

# Product Data Sheet

## Tm24 Type ground mount

The Tm24 type structure kits are designed for low level ground mounting of solar panels with a maximum length of 2m, by using a modular design you can mount a number of modules (depending on the width of the modules) onto one single row structure, for larger arrays another array can be mounted next to or behind the first array.

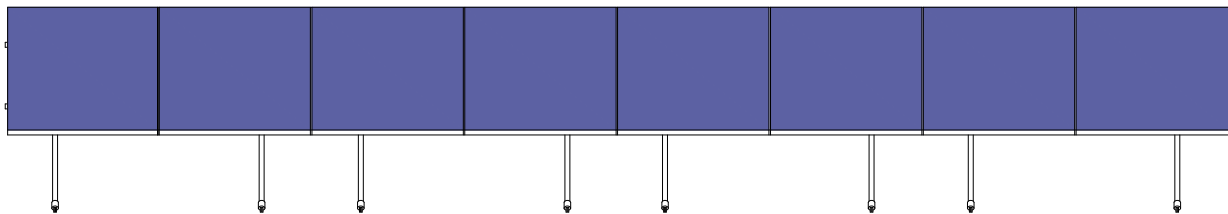


### Specification:

- Galvanised steel Tubes and clamps.
- 316L stainless steel module clamps.
- A4-70 stainless steel fasteners.
- M6 & M8 fasteners both supplied.
- Foundation or Non-foundation.
- Modules up to 2m long.
- Design wind speed 40m/s. #1
- Tilt angle 15° to 50° #2

The structures are supplied in kits with a structure width of 2.4m, each kit is supplied with a set of pole joiners for attachment of the next structure to allow a continuous row of up to 9.6m. The module fixings kits are supplied separately to allow for different widths of panels and are supplied with both M6 & M8 fasteners, 1 kit per module is required. For each 2.4m structure you will need to decide what type of ground fixing is required, either feet complete with ground anchor bolts for concrete foundations or ground poles for non-foundation applications as shown in the picture above.

Part No. 001 080	Tm24 2.4m array, not including module fixings, feet or ground poles.
Part No. 001 081	Tm24 Solar panel fixing kit M6 & M8 fasteners supplied, 1 kit per module
Part No. 001 082	Tm24 Feet for concrete foundations supplied with ground anchor bolts, 1 kit per 2.4m array
Part No. 001 083	Tm24 ground pole kit for non-foundation application, 1 kit per 2.4m array



Typical layout, 4 x TM24 structures with 8 modules fitted

Tm type structures can be adapted to various situation including sloped surfaces and are available through stockists within the UK, please contact us for your nearest stockist.

BDS Unit 8 Alexander House, Thame Road, Haddenham, Buckinghamshire HP17 8BY 01844 290780

#1 Design wind speed of 40m/s subject to conditions. Ground tubes supplied are 1.2m long, longer tubes may be required for certain ground conditions or uneven surfaces.

#2 The tilt angle range is dependent upon solar module mounting hole centres, for certain modules the complete angle range may not be achievable.

## Design Data.

- Material: mild & Carbon steel
- Finish: Galvanised
- Fasteners: A4 Stainless steel
- Mod, fixings: A4 stainless steel
- Tilt angle: 15°-50° (Subject to module)
- Wind loading: 40metres per second (3 second gust) \*

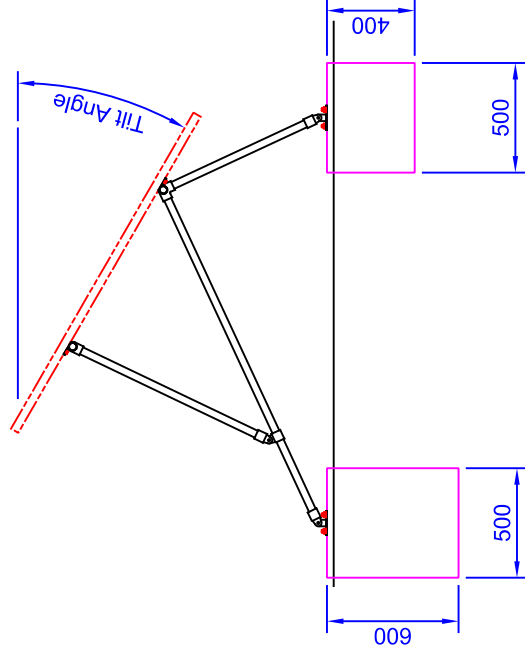
Suitable for solar panels with a length of upto 2m with M6 or M8 mounting holes on the rear of the panel.

Modular design provides each unit to be attached to the next to a maximum of 4 units using the joiners provided.

Ground poles to be installed using a suitable post hammer. Note not all ground types are suitable, please consult local civil engineer to establish ground conditions prior to ordering.

Non foundation version is also available.

Typical size panels shown, note leg spacing and tilt angles will vary depending on modules fitted, please contact us if in doubt.



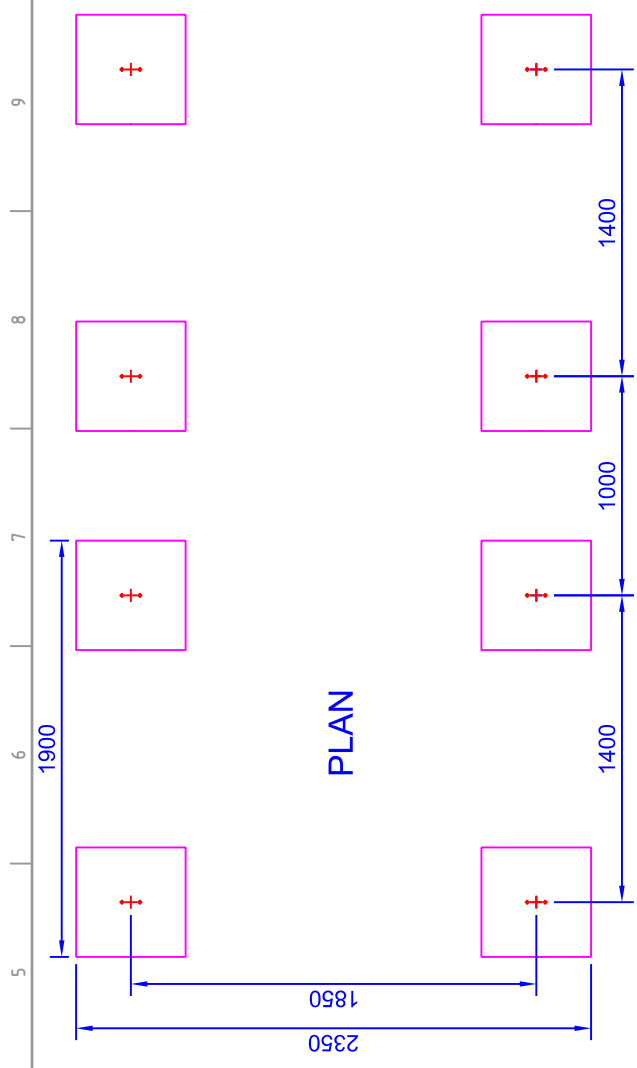
## SIDE ELEVATION

\* Wind loading Eurocode: Basis of structural design - BS EN 1990  
Eurocode1: Action on structures - BS EN 1991 part 1-4: General actions - wind actions - BS EN 1991-1-4  
Eurocode 3: Design of steel structures - BS EN 1993 part1-1: General rules and rules for buildings - BS EN 1993-1-1  
BRE digest 489: Wind loads on roof-mounted PV and solar thermal systems.

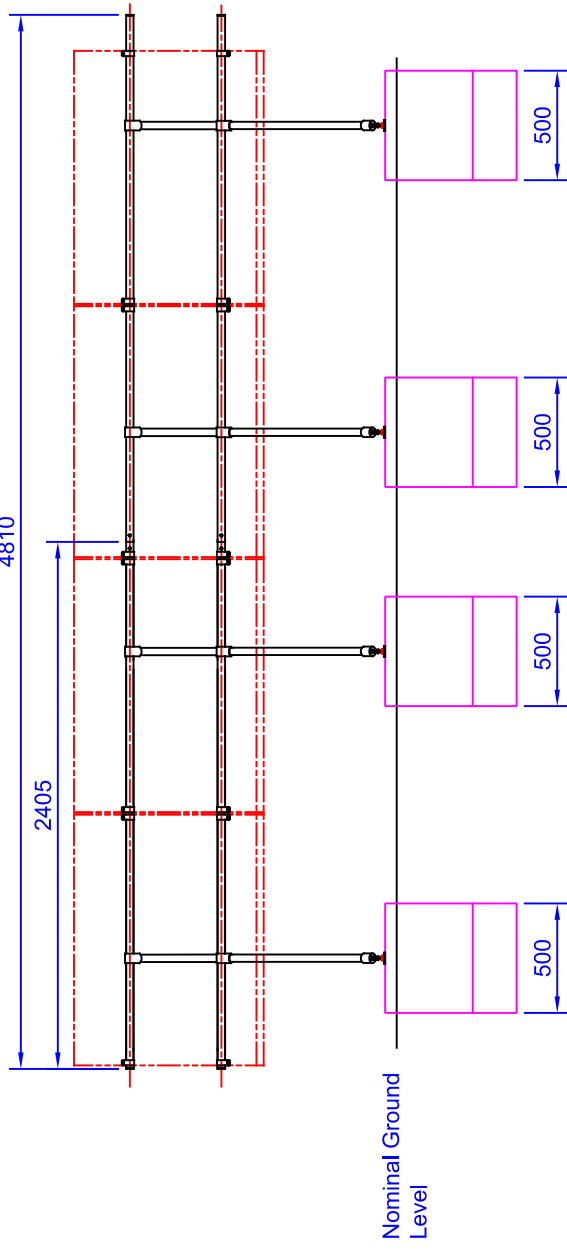
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DO NOT SCALE

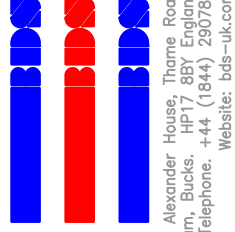


## PLAN



## FRONT ELEVATION

Tolerances:  
NO D.Point ±1mm  
1 D.Point ±0.5mm  
2 D.Points ±0.2mm



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ISSUE	1	T Brooks	11.05.2024	Production Issue
DRAWN BY			DATE	CHANGE

Material:		Tm24 Type low level Modular		Product Type
Finish:		Ground Mount Structure Kit		N.o.
		FOUNDATION VERSION		001 084

## Design Data.

- Material: mild & Carbon steel
- Finish: Galvanised
- Fasteners: A4 Stainless steel
- Mod, fixings: A4 stainless steel
- Tilt angle: 15°-50° (Subject to module)
- Wind loading: 40metres per second (3 second gust) \*

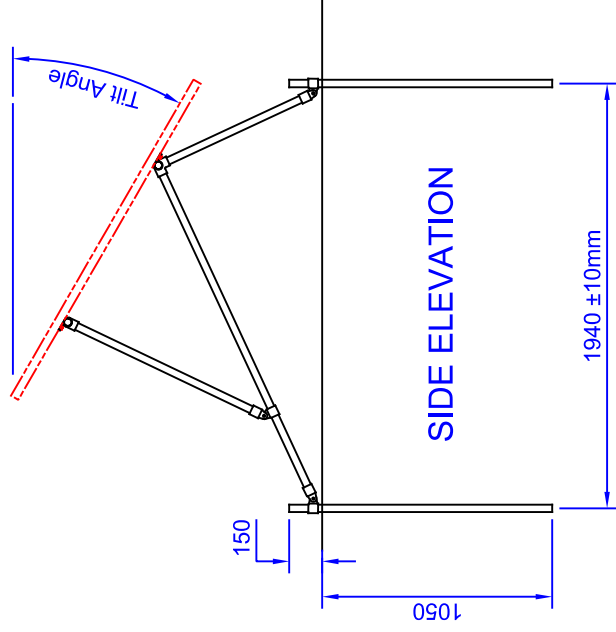
Suitable for solar panels with a length of upto 2m with M6 or M8 mounting holes on the rear of the panel.

Modular design provides each unit to be attached to the next to a maximum of 4 units using the joiners provided.

Ground poles to be installed using a suitable post hammer. Note not all ground types are suitable, please consult local civil engineer to establish ground conditions prior to ordering.

Concrete foundation version is also available.

Typical size panels shown, note leg spacing and tilt angles will vary depending on modules fitted, please contact us if in doubt.



\* Wind loading Eurocode: Basis of structural design - BS EN 1990  
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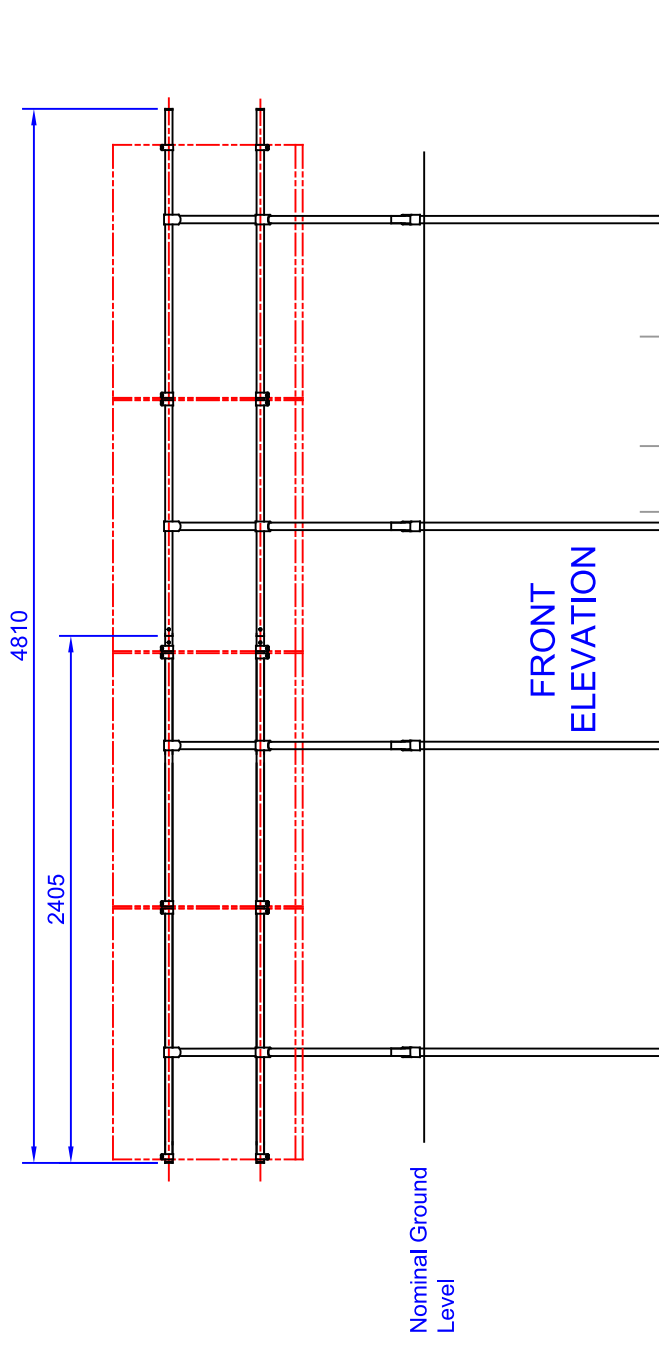
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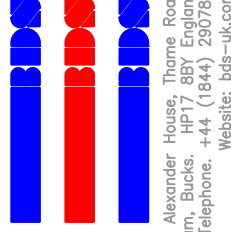


1940 ± 10mm

## PLAN



## FRONT ELEVATION



Tolerances.  
 NO D.Point ±1mm  
 1 D.Point ±0.5mm  
 2 D.Points ±0.2mm

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Tm24 Type low level  
 Modular  
 Ground Mount Structure Kit  
 NON-FOUNDATION VERSION

Product Type  
 Tm24  
 N o.  
 001 085

ISSUE	DRAWN BY	DATE	CHANGE
1	T Brooks	11.05.2024	Production Issue

Modular T type structures		2.4m Array	Solar panel fixing kit	Leg set foundation kit	Leg set ground poles
Components	Length	001 080	001 081	001 082	001 083
	mm	QTY	QTY	QTY	QTY
Front leg	720	2			
Rear strut/Ground pole/1m	1200	2			4
Rear leg	1630	2			
2.4m array poles	2400	2			
Joiner 20NB tube	250	2			
101-2 Short tee		2			
116-2 Corner		2			
173F-2 Swivel female		6			
173M-2 Swivel male		2			4
169M-2 foot				4	
Plastic end cap		4			4
Allen key		1			
6.3 x 25mm Self drilling screw		6			
Module clamp			4		
M6 x 25 hex set screw			4		
M6 Form C washer			8		
M6 Nyloc Nut			4		
M8 x 25 hex set screw			4		
M8 washer			8		
M8 Nyloc Nut			4		
M10x40 hex set screw Galv		6			
M10 washer Galv		12			
M10 spring washer galv		6			
M10 Nut galv		6			
M10 x 90 through bolt				10	

Each Tm24 2.4m array is supplied with 2 pole joiners to allow for attachment of the next array, these are now fitted using Self drilling screws, the 2.4m long array tubes are pre drilled to help with fitting of these joiners, a suitable electric screw driver or impact driver will be required with a 10mm socket.

Plastic end caps are supplied with each kit to close off the ends of any exposed tubes to prevent water ingress and sharp edges.

