

Insulated Panels
UK & Ireland



Protected by



QuadCore® Curved Wall Panel Product Data Sheet

POWERED BY
QuadCore®
TECHNOLOGY



Product Data

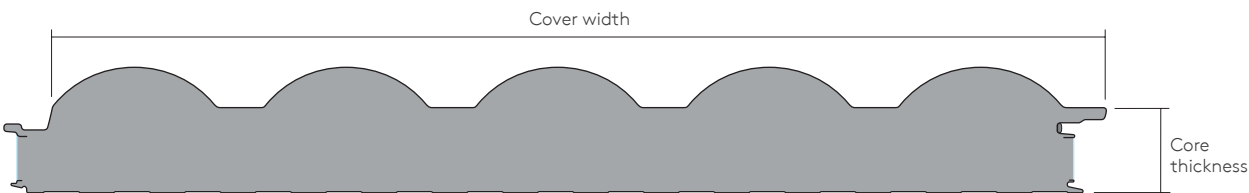
Applications

QuadCore® Curved Wall Panel is a secret-fix wall panel with distinctive rolling profile. This panel can be installed both horizontally and vertically.

Available Lengths

Standard Lengths (m)	1.2 - 14.5
Longer Lengths (non-standard) (m)	14.5 - 18.3
Shorter Lengths (non-standard) (m)	Below 1.2

Note: Additional costs and transport restrictions may apply for non-standard lengths. All lengths may change for export (outside of the UK & Ireland).



Dimensions, Weight & Thermal Performance

Core Thickness (mm)	45	54	60	74	80	90	100	120	140
Overall Thickness (mm)	83	92	98	112	118	128	138	158	178
U-Value (W/m²K)	0.39	0.32	0.28	0.23	0.21	0.18	0.17	0.14	0.12
Weight (kg/m²)	11.3	11.6	11.9	12.4	12.6	13.0	13.4	14.2	14.9

The QuadCore® insulation used in QuadCore® Curved Wall Panel has a Thermal Conductivity (λ) of 0.018 W/m.K
QuadCore® Curved Wall 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).

Insulation Core

QuadCore® Curved Wall Panel is manufactured with an HCFC, CFC and HFC free QuadCore® insulation core.



Product Data

Certification and Testing

Reaction to Fire

QuadCore® Curved Wall Panel is classified B-s1,d0, when tested on the internal face of the product, according to the European Reaction to Fire classification system (Euroclasses) EN 13501-1: 2018 under the certified name AWP Product Family when using the following internal liners:

- CLEANsafe 15, CLEANsafe 25, CLEANsafe 55, CLEANsafe 120 and AQUAsafe 55.

Please contact Kingspan Tech-eXchange for information relating to the external face.

Insurer Approvals

QuadCore® Curved Wall Panels are tested to:

- LPS 1181 Part 1: Issue 1.2 Requirements and tests for built-up cladding and sandwich panel systems for use as the external envelope of buildings certified to:
 - LPS 1181-1 Grade EXT-B under the certified name Benchmark Curved DW for thicknesses 45 – 150 mm.
- FM 4880 approval standard for class 1 fire rating of building panels or interior finish materials for thicknesses 45 – 140 mm and panel widths of 1000 mm.
- FM 4881 approval standard for class 1 exterior wall systems for thicknesses 45 – 140 mm and panel widths of 1000 mm.
- FM 4882 approval standard for class 1 interior wall and ceiling materials or systems for smoke sensitive occupancies for thicknesses 45 – 140 mm and panel widths of 1000 mm.

FM approvals are subject to the following certified names:

- For 1000 mm widths: KS1000CW.

Insurer approvals are large scale testing regimes that provide objective third-party testing, which is underpinned by quarterly, bi-annual and annual factory surveillance audits (depending on the region) to verify compliance. Insurer approvals are subject to panel thickness, cover width, orientation, method of assembly, steel coating and manufacturing facility. Please contact Kingspan Tech-eXchange for further information.



Environmental

Kingspan Insulated Panels produced in the UK and Ireland are certified to BES 6001 (Framework Standard for the Responsible Sourcing of Construction Products) 'Good'.

In addition, facilities located in Kingscourt, Holywell and Sherburn generate renewable energy onsite which contributes to that sites energy mix.

Recycled content calculations are available for all QuadCore® products via technical services. Kingspan insulated panels can directly contribute to BREEAM® / LEED® credits.

Air Leakage

An air leakage rate of 3m³/hr/m² at 50Pa or less can be achieved when using Kingspan insulated roof and wall panels.

For information on detailing required to achieve lower air leakage rates please contact Kingspan Tech-eXchange.

Acoustic

Sound Reduction Index (SRI)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
SRI (dB)	20	18	20	24	20	29	39	47

QuadCore® Curved Wall Panel has a single figure weighted sound reduction $R_w = 25\text{dB}$. Results are based on panels of similar profile and core material.

Product Data

Materials

Substrate

Metallic protected steel to BS EN 10346: 2015.

Please contact Kingspan Tech-eXchange for information on other substrates.

Coatings – External Weather Sheet

- Kingspan Spectrum: Consists of a coated semi-gloss finish with slight granular effect.

For Reaction to Fire performance of external weather sheets please contact Kingspan Tech-eXchange.

Coatings – Internal Liner Sheet

- Kingspan CLEANsafe 15: The coating has been developed for use as the internal lining of insulated panels. Standard colour is “bright white” with an easily cleaned surface.
- Kingspan CLEANsafe 120: The coating has been developed for use as the internal lining of insulated panels where a high level of cleanliness and hygiene is required, and the panels are to be cleaned down on a regular basis.
- Kingspan AQUAsafe 55: The coating has been developed for use as the internal lining of insulated panels to swimming pool internal environments.

For Reaction to Fire performance of internal liners please see Certification and Testing section.

Product Tolerances

Cut to Length	± 5 mm
Cover Width	± 2 mm
Thickness (Core ≤ 100mm)	± 2 mm
Thickness (Core > 100mm)	± 2%
End Squareness	± 3 mm

Seals

Factory applied side joint seals. All side joints have a factory applied seal fitted into the groove to automatically seal the joint between panels.

Quality & Durability

QuadCore® Curved Wall Panel is manufactured from the highest quality materials, using state of the art production equipment to rigorous quality control standards, complying with BS EN ISO 9001 standard, ensuring long term reliability and service life. The panels are also being manufactured under Environmental Management System Certification BS EN ISO 14001, Energy Management System Certification BS EN ISO 50001 and Occupational Health and Safety Certification BS EN ISO 45001 and Compliance Management Systems BS EN ISO 37301.

Warranty

QuadCore® Assured Panel Warranty

- 25 years thermal performance
- 25 years fire performance
- 25 years structural performance
- 25 years environmental performance
- Up to 30 years coating performance

Packing

QuadCore® Curved Wall Panels are stacked weather sheet to liner sheet. The top and sides are protected by either cardboard or polystyrene and spiral wrap stretch polyfilm. The number of panels in a pack will vary depending on thickness.

Core Thickness (mm)	45	54	60	74	80	90	100	120	140
No. of Panels per Pack	14	12	12	10	10	8	8	5	5

Note: Applies to UK pack sizes. Please contact Kingspan Tech-eXchange for export information.

Sea Freight

Fully timber crated packs are available on projects requiring delivery by sea freight shipping, at additional costs. Alternatively, steel containers can be used. Special loading charges apply.

Delivery

All deliveries (unless indicated otherwise) are by road transport to project site. Off-loading is the responsibility of the client.

Site Installation Procedure

Site assembly instructions and construction details are available from Kingspan Tech-eXchange.

Contact Details

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