

# INSTALLATION MANUAL

November 2025

## SOLFIT JT 425-435Wp Portrait

For installation instruction videos  
visit: **[solfit.co.uk](https://www.solfit.co.uk)**

For onsite installer & installation  
support text:

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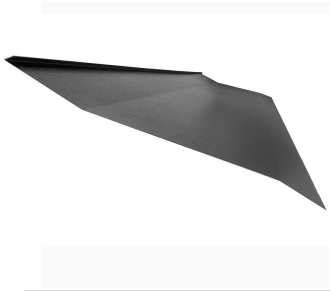
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# COMPONENTS

## FLASHING & PROFILE PARTS

Top Flashing 425Wp  
1182mm



Top Flashing Joiner



Corner Flashing  
Top Left



Corner Flashing  
Top Right



Side Flashing Left  
425Wp 1828mm



Side Flashing Right  
425Wp 1828mm



External Flashing  
Left 425Wp  
1828mm



External Flashing  
Right 425Wp  
1828mm



Bottom Flashing  
425Wp 1182mm



Bottom Flashing  
Joiner



Bottom Capping  
Strip 425Wp  
1182mm



Bottom Capping  
Strip Joiner



Bottom Capping  
Strip End Caps



Lead ZeroFlashing  
x 5m



Flexi Bottom Corner  
Flashings x 500mm



# COMPONENTS

## AUXILLARY PARTS

Top Mounting Profile  
Landscape  
1152mm



Top Mounting Profile  
Landscape  
1182mm



Butyl Tape  
x 10m



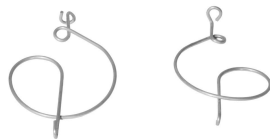
Expanding Foam  
Tape  
x 5.5m



Side Flashing Clip



Bottom Flashing  
Hooks  
x 10



10mm Mid Panel  
Support  
x 250



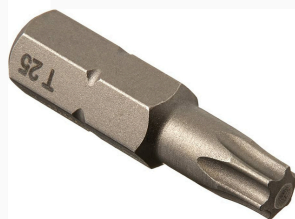
Plumbers  
Lubricant x  
500mm



25mm EEJOT SS  
Torq Screws



Torq Driver Head



115mm Hex Head  
Neoprene Screw



8mm Head Driver  
Bit



50mm x 5 Screws  
x 200



25 Screws  
x 200



CT 1  
250ml



80mm Neoprene  
Tec screw



# ROOF VENTILATION

## AND MEMBRANES

New guidance has been brought in by the NFRC (National Federation for Roofing Contractors) (GN 64) which recommends when fitting in roof solar adequate allowance is made for the eaves and ridge ventilation and the use of high resistance non-permeable roofing membranes or underlays to allow the movement of moisture from under the panels.

Roofs can be counter battened and / or fitted with a vented ridge and a vented eaves to allow air flow.

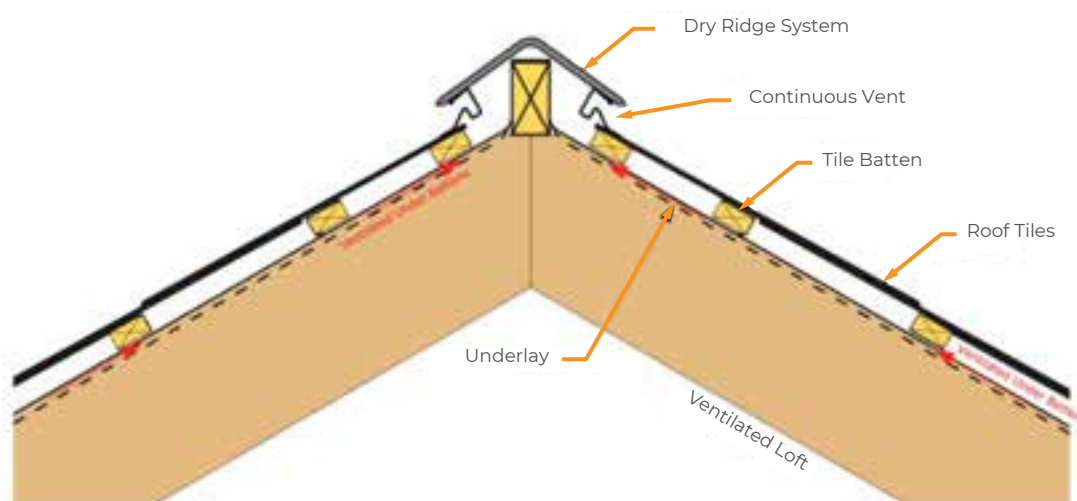
It is recommended that high resistant non-permeable membranes are fitted under the array to prevent moisture penetration in the form of condensation building up under the panels.

All roofs should have a vented ridge and a vented soffit wherever possible to allow.

Where mortared ridges are fitted, ventilated slates and tiles should be fitted to allow moist air & condensation to escape.

More information can be found at:  
<https://solfit.co.uk/brochures-datasheets>

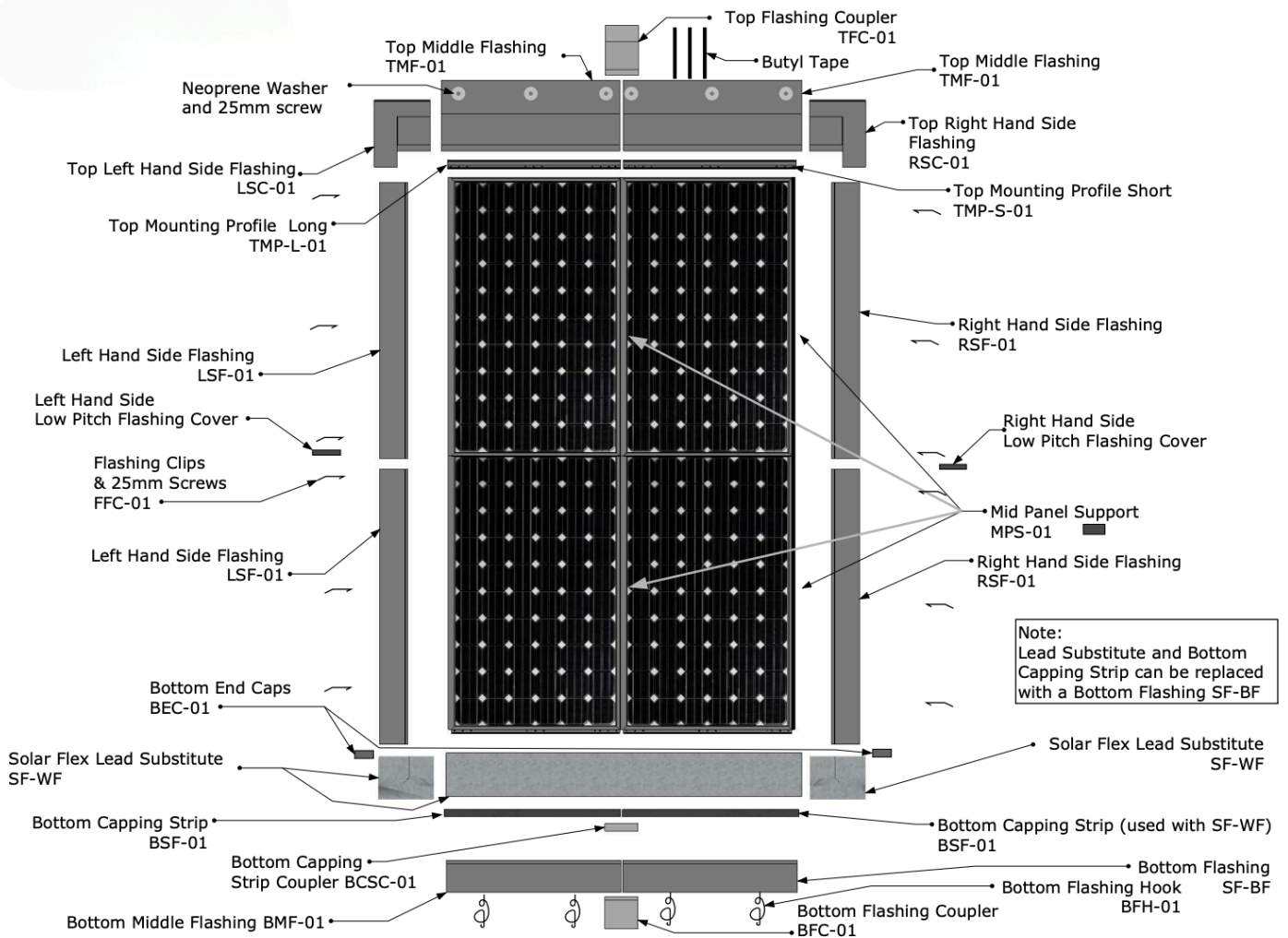
### Ridge Detail Cold Roof



Ridge Detail Cold Roof

# COMPONENT PARTS

## LAYOUT



**Note:**  
Corrugated Black Lead or Lead Substitute & Bottom Capping Strip can be replaced with Bottom Flashing SF-BF

**Important!** Low pitch flashing <math><20^\circ</math>

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Please note: All standard flashing are for roof pitches down to 20 degrees. For roof pitches less than 20 degrees, Low Profile Top Flashings are required. Please make special order for low pitch flashings.

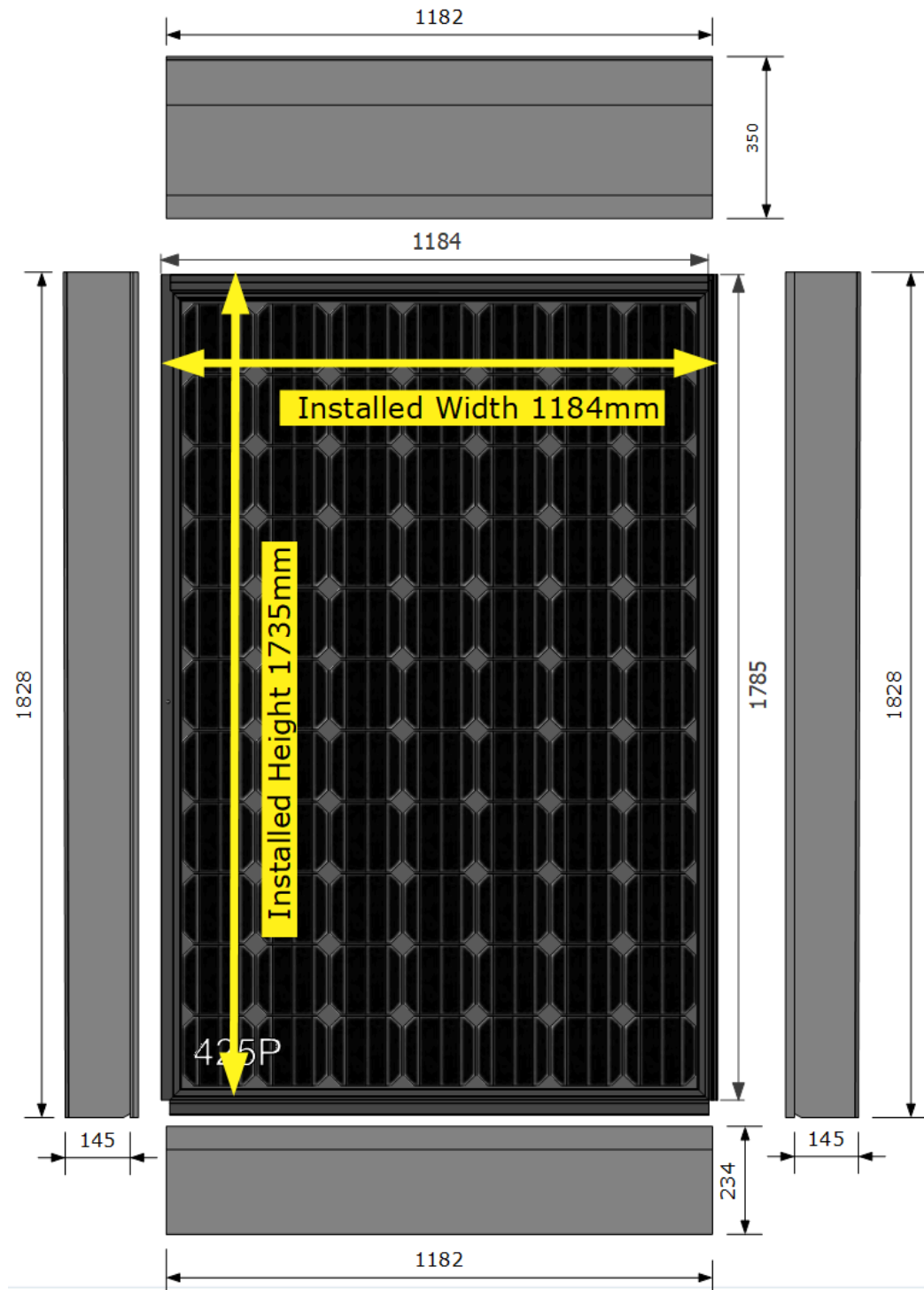
**Important!** MC4 Cable Connectors

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Important when fitting MC4 Cable Connectors, only ever use Staubli MC4 connectors. Mismatched MC4 connectors can cause fires!

# DIMENSIONS

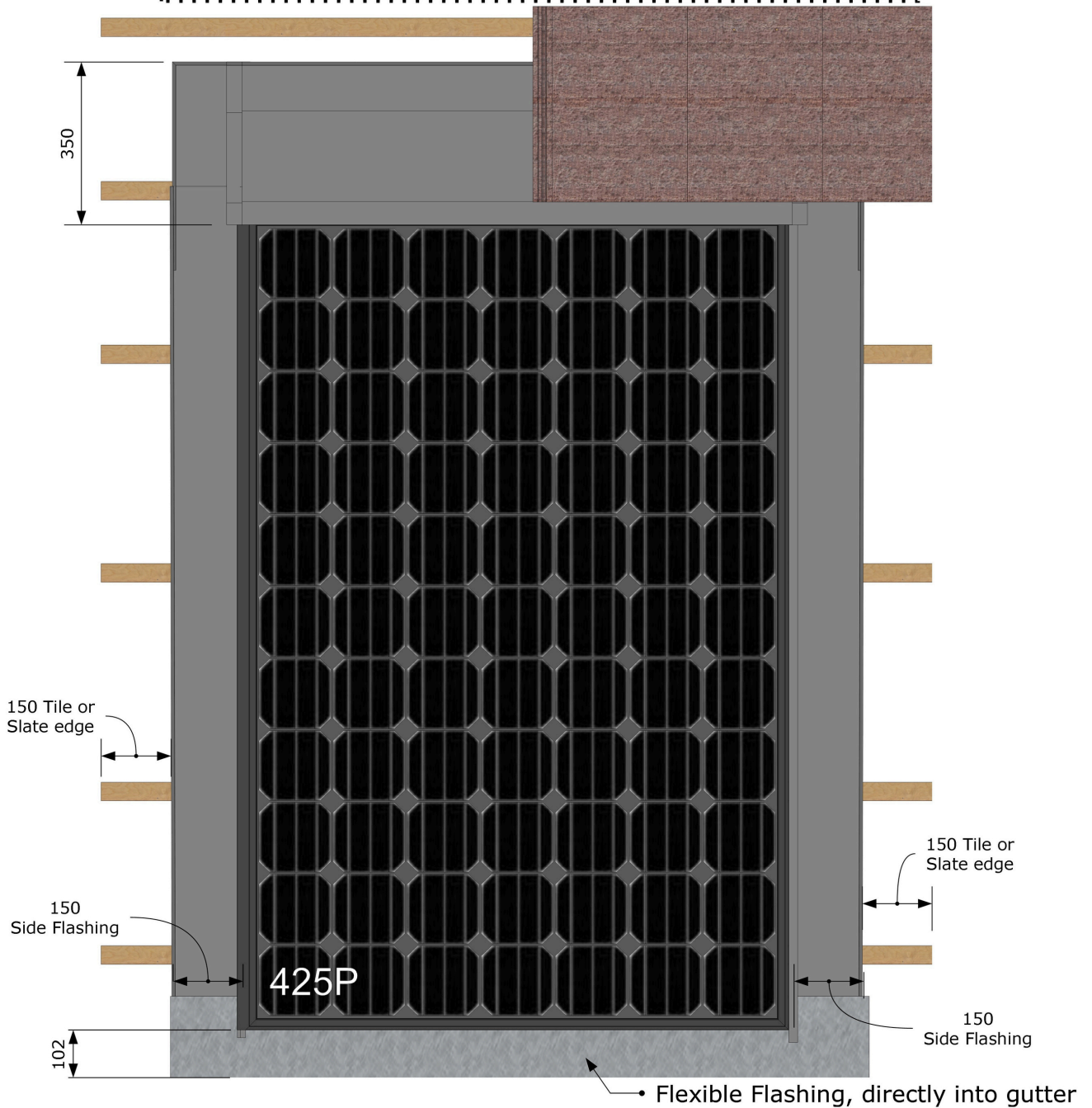
## PANEL AND MINIMUM BORDER



# DIMENSIONS

## FITTING SPACE TO GUTTER

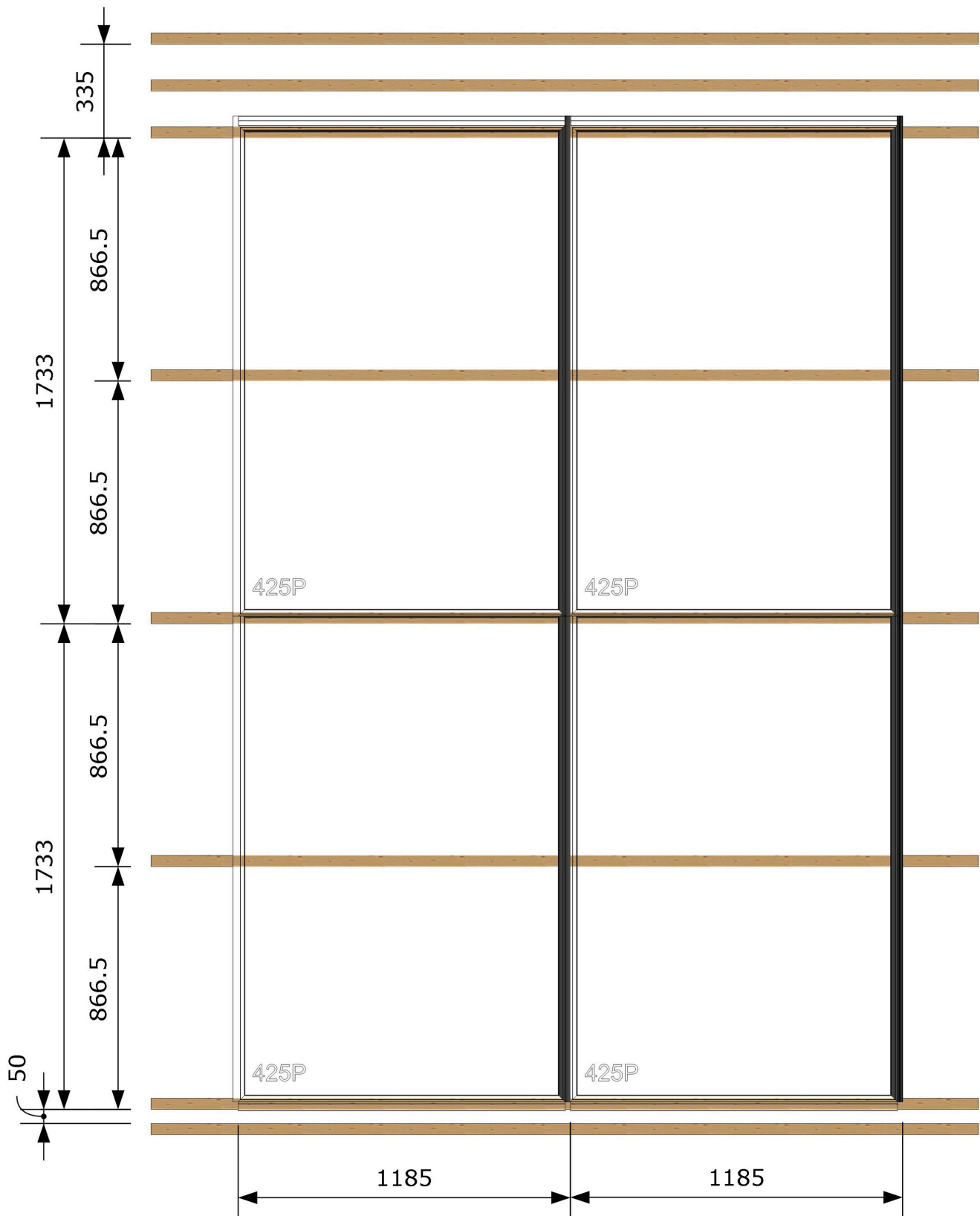
350mm clear and one top tile batten for a row of "Toppers"  
 Alternatively it can go under the ridge so long it is a dry ridge



Bottom of panel directly into gutter via flexible flashing.  
 Preferred Option: Row of tiles or slates under flashing, see separate detail

# BATTEN SPACING

## 2X2 BATTEN LAYOUT



# SETTING ROOF OUT

Y Array height = 1733mm x nom of panels



X Array width = 1185mm x nom of panels

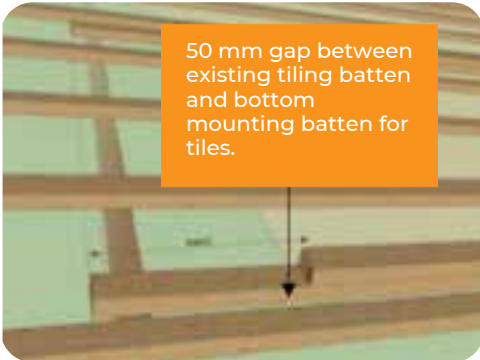
## 1: Measure size of array

- Installed panel width: 1185mm
- Installed panel height: 1733mm

### Array size

- X =(width) = 1185m x number of panels
- Y = (height) 1733mm x number of panels
- Side flashing = 150mm
- Top flashing = 350mm
- Bottom flashing = 150mm

50 mm gap between existing tiling batten and bottom mounting batten for tiles.



## 2: 50mm gap between existing & mounting batten

- For tiles: 50mm gap between lower existing tiling batten and the lowest panel mounting batten to allow space for the tile nib. No gap required for slate.
- TIP: Use a 25mm x 50mm batten as a spacer.

1733mm centre to centre.



## 3: Fitting mounting battens

- Use only 25mm x 50mm battens.
- Measure the height of array from bottom of the array up the roof.
- Fit double mounting battens at 1733mm spacings, centre to centre.
- Secure lower battens with 50mm screws on every rafter.

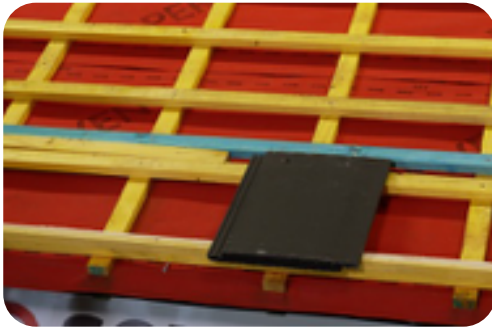


## 4: Spanning existing battens

- Span existing batten mounting battens 1733mm spacing centre to centre. Fix lower batten with 1x 50mm screw per rafter.
- Fix upper batten with 1 x 50mm screw, 4 x 50mm screw approx.

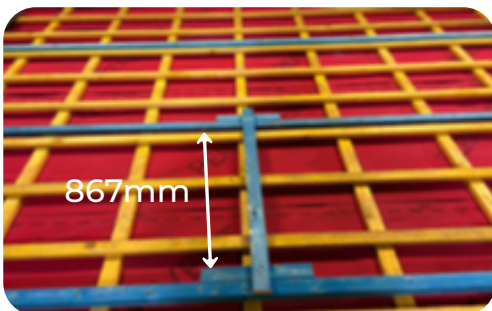
### IMPORTANT

Always have the roof battened for slates or tile before measuring out batten spacing for Solfit panels.



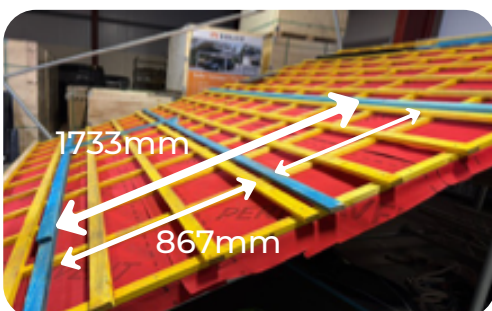
#### 1: Use 50mm batten as a spacer

- Use 25 x 50mm batten as a spacer to create 50mm gap between bottom roofing batten and bottom mounting batten. This is where the bottom panel finishes.
- The 50mm gap creates a space for the tile nib.



#### 2: Use a measuring stick to measure the space between battens.

- For 425/35 Wp portrait panels the spacing is 1733mm centre to centre (double battens).
- 867mm double batten to mid batten.



#### 3: Double Mounting to Double Mounting batten = 1733mm

- Double batten, single mid panel support. Single batten = 867mm.



#### 4: Fix battens with 50mm x 5 gauge self cutting screws

- a) Fit lower mounting batten to every rafter.
- b) Fit upper batten very 500mm approx.

## TOP MOUNTING PROFILE



### 1: Fit Top Mounting profile

- **Very Important!** Fit 1 short end mounting profile per array (30mm shorter than the others).
- Fix top mounting bars straight & parallel.
- Set bottom edge of mounting profile flush with the bottom of top batten.
- Secure with 4 screws per profile.

**VERY IMPORTANT**



### 2: Fit top profiles. Straight and true

- 1 x short profiler per row, 30mm shorter than longs profiles.
- Use string line to keep straight if required.
- Fix with 6 screws per profile.



### 3: Fix each mounting profile with 6 screws



### 4: Cut top batten LHS & RHS of mounting profile

- Cut batten flush with the LHS edge of mounting profile.
- Set bottom edge of mounting profile flush with the bottom of top batten.

## TOP FLASHING



### 1: Additional top flashing support batten

- Fit top flashing batten 335mm approx.
- Hook flashing into mounting groove of top profile.
- Fit top flashing 10mm approx past LHS edge of mounting profile.
- Secure top flashing with 1 x 25mm neoprene torq screw in the top centre of the flashing.



### 2: Fit top flashing joiners

- Attach 2 x strips of Butyl tape to top the flashing joiner and stick joiner to top flashing.
- Don't forget to take off tape.



### 3: Top flashing joiner

- Secure top flashing joiner onto the top flashing using 2 x 25mm neoprene screw. In event of not having a torq driver head, 25mm screw and neoprene washers can be used.



### 4: Fit top flashings and joiners

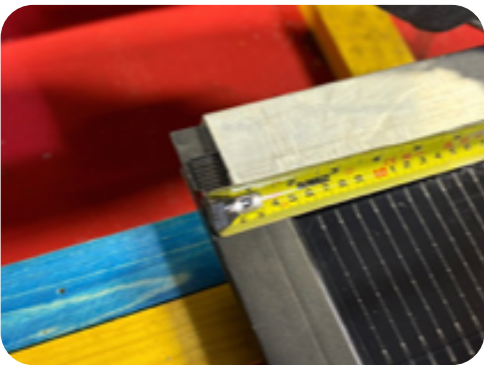
- Fit top flashings and joiners for full length of array.
- Secure with 2 x 25mm stainless neoprene torq screws or 2 x 25mm wood screws screws and neoprene washers as an alternative.

## PANEL FITTING



### 1: Lubricate top row panels seal

- When fitting top panel we recommend the use of a water-based plumbers lubricant to assist in the fitting of top panels into top mounting profiles.
- Brush or smear on with a rag to assist in fitting.



### 2: Fitting first panel first panel in top LHS

- Overshoot top mounting profile by 20- 25mm + past the LHS edge of the top profile as it allows the LHS flashing to be fitted.

**VERY IMPORTANT**



### 3: Over shoot top mounting

- Overshoot profile by 20mm + past the LHS edge of the extrusion.
- Overshoot top flashing 10mm past top profile.

**VERY IMPORTANT**



### 4: Right Hand

- Panel will overshoot top profile approx 20mm +.
- Push panels tight into top profile.

## FITTING TOP ROW OF PANELS



### 1: Fix Each Panel

- Fix each panel with 4 x 50mm x 5-gauge screws.
- Panel should be parallel with bottom of double mounting batten +/- 5mm.



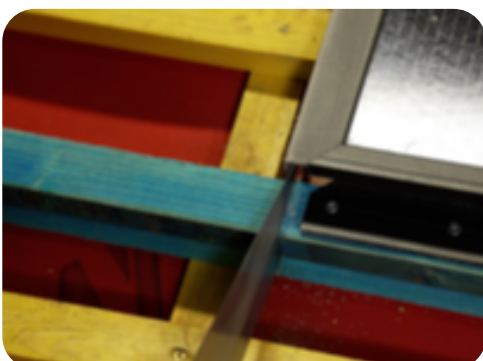
### 2: Fix Mid Panel support

- Fix mid panel support shim to 150mm section of addition roofing baton with 50mm screw to existing roof batten, in line with mid frame screw hole.
- Provides snow loading support.
- Use shim to hold MC4 in position.



### 3: Connect panels

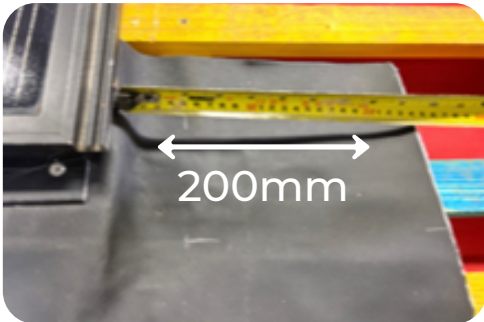
- Connect panels making sure that the MC4 connectors 'click' when connected. Fire hazard if not connected properly.
- **ALWAYS USE Staubli MC4 CONNECTORS FOR STRING CABLES. Wrongly matched connectors can cause fires!**



### 4: Cut battens

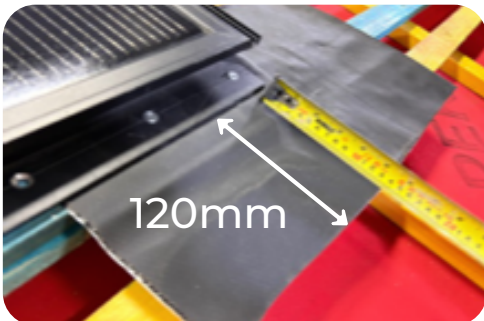
- Cut off top mounting battens on LHS and RHS flashing with panels to allow flashings to be fitted.

## FLEXI BOTTOM CORNERS



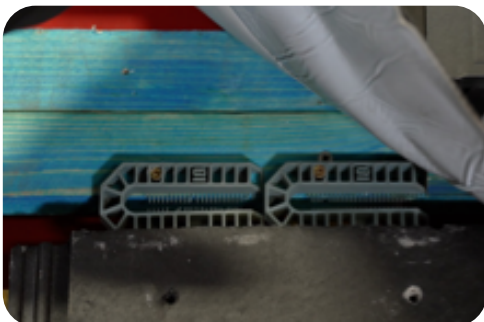
### 1: Fit bottom Flexi corner flashing

- Underlap RHS of panel with 200mm flexi bottom flashing over shooting 200mm.



### 2: Fit bottom Flexi corner flashing

- Leave between 120mm – 150mm over tile / slate overlap.



### 3: Fit tile shims to reduce tile step

- Fit 2 x 100mm x 10mm shims with 25mm screws.



### 4: Fit tile 2 x 10mm shims to reduce tile step

- Fit 2 x 100mm x 10mm shims with 25mm screws.

## BOTTOM FLASHING



### 1: Fit bottom flashing hooks

- Fit 2 x flashing hooks per bottom flashing approx 300mm from each panel end.
- Note: These are Solfit flashing hooks, not hall hooks for slates.



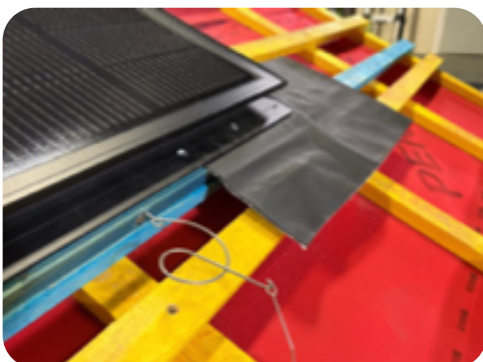
### 2: Solfit bottom flashing hooks

- For metal bottom flashing.



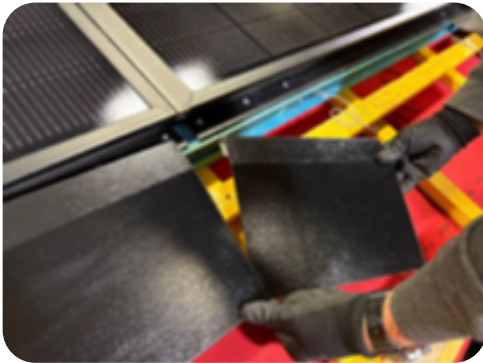
### 3: Screw bottom flashing hooks

- Screw bottom flashing hooks to top batten.
- Make sure screw hole faces down and hook faces up.



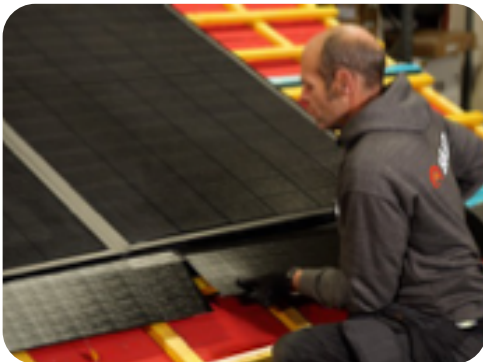
### 4: Bottom flashing hooks in place for metal bottom flashing

## METAL BOTTOM FLASHING & JOINER



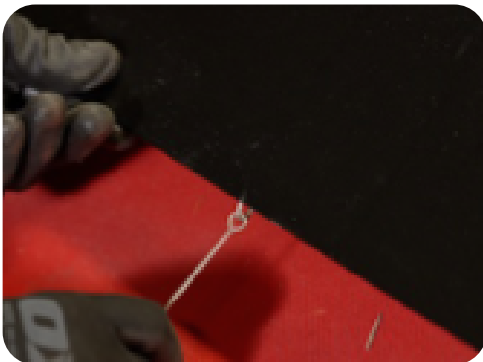
### 1: Metal bottom flashing & joiner

- Push LHS metal bottom flashing tight to LHS of panel.
- Slide in flashing joiner ' into RHS edge of bottom flashing.



### 2: Metal bottom flashing & Joiner

- Push RHS bottom flashing into position.
- With the bottom flashing joiner spanning LHS and RHS bottom flashing by 150mm.



### 3: Bottom flashing hook

- With flashing hook or pliers, pull flashing hook over bottom edge of bottom flashing.



### 4: Pull flashing hook

- Pull flashing hook into place with tool or pliers.

## FLEXIBLE BOTTOM FLASHING

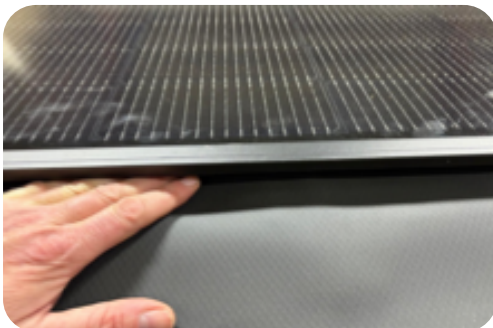
### LEAD OR SUBSTITUE



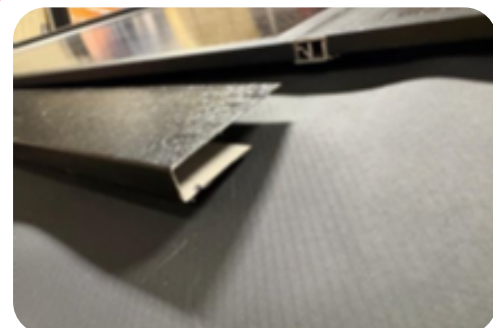
**1: Run lead zero, our preferred flexible bottom flashing, the full length of the array over shooting by 200mm either side of array**



**2: Flexible or metal bottom flashing require flexible bottom corners**



**3: Fit flexible bottom flashing into bottom profile C section**

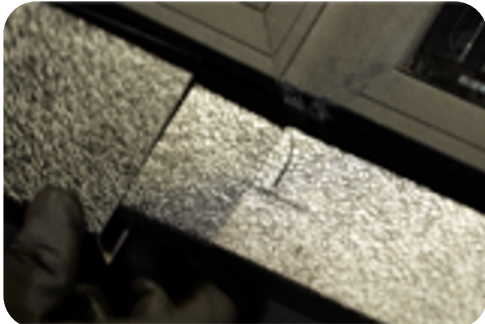


**4: Capping strip**

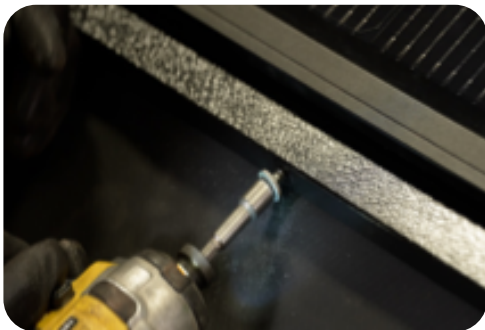
- Push capping strip into position.

## BOTTOM CAPPING STIPS

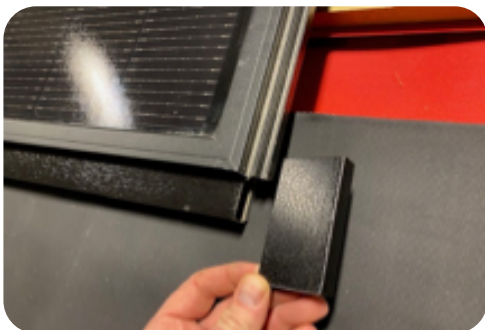
## AND END CAPS



1: Fit bottom internal bottom cap strip joiner



2: Screw 1x 115 mm hex head screw through lower face of bottom capping strip into back of C section of panel profile



3: Fit end caps on LHS & RHS



4: Capping strip end caps

- Push capping strip into position.

## RHS PANEL SUPPORT

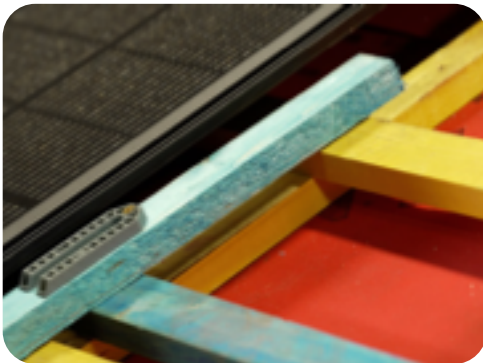


### 1: Fit additional LHS flashings

- Assemble RHS mid panel support with batten long enough to span two battens.
- 1 x shim.
- 1 x 50m screw for hanging support.
- 1 x 50mm screw for securing shim.



### 2: Over hang screw over batten in upper / middle part of panel to support panel



### 3: Slide panel support into position

- Hook with 50mm screw.
- Fit parallel under RHS panel frame.



### 4: Slide panel support into position

- Fit parallel and under RHS panel frame.

## RHS FLASHING



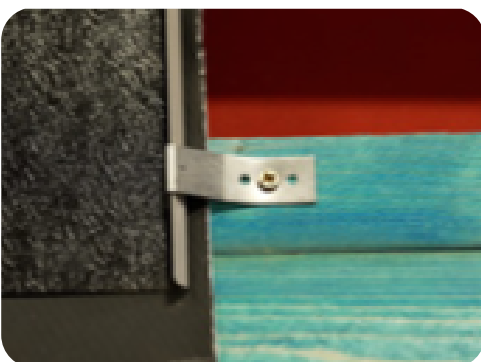
1: Slide RHS side flashing in from the bottom



2: Push RHS flashing flush with the bottom of the panel



3: RHS Push flashing past top edge of the panel

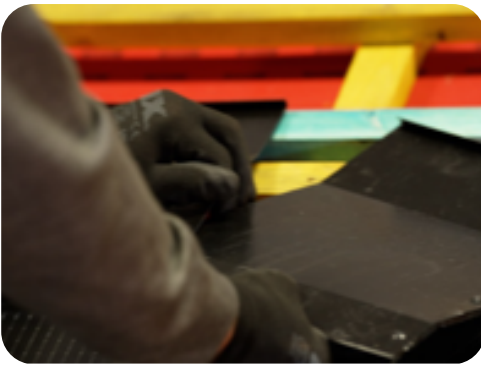


4: Secure side flashing with 3 clips per side flashing

## RHS FLASHING



**1: Stick strip of butyl tape to top corner flashing approx 100mm from RHS edge**



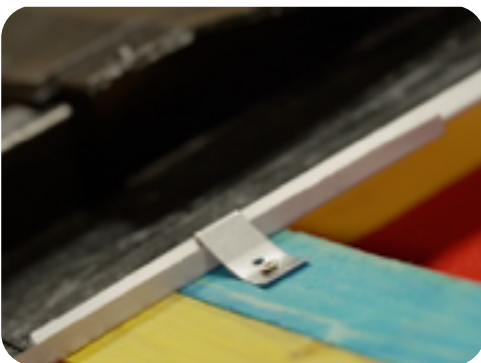
**2: Insert top RHS corner flashing**

- Slide corner flashing under top flashing.



**3: Secure top corner flashing with torq screw or 25mm screw and neoprene washer**

- Fit additional flashings and slide into position fix with 25mm torq screw.



**4: Secure top corner flashing with flashing side clip**

## MID PANEL SUPPORTING SCREW



### 1: Mid Panel

- Fit 200- 300mm batten 'noggin' with 10mm spacer screw approx 40mm from outset edge to prevent contact with mid panel support screw.



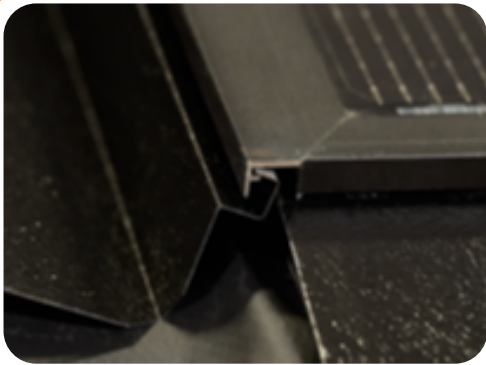
### 2: Mid panel support screw

- Fix 80mm black neoprene washer screw with 8mm hex head drill bit.
- Screw tight to seal hole.



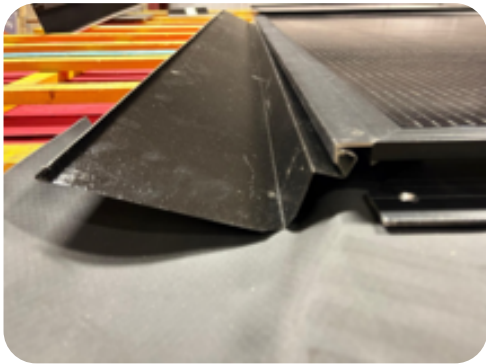
### 4: Mid panel screw

## LHS FLASHING

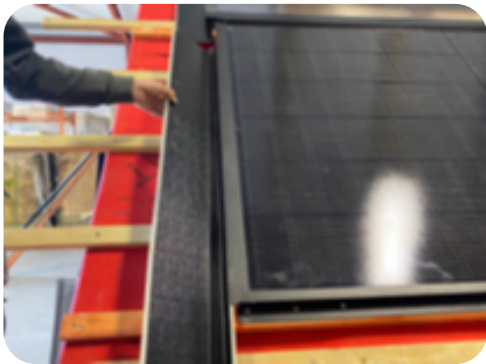


### 1: LHS Flashing

- Position and rotate LHS flashing interconnecting with panel and pushing tight into panel.



### 2: Fit LHS flashing interconnecting with panel and pushing tight into panel



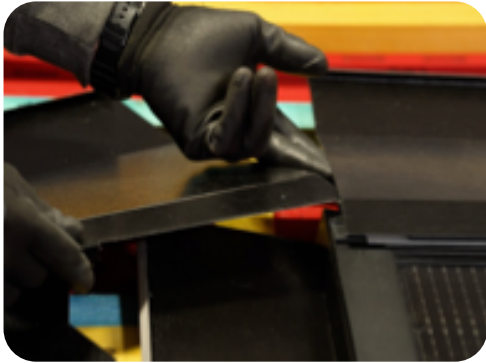
### 3: Secure side flashing with flashing clip and 25mm screw



### 4: Secure side flashing

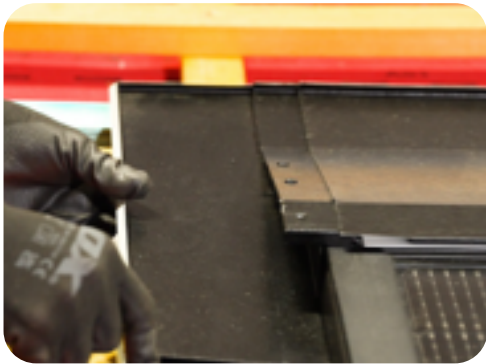
- Secure with flashing 3 x clips per side flashing.

## TOP LHS FLASHING



### 1: Insert LHS corner flashing

- Push Top LHS Flashing under the top flashing and secure with neoprene screw.



### 2: Fit LHS corner Flashing



### 3: Fit LHS flashing

- Secure corner flashing with 25mm neoprene torq screw or 25mm screw & neoprene washer.

# FLEXI BOTTOM & LEAD FLASHING

## AND END CAPS



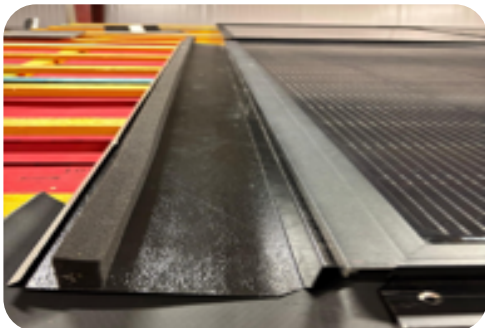
**1: Fit flexi bottom flashing, lift flexi bottom flashing and peel off back exposing sticky back**

- Try to fix to a dry dust free tile or slate surface.



**2: A bead of CTI or similar to affix flexible bottom flashing to slates or tiles is recommended to prevent flashing up lift does not properly adhere to roof**

- Also recommended on Lead Zero overlaps.

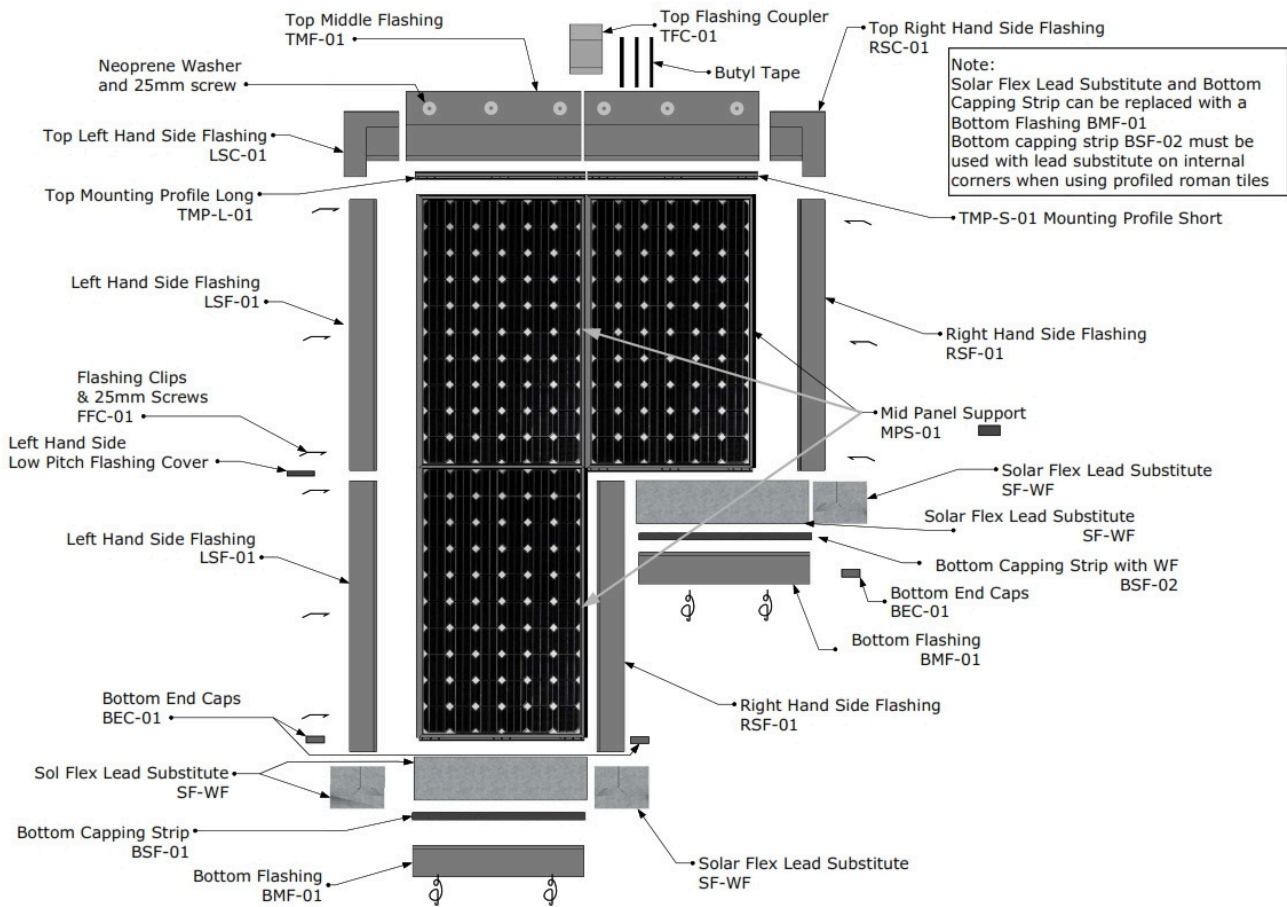


**3: Expandible foam tape**

- With tiles, expandable foam tape to be run around the array flashing to prevent wind-blown rain, water ingress.

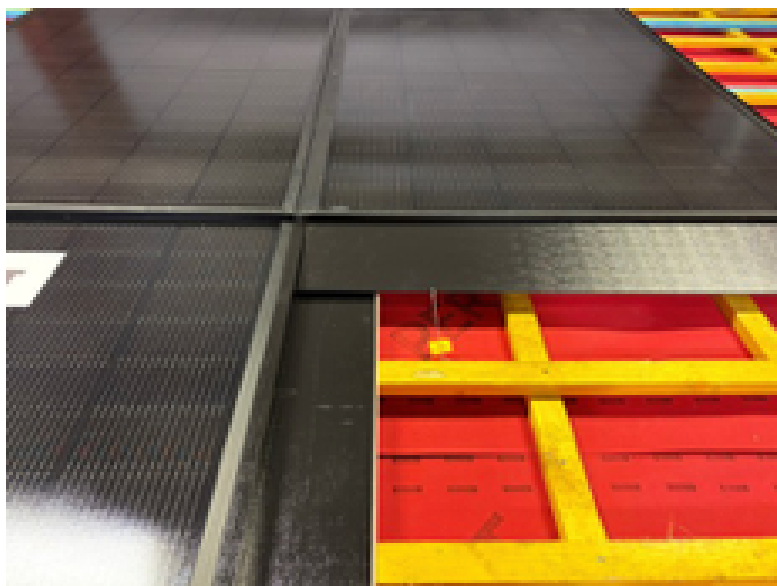
# RHS INTERNAL FLASHING

## LAYOUT



**Note:**

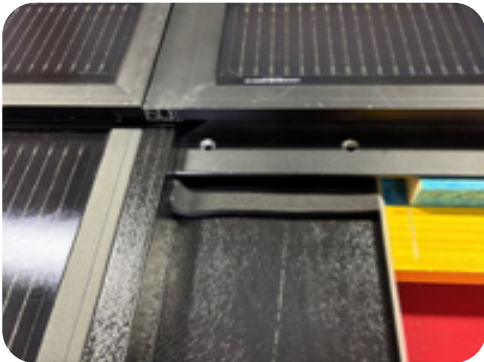
Solar Flex Lead Substitute and Bottom Capping Strip can be replaced with a Bottom Flashing BMF-01. Bottom Capping Strip BSF-02 must be used with lead substitute on internal corners when using profiled roman tiles.



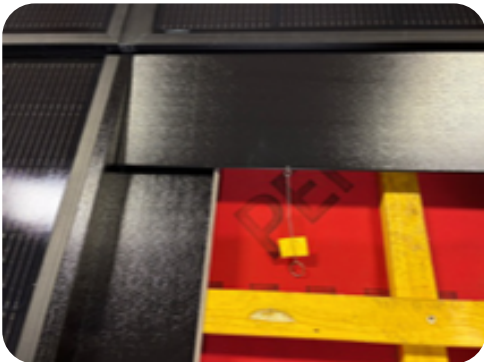
## INTERNAL RHS FLASHING



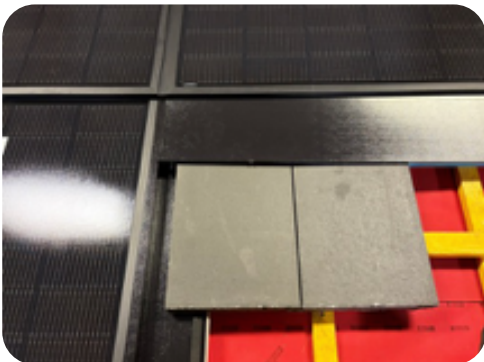
**1: Cut 170mm section of top batten out from outside RHS edge of panel**



**2: Fit RHS flashing under panel above**



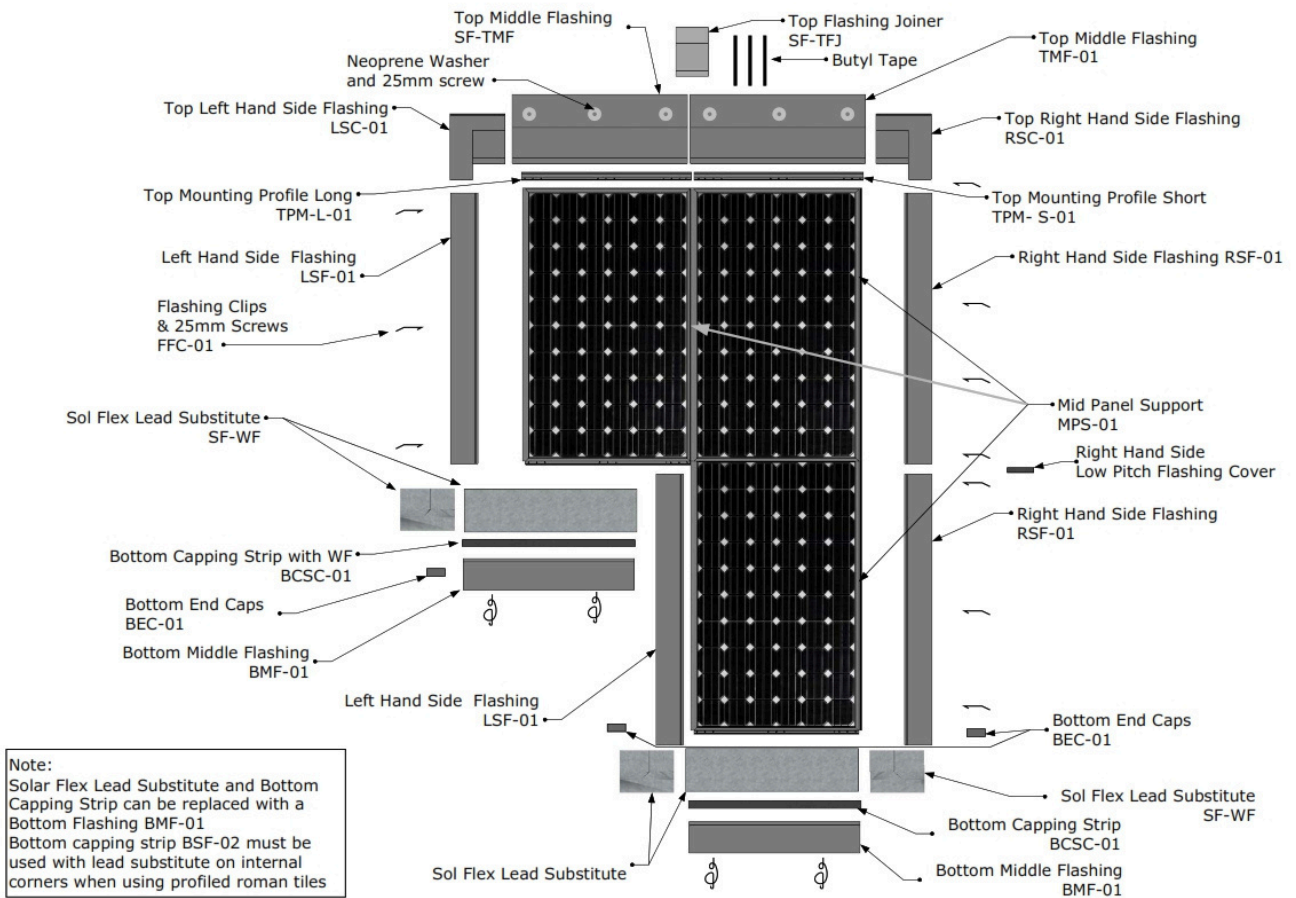
**3: Fit 150mm section of expandible phone tape under frame of upper panel**



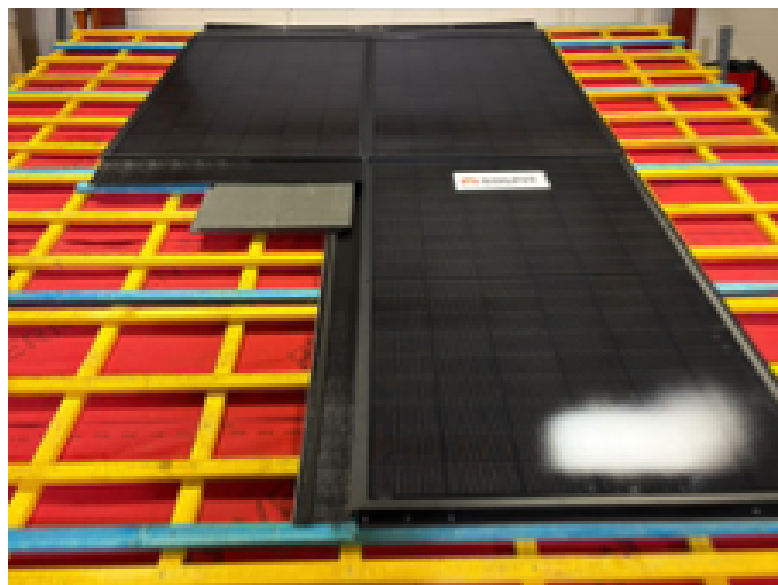
**4: Fit Metal Bottom flashing or flexible bottom as standard**

# LHS INTERNAL FLASHING

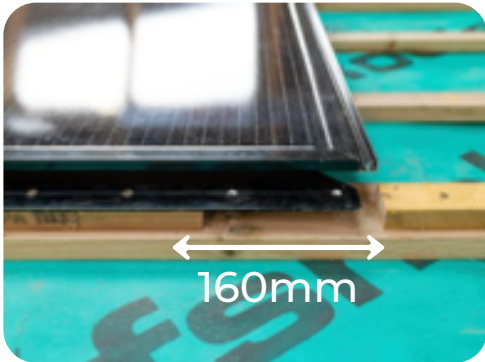
## LAYOUT



**Note:**  
 Solar Flex Lead Substitute and Bottom Capping Strip can be replaced with a Bottom Flashing BMF-01  
 Bottom Capping Strip BSF-02 must be used with lead substitute on internal corners when using profiled roman tiles.



## INTERNAL LHS FLASHING



**1: Cut out 160mm of top batten from RHS outside edge of panel**



**2: Fit an external RHS flashing**

- Leave 5-10mm gap to allow RHS external flashing to slide into position between profile and panel frame.

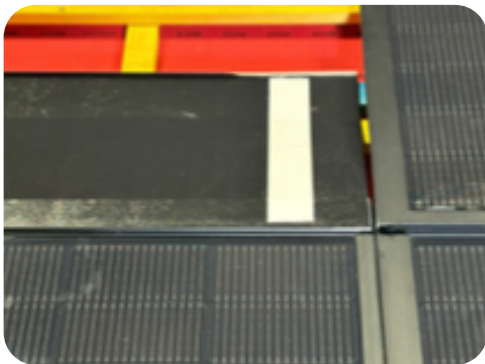


## EXTERNAL LHS FLASHING



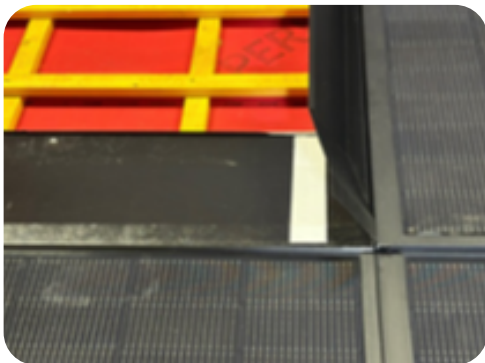
### 1) Fit top mounting profile and flashing

- Fit short mounting profile parallel with bottom profile of panel.



### 2: To Fit an external RHS flashing

- Leave 5-10mm gap to allow RHS external flashing to slide into position between profile and panel frame.



### 3: Fit top flashing

- Flatten top flashing return.
- Apply strips of butyl tape.

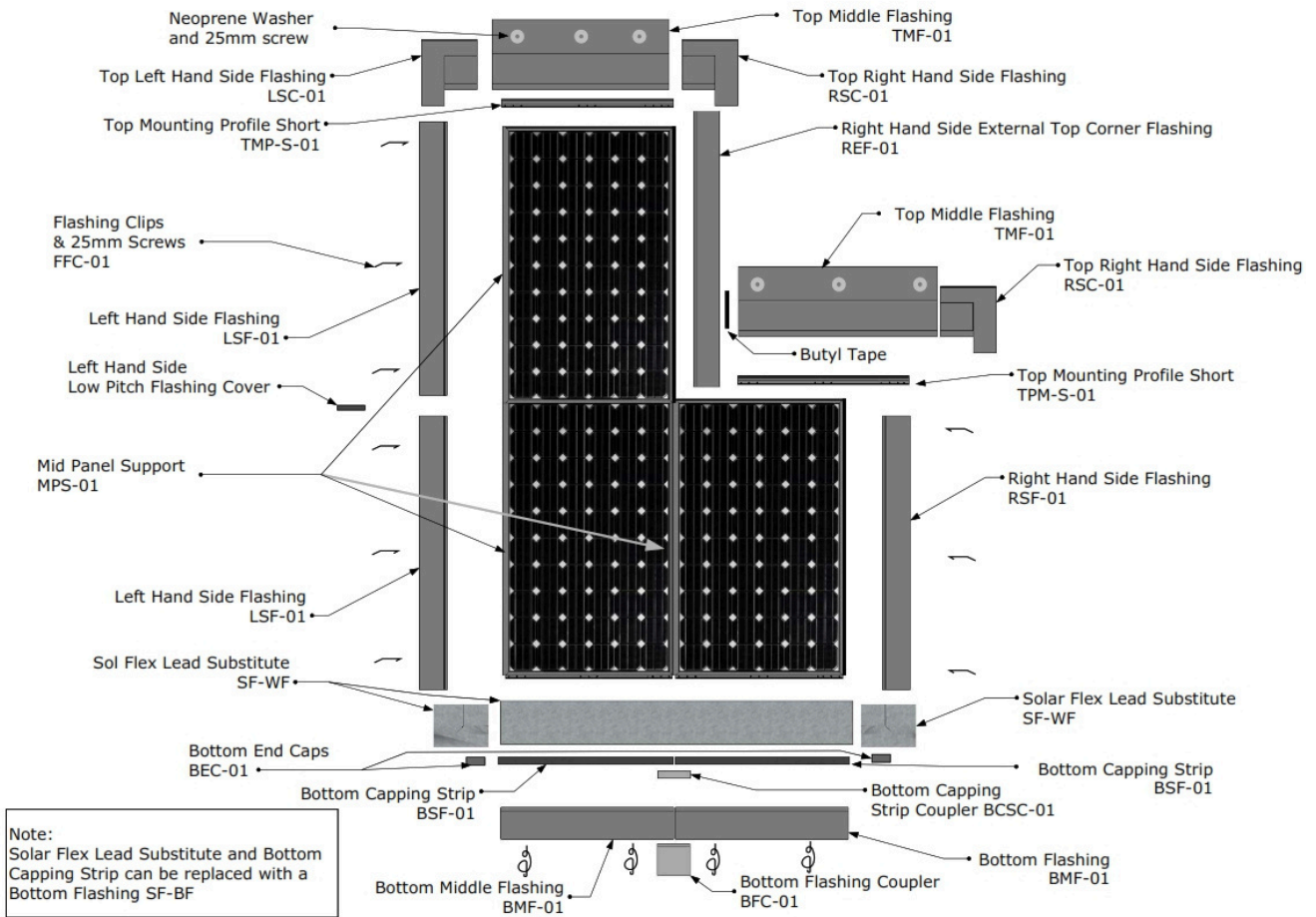


### 4: Slide RHS external flashing into place

- Secure with flashing clip.

# EXTERNAL RHS FLASHING

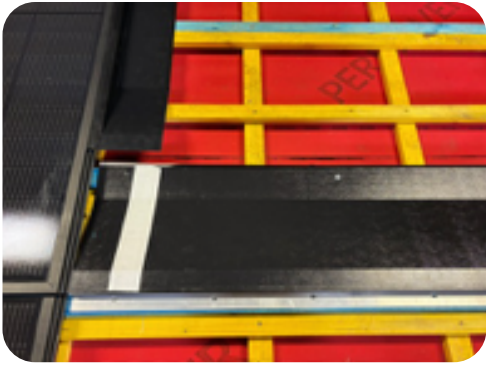
## LAYOUT



**Note:**

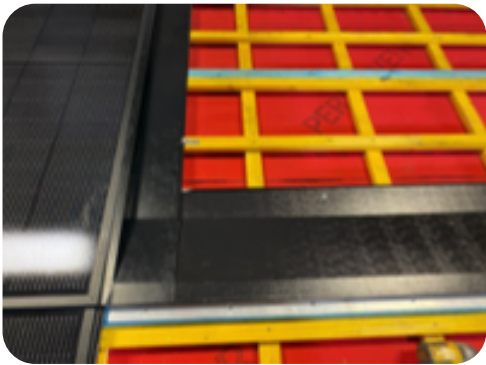
Solar Flex Lead Substitute and Bottom Capping Strip can be replaced with a Bottom Flashing SF-BF

## EXTERNAL RHS FLASHING



### 1: Fit mounting profile parallel with bottom profile of panel

- No need to leave a gap between panel and profile.



### 2: Fit top flashing and side flashing

- Flatten 150mm return of top flashing and stick two strips of butyl tape.
- Secure with side flashing clip.-

