

Insulated Panels
UK & Ireland

Protected by



KS1000SRW Roof Panel

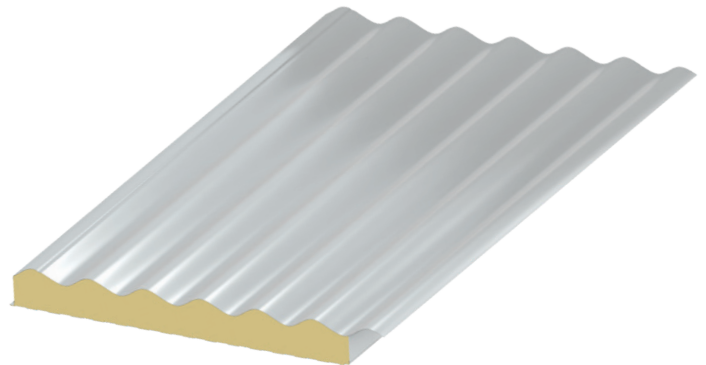
Product Data Sheet



Product Data

Applications

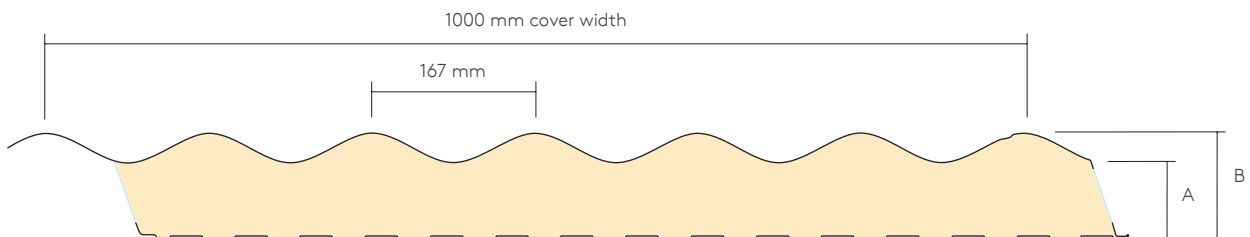
KS1000SRW Roof Panel is a through-fix sinusoidal profiled insulated roof panel which can be used for building applications with roof pitches of 4° or more after deflection.



Available Lengths

Standard Lengths (m)	1.8 - 14.5
Longer Lengths (non-standard) (m)	14.5 - 18.2
Shorter Lengths (non-standard) (m)	Below 1.8

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

A - Core Thickness (mm)	40	60	80
B - Overall Thickness (mm)	70	90	110
U-Value (W/m ² K)	0.46	0.32	0.25
Weight (kg/m ²)	9.5	10.3	11.1

The polyisocyanurate (PIR) insulation used in KS1000SRW Roof Panels has a Thermal Conductivity (λ) of 0.020W/m.K

KS1000SRW Roof Panels have 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

KS1000SRW Roof Panels are manufactured with a polyisocyanurate (PIR) core.

Certification and Testing

Reaction to Fire

KS1000SRW 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: 2007+A1: 2009 under the certified name KS 1000SR and BS EN 13501-1:2018 under the certified name KS1000 SR 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.

Roof Applications

KS1000SRW Roof Panels are tested to:

- BROOF(t4) to BS EN 13501-5: 2016 under the certified name KS1000SRW for panel thicknesses 40mm - 80mm for roof pitch of 0° - 10°.
- BROOF(t4) to BS EN 13501-5: 2016 under the certified name KS1000SRW for panel thicknesses 40 - 80mm for roof pitch of >10°.

Insurer Approvals

KS1000SRW Roof 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 KS1000SRW (roof and wall panel) for thicknesses 40 - 80mm.

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.



LPS 1181-1: Issue 1
Cert: 196a & 260a
LPCB Ref: 260a/72

Environmental

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

All Kingspan Insulated Panels manufacturing facilities across the UK and Ireland are 100% Net Zero Energy. In addition, facilities located in Kingscourt, Holywell and Sherburn generate renewable energy onsite which contributes to that sites energy mix.

Kingspan Insulated Panels procure steel that is made from 15 - 25% recycled content. Kingspan insulated panels 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

KS1000SRW Roof Panels have a single figure weighted sound reduction $R_w = 25$ 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 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 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 panels with above internal liners please see Certification and Testing section.

Panel End Cut Back

Standard Cut Back Eaves	50mm, 75mm, 100mm
Standard Cut Back End Lap	150mm

Product Tolerances

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

Handing

KS1000SRW Roof Panels can be manufactured in both left to right handed (LH) and right to left handed (RH).

Quality & Durability

KS1000SRW 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. KS1000SRW Roof Panels are CE marked to BS EN 14509: 2013.



Warranty

Kingspan Panel Warranty covering the following subject to project specific information:

- 25 year thermal performance warranty;
- 25 year structural performance warranty; and
- Up to 40 year external coating warranty.

Packing

KS1000SRW Roof Panels are stacked weather sheet to weather sheet (to minimise pack height). 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)	40	60	80
No. of Panels per Pack	19	15	11

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

Structural Tables

External sheet 0.5mm (steel), internal sheet 0.4mm (steel).

Unfactored load / span tables (to be compared against calculated design wind load values unfactored).

Single Span

Core Thickness (mm)	Load Type	Span (m)							
		Uniformly distributed imposed load (kN/m ²)							
		1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
40	Pressure	3.29	2.77	2.13	1.65	1.29	1.01	0.80	0.63
	Suction	3.40	2.92	2.55	2.12	1.77	1.50	1.30	1.13
60	Pressure	4.63	3.92	3.13	2.52	2.04	1.67	1.37	1.12
	Suction	4.71	3.64	2.91	2.39	2.00	1.70	1.47	1.28
80	Pressure	5.93	5.09	4.16	3.43	2.85	2.38	1.99	1.68
	Suction	5.25	4.08	3.27	2.68	2.25	1.91	1.65	1.44

Double Span

Core Thickness (mm)	Load Type	Span (m)							
		Uniformly distributed imposed load (kN/m ²)							
		1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0
40	Pressure	3.29	2.80	2.44	2.15	1.93	1.74	1.59	1.46
	Suction	3.40	2.92	2.55	2.12	1.77	1.50	1.30	1.13
60	Pressure	4.58	3.96	3.41	2.91	2.53	2.21	1.96	1.74
	Suction	3.40	2.85	2.43	2.11	1.86	1.66	1.47	1.28
80	Pressure	5.19	4.56	3.85	3.31	2.88	2.53	2.24	2.01
	Suction	4.28	3.60	3.09	2.68	2.25	1.91	1.65	1.44

- Values have been calculated using the method described in BS EN 14509: 2013, for medium and light coloured panels.
- The following deflection limits have been used:
 - Pressure loading $L/200$.
 - Suction loading $L/150$.
- The actual wind suction resisted by the panel is dependent upon the number of fasteners and the material of the supporting element.
- The fastener calculation should be carried out in accordance with the appropriate standards. For further advice please contact Kingspan Tech-eXchange.
- The allowable steelwork tolerance between bearing planes of adjacent supports is +/- 5mm.
- Load span tables for the panel specification not shown are available from Kingspan Tech-eXchange.
- FM approved panels spans must be limited to a maximum of 2 metres in single / double / multi-span condition.

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

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