUNTING SYSTEM







TRAPEZIODAL/IBR

SCHLETTER

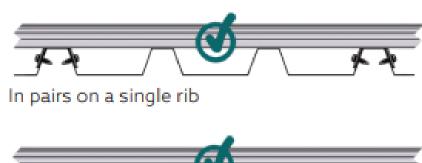
PORTRAIT RAILED ROOFTOP MOUNTING SYSTEM

Wide range of solutions for maximum flexibility and easy installation

- Suitable for different trapezoidal sheet types
- Railed System
- Portrait module placement
- Uses Bi-Metal/Stainless Steel screws













In pairs with several ribs inbetween

- 113009-003: SingleFix Pro
- 943000-360: Screw for thin sheet metal 6.0 × 25 (A2)
- 120022-05900: Pro70 Mounting Rail

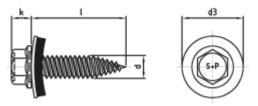


BI-METAL SCREWS FOR THIN SHEET METAL

IBR / TRAPEZOIDAL ROOF SHEETING

- Drilling, shaping and joining in one step
- Little or no swarf created due to shape of screw
- No drilling tools required / no pre-drilling
- Compliant under European Technical Assessment ETA 23/1031
- Bi-Metal a specialized welding process joins the stainless-steel screw to the hardened carbon steel drill tip
- Recommended tightening torque for steel roof sheeting: \pm 3Nm, or <1 Nm for < 0.8 mm thickness.
- Recommended tightening torque for aluminum roof sheeting: +- 1Nm, or for < 0.8 mm thickness < 0.5 Nm.

d	1,	k v	d3 d3	Klemmst. clamp.stre	dc dc	max.Bohrl. max. Drill	Antrieb Drive size
6	25	5,25	16	1-10	11	≤ 2,00	SW 8



943000-360: BiMetal Screw for Thin sheet metal 6.0×25 (A2)







SINGLEFIX VIDEO

AVAILABLE ON SCHLETTER WEBSITE / YOUTUBE

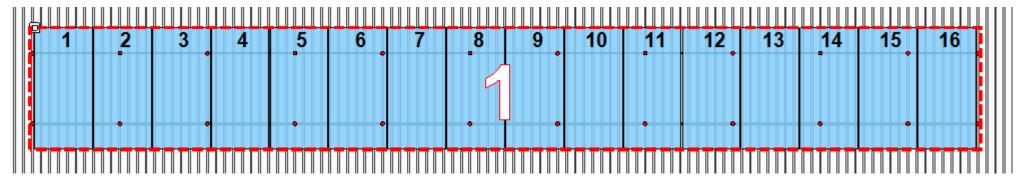
TYPICAL USE CASE



EXAMPLE OF 1V16 ROW OF PV MODULES - avg. 1,8m ridge fixing span

•	113009-003: SingleFix Pro	24 PCS
•	943000-360: Screw for thin sheet metal 6.0 × 25 (A2)	48 PCS
•	120022-04700: Pro70 Mounting Rail 4,7m	8pcs
•	129200-000: Slide in Connector Proline	6pcs
•	129200-010: Plastic End Cap	4pcs
•	131021-020: End Clamp Pro W	4pcs
•	131021-021: Mid Clamp Pro W	30 pcs







TRAPAZIODAL/IBR

SCHLETTER

ROOFTOP SYSTEM

Wide range of solutions for maximum flexibility and easy installation

- Adjustable for different sheet types
- Railed or Railless Systems
- Vertical/Portrait or Horizontal/Landscape module placement
- Uses Bi-Metal/Stainless Steel screws with European Technical Approval
- Compatible with all Schletter's mounting rails
- Integration with elevation profiles to increase tilt angle

Stock Items

- 113009-003: **SingleFix** Pro
- 130004-300: **ClampFit** Pro
- 120042-00260: **T-Bridge** Pro
- 113014-000: **EcoRapid**

Use with:

- 943000-360: Thin sheet metal bolt 6.0 × 25 (A2)
- Any mounting rail
- 129063-002 RapidConnect90
- 129063-020 Rapid cross connector 90 Pro
- FixZ Elevation Profiles

















TYPICAL USE CASE

EXAMPLE OF 2H8 ROW OF PV MODULES

36 PCS

8pcs

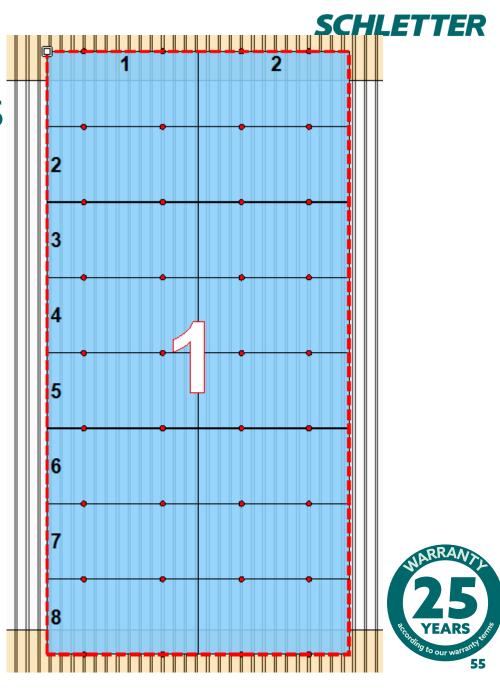
• 130004-300: Clampfit Pro

943000-360: Screw for thin sheet metal 6.0 × 25 (A2)

• 131021-020: End Clamp Pro W

• 131021-021: Mid Clamp Pro W 28 pcs

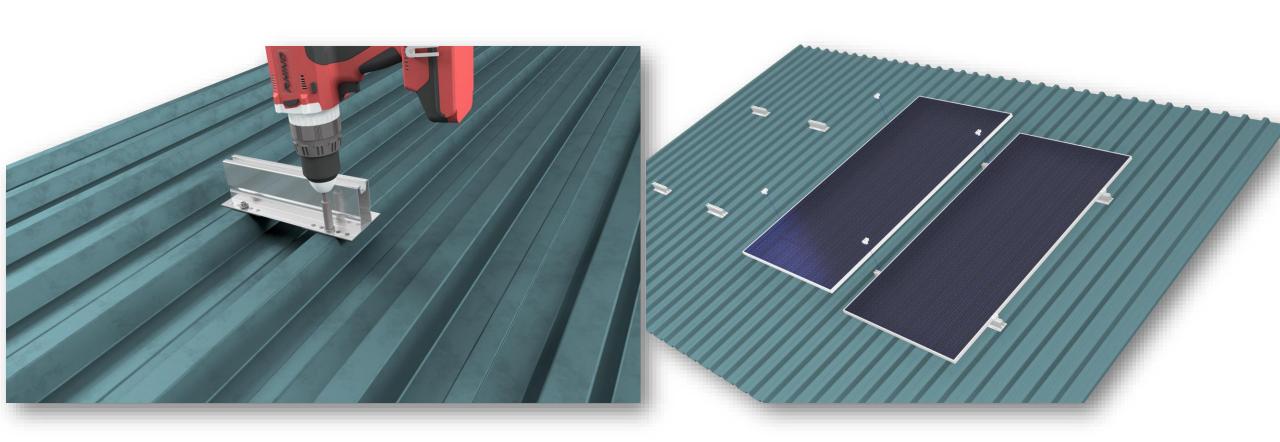






TRAPAZIODAL/IBR

T BRIDGE PRO70 ROOFTOP SYSTEM - Portrait



T-BRIDGE TYPICAL USE



EXAMPLE OF 1V16 ROW OF PV MODULES -

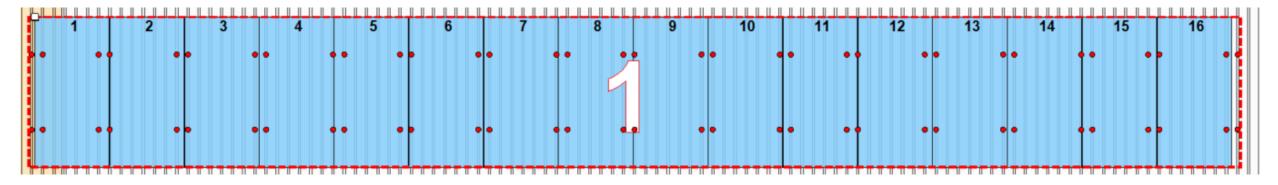
• 120042-00260: **T-Bridge** Pro 34 PCS

• 943000-360: Screw for thin sheet metal 6.0 × 25 (A2) 136 PCS

• 131021-020: End Clamp Pro W 4pcs

• 131021-021: Mid Clamp Pro W 30 pcs

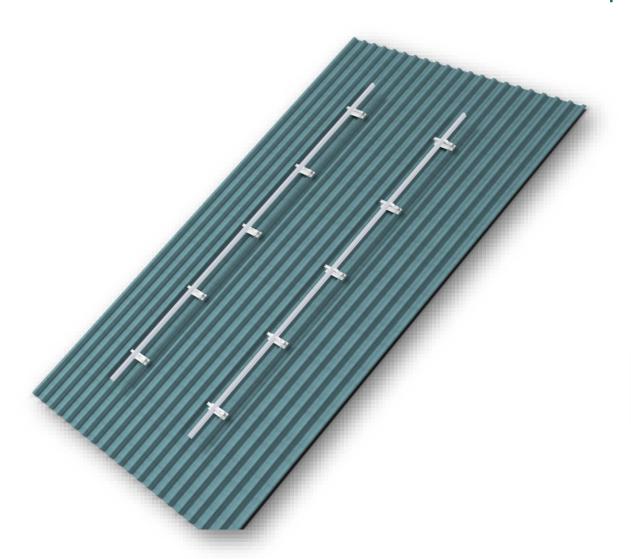


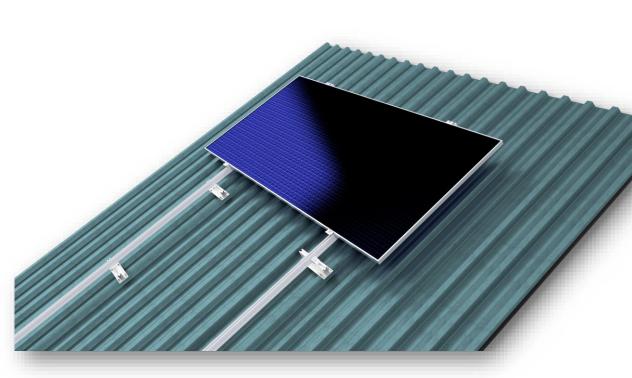




TRAPAZIODAL/IBR

T BRIDGE PRO70 ROOFTOP SYSTEM - Landscape





T-BRIDGE TYPICAL USE

EXAMPLE OF 2H8 ROW OF PV MODULES -

•	120042-00260: T-Bridge Pro	28 PCS

943000-360: Screw for thin sheet metal 6.0 × 25 (A2)
 112 PCS

• 120022-04700: Pro70 Mounting Rail 4,7m 8pcs

• 129200-000: Slide in Connector Proline 4pcs

• 129200-010: Plastic End Cap 4pcs

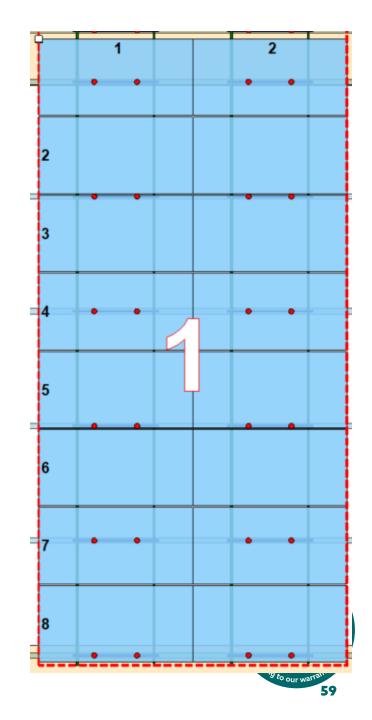
• 131021-020: End Clamp Pro W 8pcs

• 131021-021: Mid Clamp Pro W 28 pcs









CORRUGATED ROOFS

ROOFTOP SYSTEM

Load optimised solution to ensure secure fixing directly to corrugated roof sheets or into substructure

- Fixes into roof sheet or substructure (wood or steel)
- Allows for higher loads to be transferred away from roof sheets with unique design
- Load spread over two crowns using 4 screws
- · Railed or Railless
- · Stainless steel bolts for long term reliability
- Preassembled for easy stock holding and installation
- · Compatible with all Schletter's mounting rails
- · Integration with elevation profiles to increase tilt angle

Stock Items

11013-202 Corrugate Clamp - FixW Pro XL

Use with:

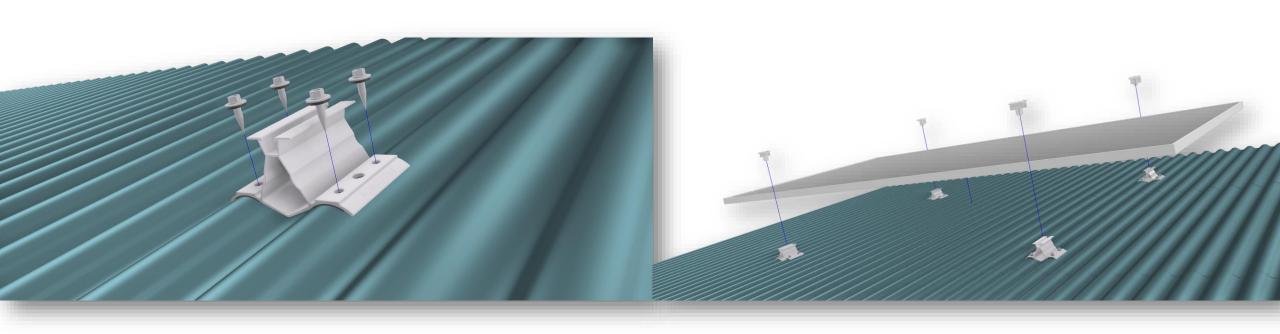
- 943000-360: Thin sheet metal bolt 6.0 × 25 (A2)
- 943763-064: 6.3 x 64 Steel Screw
- Any mounting rail
- 129063-002 RapidConnect90
- 129063-020 Rapid cross connector 90 Pro
- FixZ Elevation Profiles





CORRUGATED ROOFS

FIX W PRO ROOFTOP SYSTEM



FIX W TYPICAL USE

EXAMPLE OF 2H8 ROW OF PV MODULES -

36 PCS

8pcs

11013-202 Corrugate Clamp - FixW Pro XL

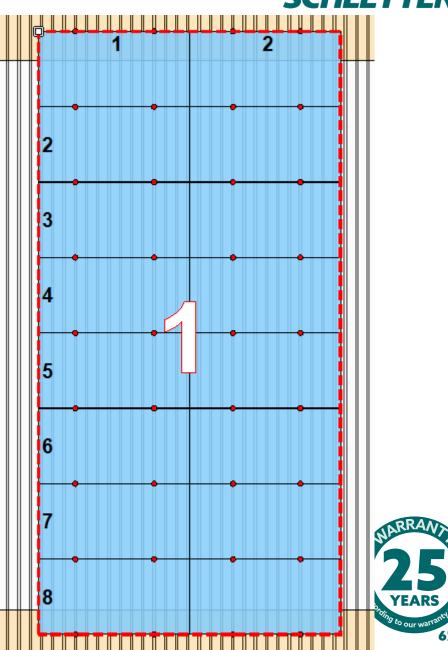
943000-360: Screw for thin sheet metal 6.0 × 25 (A2)
 144 PCS

131021-020: End Clamp Pro W

• 131021-021: Mid Clamp Pro W 28 pcs





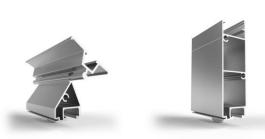


ELEVATION PROFILES

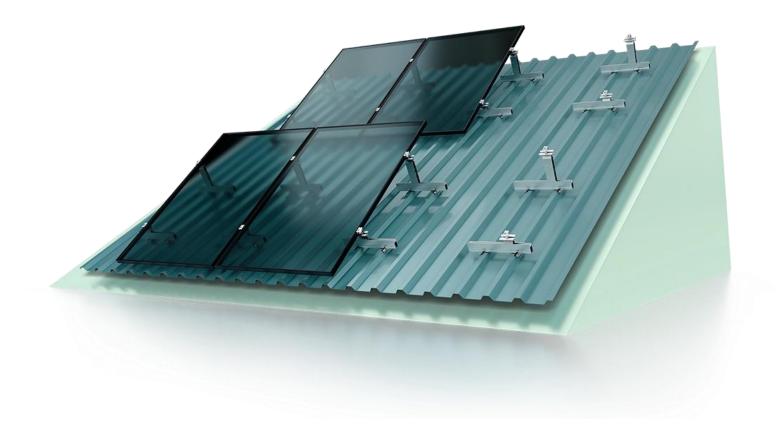
SCHLETTER

ROOFTOP SYSTEM

Increase Module tilt between 3 degrees and 25 degrees by adding one of the following systems onto our fixings:



FixGrid Pro



Adjustable Universal A-Frames

TILED ROOFS

SCHLETTER

ROOF HOOKS

Designed to install full range of mounting rails via a fast and flexible click-in system.

- Optimized to provide improved adjustability and stability will reducing cost.
- Fastening with only one TX40 wood screw
- No pressure on the roof tile
- Wide range of options available (Stainless Steel or Aluminium)

Stock Items

- 100001-000: ECO Universal (Adjustable Stainless Steel)
- 100020-100: EcoA 45 MAX (Adjustable Aluminium)
- 119026-122: Rapid Pro L (Optional for quick installation)
- 943208-080: M8 x 80 Wood screw (Stainless Screw)





TILED ROOFS

Tiles



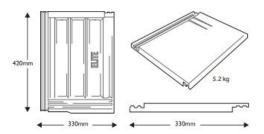
TECHNICAL DATA		
Overall size of tile (mm)	420 x 332	
Approx mass per tile (kg)	4.2	
Linear cover per tile (mm)	300	

STRUCTURAL DATA		
The roof structure specifications should c	omply with the regulation	s in your area.
Minimum pitch requirements	17° to 25°	26° and over
Rafter Centres	Up to 760 mm 38 x 38 Batten	Up to 950 mm 38 x 50 mm Batten on edge
Headlap (mm)	100	75
Batten Centres (mm)	320	345
Batten per m² (m)	3.13*	2.9*
Number of tiles per m²	10.42	9.66
Approx mass of tile m² (kg)	46	41
Undertile Membrane/ Radenshield™ recommended at all pitches	Mandatory	Recommended

^{*} No allowance for wastage.







STRUCTURAL DATA

The roof structure specifications should comply with the regulations in your area.

Minimum pitch requirements	17° to 25°	26° and over
Rafter Centres	Up to 760 mm 38 x 38 Batten	Up to 950 mm 38 x 50 mm Batten on edge
Headlap (mm)	100	75
Batten Centres (mm)	320	345
Batten per m² (m)	3.13*	2.9*
Number of tiles per m²	10.6	9.8
Approx mass of tile m² (kg)	55	50
Laying application	Broken Bond	Broken Bond
Undertile Membrane/ Radenshield™ recommended at all pitches	Mandatory	Mandatory

^{*}No allowance for wastage.

TILED ROOFS







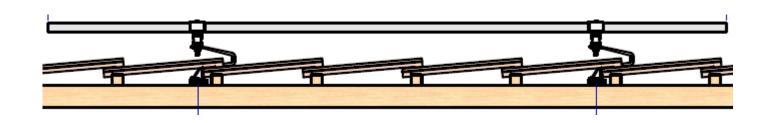
TILED ROOFS

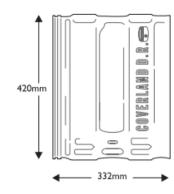


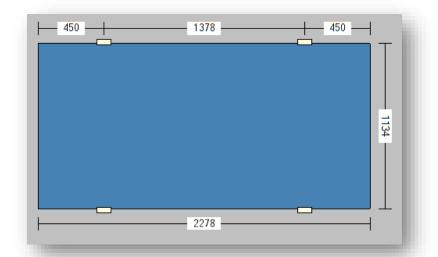


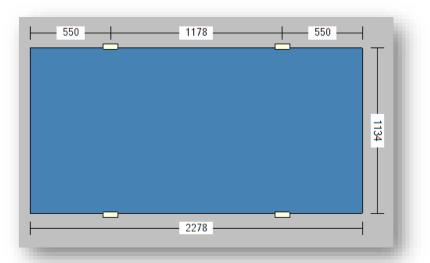
TILED ROOFS

R









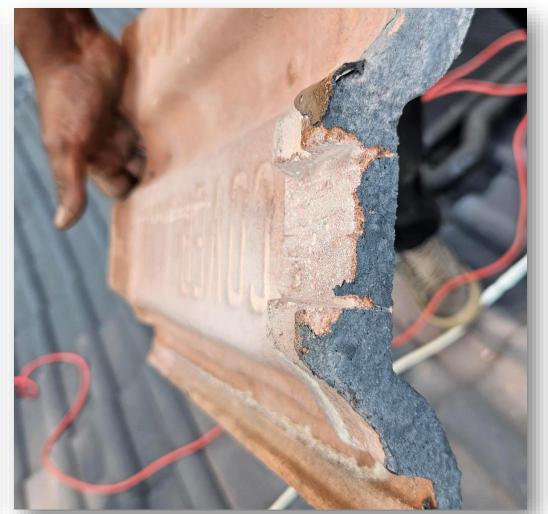
TILED ROOFS





TILED ROOFS







TILED ROOFS



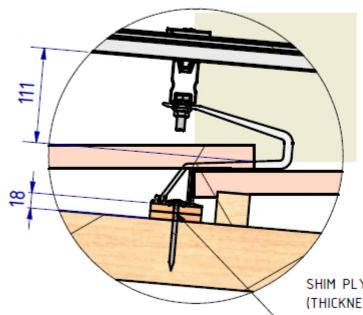


TILED ROOFS

SCHLETTER

ROOF HOOKS

DETAIL SECTION A-A (1:5)



SHIM PLY STOCK CUT TO 100mmx60mm (2-OFF 9mm THK) (THICKNESS TO BE DETERMINED BY SITE REQUIREMENT)

(PRE DRILLING AND TILE GRINDING REQUIRED AS PER INSALLATION MANUAL)





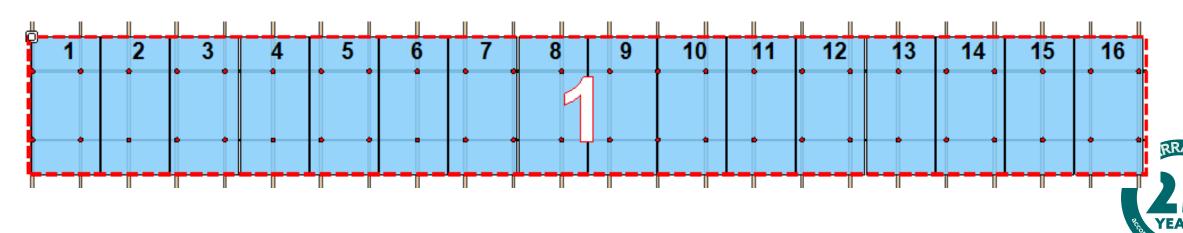
ROOF HOOK TYPICAL USE

EXAMPLE OF 1V16 ROW OF PV MODULES -

•	120020-0100: Roof Hook EcoA 45	48 PCS
•	943208-080: S/S 8x80mm Wood ScrewWafer Head	48 PCS
•	109008-023: Rapfix Pro	48 PCS
•	120020-04700: Pro35 Rail 4,7m	8 PCS
•	129200-000: Proline Internal Connector	6 PCS
•	131021-020: End Clamp Pro W	4 PCS
•	131021-021: Mid Clamp Pro W	30 PCS



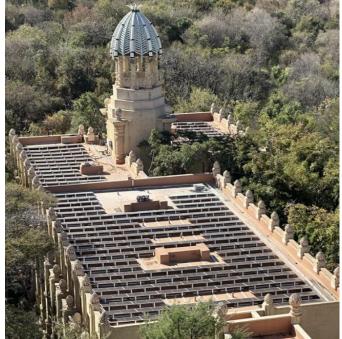














FLAT ROOFTOP SYSTEMS

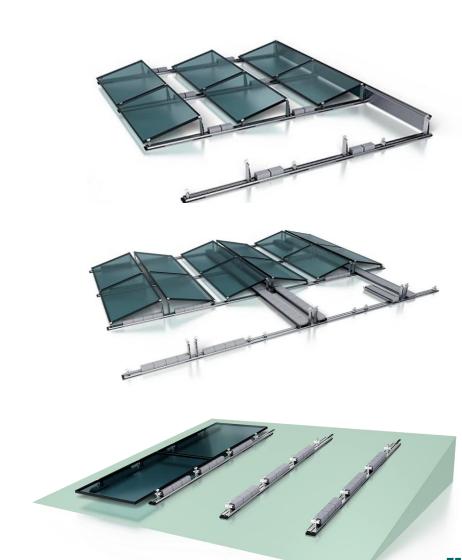
SCHLETTER

FIXGRID / FLATGRID PRO

BALLAST SYSTEM FOR FLAT/CONRETE ROOFS SYSTEM

Designed for installation on flat roofs
with the optimization and reduction of ballast
through improved aerodynamics

- · Adjustable tilt angle by adding more elements
- Software based planning and design reports for insurance and engineering purposes
- · Easy assembly with flexible and time-saving
- · Compatible with ProLine series module clamps
- Low component count for wide variety of system configurations
- · Toolless mounting of the Pro elevation profiles
- Flexible modules mounted options (horizontal/vertical)
- North facing or East/West facing



ACCESSORIES

SCHLETTER

ROOFTOP SYSTEM

A wide range of specialised accessories and fasteners allows for easy installation and on a various roofs

For more information, please contact your Schletter Representative





FS UNO/DUO

SCHLETTER

GROUND-MOUNT SYSTEM > 200kWp Projects

Flexible: allowing for a wide range of applications and conditions.

- · Suitable for direct ramming
- Designed and supplied to specification
- Clamped or bolted solution
- · Optional tilt-head for high ground slopes
- Excellent material efficiency, system connections optimized down to the last detail
- System components made of steel or aluminium with design life of more than 20 years
- · Optimised for easy and fast installation
- · Perfectly matched system components
- Up to: 30 degrees tilt, 3V, 6H, 3.5m high



FS UNO

Single post solution (ideal for expensive piling costs)

FS DUO

Dual post solution (Optimised for cost and easy installation)

FS RAFTER

Solutions without purlins and horizontal module installation

Carports

GROUND-MOUNT SYSTEM > 200kWp Projects

Standard Solutions Available

- Aluminium Cantilever (B1/B2/B3)
- 4-Post solutions (R1)
- Steel Cantilever (Sunride)











CARPORT SYSTEMS

SCHLETTER

CONTACT



Schletter Solar South Africa (Pty) Ltd.

Tel: +27 010 595 1185

Info.ZA@schletter-group.com

www.schletter-group.com



HOW CAN WE SUPPORT YOU MORE?