

# Kingspan Insulation Middle East At A Glance





Project Name: The Museum of the Future

Location: Dubai, U.A.E.

Building Use: Leisure – Museum

Product: Kingspan Kooltherm™ Duct and Pipe Insulation

Kingspan PalDuct™ Phenolic System





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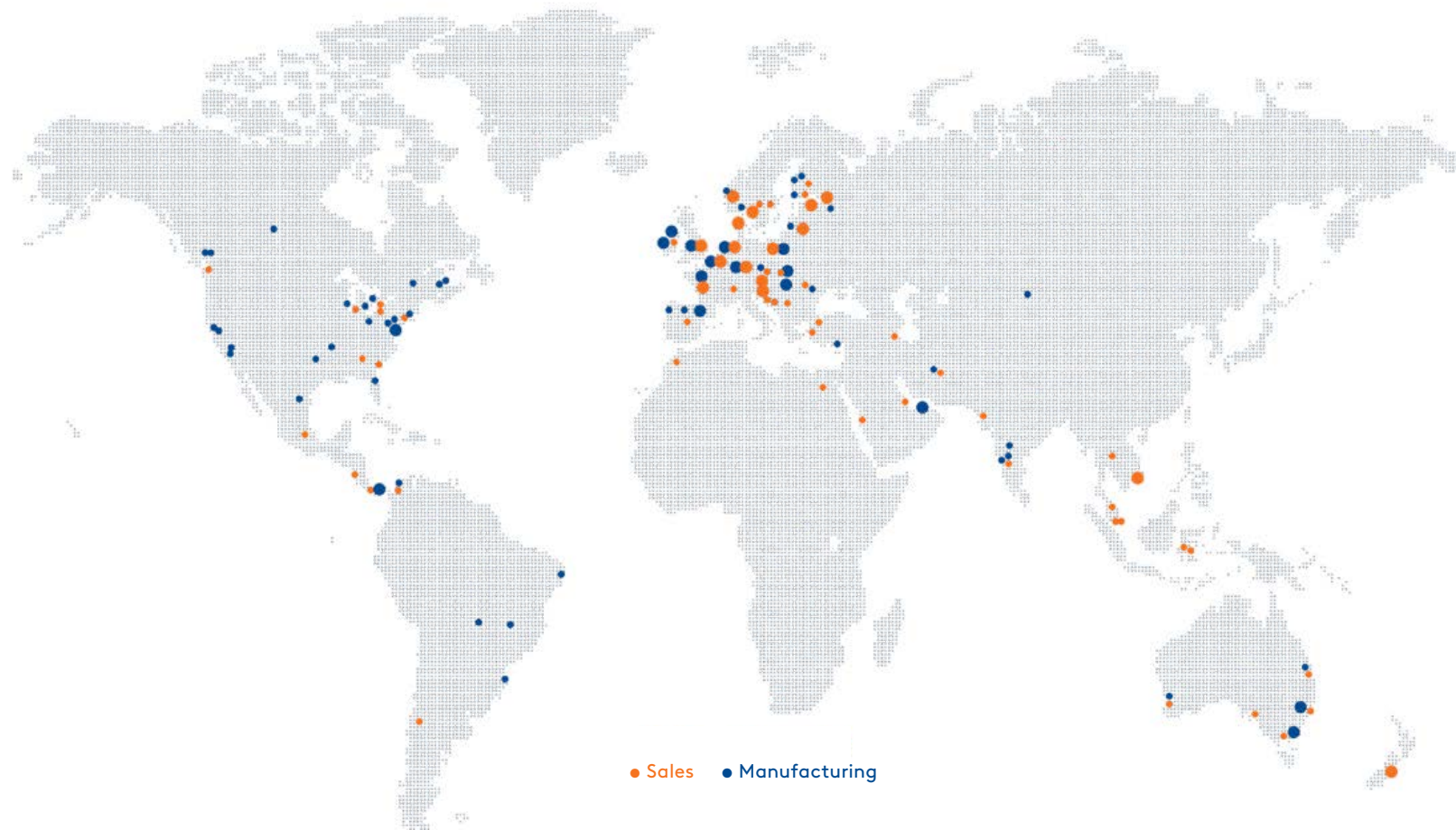


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# Kingspan Insulation's Global Presence

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Kingspan has 161 manufacturing sites in over 70 countries around the world.  
Our head offices are located where we were founded in Ireland.





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# Welcome to Kingspan Insulation Middle East

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# Welcome to Kingspan Insulation

**Kingspan Insulation is a global manufacturer of optimum, premium and high performance rigid insulation products and insulated systems for building fabric and building services applications.**

Kingspan Insulation, a division of Kingspan Group, is at the forefront of the low energy building drive, helping architects, engineers and developers get the most energy efficient building envelope and building services performance, offering triple benefits of cutting energy use, cutting operational carbon dioxide (CO<sub>2</sub>) emissions and cutting costs.

Kingspan insulation's global presence means that its unrivaled expertise and knowledge can be transferred and shared quickly into new territories and markets. As international architecture and engineering practices continue to grow with portfolios and clients across borders, Kingspan Insulation's technical and logistical support as well as global product availability becomes increasingly important. Specifiers, architects, engineers and contractors are fully supported by technical expertise, calculations and advice to give complete peace of mind throughout the design and build.

Kingspan Insulation has a vast product range that includes optimum performance next generation insulation; fiber-free premium performance phenolic insulation; fibre-free high performance polyisocyanurate (PIR) insulation; and fibre-free high performance rigid extruded polystyrene insulation. Kingspan Insulation's products are suitable for both new build and refurbishment in a variety of applications within both residential and commercial buildings.

Insulation for:

- flat roofs;
- tapered roofing systems;
- cavity walls;
- solid walls;
- steel framing;
- externally insulated cladding systems;
- externally insulated render systems;
- floors;
- soffits;

- ductwork in building services applications;
- pipework in building services applications.

Kingspan Insulation also supplies:

- The Kingspan KoolDuct™ System of pre-insulated ducting;
- Kingspan PalDuct Systems of pre-insulated ducting;
- Pre-insulated plenum boxes;
- Kingspan AQUAZONE™ – water infiltration reduction membrane for inverted roofs;
- Kingspan nilvent™ – breathable membrane for roofs and walls;
- Kingspan AIR-CELL™ – thermo reflective insulation for steel framed roofs, walls and floors; and
- Kingspan Kooltherm™ Cavity Closer;

Kingspan Insulation continues to reinvest in innovation to ensure it is manufacturing the latest technologies that provide architects and engineers with the most efficient building envelope and building services, to improve the thermal comfort and efficiency of buildings.





# Welcome to Kingspan Insulation

## Kingspan Group

Kingspan Group has over 40 years of experience and is a global provider of high performance, sustainable building products and solutions for the international property and construction market. Kingspan is committed to producing high efficiency, low cost and low carbon building solutions across a broad range of market sectors. The Group has manufacturing, distribution and commercial operations throughout North America, the Middle East, Europe, Australasia and other locations across the globe.

To show Kingspan's commitment to sustainable manufacturing, Kingspan Group has launched a worldwide initiative for all its facilities. The Path to Net Zero Energy commitment aims to ensure that all facilities across the globe will be net zero energy by 2020. At this time, all Kingspan facilities should be running on entirely renewable energy.

## Product Groups

### Insulated Panels

- Insulated Roof & Wall Panels
- Integrated Solar Solutions
- Benchmark Architectural Façade Systems
- Controlled Environments
- Structural Products & Systems
- Steel Building Solutions
- Height Safety Solutions
- Insulated Door Components

### Insulation

- Insulation Boards for Roofs, Walls & Floors
- Ductwork Insulation
- Ductboard Pre-insulated Ductwork
- Pipe Insulation

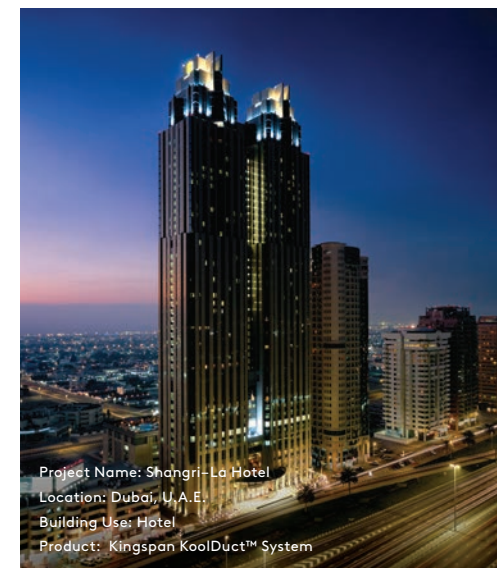
### Environmental

- Water Management:  
Rainwater Harvesting Wastewater and Stormwater Management

- Renewable Technologies
  - Solar Thermal Systems
  - Heat Pumps
  - Wind Energy
  - Hot Water Systems
- Environmental Management
  - Environmental Storage
  - Telemetry and Monitoring
  - Environmental Services

### Access Floors

- Access Floor Systems
- Data Center Products
- Underfloor Air
- Underfloor Wire & Cable







Project Name: Atlantis, The Palm  
Location: Dubai, U.A.E.  
Building Use: Leisure – Resort Hotel  
Product: Kingspan KoolDuct™ System



# Low Energy Building

With targets throughout the Gulf committing to cutting carbon emissions, such as Dubai's Integrated Energy Strategy which commits to reducing energy demand by 30% by 2030; Abu Dhabi's Vision 2030 which commits to reducing energy consumption and power demand by 30%; and Qatar's National Vision 2030, the impetus is there for the industry to produce low energy buildings. This is backed up by Building Regulations and standards, such as Qatar's GSAS, Dubai's Green Building Code, Abu Dhabi's Estidama, LEED, BREEAM and many more.

The next few years is likely to see demand for optimum, premium and high performance insulants grow as energy standards get tighter for new build projects. This, coupled with higher fuel prices and consumer demand for low-energy buildings, will see this sector grow to become the norm. Kingspan Insulation offers products and solutions for all types of new build projects.

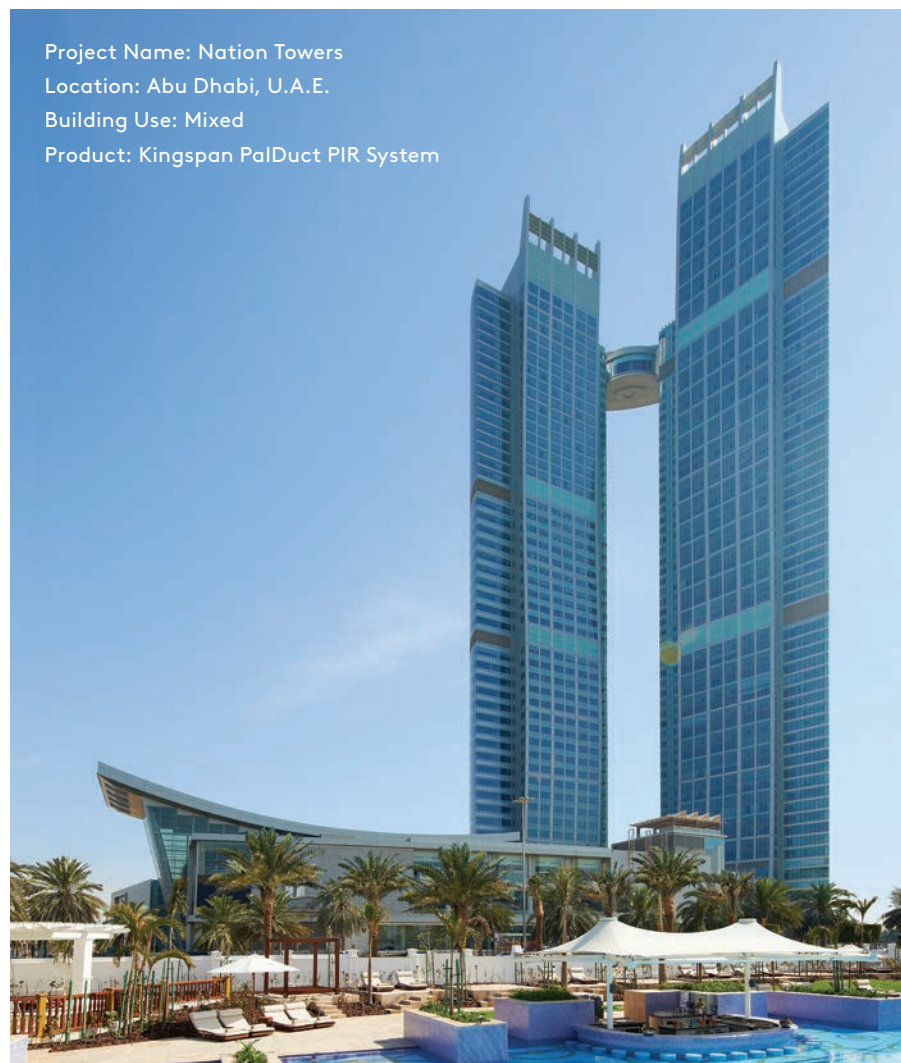
In addition, existing buildings offer the greatest opportunity to reduce the carbon emissions of the current building stock. 70% of all the energy produced in Dubai is consumed by buildings, showing the need to look closely at the current stock. Programmes and initiatives to upgrade existing stock are in evidence in the U.A.E with targets to retrofit 30,000 of the existing 120,000 buildings in Dubai. Kingspan Insulation offers products and solutions for all types of retrofit projects.

The solutions offered for both refurbishment and new build will depend upon the individual circumstances of the project, such as room size; project type; whether the building is in a conservation area; the desired thermal and air tightness performance; and the building regulations or standards in that area.

Kingspan Insulation has an impressive track record in the global construction industry. Its extensive range of products has been used to insulate buildings in both new build and refurbishment projects in all construction sectors:

- |                    |                       |
|--------------------|-----------------------|
| ■ private housing; | ■ retail;             |
| ■ social housing;  | ■ hotels and leisure; |
| ■ health;          | ■ commercial;         |
| ■ education;       | ■ offices; and        |
| ■ defence;         | ■ industrial.         |

**Project Name:** Nation Towers  
**Location:** Abu Dhabi, U.A.E.  
**Building Use:** Mixed  
**Product:** Kingspan PalDuct PIR System





Project Name: The Heart of Europe  
Location: Dubai, U.A.E.  
Building Mixed Use  
Product: Kingspan PalDuct™ PIR System





# Building Fabric Insulation Overview

## Introduction

Kingspan Insulation offers one of the widest ranges of building fabric insulation products available in the Middle East market. Its products are among the most thermally efficient and technically advanced insulation materials available and have many advantages over traditional insulation materials such as man-made mineral fibre.

This extensive range of roof, wall and floor insulation products comprises:

- Kingspan Kooltherm™ premium performance insulation;
- Kingspan Therma™ high performance insulation;
- Kingspan Optim-R™ optimum performance insulation;
- Kingspan GreenGuard™ high performance insulation for specialist applications; and
- Kingspan AIR-CELL™ Insulbreak high performance thermo reflective insulation.

### Kooltherm™

Premium performance rigid thermoset insulation.

### Therma™

High performance rigid thermoset insulation.

### OPTIM-R™

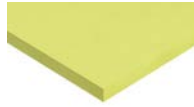
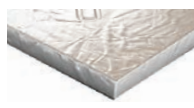
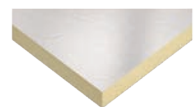
Optimum performance next generation insulation.

### GreenGuard™

High performance rigid insulation.

### AIR-CELL™

Thermo reflective insulation for steel framed commercial and residential roofs, walls and floors.



# Kooltherm™ Range

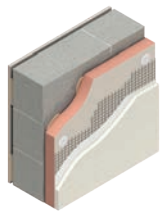
## Introduction

The Kingspan Kooltherm™ Range is an extensive range of premium performance phenolic insulation products for walls and floors.

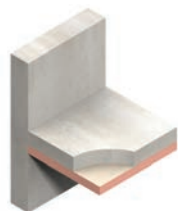
## Benefits

- With a thermal conductivity as low as 0.020 W/m.K, it utilises the thinnest commonly used insulation board to achieve required U-values.
- It easily achieves required U-values with minimum board thickness.
- Achieves an A+ BRE Green Guide Rating.
- Its closed cell structure resists both moisture and water vapour ingress – problems which can be associated with open cell materials such as man-made mineral fibre and which can result in reduced thermal performance.
- It is unaffected by air infiltration – a problem that can be experienced with man-made mineral fibre and which can reduce thermal performance.
- It is safe and easy to install – it does not produce irritative fibres.
- It provides reliable long term thermal performance over the lifetime of a building.
- Non-deleterious material.
- BRE certified Life Cycle Assessment (LCA) data is available.
- Manufactured with a blowing agent that has zero ODP (contains no CFCs and HCFCs) and GWP  $\leq 5$

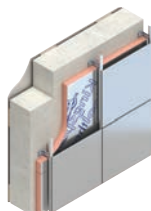
Fibre-free  
Core



Kingspan Kooltherm™ K5  
External Wall Board



Kingspan Kooltherm™ K10  
Soffit Board



Kingspan Kooltherm™ K15  
Cladding Board







Project Name: Deira Enrichment Project [DEP], Deira District  
Location: Dubai, U.A.E.  
Building Use: Mixed  
Product: Kingspan Kooltherm™ K10 Soffit Board



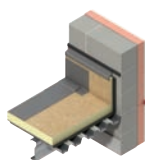
# Therma™ Range

## Introduction

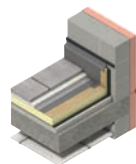
The Kingspan Therma™ Range is an extensive range of high performance polyisocyanurate insulation products for roofs, walls and floors.

## Benefits

- With a thermal conductivity as low as 0.022 W/m.K, it is one of the more thermally efficient insulation products commonly used.
- FM approved solutions available.
- Its closed cell structure resists both moisture and water vapour ingress – problems which can be associated with open cell materials such as man-made mineral fibre and which can result in reduced thermal performance.
- It is unaffected by air infiltration – a problem that can be experienced with man-made mineral fibre and which can reduce thermal performance.
- It is safe and easy to install – it does not produce irritative fibres.
- It provides reliable long term thermal performance over the lifetime of a building.
- Non-deleterious material.
- Manufactured with a blowing agent that has zero ODP (contains no CFCs and HCFCs) and GWP  $\leq 5$



Kingspan Therma™ TR27 on a metal deck



Kingspan Therma™ TR27 on a concrete deck



Project Name: Louvre Abu Dhabi  
Location: Abu Dhabi, United Arab Emirates  
Building Use: Museum  
Product: Kingspan Therma™ TR27 & GreenGuard™ GG300



Project Name: UAE Pavillion  
Location: Dubai, United Arab Emirates  
Product: Kingspan Therma™ TR27 & Optim-R™

Image copyright Expo 2020



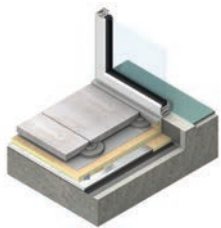
# Optim-R™ Range

## Introduction

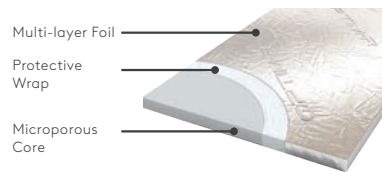
Kingspan Optim-R™ is an optimum performance next generation insulation solution for roofs, balconies, walls and floors. Kingspan Optim-R™ comprises a rigid vacuum insulation panel with a microporous core which is evacuated, encased and sealed in a thin, gas-tight envelope, giving an outstanding thermal conductivity, with the thinnest possible solution to insulation problems.

## Benefits

- With a thermal conductivity of as low as 0.007 W/m.K, it provides an insulating performance that is up to five times better than other commonly available insulation materials.
- Provides solutions for applications where a lack of construction depth or space is an issue.
- Each Kingspan Optim-R™ system comes with a supporting design service. This ensures optimum coverage of Kingspan Optim-R™ Vacuum Insulation Panels.
- If installed correctly, it provides reliable long term thermal performance over the lifetime of a building.
- Non-deleterious material.



Kingspan Optim-R™ Balcony  
& Terrace System



Structure of Kingspan Optim-R™



Project Name: Expo 2020 Observation Tower

Location: Dubai, U.A.E.

Building Use: Observation Tower

Product: Optim-R™

# Thermataper™ Range

## Introduction

Kingspan Thermataper™ Systems comprise tapered insulation boards, flat packer boards, pre-mitred hip and valley boards and a tapered roofing design service. Kingspan Thermataper™ products are designed: for use under most waterproofing membranes; to provide required roof falls; and to provide insulation to meet the requirements of Building Regulations / Standards.

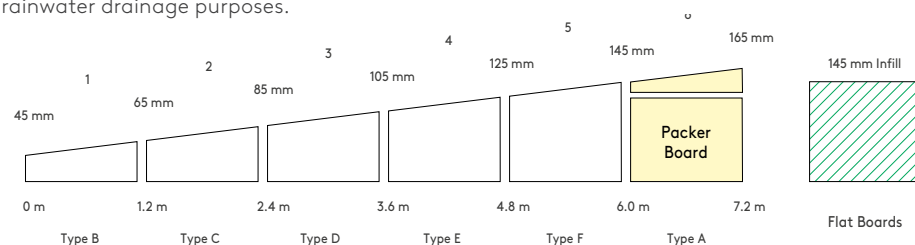
## Benefits

### Simpler

On new roofs, the use of Kingspan Thermataper™ Systems eliminates the need to incorporate a fall into the design of the roof deck. On existing roofs, a Kingspan Thermataper™ Systems and a new waterproofing membrane can be laid on top of the original waterproofing. This eliminates the need for stripping down the roof to deck level, and the provision of a vapour check may not be required.

### Cheaper

Using Kingspan Thermataper™ Systems to achieve a U-value of 0.16 W/m².K could be up to or over 26% cheaper than using alternative methods (e.g. screed) to create a fall in a flat roof for rainwater drainage purposes.



A typical section through roof insulation using Kingspan Thermataper™ TT47

### Quicker

Kingspan Thermataper™ Systems avoid a wet trade and do not need time to dry out saving time in the scheduling of a construction project.

### Lighter

Kingspan Thermataper™ Systems are also a lighter weight alternative to screeding and they do not present the risk of an overloaded structure due to excessive screed depths. Kingspan Thermataper™ Systems can be as little as 1.5% or less of the weight of a solution using screed to falls with a flat insulation board.

## Less Waste

Pre-mitred boards reduce waste from the installation process. Insulation boards are cut in half by Kingspan Insulation in its factory to make mitred hip and valley boards. These are single picked to match the tapered system design so as to reduce waste from cutting hips and valleys on site. Both (hip and valley) halves of the cut board are used and the only waste is the dust generated by sawing. Whereas when boards are cut on site, up to 50% of the cut boards could be wasted, depending on the particulars of the specific board layout and falls design.

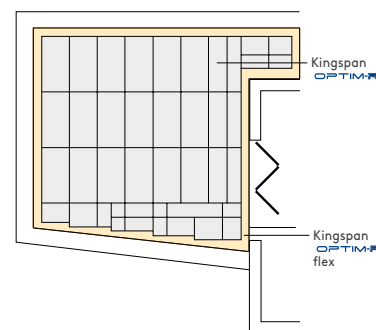
## Kingspan Thermataper™ and Kingspan OPTIM-R™ Design Service

### Efficiency by Design

Kingspan Thermataper™ and Kingspan Optim-R™ systems come with first class design services. For tapered roofing, this ensures that the most cost-effective solution for a roof is identified and that the end result is a tapered system design which meets the roof's rainwater run-off and insulation requirements. For Kingspan Optim-R™ systems this ensures optimum coverage for Kingspan Optim-R™ panels within the designated area.

### Board Layout & Falls Design

The board layout and falls of even the most complex system can be designed quickly and effectively, ready for client approval. The Kingspan Thermataper™ roof design will illustrate the required direction of drainage and both tapered and Kingspan designs take into account U-value, condensation risk and wind uplift requirements, as well as minimum / maximum rise restrictions. Client amendments or revisions can be easily incorporated.



A typical design layout for the Kingspan Optim-R Balcony & Terrace System



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# Thermataper™ Range

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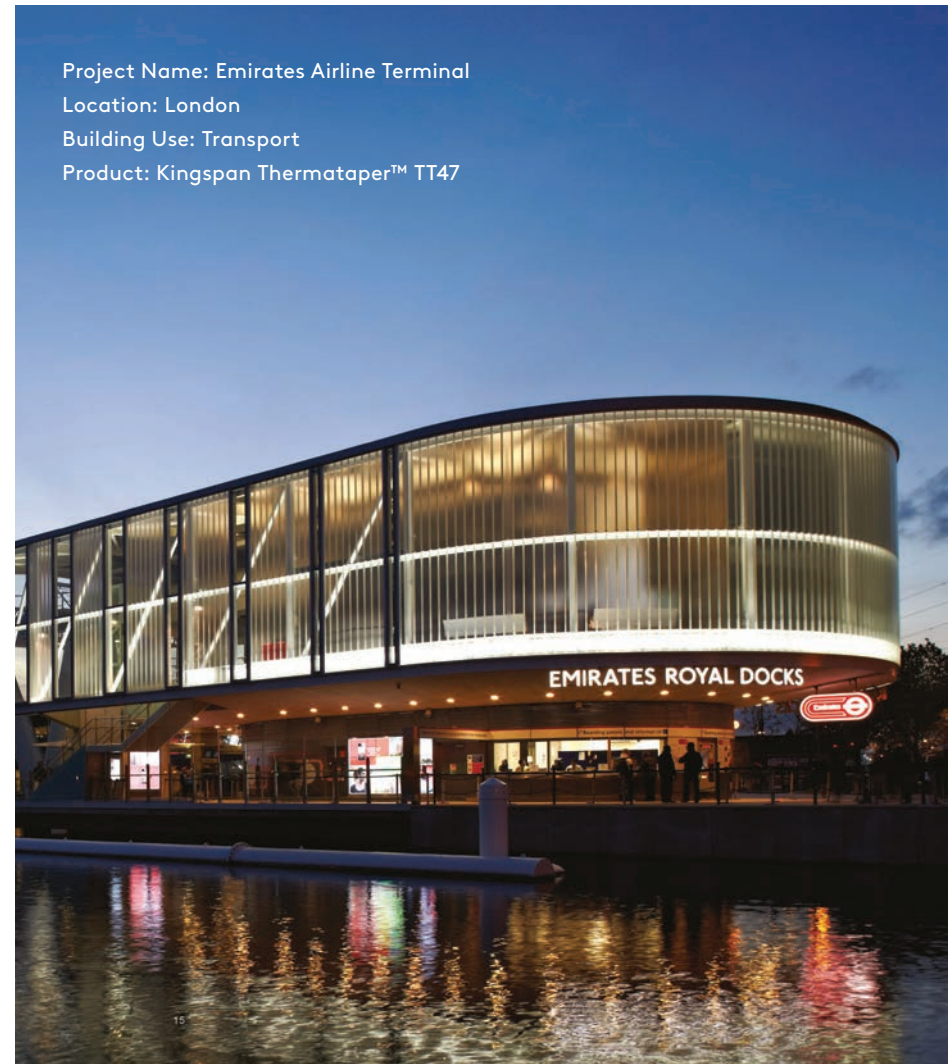
Once the final design has been accepted by the client and the Kingspan Thermataper™ or Kingspan Optim-R™ System is ordered, a working drawing will be produced on waterproof paper. For tapered roofing, the drawing will clearly set out the fall pitch, fall direction and fixing of each board type and will clearly match the markings on the boards to create an easy to install system that is delivered direct to site. Each layout for Kingspan Optim-R™ Systems will illustrate the size, number and location of the Kingspan Optim-R™ panels. It will also illustrate the size, number and location of any Kingspan Optim-R™ flex and Kingspan Optim-R™ fix panels required.

Installation is simple using these easy to follow drawings and, to facilitate installation, each board type is packed separately in labelled shrink wrapped packs.

## Condensation Risk Analysis

Included in the design service is the calculation of condensation risk in accordance with BS 5250: 2016 (Code of practice for control of condensation in buildings). This ensures that any predicted dew- point is above the vapour control layer at the point in the Kingspan Thermataper™ or Kingspan Optim-R™ System with the thinnest insulation layer, whilst also ensuring any condensation risk is within the limits given in BS 5250: 2016.

Project Name: Emirates Airline Terminal  
Location: London  
Building Use: Transport  
Product: Kingspan Thermataper™ TT47



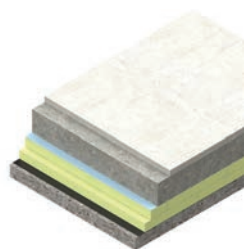
# GreenGuard™ and Air-Cell™ Insulbreak Range

## Introduction

The Kingspan GreenGuard™ Range is an extensive range of high performance insulation products for inverted roofs, car park decks, basements and heavy-duty floors.

## Benefits

- It is ideal for specialist applications such as inverted roofing and heavy-duty floors.
- High performance rigid extruded polystyrene insulation – thermal conductivity 32-45 kg/m<sup>3</sup>
- It easily achieves required U-values with minimum board thickness.
- Compatible with green roofing systems.
- Its closed cell structure resists both moisture and water vapour ingress – problems which can be associated with open cell materials such as man-made mineral fibre and which can result in reduced thermal performance.
- It is unaffected by air infiltration – a problem that can be experienced with man-made mineral fibre and which can reduce thermal performance.
- It is safe and easy to install – it does not produce irritative fibres.
- It provides reliable long term thermal performance over the lifetime of a building.
- Manufactured with a blowing agent that has zero ODP and a GWP of 1



Kingspan GreenGuard™ for heavy duty floors



Kingspan GreenGuard™ for car park decks and inverted roofs



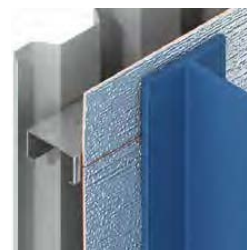
Kingspan GreenGuard™ for basement walls

## Introduction

The Kingspan AIR-CELL™ Insulbreak™ Range is a patented high performance insulation for steel framed residential and commercial roofs, walls and floors.

## Benefits

- All-in-one high performance polyethylene insulation, radiant barrier, vapour barrier and thermal break solution.
- Reflects up to 97% of radiant heat
- High performance polyethylene insulation – thermal resistance of 0.13-22 m<sup>2</sup>.K/W
- Its closed cell structure resists both moisture and water vapour ingress – problems which can be associated with open cell materials such as man-made mineral fibre and which can result in reduced thermal performance.
- It is safe and easy to install – it does not produce irritative fibres.



Kingspan AIR-CELL™ Insulbreak™ for steel framed wall without lining



Kingspan AIR-CELL™ Insulbreak™ for cladding system



Kingspan AIR-CELL™ Insulbreak™ for under suspended floor joints





Project Name: My City Centre, Masdar

Location: Abu Dhabi, U.A.E

Building Use: Mixed

Product: Kingspan GreenGuard™ GG500 (XPS) Insulation  
board and Kingspan Therma™ TR26



# KoolDuct™ System Overview

## Introduction

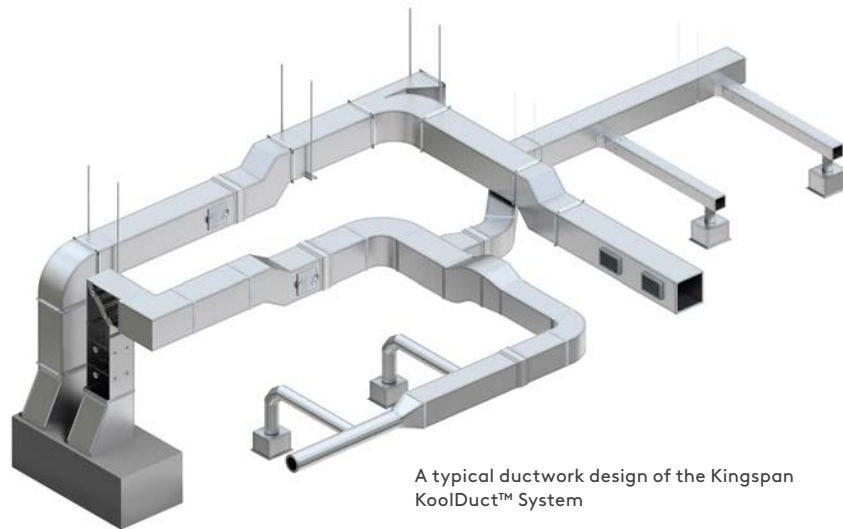
The Kingspan KoolDuct™ System is an advanced and innovative pre-insulated rectangular HVAC ductwork system. This cutting edge System offers the triple benefits of cutting energy use, cutting operational CO<sub>2</sub> emissions and cutting costs.

Kingspan KoolDuct™ Panels, used in the fabrication of The Kingspan KoolDuct™ System, comprise a fibre-free premium performance phenolic insulation core, faced on both sides with a reinforced aluminium foil.



## Benefits

- The Kingspan KoolDuct™ System was the first premium performance pre-insulated ductwork in the world to be UL Listed as a Class 1 Air Duct, to Standard for Safety UL 181, when fabricated to a specification clearly defined by UL.
- Ductwork can weigh up to 75% less than ductwork constructed from galvanised sheet steel and insulated with mineral fibre.



A typical ductwork design of the Kingspan KoolDuct™ System

- Faster installation speeds as a result of low weight ductwork fabricated in sections up to 3.93 m /13 ft long, single-fix installation and no need to install insulation as a second operation.
- It typically saves up to 150–200 mm / 6–8" in a single dimension, allowing ductwork to be installed flush to ceilings, walls and floors, as well as to surfaces within confined enclosures.
- Reduced labour and materials can provide an ideal value engineered ductwork solution without compromising performance.
- Low ductwork air-leakage can yield significant electrical consumption and CO<sub>2</sub> emissions savings because of reduced heating and cooling loads and fan energy usage.
- Low embodied environmental impact – up to 65% less than that of rock mineral fibre insulated galvanised sheet steel ductwork.
- Kingspan KoolDuct™ panels have an A BRE Green Guide Rating.

Project Name: Etihad Museum  
Location: Dubai, U.A.E  
Building Use: Museum  
Product: Kingspan KoolDuct™ System



Project Name: Four Seasons Hotel  
Location: Doha, Qatar  
Building Use: Leisure – Hotel  
Product: Kingspan KoolDuct™ System





# PalDuct System Overview

## Introduction

Kingspan PalDuct Systems offer a range of pre-insulated HVAC ductwork for a variety of applications. Kingspan PalDuct Systems comprise premium performance Kingspan PalDuct phenolic panels, high performance Kingspan PalDuct polyisocyanurate (PIR) panels or Kingspan PalDuct polyurethane (PUR) panels.

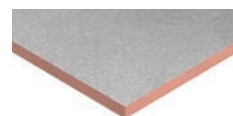
The following Kingspan PalDuct systems are available:

- PalDuct PIR System;
- PalDuct Eco System;
- PalDuct Phenolic System;
- PalDuct Spiral System; and
- KDuct Pre-Clad Duct Systems.

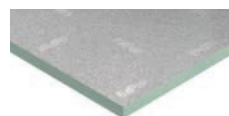
## Benefits

All products in the Kingspan PalDuct range offer many advantages commonly associated with pre-insulated ductwork, such as:

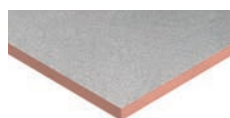
- fast track installation;
- lightweight;
- space saving;
- low air-leakage; and
- energy saving.



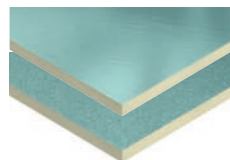
Kingspan PalDuct PIR panel (Internal Use)



Kingspan PalDuct PIR panel (External Use)



Kingspan PalDuct Phenolic panel



Kingspan PalDuct Eco panel

## Additional Benefits

- The Kingspan PalDuct Spiral System offers high performance spiral ductwork that is generally preferred in swimming pools, sport centres, exhibition halls and shopping centres.
- The facings of Kingspan PalDuct Eco panels, used in the fabrication of the Kingspan PalDuct Eco System, are antimicrobial coated and can resist the spread of bacteria. This technology can be particularly useful in clinics and hospitals, laboratories and the food, beverage and pharmaceutical industries.
- The Kingspan PalDuct Phenolic System is UL Listed as a Class 1 Air Duct, to Standard for Safety UL 181, when fabricated to a specification clearly defined by UL.
- All Kingspan PalDuct panels, used in the fabrication of Kingspan PalDuct Systems, comprise a fibre-free rigid insulation core.





Project Name: AKOYA  
Location: Dubai, U.A.E.  
Building Use: Residential  
Product: Kingspan PalDuct™ Phenolic System





# KDuct Pre-Clad Duct System Overview

## Introduction

KDuct is Kingspan's innovative and revolutionary pre-insulated ductwork system made of thermoset fibre-free pre-insulated duct board with a heavy-duty outer jacket, ideal for:

- External/Outdoor applications
- Plantrooms
- Risers
- Congested spaces
- Lightweight specifications



Kingspan KDuct Pre-Clad Duct Systems

## Benefits

Kingspan KDuct offer many advantages commonly associated with pre-insulated ductwork, such as:

- Ultra-strength and rigidity
- Cost-savings over traditional exterior ductwork
- Extra-low air leakage, does not allow conditioned air to escape.
- Easy to clean and hygienic.
- Clean air: fibre-free insulation core.
- Improved indoor air quality (IAQ)
- Lightweight: Over 80% lighter than traditional roof ductwork systems
- Resistant to fungus growth.
- Easy to transport and install.
- Space-saving: flush-fitting installation possible.
- Low 'λ' value.
- Energy savings: up to 20% annually.
- Fast-track single-fix installation.
- No limits to duct sizes..
- High-compressive strength.
- Base material is impermeable to moisture.
- Environmentally friendly: CFCs and HCFCs free
- 32mm pre-insulated ductwork fabricated from thermoset fibrefree duct board.
- 0.76mm impact resistant Aluminium Facer with anti-static properties for easy maintenance.
- Aluminium Facer is Layered with a transparent UV-Protective Outer Film with resistance to Acid, Alkali, Salt, Fat, Oil, Bacteria & Fungi.



**Fibre-free  
Core**

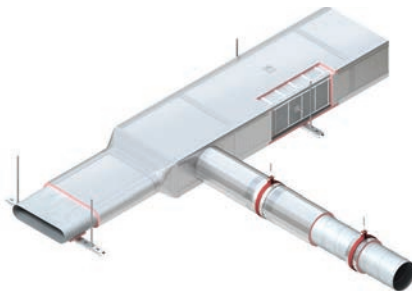
# Kooltherm™ Duct Insulation Overview

## Introduction

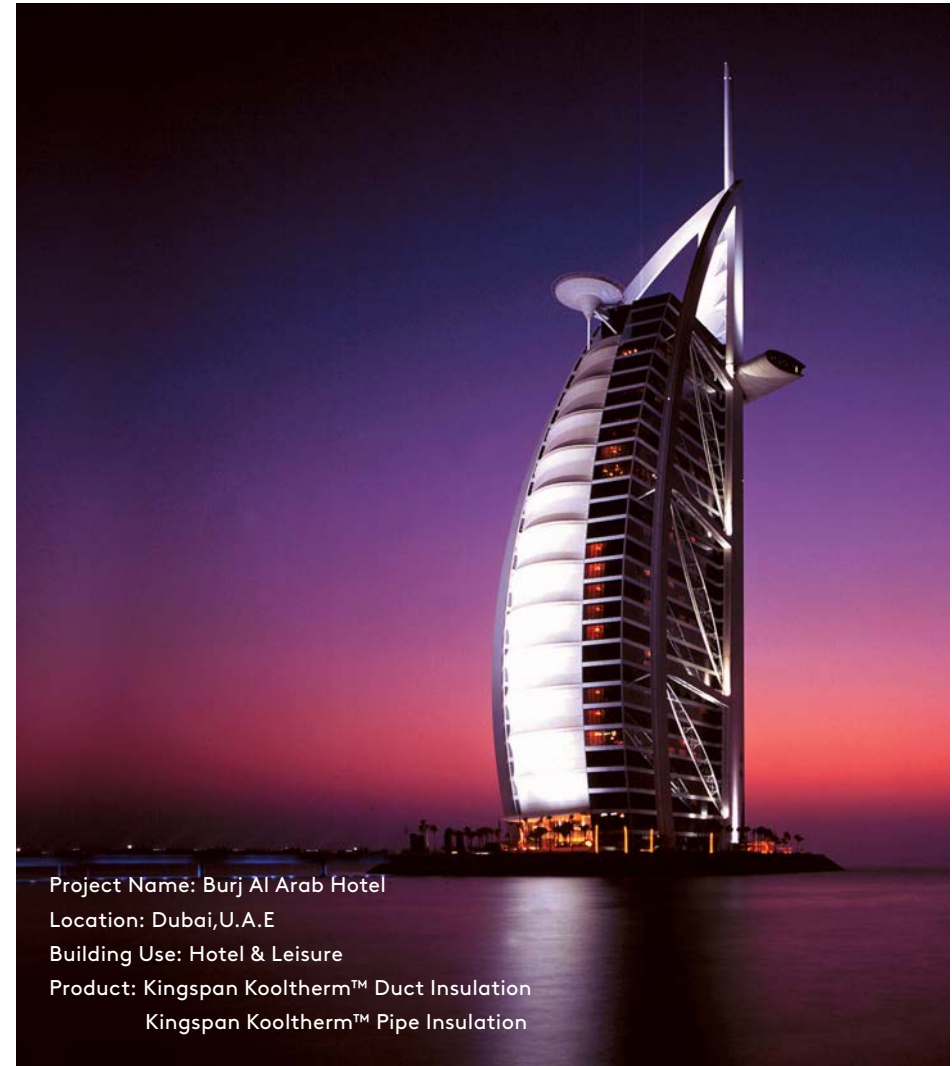
Kingspan Kooltherm™ Duct Insulation is a premium performance phenolic thermal insulation designed for use on ductwork in Building Services / HVAC applications.

## Benefits

- Kooltherm™ Duct Insulation is FM Approved for use as thermal insulation on ductwork.
- It has the lowest thermal conductivity of any commonly used duct insulation material at 0.021 W/m.K which allows thinner insulation to achieve the required thermal performance.
- Its rigidity enables the specified thickness of insulation to be maintained at the corners of ductwork which ensures the integrity of its thermal performance is preserved.
- Kooltherm™ Duct Insulation includes a factory applied aluminium foil vapour barrier jacket with low emissivity for increased energy efficiency.
- The risk of moisture penetration as a result of damage to the vapour barrier jacket is greatly reduced as it has a closed cell structure.
- It is suitable for use on high specification projects in the food, beverage and pharmaceutical industries in addition to medical and other hygiene controlled environments.
- It is safe and easy to install – it does not produce irritative fibres.
- Achieves an A+ BRE Green Guide Rating.



A typical application for Kooltherm™ Duct Insulation



Project Name: Burj Al Arab Hotel  
Location: Dubai, U.A.E  
Building Use: Hotel & Leisure  
Product: Kingspan Kooltherm™ Duct Insulation  
Kingspan Kooltherm™ Pipe Insulation



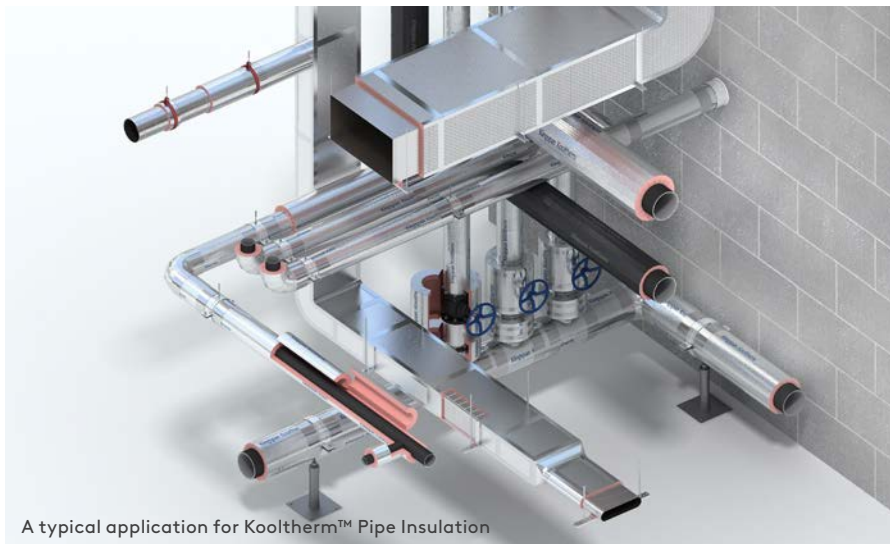
# Kooltherm™ Pipe Insulation Overview

## Introduction

Kingspan Kooltherm™ Pipe Insulation is a premium performance phenolic product for the insulation of pipework in building services / HVAC applications.

## Benefits

- Kooltherm™ Pipe Insulation is FM Approved for use as thermal insulation on pipework.
- It has the lowest thermal conductivity of any commonly used pipe insulation material at 0.025 W/m.K which allows thinner insulation to achieve the required thermal performance.
- Its rigidity enables the specified thickness of insulation to be maintained all around the pipe which ensures the integrity of its thermal performance is preserved.
- Kooltherm™ Pipe Insulation includes a factory applied aluminium foil vapour barrier jacket with low emissivity for increased energy efficiency.
- The risk of moisture penetration as a result of damage to the vapour barrier jacket is greatly reduced as it has a closed cell structure.



A typical application for Kooltherm™ Pipe Insulation

- It is suitable for use on high specification projects in the food, beverage and pharmaceutical industries in addition to medical and other hygiene controlled environments.
- It is safe and easy to install – it does not produce irritative fibres.
- Achieves an A+ BRE Green Guide Rating.



Project Name: Haramain High Speed Railway Stations  
Location: Jeddah, KAEC and Madinah, Saudi Arabia  
Building Use: Transport - Railway Station  
Product: The Kingspan Kooltherm™ Duct Insulation  
Kingspan Kooltherm™ Pipe Insulation



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# Contact Details

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## Technical Service

Kingspan Insulation has one of the most technically advanced support services in the industry offering a full spectrum of advice, free of charge for all types of design projects.

The Kingspan Insulation technical team are continually updating their knowledge on building regulations, best practise, construction methods and the development of building materials to ensure the advice and services provided are always one step ahead.

### Services available:

- U-value calculations;
- condensation/dew point risk calculations;
- advice on product selection and product data for the full range of Kingspan Insulation products;
- installation and fixing advice on all applications and products;
- specification and construction advice; and
- Tapered Roofing Design service.

Email: [technical@kingspaninsulation.ae](mailto:technical@kingspaninsulation.ae)

Kingspan Insulation LLC reserves the right to amend product specifications without prior notice. Product thicknesses shown in this document should not be taken as being available ex-stock and advice should be sought directly from Kingspan Insulation LLC. The information, technical details and fixing instructions etc. included in this literature are given in good faith and apply to uses described herein. Recommendations for use should be verified as to the suitability and compliance with actual requirements, specifications and any applicable codes, laws and regulations. For other applications or conditions of use, contact Kingspan Insulation LLC.

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