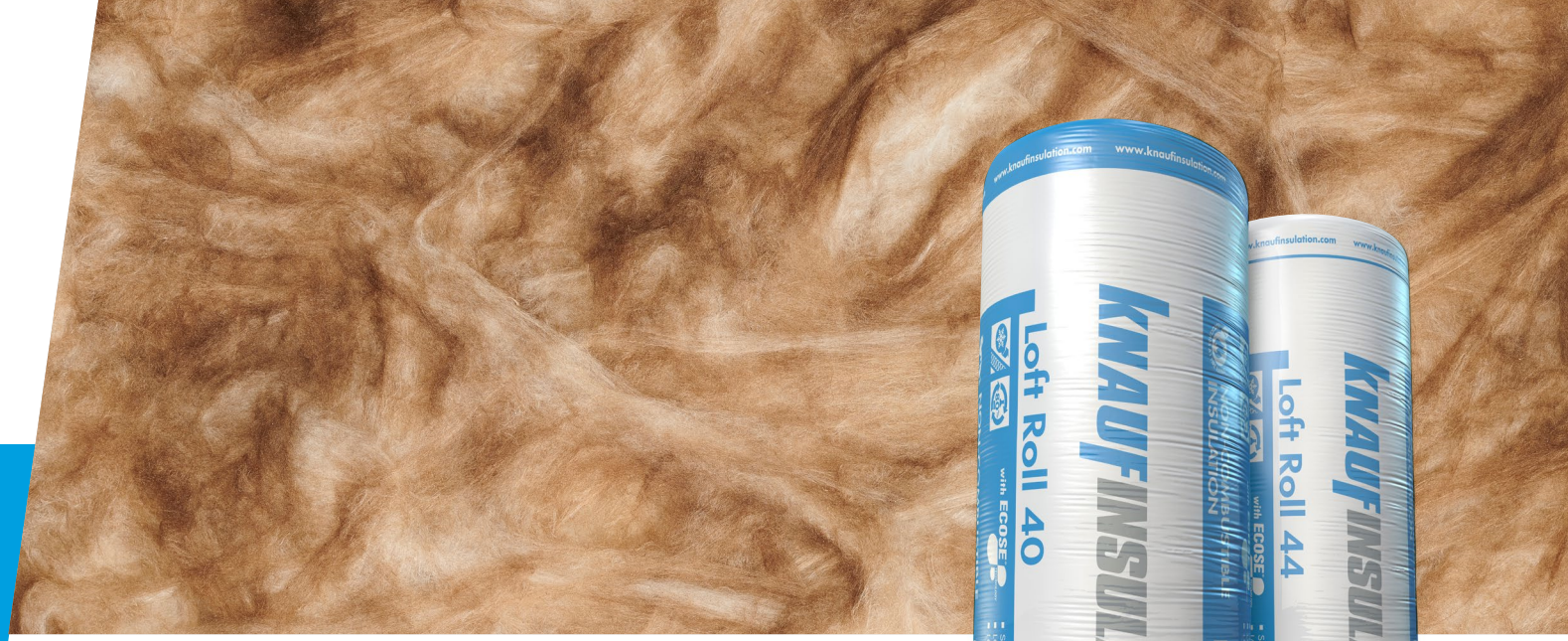
KNAUFINSULATION

Loft Roll 40 and 44

November 2024



Description

Loft Rolls are glass mineral wool rolls, designed for insulating cold pitched roofs at ceiling level and offering thermal conductivity between 0.040 W/mK and 0.044 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

- Cost-effective solution for cold lofts where the thickness of insulation is unrestricted.
- Available in combi-cut, ready-cut and uncut formats giving a wide range of options to suit specific install requirements (Loft Roll 40 is only available in combi-cut format).
- Manufactured in two different options; long lengths to allow quick and simple installation maximising efficiency, and shorter lengths for ease of handling on-site (Loft Roll 40 is not available in short length).

EUROCLASS A1 FIRE CLASSIFICATION
NON-COMBUSTIBLE INSULATION

with ECOSE® TECHNOLOGY

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Loft Roll 40 and 44

Technical Specifications

LOFT ROLL 40 (COMBI-CUT)

Thickness (mm)	**Thermal conductivity** (W/mK)	**Thermal resistance** (m^2K/W)	**Length** (m)	**Width** (mm)	**Area per pack** (m^2)	**Packs per pallet**	**Pallet product code**
200	0.040	5.00	4.85	2x570/3x380	5.529	24	2404169
150	0.040	3.75	7.53	2x570/3x380	8.584	24	2404166
100	0.040	2.50	11.25	2x570/3x380	12.825	24	2404167

LOFT ROLL 44 (COMBI-CUT)

Thickness (mm)	**Thermal conductivity** (W/mK)	**Thermal resistance** (m^2K/W)	**Length** (m)	**Width** (mm)	**Area per pack** (m^2)	**Packs per pallet**	**Pallet product code**
200	0.044	4.50	6	2x570/3x380	6.840	24	715820
170	0.044	3.85	7.03	2x570/3x380	8.014	24	2404156
150	0.044	3.40	8.05	2x570/3x380	9.177	24	2404155
100	0.044	2.25	12.18	2x570/3x380	13.885	24	2404154

LOFT ROLL 44 SHORT LENGTH (COMBI-CUT)

Thickness (mm)	**Thermal conductivity** (W/mK)	**Thermal resistance** (m^2K/W)	**Length** (m)	**Width** (mm)	**Area per pack** (m^2)	**Packs per pallet**	**Pallet product code**
200	0.044	4.50	4.825	2x570/3x380	5.501	30	766204
170	0.044	3.85	5.7	2x570/3x380	6.498	30	766250
150	0.044	3.40	6.45	2x570/3x380	7.353	30	766202
100	0.044	2.25	9.725	2x570/3x380	11.087	30	766251

LOFT ROLL 44 (READY-CUT)

Thickness (mm)	**Thermal conductivity** (W/mK)	**Thermal resistance** (m^2K/W)	**Length** (m)	**Width** (mm)	**Area per pack** (m^2)	**Packs per pallet**	**Pallet product code**
200	0.044	4.50	6	2x570	6.840	24	715824
150	0.044	3.40	8.05	2x570	9.177	24	2404163
100	0.044	2.25	12.18	2x570	13.885	24	2404161

LOFT ROLL 44 (UNCUT)

Thickness (mm)	**Thermal conductivity** (W/mK)	**Thermal resistance** (m^2K/W)	**Length** (m)	**Width** (mm)	**Area per pack** (m^2)	**Packs per pallet**	**Pallet product code**
200	0.044	4.50	6	1140	6.840	24	743252
150	0.044	3.40	8.05	1140	9.177	24	2438878
100	0.044	2.25	12.18	1140	13.885	24	2438877

All dimensions are nominal

Loft Roll 40 and 44

Performance

THERMAL (W/mK)

0.032		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

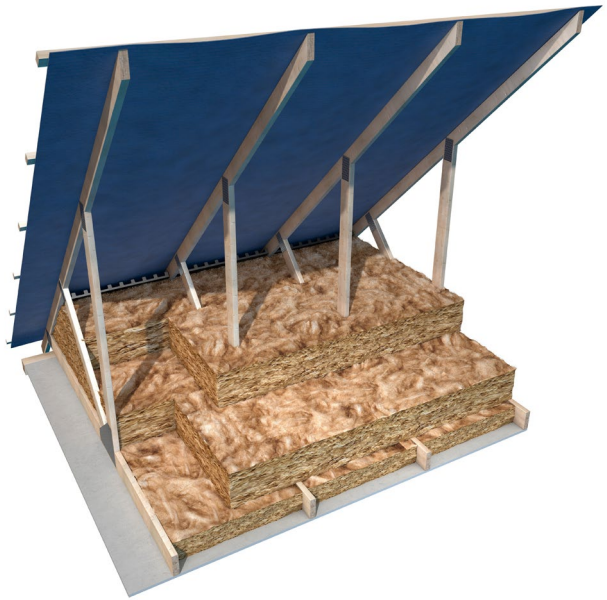
5.00 MNs/g.m

Certification, accreditations and industry standards

Applications

Cold roof - ceiling level

Typical Build-Ups



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Application

Loft Rolls are used for insulating cold pitched roofs at ceiling level.

In a cold roof, insulation is required for thermal performance to prevent heat loss and thermal bridging through the loft space. In this application, the mineral wool insulation is installed in a number of layers with the first layer being laid between ceiling joists, and subsequent layers being laid at right angles to the ceiling joists, with all edges butt jointed together, and allowing for ventilated eaves to allow moisture to escape.

Loft Rolls provide excellent levels of thermal resistance in relation to cost of installation as in this application thickness is largely unrestricted.

Standards and certification

Loft 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 14001Environmental 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

Loft 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 structure in which they are incorporated.

Sustainability

Loft 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 are 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).

Loft 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 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.

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Handling and storage

Loft Rolls should be stored properly and handled in such a way as toensure that the product remains clean and undamaged.

The polyethylene packs / shrink-wrapped pallets used for the supply of Loft 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. Loft Rolls should not be left permanently exposed to the elements.

If the main hood is removed or damaged, the remaining packs shouldbe 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.

Loft 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.

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