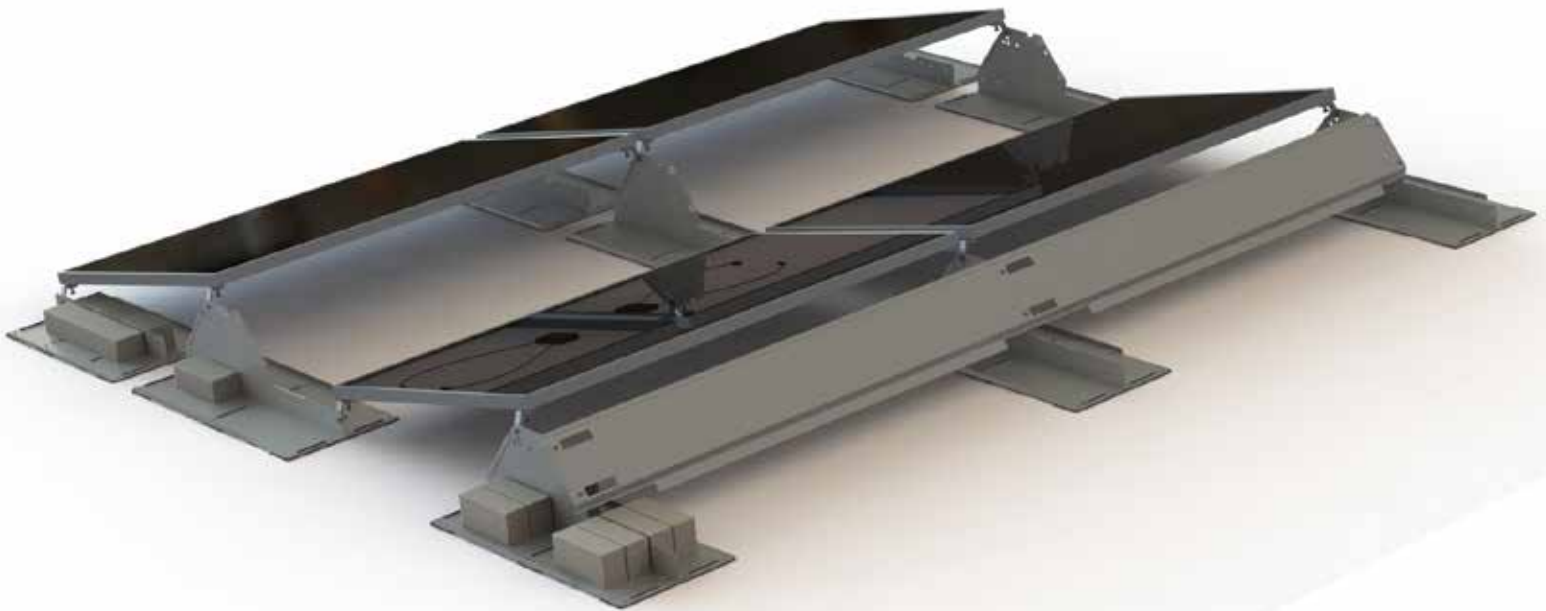




# LIGHT **TEGRA**



R3 Bourton Industrial Park, Bourton on the Water, Glos, GL54 2HQ, UK

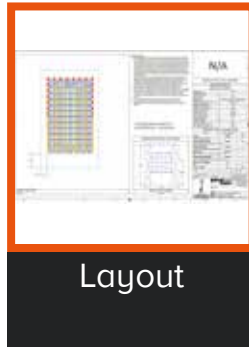
**Tel:** +44 1451 824 312

**Email:** [info@sunfixings.co.uk](mailto:info@sunfixings.co.uk)

**[WWW.SUNFIXINGS.CO.UK](http://WWW.SUNFIXINGS.CO.UK)**

V042017

### Tools & Items Required



Use the layout to to:

1. confirm the position of the Supports
2. locate the position of the Wind Deflectors
3. confirm Ballast amount on each Support
4. confirm the fixing holes on the Supports

**BALLAST  
WIND DEFLECTORS**

**GENERAL NOTE**

1. ALL SITE, PROJECT, AND BUILDING DETAILS ARE PROVIDED BY CUSTOMER OR GENERATED VIA SATELLITE IMAGES FROM INFORMATION PROVIDED BY CUSTOMER. PAMELCLAW IS NOT RESPONSIBLE FOR SITE INACCURACIES THAT COULD LEAD TO CHANGES TO THESE DRAWING DETAILS AND ARRAY LAYOUT CONFIGURATIONS. ALL INFORMATION CONTAINED WITHIN THESE DOCUMENTS ARE TO BE FIELD VERIFIED BY CUSTOMER AND INSTALLER. ANY CHANGES OR MODIFICATIONS TO THESE DOCUMENTS, CONTAINED INFORMATION, OR FINAL ARRAY AND ADJUNCTING SYSTEM INSTALLATIONS MUST BE SUBMITTED TO PAMELCLAW AND OTHER PROJECT AUTHORITIES FOR APPROVAL.
2. REFER TO AND FOLLOW THE APPROPRIATE PAMELCLAW INSTALLATION MANUALS AND PROCEDURES DURING THE INSTALLATION PROCESS. NOT FOLLOWING SUCH PROCEDURES AND METHODS COULD RESULT IN DAMAGE TO THE COMPONENTS OR MAY VOID THE PRODUCT WARRANTY.
3. REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION.
4. THE MODULE FOOTPRINT DETAIL INCLUDES THE ASSEMBLY OF (1) MODULE MOUNTED TO (2) SUPPORTS AND (3) DEFLECTOR. DIMENSIONS REFLECT THE CRITICAL MEASUREMENTS OF A MODULE MOUNTING SYSTEM ASSEMBLY. DIMENSIONS DO NOT REFLECT DIRECT MODULE LENGTH AND WIDTH.
5. COEFFICIENT OF FRICTION ASSUMED TO BE 0.3. VERIFY ON ROOF.
6. NOT FOR CONSTRUCTION. FOR PLANNING PURPOSES ONLY. ALL DIMENSIONS HAS TO BE PROVIDED BY CUSTOMER/INSTALLER ON THE ROOF.

**SYSTEMLOAD/ COMPLETE ROOFSURFACE = 20,2KG/M<sup>2</sup>**

**DIMENSIONS REFLECT 2A SPACING.**

**MODULE FOOTPRINT**

**PROJECT DETAIL**

AERIAL PHOTO / SITE DIAGRAM		
POLAR BEAR FR GEN B 30°		
PROJECT DETAIL		
WIND ZONE	21.9m/s	
TERRAIN CATEGORY	0	
WIND ZONE	N/A	
MODULE TYPE	Sunpower Solar System SP700-48R	
MODULE DIMENSIONS (mm x mm)	992 x 1840	
NUMBER OF MODULES	91	
MODULE WATTAGE (W ETC)	250	
SYSTEM SIZE (W ETC)	22.75	
SYSTEM WEIGHT (KG)	7768.88	
SYSTEM AREA (SQ.M.)	342.45	
NUMBER OF ARRAYS	1	
ARRAY TILT (DEG)	11.7	
W-SPACER STOK DIM (mm)	267	
E-W SPACER STOK DIM (mm)	267	
PROJECT PART QUANTITIES		
ITEM	PART NUMBER	QTY
CLAW	304001	94
POLAR BEAR SUPPORT	304006	188
SOUTH SUPPORT	304028	8
DEFLECTOR	30403804	7
DEFLECTOR END PLATE	304038	1
ANCHOR ATTACHMENT	N/A	0
REAL STONES	5.9 kg	1810

**DIMENSIONS  
FIXING HOLES**

# 3

## Fitting the standard Module Claw

### Tools & Items Required



17mm Socket Wrench



Module



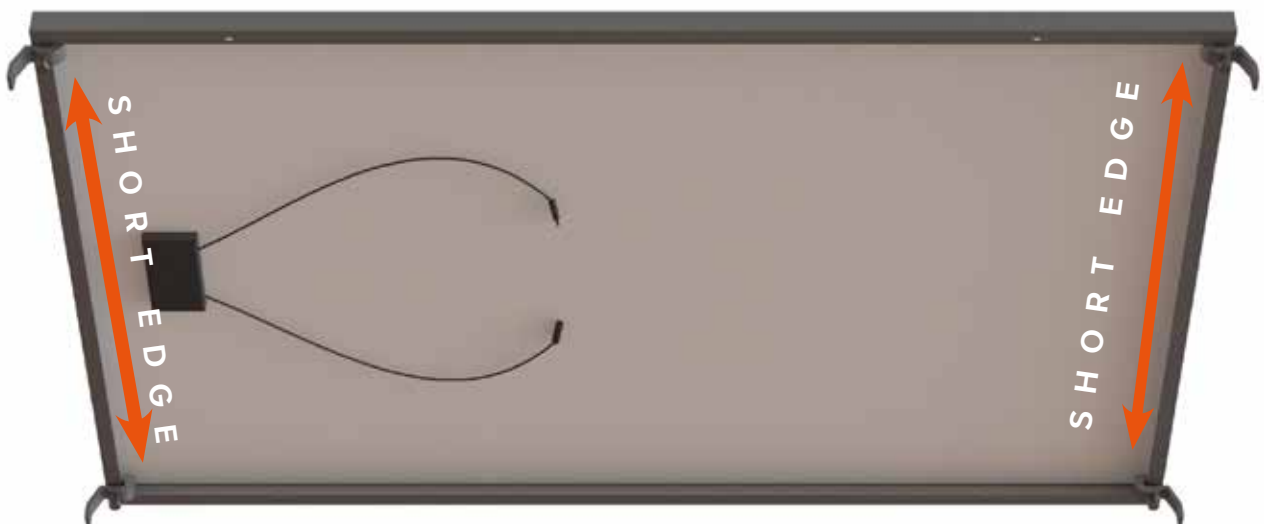
Standard Module Claw

Hook 4x Standard Module Claws onto the back of the module's frame along the short edge.

Slide each 1 into the corners of the frame.



25Nm



# 4

## Fitting the Special Module Claw

### Tools & Items Required



13mm Spanner



6mm Allen Key



Module



Special Module Claw

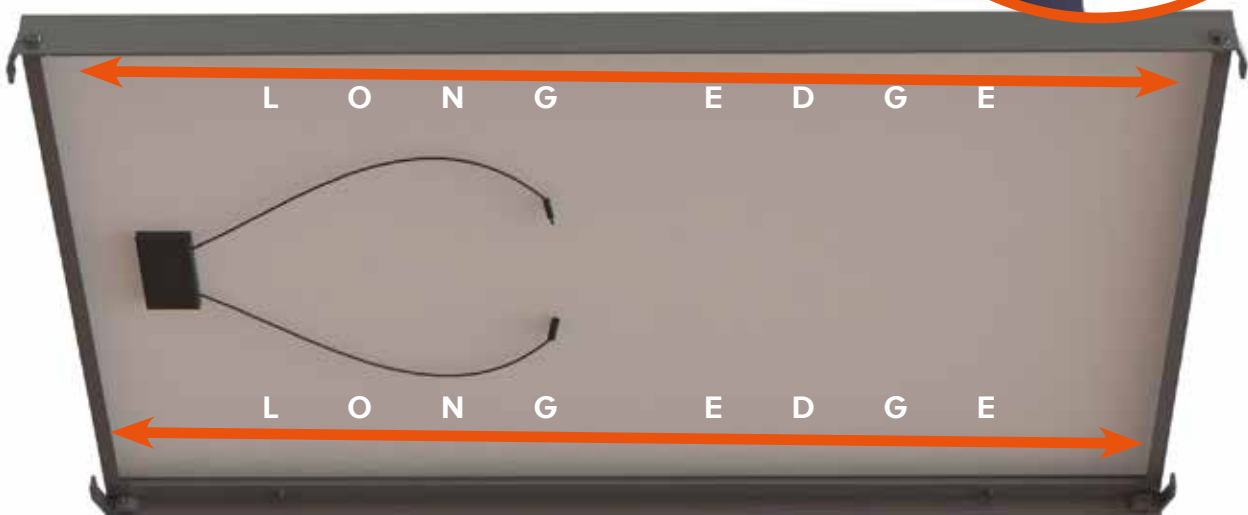
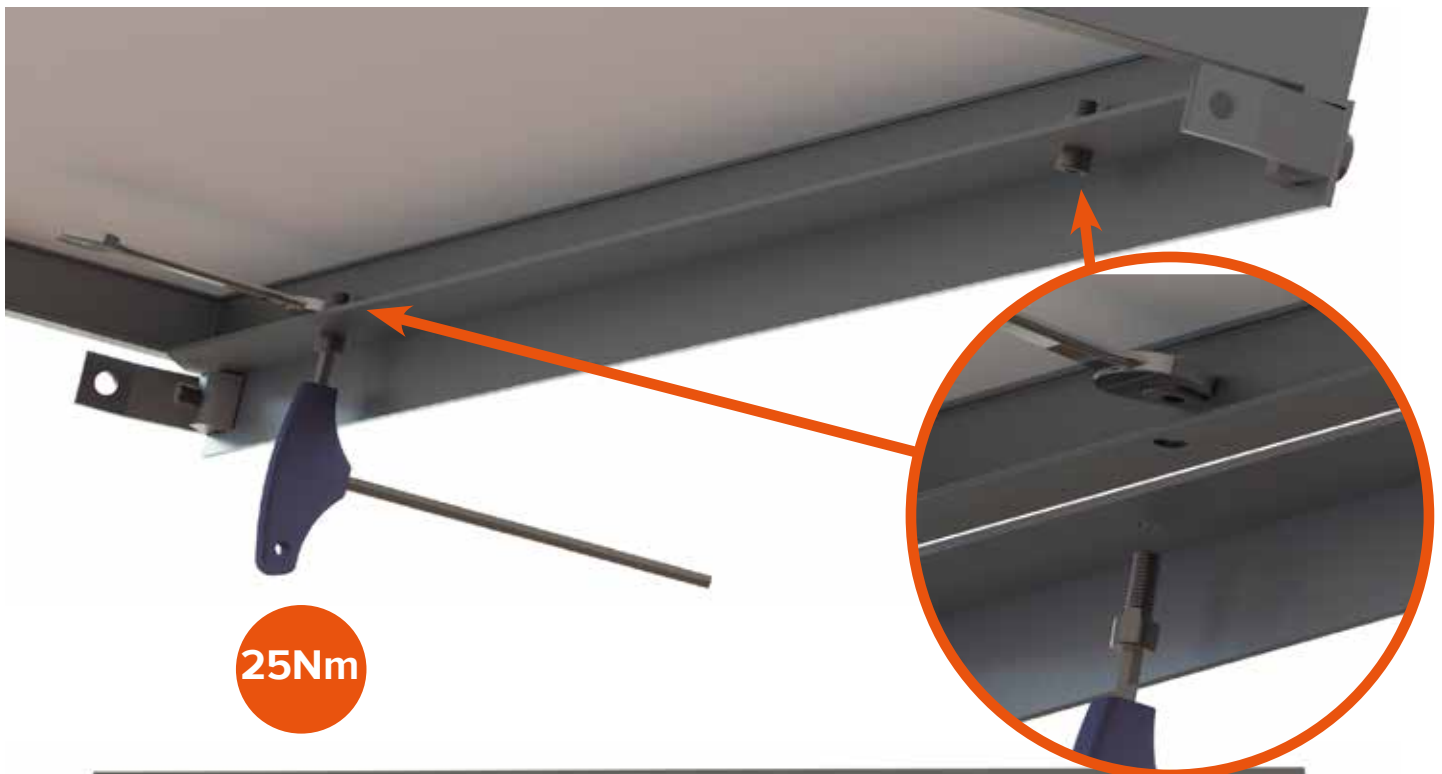


Cylinder Head Screw



Serrated Nut

Position 2x Special Module Claws on the back of the module's frame along the long edge. Push 1x Cylinder Head Screw through the fixing hole into the mounting hole of the module and secure with a Serrated Nut.



# 5

## Assemble the Supports

### Tools & Items Required



N/S Support



South Support

Twist the 2 pieces of the Support together until the slots at the top and bottom lock together.



# 6

## Position the Supports on the roof

### Tools & Items Required



Layout



Tape Measure

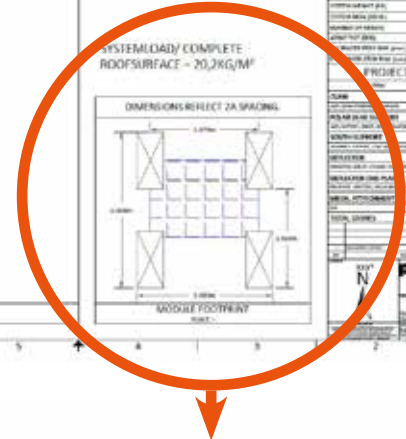
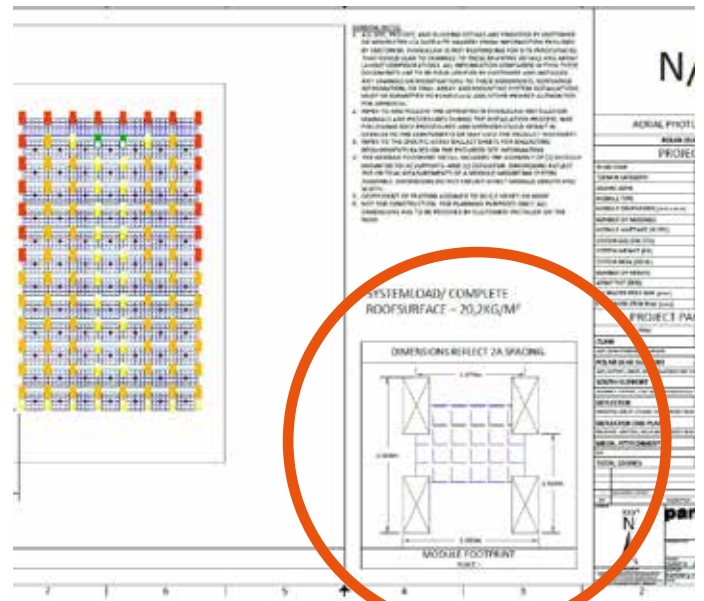
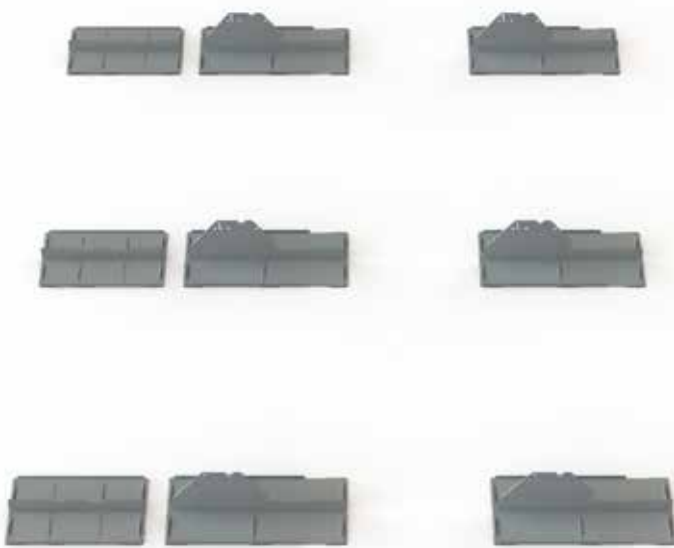


N/S Support

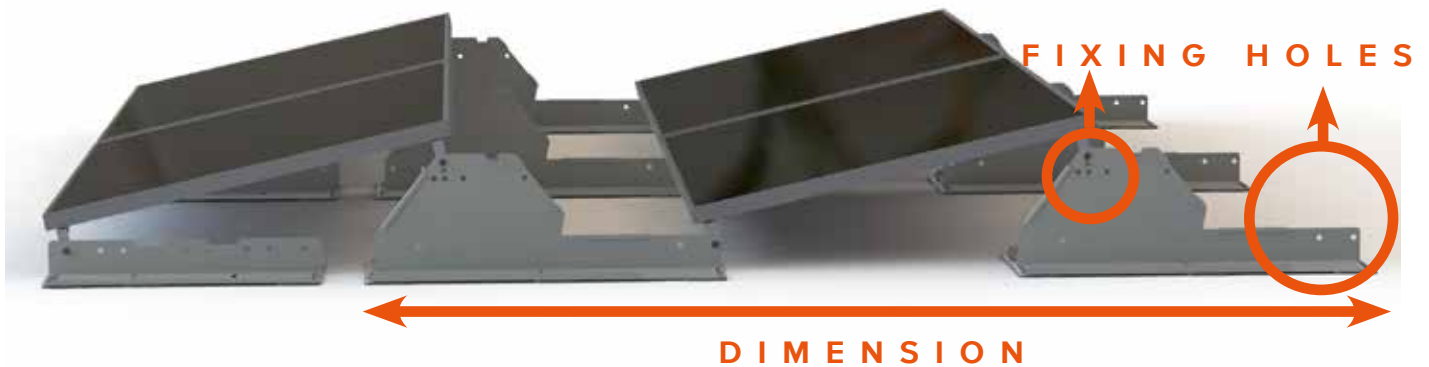


South Support

Use the layout to confirm the position of the assembled Supports across the roof.



DIMENSIONS  
FIXING HOLES



D I M E N S I O N

# 7

## Attaching the Module Claws to the South Supports

### Tools & Items Required



17mm Spanner



15mm Socket Wrench



South Support

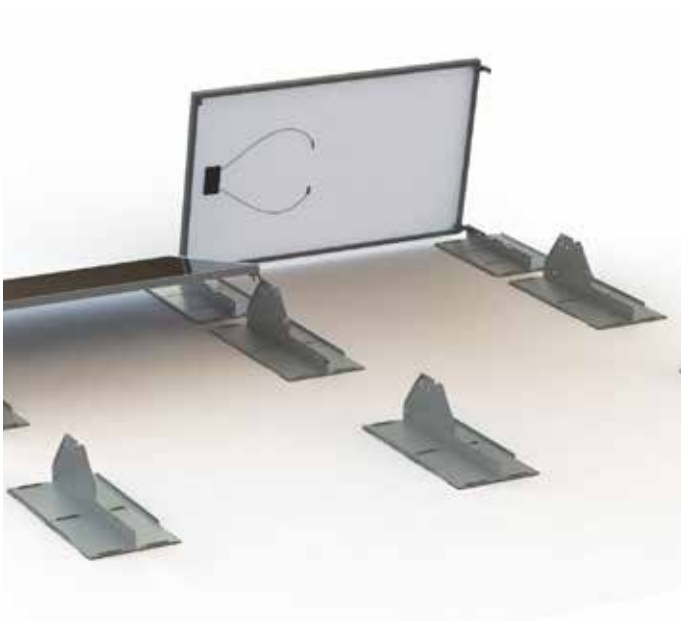
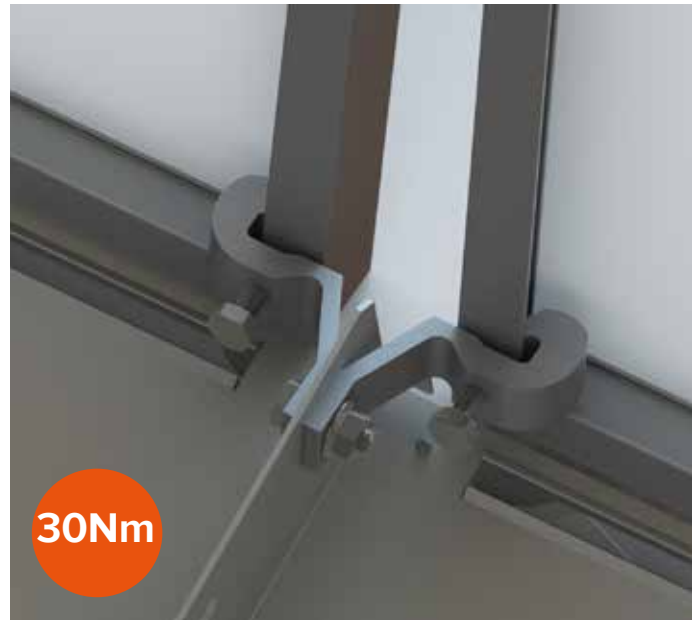


M10 x 30 Bolt



M10 Serrated Nut

Start from the left of the array. Push 1x M10 x 30 Bolt through the 1st Module Claw and into the fixing hole on the South Support. Place 2nd Module Claw onto the same M10 x 30 Bolt and secure with 1x M10 Serrated Nut.



# 8

## Attaching the Module Claws to the N/S Supports

### Tools & Items Required



17mm Spanner



15mm Socket Wrench



N/S Support



M10 x 30 Bolt



M10 Serrated Nut

Start from the left of the array. Push 1x M10 x 30 Bolt through the 1st Module Claw and into the fixing hole on the N/S Support. Place 2nd Module Claw onto the same M10 x 30 Bolt and secure with 1x M10 Serrated Nut.





# 9

## Position the Ballast

### Tools & Items Required



Layout



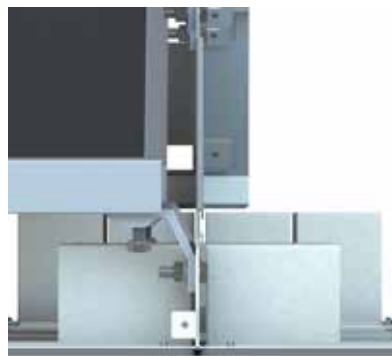
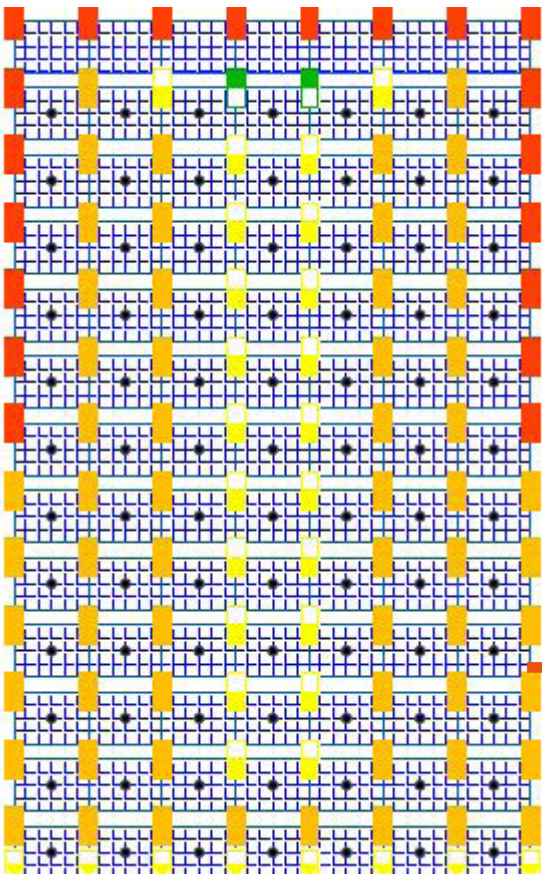
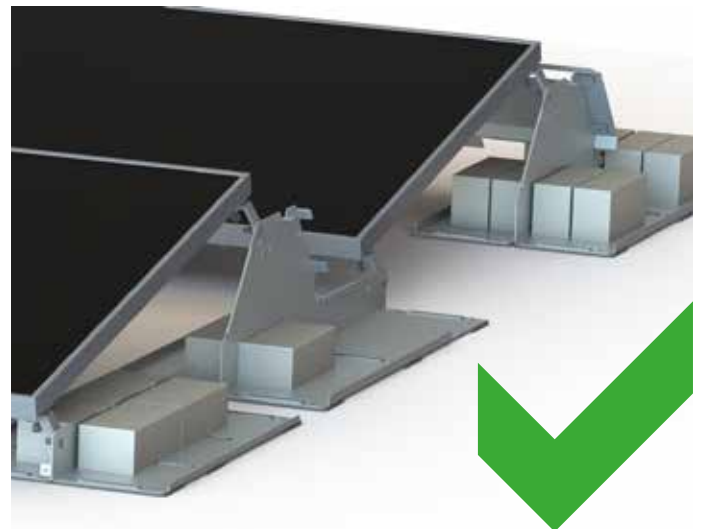
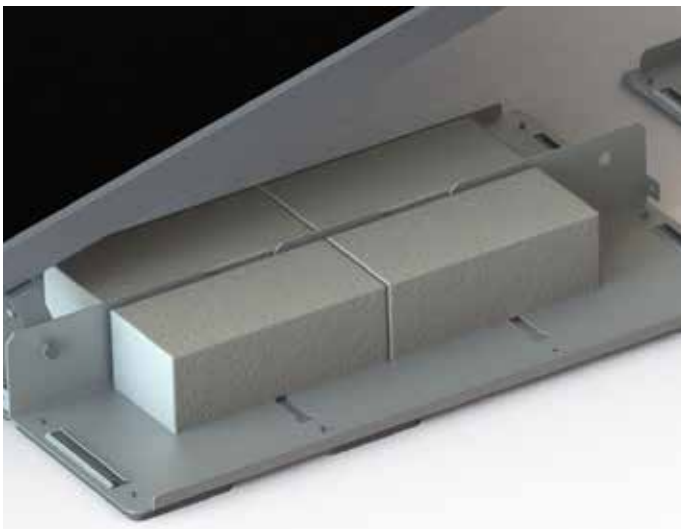
N/S Support



South Support



Ballast

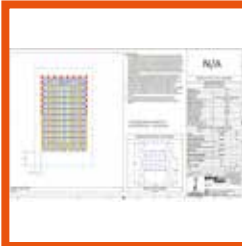


				2
ONE	5-STONE	10-STONE	15-STONE	
SOUTH SUPPORTS				
				1
ONE	5-STONE	10-STONE	M.A. WITH 4-STONE	

# 10

## Installing the Wind Deflectors

### Tools & Items Required



Layout



10mm Socket Wrench



N/S Support



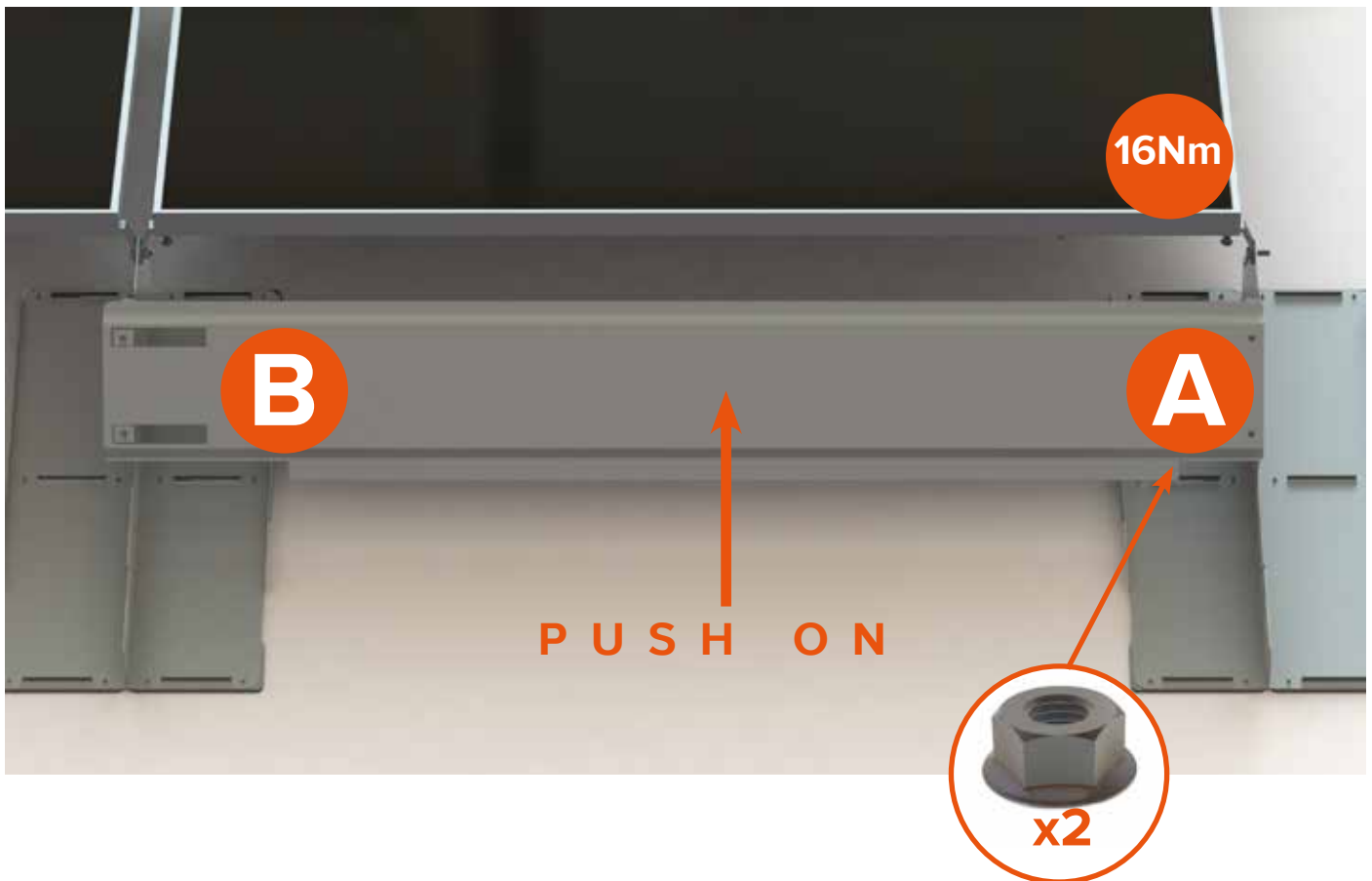
Wind Deflector



M6 Serrated Nut

Push the Wind Deflector onto the back of the N/S Supports. Make sure the holes go over the threads on the back of the N/S Supports.

Secure side A ONLY with 1x M6 Serrated Nut for each thread.



# 11

## Attaching multiple Wind Deflectors

### Tools & Items Required



Layout



10mm Socket Wrench



N/S Support



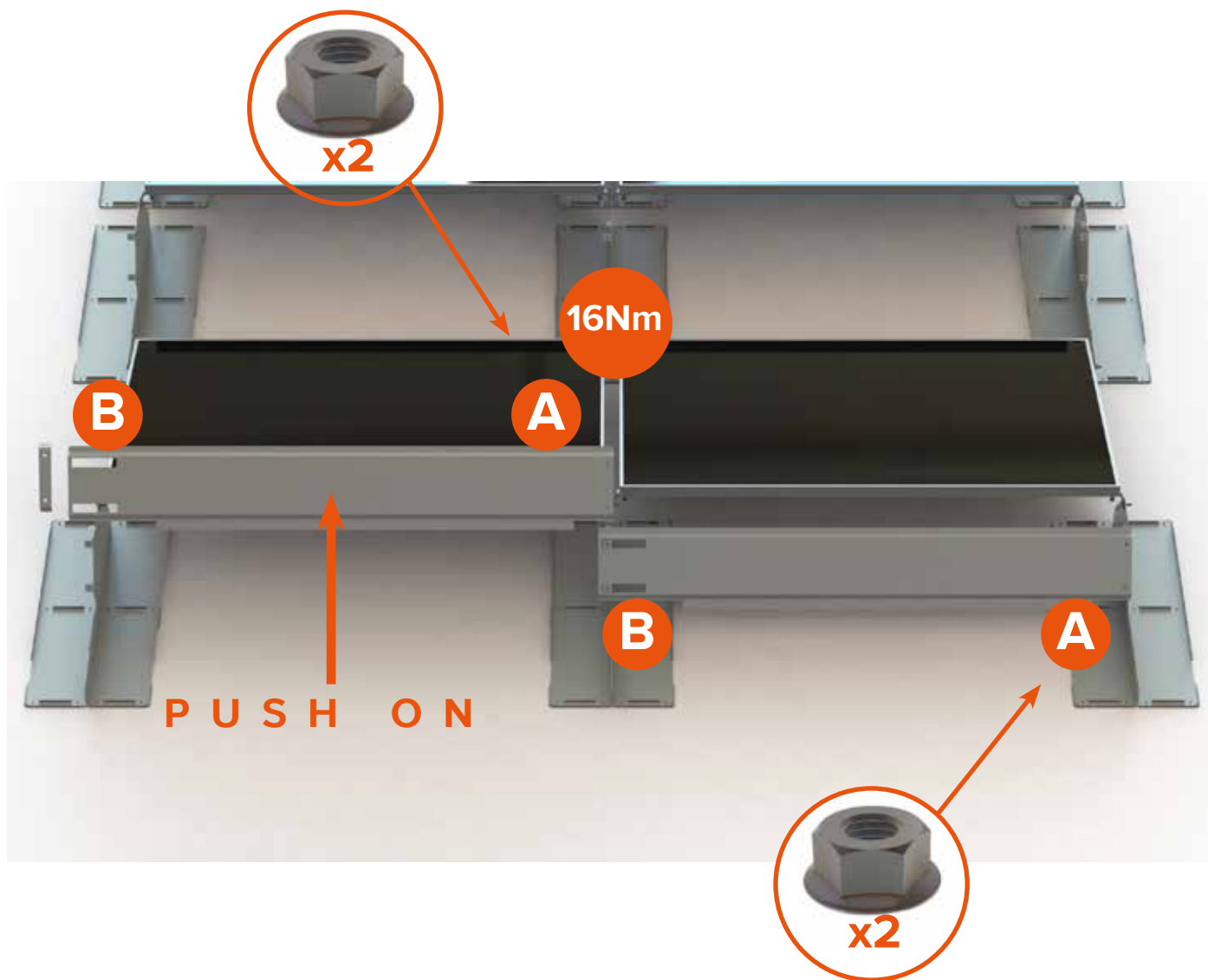
Wind Deflector



M6 Serrated Nut

Push the 2nd Wind Deflector onto the back of the N/S Supports. Make sure that side A fits over side B of the 1st Wind Deflector.

Secure side A of the 2nd Wind Deflector ONLY with 1x M6 Serrated Nut for each thread.



# 12

## Attaching the End Plate to the end of a row

### Tools & Items Required



10mm Socket  
Wrench



End Plate



N/S Support



Wind Deflector



M6 Serrated  
Nut

At the end of a row of Wind Deflectors, position 1x End Plate over side B of the last Wind Deflector.  
Make sure the curve faces the Wind Deflector.  
Secure the End Plate into position with 1x M6 Serrated Nut for each thread.

