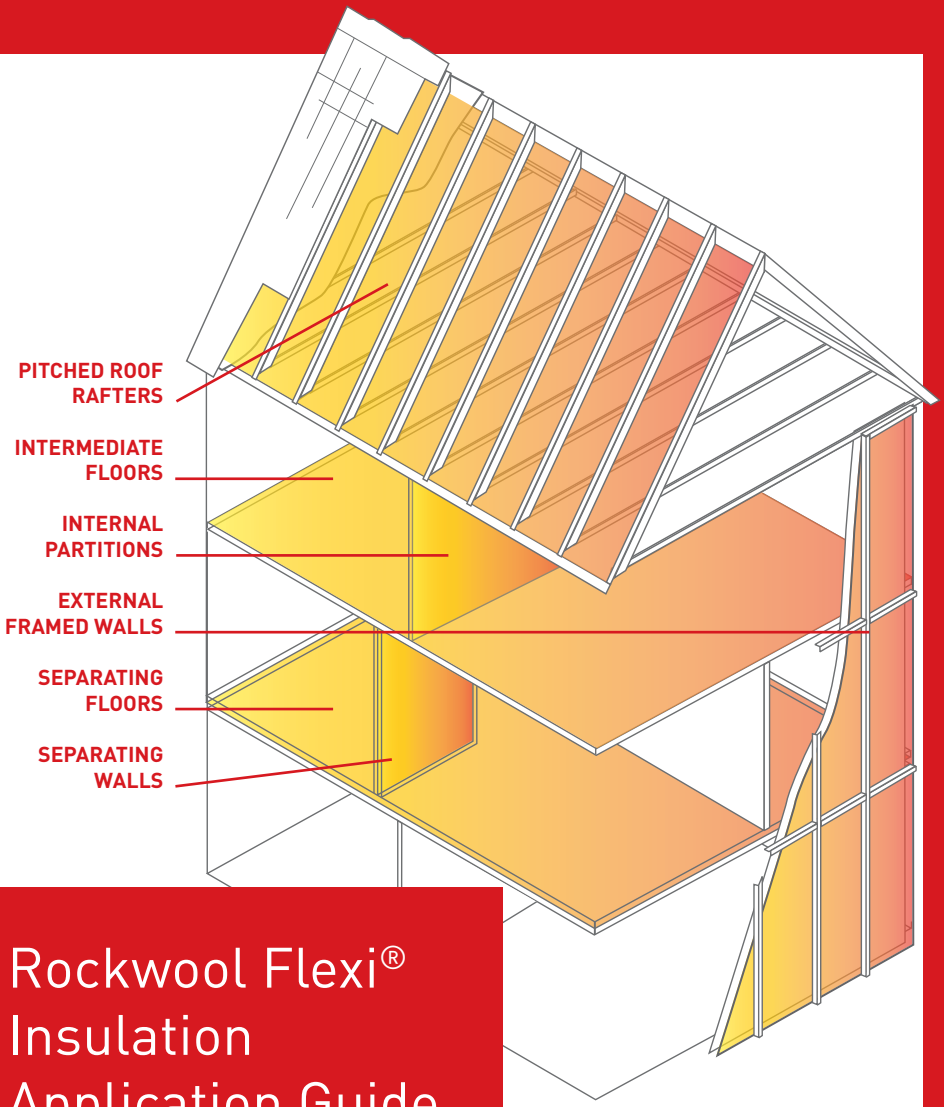


Rockwool Flexi® Insulation Application Guide

- 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 1000ºC 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 CO_2 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 studs maintains excellent insulation levels and minimises cold bridging. Rockwool Flexi® has a thermal conductivity of 0.038W/mK when tested to BS EN 13162. Except 140mm thickness, which is 0.035W/mK. 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

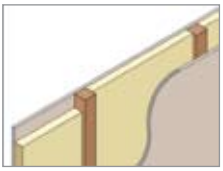
The unique flexible edge makes Rockwool Flexi® easy to use and fast to install. Ensuring you move on to your next job faster.

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

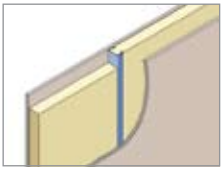


LIGHTWEIGHT TIMBER STUD

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

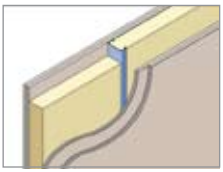
TYPICAL OFFICE PARTITION

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



LIGHTWEIGHT METAL STUD

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



ENHANCED PERFORMANCE: SCHOOLS, OFFICES and PUBLIC BUILDINGS

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

Airborne noise reduction benefits (dB)	Fire resistance (minutes)	Max height (m)
Airborne 40	30	3.0
Airborne 46	60	3.0
Airborne 41	30	2.5
Airborne 57	90	4.6

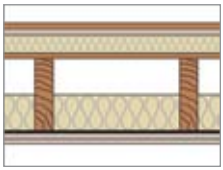
Separating Floors

TIMBER PLATFORM FLOOR WITH RECESSED DOWNLIGHTERS (NEW BUILD)

- 18mm T&G flooring grade chipboard on 15mm acoustic plasterboard (13kg/m²) on 50mm Rockwool Rockfloor on 15mm OSB on 200x50mm timber joists at 400mm centres
- 100mm Rockwool Flexi® between joists
- Resilient bars fixed at right angles to joists at 400mm centres
- Ceiling finish, 2 layers of 15mm acoustic plasterboard (2 x 13kg/m²)
- Aspect lighting 60mm downlights (1 per 1.8sqm) with Tenmatt FF 109 downlighter covers

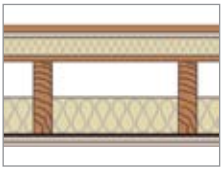
Airborne noise reduction benefits (dB)	Impact noise reduction benefits (dB)	Fire resistance (minutes)
Airborne 53	Impact 54	60

Separating Floors



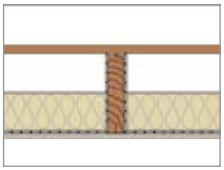
SEPARATING TIMBER FLOOR TREATMENT:
PLATFORM FLOOR WITH ABSORBENT MATERIAL (MATERIAL CHANGE OF USE)

- Min 2 layers of board material to provide min total mass 25kg/m² spot bonded together with joints staggered (eg 18mm T&G flooring grade chipboard and 19mm plasterboard plank)
- Floating layer loose laid over Rockfloor
- 25mm (min) Rockwool Rockfloor resilient layer laid on existing floor deck on existing timber floor joists
- 100mm Rockwool Flexi® between joists
- Existing ceiling upgraded to 20kg/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 12.5mm fire resistant plasterboard and screw into joists)



SEPARATING TIMBER PLATFORM FLOOR CONSTRUCTION (NEW BUILD)

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

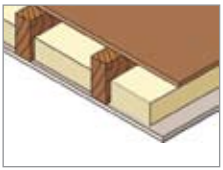


UPGRADED FIRE FLOOR (EXISTING)

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

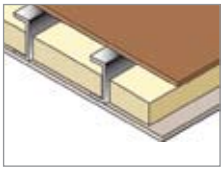
Airborne noise reduction benefits (dB)	Impact noise reduction benefits (dB)	Fire resistance (minutes)
Airborne 43	Impact 64	60
Airborne 53	Impact 54	60
Airborne 40	Impact NA	60

Internal Floors



TIMBER JOIST INTERNAL FLOOR WITHIN THE SAME DWELLING

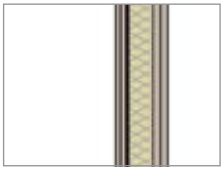
JOISTS Timber joists at 400mm centres
FACINGS Standard 18mm T&G flooring grade chipboard, mass per unit area 12.4kg/m^2.
Single layer of standard 12.5mm plasterboard ceiling mass per unit area 8kg/m^2.
INFILL Minimum 100mm Rockwool Flexi® between joists



INTERNAL METAL JOISTED FLOORS WITHIN THE SAME DWELLING

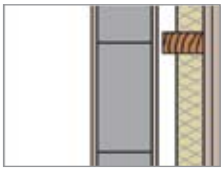
JOISTS Metal floor joists at 400mm centres
FACINGS Timber floor minimum mass per unit area 15kg/m^2 (eg 22mm chipboard). Single layer plasterboard, minimum mass per unit area 10kg/m^2 (eg 15mm standard plasterboard)
INFILL Minimum 100mm Rockwool Flexi® between joists

Separating Walls Conversion Work



SEPARATING NEW BUILD METAL FRAME WALL CONSTRUCTION

STUDS 70mm metal C studs at 600mm centres
FACINGS 2 layers of 15mm plasterboard (13kg/m^2) one side. Other side: 2 layers of 15mm plasterboard (2 x 13kg/m^2) fixed to resilient bars (spaced at 600mm centres).
INFILL Minimum 70mm Rockwool Flexi®

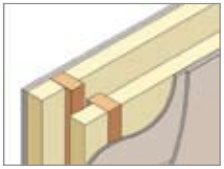


SEPARATING WALL EXISTING SOLID MASONRY WALL

STUDS Independent timber or steel studs, minimum 10mm gap to be maintained between frame and existing wall
FACINGS 100mm minimum existing solid masonry wall plastered on both faces. 2 layers of 15mm standard plasterboard (2 x 10kg/m^2).
INFILL 50mm 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 100mm thick then independent panels should be applied to both sides.

	Airborne noise reduction benefits (dB)	Fire resistance (minutes)	Max height (m)
	Airborne 40	30	NA
	Airborne 40	30	NA
	Airborne 57	90	4.6
	NA	NA	NA

Separating Walls New Build



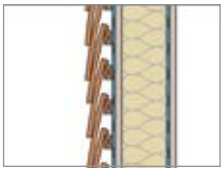
SEPARATING WALL TIMBER FRAME
(TWIN TIMBER FRAMES) (NEW BUILD)

Conforms with Robust Detail E-WT -1. For use with timber framed dwellings and apartments.
FACINGS 240mm minimum between inner faces of wall linings. 50mm minimum gap between studs. 2 or more layers of gypsum based board (total nominal mass per unit area 22kg/m^2) both sides.
INFILL Minimum 60mm Rockwool Flexi® both sides

SEPARATING WALL-STEEL FRAME TWIN METAL FRAMES (NEW BUILD)

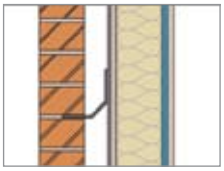
Conforms with Robust Detail E-WS -1. For use with lightweight steel framed dwellings and apartments.
FACINGS 200mm minimum between inner faces of wall linings. 2 or more layers or gypsum based board (total nominal mass per unit area 2 x 11kg/m^2) both sides.
INFILL Minimum 50mm Rockwool Flexi®

Exterior Walls



TIMBER FRAME WALL WITH TILE HANGING

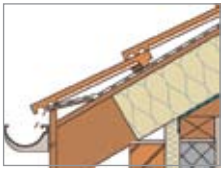
STUDS Studs to suit 400mm/600mm centres
FACINGS External tile hanging or weatherboard. 12.5mm standard plasterboard with VCL.
INFILL Rockwool Flexi® between the studs



TIMBER FRAME CAVITY WALL

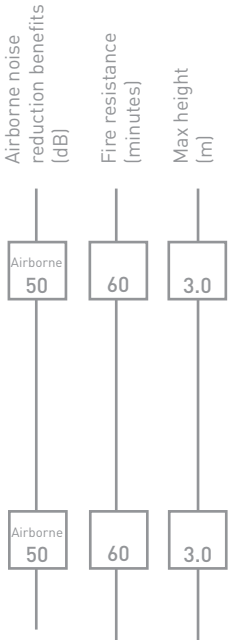
STUDS Studs at 400mm/600mm centres
FACINGS Outer brick or block with 50mm clear cavity. High performance breather membrane on OSB 12.5mm plasterboard with VCL.
INFILL Rockwool Flexi® between the studs

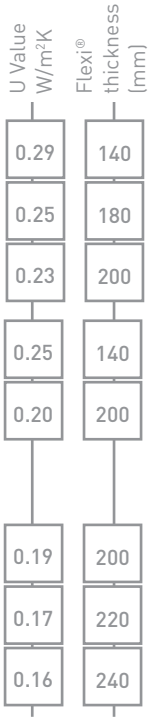
Roofs



INSULATION AT RAFTER LEVEL

RAFTERS 38mm timber rafters at 600mm centres.
FACINGS Breather membrane and tiles outer. 25mm 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 CO_2 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

Thickness (mm)	Coverage per pack (m^2)
50	8.64
60	8.64
70	5.76
90	4.32
100	4.32
120	4.32
140	2.88

Length and width 1200mm x 400mm

Thickness (mm)	Coverage per pack (m^2)
50	5.76
60	5.76
100	2.88
140	1.92

Rockwool Limited
Pencoed
Bridgend
CF35 6YN UK

Tel: 0871 222 1780
Fax: 0871 222 1784
Email: info@rockwool.co.uk
www.rockwool.co.uk

ROCKWOOL®

CREATE AND PROTECT