PRODUCT DESCRIPTION

FrameTherm® Rolls are glass mineral wool rolls, designed for use in timber frame applications between studwork, and offering thermal conductivity between 0.032 W/mK and 0.040 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

- Designed to friction fit between timber studs, which prevents air movement and infiltration through or around the insulation, minimising heat loss.
- Rolls are ready-cut into either 2x570mm or 3x380mm to suit commonly used timber stud spacing.
- Manufactured from mineral wool which provides the best levels of sound absorption and reduction compared to other mainstream insulants.

CERTIFICATION, ACCREDITATIONS AND INDUSTRY STANDARDS

CE   INDOOR AIR COMFORT eurofins GOLD CERTIFIED PRODUCT   EUCEB   MADE IN BRITAIN

EPD® THE INTERNATIONAL EPD® SYSTEM   Generic BRE Green Guide Rating A+   Declare.   Red List Free

APPLICATIONS

Timber frame walls Built-in insulation between studs with partially filled cavity

Pitched roofs rafter level

NON-COMBUSTIBLE INSULATION with **ECOSE** TECHNOLOGY

PERFORMANCE

THERMAL (W/mK)

| 0.032 | 0.035 | 0.040 | 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

FRAMETHERM® ROLL 32

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m²K/W)	Length (m)	Width (mm)	Area per pack (m²)	Packs per pallet	Pallet product code
140	0.032	4.35	2.800	2x570	3.192	24	2435999
90	0.032	2.80	4.500	2x570	5.130	24	2402014
140	0.032	4.35	2.800	3x380	3.192	24	292208
90	0.032	2.80	4.500	3x380	5.130	24	605745

FRAMETHERM® ROLL 35

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m²K/W)	Length (m)	Width (mm)	Area per pack (m²)	Packs per pallet	Pallet product code
140	0.035	4.00	3.900	2x570	4.446	24	2407395
90	0.035	2.55	6.000	2x570	6.840	24	2407396
140	0.035	4.00	3.900	3x380	4.446	24	605754
90	0.035	2.55	6.000	3x380	6.840	24	605752

FRAMETHERM® ROLL 40

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m²K/W)	Length (m)	Width (mm)	Area per pack (m²)	Packs per pallet	Pallet product code
140	0.040	3.50	8.020	2x570	9.143	24	498560
90	0.040	2.25	12.500	2x570	14.250	24	498196

All dimensions are nominal.

Application

FrameTherm® Rolls are used for the thermal insulation of external walls and warm pitched roofs in timber frame constructions.

Timber frame walls generally deliver better levels of thermal insulation than masonry walls of comparable thickness. However, the reduced mass of the wall means that insulation materials need to provide a higher level of acoustic performance to compensate.

FrameTherm® Rolls are designed to friction fit between studs to minimise heat loss, whilst also providing acoustic absorption to enhance the overall acoustic performance of the wall.

Standards and certification

FrameTherm® Rolls 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.

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.

Durability

FrameTherm® Rolls 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

FrameTherm® Rolls are manufactured with ECOSE® Technology, our unique bio-based binder which contains no added formaldehyde or phenol. They are 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).

FrameTherm® Rolls 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 m² 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

FrameTherm® Rolls 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 FrameTherm® Rolls 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. FrameTherm® Rolls 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.

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

During construction exposed areas of rolls 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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