THERMAL INSULATION ROLL
A mid-density insulation designed for use in lofts
THERMAL INSULATION ROLL

ROCKWOOL Thermal Insulation Roll is designed to increase home comfort and save energy, by insulating one of the most cost-effective areas; the loft. Keeping the heat in during the winter, and out in the summer. Thermal Roll can be used to insulate from scratch or be used as a top up in older homes.
Description

ROCKWOOL Thermal Insulation Roll has been designed to maximise home energy efficiency by reducing heat transfer through the roof. Thermal Roll has the effect of both helping to reduce heating bills and improving home comfort, keeping occupants warm in the winter and cool in the summer.

Thermal Roll also provides several additional benefits. Being made from volcanic rock means ROCKWOOL insulation is non-combustible, able to withstand temperatures of up to 1,000°C - acting as a barrier to fire. In the event of a fire this can help provide extra time for occupants to escape, and enable the emergency services to contain the fire, minimising damage to property and contents.

ROCKWOOL insulation also enhances home comfort as it absorbs sound and reduces sound vibrations. The density, non-directional fibre orientation, and its open porous structure trap sound waves and prevent them from traveling through it.

Advantages

- Keeps homes warm in the winter and cool in the summer
- Non-combustible
- Sound absorbent
- Quick and easy to install
- Maintains performance over time
- Produced from sustainable, renewable volcanic rock
Application

Designed for use in horizontal loft applications, the “Twin Roll” feature of ROCKWOOL Thermal Roll means it is pre-split at 100mm and 200mm thicknesses, for quick and easy installation. 100mm thickness for laying between the joists, and 200mm cross layered over the top of the joists - to give the recommended 300mm total coverage to meet thermal performance set out in Part L (Conservation of Fuel and Power) of the building regulations.

Performance

U-values

Part L: 2013 of the Building Regulations requires new pitched roofs with loft spaces to achieve U-values of between 0.16 and 0.11W/m²K. Laying 100mm Thermal Roll between the joists and overlaying the joists with 200mm Thermal Roll provides a U-value of 0.14 W/m²K, which exceeds the minimum U-value of 0.16 W/m²K.

To maximise performance, Thermal Roll should be cross-layered between and over the ceiling joists, with all joints closely butted, to reduce thermal bridging and eliminate performance reducing gaps.

<table>
<thead>
<tr>
<th>U-value (W/mK²)</th>
<th>Between Joists (mm)</th>
<th>Over Joists (cross laid) (mm)</th>
<th>Total Thickness (mm)</th>
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<tbody>
<tr>
<td>0.14</td>
<td>100</td>
<td>200</td>
<td>300</td>
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Technical Information

Durability

Non-hygroscopic (does not attract water), highly durable and inorganic. Provides no food source to sustain vermin, and does not encourage growth of mould, fungi or bacteria.

Water repellence and vapour resistivity

ROCKWOOL Insulation products work with the fabric of the building, preventing water from penetrating, but allowing moisture vapour to pass through. Vapour resistivity of 5.9 MNs/gm.
**Installation**

**Upgrading existing loft insulation**
When upgrading loft insulation, a check should be performed to make sure existing insulation material between joists is tightly jointed to the sides of the timber, and that it has not slumped or sagged. If not tightly jointed and, or, the insulation is sagging, remove and replace with new. If the existing insulation is in good condition, cross layer over the top of the rafters with 200mm of ROCKWOOL Thermal Roll.

**Considerations**

- **Water tanks:**
  Insulation should not be placed directly under cold water tanks. Where access is required to water tanks, supports should be provided for a raised walkway.

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

- **Electrical cables:**
  The IEE Wiring Regulations, 17th edition and British Standard BS 7671: 2008 provide guidance on the correction factors to be applied in downrating cables. Each case should be separately assessed. Where possible, all cables should be lifted free of the insulation.
Sustainability

ROCKWOOL stone wool is produced from diabase rock, which is naturally and continually replenished from within the earth at a higher rate than it is used. ROCKWOOL have invested to make sure recycling is a key part of our business. Waste material, refurbishment and demolition waste, along with off-cuts, can all be transformed into ROCKWOOL insulation briquettes and used in our furnaces. In fact, more than 75% of our stone wool waste is recycled. ROCKWOOL also runs a product recycling program from our recycling centre in Bridgend.

Environment

ROCKWOOL Insulation is made from natural, sustainable and recyclable resources. Our high-tech production process utilises filters, pre-heaters, after-burners and other cleaning collection systems to ensure an environmentally responsible approach. 97% recyclable and with a zero Ozone Depletion Potential and zero Global Warming Potential, ROCKWOOL insulation products represent no known threat to the environment.

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). ROCKWOOL Limited.

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.

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 Sound Insulation Slab.
ROCKWOOL Limited does not accept responsibility for the consequences of using ROCKWOOL Sound Insulation Slab 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.
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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