Insulated Panels
UK & Ireland

Protected by
Kingspan
QuadCore®
Assured

QuadCore® Lo-Pitch Roof Panel

Product Data Sheet

POWERED BY
QuadCore®
TECHNOLOGY

Kingspan®

Product Data

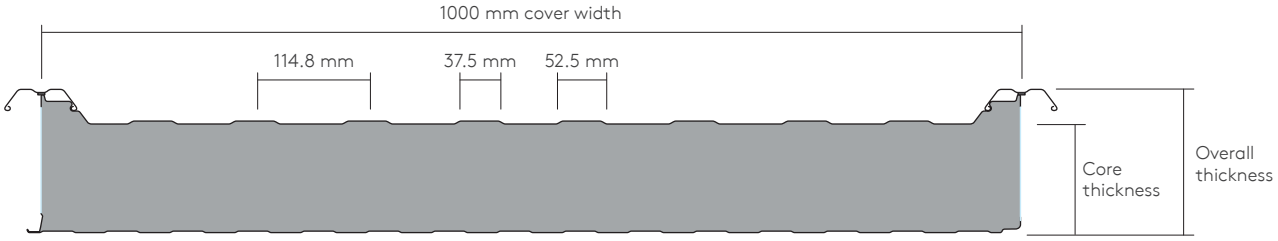
Applications

QuadCore® Lo-Pitch Roof Panels are secret-fix, profiled, insulated roof panels which can be used for building applications with roof pitches of 1.5° or more after deflection.

Available Lengths

Standard Lengths (m)	2.0 - 14.5
Longer Lengths (non-standard) (m)	14.5 - 29.2
Shorter Lengths (non-standard) (m)	Below 2.0

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



Dimensions, Weight & Thermal Performance

Core Thickness (mm)	80	115
Overall Thickness (mm)	112	147
U-Value (W/m²K)	0.24	0.16
Weight (kg/m²)*	10.9	12.3

* Weight includes the weight of cover cap 0.47 kg/m.

The QuadCore® insulation used in QuadCore® Lo-Pitch Roof Panel has a Thermal Conductivity (λ) of 0.019 W/m.K

QuadCore® Lo-Pitch 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).

Insulation Core

QuadCore® Lo-Pitch Roof Panels are manufactured with an HCFC, CFC and HFC free QuadCore® insulation core.

POWERED BY QuadCore® TECHNOLOGY

Certification and Testing

Reaction to Fire

QuadCore® Lo-Pitch Roof Panels are classified B-s1,d0, when tested on the internal face of the product, according to the European Reaction to Fire classification system (Euroclasses) BS EN 13501-1: 2018 under the certified name Lo-Pitch QuadCore® when using the following internal liners:

- CLEAN*safe* 15, CLEAN*safe* 25, CLEAN*safe* 55, CLEAN*safe* 120 and AQUA*safe* 55.

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

Roof Applications

QuadCore® Lo-Pitch Roof Panels are tested to:

- BROOF(t4) to BS EN 13501-5: 2016 under the certified name Lo-Pitch for panel thicknesses 80 mm and 115 mm and roof pitch of 0° - 10°.

Product Data

Insurer Approvals

QuadCore® Lo-Pitch Roof Panels are tested to:

- FM 4471 approval standard for class 1 roof panels under the certified name QuadCore® Lo-Pitch KS1000LP. This classification is valid for panel thicknesses 80 – 115 mm.

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.

FM APPROVED

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 $3m^3/hr/m^2$ 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® Lo-Pitch Roof Panels have a single figure weighted sound reduction Rw = 25dB. Results are based on panels of similar profile and core material.

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 XL Forté: Consists of a multi-layer organic coating, embossed with a traditional leather-grain finish.
- 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 CLEAN*safe* 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 CLEAN*safe* 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 AQUA*safe* 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 panels with above internal liners please see Certification and Testing section.

Panel End Cut Back

Eaves Cut Back	75 mm
End Lap	75 mm

For further information in relation to end laps please contact Kingspan Tech-eXchange.

Product Tolerances

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

Product Data

Handing

QuadCore® Lo-Pitch Roof Panels can be manufactured in both left to right handed (LH) and right to left handed (RH).

Cover Caps

Material	To suit weather sheet
Maximum Length (m)	12.0

Note: Available in plain ended for eaves to ridge in one length or joggle ended for when the cover cap is being end lapped due to multiple lengths up the slope.

Quality & Durability

QuadCore® Lo-Pitch Roof Panels are 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.

QuadCore® Lo-Pitch Roof Panels are CE marked to BS EN 14509: 2013.

CE

Warranty

QuadCore® Assured Panel Warranty

- 25 years thermal performance
- 25 years fire performance
- 25 years structural performance
- 25 years environmental performance
- Up to 40 years coating performance

Packing

QuadCore® Lo-Pitch Roof 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)	80	115
No. of Panels per Pack	11	8

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.

Product Data: Load / Span Tables

Load / span tables to be compared against calculated characteristic (i.e. unfactored) wind load values.

Single Span

Core Thickness (mm)	Load Type	Uniformly distributed imposed load (kN/m²)																						
		Span (m)																						
		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0
80	Pressure	7.88	6.36	5.49	4.85	4.32	3.85	3.44	3.03	2.51	2.10	1.76	1.49	1.26	1.07	0.91	0.77	0.66	0.56	0.48	0.41	0.35	-	-
	Suction	8.30	6.75	5.86	5.20	4.66	4.18	3.76	3.38	3.04	2.74	2.48	2.25	2.05	1.87	1.71	1.54	1.39	1.26	1.15	1.05	0.97	-	-
115	Pressure	10.40	8.85	7.91	7.16	6.49	5.88	5.32	4.80	4.12	3.52	3.03	2.62	2.27	1.98	1.72	1.51	1.32	1.16	1.02	0.90	0.79	0.69	0.61
	Suction	10.95	9.37	8.41	7.64	6.96	6.32	5.71	5.15	4.69	4.29	3.90	3.50	3.06	2.69	2.39	2.14	1.93	1.75	1.59	1.46	1.34	1.24	1.15

Double Span

Core Thickness (mm)	Load Type	Uniformly distributed imposed load (kN/m²)																						
		Span (m)																						
		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0
80	Pressure	6.89	4.36	3.07	2.31	1.82	1.47	1.22	1.04	0.89	0.78	0.68	0.60	0.54	0.48	0.43	0.39	0.36	0.32	-	-	-	-	-
	Suction	6.77	4.33	3.10	2.38	1.92	1.60	1.36	1.19	1.06	0.95	0.87	0.80	0.74	0.69	0.65	0.61	0.58	0.55	-	-	-	-	-
115	Pressure	7.75	5.05	3.63	2.77	2.20	1.79	1.50	1.27	1.10	0.96	0.84	0.75	0.67	0.60	0.55	0.50	0.45	0.41	0.38	0.35	0.32	-	-
	Suction	7.65	5.04	3.68	2.86	2.31	1.93	1.66	1.45	1.28	1.16	1.05	0.97	0.89	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.58	-	-

1 Values have been calculated using the method described in BS EN 14509: 2013, for medium coloured panels.

2 The following deflection limits have been used:
- Short term pressure loading $^{L}/_{200}$.
- Short term suction loading $^{L}/_{150}$.
- Long term loading $^{L}/_{100}$.

3 All panel thicknesses have been calculated with a minimum end support width of 50 mm and intermediate support width of 50 mm. Larger support widths are possible.

4 The actual wind suction resisted by the panel is dependent upon the number of fasteners and the material of the supporting element.

5 The fastener calculation should be carried out in accordance with the appropriate standards.

6 For intermediate values linear interpolation may be used.

7 The allowable steelwork tolerance between bearing planes of adjacent supports is ±5 mm.

Product Data: Load / Span Tables

Load / span tables to be compared against calculated characteristic (i.e. unfactored) wind load values.

Triple Span

Core Thickness (mm)	Load Type	Uniformly distributed imposed load (kN/m²)																						
		Span (m)																						
		0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0	4.2	4.4	4.6	4.8	5.0
80	Pressure	7.88	4.96	3.50	2.66	2.12	1.75	1.48	1.27	1.11	0.98	0.87	0.78	0.70	0.63	0.58	0.53	0.48	0.44	0.41	0.38	0.35	0.32	-
	Suction	7.79	4.92	3.53	2.74	2.23	1.89	1.63	1.44	1.29	1.17	1.07	0.99	0.92	0.86	0.80	0.76	0.71	0.68	0.64	0.61	0.59	0.56	-
115	Pressure	8.74	5.60	4.02	3.09	2.48	2.06	1.74	1.51	1.32	1.17	1.04	0.94	0.85	0.77	0.71	0.65	0.59	0.55	0.51	0.47	0.44	0.41	0.38
	Suction	8.60	5.58	4.07	3.18	2.61	2.21	1.92	1.70	1.52	1.38	1.27	1.17	1.09	1.02	0.96	0.90	0.86	0.81	0.78	0.74	0.71	0.68	0.65

1 Values have been calculated using the method described in BS EN 14509: 2013, for medium coloured panels.
2 The following deflection limits have been used:
  – Short term pressure loading $^{L}/_{200}$.
  – Short term suction loading $^{L}/_{150}$.
  – Long term loading $^{L}/_{100}$.
3 All panel thicknesses have been calculated with a minimum end support width of 50 mm and intermediate support width of 50 mm. Larger support widths are possible.
4 The actual wind suction resisted by the panel is dependent upon the number of fasteners and the material of the supporting element.
5 The fastener calculation should be carried out in accordance with the appropriate standards.
6 For intermediate values linear interpolation may be used.
7 The allowable steelwork tolerance between bearing planes of adjacent supports is ±5 mm.

Contact Details

UK

Kingspan Limited
Greenfield Business Park No. 2
Greenfield | Holywell | Flintshire
North Wales | CH8 7GJ

T: +44 (0) 1352 716100
E: info@kingspanpanels.com
www.kingspanpanels.co.uk

Ireland

Kingspan Limited
Carrickmacross Road | Kingscourt
Co. Cavan | A82 E897

T: +353 (0) 42 96 98500
E: info.ire@kingspanpanels.com
www.kingspanpanels.ie

Please scan for the most up to date version of this document.

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

Sixth Issue | 08/01/2026