

Construction type **Roofs**Application type **Acoustic****ROCKWOOL**

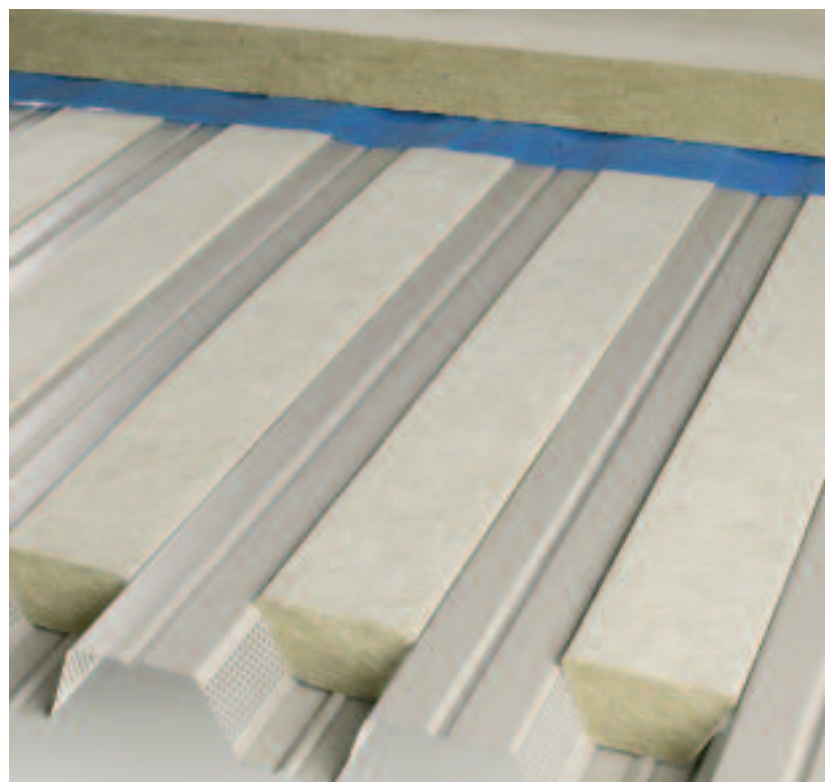
# Rockwool Acoustic Infill

## High performance sound absorption for perforated metal decks

Rockwool Acoustic Infill consists of trapezoidal shaped tissue faced Rockwool insulation, which is engineered to suit specified perforated roof decking. The combination of optimised density, fibre direction and excellent fit provides a significant improvement in sound absorption when used together with Rockwool Hardrock Dual Density Roofing Board on perforated metal roof decking constructions.

### Advantages

- Excellent acoustic absorption
  - Class C sound absorption performance
- Pre-cut to suit specific roof deck sizes for fast installation
- Vapour control layer can be installed directly onto the roof decking
- Tissue faced on all sides for enhanced aesthetic appearance



## Description, performance and properties

### Description

Rockwool Acoustic Infill D60

#### Dimensions

Length: 1000mm

Profile: To suit Corus D60 perforated roof decking

Other profile sizes available on request.

### Standards and approvals

The product is manufactured in full accordance with the ISO 9001:2000 Quality Management System.

### Performance & Properties

#### Acoustic Performance

##### Solution to E3 and E4 of the Approved Document E

A perforated metal deck construction including Rockwool Acoustic Infill and Hardrock DD Roofing Board will achieve Classification C sound absorption rating in accordance with BS EN ISO 11654:1997. See 'Typical applications'. Method A as determined by E3 and E4 of Approved Document E can generally be satisfied by the use of ceilings with Class C sound absorption. See Approved Document E, and Building Bulletin 93 (The Acoustic Design of Schools) for guidance.

#### Fire Performance

The Rockwool used in the manufacture of this product is non-combustible.

#### Thermal Conductivity

The Thermal Conductivity ( $\lambda$ ) of Rockwool Acoustic Infill is 0.040W/mk.

#### Resistance to moisture

Rockwool Acoustic Infill is water-repellent and unaffected by the freeze/thaw cycle.

# Construction and installation guidance

## Typical Applications

Flat roof areas over convention and sports halls, manufacturing plants, entrance halls, corridors, hallways and stairwells etc.

### Mechanically fastened single ply membrane system



D60 webb perforated steel deck 13% open area  
Rockwool Acoustic Infill D60  
Polythene vapour control layer (VCL), 0.22mm  
Rockwool Hardrock DD Roofing Board,  
210mm (105 + 105mm)  
Mechanically fastened single ply membrane system  
U value: 0.18W/m<sup>2</sup>K

| Frequency (Hz)               | 125  | 250  | 500  | 1k   | 2k   | 4k   |
|------------------------------|------|------|------|------|------|------|
| Sound absorption coefficient | 0.55 | 0.94 | 1.09 | 0.95 | 0.59 | 0.44 |

Weighted Sound Absorption Coefficient      W = 0.6(LM)  
Noise Reduction Coefficient                  NRC = 0.90  
Absorption Classification                        Class C  
Weighted Sound Reduction Index              Rw = 39dB

C/06/5L3434/2, C/06/5L/3434/1

### Fully bonded single ply membrane system

D60 webb perforated steel deck 13% open area  
Rockwool Acoustic Infill D60  
Bituminous Vapour control layer (VCL)  
Rockwool Hardrock DD SPA Roofing Board,  
210mm (105 + 105mm)  
Fully bonded single ply membrane system

See above for sound absorption coefficients.

## Installation

Apply the Rockwool Acoustic Infill strips directly within the troughs of the metal deck. Ensure that all joints are tightly butted together. Where lengths of Rockwool Acoustic Infill require to be cut, this is easily facilitated with a sharp knife.

Follow with the installation of the appropriate VCL, Rockwool insulation and waterproofing layer in accordance with the manufacturers' requirements. Day joints must be formed at the conclusion of each section of work to seal exposed edges of the Rockwool Acoustic Infill and Hardrock DD roofing board. For roof board installation, see the Hardrock DD data sheet.

## Design

The roof construction and design should comply with BS 6229:2003 (Code of practice for flat roofs with continuous supported coverings).

### Vapour control layer

The need for a vapour control layer should be calculated in accordance with BS 5250: 2002 (Code of practice for control of condensation in buildings) and with reference to BS 6229: 2003 (Code of Practice for Flat Roofs with Continuously Supported Coverings).

### Storage and handling

Rockwool Acoustic Infill is supplied to site in cardboard cartons. Store in dry conditions

### Supply

Available throughout the United Kingdom from Rockwool stockists. A list is available on request.

### 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](http://www.spra.co.uk) or call 0115 914 4445



### Health and safety

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/m<sup>3</sup>, 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).

### 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).



### Technical Information

For further details visit our website at [www.rockwool.co.uk](http://www.rockwool.co.uk) or phone the Technical Hotline on 0871 222 1780

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 Acoustic Infill. Rockwool Limited does not accept responsibility for the consequences of using Rockwool Acoustic Infill 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.

**ROCKWOOL**

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