



ROCKWOOL® Tapered Roofing

High Performance Tapered Insulation Boards

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.



ROCKWOOL® Tapered Roofing

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

The ROCKWOOL® Tapered Roofing Service

Key benefits

- Site surveys
- Preparation of bespoke & considered design solutions to any flat roof
- Quotations for the supply of insulation systems
- Roof drawings provided with each quotation
- Thermal calculations provided for every project
- Precision manufacture and supply to order
- Site advisory service prior to and during installation
- Cost effective insulated drainage solution for flat roofs
- Reduces risk of ponding
- Compatible with most weather proofing systems
- Built-in acoustic specification
- Excellent sound reduction & absorption
- Rain noise solutions
- Dimensionally stable
- Non-combustible
- Suitable for new build & refurbishment

Example of roof drawing provided with each quotation.



ROCKWOOL® Tapered Roofing

Description, performance and design

Application of ROCKWOOL®

Products

Tapered Range

1. Single ply

| | |
|----------------------------------|--|
| Mechanically fastened | Base/Underlay – ROCKWOOL® Roofing Boards (Plain or Tissue Faced) Tapered – ROCKWOOL® Tapered Roofing Boards (Plain or Tissue Faced) |
| Warm ballasted roof | Base/Underlay – ROCKWOOL® Roofing Boards (Plain or Tissue Faced) Tapered – ROCKWOOL® Tapered Roofing Boards (Plain or Tissue Faced) |
| Fully adhered (cold applied) | Base/Underlay – ROCKWOOL® Roofing Boards (SPA) Tapered – ROCKWOOL® Tapered Roofing Boards (SPA) |
| Partially adhered (cold applied) | Base/Underlay – ROCKWOOL® Roofing Boards (Plain or Tissue Faced) Tapered – ROCKWOOL® Tapered Roofing Boards (SPA) |

2. Bituminous felt

| | |
|---------------|---|
| Pour and roll | Base/underlay – ROCKWOOL® Tapered Roofing Boards (Plain or Tissue faced) Tapered – ROCKWOOL® Tapered Roofing Boards (Tissue faced) |
|---------------|---|

Ancillary Products

3. Sound reduction – metal decks

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|-----------------------------|--|
| ROCKWOOL® Acoustic Membrane | Refer to ROCKWOOL® Acoustic Membrane datasheet |
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4. Sound absorption – perforated metal decks

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|---------------------------|---|
| ROCKWOOL® Acoustic Infill | Refer to ROCKWOOL® Acoustic Infil datasheet |
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Dimensions

ROCKWOOL® Tapered Roofing Boards are manufactured in 1200x1000mm boards (plain, tissue faced and SPA).

Resistance to Moisture

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

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

ROCKWOOL® Tapered Roofing systems are covered by this LPCB approval with certain restrictions. Further details can be found on the LPCB website: 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 can not 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.

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.

Standards and Approvals

ROCKWOOL® Tapered Roofing Boards are certified in accordance with BS EN 13162: 2008, 'Thermal Insulation products for buildings – factory made mineral wool (MW) products specification.'

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.

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.

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Rockwool Rock Roller Trolley

To facilitate fast and easy movement of the roofing boards from the loading area to the point of installation on the roof deck, ROCKWOOL® Limited have developed a purpose made 'trolley'. Each Rock Roller comes complete with operating instructions, which should be followed by the roofing contractor.

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.

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.



Use of the ROCKWOOL® Rock Roller trolley allows fast and easy movement of boards across the roof decking.

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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 and 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 from ROCKWOOL® Technical Support (0871 222 1780) 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

Relying on entrapped air for its thermal properties, we are proud to say that ROCKWOOL® insulation does not contain (and has never contained) gases that have ozone depleting potential (ODP) or global warming potential (GWP). ROCKWOOL® therefore complies with the relatively modest threshold of GWP<5 included in documents such as the Code for Sustainable Homes. ROCKWOOL® is increasingly involved in recycling 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 Rockwool materials to our factory for recycling.

More information

For further details visit our website at www.rockwool.co.uk or phone ROCKWOOL® Technical Solutions on 0871 222 1780.

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ROCKWOOL® Limited
Pencoed, Bridgend, CF35 6NY

26-28 Hammersmith Grove
Hammersmith
London W6 7HA

info@rockwool.co.uk
www.rockwool.co.uk

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® Tapered Roofing. ROCKWOOL® Limited does not accept responsibility for the consequences of using ROCKWOOL® Tapered

Roofing 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.