

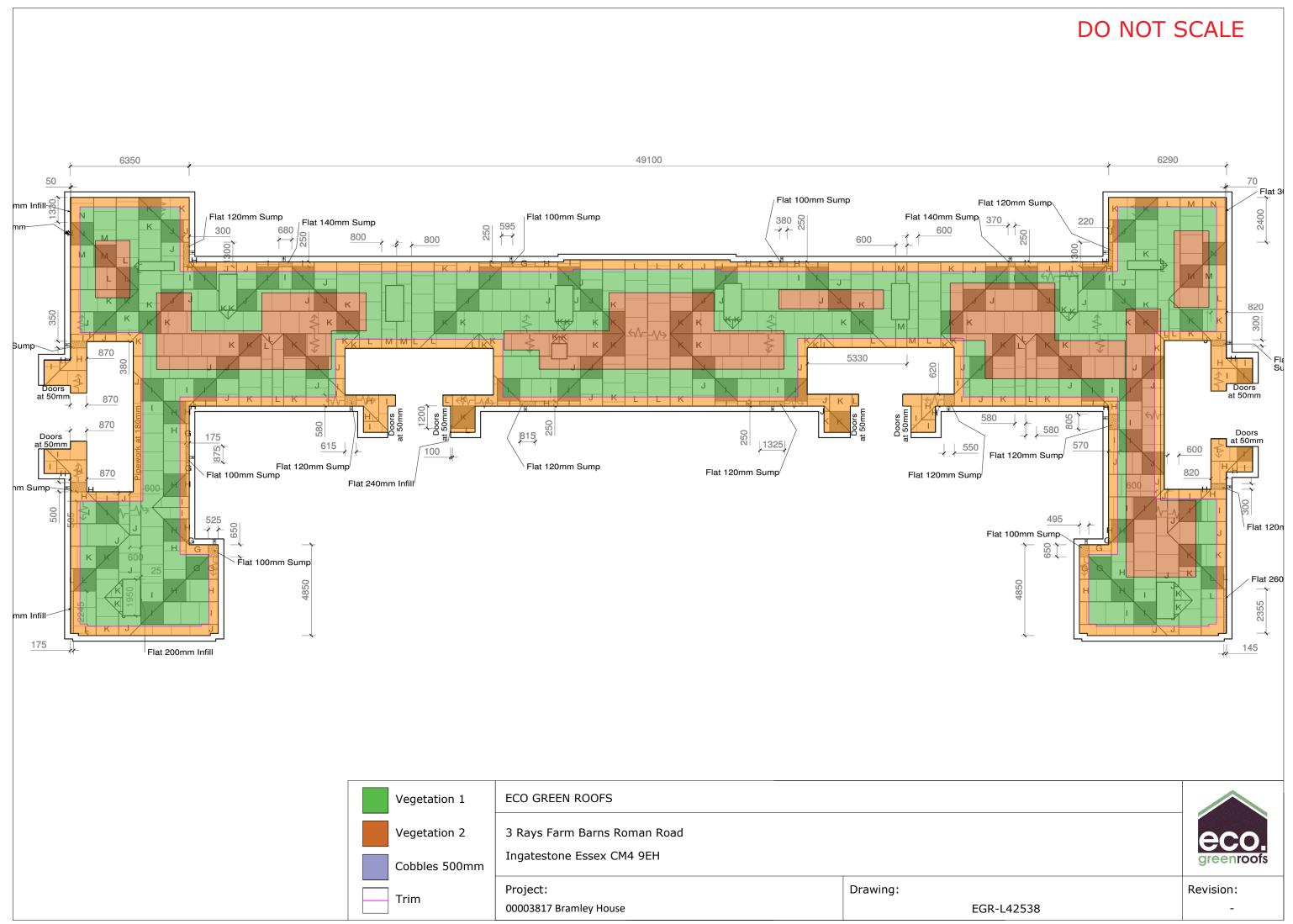
# **PV Specification - Bramley House**

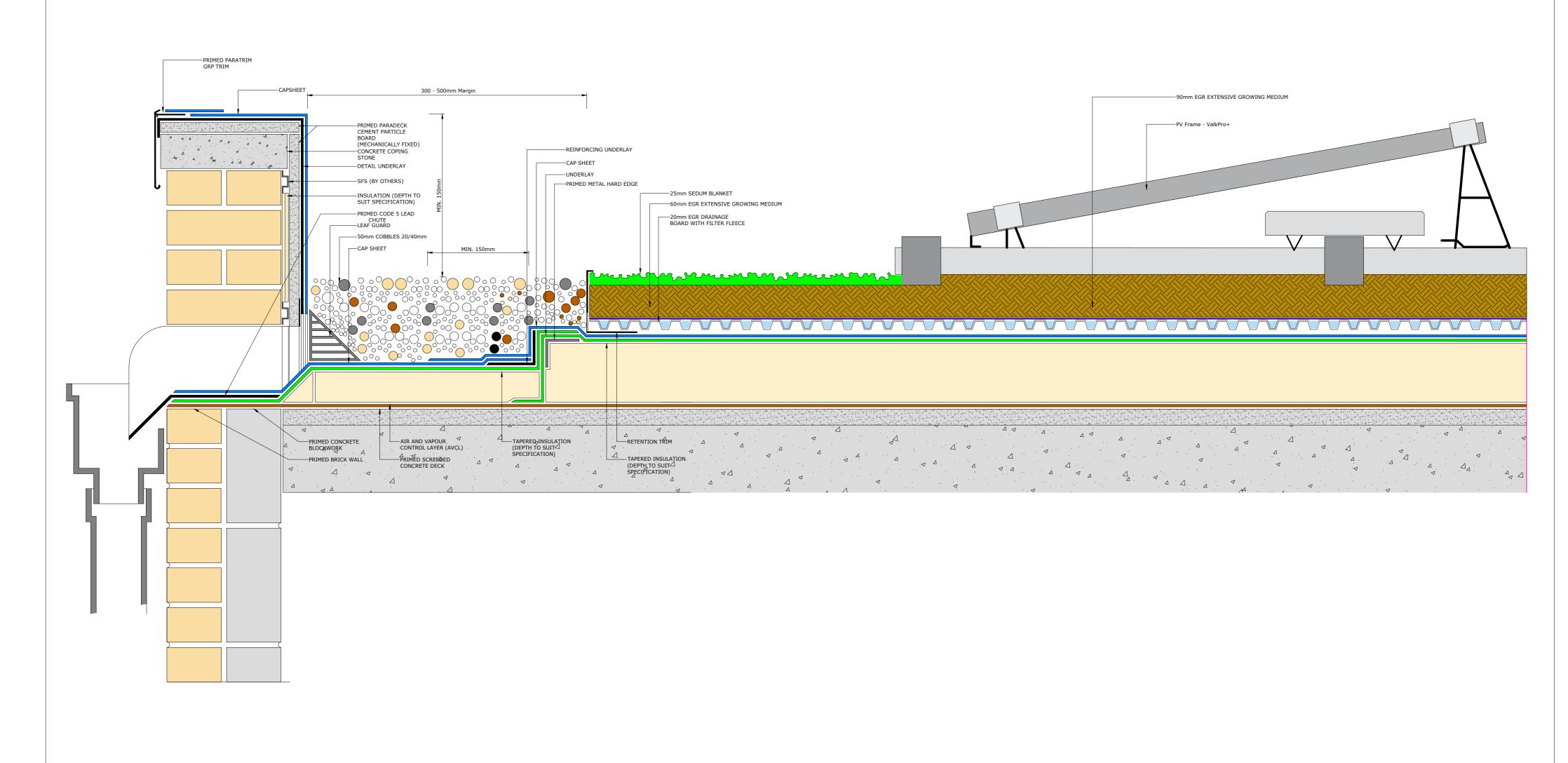
# **Material Data Sheets & Execution**

REV00SV Date: 18<sup>th</sup> January 2022

#### Products

Jinko 400w Solar Panel Van Der Valk Flat Roof Mounting System SolarEdge Inverter SolarEdge Power Bank (Battery) DC cable 4mm DC Isolators Cable Ties Galvanised Cable Tray Emlite Generation Meter





ECO GREEN ROOFS		
3 Rays Farm Barns Roman Road	Scale:	eco.
Ingatestone Essex CM4 9EH	1:5@A2	greenroofs
Project:		Revision:
ENCAPSULATED PARAPET WITH GREEN ROOF FINISH		-



#### Execution

Step by step procedure

#### A. Flat Roof Mounting System for a Solar PV Installation

- 1. The measurements made on the site survey are checked, marks on the roof to indicate the planned positions of the panels as per the latest drawings.
- 2. Photograph the roof and the condition prior to commencement.

# B. Initial Mounting the Aluminium Bar and Solar PV Installation

- 1. The aluminium mounting system that make up the frame are set out into place.
- 2. Each bar is checked to make sure that it is straight and that all the bars are parallel to each other.
- 3. Safe pads to be put under mounting system to protect membrane.
- 4. Ensuring that the panels located to manufactures specifications.
- 5. If the length of the frame is longer than the aluminium bars supplied then they are spliced together using specially designed strips of aluminium and further bolts.
- 6. With the bars in place, and the frame complete the panels can start to be attached and clamped to the frame. A minimum of four clamps is used per solar panel, though in some cases extra clamps are used to aid the alignment of the rows.
- 7. The panels are either placed by row or by column depending upon which is the easiest in the specific situation.

# C. Panels Wiring for a Solar PV Installation

Panels are wired by the manufacturer, meaning the rooftop connection is straightforward. See datasheet titled: TR JKM380-400N-6RL3-B-A2-EN and PDF titled Installation Method Jinko

- 1. Each panel is tested prior.
- Each panels test result and serial number is recorded and the intended position as per the string design







# D. Panel Connecting Wires mounting the final PV Panel

The DC isolator should first be fitted locked off and wires fed out through the sealed roof penetration to the required position on the roof.

- 1. Once all the panels have been installed and the final alignment checked the DC wiring for each string should be tested to insure continuity of the connections.
- 2. The PV array testing is done from the dc isolator and the test procedures strictly adhered too.
- 3. The AC supply is wired from the locked off inverter isolator.
- 4. The inverter is then connected to the ac isolator, and the dc isolator observing the correct polarity.
- 5. All cables will be neatly clipped and dc cables fitted with warning labels.
- 6. The installation will then be fitted with all the appropriate warning labels in the correct positions.

#### E. Installation of inverter

See PDF titled se\_hd)wave\_inverter\_installation\_guide

#### F.Installation of battery

See PDF titled se-energy-bank-installation-guide

#### G. Install Generation Meter

See page 10 of PDF titled EMP1 basic versions user manual V1\_0

#### H. Commission Array

#### I. Electricity Generation Starts

#### J. Set up Monitoring

See PDF titled se-single-phase-hd-wave-inverters-setapp-datasheet





Bramley House Rev OOSV PV Frame and Panel



### Completion

- A. Leave works in clean and tidy condition
- **B.** Inspection by senior personnel
- C. Handover to client and training to operate array
- **D.** Handover pack compiled
- E. Handover pack issued





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