

CLADDING ROLL

High performance industrial insulation



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ROCKWOOL Cladding Roll is a lightweight, flexible mat which delivers a combination of thermal insulation, fire resistance, and acoustic absorption.

Cladding Roll has been specifically developed for use as an economical solution for projects that require dimensionally stable, consistent performance within lightweight cladding in commercial and industrial framed buildings.



Certificate No FM 02262



Certificate No EMS 70301





Advantages

- Non-combustible Euroclass A1
- Water repellent
- Chemically inert
- Outstanding thermal insulation
- Effective acoustic properties

Description

Available in a range of thicknesses, ROCKWOOL Cladding Roll is specifically developed to suit the needs of both commercial and industrial builds. A high-quality stone wool insulation, ROCKWOOL Cladding Roll also offers essential fire protection and has been shown to achieve 4 hours integrity, 4 hours stability and 17 minutes insulation when tested in a typical twin-skin wall system.

The product can be supplied with an aluminium facing for additional tensile strength.

Applications

ROCKWOOL Cladding Roll is principally designed for use in lightweight cladding applications in commercial or industrial framed buildings.

Performance

Fire classification

ROCKWOOL Cladding Roll (unfaced and aluminium faced) achieves a reaction to fire classification of A1 as defined in BS EN 13501-1.

Fire performance

A typical metal twin-skin wall incorporating ROCKWOOL Cladding Roll has been fire tested and shown to comply with BS 476: Part 22 as a fire rated wall one metre or more from a relevant boundary.

The over sheeting rail system achieved 4 hours integrity, 4 hours stability and 17 minutes insulation (Warres No. 42624 + WF153726).

Alternative fire wall designs have been tested by cladding systems manufacturers using different sheeting, fixing and spacer systems. These manufacturers should be contacted for full specification and design.

Please contact MCRMA for manufacturer's details:

www.mcrma.co.uk

Acoustic performance

Tests have shown that with suitably designed constructions excellent sound reduction can be achieved.

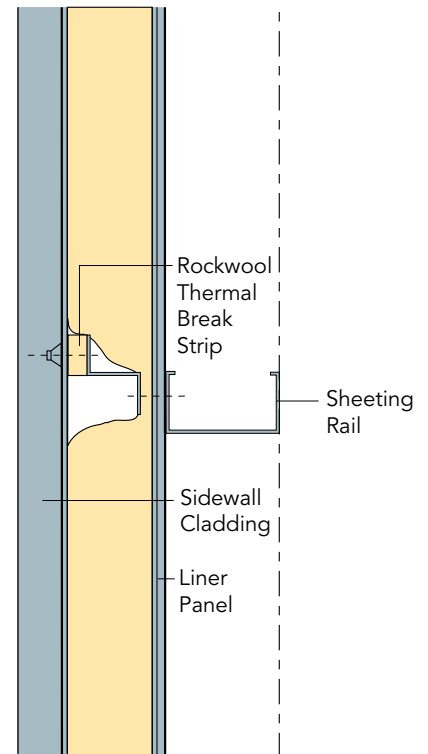
A 0.4mm thick lining sheet and 0.55mm outer sheet filled with 100mm Cladding Roll achieved R_w 37dB. This can be increased to R_w 38dB by including an air space between the insulation and the outer sheets.

Please note: The R_w figure will alter with the profile and construction.

Thermal performance

Due to the complexity of the design issues within the Part L document there is no single fabric solution for individual elements for new build constructions.

However, minimum elemental fabric performance standards have been set for extensions and refurbishment work.



Construction Sidewall cladding with 100mm ROCKWOOL Cladding Roll and ROCKWOOL thermal break strips

Noise reduction – R_w 37dB

U-values

Part L U-value requirements for external clad walls in non-domestic buildings:

Extensions:
England 0.28; Wales 0.21

Renovation & repair:
0.30 (E & W)

New build:
Approx. 0.26 (E & W) pending build type and design.

Part L U-value requirements for clad roofs in non-domestic buildings:

Extensions:
England 0.18; Wales 0.15

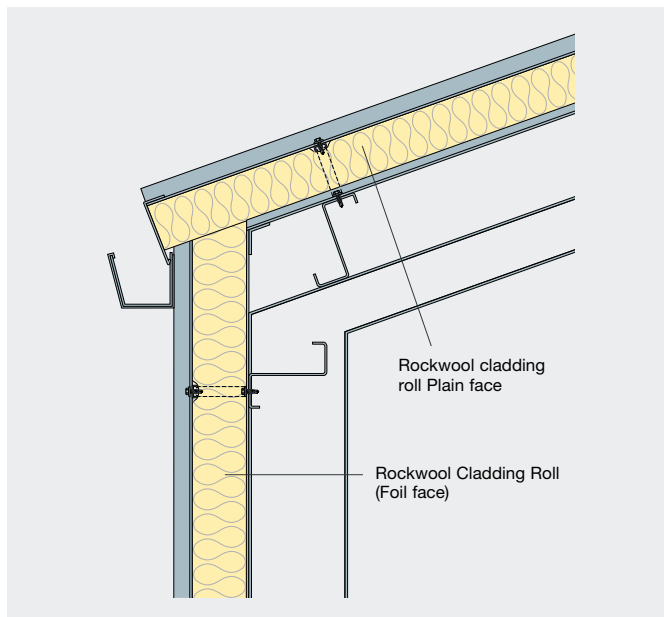
Renovation & repair:
0.18 (E & W)

New build:
Approx. 0.18 (E & W) pending build type and design

The U-Values shown in the tables below are based on euroclad elite systems using ROCKWOOL Cladding Roll (thermal conductivity 0.040 W/mK)

Cladding Roll Walls	
U-Values W/m ² K	Thickness range (mm) (pending system type)
0.28	150
0.26	160 - 180
0.24	180
0.22	200
0.20	220

Cladding Roll Roofs	
U-Values W/m ² K	Thickness range (mm) (pending system type)
0.25	180 - 220
0.20	220 - 240
0.18	260 - 280
0.16	320
0.15	340 - 360



Cladding systems require a complex calculation method using three dimensional modelling, hence thickness range shown may vary pending specific system type.

Euroclad offers solutions to allow architectural requirements to be met, whilst providing the required strengths and cost advantages associated with cladding systems. Confirmation of systems and U-Values should therefore be obtained from Euroclad LTD.

For further details of Euroclad systems visit: www.euroclad.com (+44 (0)2920 790 722).

For cladding systems not detailed in our U-Value tables and for systems incorporating a structural liner tray, a more complex calculation method must be used which requires a three dimensional computer model programme.

The U-Values and insulation thicknesses shown may vary depending on the cladding system and confirmation of U-Values must be obtained directly from the individual cladding manufacturer.

Thermal bridging and air leakage

Improving the u-value of the main building fabric without adding the thermal bridging is no longer an option. Approved Document L, requires that the building fabric should be constructed so that there are no significant thermal bridges or gaps in the insulation layer, particularly at joints between elements and at the edges of elements, such as those around window and door openings. Linear thermal transmission losses, known as psi values are found at junctions between elements such as floors, walls and corners.

Thermal point losses, known as 'chi' values occur at brackets or fixings that penetrate insulation layer.

These values will vary with each detail and confirmation of heat loss and risk of condensation should be obtained directly for the individual cladding manufacturer.

Buildings also need to be reasonably airtight, to reduce air leakage and testing to show compliance. Special care should be taken at junctions between elements and around penetrations within the building envelope.

Installation

Plain Faced Cladding Roll is recommended for use in roofing applications.

Foil Faced Cladding Roll is recommended for use in vertical applications and should be installed with the foil facing towards the inner liner.

Packaging

ROCKWOOL Cladding Roll is supplied compression wrapped on pallets protected by a waterproof covering which allows the product to be stored outside for a limited time period.

Perforated liner trays

Cladding Roll can also be used in conjunction with ROCKWOOL Acoustic Infill pieces fitted within the trapezoidal sections of a perforated liner tray to provide both sound absorption and reduction. ROCKWOOL trapezoidal Acoustic Infills are supplied tissue faced.

Composite panels

ROCKWOOL also supplies structural panel products to composite panel manufacturers who have developed a wide range of fire safe composite panels for use both internally and externally. The external panel systems include wall constructions that achieve up to four hours stability and one hour of integrity and insulation. These systems are suitable for use less than one metre from the relevant boundary.

Technical information

Standards and approvals

ROCKWOOL Cladding Roll complies with BS EN 13162:2012+A1:2015. Factory made mineral wool (MW) products specification.

Trade associations

ROCKWOOL LTD is an associate member of the Metal Cladding and Roofing Association (MCRMA) which seeks to foster and develop a better understanding amongst specifiers and end users alike of the most effective use of metal building products, components and systems.

For more information about MCRMA visit www.mcrma.co.uk

Dimensions

Plain faced: 1200mm wide.

Foil faced: 1000mm wide.

Standard thickness options: 60, 80, 100, 120, 150, 180 and 220mm

Other thicknesses are available up to 220mm but may be subject to minimum order quantities.

Specification clauses

1. Wall insulation

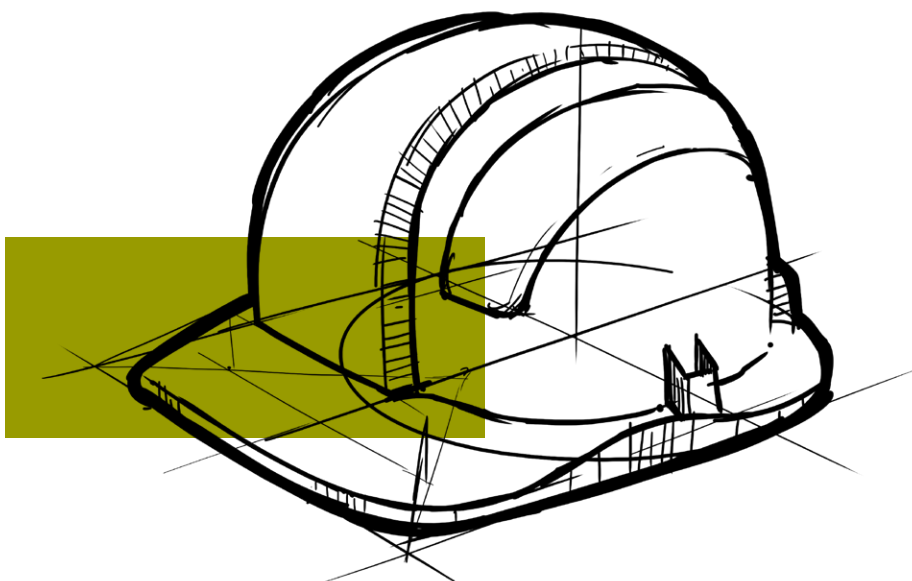
The insulation to the wall cladding¹ is to be ROCKWOOL Cladding Roll Alu-faced mm² thick, as manufactured by ROCKWOOL Limited, Pencoed, Bridgend, CF35 6NY and installed in accordance with the manufacturer's recommendations.

¹ Insert required thickness

2. Roof insulation

(As wall insulation) but state Cladding Roll 'Plain face' (in lieu of Alu faced)

The following NBS clauses include Cladding Roll: H31:254, H31:271



Sustainability

As an environmentally conscious company, ROCKWOOL promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.

All ROCKWOOL products provide outstanding thermal protection as well as four added benefits:



Fire resistance



Acoustic comfort



Sustainable materials



Durability

Health & Safety

The safety of ROCKWOOL stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC: ROCKWOOL fibres are not classified as a possible human carcinogen.

A Material Safety Data Sheet is available and can be downloaded from www.rockwool.co.uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

Environment

Made from a renewable and plentiful naturally occurring resource, ROCKWOOL insulation saves fuel costs and energy in use and relies on trapped air for its thermal properties.

ROCKWOOL insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

ROCKWOOL is approximately 97% recyclable. For waste ROCKWOOL material that may be generated during installation or at end of life, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.



Interested?

For further information, contact the Technical Solutions Team on 01656 868490 or email technical.solutions@rockwool.co.uk
Visit www.rockwool.co.uk to view our complete range of products and services.

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The ROCKWOOL Trademark

ROCKWOOL® - our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the world.

The ROCKWOOL trademark is one of the largest assets in the ROCKWOOL Group, and thus well protected and defended by us throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion. You must apply for a Trade Mark Usage Agreement. To apply, write to:
marketcom@rockwool.com.

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RAINSCREEN DUO SLAB®

HARDROCK®

ROCKFLOOR®

FLEXI®

BEAMCLAD®

FIREPRO®

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marketcom@rockwool.com.

Notes

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