

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

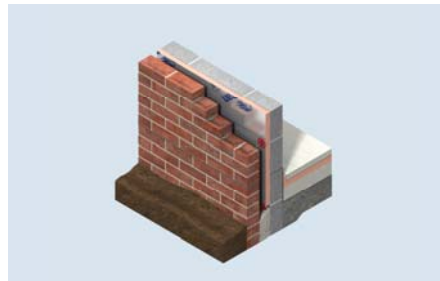
Kingspan Kooltherm K108 Cavity Board

Description of Product

Kingspan K108 Cavity Board is a rigid board insulation that is designed to be used in a cavity wall as a partial fill insulation. The product is manufactured in thicknesses ranging from 20mm-160mm and has a thermal conductivity of 0.018W/mK and is manufactured with a blowing agent that has zero depletion potential and low global warming potential.

It is a product that has a closed cell structure, is safe to install and resists moisture penetration and has a compressive strength exceeding 100kPa at 10% compression when tested to BS EN 826:2013.

The insulation board is suitable for use as a partial fill material in cavity walls.



Key Factors Assessed

- Mechanical Resistance & Stability
- Safety in case of Fire
- Hygiene, health and environment
- Safety in Use
- Energy Economy and heat retention
- Durability serviceability and identification

Validity

This certificate was first issued on 18th November 2015 and is valid until 18th November 2019

Issue Dated 24th November 2016

Scope of Registration

This registration relates to the Kingspan Kooltherm K108 Cavity Board, a rigid closed-cell foil-faced phenolic foam board for use as partial cavity fill insulation in walls. It can be used in domestic and non domestic buildings with masonry inner and outer leaves without height restriction, however additional requirements apply above 25m.

With regards to durability, if correctly installed, this product is unaffected by the normal conditions in a wall, and it is durable, rot proof, water resistant and sufficiently stable to remain effective as insulation for the life of the building.

The products ability to limit moisture from the ground, precipitation and interstitial and surface condensation has been assessed in line with information provided within the products BBA certification.

The thermal performance of the product can contribute to the required u-values within the Scottish Building Regulations.

Conditions of Certificate

The product performance is greatly affected by the correct installation for each wall type.

It is therefore important that each board application is installed to the manufacturer's requirements to avoid a reduction in both thermal and structural performance and also the cavity wall resistance to moisture.

For Scotland purposes:

The specifications and materials referred to have been assessed in accordance with the Building (Scotland) Regulations 2004 and in accordance with the supporting guidance in the Domestic Technical Handbooks which came into force with effect from 1 October 2015.

Where reference is made on a plan or specification document to any Code of Practice, British or European Standard or manufacturer's instruction it shall be construed as a reference to such publication in the form in which it is in force at the date of this Registered Detail.

The materials specified shall be for purposes of this Registered Detail and should not be changed without first gaining approval so to do from Local Authority Building Standards Scotland [LABSS]. Failure to do so will invalidate the Registered Detail.

The Registered Detail shall be valid for a period of 12 months from the date of issue or until otherwise invalidated by formal notice by LABSS. The Registered Detail may be re-validated after 12 months following a request and payment of an annual renewal fee from the Registered Detail Holder.

This Registered Detail should not be regarded as a formal approval under the building warrant process prescribed by the

Building (Scotland) Act 2003 enacted from 1 May 2005

This Registered Detail shall contribute to compliance with relevant Mandatory Standards specified under the Building (Scotland) Regulations 2004 as amended when read with the scope, conditions and regulations sections to this Registered Detail.

For LABC Warranty purposes:

A minimum residual cavity width of 50mm will be required.

Assessed for use in connection with a masonry inner and outer leaf of cavity wall construction. Not assessed for use with a timber or steel frame inner leaf construction.

LABC consider that, Kingspan Kooltherm K108 Cavity Board, will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;



The Building Regulations 2010 (as amended) England & Wales

Regulation 7 Materials and workmanship

Note: The product is acceptable.

AD A1 Loading

Note: The product is a closed cell structure and offers a compressive strength exceeding 100kPa at 10% compression when tested to BS EN 826: 2013. Boards can be placed between the usual required wall ties spacing's therefore wall structural performance is unaffected. Also as a residual cavity is maintained there is no issue with pressure build up from the product to push out the faces of the cavity wall during the construction stage while mortar is still wet.

AD B Fire Safety

Note: The effects of a fire on the product within a roof space are unlikely to have any detrimental impact on the material and will remain contained within protective linings until the roof structure is destroyed. The boards will also will not present a smoke or toxic hazard if exposed to fire.

AD C2 Resistance to Moisture

Note: The product offers excellent moisture resistance however there are recommendations for residual cavity widths that are dependent on the height of the wall and also the exposure zones of the building. The design data is divided into two categories, walls below 12m high and those over 12m
A minimum 25mm cavity is recommended therefore to overcome any discrepancies during construction it is recommended a residual 50mm clear cavity is maintained. Walls over 12m high the maximum height of the wall cavity should not exceed 7m without a break and a tray DPC inserted to the wall with appropriate weep holes provided. Where the product passes below the DPC line in a cavity wall it is proven that dampness from the ground will not be transferred through to the inner leaf.

AD L1A Conservation of fuel and power

Note: The product has a thermal conductivity as low as 0.018W/mK and one of the thinnest insulation products for a required U-Value and is manufactured with a blowing agent that has zero depletion potential and low global warming potential. Design data is available from Kingspan for the accurate calculation of the wall U-value when using this product.



The Building Regulations 2010 (as amended) England

AD L1A Conservation of fuel and power

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The Building Regulations 2010 (as amended) Wales

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The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks Domestic and Non-Domestic

Regulation 8 Durability, workmanship and fitness of materials

0.8.5: Ways of establishing the fitness of materials

Regulation 9 Building Standards applicable to construction

Note: Construction shall be carried out so that the work complies with the applicable requirements of schedule 5.

Mandatory

Standard 3.4 Moisture from the ground

Note: The product can contribute to satisfying this standard with reference to clauses 3.4.1 and 3.4.5 of the Technical Handbook's please refer to section 7.1 of the BBA certificate.

Mandatory

Standard 3.10 Precipitation

Note: The product can contribute to satisfying this standard with reference to clauses 3.10.1 and 3.10.3 of the Technical Handbook's please refer to section 7.2 of the BBA certificate.

Mandatory

Standard 3.15 Condensation

Note: This product can contribute to satisfying this Standard with reference to clauses 3.15.1 and 3.15.4 of the Technical Handbook's, please refer to sections 8.2 and 8.3 of the BBA certificate.

Mandatory

Standard 6.1(b) Carbon Dioxide Emissions

Note: The thermal insulation performance of this product should be considered in the context of the contribution made to the overall performance of the building.

Mandatory

Standard 6.2 Building Insulation Envelope

Note: The thermal insulation performance of this product should be considered in the context of the contribution made to the overall performance of the building.

Non-Regulatory Information



LABC Warranty

LABC Warranty conditionally accepts the use of Kooltherm K108 Cavity Board when installed and used in accordance with the Scope and Conditions of this Certificate. Visit www.labcwarranty.co.uk for our LABC Warranty Technical Manual requirements and Warranty conditions of acceptance.

Supporting Documentation

BBA Agreement Certificate 16/5299 Product sheet 1 issued 01/03/2016

University of Salford Manchester UKAS Report Serial No.1417 Issue Date 05/02/2015

University of Salford Manchester UKAS Report Serial No.1419 Issue Date 20/01/2015

University of Salford Manchester UKAS Report Serial No.1493 Issue Date 28/10/2015

University of Salford Manchester UKAS Report Serial No.1509 Issue Date 28/10/2015

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