ROCKWOOL FLEXI®
Insulation Application Guide

- The perfect fit for any framed construction
- Meets regulations Part L, Part E and Part B
- Fast and easy to install
- No cutting, no gaps, no waste
ROCKWOOL FLEXI®

One product, many applications

Choosing ROCKWOOL FLEXI® is an easy decision as it can be used all over your home or building project – which is great value for money. ROCKWOOL FLEXI® can be used in:

- Pitched roof rafters
- Framed external walls
- Internal partitions and intermediate floors
- Separating walls and floors
- Timber suspended ground floors

The perfect fit for any framed construction

ROCKWOOL’s unique patented flexible edge along one side ensures the perfect fit is maintained when timber expands and contracts. ROCKWOOL FLEXI® can be fitted between fresh timber and will expand into the wider space created when the timber has dried out and shrunk back. Other insulation may be displaced, resulting in cold spots or poor acoustics.

4 in 1 solution

Fire resistance
ROCKWOOL products withstand temperatures up to 1000°C making them exceptionally resistant to fire.

Acoustic comfort
Insulating for acoustic comfort is important. ROCKWOOL FLEXI® offers a snug fit that eliminates gaps and significantly reduces the passage of sound. Ensuring the building environment is protected from internal and external noise.

Durability
ROCKWOOL FLEXI® is designed to last, once installed there is no need for replacement. Once you have done the job, you can sit back and relax.

Sustainable materials
Produced from renewable volcanic rock, ROCKWOOL FLEXI® is 97% recyclable. It is acknowledged to maximise energy efficiency and minimise CO₂ emissions.
ROCKWOOL FLEXI®

Meeting the regulations

Using ROCKWOOL FLEXI® will assist you in achieving compliance to the relevant building regulations.

Part L - Thermal
The perfect friction fit between frames and provides excellent insulation levels. ROCKWOOL FLEXI® has a thermal conductivity of 0.038 W/mK at thicknesses between 50-120 mm and 0.035 W/mK for thicknesses of 140 mm and above. Correct design and high performance insulation are key to meeting the requirements of Part L.

Part B - Fire Safety
ROCKWOOL FLEXI® boasts an A1 European reaction to fire classification, as defined in BS 13501-1. It is non-combustible and is fully tested in fire separation constructions.

Part E - Acoustics
ROCKWOOL FLEXI® works in two distinct ways to reduce noise; by impeding the transmission of sound through the structure, and through the absorption of sound at the surface. The structure of the fibres in ROCKWOOL FLEXI® makes it ideal for use as a sound absorber. Details of acoustic performance are included in this guide.

Fast and easy to install

The unique flexible edge makes ROCKWOOL FLEXI® easy to use and fast to install. Ensuring you move on to your next job faster.

ROCKWOOL FLEXI® has been designed to fit all typical metal and timber frame spacing, without the need for cutting or waste. It is easy to install and does not slump.

To install simply push in the specially designed flexible edge.

And let go for the perfect fit.
### Acoustic Partitions

**LIGHTWEIGHT TIMBER STUD**

STUDS 38 x 63 mm at 600 mm centres  
FACINGS Single layer of 12.5 mm acoustic plasterboard (11 kg/m²) each side  
INFILL Minimum 50 mm ROCKWOOL FLEXI®

**TYPICAL OFFICE PARTITION**

STUDS 38 x 75 mm timber studs at 600 mm centres  
FACINGS 2 layers of 12.5 mm standard plasterboard (2 x 8 kg/m²) each side  
INFILL Minimum 50 mm ROCKWOOL FLEXI®

**LIGHTWEIGHT METAL STUD**

STUDS 50 mm metal studs at 600 mm centres  
FACINGS 1 layer of 12.5 mm standard plasterboard (8 kg/m²) each side  
INFILL Minimum 50 mm ROCKWOOL FLEXI®

**ENHANCED PERFORMANCE: SCHOOLS, OFFICES and PUBLIC BUILDINGS**

STUDS 70 mm metal studs at 600 mm centres  
FACINGS 2 layers of 15 mm standard plasterboard (2 x 13 kg/m²) each side  
INFILL Minimum 70 mm ROCKWOOL FLEXI®

### Separating Floors

**TIMBER PLATFORM FLOOR WITH RECESSSED DOWNLIGHTERS (NEW BUILD)**

- 18 mm T&G flooring grade chipboard on 15 mm acoustic plasterboard (13 kg/m²) on 50 mm ROCKWOOL Rockfloor on 15 mm OSB on 200x50 mm timber joists at 400 mm centres  
- 100 mm ROCKWOOL FLEXI® between joists  
- Resilient bars fixed at right angles to joists at 400 mm centres  
- Ceiling finish, 2 layers of 15 mm acoustic plasterboard (2 x 13 kg/m²)  
- Aspect lighting 60 mm downlights (1 per 1.8 sqm) with Tenmatt FF 109 downlighter covers
SEPARATING TIMBER FLOOR TREATMENT:
PLATFORM FLOOR WITH ABSORBENT MATERIAL
(MATERIAL CHANGE OF USE)

- Min 2 layers of board material to provide min total mass 25 kg/m² spot bonded together with joints staggered (eg 18 mm T&G flooring grade chipboard and 19 mm plasterboard plank)
- Floating layer loose laid over Rockfloor
- 25 mm (min) ROCKWOOL Rockfloor resilient layer laid on existing floor deck on existing timber floor joists
- 100 mm ROCKWOOL FLEXI® between joists
- Existing ceiling upgraded to 20 kg/m². If existing ceiling is of lath and plaster it should be retained providing it satisfies Part B - Fire Safety (If in doubt, underdraw with an additional layer of 12.5 mm fire resistant plasterboard and screw into joists)

SEPARATING TIMBER PLATFORM FLOOR CONSTRUCTION (NEW BUILD)

- 18 mm T&G flooring grade chipboard spot bonded to 15 mm plasterboard (total mass 28 kg/m²)
- 50 mm (min) ROCKWOOL Rockfloor resilient layer
- Min 15 mm OSB floor deck on timber floor joists (200 mm x 50 mm @ 400 ctrs.)
- 100 mm ROCKWOOL FLEXI® between joists
- Resilient bars fixed at right angles to joists at 400 mm centres
- Ceiling finish 2 layers 15 mm plasterboard 26 kg/m²

UPGRADED FIRE FLOOR (EXISTING)

- 19 mm T&G floor boarding
- 195 x 47 mm gs grade softwood joists at 400 mm centres
- 100 mm ROCKWOOL FLEXI® supported by continuous run of 25 mm wire mesh stapled to sides of joists and laid over ceiling
- 9.5 mm plasterboard (or good condition lath and plaster)
**Internal Floors**

**TIMBER JOIST INTERNAL FLOOR WITHIN THE SAME DWELLING**

**JOISTS** Timber joists at 400 mm centres
**FACINGS** Standard 18 mm T&G flooring grade chipboard, mass per unit area 12.4 kg/m². Single layer of standard 12.5 mm plasterboard ceiling mass per unit area 8 kg/m².
**INFILL** Minimum 100mm ROCKWOOL FLEXI® between joists

<table>
<thead>
<tr>
<th>Airborne noise reduction benefits (dB)</th>
<th>Fire resistance (minutes)</th>
<th>Max height (m)</th>
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<tbody>
<tr>
<td>40</td>
<td>30</td>
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**INTERNAL METAL JOISTED FLOORS WITHIN THE SAME DWELLING**

**JOISTS** Metal floor joists at 400 mm centres
**FACINGS** Timber floor minimum mass per unit area 15 kg/m² (e.g., 22 mm chipboard). Single layer plasterboard, minimum mass per unit area 10 kg/m² (e.g., 15 mm standard plasterboard)
**INFILL** Minimum 100 mm ROCKWOOL FLEXI® between joists

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**Separating Walls Conversion Work**

**SEPARATING NEW BUILD METAL FRAME WALL CONSTRUCTION**

**STUDS** 70 mm metal C studs at 600 mm centres
**FACINGS** 2 layers of 15 mm plasterboard (13 kg/m²) on one side. Other side: 2 layers of 15 mm plasterboard (2 x 13 kg/m²) fixed to resilient bars (spaced at 600 mm centres).
**INFILL** Minimum 70 mm ROCKWOOL FLEXI®

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**SEPARATING WALL EXISTING SOLID MASONRY WALL**

**STUDS** Independent timber or steel studs, minimum 10 mm gap to be maintained between frame and existing wall
**FACINGS** 100 mm minimum existing solid masonry wall plastered on both faces. 2 layers of 15 mm standard plasterboard (2 x 10 kg/m²).
**INFILL** 50 mm ROCKWOOL FLEXI® between studs

Avoiding flanking transmission: seal perimeter edges of new plasterboard with tape or ROCKWOOL Acoustic Sealant. If existing masonry wall is not plastered or less than 100 mm thick then independent panels should be applied to both sides.
Separating Walls New Build

**SEPARATING WALL TIMBER FRAME**
*TWIN TIMBER FRAMES (NEW BUILD)*
Conforms with Robust Detail E-WT -1. For use with timber framed dwellings and apartments.
**FACINGS**
- 240 mm minimum between inner faces of wall linings.
- 50 mm minimum gap between studs.
- 2 or more layers of gypsum based board (total nominal mass per unit area 22 kg/m²) both sides.
**INFILL**
- Minimum 60 mm ROCKWOOL FLEXI® both sides.

**SEPARATING WALL-STEEL FRAME**
*TWIN METAL FRAMES (NEW BUILD)*
Conforms with Robust Detail E-WS -1. For use with lightweight steel framed dwellings and apartments.
**FACINGS**
- 200 mm minimum between inner faces of wall linings.
- 2 or more layers or gypsum based board (total nominal mass per unit area 2 x 11 kg/m²) both sides.
**INFILL**
- Minimum 50 mm ROCKWOOL FLEXI®

Exterior Walls

**TIMBER FRAME WALL WITH TILE HANGING**
**STUDS**
- Studs to suit 600 mm centres with 50 mm ROCKWOOL FLEXI® between battens.
**FACINGS**
- External tile hanging or weatherboard.
- 12.5 mm standard plasterboard with VCL.
**INFILL**
- ROCKWOOL FLEXI® between the studs.

**TIMBER FRAME CAVITY WALL**
**STUDS**
- Studs at 400 mm/600 mm centres
**FACINGS**
- Outer brick or block with 50 mm clear cavity.
- High performance breather membrane on OSB 12.5 mm plasterboard with VCL.
**INFILL**
- ROCKWOOL FLEXI® between the studs.

Roofs

**INSULATION AT RAFTER LEVEL**
**RAFTERS**
- 47 mm timber rafters at 600 mm centres.
**FACINGS**
- Breather membrane and tiles outer.
- 25 mm service zone with high performance VCL and plasterboard inner.
**INFILL**
- ROCKWOOL FLEXI® between rafters.
ROCKWOOL FLEXI®

The ideal choice for homes and commercial buildings alike

ROCKWOOL FLEXI® provides home owners with thermal and acoustic comfort. As well as providing a fire safe and environmentally sustainable solution to home insulation. Installation of ROCKWOOL FLEXI® can also help reduce energy consumption, lowering the cost of heating your home. The ease of installation makes it the right choice for home owners.

Schools, factories, offices, hospitals and industrial buildings all benefit from the use of ROCKWOOL FLEXI®. It has been chosen in these projects to maximise energy efficiency and minimise CO₂ emissions, as well as provide acoustic comfort and a fire safe environment for people to work and learn in.

Size and usage information

Length and width 1200mm x 600mm

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<th>Thickness (mm)</th>
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Length and width 1200mm x 400mm

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