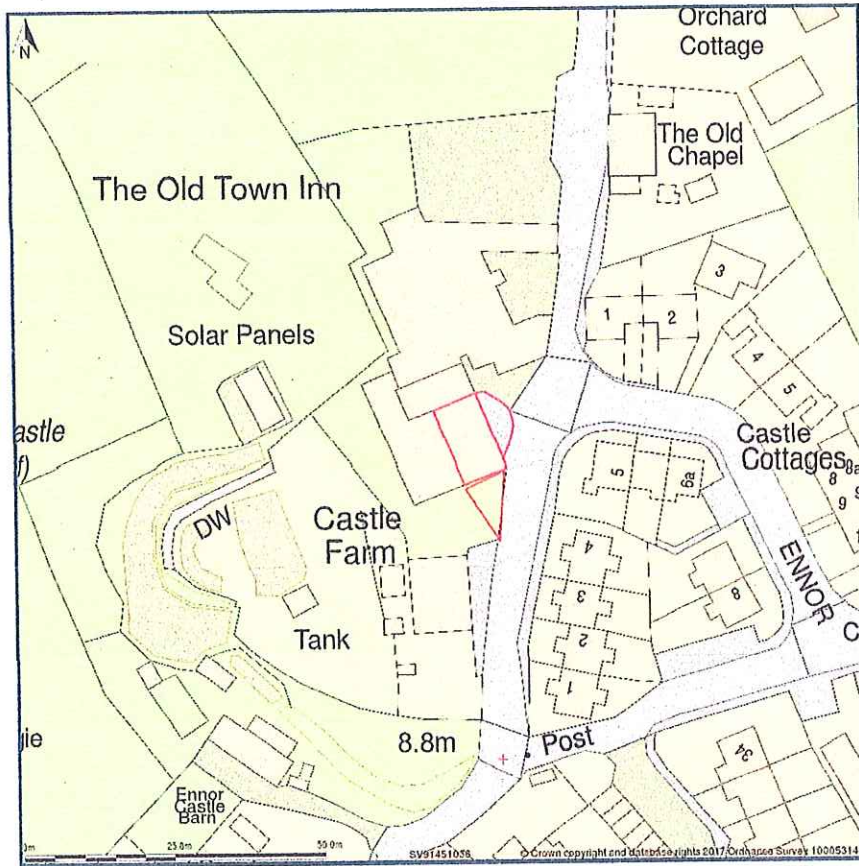


The Craft House, Old Town Lane, Old Town, St Mary s, Isles Of Scilly, TR21 0NN



Site Plan shows area bounded by: 91382.09, 10293.7 91523.51, 10435.12 (at a scale of 1:1250), OSGridRef: SV91451036. The representation of a road, track or path is no evidence of a right of way. The representation of features as lines is no evidence of a property boundary.

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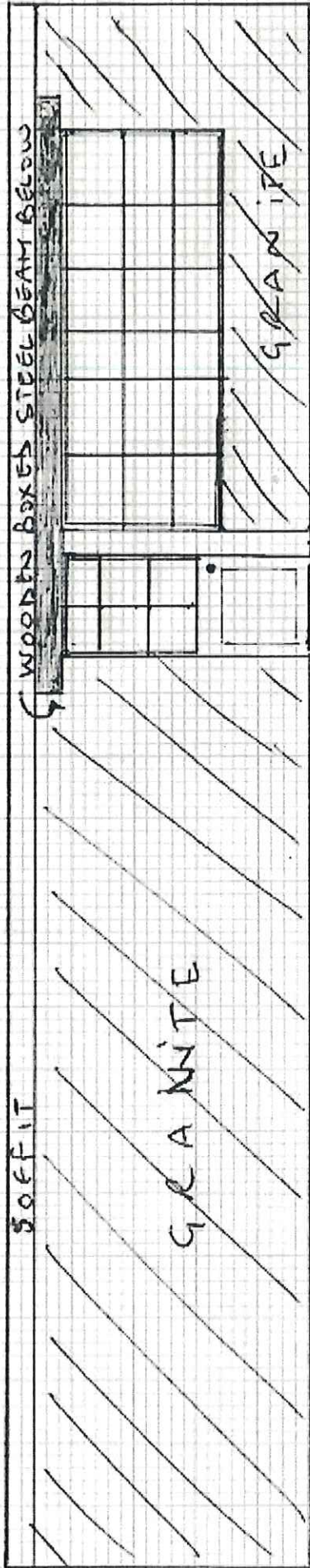
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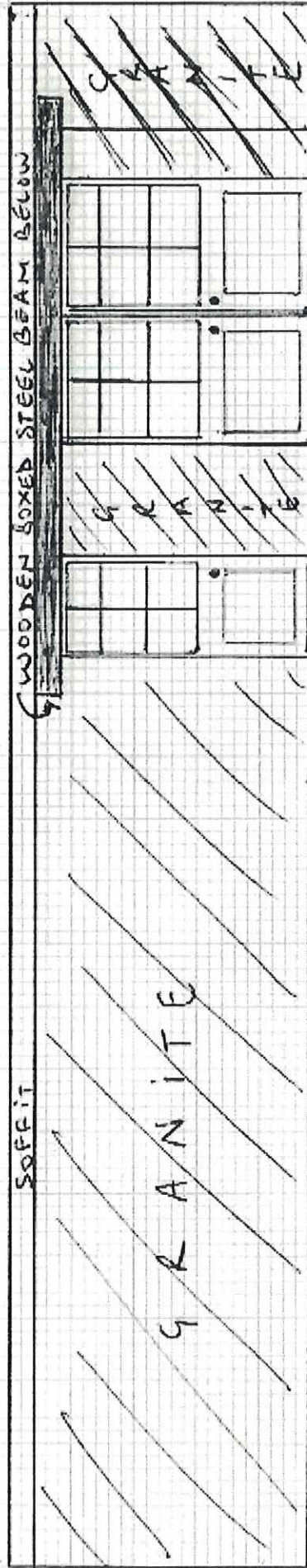
P-18-045

THE DISTILLERY - EXISTING SIDE ELEVATION



DRAWING SCALE 1:50 REF: AMSS08

THE DISTILLERY - PROPOSED SIDE ELEVATION



DRAWING SCALE 1:50

REF: AMSS09

NEW WOODEN
MULTI PANELED
DOUBLE DOOR

RECEIVED BY THE
PLANNING DEPARTMENT
15 JUN 2018

Approved
10 AUG 2018
Plans

P-18-048



Q.PEAK BLK-G4.1 285-295

Q.ANTUM SOLAR MODULE

With its top performance and completely black design the new **Q.PEAK BLK-G4.1** is the ideal solution for all residential rooftop applications thanks to its innovative cell technology **Q.ANTUM**. The world-record cell design was developed to achieve the best performance under real conditions – even with low radiation intensity and on clear, hot summer days.



LOW ELECTRICITY GENERATION COSTS

Higher yield per surface area and lower BOS costs thanks to higher power classes and an efficiency rate of up to 18.0%.



INNOVATIVE ALL-WEATHER TECHNOLOGY

Optimal yields, whatever the weather with excellent low-light and temperature behavior.



ENDURING HIGH PERFORMANCE

Long-term yield security with Anti-PID Technology¹, Hot-Spot-Protect and Traceable Quality Tra.Q™.



EXTREME WEATHER RATING

High-tech aluminum alloy frame, certified for high snow (5400 Pa) and wind loads (4000 Pa) regarding IEC.



MAXIMUM COST REDUCTIONS

Up to 10% lower logistics costs due to higher module capacity per box.



A RELIABLE INVESTMENT

Inclusive 12-year product warranty and 25-year linear performance guarantee².

RECEIVED BY THE PLANNING DEPARTMENT
30 MAY 2018

Approved
10 AUG 2018
Plans



THE IDEAL SOLUTION FOR:



Rooftop arrays on residential buildings

¹ APT test conditions: Cells at -1500V against grounded, with conductive metal foil covered module surface, 25 °C, 168h

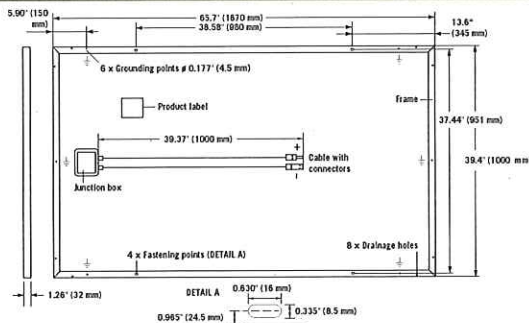
² See data sheet on rear for further information.

Engineered in Germany



MECHANICAL SPECIFICATION

Format	65.7 in × 39.4 in × 1.26 in (including frame) (1670 mm × 1000 mm × 32 mm)
Weight	41.45 lbs (18.8 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodised aluminum
Cell	6 × 10 monocrystalline Q.ANTUM solar cells
Junction box	2.60-3.03 in × 4.37-3.54 in × 0.59-0.75 in (66-77 mm × 111-90 mm × 15-19 mm), Protection class IP67, with bypass diodes
Cable	4 mm ² Solar cable; (+) ≥ 39.37 in (1000 mm), (-) ≥ 39.37 in (1000 mm)
Connector	Multi-Contact MC4 or MC4 intermateable, IP68



ELECTRICAL CHARACTERISTICS

POWER CLASS		285	290	295	
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W / -0W)					
Minimum	Power at MPP²	P_{MPP} [W]	285	290	295
	Short Circuit Current*	I_{SC} [A]	9.56	9.63	9.70
	Open Circuit Voltage*	V_{OC} [V]	38.91	39.19	39.48
	Current at MPP*	I_{MPP} [A]	8.98	9.07	9.17
	Voltage at MPP*	V_{MPP} [V]	31.73	31.96	32.19
	Efficiency²	η [%]	≥ 17.1	≥ 17.4	≥ 17.7
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC³					
Minimum	Power at MPP²	P_{MPP} [W]	210.7	214.4	218.1
	Short Circuit Current*	I_{SC} [A]	7.71	7.77	7.82
	Open Circuit Voltage*	V_{OC} [V]	36.38	36.65	36.92
	Current at MPP*	I_{MPP} [A]	7.04	7.12	7.20
	Voltage at MPP*	V_{MPP} [V]	29.92	30.12	30.30

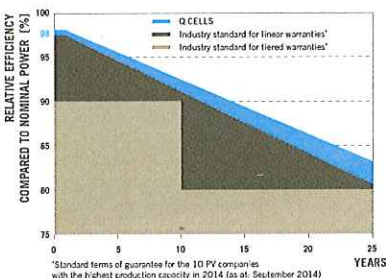
¹1000W/m², 25 °C, spectrum AM 1.5G

²Measurement tolerances STC ±3%; NOC ±5%

³800W/m², NOCT, spectrum AM 1.5G

* typical values, actual values may differ

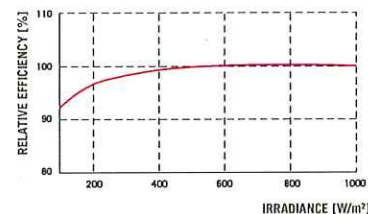
Q CELLS PERFORMANCE WARRANTY



At least 98% of nominal power during first year. Thereafter max. 0.6% degradation per year. At least 92.6% of nominal power up to 10 years. At least 83.6% of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000W/m²).

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	-0.28
Temperature Coefficient of P_{MPP}	γ	[%/K]	-0.39	Normal Operating Cell Temperature	NOCT	[°F]	113 ± 5.4 (45 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1000 (IEC) / 1000 (UL)	Safety Class	II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating	C (IEC) / TYPE 1 (UL)
Design load, push (UL)²	[lbs/ft ²]	75 (3600 Pa)	Permitted module temperature on continuous duty	-40 °F up to +185 °F (-40 °C up to +85 °C)
Design load, pull (UL)²	[lbs/ft ²]	55.6 (2666 Pa)	² see installation manual	

QUALIFICATIONS AND CERTIFICATES

UL 1703; VDE Quality Tested; CE-compliant; IEC 61215 (Ed.2); IEC 61730 (Ed.1) application class A



PACKAGING INFORMATION

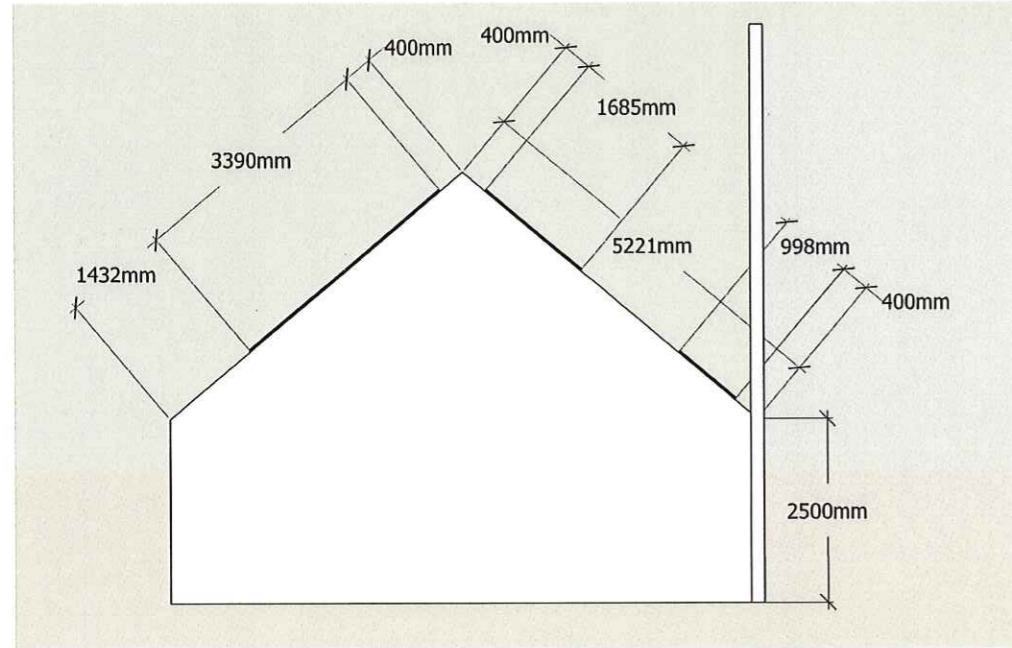
Number of Modules per Pallet	32
Number of Pallets per 53' Container	30
Number of Pallets per 40' Container	26
Pallet Dimensions (L × W × H)	68.7 in × 45.3 in × 46.1 in (1745 mm × 1150 mm × 1170 mm)
Pallet Weight	1435 lbs (651 kg)

NOTE: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

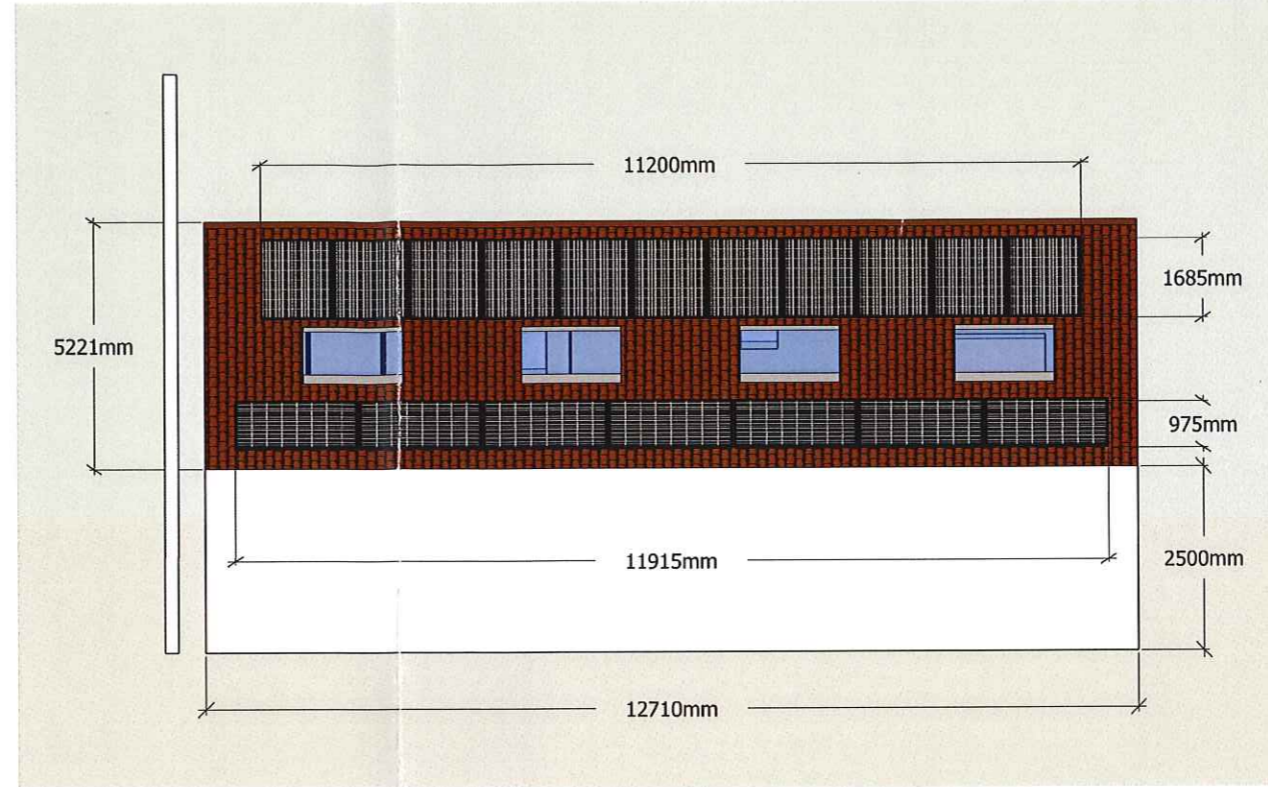
Hanwha Q CELLS America Inc.
300 Spectrum Center Drive, Suite 1250, Irvine, CA 92618, USA | TEL +1 949 748 59 96 | EMAIL inquiry@us.q-cells.com | WEB www.q-cells.us

P-18-045

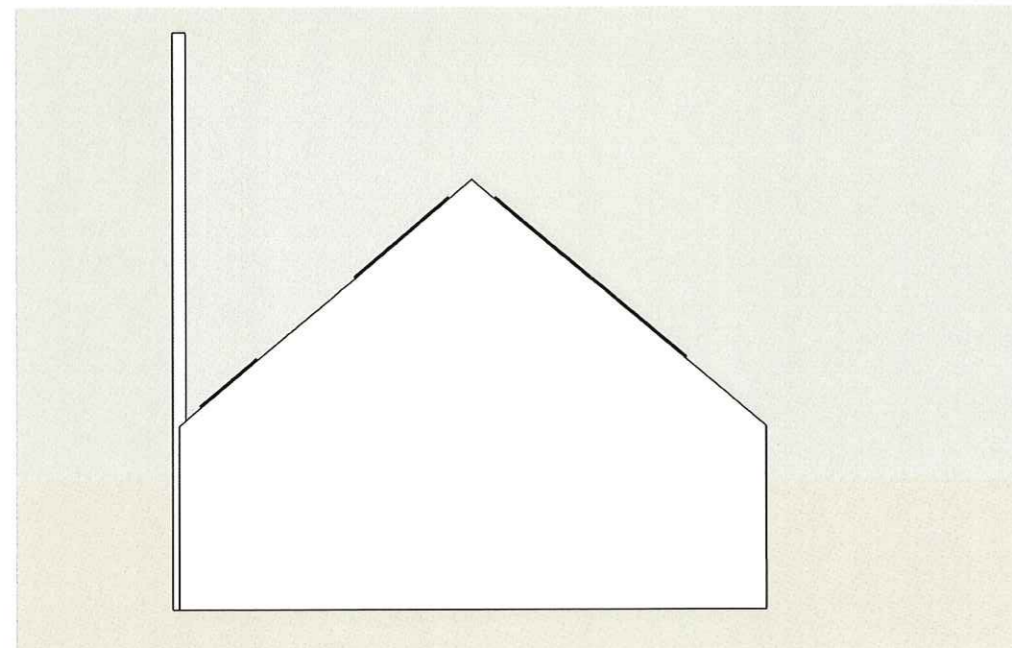
bre NATIONAL SOLAR CENTRE



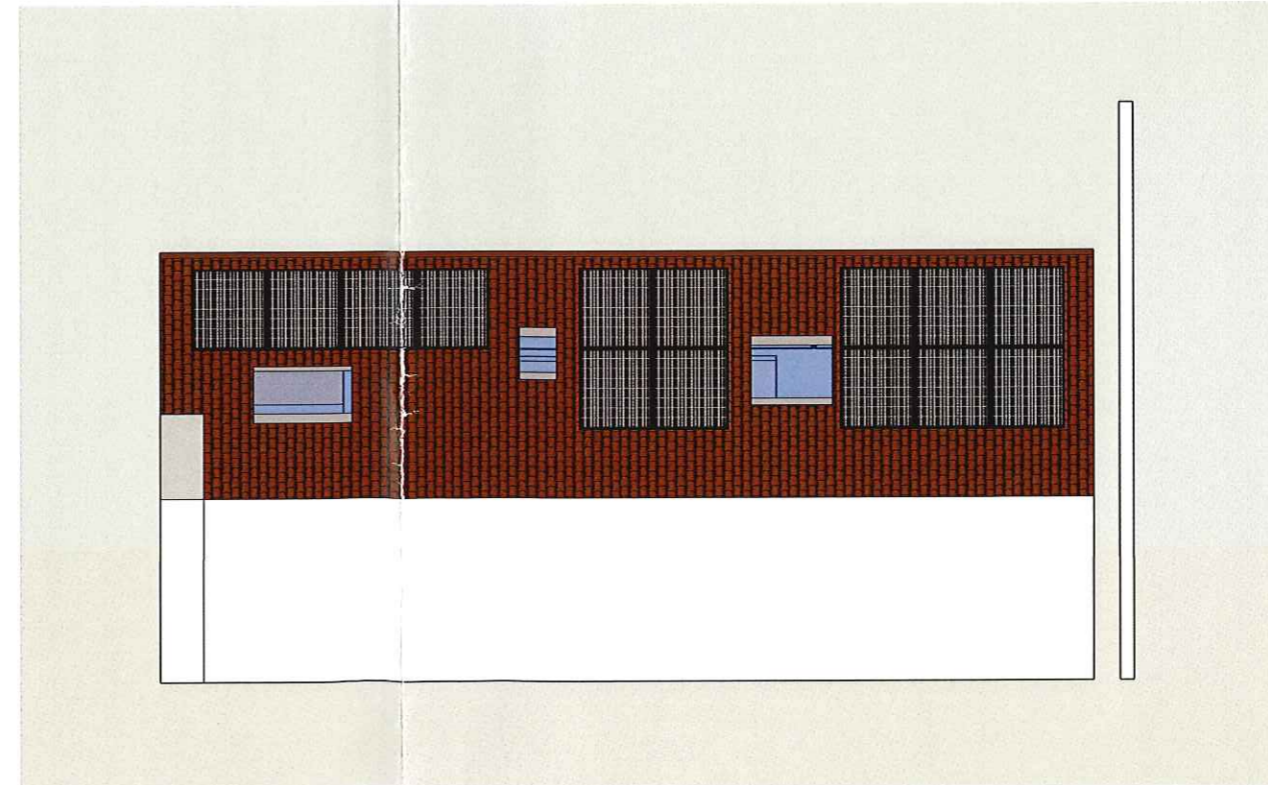
Side (South-East) Elevation - Proposed 1 : 50



Front (North-East) Elevation - Proposed 1 : 50



Side (North-West) Elevation - Proposed 1 : 50



Back (South-West) Elevation - Proposed 1 : 50

BRE National Solar Centre
Eden Project
Bodelva
St Blazey
PL24 2SG

T: 01726 871830
E: nsc@bre.co.uk
12 JUN 2018
Client

Scilly Spirit

Approved
10 AUG 2018
Plans

Site Address

The Distillery
Old Town
St Mary's
Isles of Scilly
TR21 0NN

Project Name / Number

Roof Mounted Solar PV System

Drawn By / Checked By

AL/CC

Date Published DD/MM/YY

11/06/2018

Drawing Number

CNE/BRE10/1

Scale

1:50 @ A1

P-18-045

bre NATIONAL SOLAR CENTRE

RECEIVED BY THE PLANNING DEPARTMENT

12 JUN 2018
BRE National Solar Centre
Eden Project
Bodelva
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PL24 2SG

T: 01726 871830
E: nsc@bre.co.uk

Client

Scilly Spirit

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The Distillery
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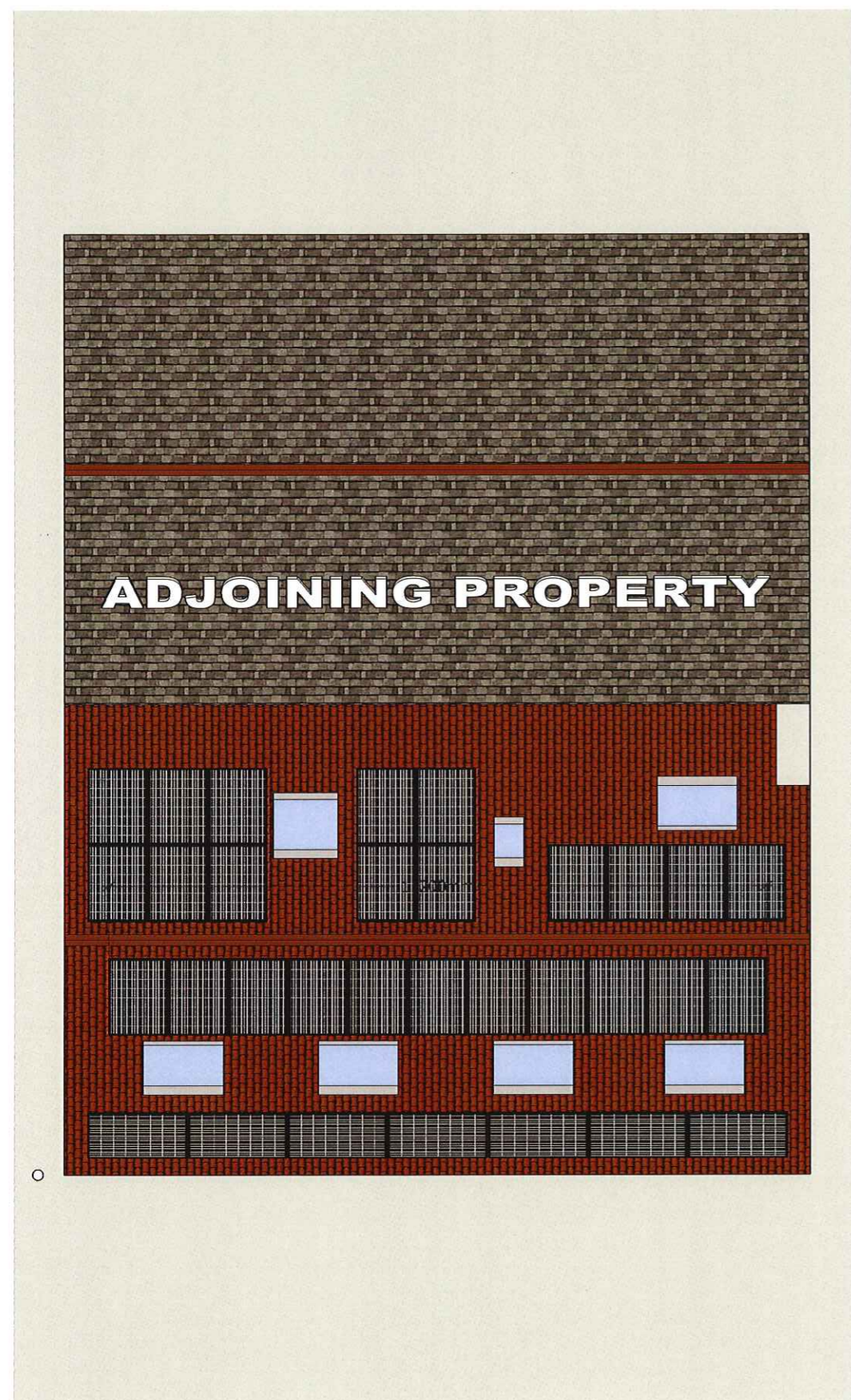
11/06/2018

Drawing Number

CNE/BRE10/2

Scale

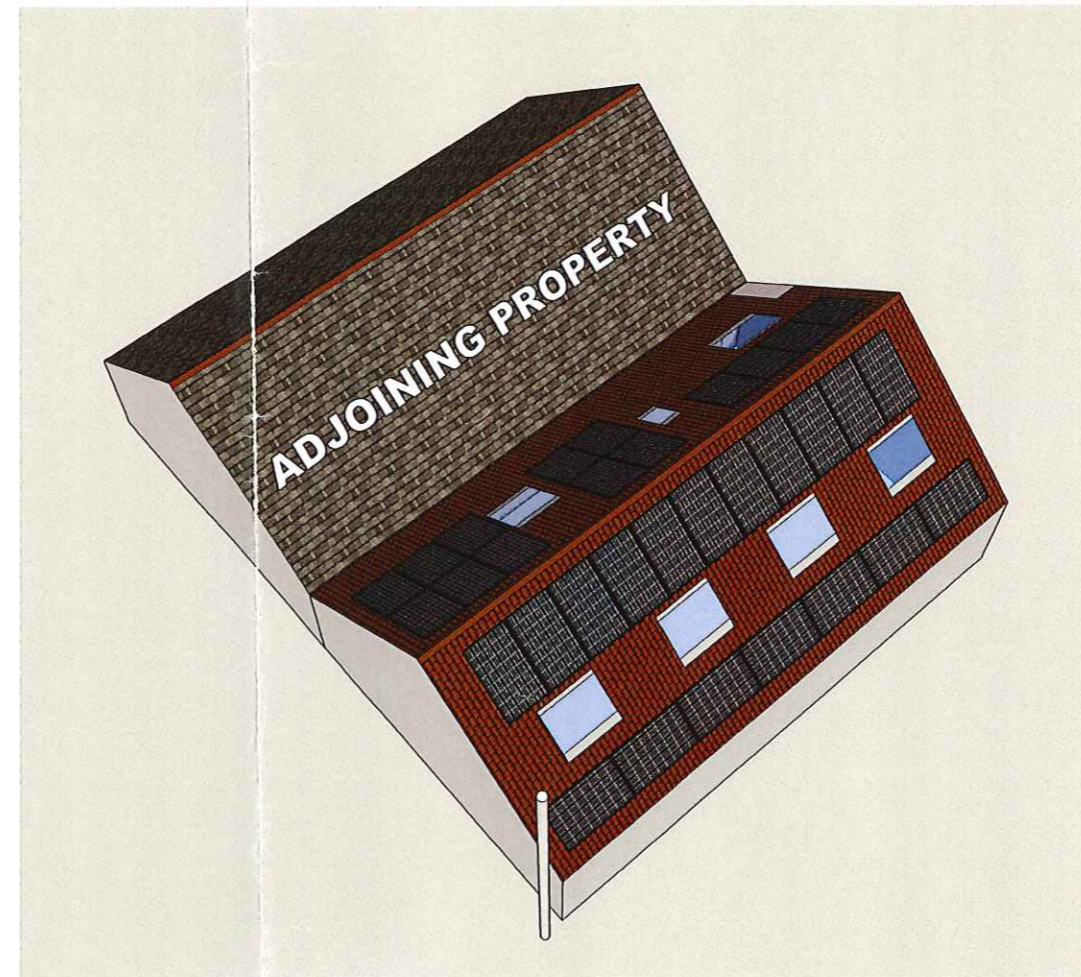
As Indicated



Plan Elevation - Proposed 1 : 50 @ A1



Fixing System - Proposed NOT TO SCALE



Isometric Elevation - Proposed NOT TO SCALE