



For details of countries - see rear cover

OPTIM-R™

NEXT GENERATION INSULATION SOLUTIONS



Low Energy –
Low Carbon Buildings

Description

Kingspan OPTIM-R™ is an optimum performance next generation insulation solution from Kingspan Insulation.

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 outstanding thermal conductivity, with the thinnest possible solution to insulation problems.

General

With a declared (aged) thermal conductivity (λ) of 0.007 W/m·K, *Kingspan OPTIM-R™* provides an insulating performance that is up to five times better than other commonly available insulation materials.

The high level of thermal efficiency with minimal thickness, achieved by *Kingspan OPTIM-R™*, can provide solutions for applications where a lack of construction depth or space is an issue.

For instance, in retrofit applications, *Kingspan OPTIM-R™* can provide solutions for areas that previously would have remained un-insulated because there was insufficient space available. In new constructions *Kingspan OPTIM-R™* can significantly enhance U-values in areas that would otherwise be accepted as denigrating the overall thermal performance.

If installed correctly and protected from damage and penetration, *Kingspan OPTIM-R™* can provide reliable long term thermal performance over the lifetime of the building.

Kingspan OPTIM-R™ is available in a range of sizes and thicknesses to suit various applications, including roofs, walls and floors. It is also suitable for use in a variety of OEM systems. Please contact Kingspan Insulation to discuss individual requirements.

Standards & Approvals

Kingspan OPTIM-R™ is manufactured to the highest standards under a management system certified to ISO 9001: 2008 (Quality Management Systems. Requirements), ISO 14001: 2004 (Environmental Management Systems. Requirements) and OHSAS 18001: 2007 (Health and Safety Management Systems. Requirements).

Product Properties	
Product Thickness (mm)	20 – 40*
Product Length (mm)	300 – 600*
Product Width (mm)	300 – 1200*
Density EN 1602: 1997	≥ 160
Compressive Strength (EN 826: 1996)	≥ 160 kPa @ 10% compression
Tensile Strength (EN 1607: 1997)	≥ 60 kPa
Service Temperature (°C)	-40 to +80

Thermal	
Thermal Conductivity (EN 12667: 2001)	0.007 W/m·K (aged design value**)
Thermal Resistance (R-value)	2.857 m ² ·K/W (thickness 20 mm) 3.571 m ² ·K/W (thickness 25 mm) 4.285 m ² ·K/W (thickness 30 mm) 5.714 m ² ·K/W (thickness 40 mm)

Fire & Smoke	
The core of Kingspan OPTIM-R™ is non-combustible	

Recyclability	
Over 90% (by weight) recyclable	

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

** Aged design value allowing for edge effect.

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Applicable countries comprise all European countries (including all of the Russian Federation, Ukraine and Belarus) except for the UK, Ireland, Gibraltar and Malta.

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