SOLFIT

JETION SOLAR

SOLFIT
425 Wp

INSTALLATION MANUAL

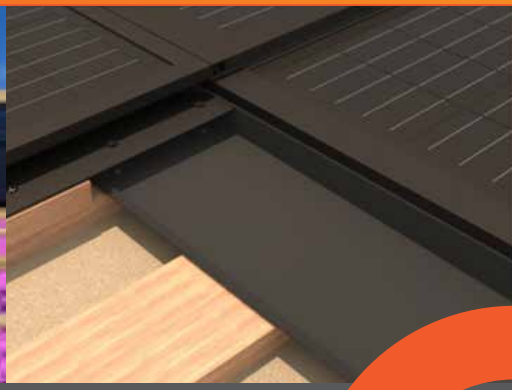
January 2025

SOLFIT JT 425Wp Landscape

Installation instruction videos visit
Solfit.co.uk

On site installer installation support
Text / WhatsApp Ewan: 07775 897 980

Scan for videos



APPROVED PRODUCT MCS BABT TÜV

TABLE OF CONTENTS

1: COMPONENTS

FLASHING & PROFILE PARTS

Top Flashing 425Wp 1770mm 	Top Flashing Joiner 	Corner Flashing Top Left 	Corner Flashing Top Right 
Side Flashing Left 425Wp 1235mm 	Side Flashing Right 425Wp 1235mm 	Side Flashing Right 425Wp 1235mm 	External Flashing Right 425Wp 1235mm 
Bottom Flashing 425Wp 1770mm 	Bottom Flashing Joiner 	Bottom Capping Strip 425Wp 1770mm 	Bottom Capping Strip Joiner 
Bottom Capping Strip End Caps 	Lead Zero Flashing x 5m 	Wonder, Black Corrugated Lead x 2.5m 	Flexi Bottom Corner Flashings x 500mm 

2: COMPONENTS

AUXILLARY PARTS

Top Mounting Profile Landscape 1770mm 	Top Mounting Profile Landscape 1740mm 	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 Lube x 500mm 
25mm EEJOT SS Torq Screws 	Torq Driver Head 	115mm Hex Head Neoprene Screw & Black Cap 	8mm Head Driver Bit 
50mm x 5 Screws x 200 	25 Screws x 200 		

3: 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.

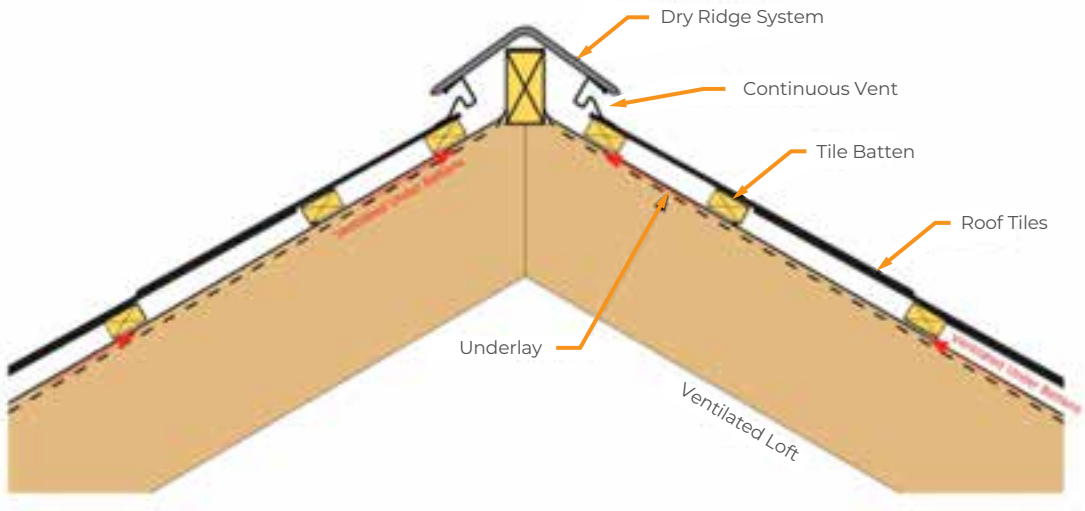
All roofs should have a vented ridge and a vented soffit wherever possible to allow.

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;

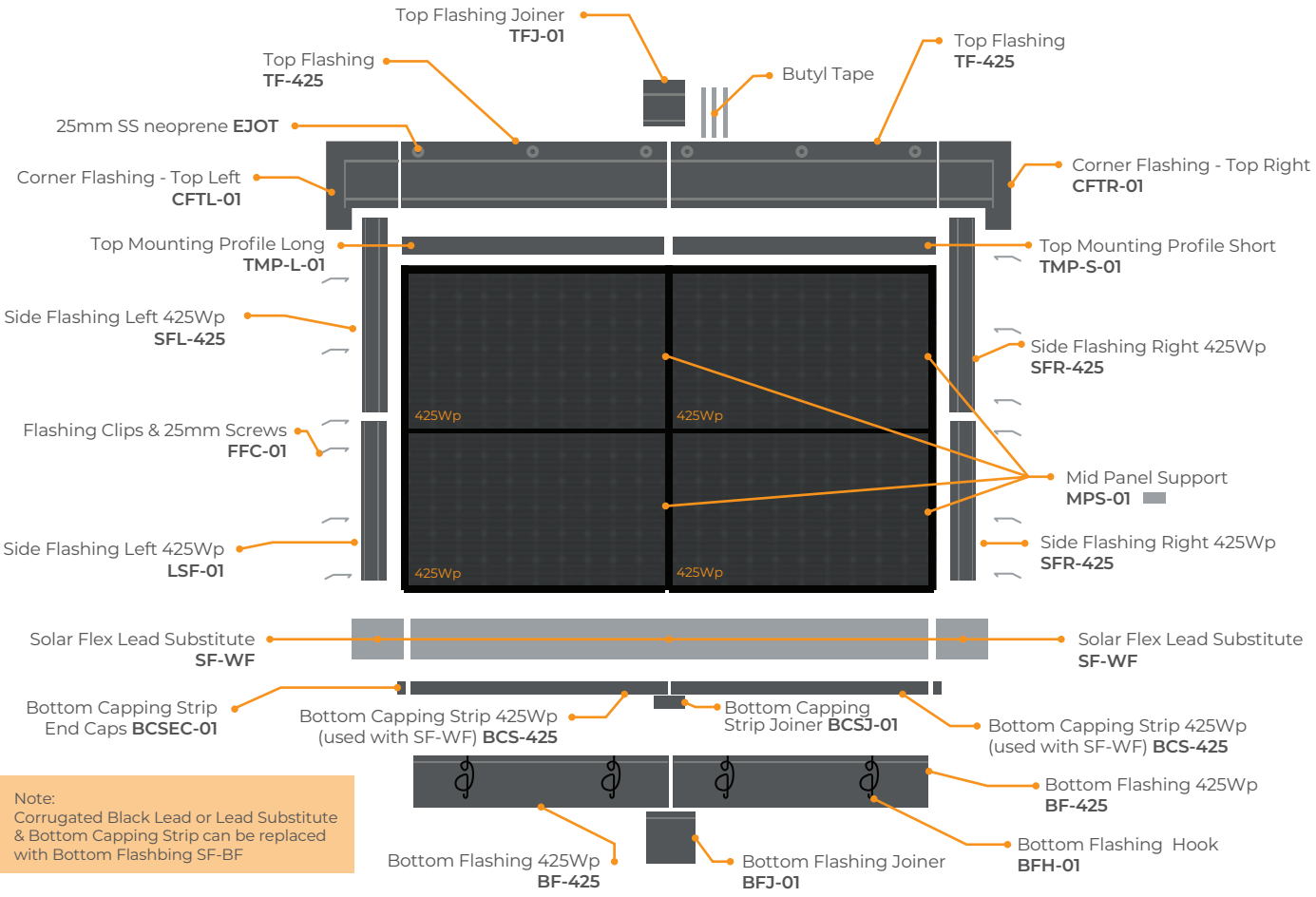
https://solfit.co.uk/brochures-datasheets/

Ridge Detail Cold Roof



4: COMPONENT PARTS

LAYOUT



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

Important; Low pitch flashing <20°

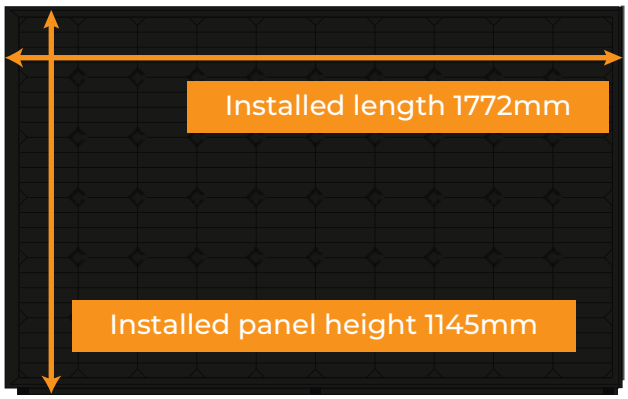
Please note ; All standard flashing are for roof pitches down to 20 degrees.
For roof pitches less than 20 degrees Low profile Top flashings are required.
Please make special order for low pitch flashings.

Important; MC4 Cable Connectors

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

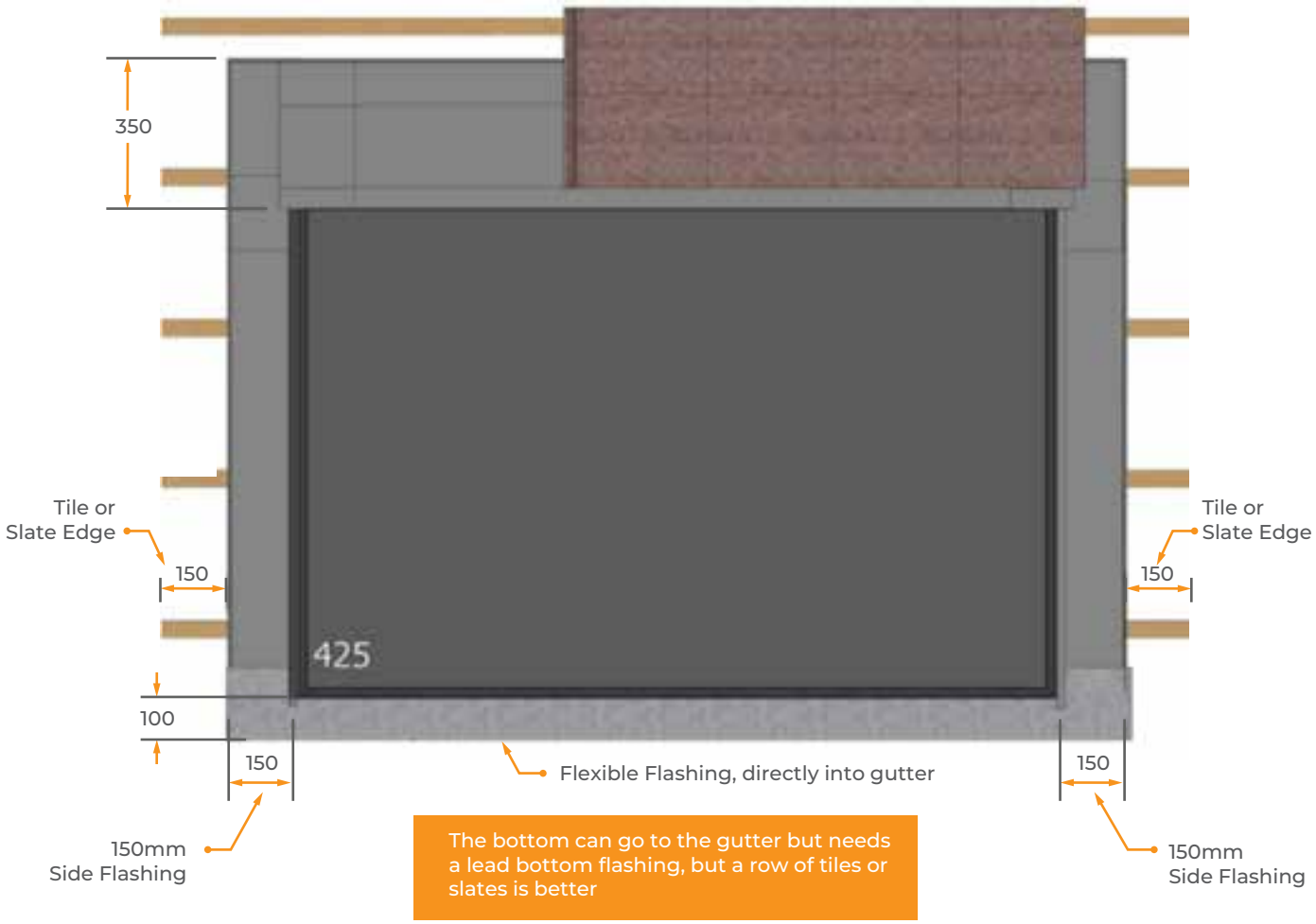
5: DIMENSIONS

PANEL AND MINIMUM BORDER



Fitting Space to Gutter

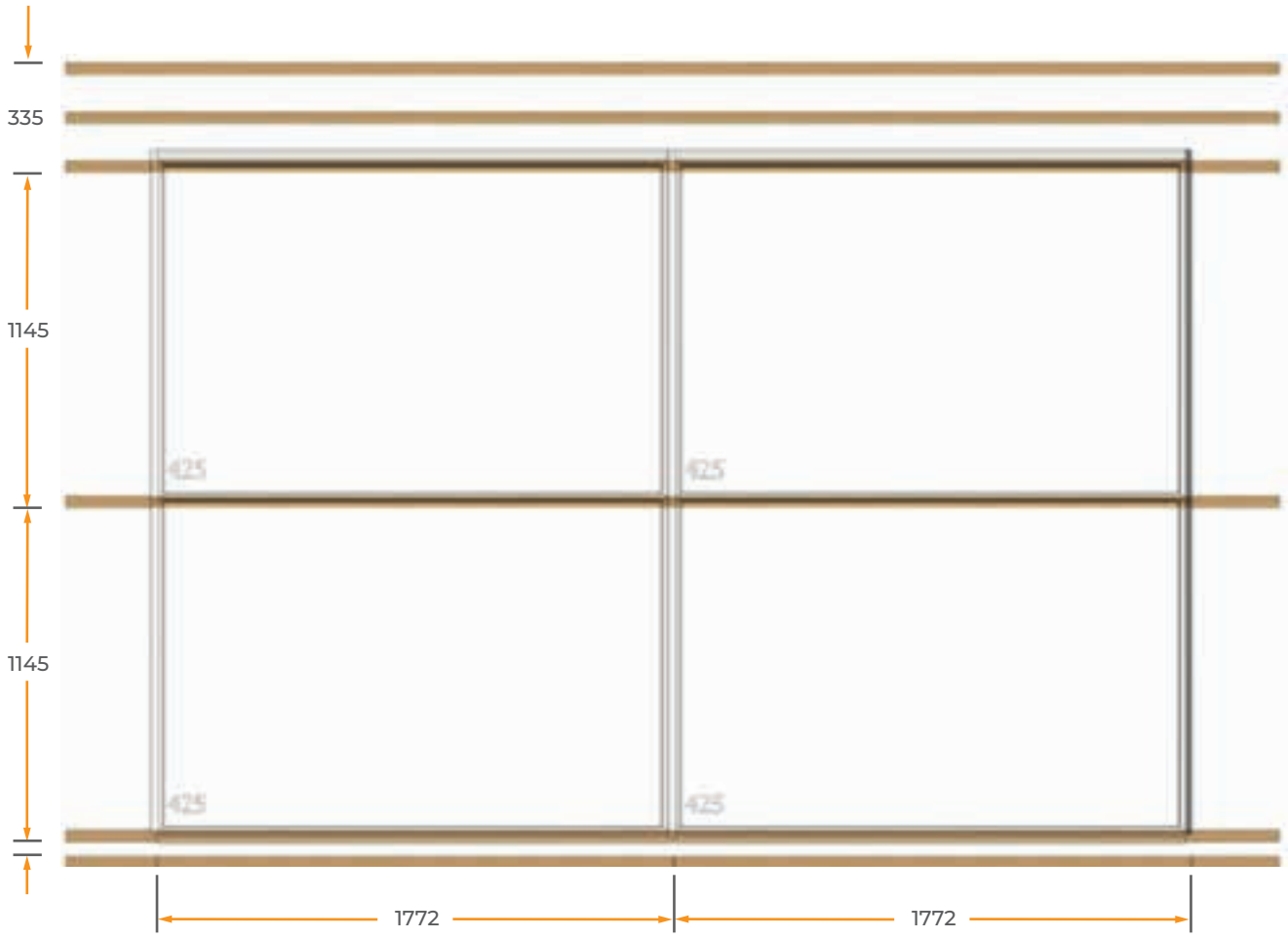
350mm clear and one top tile batten for a row of “Troppers”.
Alternatively it can go under the ridge so long as it is a dry ridge



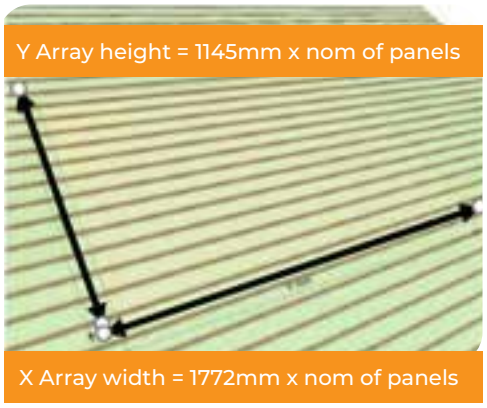
The bottom can go to the gutter but needs a lead bottom flashing, but a row of tiles or slates is better

6: BATTEN SPACING

2x2 Batten Layout



7: SETTING ROOF OUT

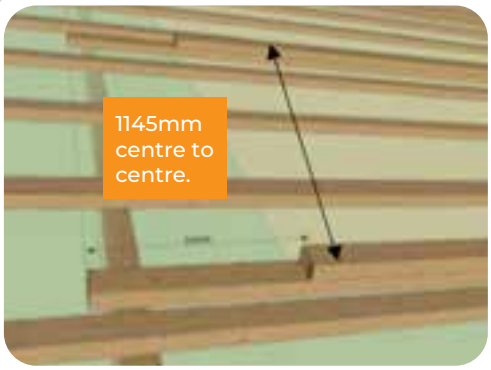


A: Measure size of array

- Installed Panel width; 1172mm
- Installed Panel height 1145mm

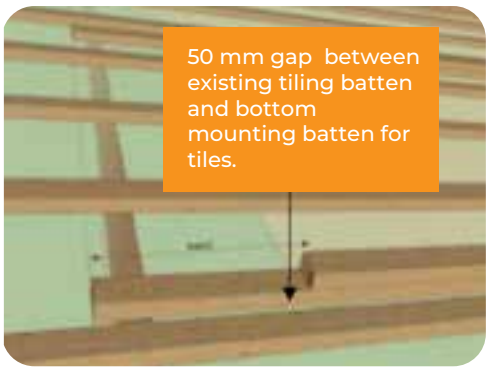
Array size

- X =(width) = 1772m x number of panels
- Y = (height) 1145mm x number of panels
- Side flashing = 150mm
- Top flashing = 350mm
- Bottom flashing = 190mm



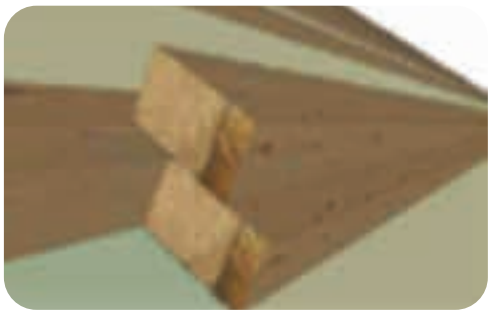
B: Fitting mounting battens

- Use only 25mm x 50mm battens
- Measure the height of array from bottom of the array up the roof,
- Fit double mounting battens at 1145mm metre spacing's. centre to centre
- Secure lower battens with 50mm screws on every rafter



C: 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
- No gap required for slates



D: Spanning existing battens

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

8: SETTING ROOF OUT continued

Important
Always have the roof battened for slates or tile before measuring out batten spacing for SOLFIT panels

! VERY IMPORTANT

A: 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 where the array bottom panel finishes

B: String line bottom mounting batten

- If roofing battens are not square or are bent a string line of the bottom batten is a good idea as it create a straight and level starting point

C: Fix upper 2nd batten on lower batten

- Fix upper 2nd batten on lower batten with 4 x 50mm screws approx. per panel

D: Measure Batten spacing

- Use measuring stick or tape to measure correct batten spacing batten spacing for panel being used.

9: TOP MOUNTING PROFILE

B: 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 flush with bottom of top batten
- Secure with 6 screws per profile

! VERY IMPORTANT

B: 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

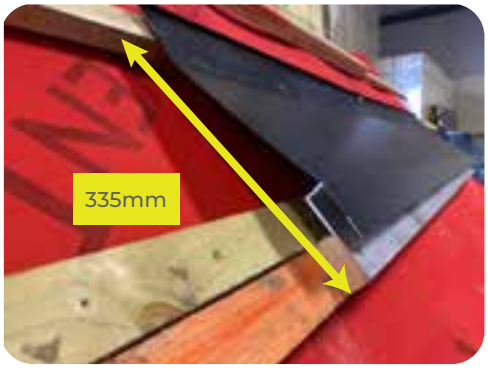
C: Cut top mounting batten RHS

- Cut top mounting batten flush with RHS end of mounting profile

D: Cut top mounting batten LHS

- Cut batten flush with the LHS edge of mounting profile

10: TOP FLASHING



A: 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 top centre of flashing

B: Fit top flashing joiners

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

C: Top flashing joiner

- Secure top flashing joiner on to top flashing using 2 x 25mm neoprene screw. In event of not having Torq driver head 25mm screw and neoprene washers can be used.

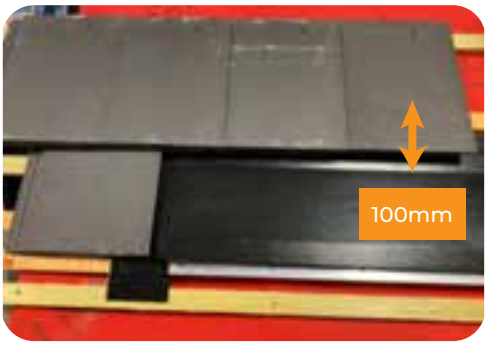
D: Fit top flashings and joiners

- 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 washers

11: TOP TILE SUPPORT BATTEN

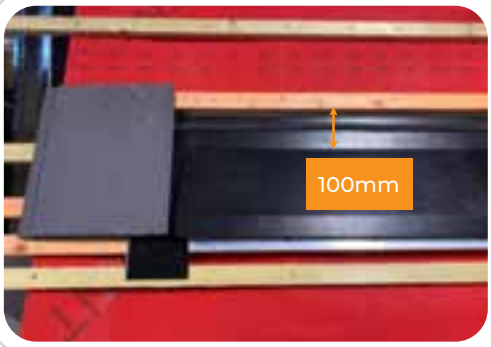
For Roofers

When the top course tiles fall on the top 100mm of the top flashing it is necessary to support & lift the tile course by 25mm to allow it to run level with the tile course to tiles to the LHS & RHS of the array.



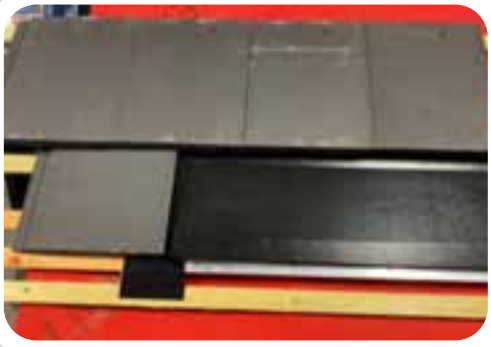
A: Top tile support batten

Tile falls on top flat 100mm of top flashing



B: Top tile support batten

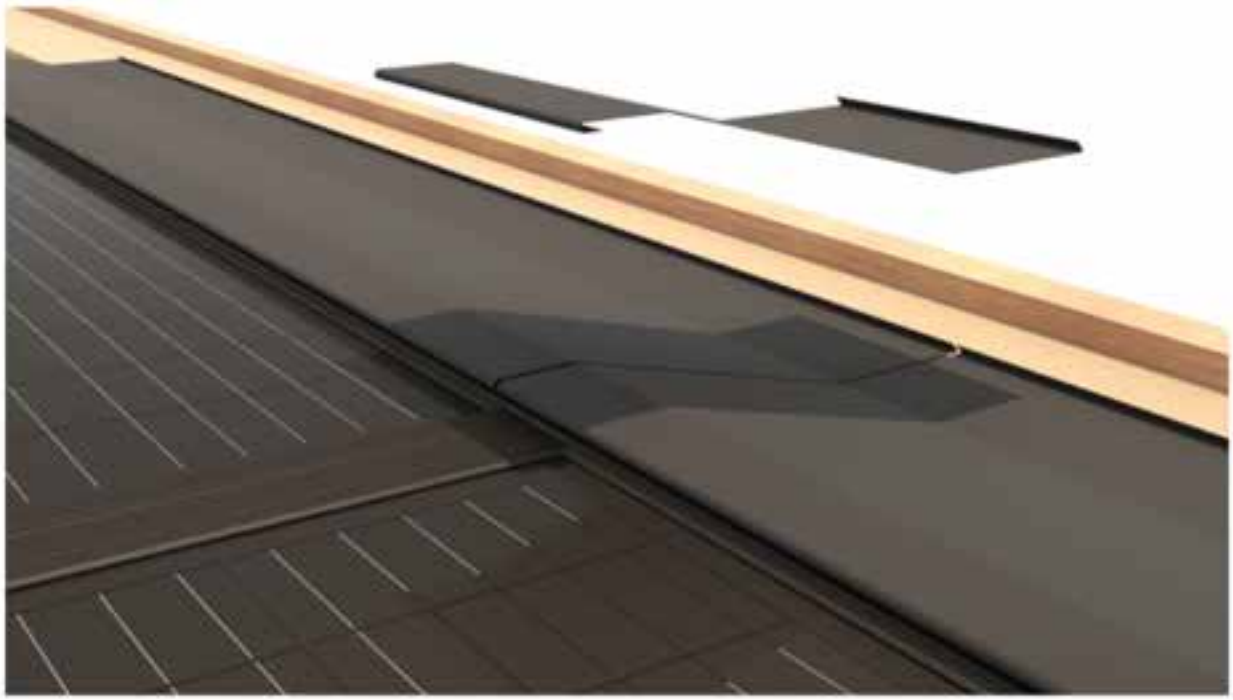
Fit a double batten (2 x 25mm) on the upper edge of the top flashing.



C: Fit expandible foam tape

- Fit expandible foam tape
- Roofer to Lay tiles level

12: TOP FLASHING IMAGES



13: PANEL FITTING

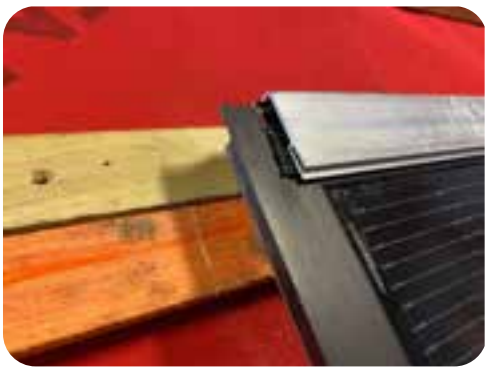
A: Lubricate top row panels seal

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

B: Fitting first panel fist 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



C: Over shoot top mounting

- Overshoot profile by 20mm + past the LHS edge of the extrusion
- Push in tight and square with Top mounting profile

! VERY IMPORTANT

D: Fix panel with 6 screws per panel

- Don't let the panel drop or slip down as it will not be square

14: FITTING TOP ROW OF PANELS

A: Secure MC4 lead

- Secure lead temporarily to frame with panel shim to prevent from Loosing lead behind the panel
- Note; only use Staubli MC4 connectors. Miss matched MC4 connectors cause fires !

B: Fix Mid Panel support

- Fix mid panel support shim to small section of addition roofing baton with 50mm screw to existing roof batten as close to centre of panel. Provides snow loading support.
- We recommend that every panel has a mid-panel support even in areas of low snow loading.

C: 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!!!!

D: Micro Inverters / Optimisers / Arc Boxes

- Micro Inverters
- Optimisers
- Arc Boxes

Can all be fitted and are secured to the existing roof battens.

15: FITTING PANELS

A: Fit addition panels

- Slide RHS panel next to LHS panel - interconnecting side profiles
- Push each panel as far as it will go flush and level with its neighbour
- Secure panels with 6 screws panel

B: Fit top row of panels

- Make sure they are pushed in tight and square. Beware of wrinkling EPDM tape preventing them being pushed tight

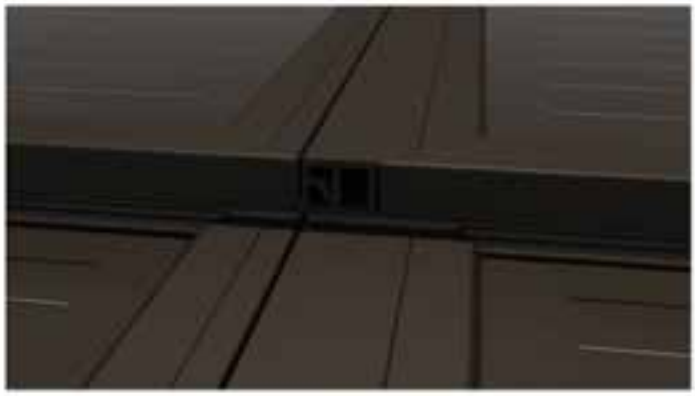
C: Fit additional rows of panels

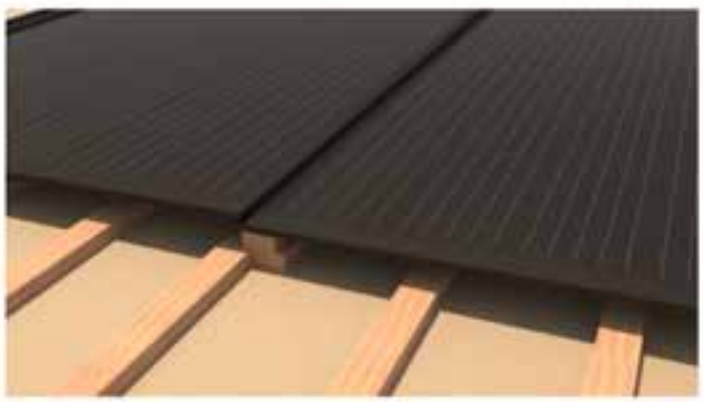
- Fit additional rows of panels pushing tight and level

D: Cut mounting battens

- Cut flush battens flush with LHS and RHS edge of each panel

16: PANEL FITTING IMAGES





17: LHS FLASHING

A: Top LHS corner

- Fit Butyl Tape to Top LHS corner flashing, slide in from the top.

B: Insert LHS corner flashing

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

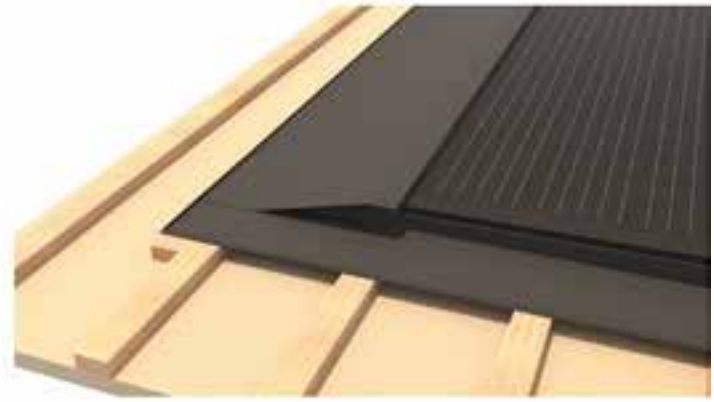
C: Fit LHS Flashing

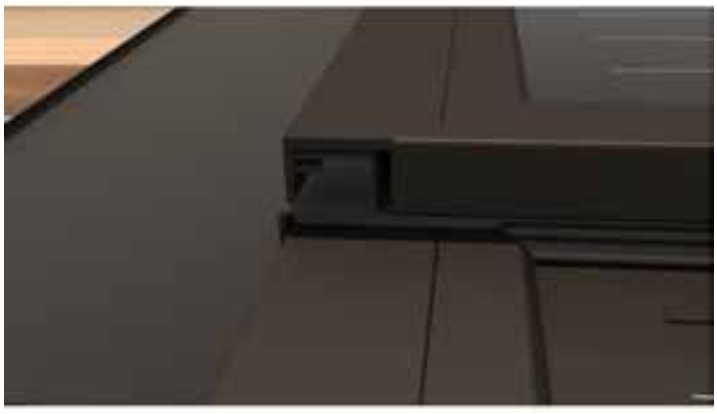
- Fit LHS flashing by inserting into side profile and rotating

D: Fit LHS flashing

- Rotate and slide LHS flashing up into position and secure with 2 x flashing clips

18: LHS FLASHING AND TOP LEFT CORNER

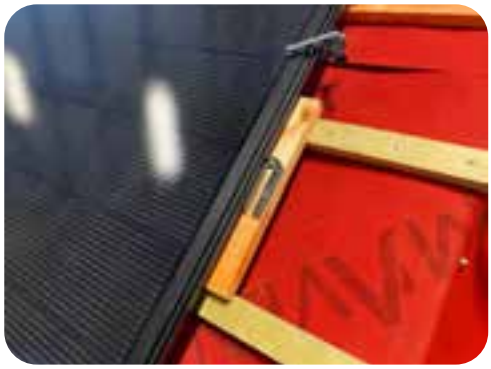




19: RHS PANEL SUPPORT

A: Fit additional LHS flashings

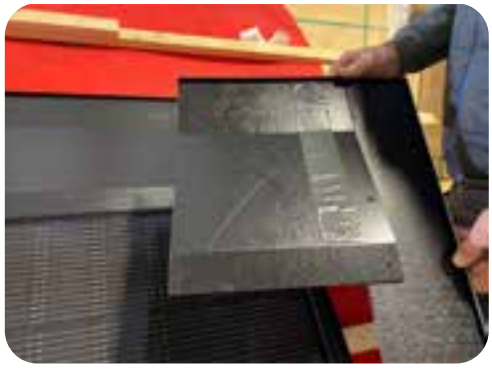
- Assemble RHS mid panel support with batten long enough to span two battens
- 1 x shim
- 1 x 50m screw for hanging support
- 1 x 50mm screw for securing shim



B: Over hang screw over batten in upper / middle part of panel

C: Slide panel support into position Parallel with RHS panel frame

20: RHS FLASHING



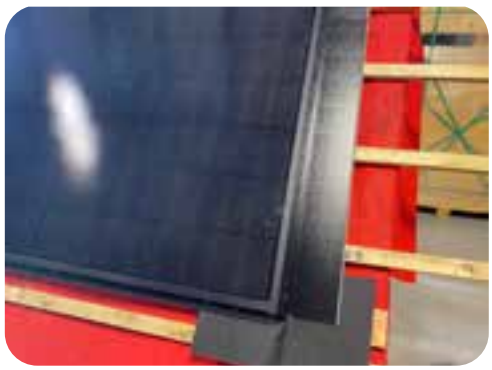
A: Stick strip of butyl tape to top corner

B: Insert top RHS corner flashing

- Slide corner flashing **under** top flashing
- Secure with flashing clip

C: Fit additional LHS flashings

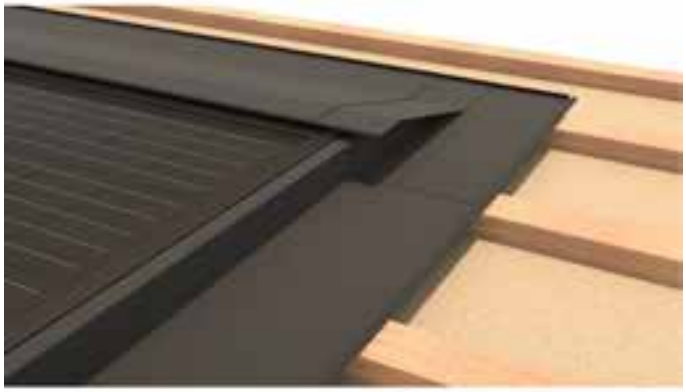
- Fit additional flashings and slide into position

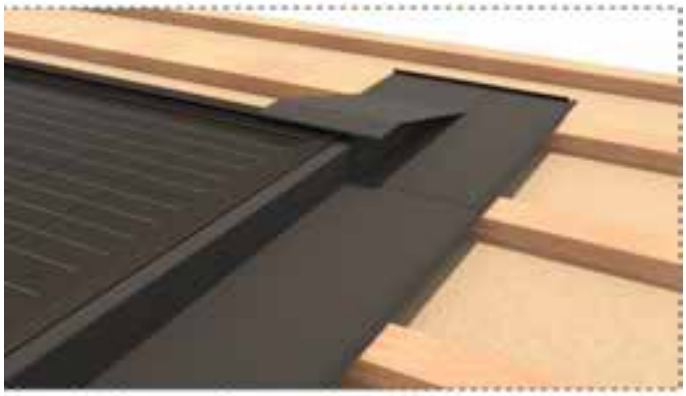


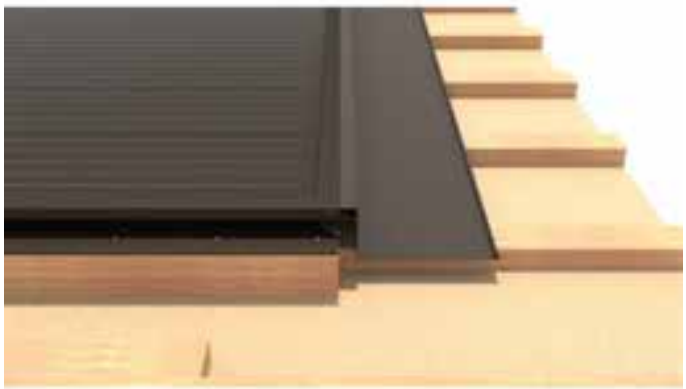
D: Fit additional LHS flashings

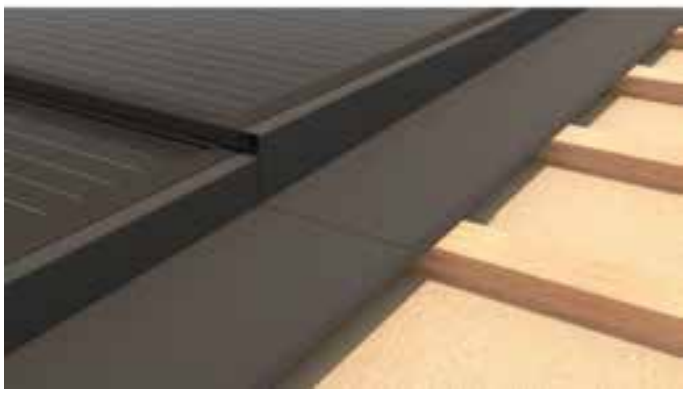
- Fit additional flashings and slide into position
- Secure with 2 flashing clips minimum per flashing

21: TOP RIGHT CORNER AND RHS FLASHING









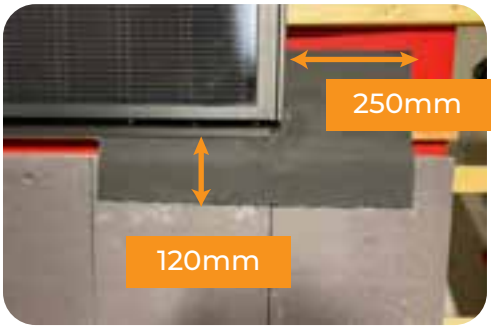
22: FITTING FLEXI BOTTOM CORNERS

A: Fit flashing bottom batten

- Fit flashing support batten noggin above panel mounting batten to support corner flashing

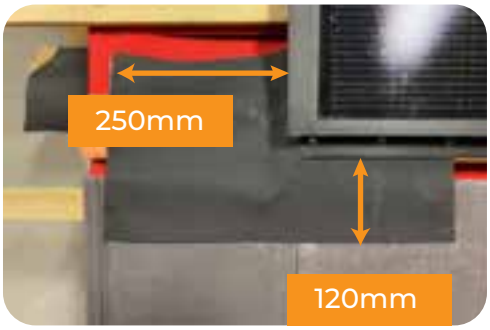
B: Fit flashing support shims

- Fit 2 x 10mm Flashing support shims secured with 25mm screws
- Support batten & shims prevent water pooling Between top of tile and flashing.



C: Overlap bottom flashing

- Overlap tile course by approx. 120mm



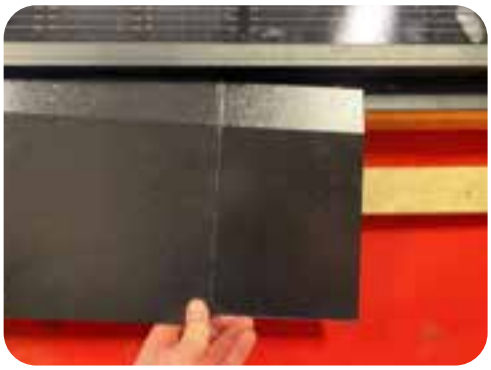
D: Bottom flashing

- Fit flexible bottom corner flashing Allow for 250mm either side of panel edge.

23: BOTTOM FLASHING

A: 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



B: Fit bottom flashing and bottom flashing joiner

- Push bottom joiner into position into bottom flashing. No need for Butyle tape sealer.

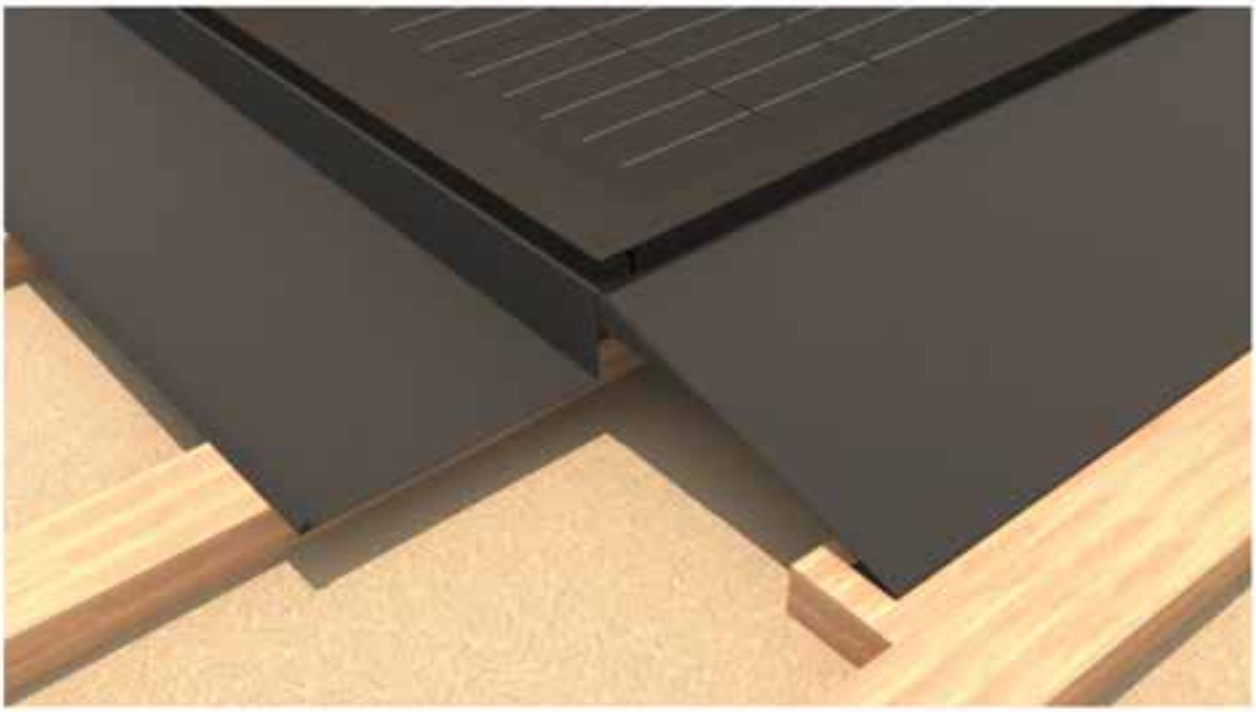
C: Fit additional bottom flashings

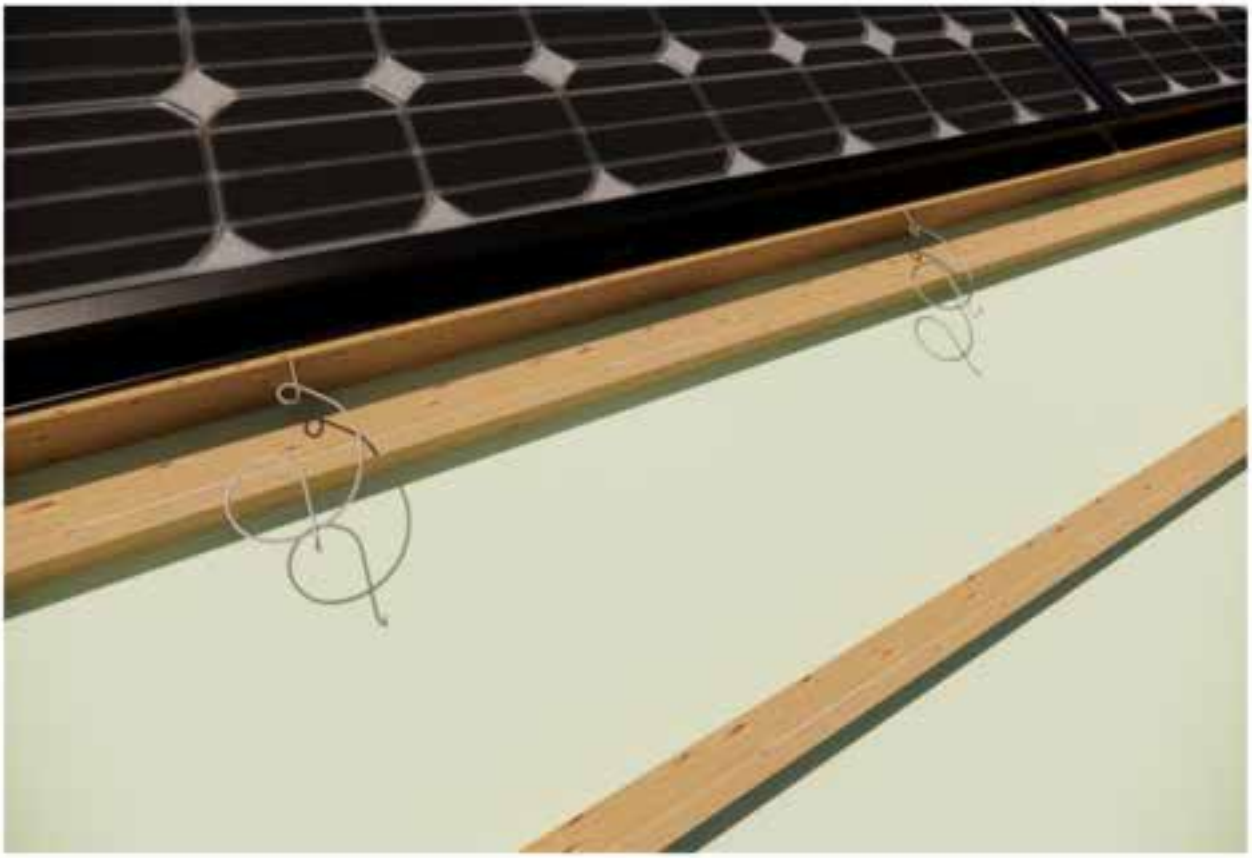
- Note; If slates are being fitted the bottom flashing will need removed and refitted. Tiles can be fitted under flashing.

D: Pull flashing hook

- Pull flashing hook into place with tool or plyers

24: BOTTOM FLASHING & FLASHING HOOK





25: FLEXIBLE BOTTOM FLASHING
Lead or lead substitute

A: Fit bottom flashing support baton

- Fit above bottom panel mounting baton

B: Fit flashing support shims

- When roofing with tiles
- Fit flashing support 10mm shims on LHS and RHS securing with 1 x 50mm screw per shim This reduces the step and reduces water pooling

C: Fit lower flexible bottom flashing.

- We recommend Lead Zero but lead or other lead substitutes can be used

D: Flexible bottom flashing with tiles

26: BOTTOM CAPPING STRIP & END CAPS

A: Fit bottom capping strip and screw 120mm hex head neoprene screw with 8m hex head driver bit.

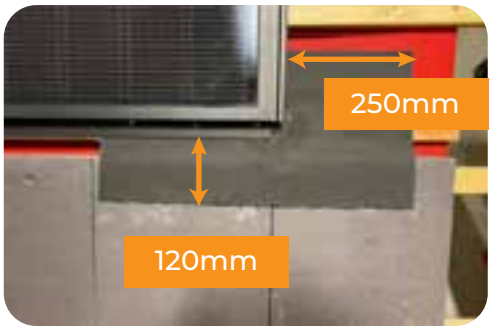
B: Fit black cap on Hex head screw, make sure it is on tight.

C: Fit end caps on LHS & RHS

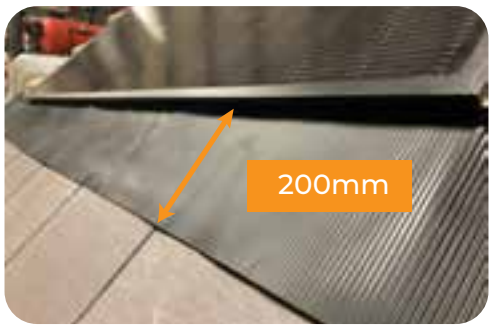
D: Capping strip end caps

Push end caps into position

27: WONDER BLACK CORRUGATED LEAD



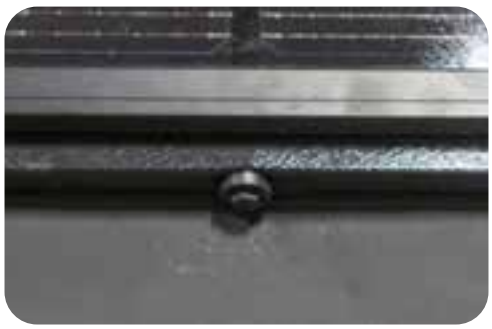
A: Fit flexi bottom corners



B: Fit black corrugated lead into bottom profile. Allow 200mm + overlap on LHS & RHS

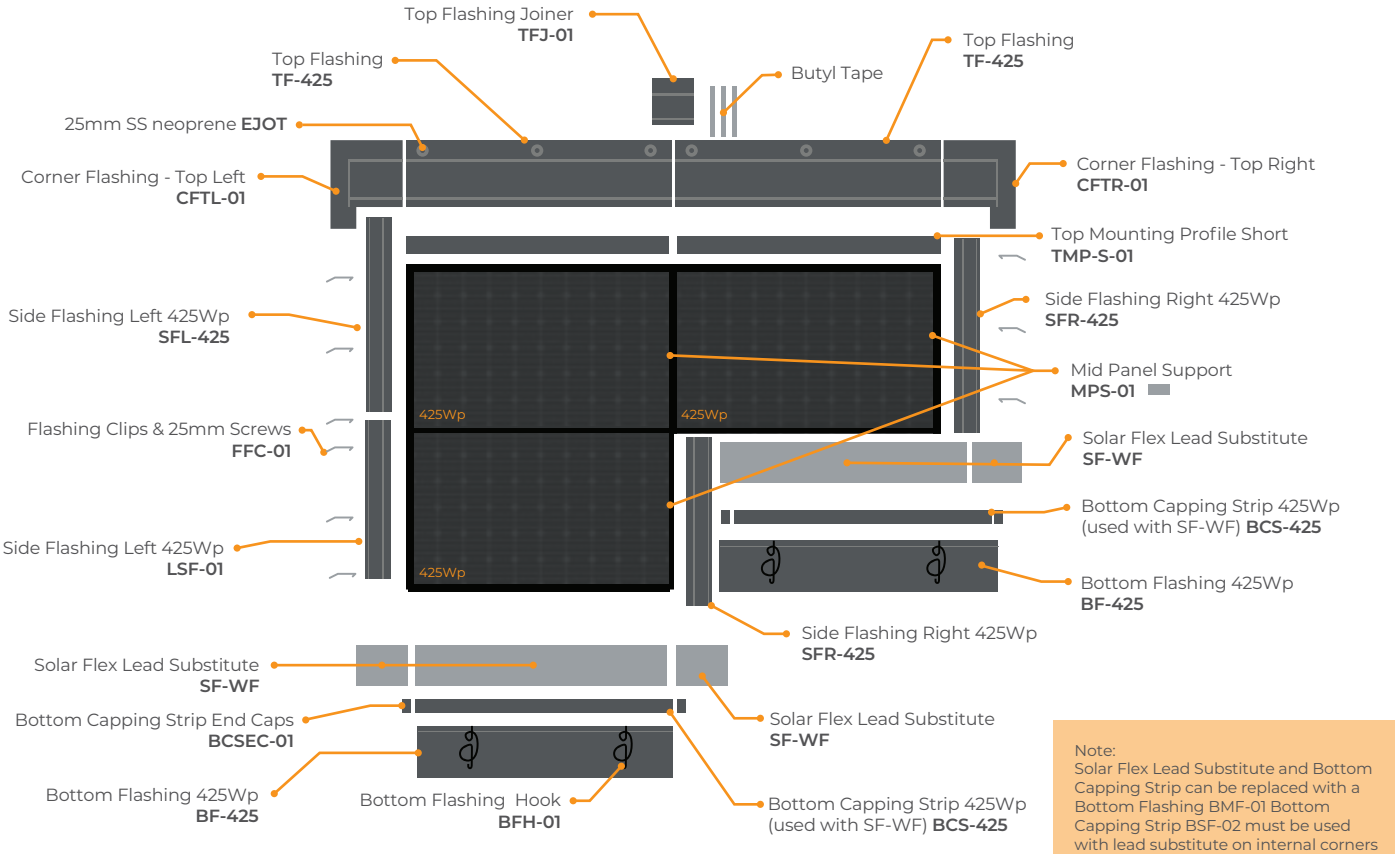
- Beware once fitted Lead very hard to remove

C: Fit bottom capping strip & end caps and side flashings



D: Secure bottom flashing with 115mm Tec screw and black cap

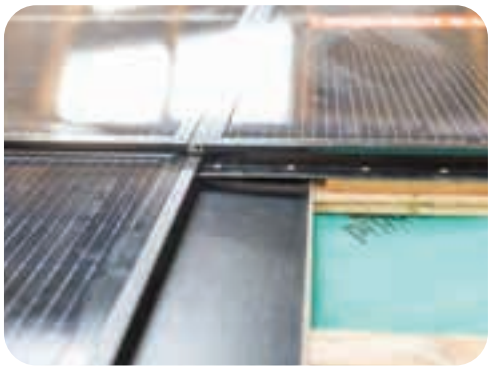
28: RHS INTERNAL FLASHING LAYOUT



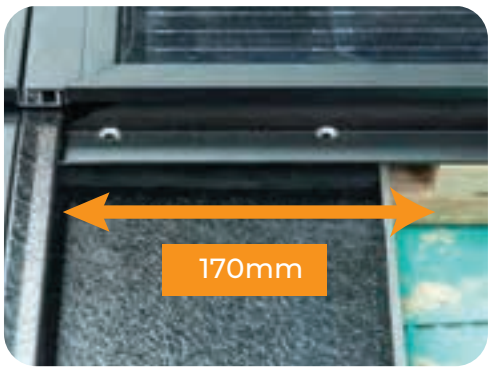
Note:
Solar Flex Lead Substitute and Bottom Capping Strip can be replaced with a Bottom Flashing BMF-01 Bottom Capping Strip BSF-02 must be used with lead substitute on internal corners when using profiled roman tiles.

29: RHS INTERNAL FLASHING

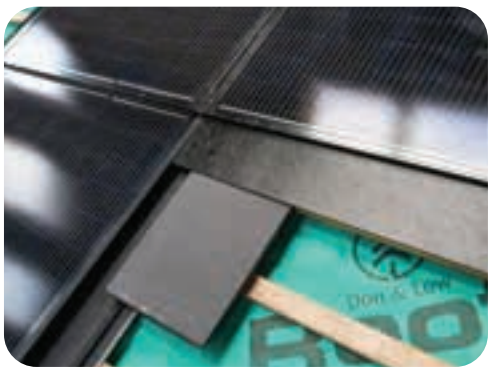
A: Cut 170mm section of top batten out from outside RHS edge of panel.



B: Fit RHS flashing under panel above

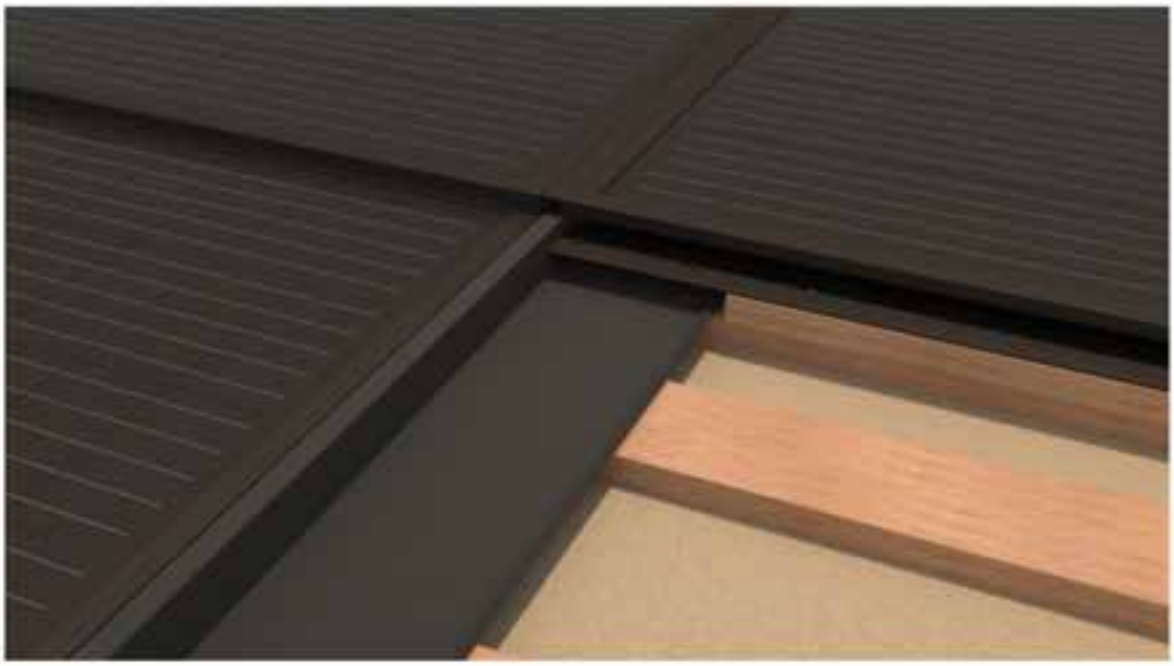


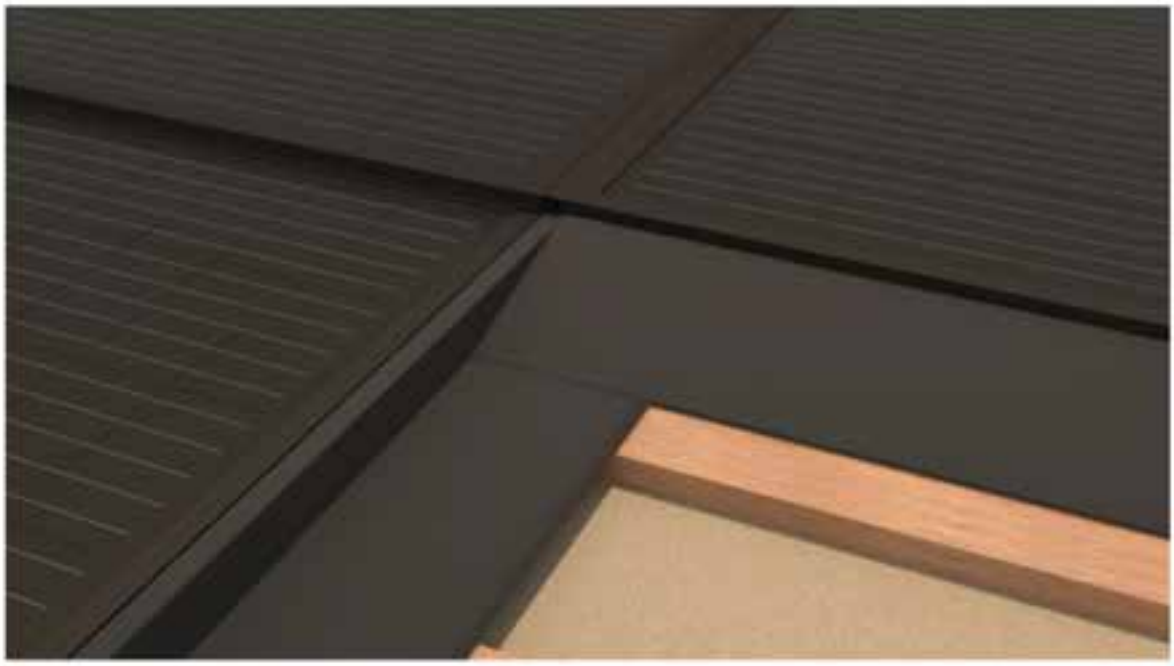
C: Fit 150mm section of expandible foam tape under frame of upper panel



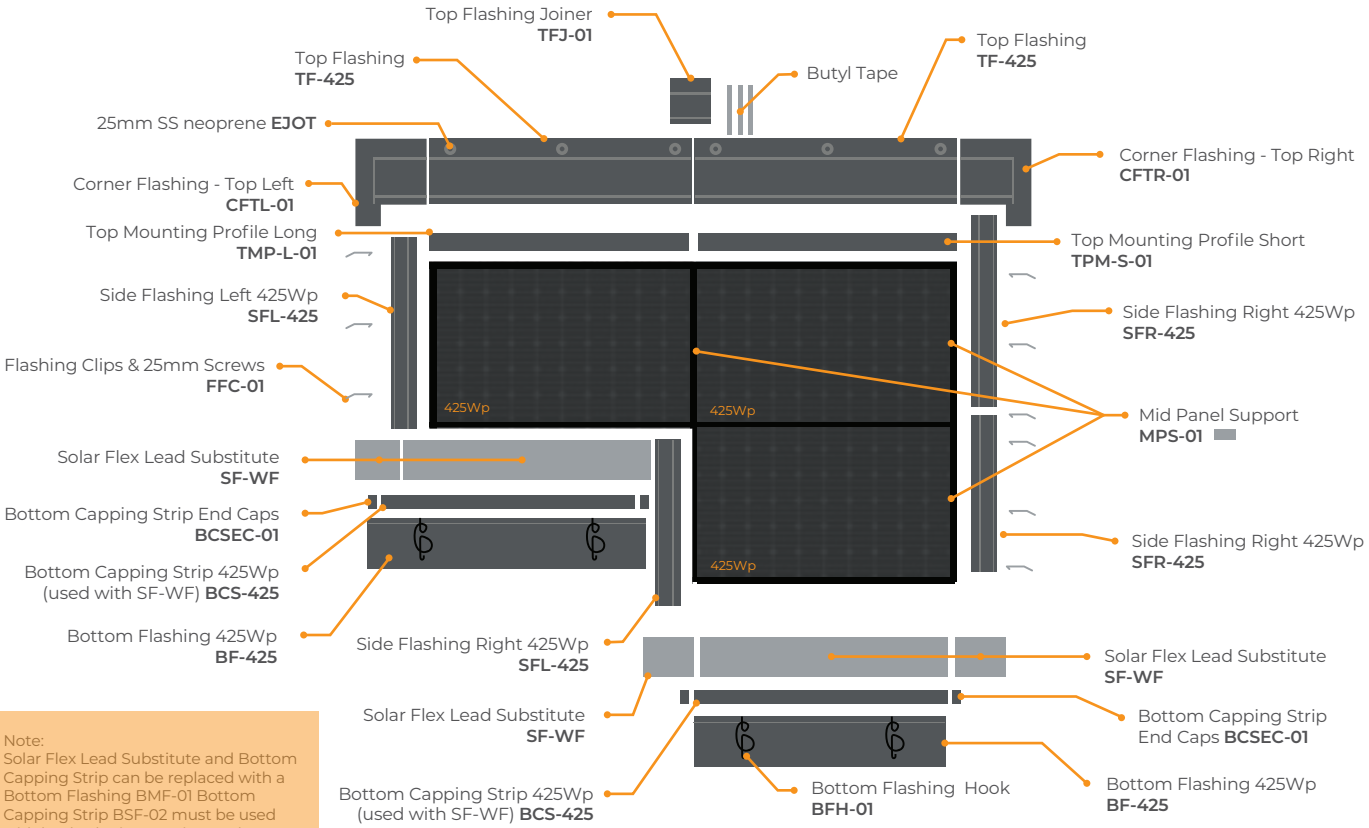
D: Fit Metal Bottom flashing or flexible bottom as standard

30: INTERNAL RHS FLASHING IMAGES



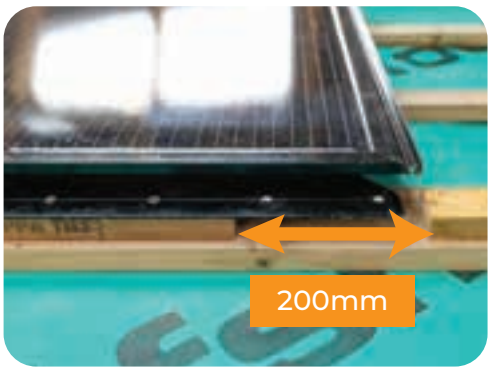


31: LHS INTERNAL FLASHING LAYOUT



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.

32: INTERNAL LHS FLASHING

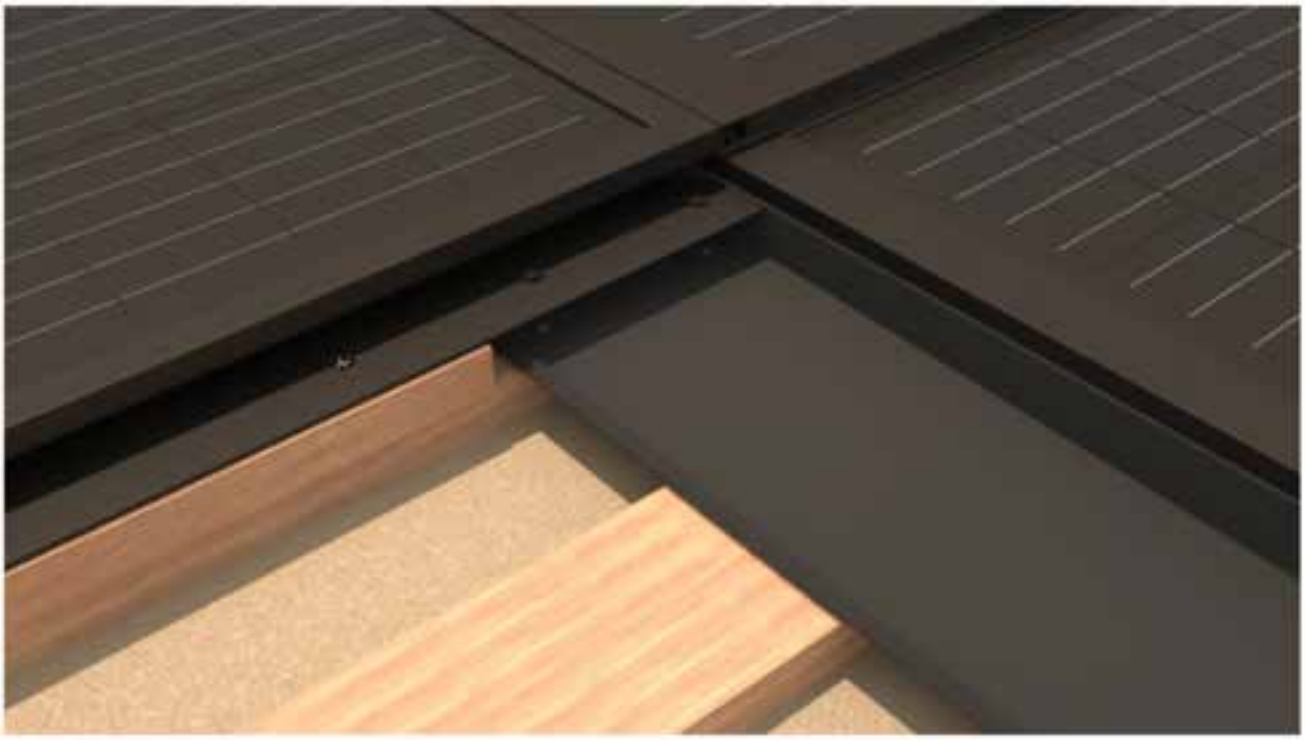


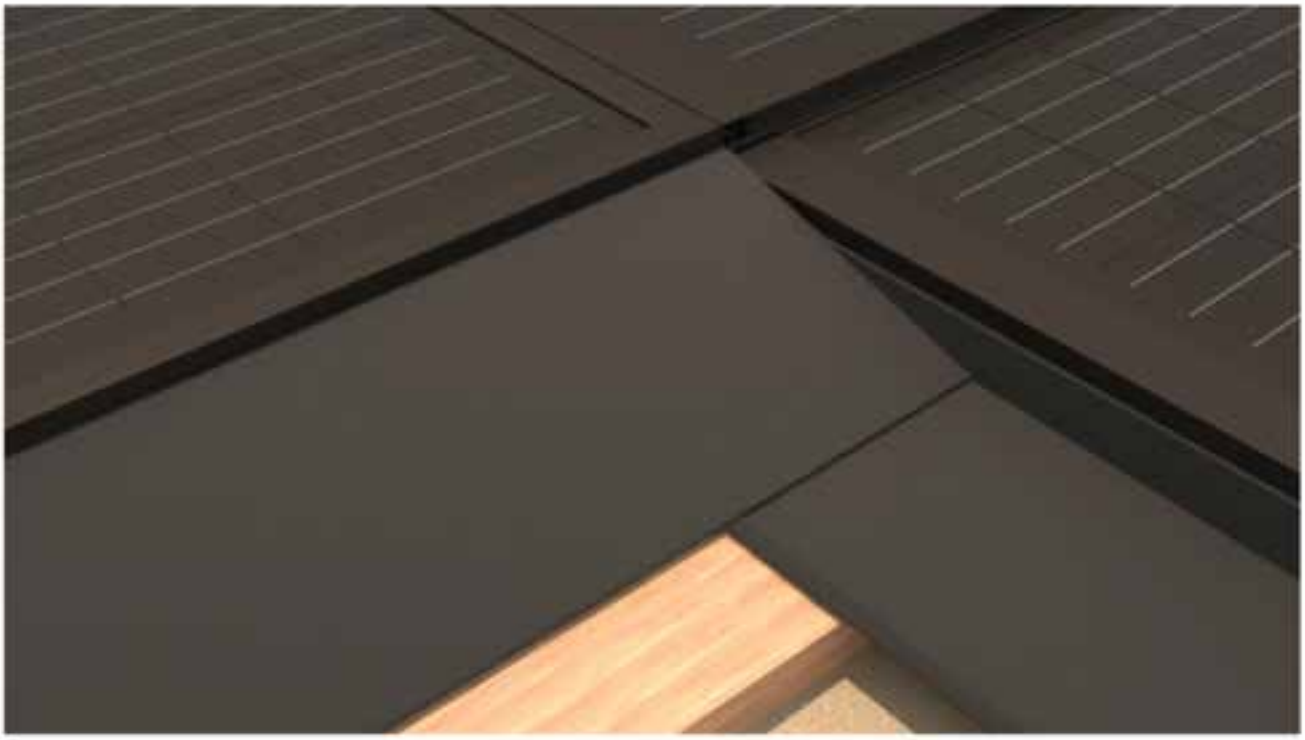
A: Cut out 200mm of top batten from RHS outside edge of panel

B: Fit additional panels around the corner and fit LHS flashing flashing

C: Fit metal bottom flashing or flexible bottom flashing as standard

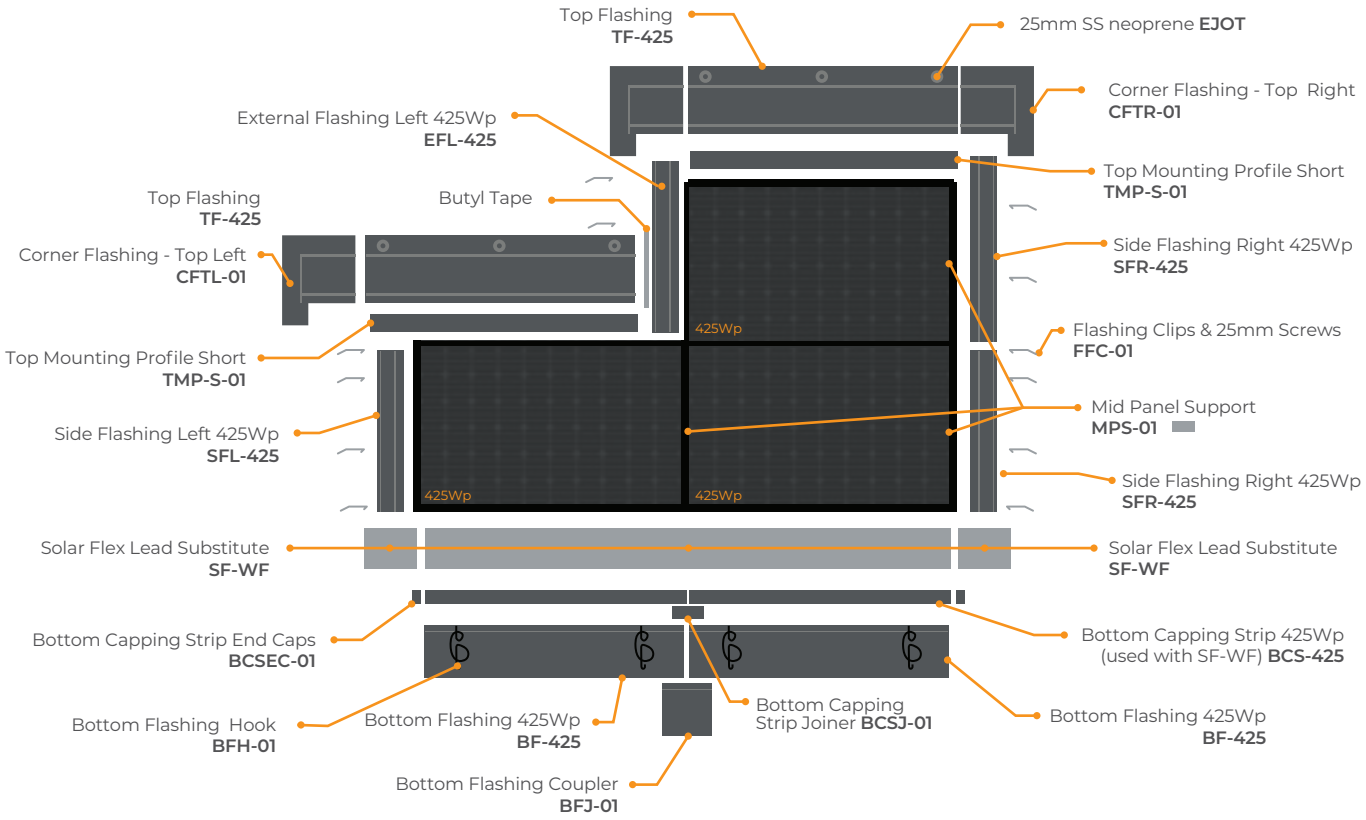
33: LHS INTERNAL CORNER FLASHING IMAGES



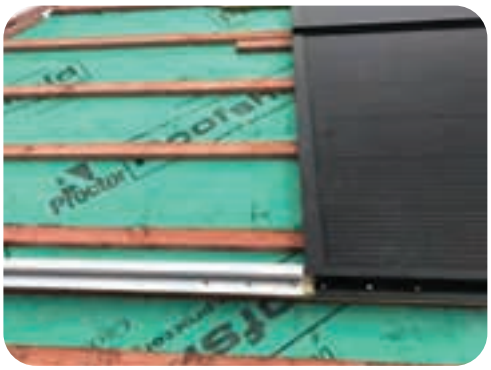


34: LHS EXTERNAL FLASHING LAYOUT

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

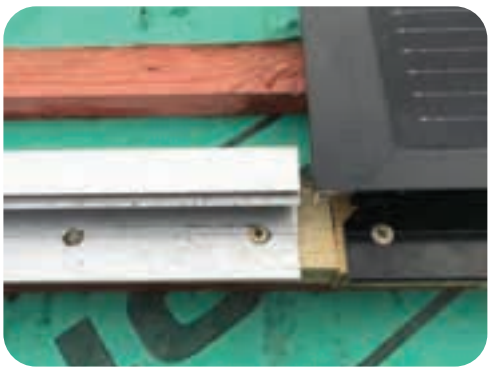


35: EXTERNAL LHS FLASHING



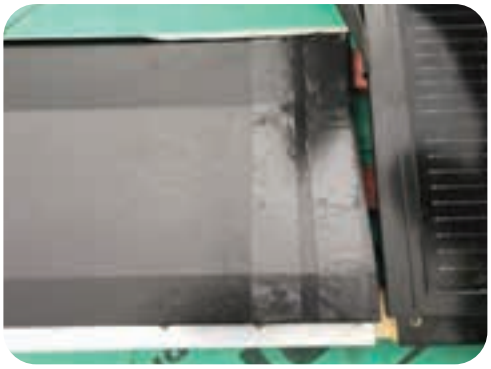
A: Fit top mounting profile and flashing

- Fit short mounting profile parallel with bottom profile of panel



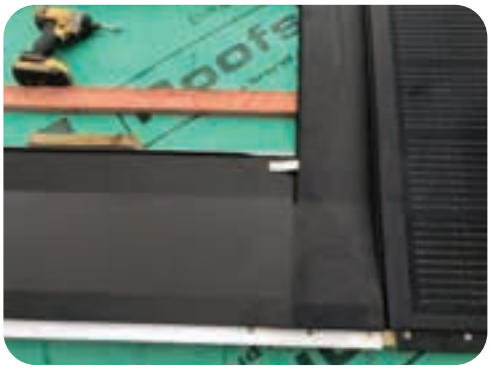
B: Fit an external RHS flashing

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



C: Fit top flashing

- Flatten top flashing return
- Apply 2 strips of Butyl tape

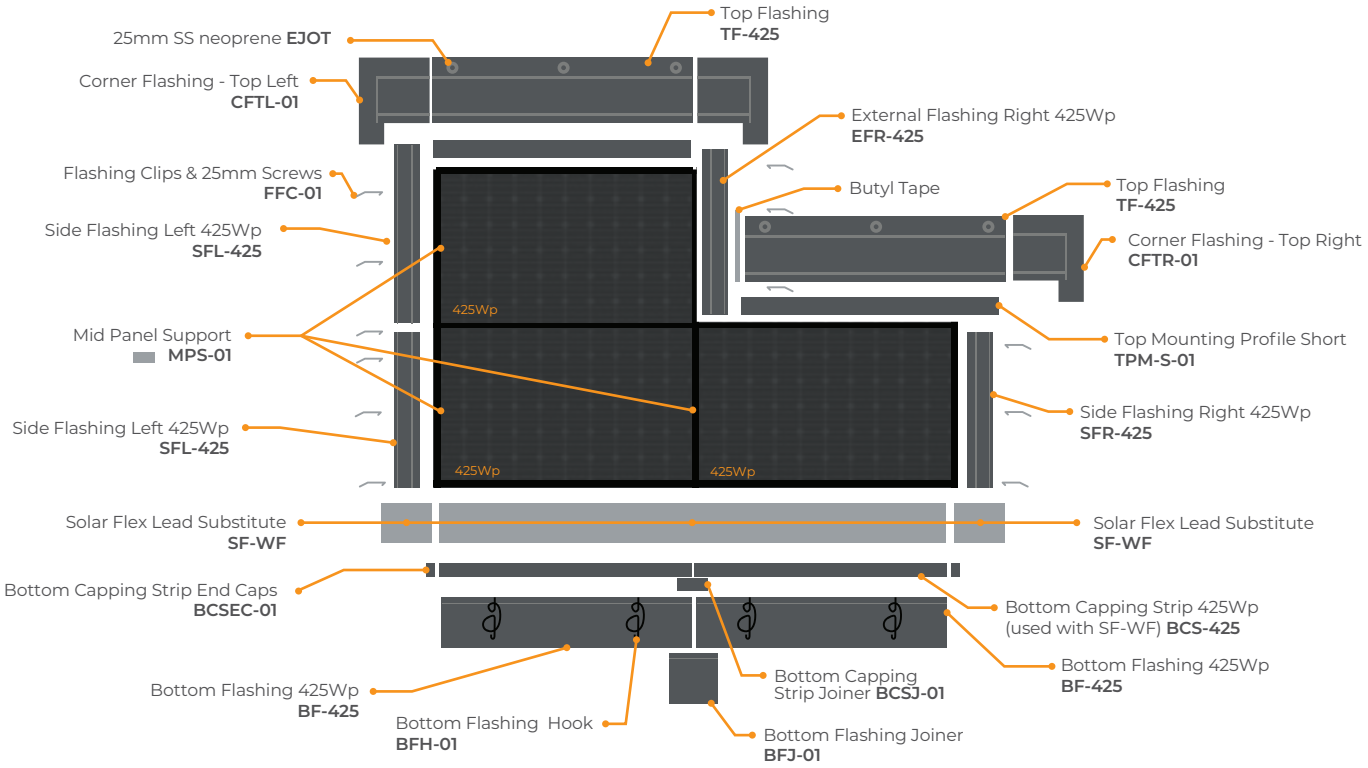


D: Slide RHS external flashing into place

- Secure with flashing clip and neoprene washer & screw

36: EXTERNAL RHS FLASHING LAYOUT

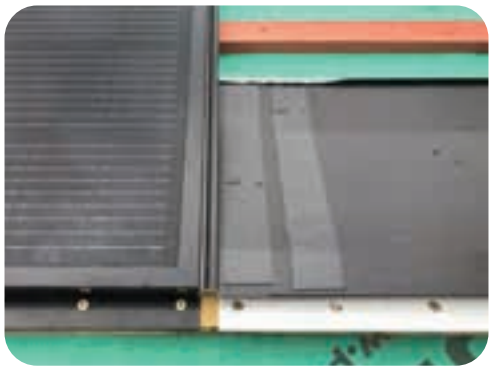
Note:
Solar Flex Lead Substitute and Bottom Capping Strip can be replaced with a Bottom Flashing SF-BF



17: EXTERNAL RHS FLASHING

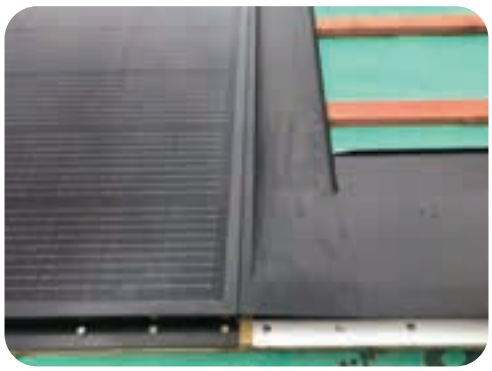
A: Fit Mounting profile parallel with bottom profile of panel

- No need to leave a gap between panel and profile

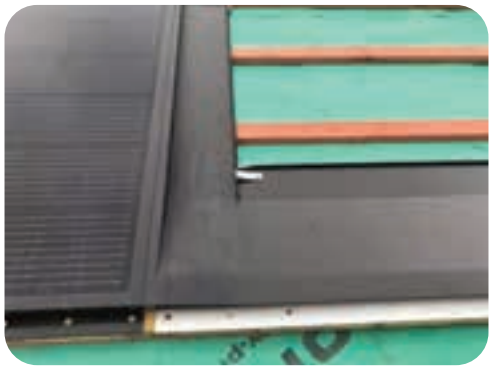


B: Fit top flashing

- Flatten 150mm return of top flashing
- Stick two strips of Butyl tape



C: Fit LHS side flashing



D: Secure with Flashing clip, neoprene washer and screw

SOLFIT

Installation instruction videos
Scan me

SOLFIT.co.uk