

TAPERED ROOFING

High performance tapered insulation boards



A high-angle photograph of two men in a professional setting, likely an office or construction site, looking at a large set of architectural blueprints spread out on a table. One man, wearing glasses and a dark sweater, is pointing at a specific area on the plans. The other man, wearing a light blue shirt, is looking down at the documents. The blueprints are detailed, showing various rooms, corridors, and structural elements with technical annotations and dimensions. The scene is brightly lit, and the focus is on the collaborative work being done.

TAPERED ROOFING

The ROCKWOOL® Tapered Roofing range is engineered to meet the demand for tapered solutions for existing and new flat roof constructions. The system is backed by a complete design to delivery service.

Alongside an effective weatherproofing system, Tapered Roofing Boards offer thermal performance and reliable rain management.



Advantages

- Bespoke designs for any flat roof
- Thermal calculations provided for every project
- Precision manufacture and supply to order
- Cost effective, insulated drainage solution for flat roofs
- Compatible with most weatherproofing systems
- Excellent sound reduction & absorption
- Dimensionally stable
- Non-combustible
- Suitable for new build & refurbishment

Description

In conjunction with an effective weatherproofing system, ROCKWOOL® Tapered Roofing Boards deliver thermal performance with effective rain management, to help ensure a weatherproof and energy efficient roof for the lifetime of the building.

Applications

ROCKWOOL® Tapered Roofing Boards are fully comparable for use with the following roofing systems:

- Fully bonded, partially bonded, mechanically fastened single ply membrane systems, and EPDM membrane systems
- Torch applied, bitumen based, and mastic asphalt built up systems
- Liquid applied systems

Performance

Fire performance

Roofing constructions featuring ROCKWOOL®'s roofing boards have achieved the highest possible classification to LPS 1181: Part 1, by successfully passing the Reaction-to-Fire Part 1 test and the more onerous LPS 1208 Resistance to Fire test.

Fire resistance performances of up to 120 minutes (integrity and insulation) to BS 476: Part 21 can be achieved.

ROCKWOOL® Tapered Roofing systems are covered by this LPCB approval with certain restrictions. Further details can be found on the LPCB website: www.redbooklive.com or by contacting ROCKWOOL® Customer Support.

Thermal performance – U-values

A ROCKWOOL® Tapered Roofing system will normally enhance the thermal performance of the roof in excess of Building Regulation requirements. However, as a result of the tapered thickness of the insulation, determining the overall U-values for a particular tapered roof requires a series of calculations. Consideration should be given as to whether an effective or minimum U-value is required for the particular roof.

It is a Building Regulation requirement that a tapered roof must be calculated to include all areas of the roof including gutters etc. The roof must be proven to meet the required effective or minimum U-value. Unlike other elements such as walls, floors and non-tapered elements you cannot take a single point U-value. BRE 443 (conventions for U-values) requires tapered insulation to be calculated as set out in accordance with Annex C of BS EN ISO 6946. A thermal calculation analysis is available on request.

Resistance to Moisture

ROCKWOOL® Tapered Roofing Boards are water repellent and unaffected by the freeze/thaw cycle.

Technical Information

Standards & approvals

ROCKWOOL® Tapered Roofing Boards are certified in accordance with BS EN 13162, 'Thermal Insulation products for buildings – factory made mineral wool (MW) products specification.'

Dimensions

ROCKWOOL® Tapered Roofing Boards are manufactured in 1200x1000mm boards.

Storage and handling

ROCKWOOL® Tapered Roofing Boards are fully palletised and wrapped in a polythene shroud for protection during transit and for short term protection if stored outside. For longer term protection the pallets should be stored under a secure waterproof covering.

ROCKWOOL® Tapered Roofing should be stacked no more than 2 pallets high for safety. Where craning of pallets to roof level is required, the use of a pallet fork attachment is recommended.

Specify SPRA

The Single Ply Roofing Association (SPRA) represents membrane manufacturers, associated component manufacturers and specialist subcontractors and aims to ensure the delivery of best value single ply roofing systems, through a quality assured partnership.

By specifying products and specialist installation by SPRA Manufacturer, Associate and Contractor members you can be assured that all parties meet strict quality criteria. Compliance with these criteria and with the Code of Conduct is assessed at application, by annual audit and by random spot checks.

For further information, and to obtain copies of the SPRA Design Guide and other documents, go to www.spra.co.uk or call 0115 914 4445.

Installation

Preparation Work for Refurbishment

Unless the existing roof finish is known to be sound and watertight, and the type and condition of the surface suitable for bonding or mechanical fixing of ROCKWOOL® Tapered Roofing Board, all previously applied finishes and, if necessary, insulation layers should first of all be removed. It is recommended that the specifier/contractor checks the existing levels to ensure that the falls are correct.

Achieved design fall

Where practical, it is recommended that the minimum achieved design fall is 1:60, with an enhance gradient of 1:40 at critical drainage points, such as gutters or outlets. Other falls are available for specific projects.

Good roof design

Flat roofs may include a variety of features such as rooflights, concrete plinths and air-handling units. These features can cause ponding water to collect unless correctly detailed.

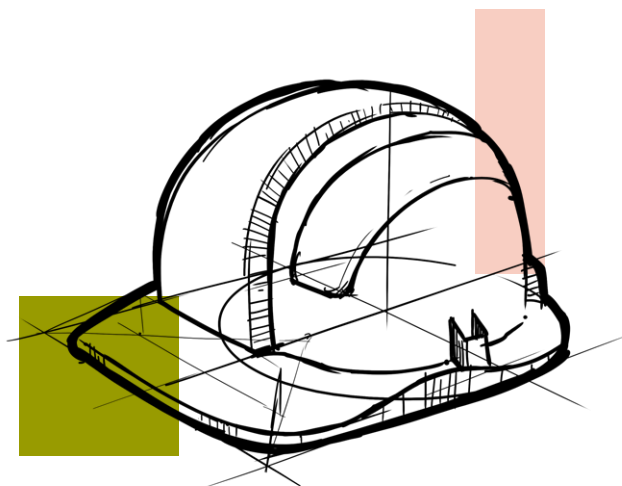
Standing water may also occur at roof edges, held back by the extra thickness of roofing membrane, or where outlets are positioned at some distance from each other. Where such situations arise, ROCKWOOL® offers various solutions, by means of additional design features, which also benefit the long-term performance of the overall roofing system.

A ROCKWOOL® Tapered Roofing system can also be provided for level gutters or other similar constructions. Even where existing falls are available and flat ROCKWOOL® roofing boards are used, a tapered scheme may be required at certain locations on the roof to enhance drainage. NB. The effectiveness of tapered gutters is restricted to the available height created by the ROCKWOOL® roof or other design considerations. Refer to ROCKWOOL® Technical Support for assistance with specification clauses relevant to your project.

Fixing

Boards are delivered to site individually marked with a positional code corresponding to the detailed layout drawing provided. The board layout should strictly follow that shown on the drawing, and to avoid error it is advisable to place each board in position temporarily prior to attachment.

The boards are either fully bonded to the vapour control layer with hot bitumen or glue or mechanically fastened through the vapour control layer to the deck.



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.

Trademarks

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ROCKWOOL®

ROCKCLOSE®

RAINSCREEN DUO SLAB®

HARDROCK®

ROCKFLOOR®

FLEXI®

BEAMCLAD®

FIREPRO®

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