



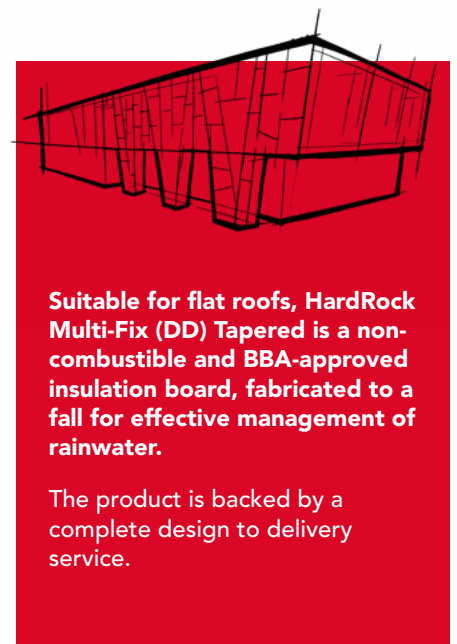
# HardRock® Multi-Fix (DD) Tapered

Non-combustible tapered insulation for flat roofs

ROCKWOOL HardRock Multi-Fix (DD) Tapered is a stone wool insulation board faced with a mineral-coated white fleece. The product is engineered to a fall for effective rain water management.

Manufactured from volcanic stone, HardRock Multi-Fix (DD) Tapered achieves Euroclass A2-s1, d0 (non-combustible).

- BBA-approved
- Non-combustible Euroclass A2-s1, d0
- Bespoke design and thermal calculation service
- Precision manufacture and supply to order
- Compatible with most weatherproofing systems
- Excellent sound reduction and absorption
- Dimensionally stable
- Suitable for new build and refurbishment



# HardRock Multi-Fix (DD) Tapered



## APPLICATIONS

HardRock Multi-Fix (DD) Tapered is fully compatible 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

\*BBA approval subject to use with a waterproofing membrane that has a current BBA Agrément Certificate.  
For more information please see Agrément Certificate 21/5878.

# HardRock Multi-Fix (DD) Tapered

## PERFORMANCE

### Fire performance

HardRock Multi-Fix (DD) Tapered achieves Euroclass A2-s1, d0 (non-combustible).

Flat roof constructions featuring HardRock Multi-Fix (DD) have attained a rating of "Grade EXT-A", the highest possible classification under LPS 1181: Part 1, by successfully passing both the LPS1181 Part 1 'reaction to fire' and LPS1208 'resistance to fire' tests.

In addition, a fire resistance performance of up to 120 minutes (integrity and insulation) to BS 476-21 can be achieved.

HardRock Multi-Fix (DD) Tapered is covered by the above approvals with certain restrictions - more information can be found in LPCB certificates 022g, available on the ROCKWOOL website.

### Thermal performance

HardRock Multi-Fix (DD) Tapered boards have a thermal conductivity of 0.039 W/mK.

When calculating the U-value of a tapered roof, Building Regulations require that the entire roof is taken into account, including gutter details etc.

Calculations should be carried out in accordance with the method given in Annex C of BS EN ISO 6946, which accurately accounts for varying insulation thickness across a roof.

For more information please contact ROCKWOOL Technical Solutions.

### Resistance to moisture

HardRock Multi-Fix (DD) Tapered is impregnated with a water repelling agent during manufacture.

## PRODUCT INFORMATION

### Dimensions

Manufactured at 1200x1000mm, to suit a range of falls. Please contact your local ROCKWOOL representative for more information.

### Storage and handling

Pallets are wrapped in a polythene shroud for protection during transit and for short term protection if stored outside. For longer term protection, pallets should be stored under a secure waterproof covering.

Pallets should be stacked no more than two-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 [spra.co.uk](http://spra.co.uk) or call 0845 154 7188.

## STANDARDS AND APPROVALS

Certificate
BBA approved (21/5878)
CE-marked to BS EN 13162
LPCB approved (022g)

# HardRock Multi-Fix (DD) Tapered

## 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 HardRock Multi-Fix (DD) Tapered, 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.

HardRock Multi-Fix (DD) Tapered can also be provided for level gutters or other similar constructions. Even where existing falls are available and flat ROCKWOOL boards are used, a tapered scheme may be required at certain locations on the roof to enhance drainage.

Note that the effectiveness of tapered gutters is restricted to the available height created by ROCKWOOL insulation, plus other design considerations. Refer to ROCKWOOL Technical Support for assistance with specification clauses relevant to your project.

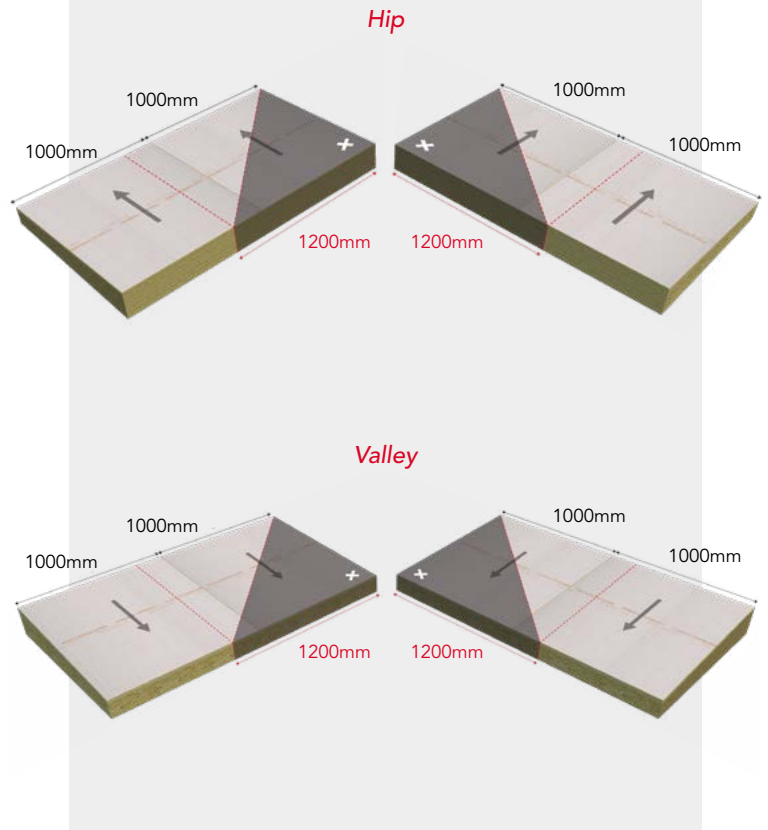
### Fixing

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.

## MITRE DETAILS

To form hips and valleys, cut and discard the shaded sections of insulation as shown below.



# HardRock Multi-Fix (DD) Tapered

## BUILDING SAFETY AND PRODUCT USE

### LEGAL NOTICES

#### General safety requirements – Building Safety Act 2022

ROCKWOOL Limited is committed to supporting specifiers, resellers and users of ROCKWOOL products for the full life cycle of the product to comply with the obligations and responsibilities set out in the Building Safety Act 2022. With regard to the general safety requirements of the Act, ROCKWOOL Limited cannot control or foresee every situation where its products might be used. We therefore strongly advise that specifiers, resellers and users contact us where use of ROCKWOOL products is contemplated in applications different from those explicitly described in the latest, relevant ROCKWOOL product datasheets; especially in applications that can be reasonably foreseen as critical to safety.

ROCKWOOL Limited reserves the right to amend the specification of its products without notice. Changes to the ROCKWOOL manufacturing process, or to pertinent regulations, may be reflected in changes to tested and certified product performance. Whilst ROCKWOOL Limited endeavours 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 our publications.

ROCKWOOL Limited does not accept responsibility for the consequences of using (including testing or certifying) its products in applications different from those explicitly described in the relevant ROCKWOOL product datasheets. Expert advice should be sought, and ROCKWOOL Limited should be contacted, where such different use is contemplated, or where the extent of any use described by ROCKWOOL Limited 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 most important assets of the ROCKWOOL Group, and is therefore well-protected and defended by ROCKWOOL 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](mailto:marketcom@rockwool.com)

#### Trademarks

Registered trademarks of the ROCKWOOL Group include but are not limited to:

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#### Photography and illustrations

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To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)



# HardRock Multi-Fix (DD) Tapered

## ROCKWOOL stone wool - safe to install and live alongside

There are no hazardous classifications associated with stone wool insulation manufactured by ROCKWOOL-UK according to EU REACH and UK REACH regulations on health and the environment.

ROCKWOOL safe use instruction sheets and material safety data sheets (where applicable) can be downloaded [here](#).



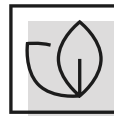
### Sustainability

ROCKWOOL products are used to enrich modern living, creating safer, healthier and more climate-resilient communities.

We transform abundant, natural volcanic rock into stone wool insulation products that are used to reduce energy demand, lower fuel bills and help address society's climate change challenges.

ROCKWOOL stone wool insulation is recyclable and can be transformed into new ROCKWOOL products. Please contact us for details of how we can work together to recycle waste ROCKWOOL stone wool material that may be generated during on-site installation.

Our annual sustainability reports, which set out progress against our sustainability goals, and further details of the positive impacts of using our products can be found on our website.



### Environment

ROCKWOOL takes a fact-based, auditable approach to documenting our progress in maximising our products' positive impact and minimising the effect our operations have on the environment, backed by third-party references and methodologies. Further details can be found online in our annual sustainability report.

Our high-tech production process uses filters, pre-heaters, after-burners and other cleaning and collection systems that help to reduce the effects of our manufacturing operations on the environment.

ROCKWOOL stone wool insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

