

---

**RBC AMETHYST LANE**

**APPLICATION 230613 - CONDITION 30**

---

Demolition and redevelopment of the Amethyst Lane to deliver a new respite care facility alongside 17 new homes, landscaping and ancillary works” approved 15 March 2024

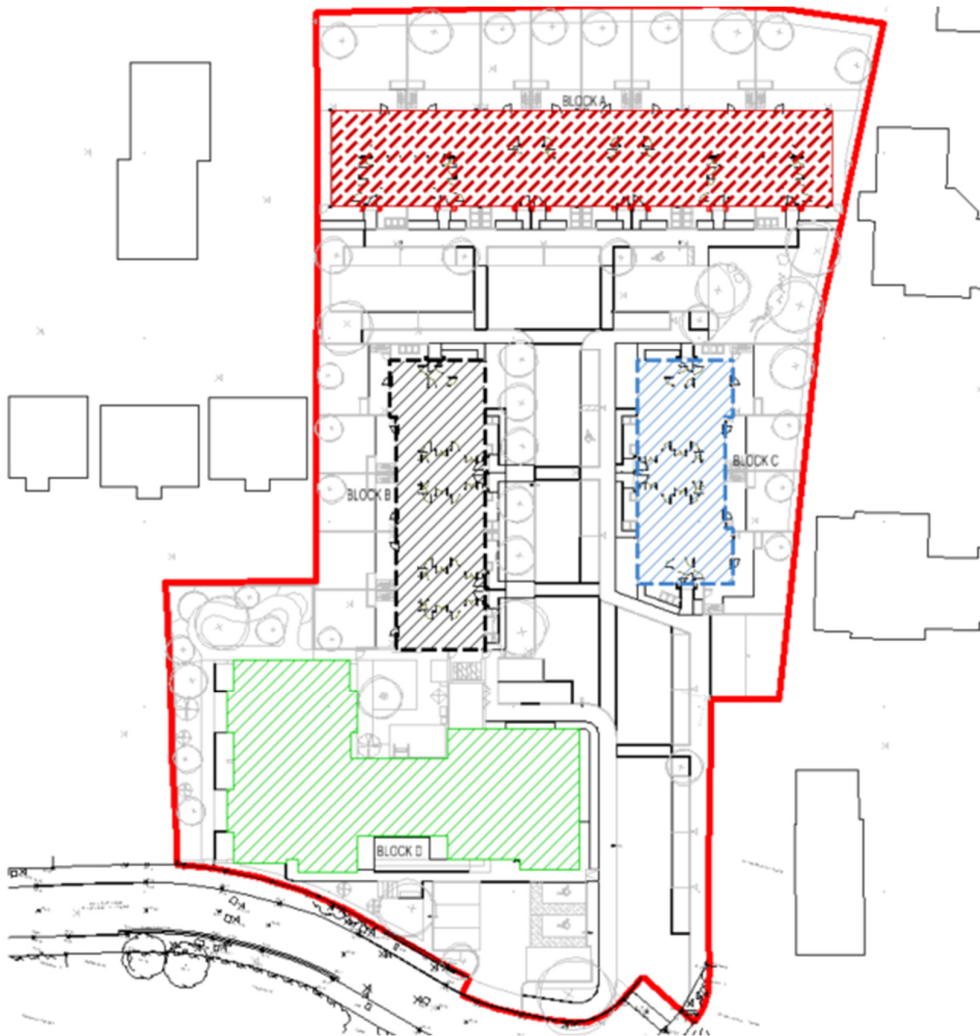
EngDesign Ltd  
106 – 108 Bermondsey  
Street  
London  
SE1 3TX

3365-ME-XX-SP-ME-9000  
6 September 2024  
AA/MS

## PLANNING PERMISSION CONDITION 30.

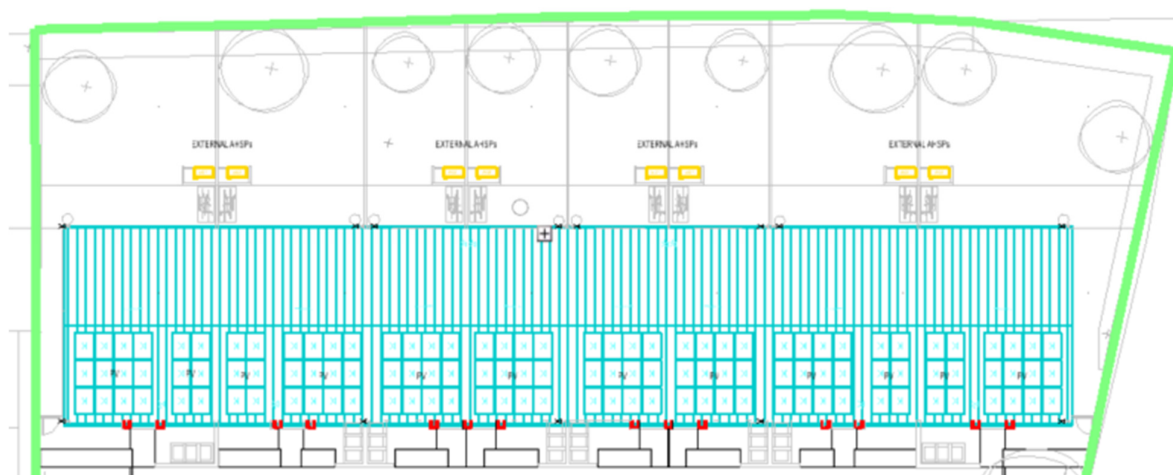
No development shall commence on site except for demolition and ground works until full details of the Photovoltaics and heat pumps to be provided within the site have been submitted to and approved in writing by the Local Planning Authority. These details shall include drawings showing the location and position of the Photovoltaics and heat pumps their dimensions, manufacturers' specifications, noise characteristics, and ongoing maintenance arrangements. The approved Photovoltaics and heat pumps shall be installed in accordance with these approved details prior to first occupation of the building to which they relate and shall maintained as approved at all times thereafter.

## SITE LAYOUT



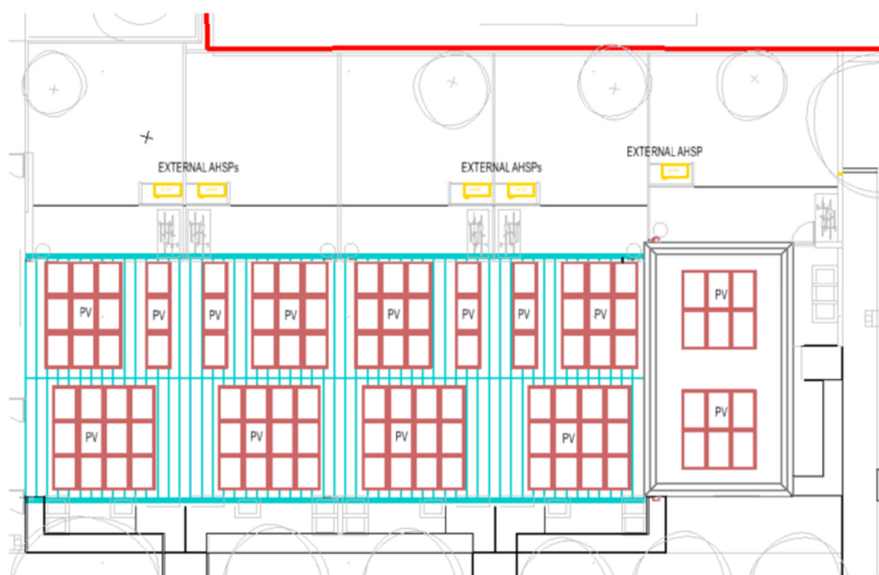
3365-ENG-ZZ-XX-DG-ME-1010

## BLOCK A LAYOUT



3365-ENG-ZZ-AX-DG-ME-1020

## BLOCK B LAYOUT



3365-ENG-ZZ-BX-DG-ME-1030

BLOCK C LAYOUT



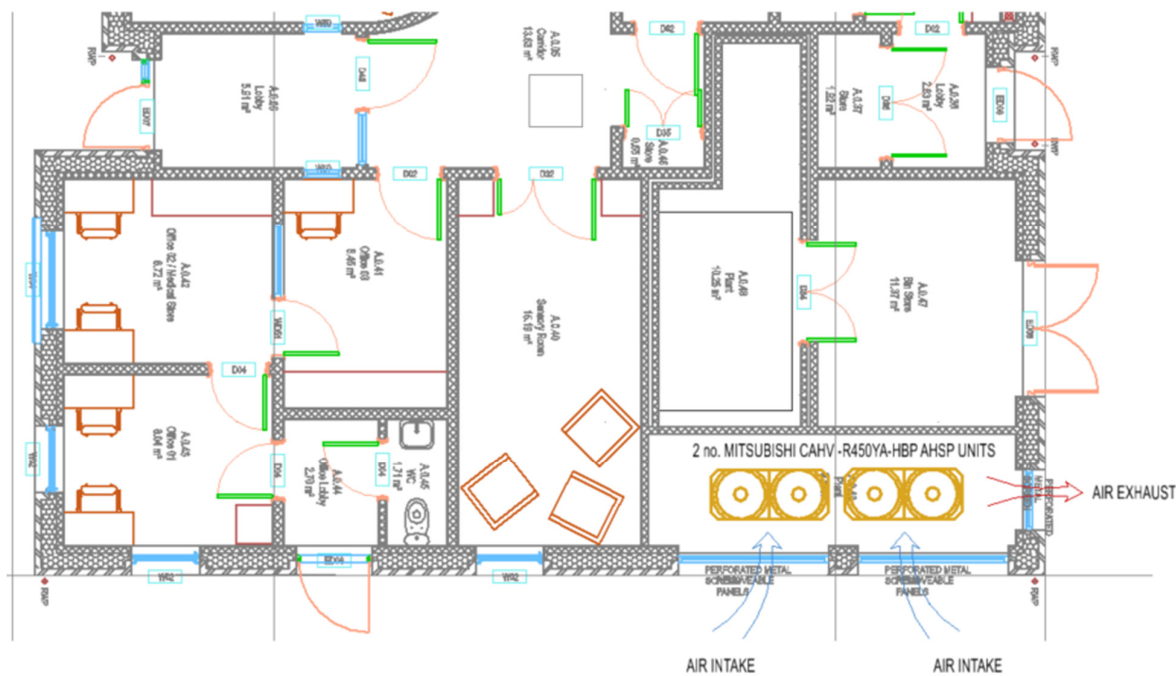
3365-ENG-ZZ-CX-DG-ME-1040

HOUSES BLOCKS B,C,D - AHSP SPECIFICATION

Heating and hot water for each house is provided from a Mitsubishi Ecodan Monobloc air source heat pump located in an enclosure in the garden.

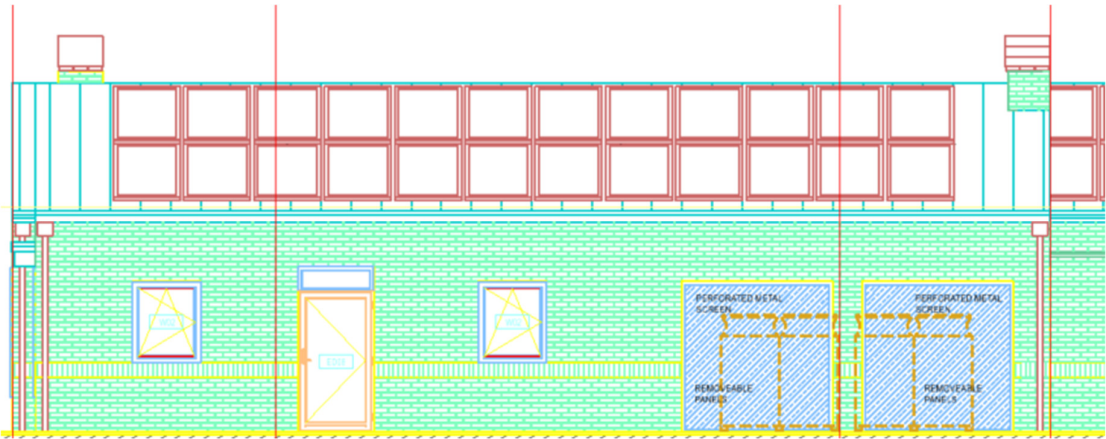
|                |                      |   |        |
|----------------|----------------------|---|--------|
| External unit: | PUZ-WM85VAA          |   |        |
| Dimensions:    | Width                | - | 1050mm |
|                | Height               | - | 1020mm |
|                | Depth                | - | 480mm  |
| Sound data:    | Pressure Level at 1m | - | 45 dBA |
|                | Power Level          | - | 58 dBA |
| Maintenance    | Annual services      |   |        |

BLOCK D AHSP ENCLOSURE PLAN



3365-ENG-ZZ-DX-DG-ME-1051

BLOCK D AHSP ENCLOSURE ELEVATION



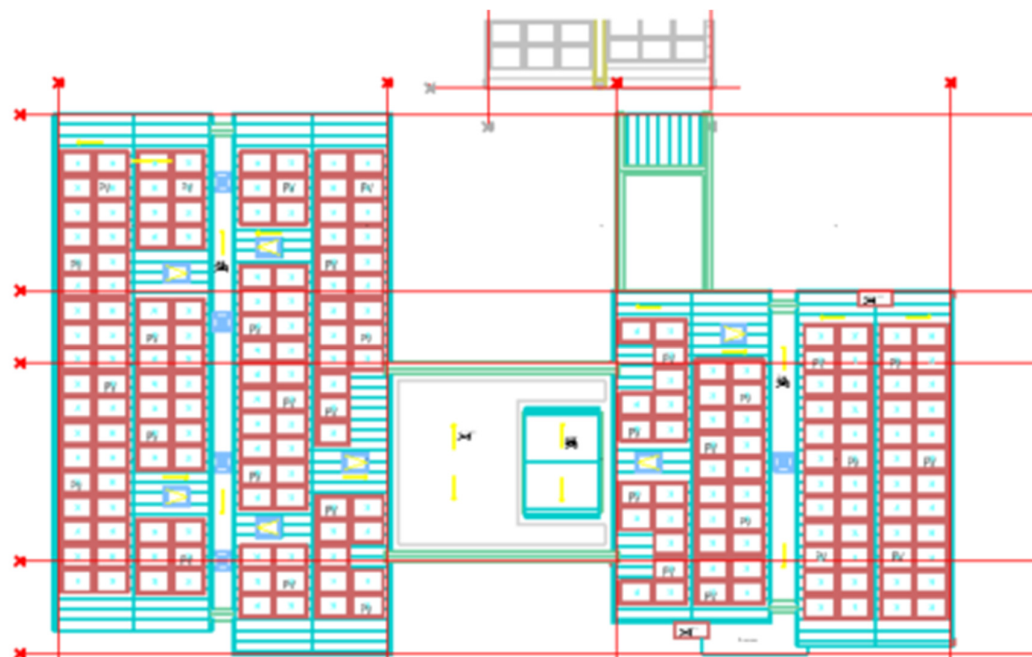
3365-ENG-ZZ-DX-DG-ME-1051

## RESPITE BLOCK D - AHSP SPECIFICATION

Heating and hot water for the Respite Unit is provided from 2 no. Mitsubishi commercial air source heat pump located in an enclosure beside to the Bin Stores. Perforated metal screens provide the airflow through the space, and attenuation from the units.

|                 |                       |          |
|-----------------|-----------------------|----------|
| External units: | 2 No. CAHV-P500YB-HPB |          |
| Dimensions:     | Width                 | - 1978mm |
|                 | Height                | - 1710mm |
|                 | Depth                 | - 759mm  |
| Sound data:     | Pressure Level at 1m  | - 59 dBA |
|                 | Power Level           | - 63 dBA |
| Maintenance     | Annual services       |          |

## BLOCK D PV LAYOUT



3365-ENG-ZZ-DX-DG-ME-1050

## PV SPECIFICATION

Photo-voltaic panels will be installed on the roofs for all blocks.

The houses' solar panels will feed into the electric to the respective house via an inverter, sited in an internal cupboard.

.

The PV array located on the Block D roof will be connected into the electrical distribution system at the MCCB main panel, via 3 no. inverters located in the roof space ventilation plant rooms.

The panels will be fitted to the with proprietary fixtures and frame supports.

The maximum number of panels are shown on the plans:

|                |                   |
|----------------|-------------------|
| Block A        | 120 panels        |
| Block B        | 108 panels        |
| Block C        | 72 panels         |
| <u>Block D</u> | <u>210 panels</u> |
| Total          | 510 panels        |

RBC-ALR\_HTA-S\_0504\_Energy and Overheating Assessment-Stage 3B- (28/07/2023) specifies a total side-wide PV system 153 kWp capacity.

This capacity would need 431 panels

The post Planning Amendment RBC-ALR Energy Strategy Addendum (02/11/2023) requires PV capacity 137.4 kWp.

This capacity would need 388 panels.

PV panels: Maxeon 3 355-375w

Dimensions:      Width      - 1046 mm  
                         Height      - 1690 mm  
                         Depth      - 369 mm  
                         Weight      - 18.5 kg

Sound data: n/a

Electrical:      Normal Operating      - 355 W  $P_{max}$

Solar Panel Efficiency – 20.1 %

Maintenance:      Cleaned as required:

2 storey houses – hosed from ground (pressure washers)

3 storey houses – access to flat roof from 2<sup>nd</sup> storey

Respite – cleaning contractors

Standing Seam Roofs



Flat Green Roofs

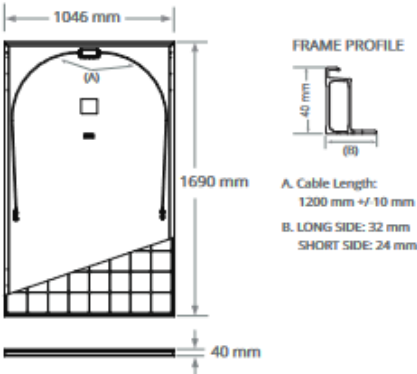


MAXEON 3 POWER: 355–375 W | EFFICIENCY: Up to 21.2%

| Electrical Data                                |                  |                  |
|------------------------------------------------|------------------|------------------|
|                                                | SPR-MAX3-375-BLK | SPR-MAX3-355-BLK |
| Nominal Power (P <sub>nom</sub> ) <sup>2</sup> | 375 W            | 355 W            |
| Power Tolerance                                | +5/0%            | +5/0%            |
| Panel Efficiency                               | 21.2%            | 20.1%            |
| Rated Voltage (V <sub>mpp</sub> )              | 64.0 V           | 60.7 V           |
| Rated Current (I <sub>mpp</sub> )              | 5.86 A           | 5.85 A           |
| Open-Circuit Voltage (V <sub>oc</sub> )        | 75.5 V           | 75.3 V           |
| Short-Circuit Current (I <sub>sc</sub> )       | 6.30 A           | 6.27 A           |
| Max. System Voltage                            | 1000 V IEC       |                  |
| Maximum Series Fuse                            | 20 A             |                  |
| Power Temp. Coef.                              | -0.27% / °C      |                  |
| Voltage Temp. Coef.                            | -0.236% / °C     |                  |
| Current Temp. Coef.                            | 0.058% / °C      |                  |

| Warranties, Certifications and Compliance |                                                                                                                                                                          |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Tests <sup>3</sup>               | IEC 61215, IEC 61730                                                                                                                                                     |
| Quality Management Certs                  | ISO 9001:2015, ISO 14001:2015                                                                                                                                            |
| Ammonia Test                              | IEC 62716                                                                                                                                                                |
| Desert Test                               | IEC 60068-2-68, MIL-STD-810G                                                                                                                                             |
| Salt Spray Test                           | IEC 61701 (maximum severity)                                                                                                                                             |
| PID Test                                  | 1000 V; IEC 62804                                                                                                                                                        |
| Available Listings                        | TUV                                                                                                                                                                      |
| IFU Declare Label                         | First solar panel labeled for ingredient transparency and LBC-compliance. <sup>4</sup>                                                                                   |
| Cradle to Cradle Certified™ Bronze        | First solar panel line certified for material health, water stewardship, material reutilization, renewable energy & carbon management, and social fairness. <sup>5</sup> |
| Green Building Certification Contribution | Panels can contribute additional points toward LEED and BREEAM certifications.                                                                                           |
| EHS Compliance                            | RoHS, OHSAS 18001:2007, Recycle Scheme, REACH SVHC-163                                                                                                                   |

| Operating Condition And Mechanical Data |                                                                         |
|-----------------------------------------|-------------------------------------------------------------------------|
| Temperature                             | -40°C to +85°C                                                          |
| Impact Resistance                       | 25 mm diameter ball at 23 m/s                                           |
| Solar Cells                             | 104 Monocrystalline Maxeon Gen 3                                        |
| Tempered Glass                          | High-transmission tempered anti-reflective                              |
| Junction Box                            | IP-68, Stäubli (MC4), 3 bypass diodes                                   |
| Weight                                  | 19 kg                                                                   |
| Max. Load <sup>6</sup>                  | Wind: 2400 Pa, 244 kg/m² front & back<br>Snow: 5400 Pa, 550 kg/m² front |
| Frame                                   | Class 1 black anodized (highest AAMA rating)                            |



Please read the safety and installation instructions.  
Visit [www.sunpower.maxeon.com/int/PVinstallGuide/IEC](http://www.sunpower.maxeon.com/int/PVinstallGuide/IEC).  
Paper version can be requested through  
[techsupport.ROW@maxeon.com](mailto:techsupport.ROW@maxeon.com).

## ATTACHED DOCUMENTS

### DRAWINGS

3365-ZZ-XX-DG-ME-1010 Site Plan - AHSP and PV  
3365-ZZ-AX-DG-ME-1020 Block A Plan - AHSP and PV  
3365-ZZ-BX-DG-ME-1030 Block B Plan - AHSP and PV  
3365-ZZ-CX-DG-ME-1040 Block C Plan - AHSP and PV  
3365-ZZ-DX-DG-ME-1050 Block D Plan – PV  
3365-ZZ-DX-DG-ME-1051 Block D Plan & Elevation - AHSP

### SPECIFICATIONS

Ecoda<sub>n</sub>\_PUZ-WM85VAA\_Monobloc\_Air\_Source\_Heat\_Pump\_Product\_Information\_Sheet  
CAHV-R450YA-HPB\_Product\_Information\_Sheet  
Sunpower Maxeon 3 355w  
Renusol MetaSole Frame Supports