

ValkPVplanner

Project report



Project name	: BLOCK 3-ROCHDALE ROAD
Date (modified)	: 20-03-2025
Time (modified)	: 12:23
Company	: Greenbridge Renewables
User	: Andrew Connell



Datasheet ValkPro+ | ValkPro+ East-West | ValkPro+ Max

The concept

- Mounting system for PV-panels on flat roofs (commercial and domestic).
- For south and east-west configurations.
- Fixed tilt angle of 10° (Landscape or Portrait).
- Low ballast, shielded system with wind deflectors (south).

ValkPro+ vs. competitive systems

- Most cost effective solution.
- All metal connections, no plastic. This ensures high strength and reliability and makes the system easy to ground and for equalization of potential.
- Also suitable for roofs higher than 25 mtrs.
- Can be placed with ballast only on flat roofs with a maximum slope up to 5°. On roofs with a bigger slope, the system needs to be fixed to the roof.
- Universal integrated panel clamps (28-50 mm frame height).
- Suitable to be placed on roofs with gravel, "green roofs" or fixed on steel structures above the roof.
- Elevated mounting on roof for guaranteed drainage.

Additional features

- Designed and calculated according to latest building regulations.
- Low ballast and roof load, thanks to the use of wind deflectors and coupled rows.
- Easy and fast installation, thanks to limited number of parts and screw joints.
- Maximum logistical advantage, thanks to limited number of different parts and dimensions.
- Smart solutions to hold cables and cable baskets.
- Easy to disassemble.

Panel formats

- ValkPro+ (south & east-west) is standard applicable for panels with the following dimensions:

Configuration	Panel length min [mm]	Panel length max [mm]*	Panel width min [mm]	Panel width max [mm]	Pitch [mm]
L10° South	1520	2320	977	1250	1500*
L10° East-West	1520	2320	977	1070	2300
			1071	1120	2400
			1121	1170	2500
P10° South	1559	2200	900	1500	2300*
P10° East-West	1560	1680	900	1500	3500
	1681	1730	900	1500	3600
	1731	1830	900	1500	3800
	1831	2035	900	1500	4200
	2036	2135	900	1500	4400
Max South	2096	2500	900	1500	3000*
Max East-West	2096	2172	900	1500	4500
	2173	2268	900	1500	4700
	2269	2369	900	1500	4900
	2370	2471	900	1500	5100

* Other pitch sizes available on request. Please contact Van der Valk Solar Systems for possibilities.

CONTACT DETAILS | DEVELOPER AND PRODUCER OF SOLAR MOUNTING SYSTEMS

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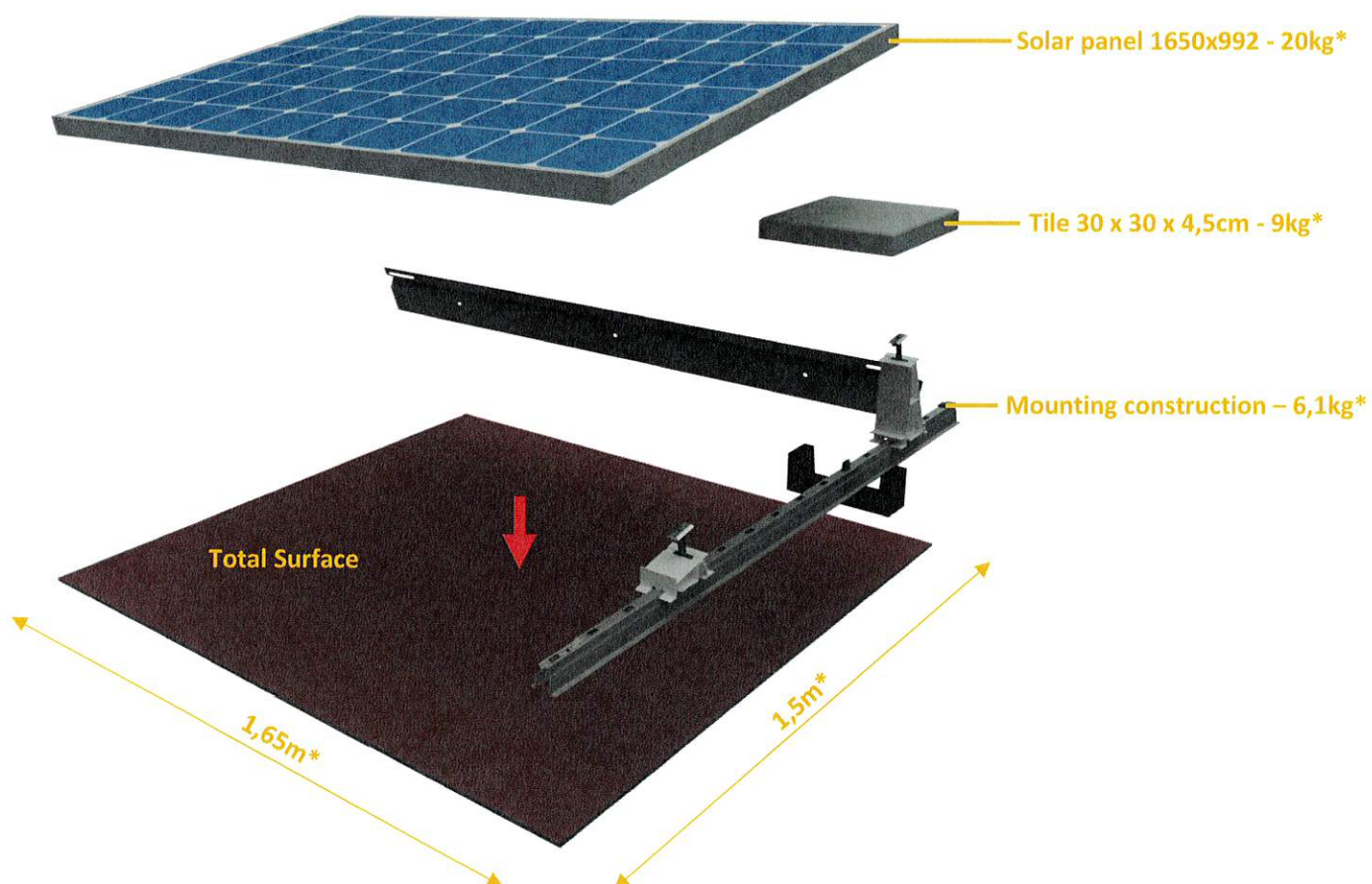
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Van der Valk Solar Systems – July 2019
Average Roof pressure & Point pressure





The following information shows the average roof pressure with a Valk Pro+ South Landscape 10° panel setup:

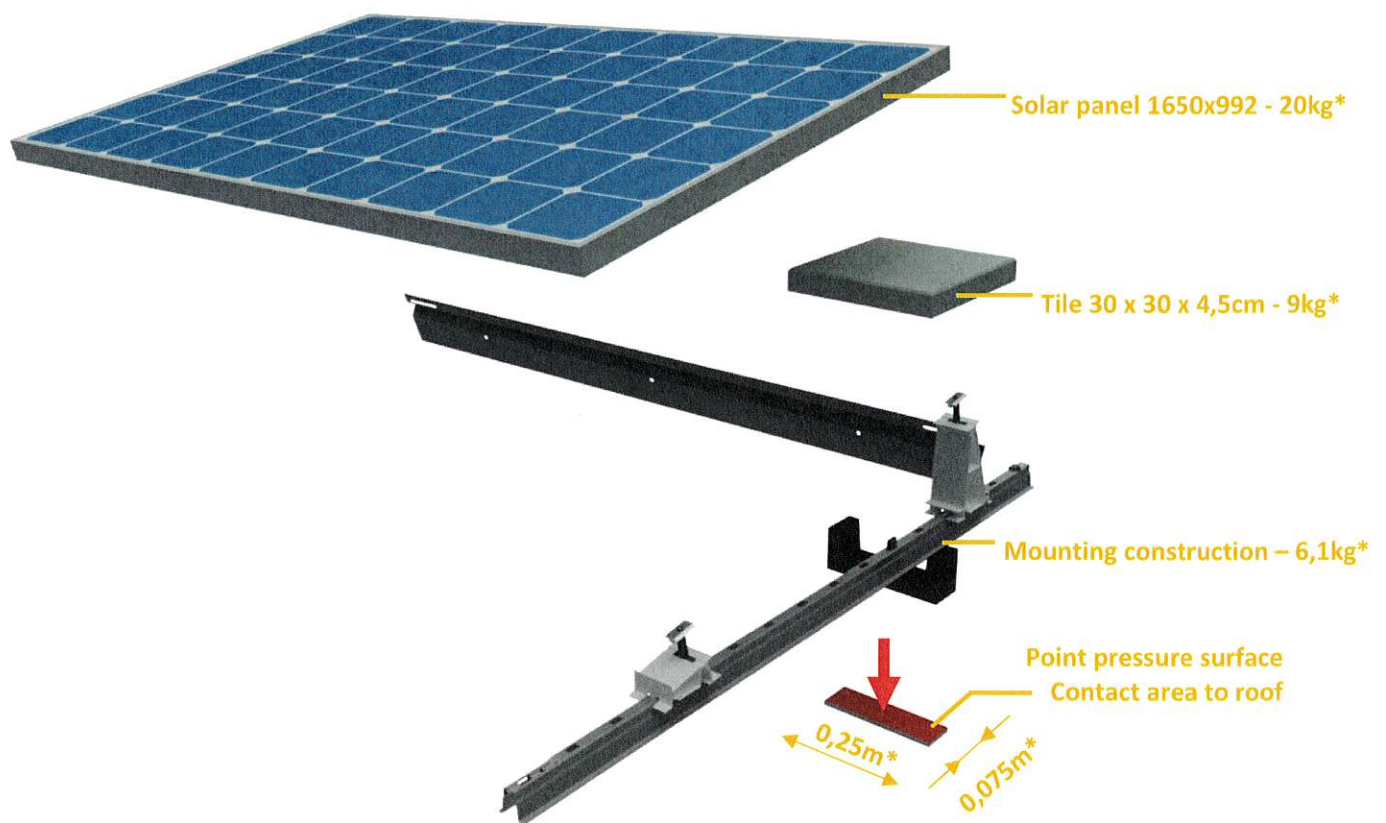
$$A = \text{total surface} = 1,65 \times 1,5 = 2,475 \text{ m}^2$$

$$\text{Total load} = \text{solar panel weight} + \text{tile weight} + \text{mounting construction weight} = 20 + 9 + 6,1 = 35,1 \text{ kg}$$

$$F = \text{Force} = \text{Newton} = \text{total weight} \times 9,81 = 344,3 \text{ N}$$

$$\text{Average surface pressure per solar panel} = \text{force/surface} = F/A = 344,3/2,475 = 139,1 \text{ N/m}^2 = 139,1 \text{ Pa}$$

*= this info is indicational (all info with reservation)



The following information shows the average roof point pressure with a Valk Pro+ South Landscape 10° panel setup:

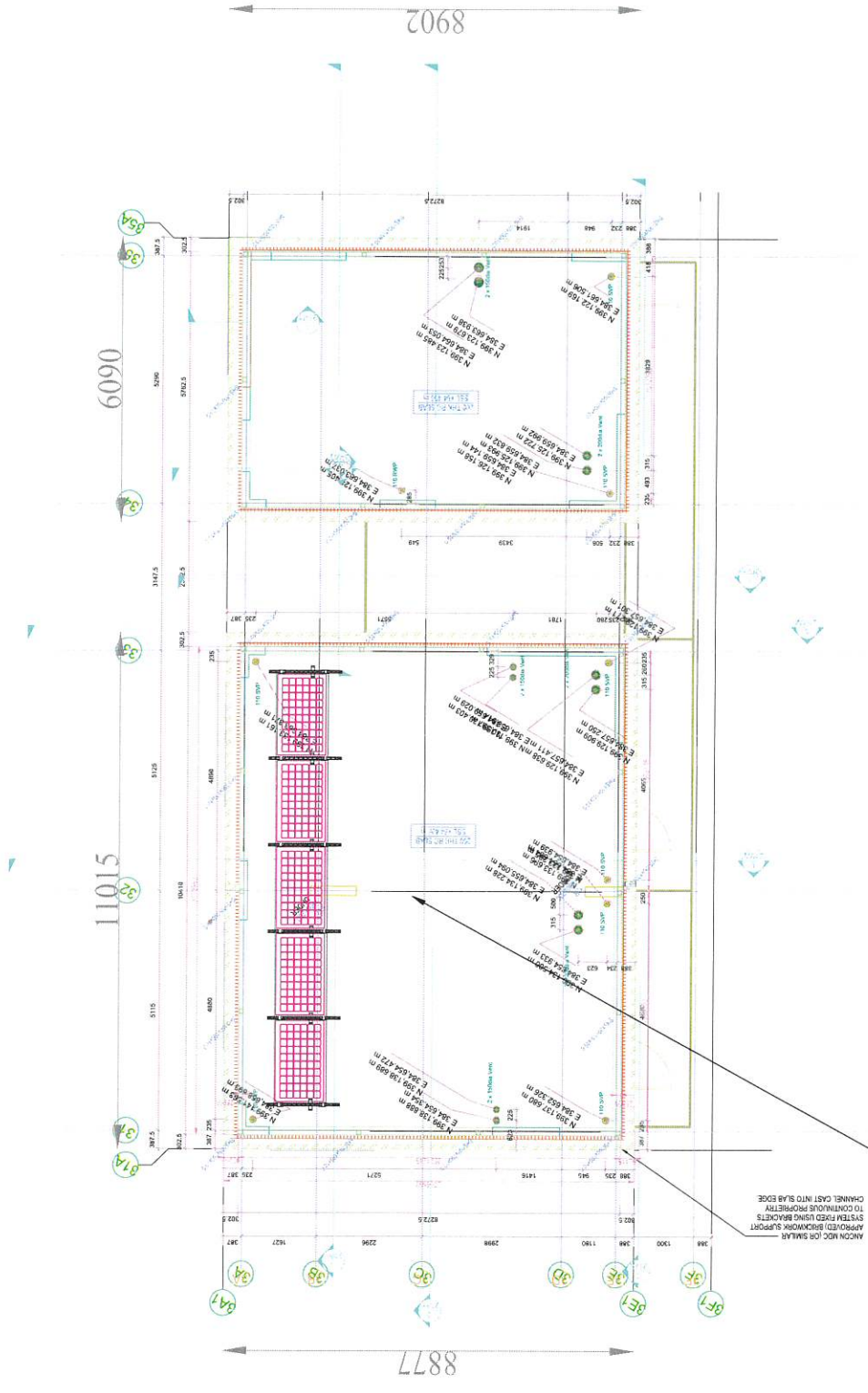
$$A = \text{total surface} = 0,25 \times 0,075 = 0,0188 \text{ m}^2$$

$$\text{Total load} = \text{solar panel weight} + \text{tile weight} + \text{mounting construction weight} = 20 + 9 + 6,1 = 35,1 \text{ kg}$$

$$F = \text{Force} = \text{Newton} = \text{total weight} \times 9,81 = 344,3 \text{ N}$$

$$\text{Point pressure per solar panel} = \text{force/surface} = F/A = 344,3 / 0,0188 = 18363 \text{ N/m}^2 = 18363 \text{ Pa}$$

*= this info is indicational (all info with reservation)



Total System Size: 5No x AIKO 460W = 2.300kWp

TITLE		DRAWING NUMBER		DATE	
Proposed Solar PV Layout - Block 3		03 Rev C		03-10-2024	
ADDRESS		SCALE		1:50	
Rochdale Road		DRAWING STATUS		Proposal	

