# **KNAUFINSULATION**

# FactoryClad Rolls 32, 35 and 40

May 2024

### **Description**

FactoryClad Rolls are glass mineral wool rolls, designed for use in built-up metal roofs and walls, and offer 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

- > Wide range of thicknesses, up to 300mm (depending on the product).
- > High tear strength, for ease of installation and durability.
- > Rolls are 1200mm wide for speed of installation.
- Manufactured from mineral wool which provides the best levels of sound absorption and reduction compared to other mainstream insulants to reduce the reverberation of internal sound when used in conjunction with metal liner sheets.











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## **Technical Specifications**

### **FACTORYCLAD ROLL 32 (UNCUT)**

Thickness	Thermal conductivity	Thermal resistance	Length	Width	Area per pack	Packs per	Pallet product	
(mm)	(W/mK)	(m <sup>2</sup> K/W)	(mm)	(mm)	(m²)	pallet	code	LUANENGHATION
80	0.032	2.50	5.00	1200	6.000	24	2400379	ANAU MUULANUN

### **FACTORYCLAD ROLL 35 (UNCUT)**

Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Area per pack (m²)	Packs per pallet	Pallet product code	TO ITELESCOPE COMMUNICATION
220	0.035	6.25	3.00	1200	3.600	24	791350	KNAUFINSULATION
180	0.035	5.10	3.65	1200	4.380	24	791351	
140	0.035	4.00	4.70	1200	5.640	24	791352	
100	0.035	2.85	6.60	1200	7.920	24	791354	
60	0.035	1.70	11.00	1200	13.200	24	791355	

### **FACTORYCLAD ROLL 40 (UNCUT)**

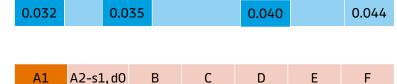
Thickness (mm)	Thermal conductivity (W/mK)	Thermal resistance (m <sup>2</sup> K/W)	Length (mm)	Width (mm)	Area per pack (m²)	Packs per pallet	Pallet product code
300	0.040	7.50	3.20	1200	3.840	24	612931 KNAUFINSULATION FactoryClad Roll 40
280	0.040	7.00	3.45	1200	4.140	24	612929
260	0.040	6.50	3.70	1200	4.440	24	2439994
240	0.040	6.00	4.70	1200	5.640	24	709932
220	0.040	5.50	4.35	1200	5.220	24	2411649
200	0.040	5.00	4.85	1200	5.820	24	2402003
180	0.040	4.50	6.26	1200	7.512	24	2402002
160	0.040	4.00	7.05	1200	8.460	24	2402001
140	0.040	3.50	8.02	1200	9.624	24	2402000
120	0.040	3.00	9.40	1200	11.280	24	2401999
100	0.040	2.50	11.25	1200	13.500	24	2401998
80	0.040	2.00	14.10	1200	16.920	24	2401997

All dimensions are nominal

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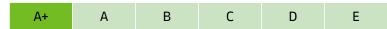
### **Performance**

THERMAL (W/mK)



Euroclass reaction to fire classification

GENERIC BRE GREEN GUIDE RATING



VAPOUR RESISTIVITY

5.00 MNs/g.m

### Certification, accreditations and industry standards

















### **Applications**



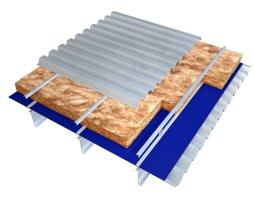


Built-up metal roofs

Built-up metal walls

### Typical Build-Ups





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### **Application**

FactoryClad Rolls are used for the thermal and acoustic insulation of roofs and walls in profiled metal clad buildings. Profiled metal roof and wall systems typically consist of a low profile metal inner liner sheet, separated from an outer, higher profile, metal weather sheet. The cavity between them is filled with a layer of thermal insulation to provide the specified level of thermal performance. FactoryClad Rolls offer different levels of thermal conductivity to suit project requirements and come with a Euroclass A1 reaction to fire classification, which can potentially reduce insurance premiums compared to foam composite panels.

Built-up metal roofing systems are typically assembled on site with the design and components used forming part of a proprietary system. FactoryClad Rolls are manufactured at 1200mm wide to suit commonly used rail and bracket systems designed for use in twin skin profiled metal cladding systems and standing seam roofs.

#### Standards and certification

FactoryClad 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 Services 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

FactoryClad 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 it is incorporated.

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### Sustainability

FactoryClad Rolls 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 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 (incl. glass from windows, bottles and jars).

FactoryClad 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  $\rm m^2$  of insulation, fewer vehicles on our roads, so less associated  $\rm CO_2$  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 & Storage

FactoryClad Rolls should be stored properly and handled in such a way as to ensure that the product remains clean and undamaged.

The polythene packs / shrink-wrapped pallets used for the supply of FactoryClad 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. FactoryClad 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.

FactoryClad 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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