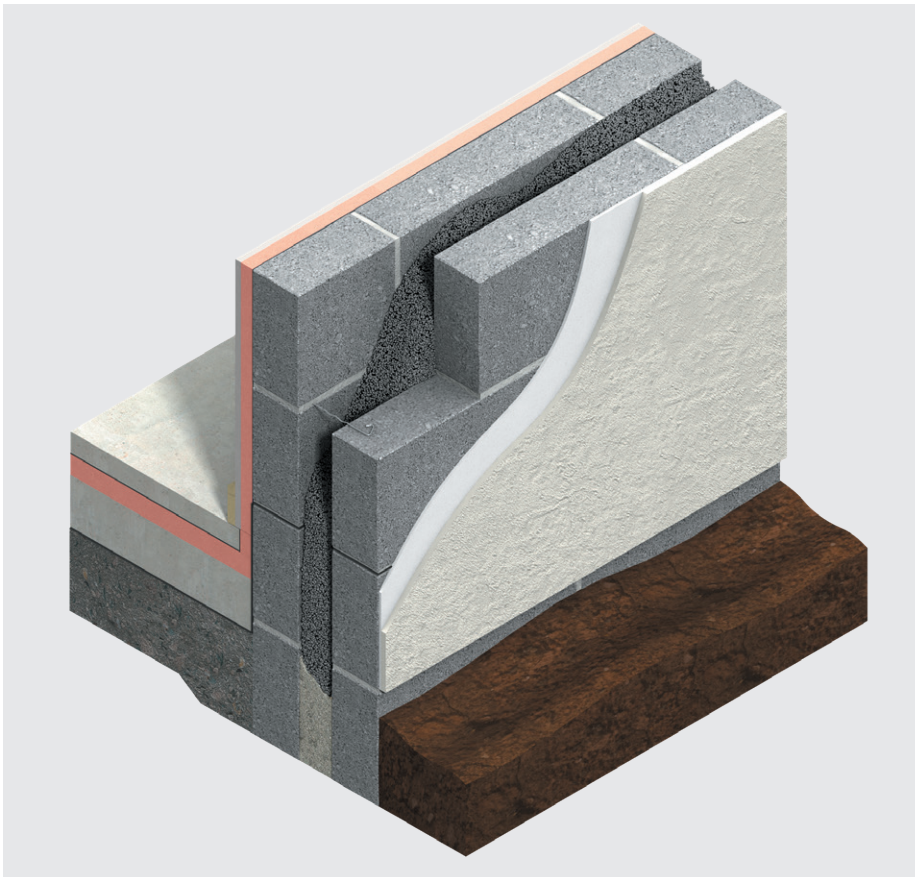


EcöBead® Platinum®

Cavity wall insulation



- Graphite infused expanded polystyrene (EPS) insulation
- Bonded bead insulation fully filling cavity
- Thermal conductivity as low as 0.033 W/mK
- Easy to install
- 0.14 W/m²K U-value achieved in a 220 mm cavity
- Extensive Installer Network

Typical constructions and U-values

Assumptions

The U-values in the tables that follow have been calculated using the method detailed in EN ISO 6946: 2017 (Building components and building elements. Thermal resistance and thermal transmittance. Calculation methods). They are valid for the constructions shown in the details immediately above each table.

NB When calculating U-values to EN ISO 6946: 2017, the type of wall tie used may change the thickness of insulation required. For cavity widths 100-150 mm, calculations assume a stainless steel flexible tie with 4.9 ties per m² and a cross-sectional area of 6.2 mm². For cavity widths > 150 mm, calculations assume a stainless steel flexible tie with 4.9 ties per m² and a cross-sectional area of 23 mm².

NB The figures quoted are for guidance only. A detailed U-value calculation and a condensation risk analysis should be completed for each project.

NB If your construction is different from those specified, and / or to gain a comprehensive U-value calculation along with a condensation risk analysis of your project, please consult the Kingspan Insulation Technical Service Department for assistance.

U-value table key

Further information on the applicable notional and area weighted average limiting U-values is available in the relevant geographical documentation:

- Technical Guidance Document L (Dwellings) and Technical Guidance Document L (Buildings other than Dwellings) to the Building Regulations for the Republic of Ireland.
- Technical Booklets F1 & F2 to the Building Regulations for Northern Ireland.

20 mm sand and cement rendered 100 mm block outer leaf* / 100 mm block inner leaf

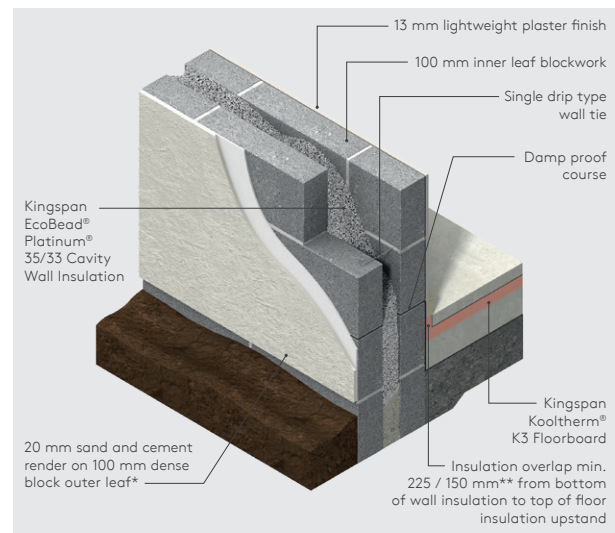


Figure 1

U-values (W/m ² K) for various thicknesses of Kingspan EcoBead® Platinum® 35 (0.035 W/m ² K) Cavity Wall Insulation		
Insulant thickness (mm)	Inner leaf blockwork density and λ-value (W/mK)	
	Dense (1.13)	Medium (0.51)
100	0.30	0.28
130	0.24	0.23
150	0.21	0.20
180	0.19	0.18
200	0.17	0.16
220	0.15	0.15
250	0.14	0.13
300	0.12	0.11

U-values (W/m ² K) for various thicknesses of Kingspan EcoBead® Platinum® 33 (0.033 W/m ² K) Cavity Wall Insulation		
Insulation thickness (mm)	Inner leaf blockwork density and λ-value (W/mK)	
	Dense (1.13)	Medium (0.51)
100	0.29	0.27
130	0.23	0.22
150	0.20	0.19
180	0.18	0.17
200	0.16	0.15
220	0.15	0.14
250	0.13	0.13
300	0.11	0.11

* Calculations assume dense block outer leaf of λ-value (1.13 W/mK).

** 225 mm applies to the Republic of Ireland and 150 mm applies to Northern Ireland.

NB A 6.6% thermal bridging factor has been assumed for the effect of mortar joints.

Typical constructions and U-values

13 mm lightweight plaster internal on 100 mm block inner leaf and 102.5 mm brick outer leaf

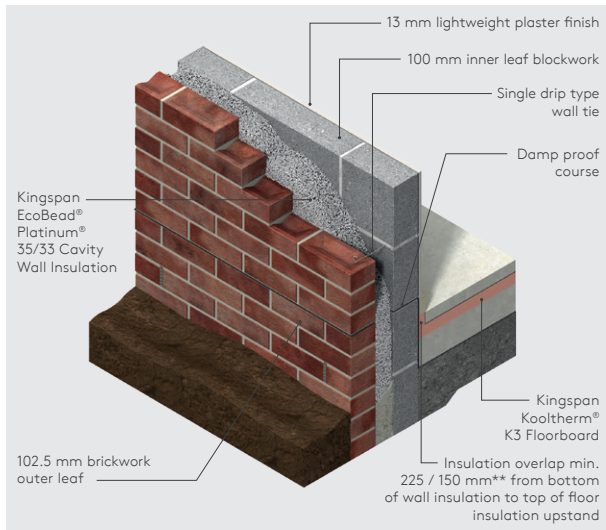


Figure 2

20 mm sand and cement rendered 100 mm block outer leaf* / internal finish - Kingspan Kooltherm® K18 Insulated Plasterboard

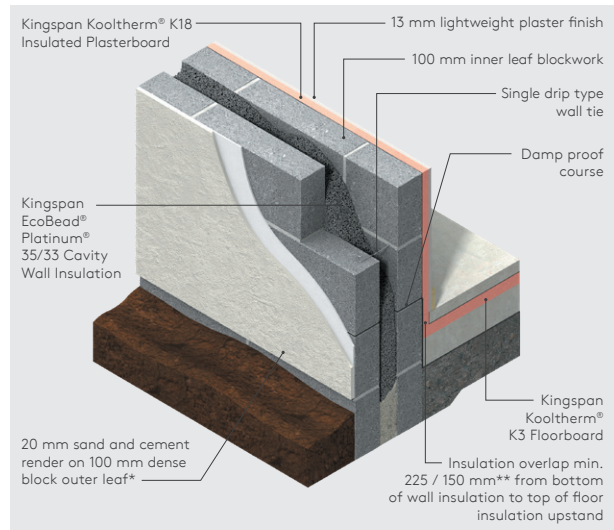


Figure 3

U-values (W/m ² K) for various thicknesses of Kingspan EcoBead® Platinum® 35 (0.035 W/m ² K) Cavity Wall Insulation		
Insulant thickness (mm)	Inner leaf blockwork density and λ-value (W/mK)	
	Dense (1.13)	Medium (0.51)
100	0.30	0.29
130	0.24	0.23
150	0.21	0.21
180	0.19	0.18
200	0.17	0.17
220	0.15	0.15
250	0.14	0.13
300	0.12	0.11

U-values (W/m ² K) for various thicknesses of Kingspan EcoBead® Platinum® 35 (0.035 W/m ² K) Cavity Wall Insulation			
Insulant thickness (mm)	Kooltherm® K18 insulant thickness*** (mm)	Inner leaf blockwork density and λ-value (W/mK)	
		Dense (1.13)	Medium (0.51)
100	62.5	0.18	0.17
125	42.5	0.17	0.18
130	37.5	0.18	0.18
150	37.5	0.17	0.16

U-values (W/m ² K) for various thicknesses of Kingspan EcoBead® Platinum® 33 (0.033 W/m ² K) Cavity Wall Insulation		
Insulation thickness (mm)	Inner leaf blockwork density and λ-value (W/mK)	
	Dense (1.13)	Medium (0.51)
100	0.29	0.28
130	0.23	0.22
150	0.20	0.20
180	0.18	0.17
200	0.16	0.16
220	0.15	0.14
250	0.13	0.13
300	0.11	0.11

U-values (W/m ² K) for various thicknesses of Kingspan EcoBead® Platinum® 33 (0.033 W/m ² K) Cavity Wall Insulation			
Insulant thickness (mm)	Kooltherm® K18 insulant thickness*** (mm)	Inner leaf with 13 mm lightweight plaster finish and λ-value (W/mK)	
		Dense (1.13)	Medium (0.51)
100	62.5	0.17	0.16
125	52.5	0.17	0.16
130	37.5	0.18	0.17
150	37.5	0.16	0.16

NB If your construction is different from those specified, and / or to gain a comprehensive U-value calculation for your project, please consult the Kingspan Insulation Technical Service Department for assistance.

* Calculations assume dense block outer leaf of λ-value (1.13 W/mK).

** 225 mm applies to the Republic of Ireland and 150 mm applies to Northern Ireland.

*** Product thickness = insulant thickness + 12.5 mm plasterboard.

NB A 6.6% thermal bridging factor has been assumed for the effect of mortar joints.

Design considerations, product details and sitework

Specification clause

Kingspan EcoBead® Platinum® should be described in specifications as:-

The cavity wall insulation shall be Kingspan EcoBead® Platinum® ____ mm thick: comprising of an expanded polystyrene (EPS) insulation. The product shall be manufactured in accordance with the requirements of EN 16809-1: 2019 and under a management system certified to ISO 9001: 2015, ISO 14001: 2015, ISO 45001: 2018, ISO 50001: 2018 and ISO 37301: 2021 installed by a certified Kingspan EcoBead® Platinum® installer.

Description

Kingspan EcoBead® Platinum® Cavity Wall Insulation is an expanded polystyrene (EPS) insulation which is injected in bead form with a binding agent into masonry cavity walls. Kingspan EcoBead® Platinum® delivers U-values as low as 0.14 W/m²K in a 220 mm cavity.

Application

The product is used for the thermal insulation of new or existing cavity walls up to 12 metres in height, where both leaves are constructed of either masonry or concrete.

Standards and approvals

Kingspan EcoBead® Platinum® is manufactured in accordance with the requirements of EN 16809-1: 2019 and under a management system certified to ISO 9001: 2015 (Quality Management Systems), ISO 14001: 2015 (Environmental Management Systems), ISO 45001: 2018 (Occupational Health & Safety Management Systems), ISO 50001: 2018 (Energy Management Systems) and ISO 37301: 2021 (Compliance Management Systems).

The use of Kingspan EcoBead® Platinum® 33 and Kingspan EcoBead® Platinum® 35 produced at Kingspan Aerobord Ltd., Askeaton (Co-Limerick) and the use of Kingspan EcoBead® Platinum® 35 produced at Kingspan Insulation, Castleblayney (Co-Monaghan) manufacturing facilities is covered by NSAI Certificate 05/0226.



Thermal properties

Product	EcoBead® Platinum® 35	EcoBead® Platinum® 33
Thermal conductivity (W/mK)	0.035	0.033

Fire performance

Kingspan EcoBead® Platinum® achieves a Euroclass rating of F under classification EN 13501-1: 2018.

Further details on the fire performance of Kingspan Insulation products may be obtained from the Kingspan Insulation Technical Service Department (see rear cover).

Handling and storage

The Kingspan EcoBead® Platinum® Cavity Wall Insulation System is supplied and installed by approved installers. The EPS bead is delivered to site in a bulk container. The bonding agent is also supplied to site. The bonding agent is used undiluted in accordance with instructions provided. It must not be allowed to freeze and should be handled in accordance with the data sheet as outlined in the Kingspan EcoBead® Platinum® Installation Manual.

Site survey

A survey is carried out prior to installation by a trained Kingspan EcoBead® Platinum® Cavity Wall Insulation surveyor, acting on behalf of the Manufacturer/ Approved Installer who will ascertain the suitability of the property or properties for the Kingspan EcoBead® Platinum® Cavity Wall Insulation System.

Services

Do not use Kingspan EcoBead® Platinum® in direct contact with PVC sheathed electrical cables or hot water pipes. Electrical cables should be enclosed in suitable conduit.

Availability

Kingspan EcoBead® Platinum® is installed through our extensive network of approved installers throughout Ireland and Northern Ireland. For an installer recommendation please contact the customer service team on T: +353 (0) 61 604 600.

About Kingspan Insulation

Company details

Kingspan Insulation Ltd is part of the Kingspan Group plc., one of Europe's leading construction product manufacturers. The Kingspan Group was formed in the late 1960s and is a publicly quoted group of companies headquartered in Kingscourt, County Cavan, Ireland.

Kingspan Insulation Ltd is a market leading manufacturer of rigid insulation products and insulated systems for building fabric and building services applications.

Products & solutions

Rigid insulation products for building fabric applications, including roofs, walls and floors.

- Kingspan AlphaCore® - microporous silica-based insulation.
- Kingspan OPTIM-R® - vacuum insulation panel (VIP) systems.
- Kingspan Kooltherm® - phenolic insulation.
- Kingspan Therma™ - PIR insulation.
- K-Roc® - rock mineral fibre insulation.
- Kingspan GreenGuard® - extruded polystyrene insulation (XPS).
- Kingspan TEK® - structural insulated panels (SIPs).
- Kingspan Aerobord® - expanded polystyrene insulation (EPS).
- Cavity closers - PVC-U extrusions with an insulation core.
- Membranes - for pitched roofs and walls.

Services

We are proud to offer one of the most advanced support services in the construction industry, designed to give fast and accurate advice no matter what your role is. Visit our website to access the following services.

- U-value calculations - free, quick and easy U-value calculations with our U-value Calculator.
- Help and advice on your projects, including stockists, how to guides, regulatory guidance and e-learning.
- Tapered roofing service - Kingspan Insulation's tapered roofing systems come with a supporting design service to ensure the most cost-effective solution for a roof is identified.
- CPDs - Kingspan Insulation offer a number of free CPD seminars for architects and specifiers covering a wide range of industry topics. CPDs can be booked or a range of online learning courses can be found online.

Planet Passionate

Planet Passionate Planet Passionate is our group wide global sustainability programme. The programme aims to have a positive impact on three big global challenges: climate change, circularity and protection of our natural world.

Click [here](#) for more information on our targets and progress to date.

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For individual department contact details please visit
www.kingspaninsulation.ie/contact

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Kingspan Insulation supports all of its products with a comprehensive Technical Advisory Service.

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