

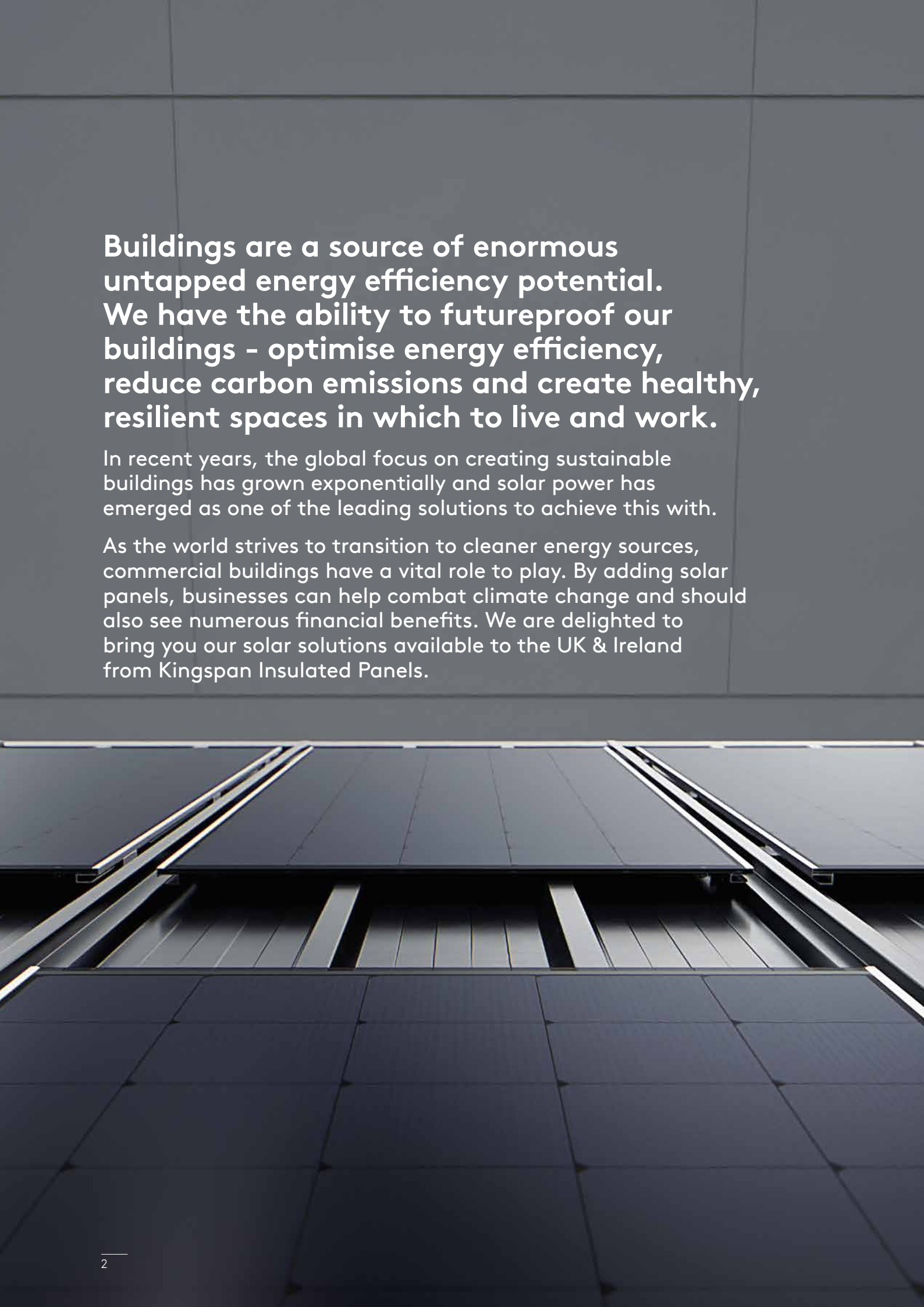
Insulated Panels
UK & Ireland

**Make the switch
and lead the charge
to renewable energy.**

Kingspan QuadCore® PowerPanel
Kingspan PowerRail FR
Kingspan PowerCanopy

Make the switch and lead the charge to
renewable energy with Kingspan.





Buildings are a source of enormous untapped energy efficiency potential. We have the ability to futureproof our buildings - optimise energy efficiency, reduce carbon emissions and create healthy, resilient spaces in which to live and work.

In recent years, the global focus on creating sustainable buildings has grown exponentially and solar power has emerged as one of the leading solutions to achieve this with.

As the world strives to transition to cleaner energy sources, commercial buildings have a vital role to play. By adding solar panels, businesses can help combat climate change and should also see numerous financial benefits. We are delighted to bring you our solar solutions available to the UK & Ireland from Kingspan Insulated Panels.

Kingspan QuadCore® PowerPanel

Integrated Solar PV Solution

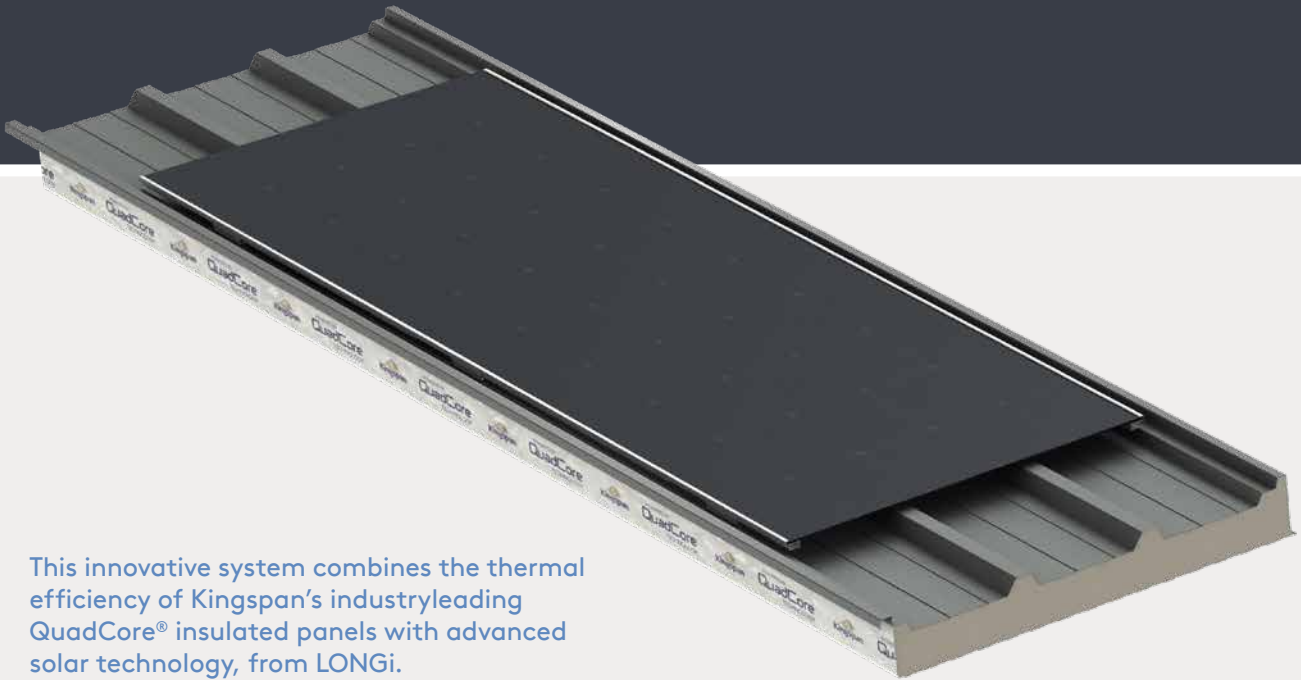
This next generation roof and PV solution combines the thermal efficiency of our industry-leading QuadCore® insulated panels with high-efficiency PV technology to create a single, precision-engineered system.



Insulate +
Generate

Kingspan QuadCore® PowerPanel

Integrated Solar PV Solution



This innovative system combines the thermal efficiency of Kingspan's industryleading QuadCore® insulated panels with advanced solar technology, from LONGi.

- ◆ Tested to FM 4478 standard*
- ◆ U-values as low as 0.11 W/m²K
- ◆ Module energy output of up to 475Wp
- ◆ Slimline Design
- ◆ Precision engineered
- ◆ Factory-controlled manufacturing



Innovative design



Rigorously tested



High performance



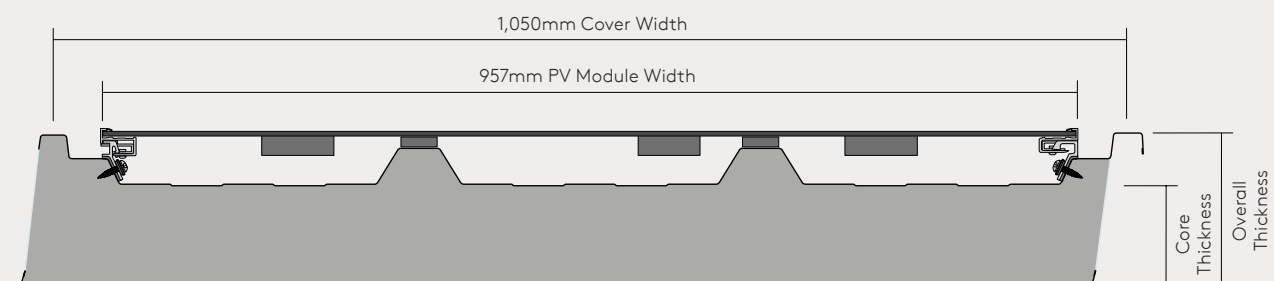
Streamlined installation



Service & support



Full system warranty



* For full testing and product performance information, please visit kingspan.com/gb/en/products/insulated-panels/solar/quadcore-powerpanel.



Benefits of choosing QuadCore® PowerPanel

- ◆ One of the first solar solutions to meet pressure and wind uplift resistance.
- ◆ Simplify installation, reduce deliveries, minimise on-site risks and secure high thermal and operational carbon efficiency.
- ◆ Manufactured in the UK using leading quality-control methods and dependable UK and Ireland delivery.
- ◆ Blends high performance with a sleek, slimline design to enhance building aesthetics.

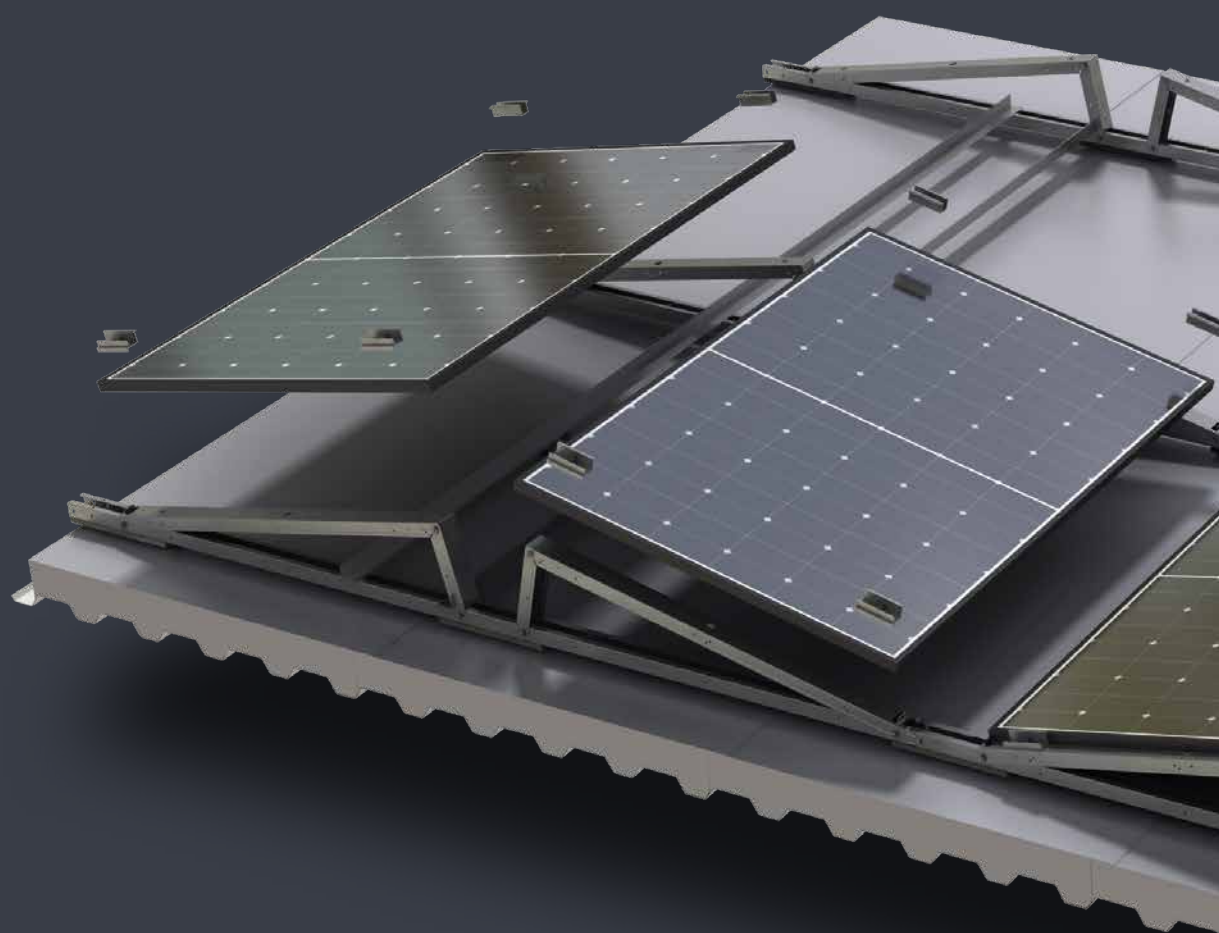


Dimensions, weight, thermal performance and output

Core Thickness (mm)	104	118	126	172
Overall Thickness (mm)	154	168	176	222
U-value (W/m²K)	0.18	0.16	0.15	0.11
Weight (kg/m²)*	23.5	24.1	24.4	26.1
Cover Width (mm)	1,050			
Solar Cell	Back Contact Monocrystalline Silicon Solar Cells by LONGi			
Module Power Output (Wp)	460 – 475			
Module Dimensions (mm)	2,274 x 957 x 5			
Module Weight (kg)	27.1			

The QuadCore® insulation used in QuadCore® PowerPanel Roof Panel has a Thermal Conductivity (λ) of 0.019 W/m.K. QuadCore® PowerPanel Roof Panel has a Thermal Transmittance (U-value), calculated using the method required by the Building Regulations Part L2 (England & Wales), Building Standards Section 6 (Scotland), Part L (Republic of Ireland) and Part F2 (Northern Ireland).

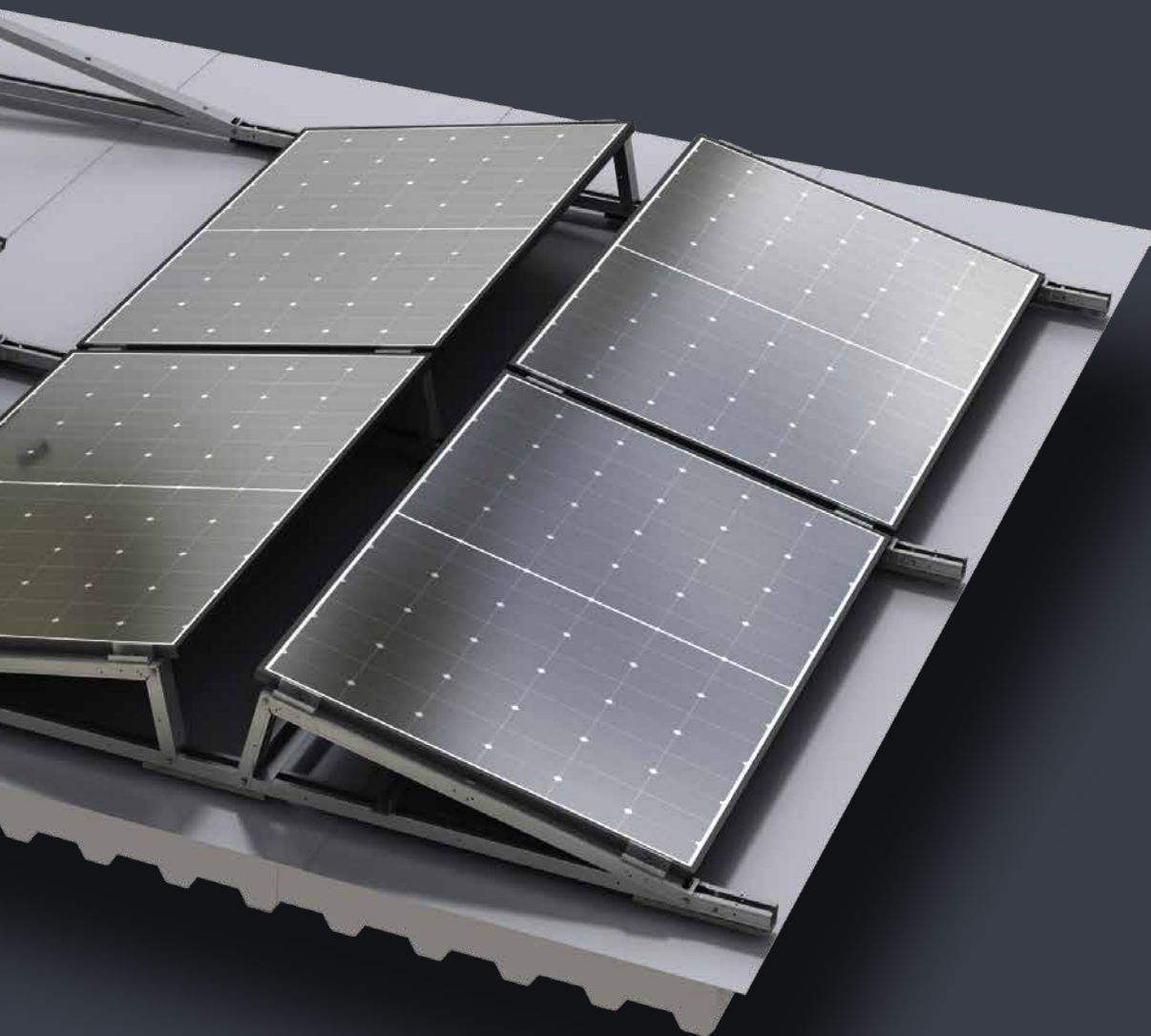
* For weight of panel only, see QuadCore® FutureProof Roof Panel product data sheet.



Kingspan PowerRail FR

Rooftop Solar PV Mounting Solution

PowerRail FR is a cost-effective PV mounting solution and its lightweight design offers quick and easy installation onto Kingspan QuadCore® Topdek Roof Panels and other flat roofs.



Kingspan PoweRail FR

Developed for the mounting of solar PV modules on to QuadCore® Topdek Roof Panels* and other flat roofs



Kingspan PoweRail FR sits on the surface of the insulated roof panel, making solar PV module installation faster and simpler than ever before.

- ◆ 'Click-fit' assembly for fast, easy installation
- ◆ Single source for roof and mounting supply
- ◆ Integrated fixing point or non-penerative ballast solutions available
- ◆ Fixings included
- ◆ Compatible with most standard PV modules



Innovative



Cost-effective solution



Optimised design



Quick & easy installation



Service & support



Industry-leading warranty



Kingspan QuadCore®
Topdek Roof Panel

Kingspan PoweRail FR East / West
or
Kingspan PoweRail FR South

Solar PV modules by others

Supplied by

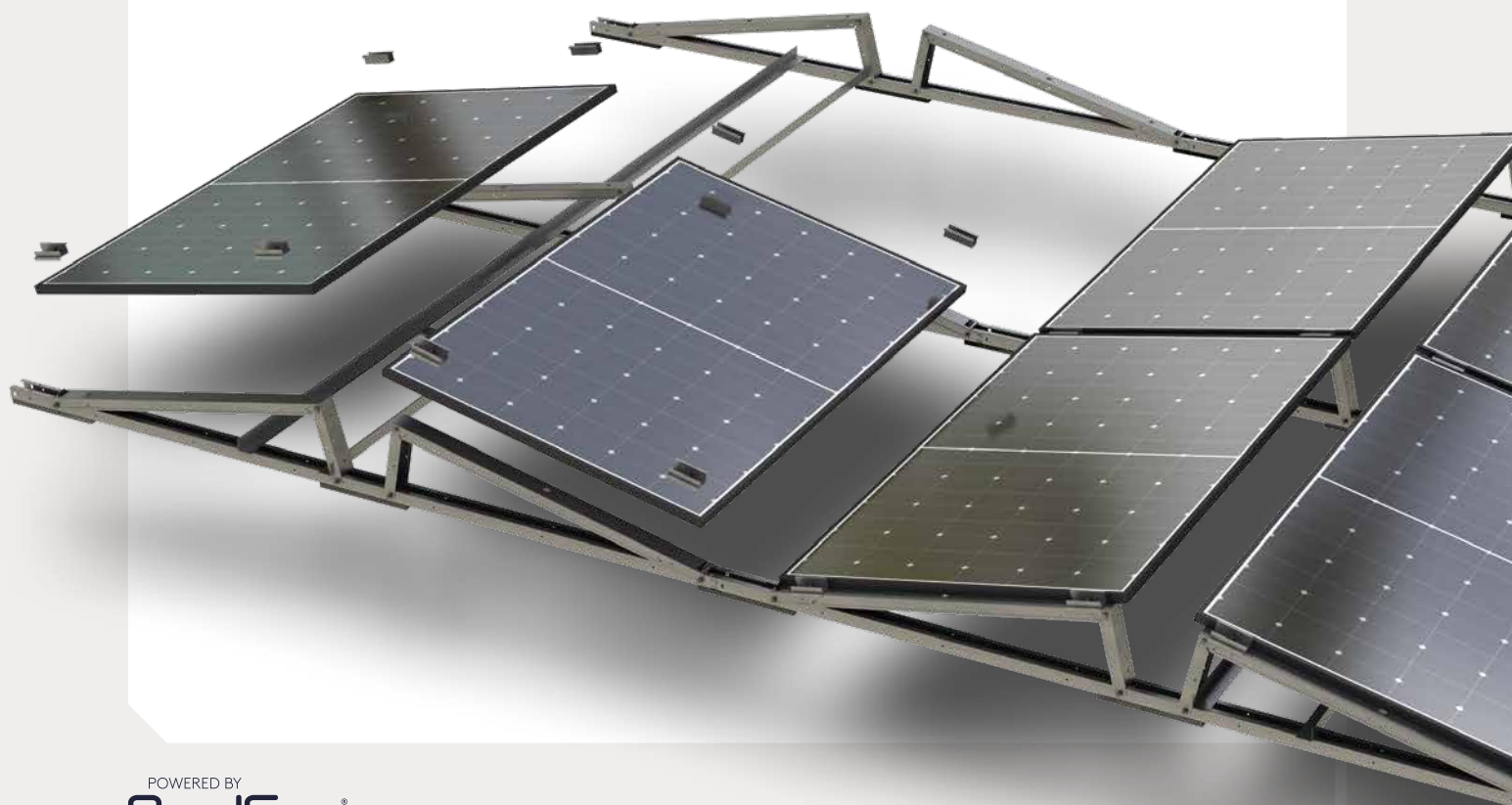
SÖLEN
Solar Energy Solutions. Delivered.

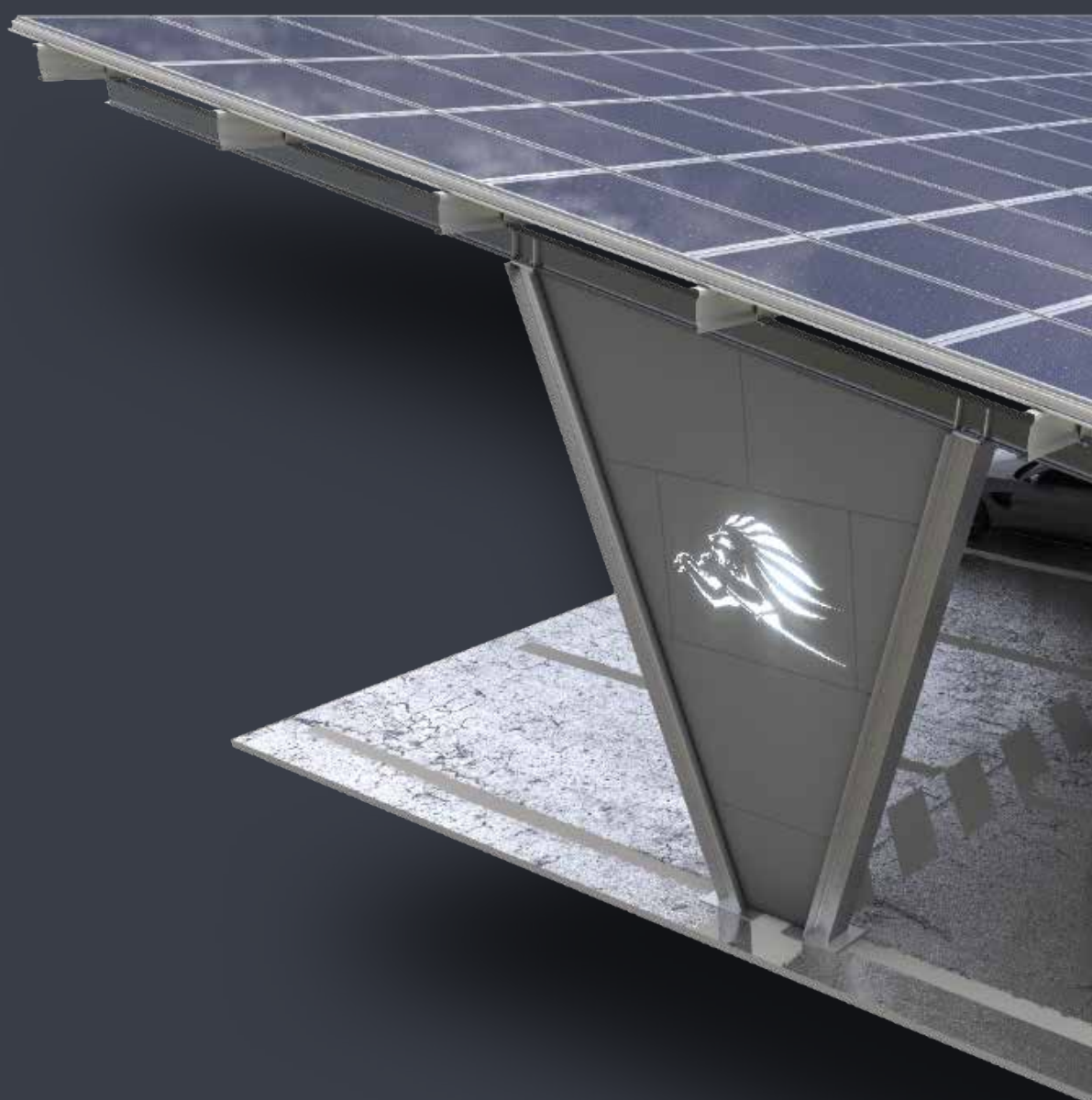
*For full technical and system testing information, reference product data sheet.



Benefits of choosing PoweRail FR

- ◆ Simple design to ensure your roof integrity and warranty is maintained
- ◆ Cost-effective solution
- ◆ Quick and easy installation
- ◆ Can be sold as a system with roof panel + mounting system or solar PV mounting system only
- ◆ Expert technical design support
- ◆ PoweRail FR is designed for use with QuadCore® Topdek Roof Panels and other flat roofs
- ◆ Up to 12-year manufacturer warranty
- ◆ Single source warranty when purchasing QuadCore® Topdek Roof Panel and solar PV mounting system





Kingspan PowerCanopy

Modular Solar PV Carport Solution

Kingspan PowerCanopy is a modular solar carport solution, that combines design flexibility with the ability to generate electricity at source and deliver it to charge vehicles.



Kingspan PowerCanopy

Modular Solar Carport Solution



PowerCanopy GW

With the increasing transition to electric vehicles, more facilities are installing charging stations to allow their users the ability to charge while at work, but this imposes an additional electricity demand on the facility.



Innovative



Cost-effective
solution



Optimised
design

Kingspan PowerCanopy is a modular solar carport solution supported by a proven mounting system with over 600 MW deployed across Europe.

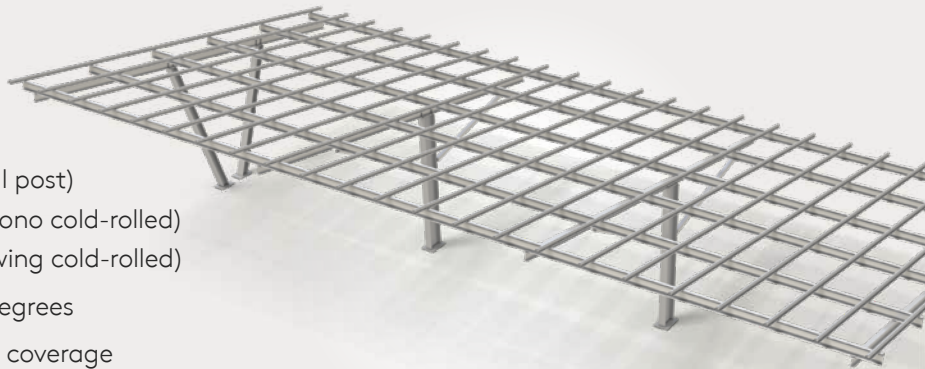


Quick & easy
installation



Service &
support

- ◆ The PowerCanopy range features the following designs:
 - PowerCanopy SM-4P (single-mono)
 - PowerCanopy SM (single-mono)
 - PowerCanopy DM (double-mono)
 - PowerCanopy GW (gull wing)
 - PowerCanopy GW-DP (gull wing dual post)
 - New PowerCanopy SM-CR (single-mono cold-rolled)
 - New PowerCanopy GWDP-CR (gull wing cold-rolled)
- ◆ Roof pitch range of 5, 7.5, 10 and 12.5 degrees
- ◆ Cost-effective modular design provides coverage to suit any car park layout
- ◆ Single-source PV and canopy solution option
- ◆ Compatible with most standard PV modules



PowerCanopy DM

Supplied by

SÖLEN
Solar Energy Solutions. Delivered.

Over **600 MW** of PoweRail RC3 PV Mounting system deployed across Europe.

Why choose Kingspan PowerCanopy?

- ◆ Cost-effective modular design
- ◆ Innovative design allows PV modules to be slid into position and secured from below for quick, safe installation
- ◆ Now available as lightweight, cold-rolled steel frame solutions
- ◆ Full watertight canopy achieved with PV module mounting system
- ◆ Expert technical design support
- ◆ Optional gutter solutions available to assist rainwater harvesting



System configurations

Solution	Spaces	Power (kWp)	Length (m)	Parking Width (m)	Area (m ²)	No. PV Modules
PowerCanopy SM-4P/SM	9	24.70*	22.20	2.40	105.70	38
PowerCanopy DM5	18	49.40*	22.20	2.40	210.90	76
PowerCanopy DM7	18	61.75*	22.20	2.40	264.20	95
PowerCanopy GW	18	74.10*	22.20	2.40	319.70	114
PowerCanopy GW-DP	18	74.10*	22.20	2.40	319.70	114
PowerCanopy SM-CR	9	26.22**	22.20	2.40	117.30	57
PowerCanopy GWDP-CR	18	69.20**	22.20	2.40	313.00	152

Typical canopy details based on a 3-bay / 9 parking space widths layout. 1 bay = 3 x car parking widths.

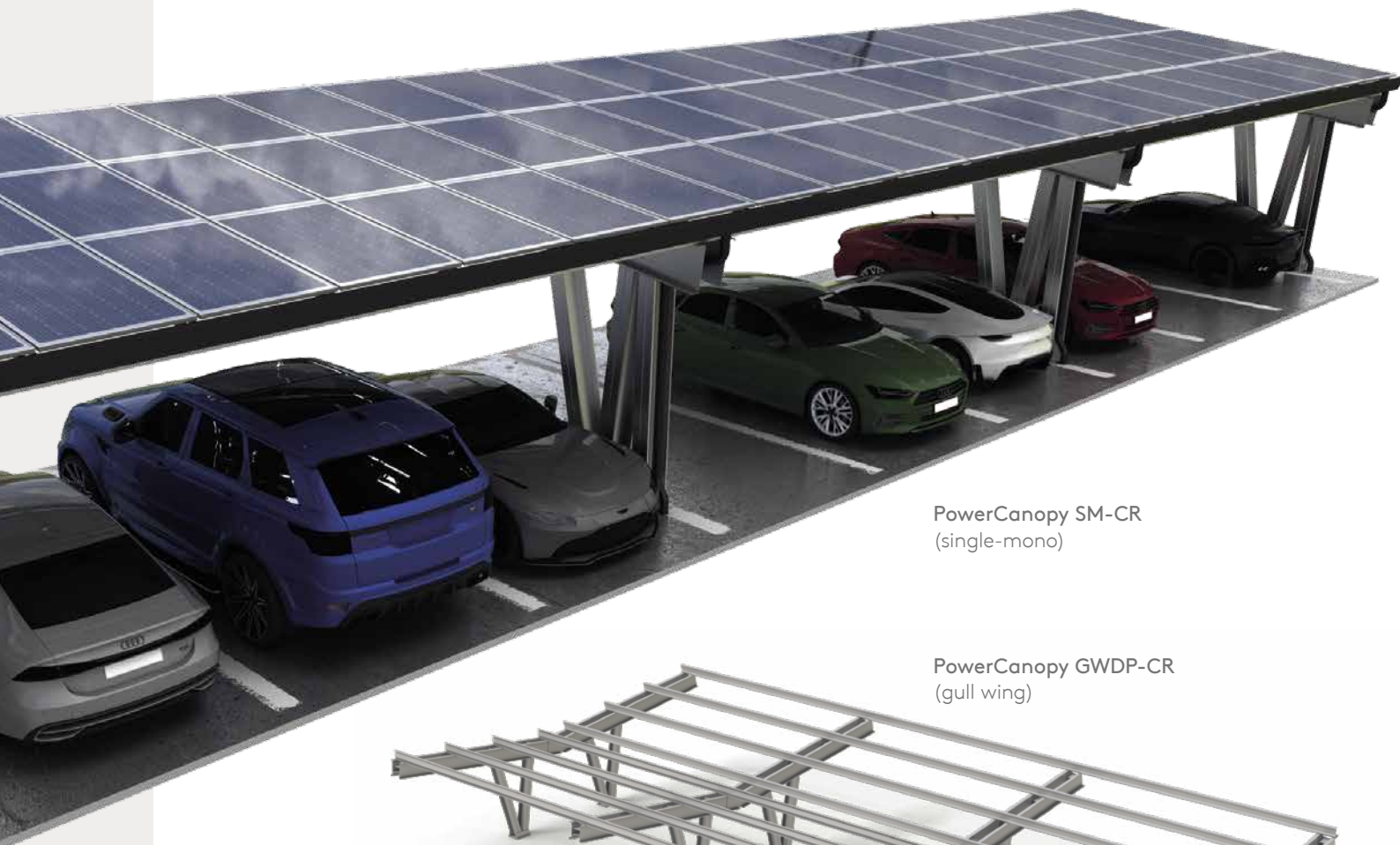
* 650 Wp module (2,382 mm x 1,134 mm).

** 460 Wp module (1,762 mm x 1,134 mm).

Kingspan PowerCanopy Cold-rolled options

Kingspan PowerCanopy is now available as lightweight, cold-rolled steel frame solutions.

Designed using structural steel systems readily available from Kingspan, the cold-rolled options provide alternative solutions that can reduce lead times to assist with tight programme constraints.



PowerCanopy SM-CR
(single-mono)



PowerCanopy GWDP-CR
(gull wing)

Customised options

Customisable options are available using the full suite of Kingspan solutions.

Customisable options

- ◆ EV charging brackets
- ◆ Inverter plate locations

We have the capabilities to produce a solution to support your needs.

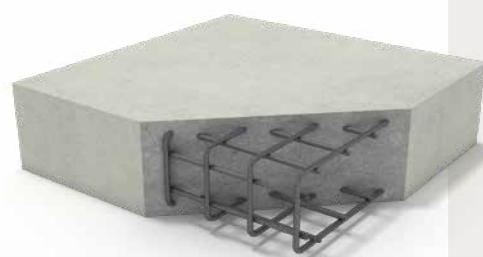
System design

The combination of our PowerCanopy solutions and experienced in-house design team, delivers efficient and cost-effective solutions.

Ground connections

PowerCanopy systems can be adapted to suit any ground connection detail, such as:

- ◆ concrete foundations;
- ◆ helical piles; and
- ◆ ground anchors.



Concrete foundations



Helical piles



Ground anchors



Kingspan PowerCanopy

System components and options

System components

Standard supply

- 1 End structural post (V)
- 2 Intermediate structural posts including support arms
- 3 Structural rafters
- 4 Multibeam purlins kit
- 5 PoweRail RC3 PV mounting rail system

Additional options

- 6 Solar modules
- 7 Rainwater drainage
- 8 Customisable façade end insert

All fixings supplied.

Foundations and associated connections are not included.

For further technical information, please contact kingspansolar@kingspan.com







Solen

Solar PV Distributor



Solen Energy UK, now part of Kingspan Group, has been in the solar industry for over 14 years and is one of the UK's most trusted PV distributors.

Solen

Solar Energy Solutions, Delivered.

Solen's vision

The vital role that low carbon sources of energy have to play in the future of our planet has finally gained universal recognition and support. World leaders have set themselves ambitious targets and Solen Energy UK are committed to helping convert those targets into reality.

Solen is a progressive and forward-thinking company that was at the forefront of alternative energy solutions long before they gained mainstream recognition. Now part of Kingspan, Solen supply our PoweRail and PowerCanopy products, as well as providing expert system support for PowerPanel projects. Solen continue to work in partnership with leading international companies to provide clients with the optimum solutions to their alternative energy requirements.

Online portal

Solen products can be purchased easily and conveniently through the online portal. If you require any advice before making a purchase, please do not hesitate to contact one of the dedicated sales team members, who will be happy to help.



Solar Energy Solutions, Delivered.



Scan here to visit
the Solen website

Design guidance

Solen offer a free in-house design guidance support service. Our team of dedicated designers are on hand ready to bring ideas to life.

PV System support service

Solen specialise in supporting installers, working with Kingspan PowerPanel, by supplying the full balance of system – everything that is required beyond the module.

Solen's team works closely with commercial PV new build and retrofit contractors to make sure every part of the system is right first time – acting as the link between the roof manufacturer and the installer, providing expert support throughout the process.

Solen offer the following services:

- ◆ Full electrical solar system design guidance tailored to each project;
- ◆ A wide range of inverter options to suit different layouts and budgets;
- ◆ Dedicated account managers for quick, reliable support;
- ◆ Deep product knowledge and hands-on technical advice.

After sales service

Solen after sales service is second-to-none, with dedicated account managers to assist with all enquiries and in-house training facilities for partners. Solen after care services are unrivalled within the solar and electrical industry.



Solen provide:

Kingspan PowerRail FR



Kingspan PowerRail RW



Kingspan PowerCanopy



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For the product offering in other markets please
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