

Insulated Panels
UAE

KSD1000RW Roof Panel

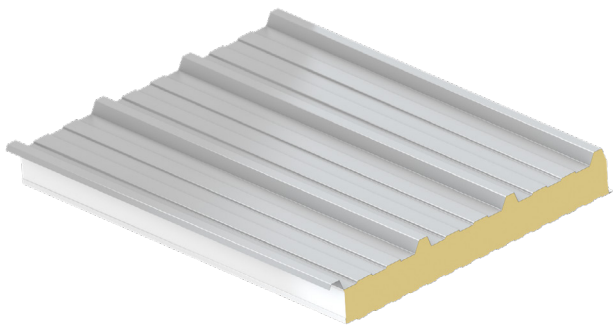
Product Data Sheet



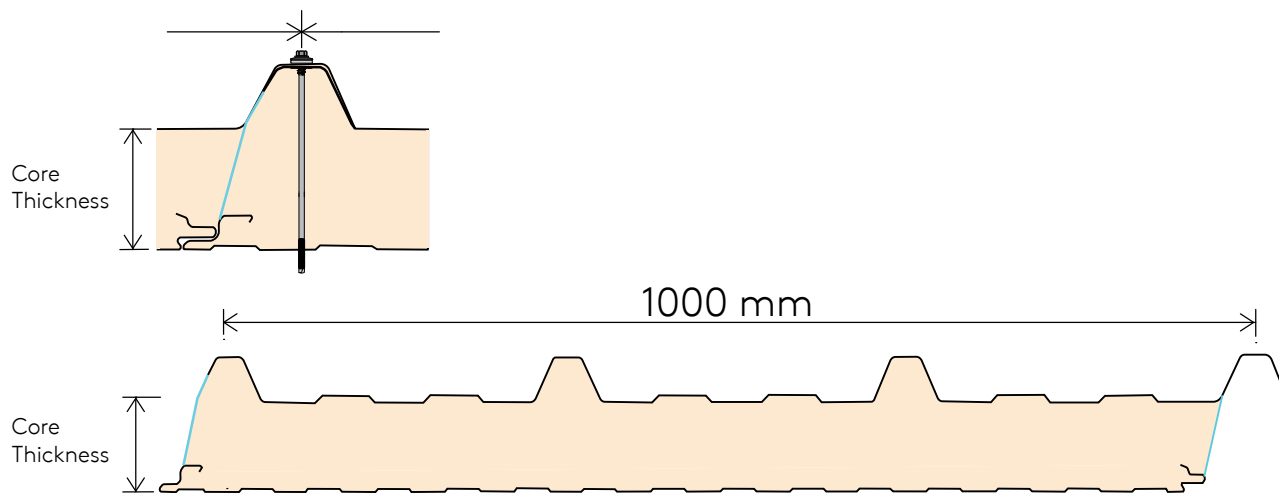
Application

The KSD1000RW Roof Panel is a versatile solution for various roofing applications with pitches of 4° or more after deflection. The panel can be installed both horizontally and vertically, making it suitable for a wide range of roofing designs. Available in a width of 1000 mm, it provides good thermal performance.

Ideal for commercial, industrial, educational, healthcare, and residential projects, the KSD1000RW Roof Panel offers a sleek and professional appearance. The panel's prefabricated nature allows for rapid installation, making the roof instantly wind and watertight, significantly reducing construction risks. It provides reliable and efficient roofing solutions for a wide range of building types.



Panel Cross Section



Technical Parameters

Module width/Cover width [mm]	Core Thickness [mm]	Mass [kg/m ²]	Thermal Transmittance (U-value) acc. EN 14509:2013 [W/m ² ·K]	Airborne Sound Insulation R _w (C;C _{tr})	FM Approval
1,000/1,000	40	8.53	0.47	NPD	
	50	8.93	0.38	NPD	
	60	9.33	0.32	NPD	
	70	9.73	0.27	NPD	
	80	10.13	0.24	NPD	
	100	10.93	0.19	NPD	
	120	11.73	0.16	NPD	

Fire Performance

External Fire Performance:

The KSD1000RW Roof Panel has been tested and approved to EN 13501-5:2005 + A1:2009 and has achieved result B_{Roof} (t₄) for panel thickness 40 mm and 100 mm with steel facer and approved to EN 13501-5:2016 for panel thickness 120 mm and has achieved result

B Roof (t4) for panel thickness 120 mm with steel facer.

Module width / Cover width [mm]	Core Thickness [mm]	Reaction to Fire	Fire Resistance - Roof
1,000 / 1,000	40	Not applicable	NPD
	50	Not applicable	NPD
	60	Not applicable	NPD
	70	Not applicable	NPD
	80	Not applicable	NPD
	100	Not applicable	NPD
	120	Not applicable	NPD

Dimensions

Length

Shorter lengths (non-standard) [mm]	500-2499
Standard lengths [mm]	2500-13000
Longer lengths (non-standard)	

Standard panel lengths: 2500-13000 mm .

Please contact Kingspan for non-standard lengths and transport restrictions.

Width

Standard panel width: 1,000 mm .

Please contact Kingspan for non-standard panel widths.

Product Tolerances

Product tolerances are measured according to the standard EN 14509:2013.

Length tolerance	L≤3m, -	5 mm
Length tolerance	L≤3m, +	5 mm
Length tolerance	L>3m, -	10 mm
Length tolerance	L>3m, +	10 mm
Cover width tolerance	-	2 mm
Cover width tolerance	+	2 mm
Thickness tolerance	-	2 mm
Thickness tolerance	+	2 mm
Thickness tolerance	D>100mm, -	2 %
Thickness tolerance	D>100mm, +	2 %
Deviation from squareness		0.006 x w
Deviation from straightness (on length)		1mm/m, maximum 5 mm/m

Materials

Insulation Core

Polyisocyanurate (IPN) insulation core with a Thermal Conductivity (λD) of 0.020 W/m·K according to ASTM C518-17 at 10 degree.

External facing

Metal Thickness Range

External Facing (Top Skin)

For Steel: 0.40 mm to 0.70 mm thickness.

For Aluminium: 0.50 mm to 0.70 mm thickness.

Coatings & Finishes:

External Weather Sheet: Polyester and PVDF.

Internal facing

Interior Facing (Bottom Skin)

For Steel: 0.40 mm to 0.70 mm thickness.

For Aluminium: 0.50 mm to 0.70 mm thickness.

Notes: The given metal thickness ranges include coating.

For Galvanized Steel Thickness: Tolerances to be in accordance with EN 10143 or ASTM A 924 / A924M-13, applicable for an external weather sheet and internal liner.

For Aluminium Thickness: Tolerances to be in accordance with BS EN 485/ BS EN 508 or ASTM B209M, applicable for an external weather sheet and internal liner.

Seals

All side joints have a factory applied seal that fits into the groove to automatically seal the joint between the panels.

Profiles

External Weather Sheet Options: TR333.

Internal Liner Options: Equi-Bead, Mini-Bead and Flat.

Colours

A diverse array of external colour choices is at your disposal, featuring a broad spectrum of finishes such as metallic, matte, and solid.

Please contact Kingspan for advice on colour selection for your project.

Mechanical Resistance

For load / span tables, please contact Kingspan.

Environmental Performance

Life Cycle Assessment (LCA) study and Environmental Product Declaration (EPD) for the KSD1000RW Roof Panel are currently

under development.

We ensure that our products are free from CFC, HCFC, HFC, and Halogenated Fire Retardants.

Additionally, Kingspan Insulated Panels are manufactured in facilities certified to the ISO 14001 Environmental Management System (EMS) standard.

Production Standard

Please contact Kingspan for the most up-to-date test certificates.

Quality

Kingspan Insulated Panels are manufactured from the highest quality materials, using state of the art production equipment to rigorous quality control standards, complying with ISO 9001:2015 Quality management systems standards as well as ISO 37301:2021 Compliance management systems standards.

The panels are also being manufactured under Environmental management system certification ISO 14001:2015 and Occupational health and safety certification ISO 45001:2018.

Packing

Standard Packing - Road Transportation

Kingspan Insulated Panels are stacked horizontally with the facing sheets facing upwards to minimise the overall height of the pack. The top and sides are protected with either cardboard or polystyrene, together with spiral wrap stretch poly film.

Customers must remove the protective film and other delivery packaging immediately after installation, ensuring that this is done within a maximum of two months of the production date.

The number of panels in a pack depends on panel thickness and length. Quantities are reduced for exceptionally long panels.

Core Thickness [mm]	40	50	60	70	80	100	120
Number of Panels	19/18	16	14/13	12	12/10	10/8	8/7

Delivery

Unless otherwise specified, all deliveries are made by road transport to the designated project site.

Unloading on site:

The responsibility for unloading the goods lies with the

recipient. It is essential that goods are not dropped or thrown from the vehicle and are not stacked on uneven surfaces.

During the unloading process, it is essential to take great care to protect the goods from potential damage and to prioritise the safety of personnel on site.

Manual unloading of goods is not recommended. Instead, it is advisable to use specialist equipment such as a forklift truck or crane equipped with a spreader beam. This precautionary measure prevents excessive pressure being applied to the product, which can lead to problems such as delamination, joint damage and surface irregularities.

Please contact Kingspan to obtain guidelines for the storage, on-site handling and safe unloading of metal coils, building sheet and insulated panels.

Sea Freight

For projects requiring sea freight via containers, timber wooden pallets are available at an additional surcharge.

Site Storage & Installation

Proper storage conditions are essential for maintaining the quality of the product. It is essential that the goods are stored in a covered area on a clean, level surface, with no more than two bundles stacked to avoid excessive pressure. Storage in an uncovered area is not recommended, but if circumstances require outdoor storage, the goods can be placed on a gently sloping surface to reduce the risk of water accumulation.

When storing goods outdoors, it is essential to use a waterproof cover that allows adequate air circulation underneath. It's also important to keep the goods a safe distance away from potential fire hazards and the risk of falling objects.

These measures are essential to ensure the integrity and safety of the goods throughout the storage period.

Please contact Kingspan to obtain guidelines for the storage, on-site handling and safe unloading of metal coils, building sheet and insulated panels.

Warranty

Kingspan offers product coating warranties tailored to each specific project, taking into account the environmental conditions of the geographical location of the project. These warranties are subject to compliance with a maintenance regime.

Please contact Kingspan for more information.

Profiles

Profile	External	Internal
T - Trapezoidal RW		
B - Mini-Bead		
E - Equi-Bead		

Contact Details

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The information provided in this datasheet is accurate as of its date of publication and represents our commitment to quality and transparency. However, Kingspan Insulated Panels reserve the right to modify product specifications without prior notice to reflect advancements or improvements.

For applications not explicitly covered within this datasheet, consultation with our Technical Advisory Service is strongly advised to ensure the product meets your specific requirements.

Customers are responsible for verifying the product's suitability for their particular needs and for ensuring compliance with all applicable laws and regulations.

For the most up to date and comprehensive product details, always refer to the latest version of this datasheet by scanning the QR code above.

We reserve the right to update this datasheet, and any other informational materials, at our discretion and without notice.

For the latest information, please visit: www.kingspan.ae.

