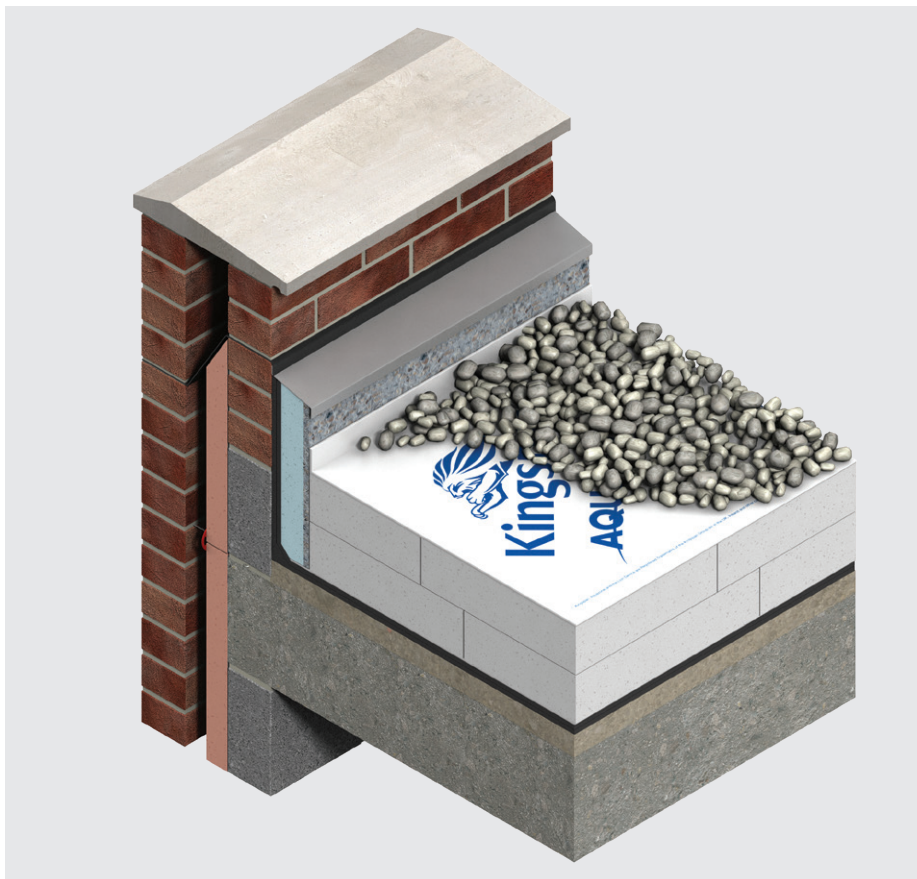


AQUAZONE®

Water-infiltration reduction membrane for inverted roofs



- Excellent water vapour permeability
- Resistant to the passage of liquid water
- Reduces insulation thicknesses required to achieve specified U-values
- Durable - heat and UV stable
- Lightweight
- Easy to handle and install
- Ideal for new build and refurbishment
- Resists mould and bacterial growth, and does not provide food value to vermin

Description

Kingspan Aquazone® is a non-woven polyethylene membrane. It is suitable for use on inverted roofs finished with gravel ballast, green roof systems and concrete pavers on appropriate supports.

Kingspan Aquazone® can be installed over Kingspan GreenGuard® insulation on inverted roofs. It can dramatically minimise the cooling effect associated with rainwater flowing down through the insulation and draining away. It can significantly reduce the insulation thicknesses required to achieve specified U-values.

Application

Kingspan Aquazone® should be loose-laid over the insulation. Where one run of membrane overlaps another, there should be minimum 300 mm side and end laps. Upper layers of the membrane should be laid over lower layers to ensure water penetration is minimised. At junctions, e.g. upstands, parapets and penetrations, Kingspan Aquazone® should be turned up to finish above the surface of the ballast layer. Kingspan Aquazone® should be star-cut and dressed down at drainage outlets. Kingspan Aquazone® should be turned up at the edges of the roof insulation and sealed under the flashing.

Kingspan Insulation recommends that roofs be designed such that they avoid standing water.

General

Resistance to solvents, fungi & rodents

- Kingspan Aquazone® resists attack by mould and fungus growth, and will not encourage insect attack.

Cutting

- Cutting should be carried out using a sharp knife.

Durability

- Kingspan Aquazone® is UV-resistant and can be safely exposed on site for a period not exceeding 4 months.

Packaging and storage

- The polyethylene packaging of Kingspan Insulation products, which is recyclable, should not be considered adequate for outdoor protection.
- Ideally, rolls should be stored inside a building. If, however, outdoor storage cannot be avoided, then the rolls should be stored on their sides, on a clean dry surface, and covered with an opaque polythene sheet or weatherproof tarpaulin.

Health and safety

- Kingspan Aquazone® is chemically inert and safe to use.
- A Safety Information Data Sheet for this product is available from the Kingspan Insulation website www.kingspaninsulation.co.uk/safety or www.kingspaninsulation.ie/safety.

Standards and approvals

Kingspan Aquazone® is manufactured to the highest standards under a management system certified to ISO 9001: 2015 (Quality Management Systems) and ISO 14001: 2015 (Environmental Management Systems).

Kingspan Aquazone® is covered by BBA Certificate 14/5102.



Product data

General		
Roll length	(m)	100
Roll width	(m)	3
Thickness	(mm)	0.185
Weight	(kg/m ²)	0.06 (20 kg roll)
Water vapour transmission (BS EN ISO 12572)	(S _d)	0.01

Water penetration

The product has been tested in accordance with ETAG 031.

The following f.x. values have been verified for use in U-value calculations:

f.x. = 0.0012 (paving slabs on supports)

f.x. = 0.0010 (gravel or green roof system)

(*BBA Report No. 47517)

Fire

Inverted roofs, when assessed to the British Standard fire test specified below, can achieve the result shown, when the surface finish is either minimum 50 mm gravel ballast or minimum 40 mm paving slabs. For specifications without the gravel ballast or paving slabs please consult the manufacturer of the specific external weatherproofing / ballast for their fire classification details.

BS 476-3: 2004 FAA rating FAA rating
(External fire exposure roof test)

Fire performance

Kingspan Aquazone® has a Euroclass rating of E.

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

Product classifications

Uniclass UK

Pr_25_57_65_60 Plastics sheets

CAWS

J41/99, J31/390, J31/130, J41/120, J42/120, J41/390, J42/390

Details also available at **the NBS Source**.

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 premium and high performance rigid insulation products and insulated systems for building fabric and building services applications.

Products & solutions

Optimum, premium and high performance rigid insulation products for building fabric applications, including roofs, walls and floors.

- Kingspan OPTIM-R® - optimum performance vacuum insulation panel (VIP) systems.
- Kingspan AlphaCore® - premium performance microporous silica- based insulation.
- Kingspan Kooltherm® - premium performance phenolic insulation.
- Kingspan Therma™ - high performance PIR insulation.
- K-Roc® - rock mineral fibre insulation.
- Kingspan GreenGuard® - extruded polystyrene insulation (XPS).
- Kingspan TEK® - structural insulated panels (SIPs).
- 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.
- Building Information Modelling (BIM) - download BIM objects for our products.
- 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 is our 10-year group wide global sustainability strategy aims to impact on three big global issues: climate change, circularity and protection of our natural world.

The Planet Passionate strategy is made up of 12 ambitious targets, addressing the impact of Kingspan's business operations and manufacturing on the four key areas of energy, carbon, circularity and water, with commitments by 2030 to include:

- energy: powering 60% of all Kingspan operations directly from renewable energy with a minimum of 20% of this energy generated on manufacturing sites;
- carbon: achieving net zero carbon manufacturing and a 50% reduction in product CO₂ intensity from primary supply partners;
- circularity: upcycling of 1 billion PET bottles per annum into insulation products plus zero company waste to landfill across all sites; and
- water: harvesting 100 million litres of Kingspan's water usage from rainwater.

Contact details

Great Britain

Kingspan Insulation Ltd
Pembroke | Leominster
Herefordshire | HR6 9LA

T: +44 (0) 1544 388 601

F: +44 (0) 1544 388 888

E: info@kingspaninsulation.co.uk

www.kingspaninsulation.co.uk

For individual department contact details please visit

www.kingspaninsulation.co.uk/contact

Ireland

Kingspan Insulation Ltd
Castleblayney | County Monaghan

T: +353 (0) 42 979 5000

F: +353 (0) 42 975 4299

E: info@kingspaninsulation.ie

www.kingspaninsulation.ie

For individual department contact details please visit

www.kingspaninsulation.ie/contact



For the most up-to-date
version of this brochure,
please scan or click [here](#).

To access pre-existing product information or information relating to previously sold/discontinued products please email literature@kingspaninsulation.co.uk.

The information contained in this brochure is believed to be correct at the date of publication. Kingspan Insulation Limited ("Kingspan Insulation") reserves the right to alter or amend the product specifications without notice due to continuous improvement commitments. There may also be relevant changes between publications with regard to legislation, or other developments affecting the accuracy of the information contained in this brochure. Product thicknesses shown in this document should not be taken as being available ex-stock and reference should be made to the current Kingspan Insulation price-list or advice sought from Kingspan Insulation's Customer Service Department. The information, technical details and fixing instructions etc. included in this literature are given in good faith and apply to uses described. Kingspan Insulation does not accept responsibility for issues arising from using products in applications different from those described within this brochure or failure to correctly follow the information or instructions as described within this brochure. Recommendations for use should be verified with a suitable expert or professional for 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 (see above for contact details), 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 this literature is current by contacting the Kingspan Insulation Marketing Department.

© Kingspan, AlphaCore, Aquazone, Kingspan GreenGuard, Kooltherm, K-Roc, OPTIM-R, TEK and the Lion Device are Registered Trademarks of the Kingspan Group plc in the UK, Ireland and other countries. All rights reserved.

TM Therma is a Trademark of the Kingspan Group plc.

Kingspan Insulation Ltd is not associated with, and its products have not necessarily been tested by, the GREENGUARD Environmental Institute.

Registered in England & Wales, No. 01882722. Registered Office: Pembroke, Leominster, Herefordshire HR6 9LA UK. VAT GB428602456.

Registered in Ireland, No. 54621. Registered Office: Bree Industrial Estate, Castleblayney, Co. Monaghan, Ireland. VAT IE45750691.

