

Application type Construction type

Thermal, acoustic Roofs and ceilings

Rockwool Roll

FIRESAFE

KWO

INSULATION

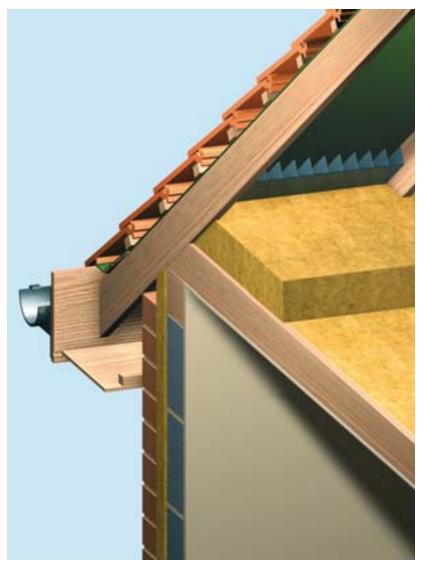
Thermal insulation for lofts. Acoustic insulation for suspended ceilings

Rockwool Roll is a medium density multi-use insulation mat.

It is a semi-perforated roll guiding the user to accurate cut widths of 400 mm, 600 mm or 1200 mm from one product. This versatile Roll is suitable for thermal insulation of roof spaces in domestic, commercial and industrial buildings. It is also useful for improving the acoustic performance of suspended ceilings.

Advantages

- Multi-application product
- Fire, thermal and acoustic properties
- Easy to use for 400 and 600 mm centres
- Higher density provides superb fit



Double layer insulation in a loft space using Rockwool Roll







Description, performance and properties

Description

Dimensions

Rockwool Roll is manufactured semi-split at 400 mm (\times 3) 600 mm (\times 2) or 1200 mm (\times 1).

Thickness* (mm)	Roll length (mm)		
100	4800		
150	3200		
170	2800		

Standards & approvals

Rockwool Roll conforms to BS EN 13162:2001 'Specification for factory-made mineral wool products'.

Performance and properties

Fire Classification

Rockwool Roll achieves a reaction to fire classification of A1 as defined in BS EN 13501-1.

Acoustic

The incorporation of Rockwool Roll within suitably designed constructions can provide improved levels of sound reduction.

Compatibility

Rockwool will not react with any metal components in the loft, nor will it cause loss of plasticiser from PVC cables and pipes (see also the note on electrical cables opposite).

Watertanks

Insulation should not be placed directly under the cold water tank. Where access is required to water tanks etc, supports should be provided for a raised walkway.

Loft hatches

To preserve continuity of insulation, covers to loft hatches should be insulated with a minimum 100 mm thickness of Rockwool Roll. Double-sided adhesive tape may be used to hold the insulation in place.

Electrical cables

The IEE Wiring Regulations, 16th edition, British Standard BS 7671: 2001 and the Electricians' Handbook (latest edition) give guidance on the correction factors to be applied in down-rating cables according to situation, and each case should be separately calculated. Where possible, all cables should be lifted free of the insulation.

Handling and storage

Rockwool Roll is very light and easy to handle. It is supplied compressed in polyethylene wrappings which provide short term protection. For long term protection the roll must be stored indoors or under a waterproof covering.

Ordering

Rockwool Roll: Please quote area and thickness required.

Environment

Rockwool insulation relies on entrapped air for its thermal properties; air is not a VOC and it does not have Global Warming Potential (GWP) or Ozone Depleting Potential (ODP).



Thermal performance and U values

Thermal application

Thermal Performance

Rockwool Roll has a thermal conductivity (k value) of 0.044W/mK.

Installation

Part L: 2006 edition requires new pitched roofs with loft spaces to achieve U values between 0.16 and $0.11W/m^2K$. To meet this thermal performance and minimise heat loss through the timbers, Rockwool Roll should be cross-layered between and over the ceiling joists.

The first layer (generally of 100 mm thickness) is rolled between the ceiling joists, which are normally spaced at 400 mm or 600 mm centres. A second layer of Rockwool Roll (e.g. 170 mm thick) is then cross-layered to cover the first layer of insulation and the ceiling joists (see fig 1).

If upgrading loft insulation, check to see if existing insulation between joists is tightly butt jointed to sides of timber. If not, remove and replace as above. If the existing insulation is in good condition, cross-layer this with a minimum of 170 mm Rockwool Roll.

U values

100mm Rockwool Roll between joists (with the additional thickness of Rockwool Roll laid over joists shown in table below).

Ceiling Joist	38 × 100 mm		$47 \times 100 \text{ mm}$	
Joist spacing	400 mm	600 mm	400 mm	600 mm
Insulation Thickness over joists(mm)	U values (W/m²K)		U values (W/m²K)	
100	0.22	0.21	0.22	0.21
150	0.17	0.17	0.17	0.17
170	0.16	0.16	0.16	0.16
200 (100+100)	0.15	0.14	0.15	0.14
250 (150+100)	0.12	0.12	0.13	0.12
300 (150+150)	0.11	0.11	0.11	0.11

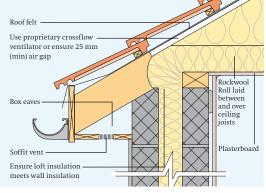


Figure 2

Health and safety

Tiled or slated roof -

Current HSE 'CHIP' Regulations and EU directive 97/69/EC confirm the safety of Rockwool mineral wool; Rockwool fibres are not classified as a possible human carcinogen.

The maximum exposure limit for mineral wool is 5mg/m³, 8 hour time-weighted average.

A Material Safety Data Sheet is available from the Rockwool Marketing Services Department to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

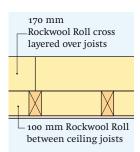


Figure 1 Cross layered roll U value $0.16W/m^2$

Specification Clause

Thermal insulation to be Rockwool Roll 600 or 400 mm wide (delete whichever is not appropriate). The first layers fitted between ceiling joists mm (insert 100, 150 or 170). The additional layer(s) mm (insert 100, 150 or 170) to be cross layered over ceiling joists,



with all joints to be closely

butted.



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 applications shown do not necessarily represent an exhaustive list of applications for Roll. Rockwool Limited does not accept responsibility for the consequences of using Roll in applications different from those described above. Expert advice should be sought where such different applications are contemplated, or where the extent of any listed application is in doubt.



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