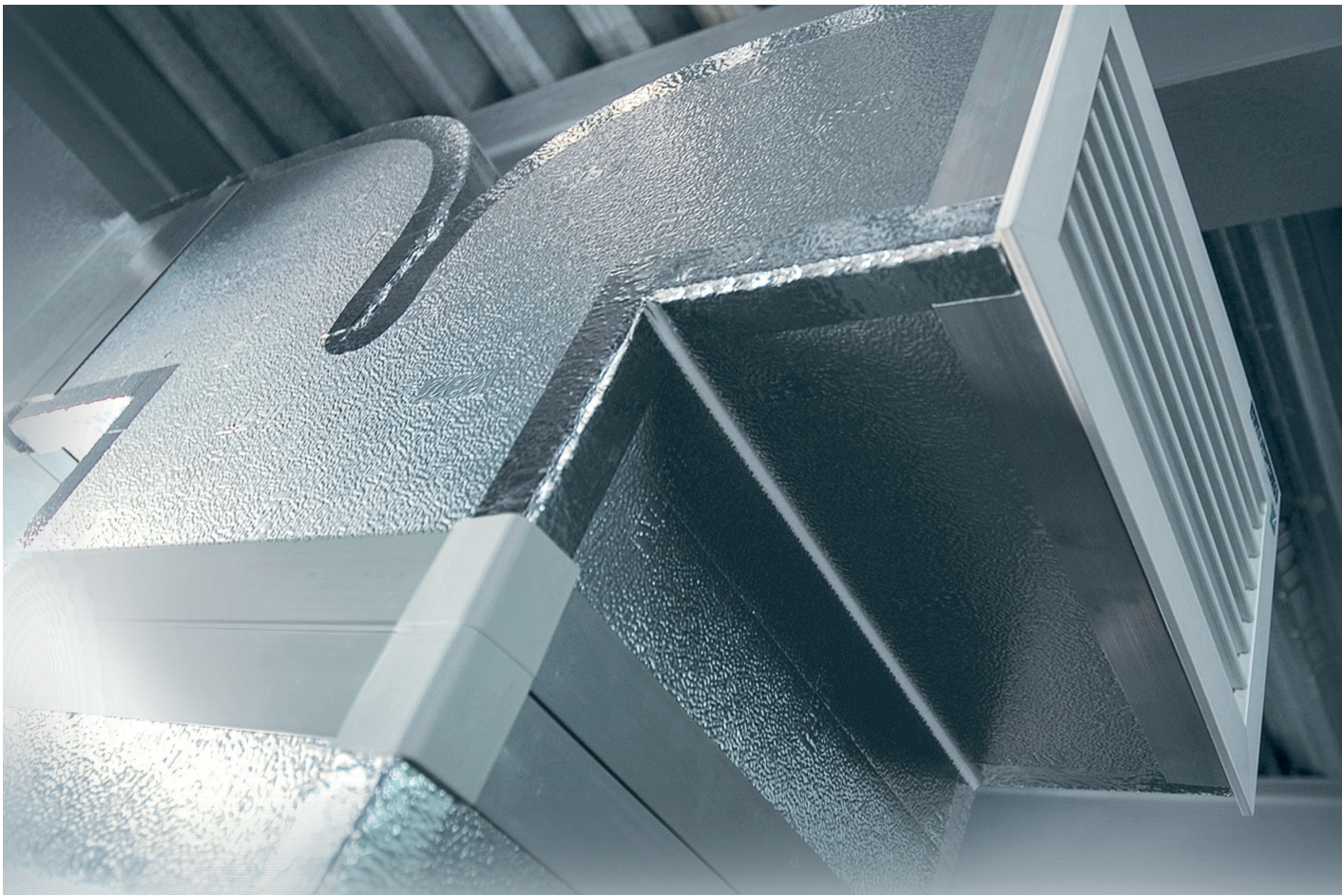


Insulation



# PalDuct™ PIR Panel

Product Brochure  
Product Code: 1010



Fibre-free  
Core



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# Product Information

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## Product Description

Kingspan PalDuct PIR Panels comprises of a fibre-free rigid thermoset polyisocyanurate (PIR) insulation core, faced on both sides with an embossed aluminium foil. The core is manufactured with a blowing agent that has zero ODP and low GWP.

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## Operating Recommendations

It is recommended that ductwork fabricated from Kingspan PalDuct PIR Panels is used for operation as supply, return, fresh and exhaust air ductwork for HVAC systems.

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## Application Suitability

Kingspan PalDuct PIR Panels are designed for use in building services / HVAC applications. They are suitable for both new build and refurbishment projects in the residential, commercial, public, light industrial and leisure sectors. They are especially suitable for use on high specification projects where insulants with a fibre-free core may be preferred, for instance:

- The food, beverage and pharmaceutical industries;
- Clean air and hygiene controlled environments;
- High relative humidity environments;
- Swimming pools;
- Non-ferrous applications; and
- Sterile areas of hospitals and
- Communication/server rooms in data centres.

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## Singapore Certificate of Conformity (SG CoC)

This product is approved for use in Singapore, according to the Singapore Civil Defence Force's (SCDF) requirements.

Auditors perform yearly tests on random samples to ensure continued fire performance, according to previously used tests.

Further details of the SG CoC listing for this product are published on Element's Singapore Certifications website at:

<https://certificationsingapore.element.com/certified-customers/>

To view the listing, search keyword "Kingspan". Read more about the SG CoC on the SCDF website, or contact us for clarifications.

## Fabrication and Installation

Ductwork fabricated from Kingspan PalDuct PIR Panels should only be fabricated by specially trained fabricators who have completed the specialised and comprehensive training course provided for the System.

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## Health and Safety

- Please refer to the Materials Safety Datasheet (MSDS)
- For more information contact Kingspan Insulation.

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## Singapore Green Building Product

The SGBP certification scheme is one of the standards and benchmarks for building products in the building and construction industry. Products and materials certified by the SGBP are recognised under the Green Mark Scheme, Singapore's national green building rating tool, administered by the Building and Construction Authority (BCA).



The scheme allows certified products to accrue points that count towards a project's Green Mark rating. Higher rated products under the SGBP Scheme (i.e., achieving more ticks), are awarded more points towards Green Mark ratings.

The SGBP is also accepted by regional green building rating tools for its coverage of products' sustainability performance. Examples include GreenRE in Malaysia, and LOTUS, Vietnam Green Building Council's rating tool.

Source: Singapore Green Building Council

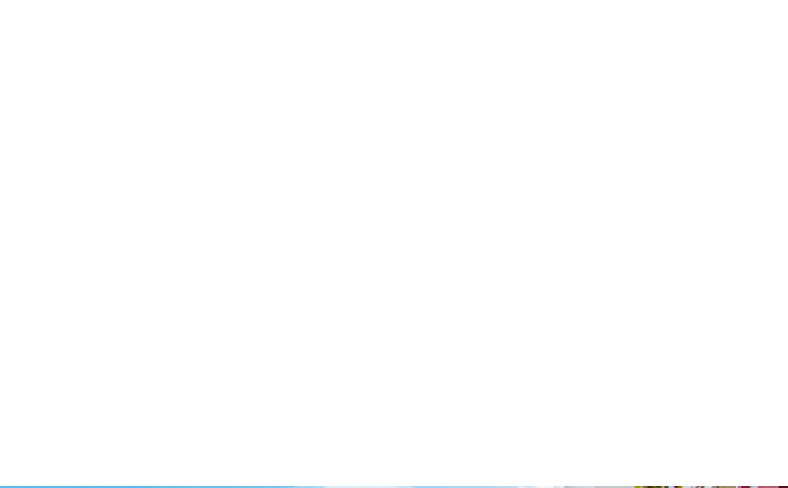
Further details of the SGBP listing for "Kingspan PalDuct PIR Product Code: 1010" are published on the Singapore Green Building Council's website at: <https://web.sgbc.online/public/product/search>

# Prestige Projects



**Project Name:** The Heart of Europe  
**Location:** Dubai, United Arab Emirates  
**Building Use:** Hotels, Restaurants & Leisure  
**Product:** Kingspan PalDuct PIR System







Project Name: Aldar Headquarters  
Location: Abu Dhabi, United Arab Emirates  
Building Use: Offices  
Product: Kingspan PalDuct PIR System

Project Name: Arabian Ranches Golf Club  
Location: Dubai, United Arab Emirates  
Building Use: Leisure  
Product: Kingspan PalDuct PIR System



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# Product Information

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## Technical Specifications

Property	Value	Test Standard
Product Thickness (mm)	20	-
Panel Dimensions (mm)	4000 x 1200	-
Aluminium Foil Finish	Embossed/ Embossed	-
Surface Spread of Flame	Class 1	BS 476: Part 7: 1997
Smoke Density (VOF4)	< 300	ISO 5659-2: 2017
Smoke Density (Average Dsmax within 20mins)	< 150	ISO 5659-2: 2017
Toxicity Emission (Average CIT at 8 mins)	< 0.75	EN 45545-2: 2013 +A1: 2015 Annex C
Thermal Conductivity at 10°C, W/(m.K)	0.022	ASTM C518-21
Thermal Conductivity at 23°C, W/(m.K)	0.023	ASTM C518-21
Minimum Density, kg/ m <sup>3</sup>	45	EN 1602: 2013

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# Contact Details

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## Asia Region

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<https://www.kingspan.com/sg/en/business-groups/kingspan-insulation/>

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To ensure you are viewing the most recent and accurate product information, please visit this link:  
[www.kingspan.com/sg/en/products/hvac-insulation/pre-insulated-duct/palduct-pir](http://www.kingspan.com/sg/en/products/hvac-insulation/pre-insulated-duct/palduct-pir)

