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Kingspan WARRANTY

QuadCore™
Controlled Environment
Series KSD1100 CS
Product Data Sheet

1 Superior **FIRE** Protection

2 Up to 20% **THERMAL** Enhancement

3 Improved **ENVIRONMENTAL** Performance

4 Up to **40 Years** Structural & Thermal Guarantee

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QuadCore™ TECHNOLOGY

Kingspan®
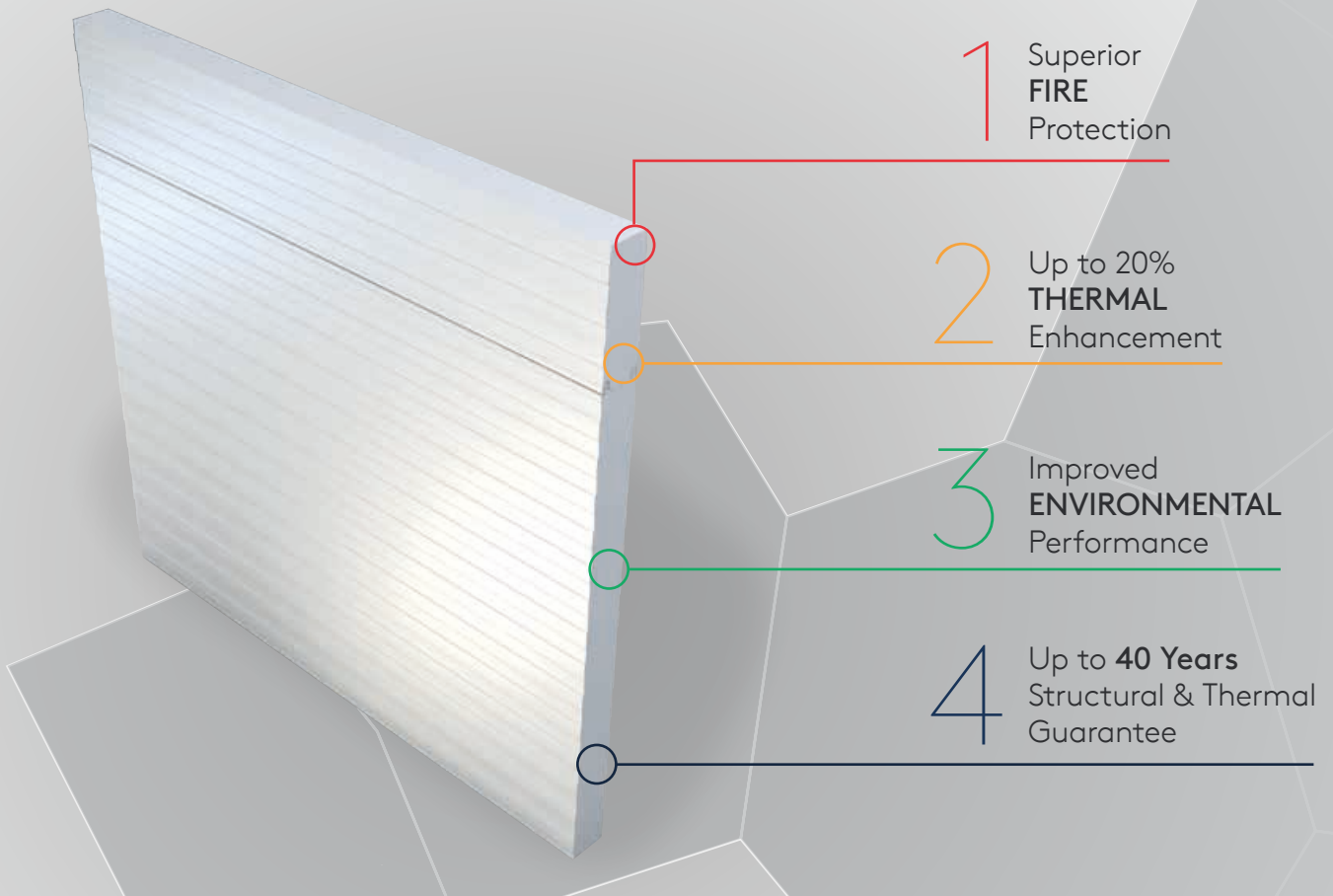
Data Sheet
## QuadCore™ Controlled Environment Series KSD1100 CS

Overview

The QuadCore™ Controlled Environment Series consist of a range of insulated panels and systems for use in cold stores, ambient rooms, cleanrooms and food processing facilities. The product range has outstanding performance in the critical building materials performance areas: fire, structural, airtightness, thermal bridging, vapour and weather tightness. The coatings utilised feature CLEAN*safe* and AQUA*safe* protection.

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TECHNOLOGY

Improved **ENVIRONMENTAL** Performance

Superior **FIRE** protection

Up to **40 YEAR** thermal guarantee

Up to 20% **THERMAL** enhancement

What is it?

QuadCore™ is Kingspan's next generation of hybrid microcell insulation technology. This technological innovation provides superior fire protection, up to 20% thermal enhancement, a higher environmental performance, and is supported by an exceptional guarantee.
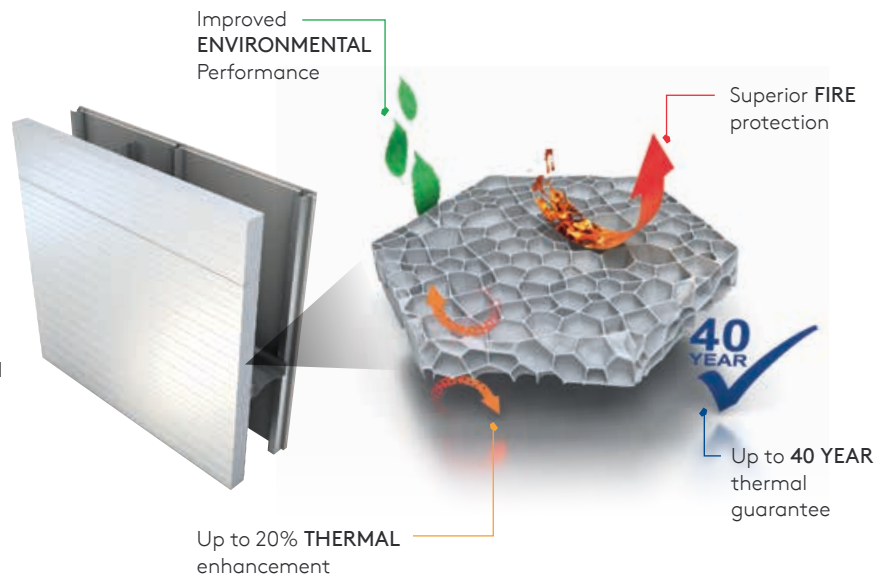
Highlights

– Designed to withstand internal to external temperature differences of up to 80°C.

– Suitable for cold and chill stores and food processing applications, with an internal temperature range of -50°C to +60°C.

– Suitable for internal and external applications including mushroom growing, data centres, partition walls, agricultural and controlled atmospheres.

– Incorporates a panel joint that achieves excellent thermal performance and can accommodate vapour and hygiene safe seals.

– Large range of profiles, coatings and insulation core thicknesses to meet project specific demands.

– Available in lengths up to 11.75 metres.

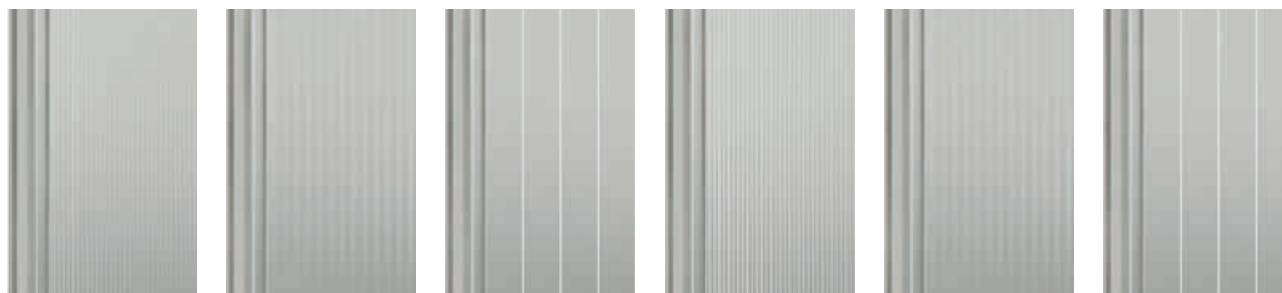– Hygiene safe, resisting moisture ingress and any risk of toxic mould and bacterial growth.
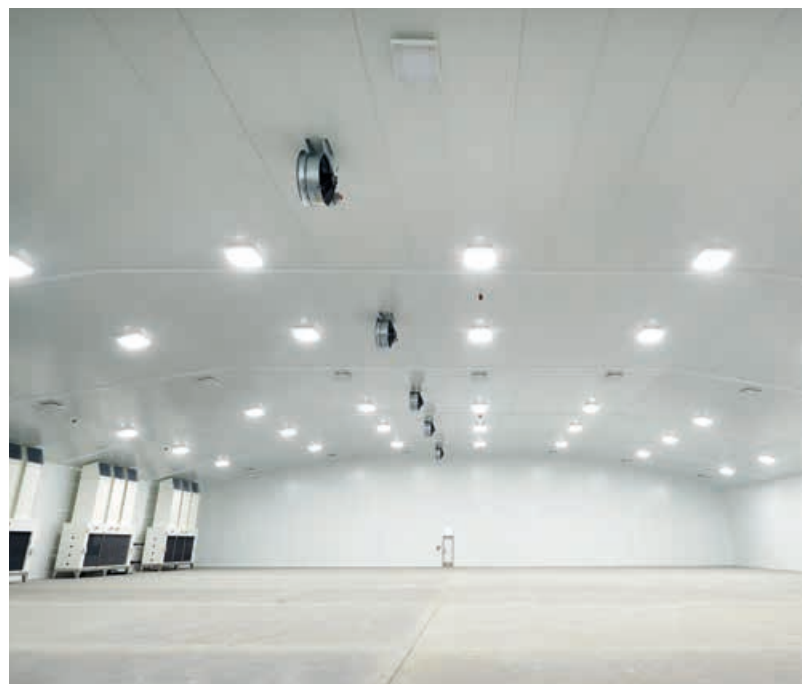
Nagel Langdons Distribution Centre, UK

KSD1100 CS Overview

The Kingspan KSD1100 CS coldstore panel proposes various profiles to best suit the application.

Product Profiles
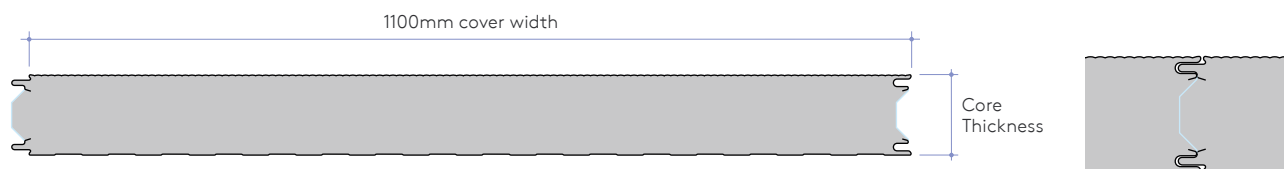
| Mini-Micro /
Equi-Bead
KSD1100 CS | Micro-Rib /
Equi-Bead
KSD1100 CS | Equi-Bead /
Equi-Bead
KSD1100 CS | Mini-Micro /
Mini-Bead
KSD1100 CS | Micro-Rib /
Mini-Bead
KSD1100 CS | Equi-Bead /
Mini-Bead
KSD1100 CS |

1100mm cover width

Core Thickness

Thermal Performance, Dimensions and Weight

KSD1100 CS	23	18	15	12	10	9
U-value (W/m²K)	0.23	0.18	0.15	0.12	0.10	0.09
R-value (m²K/W)	4.35	5.56	6.67	8.33	10.00	11.00
Core Thickness (mm)	80	100	125	150	175	200
Weight (kg/m2) 0.5 steel / 0.5 steel	11.80	12.60	13.60	14.60	15.60	16.60

The U-values have been calculated using the method required by EN14509 guidelines.

Product Specifications and Accreditations

Product Reference	Standard Environment	Temperature Control	Hygiene	High Humidity	Low Temperature
KSD1100 CS	✓	✓	✓	✓	•

Profile:	Mini-Bead / Equi-Bead, Mini-Bead / Micro-Bead, Mini-Bead / Micro-Rib, Equi-Bead / Mini-Micro, Equi-Bead / Micro-Rib, Equi-Bead / Equi-Bead. Flat external profile is available with either Mini-Bead or Equi-Bead internal profiles.
Metal Type:	Steel / stainless steel.
Coatings:	External applications: Kingspan Spectrum, Kingspan Altaris, PES, Polyester and Plastisol. Internal applications: Kingspan CLEAN*safe* 15, 25, 55 and 120. Stainless steel substrates are also available.
Application:	Suitable for internal and external roof, wall and ceiling applications. Designed for applications from -50°C to ambient.
Lengths:	From 1.2m up to 11.75m (due to container restrictions). Manufacturing capability up to 16m.
Cover Width:	600mm to 1200mm. Standard width 1100mm.
Environmental Rating:	Zero Ozone Depleting Potential (ODP), Low Global Warming Potential (GWP). Free from CFC, HCFC & HFC, free from Halogenated Fire Retardants and 100% recyclable.
Fire Rating:	ASTM D 1929-16: Self Ignition above 343°C. BS EN 13501-1:2007 + A1:2009: B-s1,d0. ASTM E 119: achieved 30 mins fire integrity and insulation.

RAND Logistics, Australia

Agristo, Netherlands

PCL Bidvest, UK

Divan Patisserie, Turkey

Deardorff Farms, USA

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Data Sheet
QuadCore™ Controlled Environment Series KSD1100 CS

QuadCore™ Controlled Environment Series System

QuadCore™ systems are the next generation of Kingspan roof, wall façade and controlled environment systems, featuring Kingspan's self-blended insulation foam, QuadCore™ Technology. QuadCore™ systems incorporate a range of special fabrications.

The QuadCore™ system is designed to deliver the ultimate protection for buildings from fire and rising energy costs, with superior sustainability and support from the industry's most transparent and comprehensive guarantees.

Protected by

RAND Logistics, Australia

Services

We focus on consistently offering the best service to our customers. We offer high levels of customer support, including technical services through to product training.

Technical Support
From the provision of project specific details through to the creation of project specific specifications, Kingspan Technical Services can help to ensure that your building performs and complies with building regulations.

Customer Service
Customer service personnel are available to support you from initial enquiry through to final order delivery to site.

Kingspan Warranty

The Kingspan Warranty provides maximum protection for the structural and thermal performance of the panel and its coating. Our warranty also offers the ultimate cover for the system components of our panel series including accessories.

Please note that you must apply to avail of the Kingspan Warranty. Please contact your sales person for more information.

Morrisons Distribution Centre, UK

Divan Patisserie, Turkey

PCL Bidvest, UK

Land o' Frost, Canada

Kingspan®