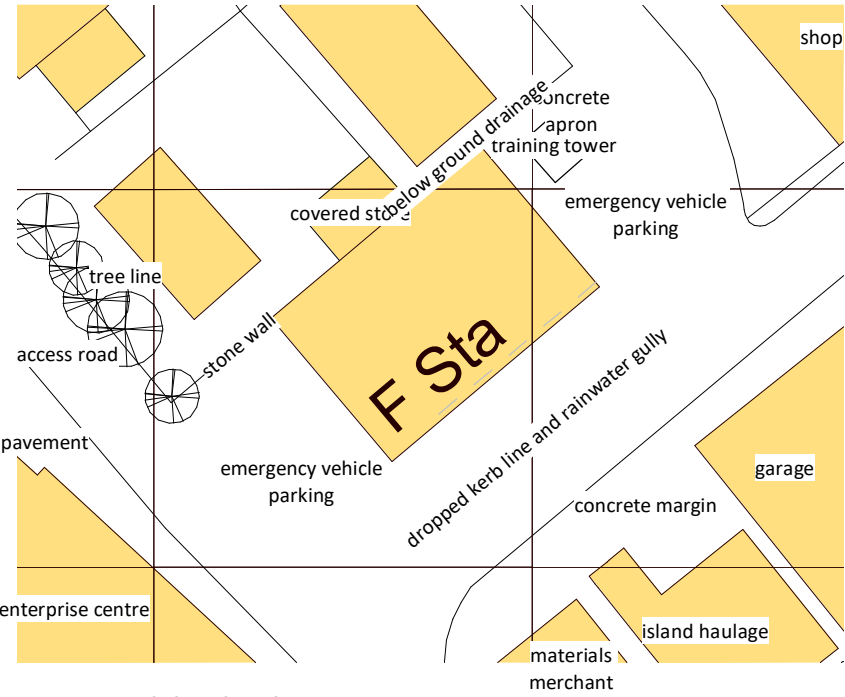
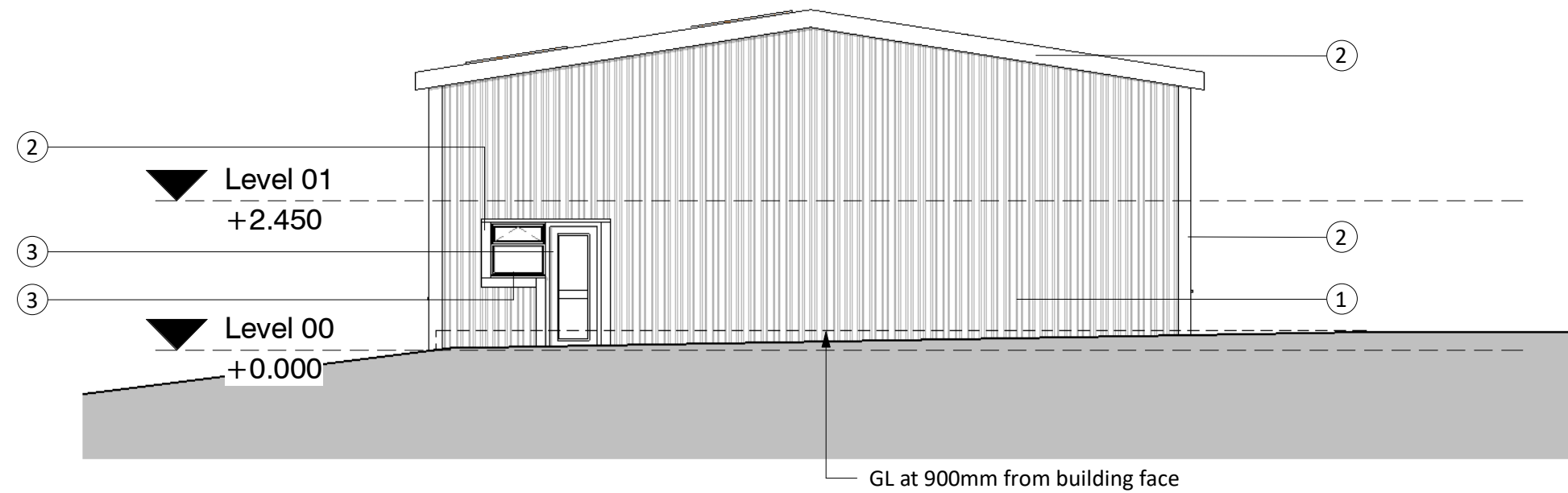


2 00 Site location plan
1 : 1250

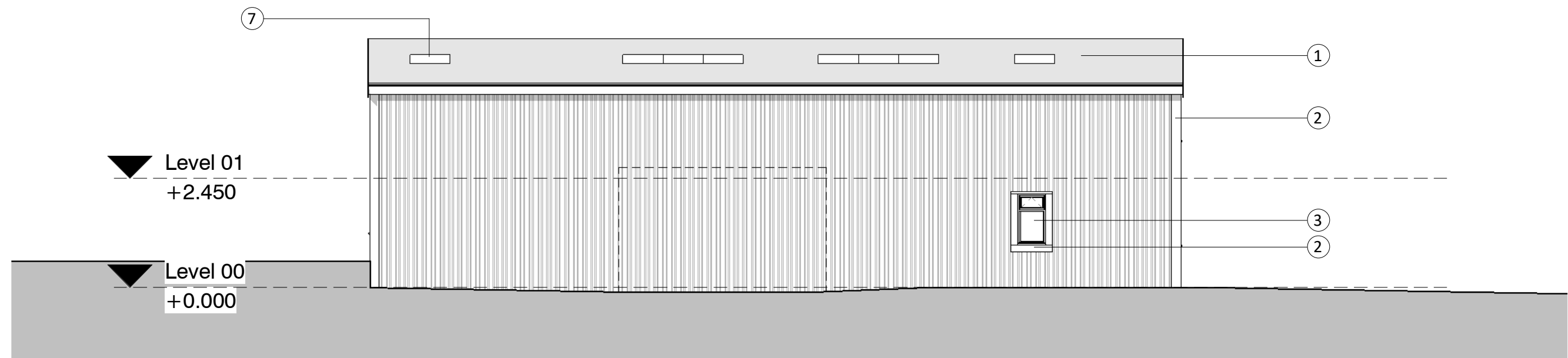


1 00 Site block plan
1 : 500

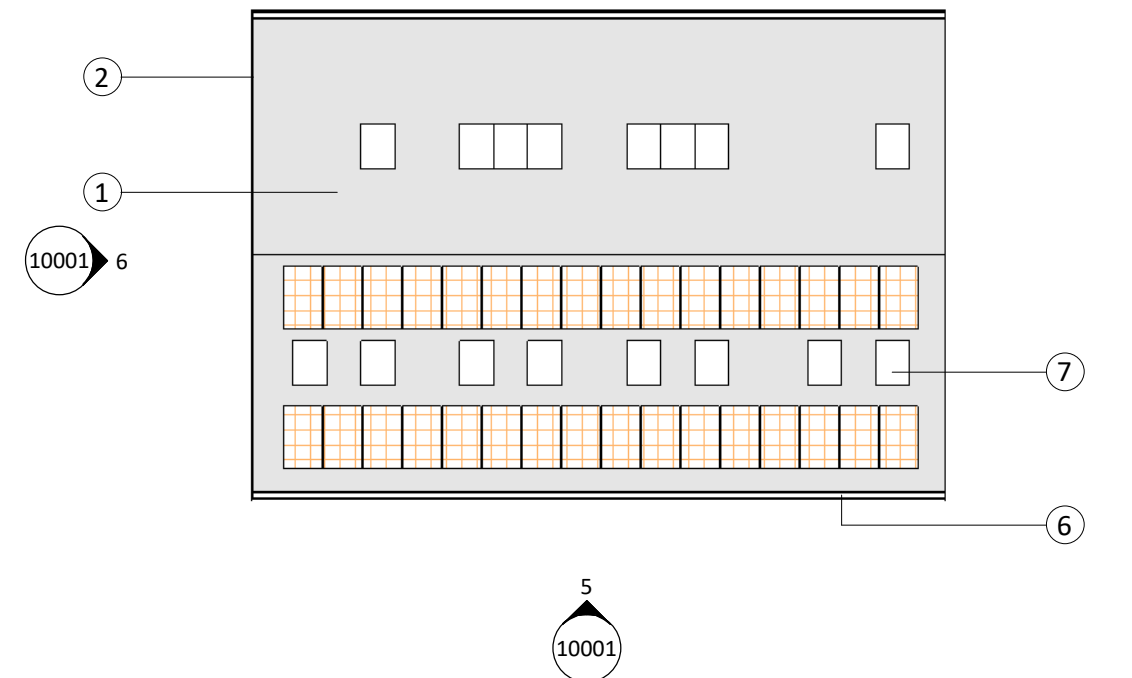
PL				P1				31/05/2018 Issued for Planning							
STATUS		REV		DATE		DESCRIPTION									
CLIENT								REVISED BY leuan Evans							
Hitachi Europe Ltd.								CHECKED BY Edward Flood							
								ORIGINATOR NO 151838							
CONSULTANT															
STRIDE TREGLOWN															
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m PROJECT								2016							
IoS Smart Island															
St Mary's Fire Station,															
Isles of Scilly,															
TR21 0JY															
DRAWING TITLE															
Site Location and Block Plan															
SUITABILITY STATUS								SCALE							
PL : PLANNING								As indicated @ A3							
PROJECT		ORIGINATOR		ZONE		LEVEL		TYPE		ROLE		CLASSIFICATION		REVISION	
151838-STL-XX-ZZ-DR-A-XXXX-10000														P1	



3 North East Elevation
1 : 100



4 North West Elevation
1 : 100

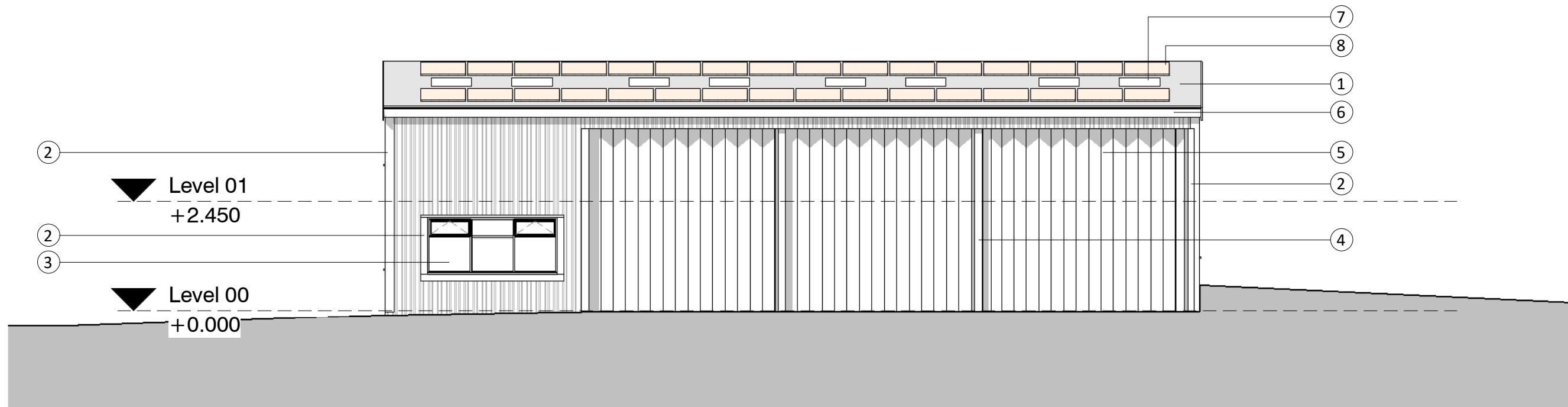


7 Level 02 Roof
1 : 200

Planning Notes	
Note Number	Note Text
1	Light green plastics coated metal cladding
2	Dark green plastic coated metal trim
3	White uPVC windows and doors
4	Steelwork painted green
5	Galvanised steel doors sliding folding
6	Dark green plastic coated metal box guttering
7	Clear polycarbonate rooflights
8	Proposed PV Panels



6 South West Elevation
1 : 100



5 South East Elevation
1 : 100

PL	P1	31/05/2018	Issued for Planning	REVISED BY
STATUS	REV	DATE	DESCRIPTION	leuan Evans
CLIENT				CHECKED BY
				Edward Flood
				ORIGINATOR NO
				151838

CONSULTANT

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PROJECT

IoS Smart Island
St Mary's Fire Station,
Isles of Scilly,
TR21 0JY

DRAWING TITLE

Plans and Elevations

SUITABILITY STATUS	SCALE
PL : PLANNING	As indicated @ A1
PROJECT ORIGINATOR ZONE LEVEL TYPE ROLE CLASSIFICATION NUMBER	REVISION
151838-STL-XX-ZZ-DR-A-XXXX-10001	P1

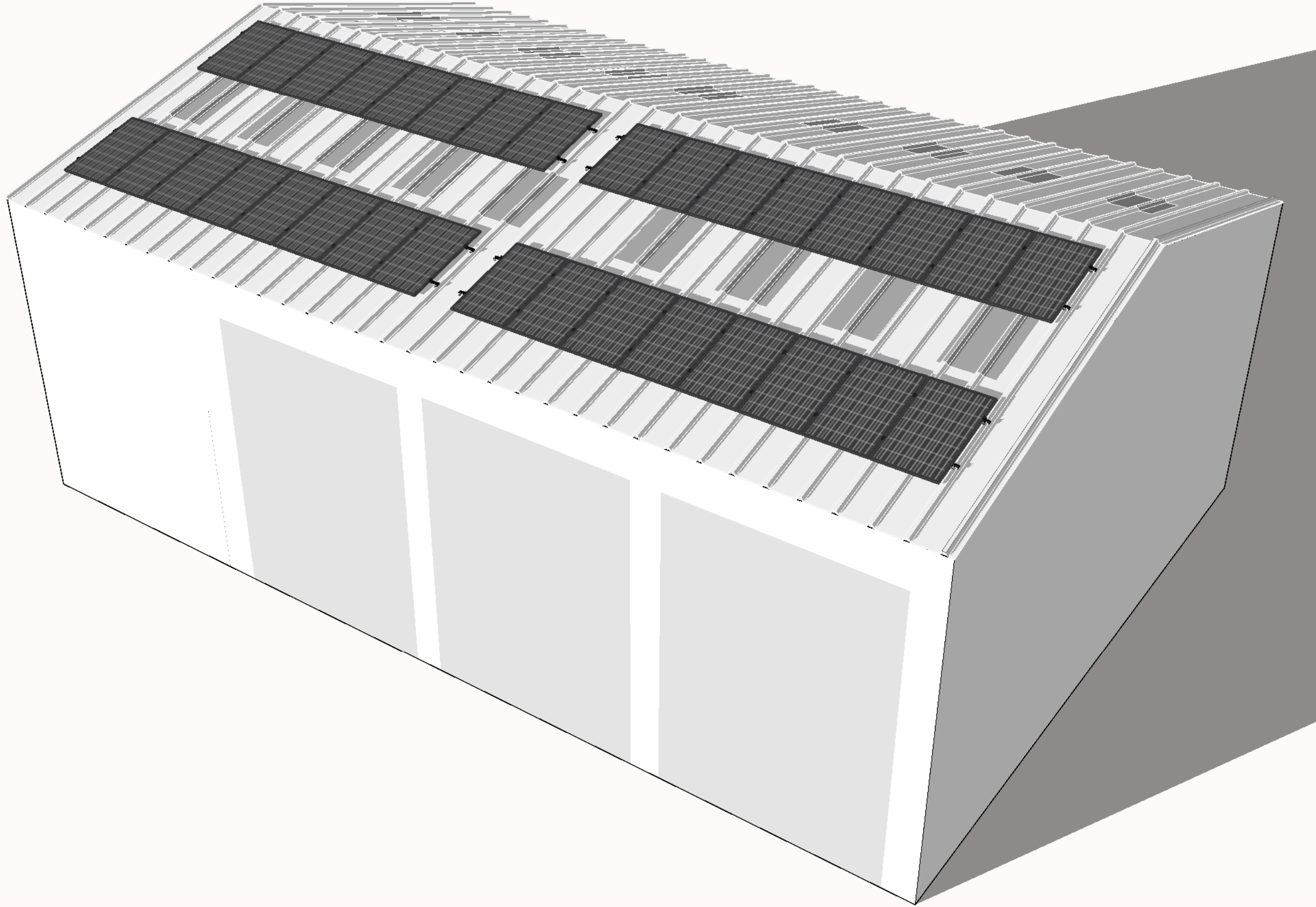


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St Marys Fire Station

9.7kW South 9,600kWh Annual generation

Array layout

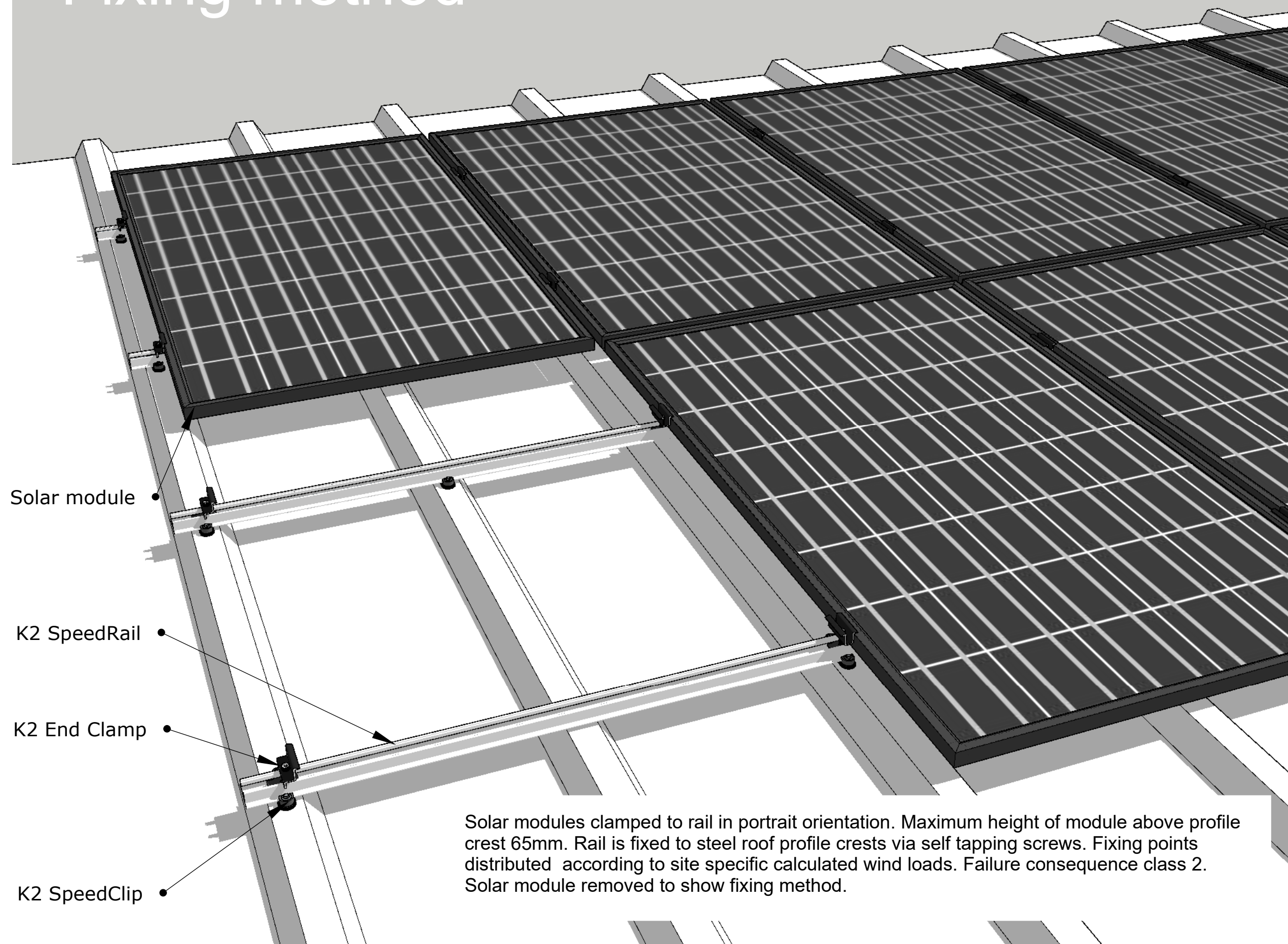


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Project

St Marys Fire Station

9.7kW South 9,600kWh Annual generation

Fixing method



Solar modules clamped to rail in portrait orientation. Maximum height of module above profile crest 65mm. Rail is fixed to steel roof profile crests via self tapping screws. Fixing points distributed according to site specific calculated wind loads. Failure consequence class 2. Solar module removed to show fixing method.

IoS Smart
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St Marys Fire Station

9.7kW South 9,600kWh Annual generation

Module Datasheet



The new **Q.PEAK DUO BLK-G5** solar module from Q CELLS impresses with its outstanding visual appearance and particularly high performance on a small surface thanks to the innovative **Q.ANTUM DUO** Technology. Q.ANTUM's world-record-holding cell concept has now been combined with state-of-the-art circuitry half cells and a six-busbar design, thus achieving outstanding performance under real conditions — both with low-intensity solar radiation as well as on hot, clear summer days.



Q.ANTUM TECHNOLOGY: LOW LEVELIZED COST OF ELECTRICITY

Higher yield per surface area, lower BOS costs, higher power classes, and an efficiency rate of up to 19.3 %.



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 LID Technology, 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.



A RELIABLE INVESTMENT

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



STATE OF THE ART MODULE TECHNOLOGY

Q.ANTUM DUO combines cutting edge cell separation and innovative wiring with Q.ANTUM Technology.

THE IDEAL SOLUTION FOR:



Engineered in Germany



¹ APT test conditions according to IEC/TS 62804-1:2015, method B (~1500V, 168h)

² See data sheet on rear for further information.

Q CELLS

MECHANICAL SPECIFICATION			
Format	1670mm × 1000mm × 32mm (including frame)		
Weight	18.8 kg		
Front Cover	3.2mm thermally pre-stressed glass with anti-reflection technology		
Back Cover	Composite film		
Frame	Black anodised aluminium		
Cell	6 × 10 monocrystalline Q.ANTUM solar cells		
Junction box	66-77 mm × 115-90 mm × 15-19 mm Protection class IP67, with bypass diodes		
Cable	4 mm ² Solar cable; (+) 1000 mm, (-) 1000 mm		
Connector	Multi-Contact MC4 or MC4 intermateable, IP68		

ELECTRICAL CHARACTERISTICS			
POWER CLASS		285	290
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5W / -0W)			
Minimum	Power at MPP²	P_{MPP}	285
	Short Circuit Current²	I_{sc}	9.56
	Open Circuit Voltage²	V_{oc}	38.91
	Current at MPP²	I_{MPP}	8.98
	Voltage at MPP²	V_{MPP}	31.73
	Efficiency²	η	≥ 17.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NOC³			
Minimum	Power at MPP²	P_{MPP}	210.9
	Short Circuit Current²	I_{sc}	7.71
	Open Circuit Voltage²	V_{oc}	36.38
	Current at MPP²	I_{MPP}	7.04
	Voltage at MPP²	V_{MPP}	29.95
¹ 1000W/m², 25°C, spectrum AM 1.5 G ² Measurement tolerances STC ±3%; NOC ±5% ³ 800W/m², NOCT, spectrum AM 1.5 G * typical values, actual values may differ			
Q CELLS PERFORMANCE WARRANTY		PERFORMANCE AT LOW IRRADIANCE	
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.		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]
Temperature Coefficient of P_{MPP}		γ	[%/K]
Temperature Coefficient of V_{oc}		β	[%/K]
Normal Operating Cell Temperature		NOCT	[°C]
			45
PROPERTIES FOR SYSTEM DESIGN			
Maximum System Voltage		V_{MS}	[V]
Maximum Reverse Current		I_r	[A]
Wind/Snow Load (Test-load in accordance with IEC 61215)		(Pa)	4000/ 5400
Safety Class			II
Fire Rating			C
Permitted Module Temperature On Continuous Duty			-40 °C up to +85 °C
QUALIFICATIONS AND CERTIFICATES		PARTNER	
VDE Quality Tested, IEC 61215 (Ed.2), IEC 61730 (Ed.1), Application class A This data sheet complies with DIN EN 50380.			

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 GmbH
Sonnenallee 17-21, 06766 Bitterfeld-Wolfen, Germany | TEL +49 (0)3494 66 99-23444 | FAX +49 (0)3494 66 99-23000 | EMAIL sales@q-cells.com | WEB www.q-cells.com

Spec features subject to technical changes © Hanwha Q CELLS Q.PEAK BLK G5.1_285-290_2017_01_Rev04_EN

Q CELLS

Engineered in Germany