DRITHERM® CAVITY SLABS 32, 34, AND 37

March 2024

PRODUCT DESCRIPTION

DriTherm® Cavity Slabs are water-repellent glass mineral wool slabs, designed for use in external full-fill masonry cavity walls, and offering thermal conductivity between 0.032 W/mK and 0.037 W/mK.

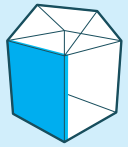
They are non-combustible with the best possible Euroclass A1 reaction to fire classification, and are manufactured using our unique bio-based binder, ECOSE® Technology.

BENEFITS

- Made with a water-repellent additive to resist moisture ingress.
- Hold an Agrément certificate by the BBA for use in all exposure zones, including those in very severe areas.
- Engineered to adapt to any slight imperfections in the substrate and knit together, eliminating any air gaps and preserving thermal performance for the lifetime of the building.
- Friction fit between wall ties, so there is no need for ancillary products, such as retaining discs or jointing tape.
- Full-fill solution that does not require cavity barriers to meet Approved Document B requirements.

CERTIFICATION, ACCREDITATIONS AND INDUSTRY STANDARDS

APPLICATION



External masonry cavity wall
Fully filled

SPECIFICATIONS

March 2024

NON-COMBUSTIBLE INSULATION

with ECOSE® TECHNOLOGY

PERFORMANCE

THERMAL (W/mK)

0.032 | 0.034 | 0.037 | 0.044

FIRE CLASSIFICATION

A1 | A2 s1,d0 | B | C | D | E | F

Euroclass reaction to fire classification

GENERIC BRE GREEN GUIDE RATING

A+ | A | B | C | D | E

VAPOUR RESISTIVITY

5.00 MNs/g.m

DRITHERM® CAVITY SLAB 32

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m^2K/W)	Length (mm)	Width (mm)	Slabs per pack	Area per pack (m^2)	Packs per pallet	Pallet product code
150	0.032	4.65	1200	455	4	2.184	30	580216
125	0.032	3.90	1200	455	4	2.184	40	715828
100	0.032	3.10	1200	455	6	3.276	30	715829
85	0.032	2.65	1200	455	5	2.730	45	715830
75	0.032	2.30	1200	455	6	3.276	45	715827

DRITHERM® CAVITY SLAB 34

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m^2K/W)	Length (mm)	Width (mm)	Slabs per pack	Area per pack (m^2)	Packs per pallet	Pallet product code
150	0.034	4.40	1200	455	5	2.730	30	715834
125	0.034	3.65	1200	455	6	3.276	30	715836
100	0.034	2.90	1200	455	8	4.368	30	715832
75	0.034	2.20	1200	455	10	5.460	30	715833

DRITHERM® CAVITY SLAB 37

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m^2K/W)	Length (mm)	Width (mm)	Slabs per pack	Area per pack (m^2)	Packs per pallet	Pallet product code
150	0.037	4.05	1200	455	8	4.368	25	715835
125	0.037	3.35	1200	455	6	3.276	40	316660
100	0.037	2.70	1200	455	12	6.552	25	715831
85	0.037	2.25	1200	455	8	4.368	45	316656
75	0.037	2.00	1200	455	8	4.368	50	316654
65	0.037	1.75	1200	455	10	5.460	40	316652
50	0.037	1.35	1200	455	12	6.552	30	316650

All dimensions are nominal.

Application

DriTherm® Cavity Slabs are used as full-fill thermal insulation in residential and non-residential external masonry cavity walls. They are installed as the walls are built, with slabs being friction-fitted between the inner and outer leaves of the wall and in between wall ties.

DriTherm® Cavity Slabs are suitable for use in all exposure zones, if installed, used and maintained in accordance with the Agrement certificate, including those deemed `Very Severe'. They are 455mm wide to suit standard vertical wall tie spacings allowing a closed joint with adjacent slabs.

The water-repellent additive in DriTherm® Cavity Slabs provides a further line of defence against moisture ingress in construction.

Standards and certification

DriTherm® Cavity Slabs have an Agrement certificate by the BBA (under reference number 95/3212) for use as full-fill thermal insulation in external masonry cavity walls up to 25 metres in height, in new domestic and non-domestic buildings where a program of assessment has been carried out, and approval obtained, from the certificate holder.

DriTherm® Cavity Slabs have a product declaration made in conformity with the requirements of BS EN 13162 and are manufactured in accordance with ISO 50001 Energy Management Systems, ISO 14001 Environmental Management Systems, ISO 45001 Occupational Health and Safety Management Systems and ISO 9001 Quality Management Systems.

DriTherm® Cavity Slabs are amongst the first products to carry the CCPI mark, helping to provide assurance to product users that the product information for these products is clear, accurate, accessible, up-to-date and unambiguous. The CCPI is playing a pivotal role in driving up standards in product information as the construction industry adapts to a new and improved building safety regime.

All of our mineral wool products are made of non-classified fibres and are certified by EUCEB. EUCEB (European Certification Board of Mineral Wool Products - www.euceb.org) is a voluntary initiative by the mineral wool industry. It is an independent certification authority that guarantees that products are made of fibres which comply with the exoneration criteria for carcinogenicity (Note Q) of the Regulation (EC) 1272/2008.

Thermal Modelling

The U-value of a proprietary built element (rainscreen façade/ masonry cavity wall/garage soffit etc.) or system is dependent on the material properties and the degree of thermal bridging in the system. Calculations should be created using 2D or 3D modelling programs which comply with the methodologies detailed in BS EN ISO 6946 or BS EN ISO 10211 and using guidance from BR443.

We offer simplified calculations to BS EN ISO 6946 and where required numerically modelled U-value calculations using software that is compliant with BS EN ISO 10211.

System Testing

Knauf Insulation maintains declared product characteristics and qualities which are defined in detail in its Declaration of Performances (DoPs) and product literature. The product literature also includes information relating to Knauf Insulation's requirements and recommendations for installation of its products when being used as part of a system.

Any party using, or planning to use, our products in a system (with or without system testing) where performance may be dependent on product characteristics not declared on our DoPs or our product literature, must contact our Technical Service Team.

Knauf Insulation will not accept liability for any failure in system performance due to product characteristics not declared on DoPs or product literature, or not agreed in a Service Level Agreement. In such an event, any warranty given in relation to those products will be invalidated.

Real Performance

Glass and rock mineral wool are easier to install correctly than other insulants, such as rigid boards, because they adapt to any slight imperfections in the substrate and knit together, eliminating any air gaps. Mineral wool is engineered to adapt to any imperfections, and any settlement/movement over time, so it maintains close contact and preserves thermal performance for the life of the building.

Evidence shows the absence of air gaps is crucial to achieving real performance in the relevant application. Any insulation material that doesn't deliver 'as-built' thermal performance is failing in its primary purpose, and therefore presents an unnecessary risk as the construction industry seeks to close the performance gap.

Moisture

DriTherm® Cavity Slabs are manufactured with a water-repellent additive, meaning that the physical and chemical characteristics of the fibres are unaltered by wetting. Therefore, the thermal properties of DriTherm® Cavity Slabs are not affected by exposure to moisture and the product will perform as expected once dry and undamaged.

Agrément certificate by the BBA No: 95/3212 confirms that DriTherm® Cavity Slabs will not transmit water to the inner leaf in a masonry cavity wall construction, nor will they transmit moisture by capillary action across the cavity or from below damp-proof course level.

Durability

DriTherm® Cavity Slabs are odourless, rot proof, non-hygroscopic, do not sustain vermin and will not encourage the growth of fungi, mould or bacteria. The products will have a life equivalent to that of the wall structure in which they are incorporated.

Sustainability

DriTherm® Cavity Slabs are manufactured with ECOSE® Technology, our unique bio-based binder which contains no added formaldehyde or phenol. It is made from natural raw materials that are rapidly renewable and is 70% less energy-intensive to manufacture than traditional binders. Products made with ECOSE® Technology are soft to touch and easy to handle. They generate low levels of dust and VOCs and have been awarded the Eurofins Gold Certificate for Indoor Air Comfort.

All our glass mineral wool products have been awarded the DECLARE `Red List Free' label. The Declare label is a third-party accreditation and is similar to a food nutrition label but for building products; it is a straightforward ingredient list and allows product transparency disclosure because it identifies where a product comes from and what it is made of. Declare 'Red List Free' certifies that there is no harmful chemical from the red list in these products.

Our glass mineral wool is made with up to 80% recycled content (including glass from windows, bottles and jars).

DriTherm® Cavity Slabs contain no ozone-depleting substances or greenhouse gases. The overall environmental performance of our products is reported in their EPDs (Environmental Product Declarations) which are available on our website. EPDs are available for all our products in accordance with ISO 14025, ISO 21930 and EN 15804+A2.

We have received the BES6001 'Very Good' rating for all our mineral wool in our three plants, which proves that our products are made with constituent materials that are responsibly sourced.

Our 3-tier industry-leading compression-packaging technology allows us to load more product per pack or pallet, and therefore onto each truck that leaves our factories. This means less packaging used per m^2 of insulation, fewer vehicles on our roads, so less associated CO_2 emissions. It also means less transport, handling and storage space required for our customers.

Our individual products and the pallets they sit on are wrapped in low-density polyethylene (LDPE4) plastic, which is made of 30-50% (depending on the supplier) recycled plastic content and is fully recyclable.

Handling and Storage

DriTherm® Cavity Slabs should be stored properly and handled in such a way as to ensure that the product remains clean and undamaged.

The polyethylene packs / shrink-wrapped pallets used for the supply of DriTherm® Cavity Slabs are designed for short-term protection only. For longer term protection on site, the product should either be stored indoors or under cover and off the ground. DriTherm® Cavity Slabs should not be left permanently exposed to the elements.

If the main hood is removed or damaged, the remaining packs should be kept under cover indoors or protected from the elements by a weatherproof cover. In coastal locations where weather is more extreme and bird damage is more common, use additional covering or store indoors.

The product must be protected from prolonged exposure to sunlight and stored dry and flat.

DriTherm® Cavity Slabs are light and easy to handle; care should be exercised to avoid crushing their edges or corners. If damaged, the product should be discarded. Damaged, contaminated or wet products must not be used.

During construction exposed areas of slabs should always be covered at the end of a day's work or in heavy rain. Polyethylene covers should be used to provide protection and prevent work from becoming saturated.

Knauf Insulation Ltd

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