

CladWool

The Future of Facade Insulation

Non-combustible RS-M & RS-MV Mineral Wool Insulation



Product Variations

CladWool RS-M is a mineral wool slab with no additional facing.

CladWool RS-MV is a mineral wool slab with black fibreglass cover to the external facing of the slab. A white facing cloth is also available.

CladWool RS-M and RS-MV is a facade mineral wool insulation for use on timber, LFS frame as well as masonry buildings.

A resin bonded stone insulation, CladWool is a highly breathable facade mineral wool insulation with excellent fire, acoustic and thermal properties.

Primarily used behind rainscreen cladding applications, CladWool can also be used internally or in ceiling applications too.

- KIWA accredited as part of our approved Safewall System:
 - Cladcolour - BAW-24-345-S-A-UK
 - Swisspearl - BAW-19-097-S-A-UK
 - Rockpanel - BAW-20-150-S-A-UK
 - Luxeclad - BAW-20-152-S-A-UK
- Non-combustible A1
- Acoustic benefits
- Water repellent breathable
- Excellent fire and thermal properties
- Suitable for below and above 18m



CE Certificate number 1454-CPR-0339



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Applications

Cladwool RS-M and RS-MV Facade Mineral Wool is primarily used behind rainscreen cladding applications, however, it can be used both internally or in ceiling applications too.

Suitable for:

- Timber frame structures
- Steel frame structures
- Masonry buildings

Performance of CladWool RS-M

Technical Information	Value
Thermal conductivity coefficient	$\leq 0.035 \text{ W/mK}$
Class for thickness tolerance T	T5 (-1mm/+3mm) or (-1%/+3mm)
Dimensional Stability under 70°C and 90% Humidity	$\leq 1.0 \%$
Compressive Stress at 10% deformation CS(10)	0.5 kPa
Water vapour transmission MU	MU1
Reaction to fire BS EN 13501-1:2018	A1 Non Combustible
Standard thicknesses	20mm – 200mm in 10mm increments
Standard slab size	1200mm x 600mm
Non standard slab sizes	1000mm x 600mm / 1200mm x 2000mm

Product Information of CladWool RS-M

Standard Board Sizes 1200mm L x 600mm W				
Thickness	Thermal Resistance R $\text{m}^2\text{K/W}$	Pieces per Pack	Packs per Pallet	Surface Area m^2 per Pallet
50mm	1.40	6	16	69.12
80mm	2.25	5	12	43.20
100mm	2.85	3	16	34.56
120mm	3.40	2	20	28.80
140mm	4.00	2	16	23.04
150mm	4.25	2	16	23.04
180mm	5.10	2	12	17.28
200mm	5.70	2	12	17.28
220mm	6.25	2	12	17.28

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Performance of CladWool RS-MV

Technical Information	Value
Thermal conductivity coefficient	0.034 W/mK
Class for thickness tolerance T	T5 (-1mm/+3mm) or (-1%/+3mm)
Dimensional Stability under 70°C and 90% Humidity	NPD
Compressive Stress at 10% deformation CS(10)	0.5 kPa
Water vapour transmission MU	MU1
Reaction to fire BS EN 13501-1:2018	A1 Non Combustible
Standard thicknesses	100mm – 220mm in 10mm increments
Standard slab size	1200mm x 600mm
Non standard slab sizes	1000mm x 600mm / 1200mm x 2000mm

Product Information of CladWool RS-MV

Standard Board Sizes 1200mm L x 600mm W				
Thickness	Thermal Resistance R m²K/W	Pieces per Pack	Packs per Pallet	Surface Area m² per Pallet
100mm	2.90	3	16	34.56
120mm	3.50	2	20	28.80
140mm	4.10	2	16	23.04
150mm	4.40	2	16	23.04
180mm	5.25	2	12	17.28
200mm	5.85	2	12	17.28
220mm	6.45	2	12	17.28

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Standards & Certification

CE Certificate number 1454-CPR-0339



Storage

CladWool RS slabs are supplied in distinctive CladWool shrink-wrapped polythene pack, typically on pallets. Pallets are delivered with a water protective hood to allow storage outside for reasonable periods of time. For extended period of outside storage, consideration should be given to additional protection to keep the product in good order.

Fitting

CladWool RS slabs can be easily cut with a sharp knife or hand saw. Slabs should be tightly butt jointed both horizontally and vertically to achieve the optimum fire, thermal and acoustic performance. The slab joints should be staggered to assist in achieving this.

The slabs should be cut neatly and tightly around any penetrations such as support frame, cavity barriers and other interfaces to achieve maximum performance.

An appropriate breather membrane (if required, project dependent) can either be fitted behind the insulation to a suitable sheathing board, such as Y-wall, Multipurpose or DensGlass or to the face of CladWool RS if third party required such as NHBC.

CladWool RS contains water repellent additives as part of the manufacturing process, however as with most minerals wool insulants in this application, best practice is to sequence works so the insulation is not left exposed for any extended periods of time.

Fixings

Framed structures onto sheathing board:

The typical fixing arrangement onto Benx Y-Wall or Multipurpose sheathing board is 3 fixings per/m² using our WX58T screw fixing within a 60 KC insulation washer, plus a KWL 90 insulation retaining plate.

In addition, 1 appropriate metal fixing and should be fixed through the centre of each slab. We recommend our WX58T screw in conjunction with our POK 070 washer for this application. Other fixing may also be used which have been appropriately assessed for this application.

Masonry structure: For fixing CladWool RS back to masonry structures, a typical fixing pattern is 3 fixing m². For insulation thickness up to and including 180mm, we recommend using our KI 10 in conjunction with our KWL 90 insulation retaining plate.

For insulation above 180mm, we recommend our TFIX 8S screw fixing with a KWL 90 plate. The 1 additional fire fixing we recommend is the Benx MBA-SS-08 hammer fixing with a MKC-SS-85 washer.

Please note: Fixing patterns can change depending on specific height and anticipated wind loading requirements, so it is recommended that this is assessed as part of the project review prior to any installation.

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Sustainable solutions

At Benx, we are constantly seeking ways to reduce our environmental impact. Our commitment to sustainability is underpinned by ISO 14001 and ISO 50001 certifications.

Adopting these standards, we have implemented comprehensive energy and environmental management systems to monitor and reduce our carbon footprint.

We have installed low energy lighting, motion sensors, and EV charging points. And our solar PV installation provides the necessary electricity for our fabrication facility, including CNCs, panel saws and state-of-the-art coating lines.

Where possible, we look to use renewable and recyclable materials. Working with our longstanding supply chain partners, we are committed to reducing the embodied carbon of our systems.



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