

Kingspan Facades
UK & Republic of Ireland

Protected by



Kingspan Facades QuadCore™ Karrier Panel Product Data Sheet

Factory-engineered Insulated Facade Support System



POWERED BY
QuadCore™
TECHNOLOGY



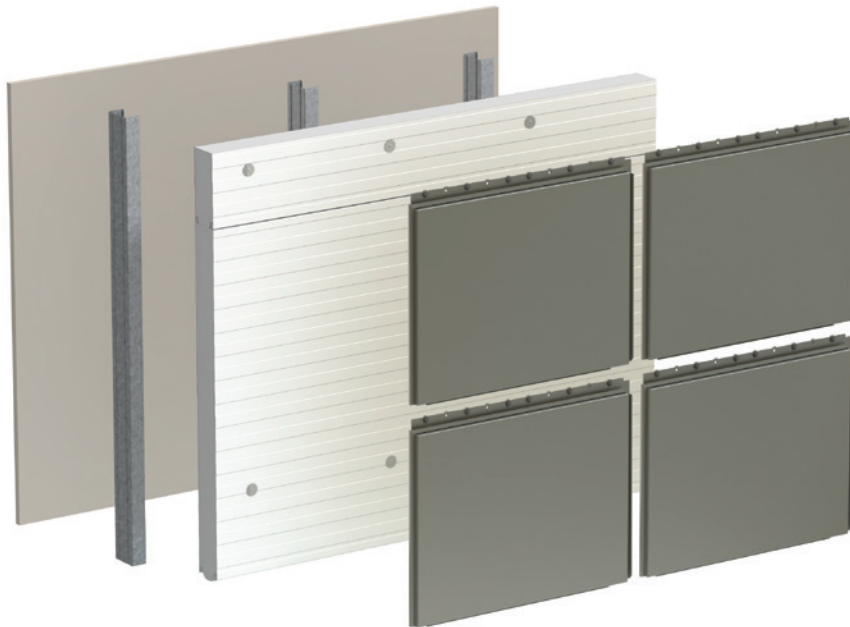
QuadCore™ Karrier

Product Data Sheet

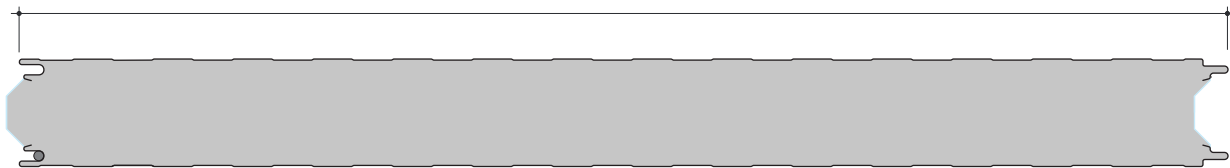
Kingspan Facades is a service-led business unit providing design and construction teams with a comprehensive portfolio of advanced facade systems suitable for a multitude of performance applications and architectural styles. Our aesthetic offering is supported with solutions suitable for all storeys heights that encompass advanced insulation core technology, alongside more traditional solutions.

QuadCore™ Karrier is an integral part of a lightweight, proven factory-engineered building system which comprises individual high-performance insulated panels designed to support cladding. QuadCore™ Karrier provides a weathertight building envelope in a fraction of the time of other systems.

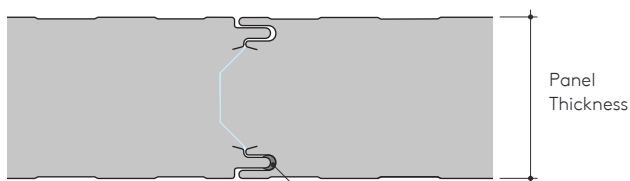
- Continuous insulation
- Fastest build speed and ease of install
- Thermal conductivity of 0.018 W/m-K
- BR 135 / BS 8414 Compliance Assured options available



1,100mm Cover Width



Internal Liner Sheet

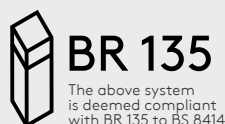


External Weather Sheet

Factory-applied
weather seal (FAWS)

Large Scale Fire Tested System Build-up

32mm deep mill finished aluminium cassettes installed onto outer face of a horizontally laid 80mm thick QuadCore™ Karrier panel to steel frame system.



The hybrid nature of QuadCore™ Technology delivers a range of improvements in fire performance which surpass all other insulated panel systems incorporating closed-cell insulation materials.

Enhanced Environmental Credentials

The improved thermal performance of QuadCore™ Technology helps optimise resource efficiency. It is also 100% recyclable and is CFC, HCFC, HFC free and has a very low Global Warming Potential.

Environmental Performance

The panels are also being manufactured under Environmental Management System Certification BS EN ISO 14001. The panel has a BRE Global verified EPD. The panels are manufactured under ISO 50001:2011 – Energy Management System.

Tolerances

Length (≥ 3m)	± 10mm
Width	± 2mm
Thickness	± 2mm
Flatness (per metre)	± 1.5mm
End Squareness	± 3mm

Available Lengths

Standard Lengths	1.8m - 14.5m
Longer Lengths*	14.5m - 19.7m
Shorter Lengths**	Below 1.8m

* Non-standard lengths. Additional transport cost and/or restrictions may apply for longer length panels.

** Panels less than 1.8m long can be supplied but may be subject to a short sheet surcharge.

Insulation Core

QuadCore™ Karrier panels are manufactured with a QuadCore™ hybrid insulation core which is HCFC, CFC and HFC free.



QuadCore™ Technology is Kingspan's next generation of self-blended hybrid insulation core. Across the world of insulated panels, this innovation with its distinctive grey microcells powers the industry's highest combined performance.

QuadCore™ Technology is certified as the most thermally efficient closed-cell insulation core on the market, with a class-leading aged lambda value of 0.018W/m·K offering the potential to reduce HVAC size, and lower both energy consumption and carbon emissions.

Materials

Substrate

S220G+ZA Galvan hot-dip zinc/aluminium coated steel to BS EN 10326.

External Weather Sheet

Nominal 0.63mm. Equi-bead profile as standard, flat profile available upon request.

External coating: Kingspan Spectrum Basalt as standard.

Internal Liner Sheet

Nominal 0.5mm.

Thermal Conductivity

0.018W/m·K - EN 13165:2012 + A2:2016.

Internal coating: CLEANsafe 15. Standard colour is 'Bright White' polyester with an easily cleaned surface.

Airtightness & Watertightness

QuadCore™ Karrier panels achieve an airtightness of <math><1\text{m}^3/\text{hr}/\text{m}^2</math> at 50Pa in accordance with BS EN 14509 (based on sealed panel joint performance), and a watertight performance to 600Pa.

QuadCore™ Karrier panels feature factory-applied weather seals (FAWS).

In addition QuadCore™ Karrier has been tested to CWCT.

Dimensions, Weights, Thermal Properties & Acoustic Performance

Panel Thickness (mm)	50	60	80	100	125	150	175	200	220
Weight (kg/m ²) 0.63 steel / 0.5 steel	11.7	12.1	12.9	13.7	14.7	15.7	16.7	17.7	18.5
U-value (W/m ² K)	0.38	0.31	0.23	0.18	0.15	0.12	0.10	0.09	0.08
Weighted Sound Reduction Rw (dB)	24	24	24	24	24	24	24	24	24

NB. The above Weighted Sound Reduction figures are based on a 70mm thick panel of similar composition.

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For the product offering in other markets
please contact your local sales representative
or visit www.kingspanfacades.com

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