



# Product Selector

INSULATION SOLUTIONS FOR ROOF, WALL, FLOOR BUILDING SERVICES APPLICATIONS AND PRE-INSULATED DUCTWORK SYSTEMS



Visit our website:  
[www.kingspaninsulation.com](http://www.kingspaninsulation.com)



Low Energy –  
Low Carbon Buildings

# Contents

	Page
<b>Building Insulation Selector Chart</b>	<b>4</b>
<b>Roof Insulation</b>	<b>7</b>
OPTIM-R™ Roofing System	8
OPTIM-R™ Balcony & Terrace System	9
Therमारoo™ TR22	10
Therमारoo™ TR24	11
Therमारoo™ TR26 LPC/FM	12
Therमारoo™ TR27 LPC/FM	13
Therमतaper™ TT46 LPC/FM	14
Therमतaper™ TT47 LPC/FM	15
Styrozone™ N 300 R	16
Styrozone™ H 350 R	17
Styrozone™ N 500 R	18
Styrozone™ N 700 R	19
Air-Cell™ Insulbreak	20
<b>Wall Insulation</b>	<b>23</b>
OPTIM-R™ Cladding System	24
OPTIM-R™ External Wall System	25
Kooltherm™ K5 External Wall Board	26
Kooltherm™ K8 Cavity Board	27
Kooltherm™ K12 Framing Board	28
Kooltherm™ K15 Cladding Board	29
Kooltherm™ Cavity Closer and Kooltherm™ Cavity Closer PLUS	30
Therमawall™ TW50	32
Therमawall™ TW55	33
Styrozone™ N 300 R	16
Styrozone™ H 350 R	17
Air-Cell™ Insulbreak	20
<b>Floor Insulation</b>	<b>35</b>
OPTIM-R™ Flooring System	36
Kooltherm™ K3 Floorboard	37
Kooltherm™ K10 FM Soffit Board	38
Kooltherm™ K10 PLUS Soffit Board	38
Therमafloor™ TF70	39
Styrozone™ N 300 R	16
Styrozone™ H 350 R	17
Styrozone™ N 500 R	18
Styrozone™ N 700 R	19
Air-Cell™ Insulbreak	20
<b>Membranes</b>	<b>41</b>
Aquazone™	42
<b>Building Services Insulation and Pre-insulated Ductwork</b>	<b>43</b>
Kooltherm™ FM Pipe Insulation	45
Kooltherm™ FM Duct Insulation	46
The Kingspan KoolDuct™ System	47
The Kingspan PalDuct PIR System	48
The Kingspan PalDuct Hydro System	49
The Kingspan PalDuct Eco System	50
The Kingspan PalDuct Phenolic System	51
The Kingspan PalDuct Spiral System	52
Kingspan Ducting SuperCut Machine	53
Kingspan Ducting CNC Machine	54
<b>Prestige Projects</b>	<b>55</b>

Kingspan Insulation reserves the right to amend product specifications without prior notice. The information contained in the document is given in good faith and applies to the uses described. Recommendations for use should be verified as to the suitability and compliance with actual requirements, specifications and any applicable laws and regulations. Kingspan Insulation recommend using the Technical Advice service (see back cover).

# Building Insulation Selector

## Roof Insulation

	OPTIM-R™ Balcony & Terrace System	OPTIM-R™ Roofing System	Thermaroof™ TR22	Thermaroof™ TR24	Thermaroof™ TR26 LPC/FM	Thermaroof™ TR27 LPC/FM	Thermataper™ TT46 LPC/FM	Thermataper™ TT47 LPC/FM	Styrozone™ N 300 R	Styrozone™ H 350 R	Styrozone™ N 500 R	Styrozone™ N 700 R	Air-Cell™ Insulbreak	Aquazone™
Pitched Roof Insulation														
Metal Clad Pitched Roof with Steel Portal Frame													■	
Flat Roof Insulation														
Tapered Roofing System	■	■					■	■						
Water Infiltration Reduction Membrane														■
Under cold liquid applied waterproofing	■	■	■			■		■						
Under torch-on felt waterproofing	■	■		■										
Under mechanically-fixed, single-ply membranes			■		■	■	■	■						
Under fully adhered singly-ply membranes	■	■	■			■		■						
In LPCB/FM approved constructions					■	■	■	■						
Above suspended plasterboard ceiling													■	
Protected Membrane Roofs														
Traditionally protected membrane / Roof gardens									■	■				
Car park decks									■	■	■	■		
Lightweight protected membrane / maintenance access									■	■				
Green Roofs														
Insulation suitable for use under Green Roofs	■	■	■	■	■	■	■	■	■	■	■	■		

# Building Insulation Selector

	OPTIM-R™ External Wall System	OPTIM-R™ Cladding System	Kooltherm™ K5 External wall Board	Kooltherm™ K8 Cavity Board	Kooltherm™ K12 Framing Board	Kooltherm™ K15 Cladding Board	Thermawall™ TW50	Thermawall™ TW55	Styrozone™ N 300 R	Styrozone™ H 350 R	Air-Cell™ Insulbreak	Kooltherm™ Cavity Closer & Kooltherm™ Cavity Closer PLUS
Partial fill cavity walls				■			■					■
Insulated render systems	■		■									
Cladding systems		■				■					■	
Steel frame					■			■			■	
Basement walls									■	■		
Cavity Closers												■

## Floor Insulation

	OPTIM-R™ Flooring System	Kooltherm™ K3 Floorboard	Kooltherm™ K10 FM Soffit Board	Kooltherm™ K10 PLUS Soffit Board	Thermafloor™ TF70	Styrozone™ N 300 R	Styrozone™ H 350 R	Styrozone™ N 500 R	Styrozone™ N 700 R	Air-Cell™ Insulbreak
Solid ground floors	■	■			■		■			
Soffit lining			■	■						■
Heavy-duty / industrial / cold store floors						■	■	■	■	



OPTIM-R

Jada

# Roof Insulation



## OPTIM-R™ Roofing System

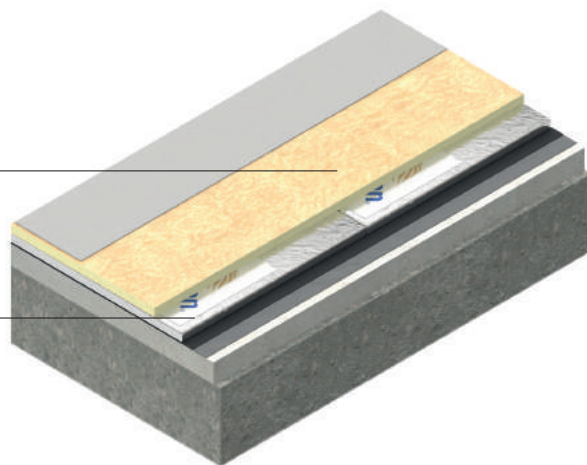
### NEXT GENERATION INSULATION SOLUTION FOR ROOFS

Recommended for:

- New build
- Refurbishment
- Metal or Concrete Deck

Kingspan Thermaroof™  
TR27 LPC/FM

Kingspan OPTIM-R™



### Product Data

Thermal Conductivity	0.007 W/m·K (aged design value)
Core	Optimum performance rigid vacuum insulation panel with a microporous core which is evacuated, encased and sealed in a thin, gas-tight envelope.
Compressive Strength	160 kPa (at 10% compression)
Density (panel)	170-210 Kg/m³
Product Width	300 – 600 mm*
Product Length	300 – 1200 mm*
Thicknesses Available	20 – 60 mm
Complementary Products	<ul style="list-style-type: none"> <li>■ Thermaroof™ TR27 LPC/FM (page 13)</li> <li>■ Thermataper™ TT47 LPC/FM (page 15)</li> </ul>

Available in a variety of thicknesses.

\*Other sizes may be available dependent on order quantity. Please contact Kingspan Insulation for more details.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## OPTIM-R™ Balcony & Terrace System

### NEXT GENERATION INSULATION SOLUTION FOR BALCONIES AND TERRACES

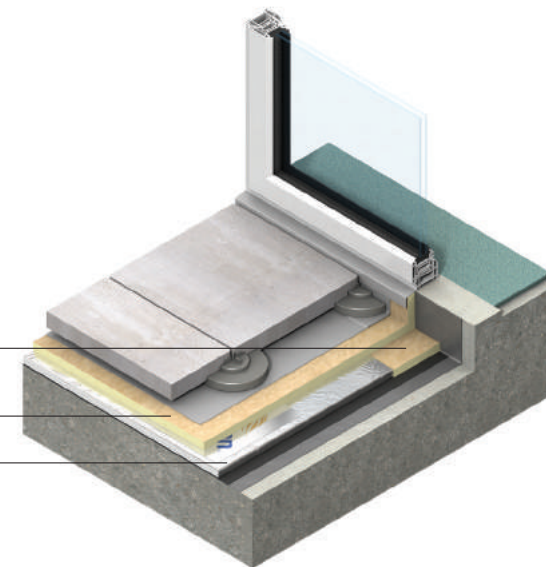
Recommended for:

- New build
- Refurbishment
- Concrete Deck

Kingspan OPTIM-R flex

Kingspan Thermaroof™  
TR27 LPC/FM

Kingspan OPTIM-R™



### Product Data

Thermal Conductivity	0.007 W/m·K (aged design value)
Core	Optimum performance rigid vacuum insulation panel with a microporous core which is evacuated, encased and sealed in a thin, gas-tight envelope.
Compressive Strength	160 kPa (at 10% compression)
Density (panel)	170-210 Kg/m³
Product Width	300 – 600 mm*
Product Length	300 – 1200 mm*
Thicknesses Available	20 – 60 mm
Complementary Products	<ul style="list-style-type: none"> <li>■ Thermaroof™ TR27 LPC/FM (page 13)</li> <li>■ Thermataper™ TT47 LPC/FM (page 15)</li> </ul>

Available in a variety of thicknesses.

\*Other sizes may be available dependent on order quantity. Please contact Kingspan Insulation for more details.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

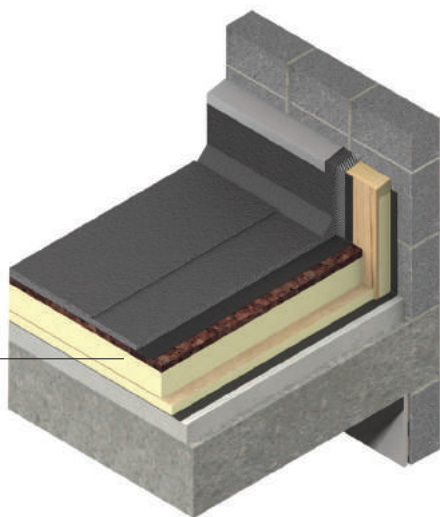
## Thermaroof™ TR22

HIGH COMPRESSIVE STRENGTH INSULATION COVER BOARD  
FOR USE IN OVERLAYING NEW OR EXISTING FLAT ROOF  
WATERPROOFING

Recommended for:

- New build
- Refurbishment
- Overlaying single-ply or cold liquid applied waterproofing

Kingspan Thermaroof™ TR22



### Product Data

Thermal Conductivity	0.028 W/m·K
Facings	Glass tissue based
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	400 kPa (at 10% compression)
Density	60 Kg/m <sup>3</sup>
Board Size	1.2 x 2.4 m
Thicknesses Available	15 mm
Complementary Products	



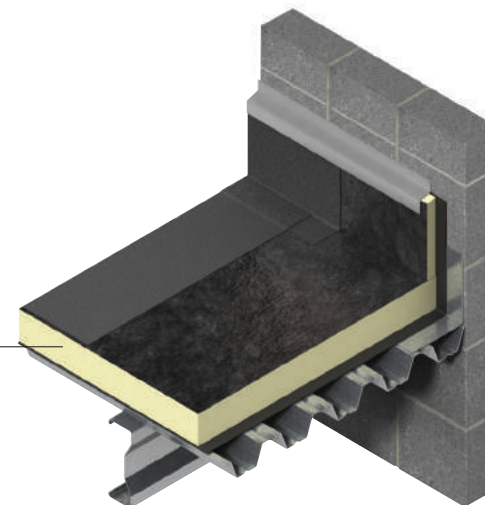
## Thermaroof™ TR24

INSULATION FOR FLAT ROOFS WATERPROOFED WITH  
PARTIALLY BONDED TORCH APPLIED MULTI-LAYER  
BITUMINOUS WATERPROOFING

Recommended for:

- New build
- Refurbishment
- Metal or Concrete Deck

Kingspan Thermaroof™ TR24



### Product Data

Thermal Conductivity	0.026 W/m·K (insulant thickness < 80 mm) 0.025 W/m·K (insulant thickness 80 – 119 mm) 0.024 W/m·K (insulant thickness ≥ 120 mm)
Upper Facing	Bitumin coated glass tissue
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Lower Facing	Mineralised glass tissue
Compressive Strength	150 kPa (at 10% compression)
Density	32 Kg/m <sup>3</sup>
Board Size	1.2 x 0.6 m
Thicknesses Available	30 – 150 mm
Complementary Products	



## Thermaroof™ TR26 LPC/FM

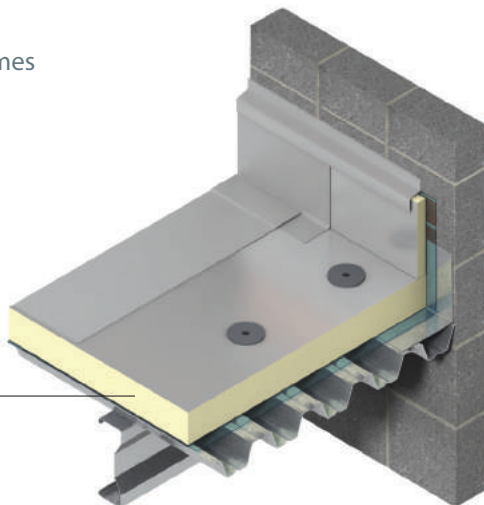
### INSULATION FOR FLAT ROOFS WATERPROOFED WITH MECHANICALLY FIXED SINGLE-PLY WATERPROOFING

Recommended for:

- LPCB / FM compliance
- Fast-track building programmes
- New build
- Refurbishment
- Metal or Concrete Deck



Kingspan Thermaroof™ TR26 LPC/FM



### Product Data

Thermal Conductivity	0.022 W/m·K
Facings	Composite foil
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	150 kPa (at 10% compression)
Density	32 Kg/m <sup>3</sup>
Board Size	1.2 x 2.4 m
Thicknesses Available	25 – 150 mm
Complementary Products	■ Thermataper™ TT46 LPC/FM (page 14)



Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## Thermaroof™ TR27 LPC/FM

### INSULATION FOR FLAT ROOFS WATERPROOFED WITH FULLY ADHERED SINGLE-PLY AND COLD LIQUID APPLIED WATERPROOFING

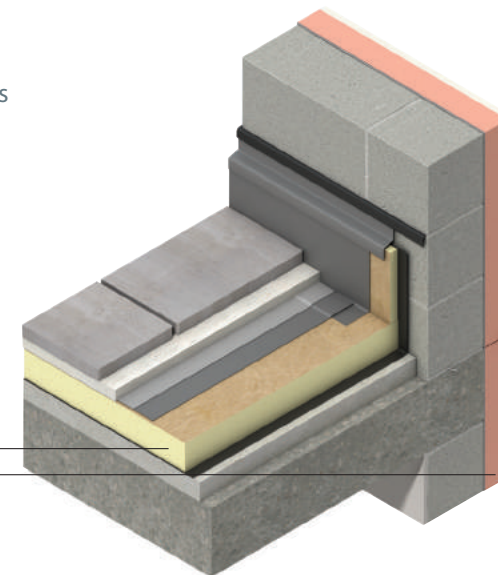
Recommended for:

- LPCB / FM compliance
- Fast-track building programmes
- New build
- Refurbishment
- Metal or Concrete Deck



Kingspan Thermaroof™ TR27 LPC/FM

Kingspan Thermaroof™ K5 External Wall Board



### Product Data

Thermal Conductivity	0.022 W/m·K
Facings	Coated glass tissue
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	150 kPa (at 10% compression)
Density	32 Kg/m <sup>3</sup>
Board Size	1.2 x 0.6 m and 1.2 x 2.4 m
Thicknesses Available	25 – 140 mm (1.2 x 0.6 m boards) and 50 – 160 mm (1.2 x 2.4 m boards)
Complementary Products	■ Thermataper™ TT47 LPC/FM (page 15)



Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## Thermataper™ TT46 LPC/FM

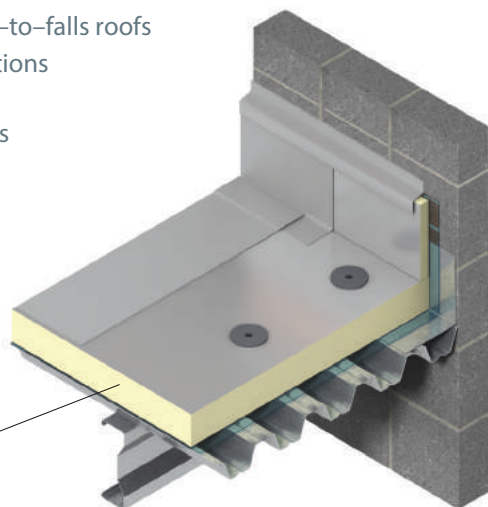
TAPERED INSULATION FOR FLAT ROOFS WATERPROOFED WITH MECHANICALLY FIXED SINGLE-PLY WATERPROOFING

Recommended for:

- Alternative to expensive screed-to-falls roofs
- Reducing load-bearing implications for new or existing structures
- Fast-track building programmes
- New build
- Refurbishment
- Metal or Concrete Deck



Kingspan Thermataper™ TT46 LPC/FM



### Product Data

Thermal Conductivity	0.022 W/m·K
Facings	Composite foil
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	150 kPa (at 10% compression)
Density	32 Kg/m <sup>3</sup>
Board Size	1.2 x 1.2 m
Manufactured Rate of Fall	1:30; 1:40; 1:60; 1:80
Complementary Products	■ Thermaroom™ TR26 LPC/FM (page 12)



## Thermataper™ TT47 LPC/FM

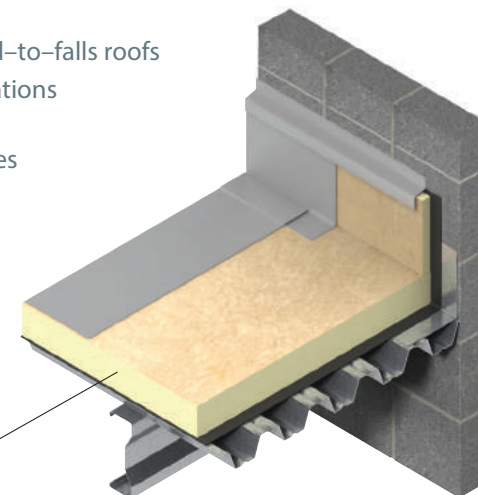
TAPERED INSULATION FOR FLAT ROOFS WATERPROOFED WITH FULLY ADHERED SINGLE-PLY AND COLD LIQUID APPLIED WATERPROOFING

Recommended for:

- Alternative to expensive screed-to-falls roofs
- Reducing load-bearing implications for new or existing structures
- Fast-track building programmes
- New build
- Refurbishment
- Metal or Concrete Deck



Kingspan Thermataper™ TT47 LPC/FM



### Product Data

Thermal Conductivity	0.022 W/m·K
Facings	Coated glass tissue
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	150 kPa (at 10% compression)
Density	32 Kg/m <sup>3</sup>
Board Size	1.2 x 1.2 m
Manufactured Rate of Fall	1:30; 1:40; 1:60; 1:80
Complementary Products	■ Thermaroom™ TR27 LPC/FM (page 13)





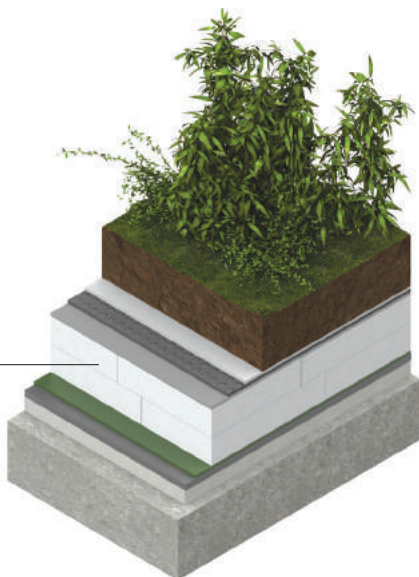
## Styrozone™ N 300 R

INSULATION FOR INVERTED ROOFS, BASEMENTS, CAR PARK DECKS, AND HEAVY-DUTY COMMERCIAL, INDUSTRIAL AND COLD STORE FLOORING


Recommended for:

- New build
- Refurbishment
- Inverted / protected membrane roofs
- Basement walls
- Below floor slab or screed

Kingspan Styrozone™ N 300 R



### Product Data

Thermal Conductivity	0.035 W/m·K (insulant thickness 50 - 120 mm) 0.036 W/m·K (insulant thickness 140 mm) 0.037 W/m·K (insulant thickness 160 mm)	
Core	High performance fibre-free rigid extruded polystyrene insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)	
Compressive Strength	300 kPa (at 10% compression)	
Density	32 Kg/m <sup>3</sup>	
Board Size	1.25 x 0.6 m	
Thicknesses Available	50 - 160 mm	
Complementary Products	■ Styrozone™ H 350 R (page 17)	

Higher thicknesses are available as a double layer of those options stated above.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

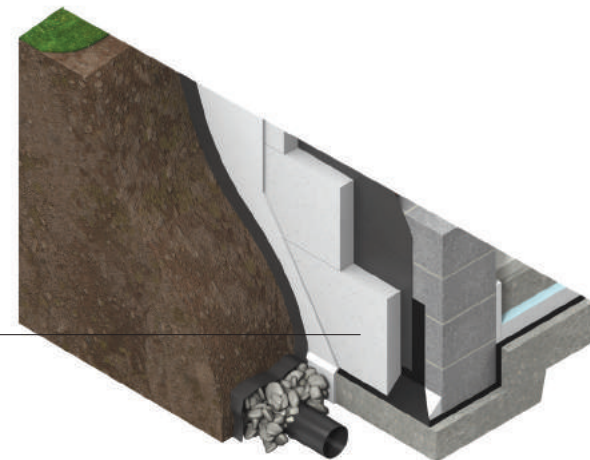
## Styrozone™ H 350 R

INSULATION FOR INVERTED ROOFS, BASEMENTS, CAR PARK DECKS, AND HEAVY-DUTY COMMERCIAL, INDUSTRIAL AND COLD STORE FLOORING


Recommended for:

- New build
- Refurbishment
- Inverted / protected membrane roofs
- Basement walls
- Below floor slab or screed

Kingspan Styrozone™ H 350 R



### Product Data

Thermal Conductivity	0.029 W/m·K (insulant thickness ≤ 120 mm) 0.031 W/m·K (insulant thickness > 120 mm)	
Core	High performance fibre-free rigid extruded polystyrene insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP)	
Compressive Strength	300 kPa (at 10% compression)	
Density	35 Kg/m <sup>3</sup>	
Board Size	1.25 x 0.6 m	
Thicknesses Available	30 - 140 mm	
Complementary Products	■ Styrozone™ N 300 R (page 16)	

Higher thicknesses are available as a double layer of those options stated above.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

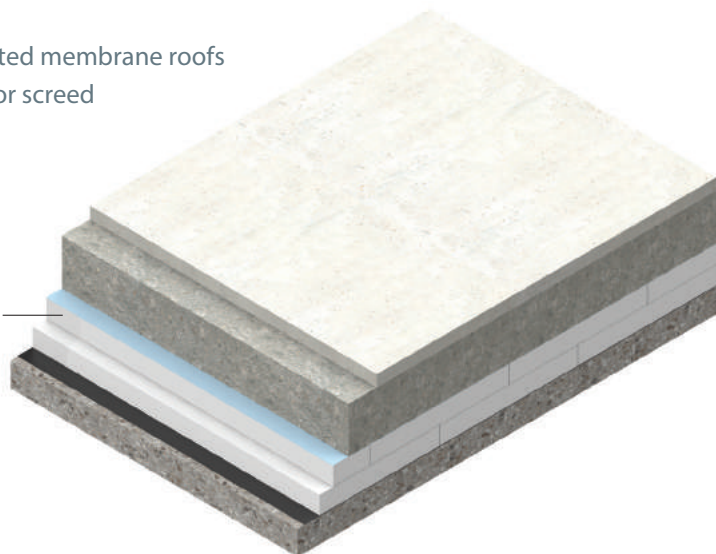
## Styrozone™ N 500 R

INSULATION FOR CAR PARK DECKS, AND HEAVY-DUTY COMMERCIAL, INDUSTRIAL AND COLD STORE FLOORING

Recommended for:

- New build
- Refurbishment
- Inverted / protected membrane roofs
- Below floor slab or screed

Kingspan Styrozone™ N 500 R



### Product Data

Thermal Conductivity	0.035 W/m·K (insulant thickness 50 - 120 mm) 0.036 W/m·K (insulant thickness 140 mm) 0.037 W/m·K (insulant thickness 160 mm)
Core	High performance fibre-free rigid extruded polystyrene insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	500 kPa (at 10% compression)
Density	40 Kg/m <sup>3</sup>
Board Size	1.25 x 0.6 m
Thicknesses Available	50 – 160 mm
Complementary Products	<ul style="list-style-type: none"> <li>■ Styrozone™ N 300 R (page 16)</li> <li>■ Styrozone™ H 350 R (page 17)</li> <li>■ Styrozone™ N 700 R (page 19)</li> </ul>



Higher thicknesses are available as a double layer of those options stated above.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## Styrozone™ N 700 R

INSULATION FOR CAR PARK DECKS, AND HEAVY-DUTY COMMERCIAL, INDUSTRIAL AND COLD STORE FLOORING

Recommended for:

- New build
- Refurbishment
- Inverted / protected membrane roofs
- Below floor slab or screed

Kingspan Styrozone™ N 700 R



### Product Data

Thermal Conductivity	0.035 W/m·K (insulant thickness 60 - 120 mm)
Core	High performance fibre-free rigid extruded polystyrene insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	700 kPa (at 10% compression)
Density	45 Kg/m <sup>3</sup>
Board Size	1.25 x 0.6 m
Thicknesses Available	60 - 120 mm
Complementary Products	<ul style="list-style-type: none"> <li>■ Styrozone™ N 500 R (page 18)</li> </ul>



Higher thicknesses are available as a double layer of those options stated above.

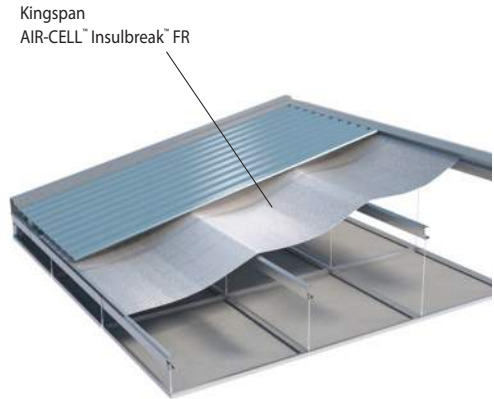
Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

# AIR-CELL™ Product Range


## THERMO REFLECTIVE INSULATION FOR USE IN STEEL FRAMED RESIDENTIAL & COMMERCIAL ROOFS, WALLS & FLOORS

Recommended for:

- New build
- Refurbishment
- Metal clad pitched roof
- Concrete deck flat roof
- Steel frame walls
- Solid walled buildings
- Insulated cladding systems on both masonry and steel frames
- Insulating under structural ceilings
- Car park ceilings



### Product Data

Thermal Resistance	0.20 <sup>2</sup> .K/W (TB065)   0.25 <sup>2</sup> .K/W (TB080)	
Facings	Highly reflective, extremely durable and low vapour permeability 6.5 micron aluminium foil	
Core	High performance fibre-free polyethylene insulation	
Roll Dimensions	1.3 m x 34.62 m (45 m <sup>2</sup> )	
Thicknesses Available	4mm, 6.5mm & 8 mm	
Complementary Products	<ul style="list-style-type: none"><li>■ Insulbreak 40F (Ask for details)</li><li>■ Insulbreak 65F (Ask for details)</li><li>■ Insulbreak 80F (Ask for details)</li><li>■ Insuliner (Group 2 NCC fire classification) (Ask for details)</li><li>■ Retroshield (Bubble Foil Product) (Ask for details)</li></ul>	

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies



Kingspan Thermataper™ TT47 LPC/FM





# Wall Insulation



# OPTIM-R™ Cladding System

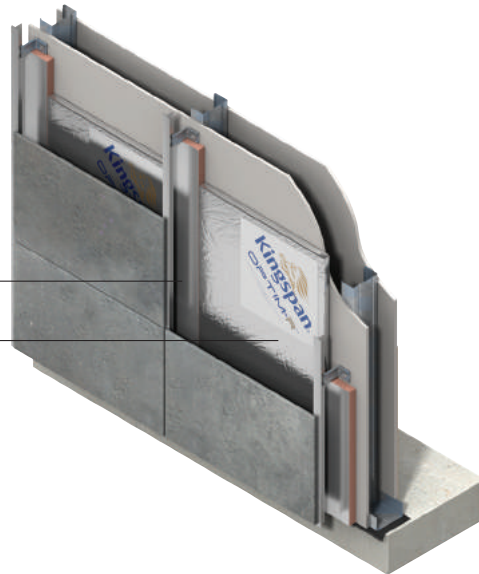
## NEXT GENERATION INSULATION SOLUTION FOR CLADDING

Recommended for:

- Proprietary and non-proprietary external finishes
- Insulated cladding systems on both masonry and steel frames
- New build
- Refurbishment

Kingspan OPTIM-R flex

Kingspan OPTIM-R



## Product Data

Thermal Conductivity	0.007 W/m·K (aged design value)
Core	Optimum performance rigid vacuum insulation panel with a microporous core which is evacuated, encased and sealed in a thin, gas-tight envelope.
Density (panel)	170-210 Kg/m <sup>3</sup>
Product Width	300 – 600 mm*
Product Length	300 – 1200 mm*
Thicknesses Available	20 – 60 mm
Complementary Products	

Available in a variety of thicknesses.

\*Other sizes may be available dependent on order quantity. Please contact Kingspan Insulation for more details.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

# OPTIM-R™ External Wall System

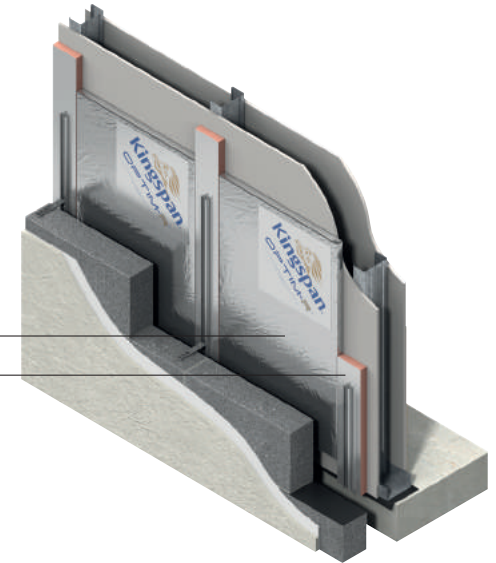
## NEXT GENERATION INSULATION SOLUTION FOR EXTERNAL MASONRY WALLS

Recommended for:

- Solid walled buildings
- Transforming and upgrading the appearance of existing buildings
- New build
- Refurbishment
- Insulated render system on masonry

Kingspan OPTIM-R

Kingspan OPTIM-R fix



## Product Data

Thermal Conductivity	0.007 W/m·K (aged design value)
Core	Optimum performance rigid vacuum insulation panel with a microporous core which is evacuated, encased and sealed in a thin, gas-tight envelope.
Density (panel)	170-210 Kg/m <sup>3</sup>
Product Width	300 – 600 mm*
Product Length	300 – 1200 mm*
Thicknesses Available	20 – 60 mm
Complementary Products	

Available in a variety of thicknesses.

\*Other sizes may be available dependent on order quantity. Please contact Kingspan Insulation for more details.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

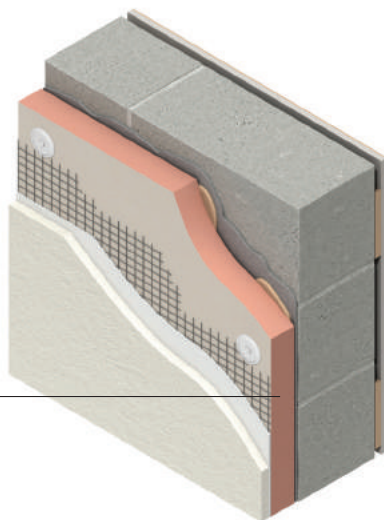
## Kooltherm™ K5 External Wall Board

### EXTERNAL INSULATION FOR MASONRY WALLS

Recommended for:

- Solid walled buildings
- Transforming and upgrading the appearance of existing buildings
- New build
- Refurbishment
- Insulated render system on masonry

Kingspan Kooltherm™ K5 External Wall Board



### Product Data

Thermal Conductivity	0.020 W/m·K
Facings	Glass tissue based
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Board Size	1.2 x 0.6 m
Thicknesses Available	20 – 120 mm
Complementary Products	

Fibre-free  
Core

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## Kooltherm™ K8 Cavity Board

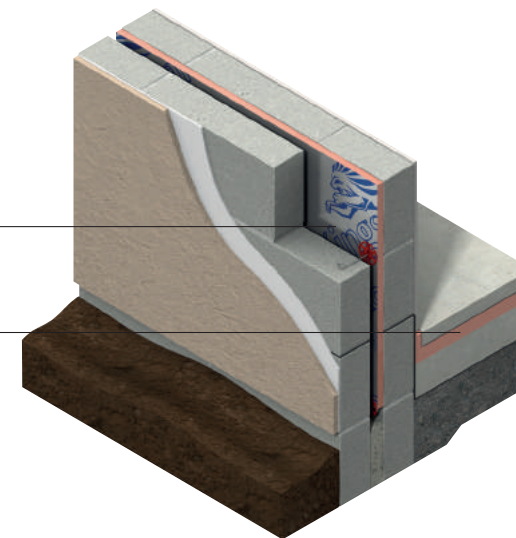
### PARTIAL FILL CAVITY WALL INSULATION

Recommended for:

- Traditional cavity wall construction methods
- New build
- All block types

Kingspan Kooltherm™ K8 Cavity Board

Kingspan Kooltherm™ K3 Floorboard



### Product Data

Thermal Conductivity	0.020 W/m·K
Facings	Composite foil
Core	Premium performance fibre-free rigid thermoset modified resin insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Board Size	1.2 x 0.45 m
Thicknesses Available	20 – 150 mm
Complementary Products	■ Kooltherm™ Cavity Closer and Kooltherm™ Cavity Closer PLUS (page 30)

Fibre-free  
Core

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

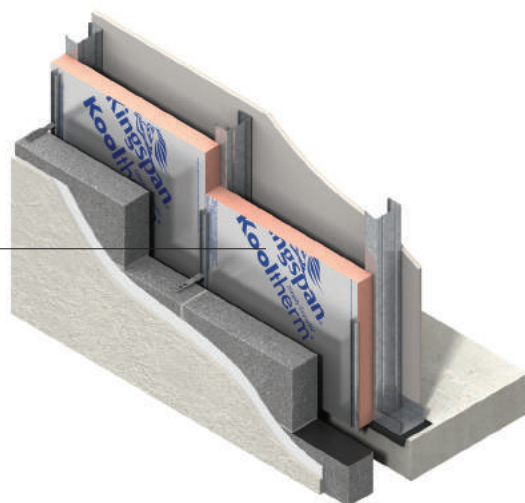
# Kooltherm™ K12 Framing Board

## INSULATION FOR STEEL FRAMING SYSTEMS

Recommended for:

- Insulating between studs
- Insulating sheathing
- Steel frame walls

Kingspan Kooltherm™ K12 Framing Board



## Product Data

Thermal Conductivity	0.020 W/m.K
Facings	Composite foil
Core	Premium performance rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Board Size	1.2 x 2.4 m
Thicknesses Available	25 – 150 mm
Complementary Products	■ Kooltherm™ Cavity Closer and Kooltherm™ Cavity Closer PLUS (page 30)

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

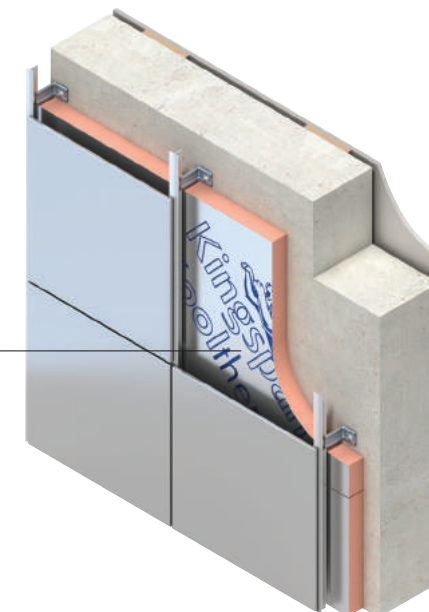
# Kooltherm™ K15 Cladding Board

## INSULATION FOR CLADDING SYSTEMS

Recommended for:

- Proprietary and non-proprietary external finishes
- Insulated cladding systems on both masonry and steel frames
- New build
- Refurbishment

Kingspan Kooltherm™ K15 Cladding Board



## Product Data

Thermal Conductivity	0.020 W/m.K
Facings	Composite foil
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Board Size	1.2 x 2.4 m
Thicknesses Available	25 – 140 mm
Complementary Products	

**Fibre-free  
Core**

Kingspan Kooltherm™ K15 Cladding Board is also available with a black foil face.

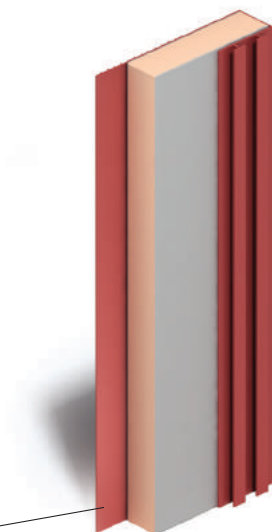
Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

# Kooltherm™ Cavity Closer

## INSULATED EXTRUSIONS FOR CLOSING WALL CAVITIES AT OPENINGS

Recommended for:

- Traditional cavity wall construction
- Window and door cavities
- Single sections fully filling cavities up to and including 150 mm achieve 30 minutes fire resistance
- Use with PVC, timber and metal frames
- Simplified construction
- Cavity widths up to 300 mm
- Use as a frame former (Kooltherm™ Cavity Closer PLUS only)



Kingspan Kooltherm™ Cavity Closer

## Product Data

Thermal Conductivity	0.021 W/m-K
Sheathing	PVC-U extrusion
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Length	2.4 m
Widths Available	50 – 150 mm*
Complementary Products	<ul style="list-style-type: none"> <li>■ Kooltherm™ K8 Cavity Board (page 27)</li> <li>■ Thermawall™ TW50 (page 32)</li> <li>■ Kooltherm™ K12 Framing Board (page 28)</li> <li>■ Thermawall™ TW55 (page 33)</li> </ul>



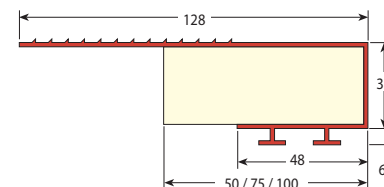
\*Sections can be joined together to suit cavity widths up to 300 mm.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## Standard Dimensions

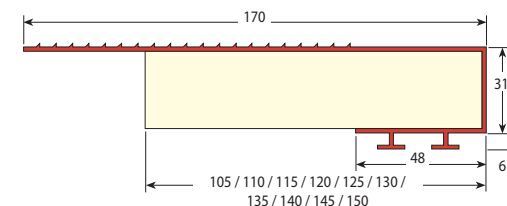
Kingspan Kooltherm™ Cavity Closer  
50, 75 & 100

For cavities 50, 75 & 100 mm wide



Kingspan Kooltherm™ Cavity Closer  
105, 110, 115, 120, 125, 130, 135, 140, 145 & 150

For cavities 105, 110, 115, 120, 125, 130, 135, 140, 145 & 150 mm wide



# Kooltherm™ Cavity Closer PLUS

## PRE-FORMED INSULATED EXTRUSIONS TO SPECIFIED OPENING SIZES FOR CLOSING WALL CAVITIES AT OPENINGS



- Kingspan Kooltherm™ Cavity Closer PLUS can be used with PVC, timber or metal window frames and an insulated lintel.
- A window and door schedule is required. Contact us for more information.

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies



# Thermawall™ TW50

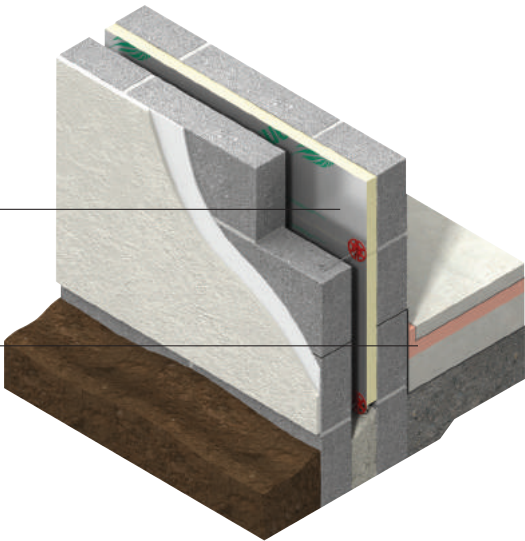
## PARTIAL FILL CAVITY WALL INSULATION

Recommended for:

- Traditional cavity wall construction methods
- New build
- All brick and block types

Kingspan Thermawall™ TW50

Kingspan Kooltherm™ K3 Floorboard



## Product Data

Thermal Conductivity	0.022 W/m-K
Facings	Composite foil
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	32 Kg/m³
Board Size	1.2 x 0.45 m
Thicknesses Available	25 – 100 mm
Complementary Products	■ Kooltherm™ Cavity Closer and Kooltherm™ Cavity Closer PLUS (page 30)



Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

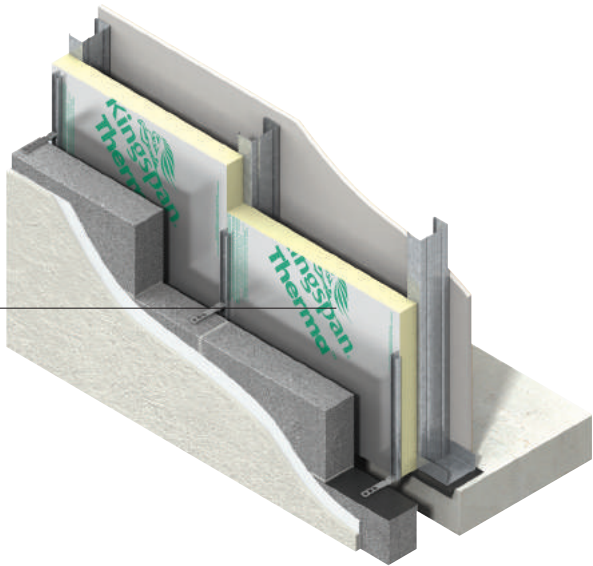
# Thermawall™ TW55

## INSULATION FOR STEEL FRAMING SYSTEMS

Recommended for:

- Insulating between studs
- Insulating sheathing
- Steel frame walls

Kingspan Thermawall™ TW55



## Product Data

Thermal Conductivity	0.022 W/m-K
Facings	Composite foil
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	32 Kg/m³
Board Size	1.2 x 2.4 m
Thicknesses Available	20 – 150 mm
Complementary Products	



Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies



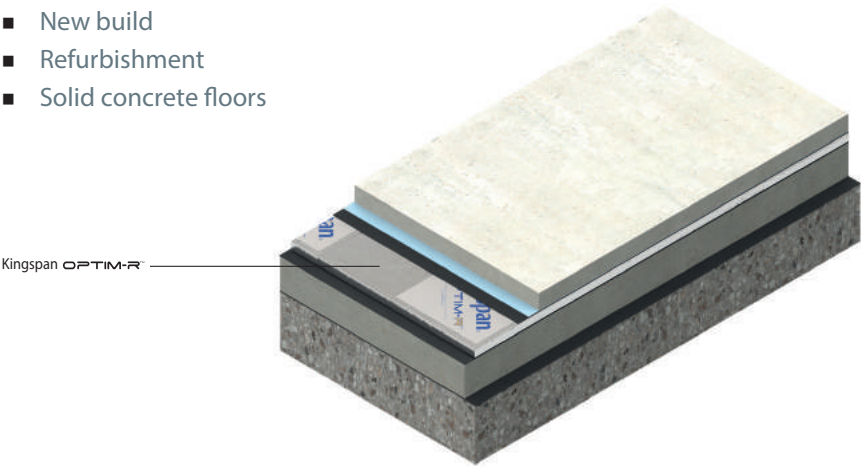
# Floor Insulation

# OPTIM-R™ Flooring System

## NEXT GENERATION INSULATION SOLUTION FOR FLOORS

Recommended for:

- New build
- Refurbishment
- Solid concrete floors



### Product Data

Thermal Conductivity	0.007 W/m·K (aged design value)
Core	Optimum performance rigid vacuum insulation panel with a microporous core which is evacuated, encased and sealed in a thin, gas-tight envelope.
Compressive Strength	160 kPa (at 10% compression)
Density (panel)	170-210 Kg/m³
Product Width	300 – 600 mm*
Product Length	300 – 1200 mm*
Thicknesses Available	20 – 60 mm
Complementary Products	

Available in a variety of thicknesses.  
\*Other sizes may be available dependent on order quantity. Please contact Kingspan Insulation for more details.

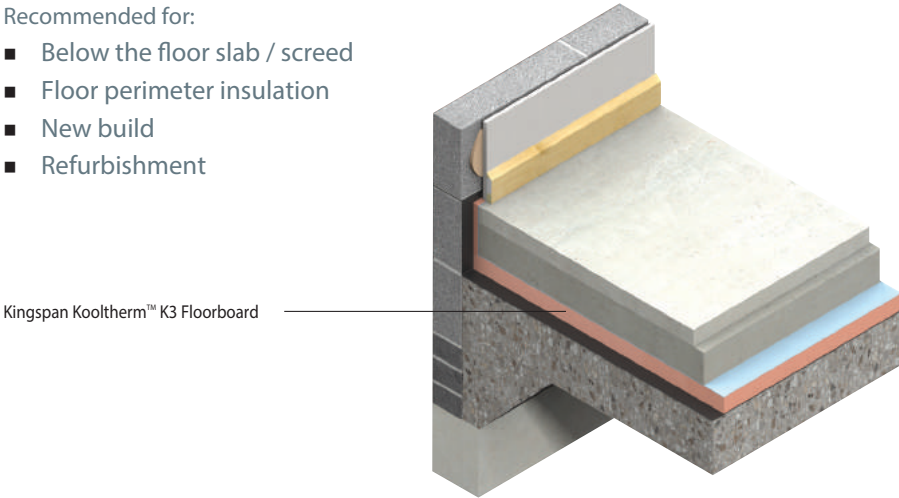
Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

# Kooltherm™ K3 Floorboard

## INSULATION FOR FLOORS

Recommended for:

- Below the floor slab / screed
- Floor perimeter insulation
- New build
- Refurbishment



### Product Data

Thermal Conductivity	0.020 W/m·K
Facings	Glass tissue based
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	120 kPa (at 10% compression)
Density	35 Kg/m³
Board Size	1.2 x 2.4 m
Thicknesses Available	25 – 150 mm
Complementary Products	



Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure, order samples and learn about case studies

## Kooltherm™ K10 FM Soffit Board

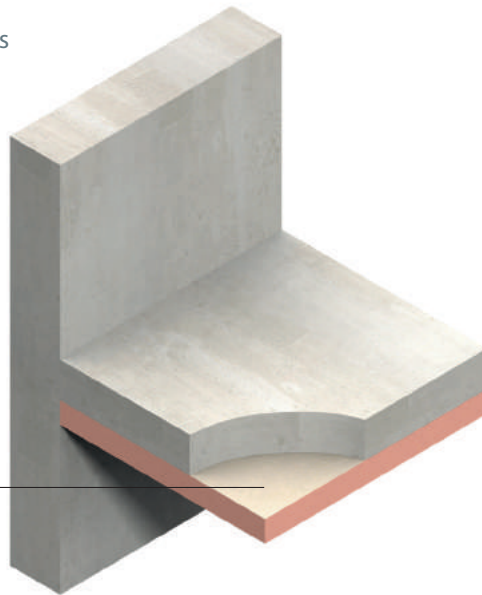
### INSULATION FOR STRUCTURAL CEILINGS (SOFFITS)

Recommended for:

- Insulating under structural ceilings
- Car park ceilings
- FM Compliance



Kingspan Kooltherm™ K10 FM Soffit Board



### Product Data

Thermal Conductivity	0.020 W/m·K
Upper Facing	Glass tissue based
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Exposed Facing	Composite foil
Board Size	1.2 x 2.4 m
Thicknesses Available	25 – 100 mm
Complementary Products	



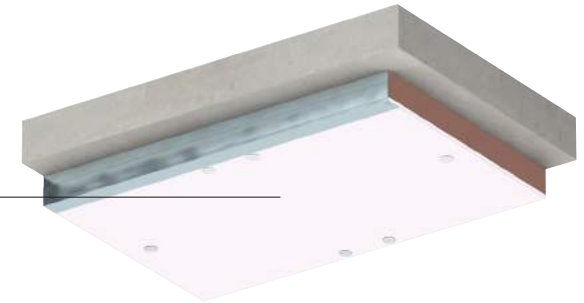
## Kooltherm™ K10 Soffit Board

### INSULATION FOR STRUCTURAL CEILINGS (SOFFITS)

Recommended for:

- Insulating under structural ceilings
- Car park ceilings

Kingspan Kooltherm™ K10 K10 PLUS Soffit Board



### Product Data

Thermal Conductivity	0.020 W/m·K
Upper Facing	Glass tissue based
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Density	35 Kg/m <sup>3</sup>
Exposed Facing	6 mm non-combustible building board
Board Size	1.2 x 2.27 m
Thicknesses Available	25 – 100 mm
Complementary Products	



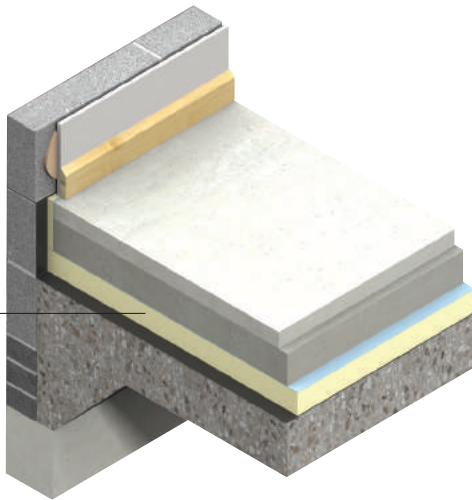


# Thermafloor™ TF70

## INSULATION FOR FLOORS

Recommended for:

- Below the floor slab / screed
- Floor perimeter insulation
- New build
- Refurbishment



Kingspan Thermafloor™ TF70

## Product Data

Thermal Conductivity	0.022 W/m·K
Facings	Composite foil
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Compressive Strength	140 kPa (at 10% compression)
Density	32 Kg/m³
Board Size	1.2 x 2.4 m
Thicknesses Available	20 – 165 mm
Complementary Products	



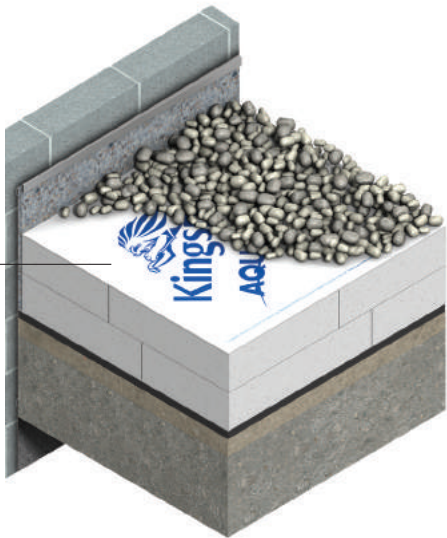
# Membranes

WATER INFILTRATION REDUCTION MEMBRANE FOR  
INVERTED ROOFS

Recommended for:

- New Build
- Re-roofing
- Inverted Roofs
- Under green roofs or concrete pavers

Kingspan Aquazone™

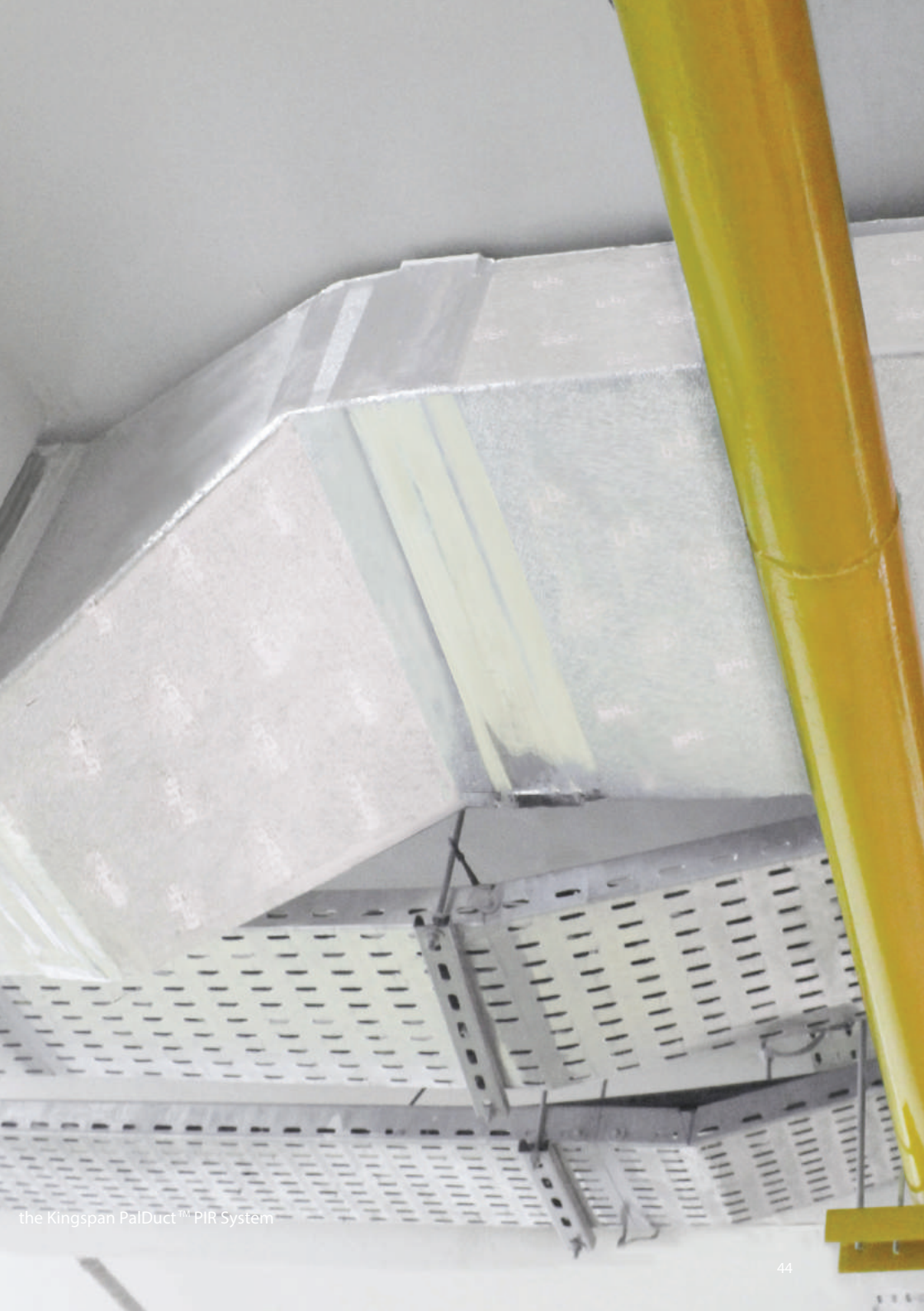


Product Data

Water Vapour Transmission	0.01 Sd
Roll length	100 m
Roll width	3m
Thickness	0.17 mm
Weight	0.06 Kg/m <sup>2</sup>
Weight per roll	20 Kg
Complementary Products	<ul style="list-style-type: none"> <li>■ Styrozone™ N 300 R (page 16)</li> <li>■ Styrozone™ H 350 R (page 17)</li> <li>■ Styrozone™ N 500 R (page 18)</li> <li>■ Styrozone™ N 700 R (page 19)</li> </ul>

Visit [www.kingspaninsulation.com](http://www.kingspaninsulation.com) to download the full product brochure,  
order samples and learn about case studies

# Building Services Insulation & Ductwork



# Kooltherm™ FM Pipe Insulation

## PIPE INSULATION FOR CIRCULAR HVAC AND BUILDING SERVICES PIPEWORK

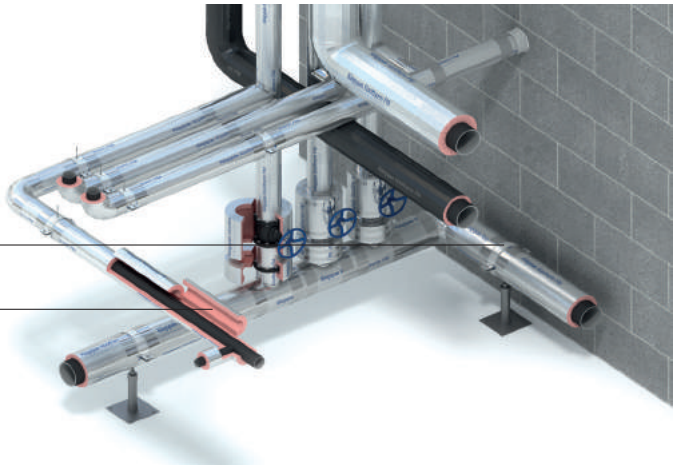
Recommended for:

- Chilled and hot water pipes
- Mild steel, stainless steel, carbon, copper and plastic pipework
- FM Compliance



Kingspan Kooltherm™ Insulated Pipe Support Inserts

Kingspan Kooltherm™ FM Pipe Insulation



## Product Data

Thermal Conductivity	0.025 W/m-K
Facings	Low vapour permeability aluminium foil
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Length	1 m
To fit pipe OD	Up to 610 mm
Thicknesses Available	15 – 50 mm
Complementary Products	<ul style="list-style-type: none"> <li>■ Kooltherm™ FM Duct Insulation (<i>page 46</i>)</li> <li>■ Kooltherm™ Insulated Pipe Support Inserts</li> <li>■ Kooltherm™ FireSleeves</li> </ul>



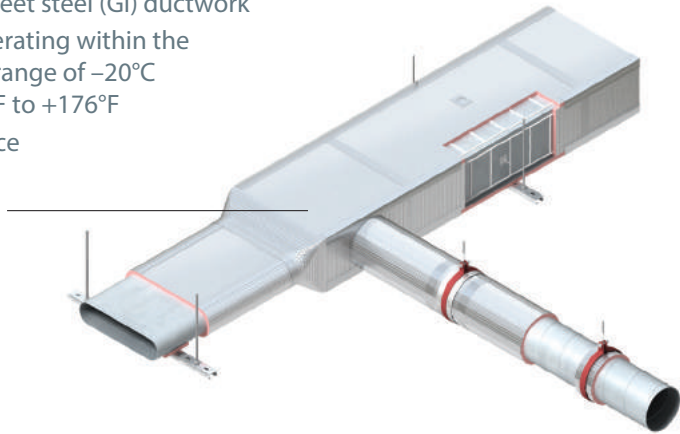
# Kooltherm™ FM Duct Insulation

DUCT INSULATION FOR RECTANGULAR, CIRCULAR AND FLAT OVAL / BUILDING SERVICES DUCTWORK

Recommended for:

- Galvanised sheet steel (GI) ductwork
- Ductwork operating within the temperature range of -20°C to +80°C / -°F to +176°F
- FM Compliance

Kingspan Kooltherm™ FM Duct Insulation



## Product Data

Thermal Conductivity	0.021 W/m-K
Upper Facing	Glass tissue based
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Exposed Facing	25.4 micron / 1 mil aluminium vapour barrier foil
Board Size	1.2 x 0.6 m
Thicknesses Available	25 – 50 mm
Complementary Products	■ Kooltherm™ FM Pipe Insulation (page 45)

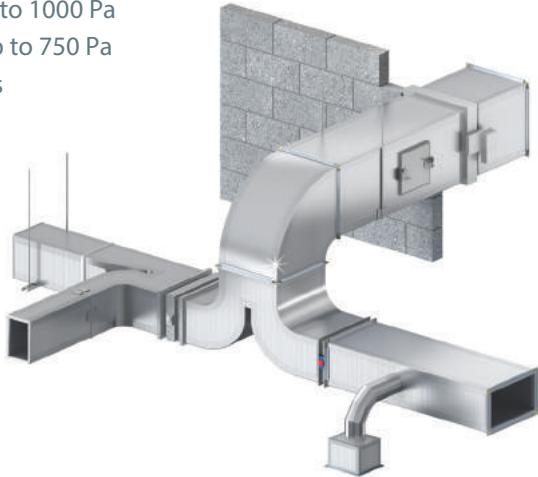


# The Kingspan KoolDuct™ System

PRE-INSULATED RECTANGULAR HVAC DUCTWORK SYSTEM

Recommended for:

- Supply, return, fresh and exhaust air ductwork for heating, ventilation and air-conditioning systems
- Rectangular HVAC ductwork
- Ductwork operating within the temperature range of -26°C to +185°C
- Positive Design pressure up to 1000 Pa
- Negative design pressure up to 750 Pa
- Mean Air Velocity of 25.- m/s
- UL Listed Ductwork



## Product Data

Thermal Conductivity	0.021 W/m-K
Facings	25.4 micron / 1 mil aluminium vapour barrier foil that is reinforced with a 5 mm / 0.2" glass scrim
Core	Premium performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP)
Board Size	3.93 x 1.2 m
Thicknesses Available	20, 22 and 30 mm
Complementary Products	





## **Pal** Duct PIR System


### PRE-INSULATED RECTANGULAR HVAC DUCTWORK SYSTEM

Recommended for:

- Supply, return, fresh and exhaust air ductwork for heating, ventilation and air-conditioning systems
- Rectangular HVAC ductwork
- Ductwork operating within the temperature range of  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$
- Positive Design pressure up to 1000 Pa for 20 mm and 1750 for 30 mm
- Mean Air Velocity of 15 m/s for 20 mm and 26 m/s for 30 mm



### Product Data

Thermal Conductivity	0.020 W/m-K
Facings	Embossed or smooth aluminium foil lacquered with a corrosion resistant polymer varnish
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant 
Board Size	4 x 1.2 m
Thicknesses Available	20 and 30 mm
Complementary Products	



## **Pal** Duct Hydro System


### PRE-INSULATED RECTANGULAR HVAC DUCTWORK SYSTEM

Recommended for:

- Supply, return, fresh and exhaust air ductwork for heating, ventilation and air-conditioning systems
- Rectangular HVAC ductwork
- Ductwork operating within the temperature range of  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .
- Positive Design pressure up to 1000 Pa for 20 mm and 1750 for 30 mm
- Mean Air Velocity of 15 m/s for 20 mm and 26 m/s for 30 mm



### Product Data

Thermal Conductivity	0.020 W/m-K
Facings	Embossed or smooth aluminium foil lacquered with a corrosion resistant polymer varnish
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP) 
Board Size	4 x 1.2 m
Thicknesses Available	20 and 30 mm
Complementary Products	

## **Pal** Duct Eco System

### ANTI-MICROBIAL PRE-INSULATED RECTANGULAR HVAC DUCTWORK SYSTEM

Recommended for:

- Supply, return, fresh and exhaust air ductwork for heating, ventilation and air-conditioning systems
- Rectangular HVAC ductwork
- HVAC ductwork system resists spread of surface bacteria
- Ductwork operating within the temperature range of  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .
- Positive Design pressure up to 1000 Pa
- Mean Air Velocity of 15 m/s



### Product Data

Thermal Conductivity	0.020 W/m-K
Facings	Embossed or smooth antimicrobial coated aluminium foil lacquered with a corrosion resistant polymer varnish. Both facings are protected with Biomaster antimicrobial technology.
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant
Board Size	4 x 1.2 m
Thicknesses Available	20 mm
Complementary Products	



## **Pal** Duct Phenolic System

### PRE-INSULATED RECTANGULAR HVAC DUCTWORK SYSTEM

Recommended for:

- Supply, return, fresh and exhaust air ductwork for heating, ventilation and air-conditioning systems
- Rectangular HVAC ductwork
- Ductwork operating within the temperature range of  $-20^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .
- Positive Design pressure up to 1000 Pa
- Mean Air Velocity of 15 m/s
- UL Listed Ductwork



### Product Data

Thermal Conductivity	0.0285 W/m-K
Facings	Embossed aluminium foil lacquered with a corrosion resistant polymer varnish
Core	High performance fibre-free rigid thermoset phenolic insulant manufactured with a blowing agent that has zero Ozone Depletion Potential (ODP)
Board Size	4 x 1.2 m
Thicknesses Available	20 and 30 mm
Complementary Products	

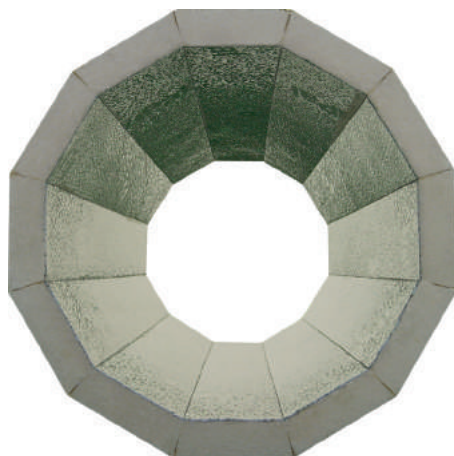


# PalDuct Spiral System

## PRE-INSULATED CIRCULAR HVAC DUCTWORK SYSTEM

Recommended for:

- Supply, return, fresh and exhaust air ductwork for heating, ventilation and air-conditioning systems
- Circular HVAC ductwork
- Ductwork operating within the temperature range of -20°C to +80°C.
- Positive Design pressure up to 1000 Pa
- Mean Air Velocity of 15 m/s



## Product Data

Thermal Conductivity	0.020 W/m·K
Facings	Embossed or smooth aluminium foil lacquered with a corrosion resistant polymer varnish
Core	High performance fibre-free rigid thermoset polyisocyanurate (PIR) insulant or high performance fibre-free rigid thermoset polyurethane (PUR) insulant.
Board Size	4 x 1.2 m
Thicknesses Available	20 and 30 mm
Complementary Products	



# Kingspan Ducting Supercut Machine

Recommended for:

- Automated cutting of pre-insulated ductwork panels
- Automated cutting of building services insulation boards
- Panel width up to 1.2- m
- Panel thickness up to 30 mm
- Aluminium facing thickness up to 200 micron



## Product Data

Nominal Size of Machine	5.4 x 1.5 m
Weight of Machine	900 kg
Power Supply	3 Phase 30MI + Neutral + Earth
Complementary Products	<ul style="list-style-type: none"> <li>■ The Kingspan KoolDuct™ System (Page 47)</li> <li>■ The Kingspan PalDuct PIR System (Page 48)</li> <li>■ The Kingspan PalDuct Hydro System (Page 49)</li> <li>■ The Kingspan PalDuct Eco System (Page 50)</li> <li>■ The Kingspan PalDuct Phenolic System (Page 51)</li> <li>■ The Kingspan PalDuct Spiral System (Page 52)</li> <li>■ Kooltherm™ FM Pipe Insulation (Page 47)</li> <li>■ Kooltherm™ FM Duct Insulation (Page 46)</li> </ul>

# Kingspan Ducting CNC Machine

Recommended for:

- Automated cutting of pre-insulated ductwork panels
- Automated cutting of building services insulation boards
- Panel width up to 1.2 m
- Panels thickness up to 30 mm.
- Aluminium facing thickness up to 200 micron.



Prestige Projects

## Product Data

Nominal Size of Machine	8.4 x 2 x 1.75h
Weight of Machine	1200 kg
Power Supply	3 Phase 400 volts Hz 50
Complementary Products	<ul style="list-style-type: none"><li>■ The Kingspan KoolDuct™ System (Page 47)</li><li>■ The Kingspan PalDuct PIR System (Page 48)</li><li>■ The Kingspan PalDuct Hydro System (Page 49)</li><li>■ The Kingspan PalDuct Eco System (Page 50)</li><li>■ The Kingspan PalDuct Phenolic System (Page 51)</li><li>■ The Kingspan PalDuct Spiral System (Page 52)</li><li>■ Kooltherm™ FM Pipe Insulation (Page 47)</li><li>■ Kooltherm™ FM Duct Insulation (Page 46)</li></ul>

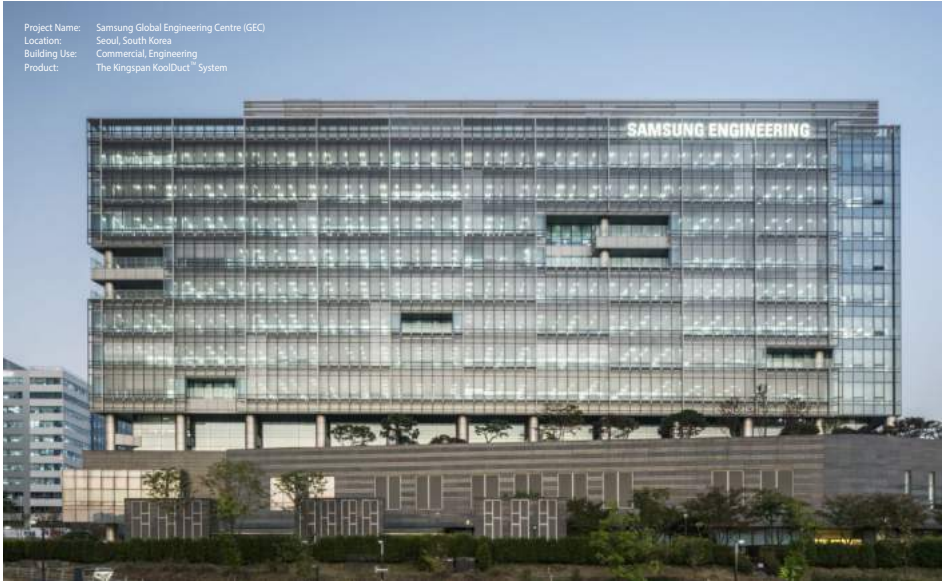


Prestige Projects





Prestige Projects



*Kingspan Insulation Pty. Ltd. reserves the right to amend product specifications without prior notice. The information, technical details and fixing instructions etc. included in this literature are given in good faith and apply to uses described. Recommendations for use should be verified as to the suitability and compliance with actual requirements, specifications and any applicable laws and regulations. For other applications or conditions of use, Kingspan Insulation offers a Technical Advisory Service the advice of which should be sought for uses of Kingspan Insulation products that are not specifically described herein. Please check that your copy of the literature is current by contacting us or visiting [www.kingspaninsulation.asia](http://www.kingspaninsulation.asia)*



**Kingspan Insulation Asia**

1 Commonwealth Lane, #07-26/27, Singapore, 149544

Office Tel: (+65) 6264 5942 | Mobile Tel: (+65) 981 35 498

[info@kingspaninsulation.asia](mailto:info@kingspaninsulation.asia) | [chris.johnston@kingspan.com](mailto:chris.johnston@kingspan.com)

Countries comprise: all of Asia and SE Asia as far west and north as, and including, Myanmar, China, Mongolia, Japan

\* Kingspan, Aquazone, KoolDuct, Kooltherm, OPTIM-R, Styrozone, Therma, Thermafloor, Therमारoof, Thermapitch, Thermataper, the Pal Device and the Lion Device are Trademarks of the Kingspan Group plc.