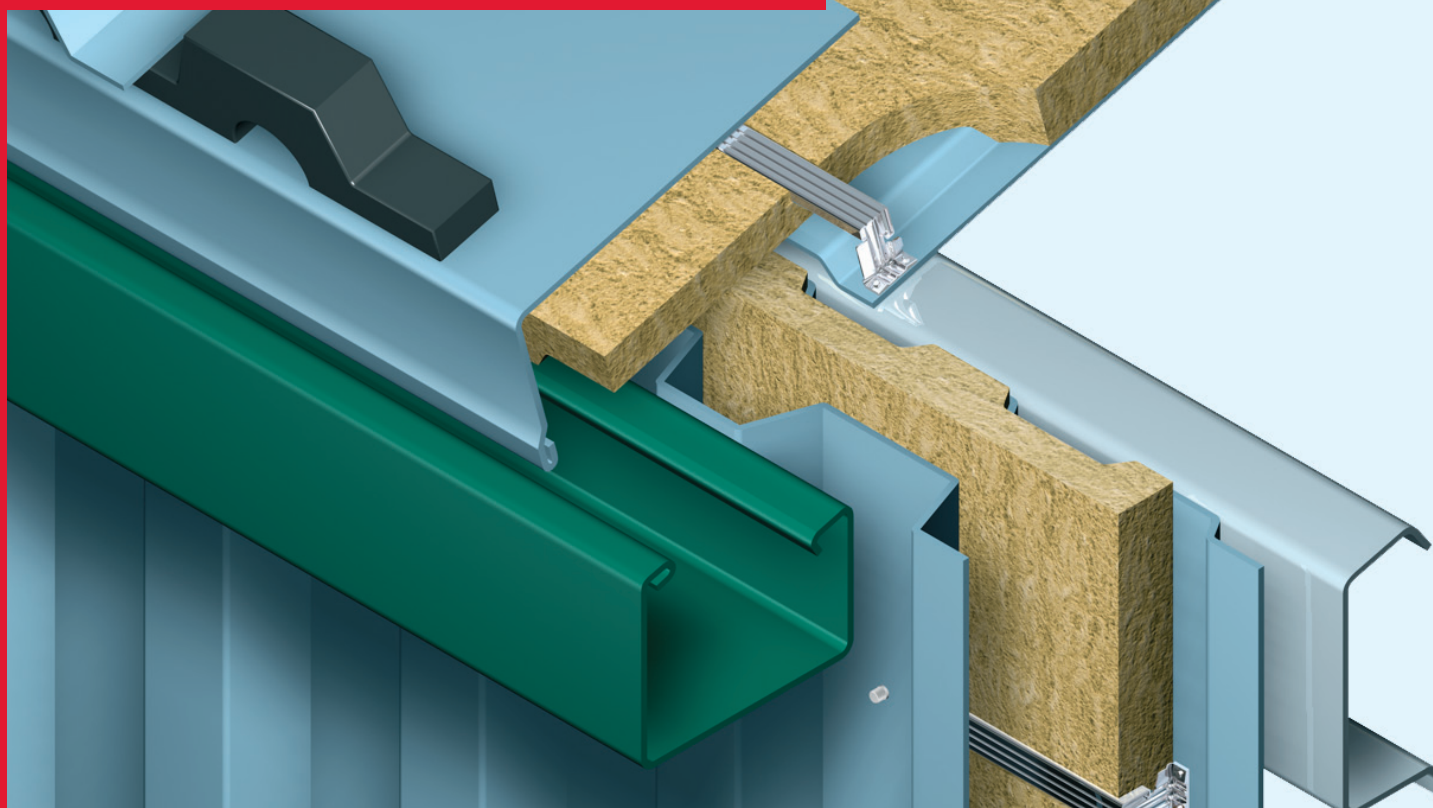


ROCKWOOL®

Cladding Roll



High performance industrial insulation

ROCKWOOL Cladding Roll has been specifically developed for use in lightweight cladding applications in commercial or industrial framed buildings. Cladding Roll (plain faced) is an ideal economical solution for both roof and wall applications. However for vertical applications, where additional tensile strength may be required, we would recommend the use of our foil faced Cladding Roll.



Certificate No: EMS 70301



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

Cladding Roll

Advantages

- Fire classification A1
- Water repellent
- Chemically inert
- Outstanding thermal insulation
- Effective acoustic properties

Standards and approvals

ROCKWOOL Cladding Roll complies with BS EN 13162: 2012. 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 ranges are 60,100,150 & 180mm.

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

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

Insulated Fire 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.

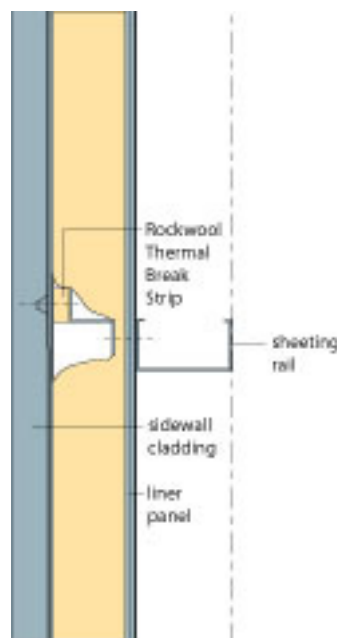
The over sheeting rail system achieved 4 hours integrity, 4 hours stability and 17 minutes insulation (Warres No. 42624 + WF153726).

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.

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.



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

Noise reduction –
Rw 37dB

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

Please note: The Rw 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.

Cladding Roll

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 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 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

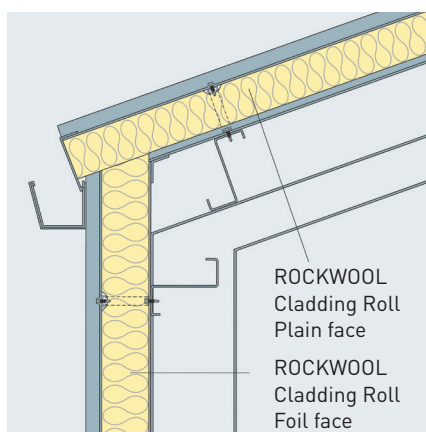
Cladding systems require a complex calculation method using three dimensional modelling, hence thickness range shown may vary pending specific system type.

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.



Cladding Roll

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 guidance

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.

Specification clause

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 leu of Alu faced)

Cladding Roll

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 868621 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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Cladding Roll

Notes

Cladding Roll

Notes

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Bridgend
CF35 6NY

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ROCKWOOL®

ROCKWOOL Limited reserves the right to alter or amend the specification of products without notice as our policy is one of constant improvement. The information contained in this data sheet is believed to be correct at the date of publication.

Whilst ROCKWOOL will endeavour to keep its publications up to date,

readers will appreciate that between publications there may be pertinent changes in the law, or other developments affecting the accuracy of the information contained in this data sheet.

The above applications do not necessarily represent an exhaustive list of applications for ROCKWOOL Cladding Roll.

ROCKWOOL Limited does not accept responsibility for the consequences of using ROCKWOOL Cladding Roll in applications different from those described within this data sheet. Expert advice should be sought where such different applications are contemplated, or where the extent of any listed application is in doubt.

CREATE AND PROTECT®