



THERMAL

# Trade Application Guide

The essential handbook for choosing the right ROCKWOOL insulation for your job



Safer



Warmer



Quieter



ROCKWOOL®

SOUND



# Welcome

Welcome to the Trade Application Guide. This guide is designed to help you choose the best possible ROCKWOOL insulation product for the job.

Inside you will find:

## Building compliance

An overview of current Building Regulations and how our stone wool insulation can support you in achieving building compliance for thermal, acoustic and fire performance in the home.

## What to use where

Our guide to using the ROCKWOOL Trade Insulation Range in walls, roofs and floor applications.

## How we can help

Further support available from ROCKWOOL to help make product selection and installation easier.

# Contents

<b>Why use ROCKWOOL?</b>	<b>4</b>	<b>Floor solutions</b>	<b>36</b>
Made for the trade	5	Thermal performance for floors	38
		Acoustic performance for floors	40
<b>Building Regulations</b>	<b>6</b>	Ground floors	42
Thermal	7	Intermediate floors	48
Fire	8	Separating floors	49
Acoustics	9	One hour fire floor	51
- Robust Details	10		
<b>Trade Insulation Range</b>	<b>14</b>	<b>Roof solutions</b>	<b>52</b>
Thermal Insulation	16	Thermal performance for roofs	54
Sound Insulation	17	Cold pitched roofs	56
		Warm pitched roofs	58
<b>Wall solutions</b>	<b>18</b>	Flat roofs	60
Thermal performance for walls	20	Roofing ancillaries	63
Acoustic performance for walls	22		
External walls - masonry cavity	24	<b>Fire Stopping solutions</b>	<b>64</b>
External walls - timber frame	26		
External walls - ventilated rainscreen	28	<b>Technical support</b>	<b>66</b>
Party wall - masonry cavity	30		
Party wall - timber frame	31	<b>Digital tools</b>	<b>68</b>
Internal walls - timber and metal stud	34		
		<b>Get in touch</b>	<b>69</b>

# Why use ROCKWOOL?

We know reputation is everything. That's why for over 40 years, we have been manufacturing stone wool insulation in the UK, helping tradespeople build safer, warmer, and quieter homes for their customers, and a great reputation for their business.

The power of stone is one of the many reasons why ROCKWOOL is trusted by construction professionals. Our insulation is made from lava deposits of volcanic rock. This gives ROCKWOOL products a wealth of hardworking properties.



## Safer

As ROCKWOOL insulation is made from volcanic rock, it is naturally non-combustible and capable of withstanding temperatures in excess of 1000°C. Our insulation is resilient to fire and prevents its spread, and at the same time, doesn't contribute to the emission of significant quantities of toxic smoke.



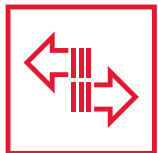
## Warmer

Our stone wool insulation traps air in its structure making it incredibly effective at creating an optimal temperature in the home, whatever the weather is doing outside. ROCKWOOL insulation keeps houses warm in the winter and cool in the summer, so homes are always a comfortable place to be.



## Quieter

Because our stone wool insulation has a high density, it traps sound waves and prevents them from travelling through the material: whether it's in a wall, roof, or floor.



## Easier

We've designed our products with ease and speed in mind. All rolls and slabs in our Trade Insulation Range are quick and easy to cut, shape and fit, plus handy features such as pre-split rolls make installation simple. Sound Slab features ROCKWOOL FLEXI® for fast friction fitting without gaps or fixings.



## Longer

The power of stone gives ROCKWOOL insulation a toughness that lasts. It's resistant to sagging and our insulation doesn't attract water or encourage the growth of mould, fungi or bacteria.

# Made for the trade

The ROCKWOOL Trade Insulation range has a high performance, easy-to-fit product for all the typical applications in a home.

You'll find solutions ideal for residential thermal applications such as extensions and loft conversions as well as sound insulation for home offices, bedrooms and TV and gaming rooms.

		Applications									
		Masonry cavity external walls	Timber frame external walls	Party wall masonry	Party wall timber	Internal walls - timber and metal stud	Suspended ground floors	Intermediate floors	One hour fire floor	Cold pitched roof	Warm pitched roof
THERMAL INSULATION			✓		✓		✓				✓
											✓
		✓		✓							
SOUND INSULATION						✓	✓		✓	✓	

# Building Regulations

Our Trade Insulation range has been designed to help you achieve building regulations across thermal, fire and acoustic requirements.



## Building Regulations: Thermal

Approved Document L of Building Regulations outlines the minimum level of thermal performance needed for dwellings and non-dwellings, giving a required U-value for the materials used within different parts of the building.

U-values are used to measure thermal transmittance - the rate of heat loss of a building element. The lower the U-value, the more slowly heat is able to transmit through the element (i.e. wall, floor or roof), meaning the better it is at maintaining a constant temperature. U-values are expressed as  $W/m^2K$  (Watts per square metre, Kelvin).

Required U-values for existing or new buildings vary across England, Scotland, Wales, Northern Ireland and the Republic of Ireland so you can find the latest requirements in the documents listed below.

- England: ADL1A (2013), ADL1B (2010), ADL2A (2013), ADL2B (2010)
- Scotland (Domestic/Non-domestic): Technical Handbook 2019 - Section 6
- Wales: ADL1A (2014), ADL1B (2014), ADL2A (2014), ADL2B (2014)
- Republic of Ireland: Technical Guidance Document L
- Northern Ireland (Booklet F1/F2): Technical Booklet F1 & F2

For ease, you'll find a list of U-values required for different fabric elements at the start of each application section in this guide.

### Up-to-date U-value data for your project

Our U-value calculator helps you work out the required thermal performance of your project.

Download the latest calculator (incorporating BIM) from the ROCKWOOL website for access to all the technical and construction information you need to calculate the thermal performance of walls, floors and roofs for your project.

**To download, search 'ROCKWOOL tools' in your internet browser.**





## Building Regulations: Fire

Approved Documents and Technical Guidance Documents offer guidance on fire safety in buildings and outline how to comply with the building regulations across the UK and Ireland.

- During Construction - The Construction (Design and Management) Regulations 2015
- Performance of the Building - Approved Document B
- Management during occupation and use - Regulatory Reform (Fire Safety) Order
- Materials and workmanship - Approved Document 7 2013

You can find more details on these guidance documents on our website, including specific requirements for each area of UK and Ireland:

<https://www.rockwool.com/uk/technical-resources/regulations/fire-regulations/>

### Understanding the importance of non-combustibility

The reaction to fire performance of a product is classified through a series of tests that measure against several key characteristics including smoke emission, flame spread and heat release.

The Euroclass Reaction to Fire system classifies building products in accordance with BS EN 13501-1. Using a product's Euroclass rating as guidance is the only way to determine a product's full Reaction to Fire performance. Products classified A1 or A2-s1, d0 are considered non-combustible and those classified B-F are considered combustible.

Euroclass	Combustibility	ROCKWOOL stone wool insulation is <b>NON-COMBUSTIBLE</b> , meaning it does not burn, does not contribute to fire growth and presents no smoke hazard.
<b>A1</b>	Non-combustible	
<b>A2-s1, d0</b>		
<b>B</b>	<b>Combustible</b>	
<b>C</b>		
<b>D</b>		
<b>E</b>		
<b>F</b>		

All ROCKWOOL products in this guide are A1 non-combustible. This means they do not burn and will not contribute to the spread of fire.



## Building Regulations: Acoustics

Building Regulations surrounding acoustics vary between UK countries and the Republic of Ireland. You can find the requirements for each in the following guideline documents:

- England & Wales Approved Document E
- Northern Ireland - Approved Document G
- Scotland - Technical Handbook - Domestic: Section 5 (Domestic/Non-domestic)
- Republic of Ireland - Technical Guidance Document E

Sound pressure is measured in dB (decibels). To help identify the reduction you need to achieve for your project, you will find the relevant acoustic regulation tables in each application section of this guide.

While specific values differ, the fundamental requirements can be divided into two core areas:

- Separating constructions (E1) - Protection against sound from other parts of the building and/or adjoining buildings
- Single dwellings (E2) - Protection within a single dwelling e.g. house or flat whether purpose-built or formed by material change of use

**It is important to note,** unless Robust Details® are specified, separating constructions (E1) will require pre-completion testing on-site. Pre-completion testing is not required for constructions within single dwellings (E2).





# Robust Details

Robust Details® offers an alternative to pre-completion sound testing for separating wall and floor constructions, which would otherwise require testing under building regulations.

ROCKWOOL provides thermal and sound insulation suitable for use in a wide range of Robust Details specifications.

Refer to the table below and on pages 12-13 to determine a suitable insulation product.

To be approved as a Robust Detail, constructions must demonstrate performance that is on average 5dB better than building regulations minima.

Performance is dependent on following the specification and building to a good standard.

## Separating Walls - England & Wales

Wall type	Detail	Insulation	Construction Detail
Masonry	E-WM-5	Thermal Cavity Batt (100mm)	Besblock "Star Performer" cellular blockwork (render and gypsum-based board)
	E-WM-6	Thermal Cavity Batt (100mm)	Aircrete blockwork (render and gypsum-based board)
	E-WM-10	Thermal Cavity Batt (100mm)	Aircrete thin joint blockwork with specified wall ties (render and gypsum-based board finish)
	E-WM-11	Thermal Cavity Batt (100mm)	Lightweight aggregate blockwork (render and gypsum-based board)
	E-WM-12	Thermal Cavity Batt (100mm)	Plasmor "Aglite Ultima" lightweight aggregate blockwork (render and gypsum-based board)
	E-WM-13	Thermal Cavity Batt (100mm)	Aircrete thin joint - untied blockwork (render and gypsum-based board)
	E-WM-16	Thermal Cavity Batt (100mm)	Dense aggregate blockwork (render and gypsum-based board)
	E-WM-18	Thermal Cavity Batt (100mm)	Dense aggregate blockwork (wet plaster)
	E-WM-19	Thermal Cavity Batt (100mm)	Dense or lightweight aggregate blockwork (render and gypsum-based board) with MONARFLOOR® BRIDGESTOP® system
	E-WM-21	Thermal Cavity Batt (100mm)	Lightweight aggregate blockwork (wet plaster)
	E-WM-26	Thermal Cavity Batt (100mm)	Besblock "Star Performer" cellular blockwork (gypsum-based board)
	E-WM-31	Thermal Cavity Batt (100mm)	H+H - Celcon Elements (gypsum-based board)
Timber	E-WT-1	Thermal Timber Frame Slab (90mm)	Timber frame - without sheathing board
	E-WT-2	Within Stud - Thermal Timber Frame Slab (90mm) In Cavity - Sound Slab (50mm)	Timber frame - with sheathing board

## Separating Walls - Scotland

Wall type	Detail	Insulation	Construction Detail
Masonry	V-WM-11	Thermal Cavity Batt (100mm)	Masonry - lightweight aggregate blockwork (render and gypsum-based board)
	V-WM-19	Thermal Cavity Batt (100mm)	Masonry - dense or lightweight aggregate blockwork (render and gypsum-based board) with MONARFLOOR® BRIDGESTOP® system
	V-WM-21	Thermal Cavity Batt (100mm)	Masonry - lightweight aggregate blockwork (wet plaster)
Timber	V-WT-1	Thermal Timber Frame Slab (90mm)	Timber frame - without sheathing board
	V-WT-2	Within Stud - Thermal Timber Frame Slab (90mm) In Cavity - Sound Slab (50mm)	Timber frame - with sheathing board

## Separating Floors - England & Wales

Floor type	Detail	Insulation	Construction Detail
Timber	E-FT-1	Between Joists - Sound Slab (100mm) Between Floating Floor Battens - Sound Slab (50mm)	Timber I-joists and floating floor treatment
	E-FT-2	Between Joists - Sound Slab (100mm) Between Floating Floor Battens - Sound Slab (70mm)	Timber solid joists and floating floor treatment
Concrete	E-FC-8	Acoustic ROCKFLOOR (25mm)	Precast concrete plank with floating screed and bonded resilient floor covering

## Separating Floors - Scotland

Floor type	Detail	Insulation	Construction Detail
Timber	V-FT-1	Between Joists - Sound Slab (100mm) Between Floating Floor Battens - Sound Slab (50mm)	Timber I-joists and floating floor treatment
	V-FT-2	Between Joists - Sound Slab (100mm) Between Floating Floor Battens - Sound Slab (50mm)	Timber solid joists and floating floor treatment

# Trade Insulation Range

The ROCKWOOL Trade Insulation Range features thermal and sound insulation solutions for every part of the home.

## THERMAL INSULATION

## SOUND INSULATION

**External Walls**  
Thermal Timber Frame Slab

**Lofts and Ceilings**  
Thermal Loft Roll

**Masonry Party Walls**  
Thermal Cavity Batt

**Masonry Cavity Walls**  
Thermal Cavity Batt

**Suspended Floors**  
Thermal Timber Frame Slab

**One Hour Fire Floors**  
Sound Slab

**Metal Stud Walls**  
Sound Slab

**Intermediate Floors**  
Sound Slab

**Timber Stud Walls**  
Sound Slab

**Made from stone**



# Thermal Insulation



ROCKWOOL Thermal Insulation is designed for use in the external envelope of the building; from ground floors, through to masonry or timber framed external walls, up to pitched roofs and horizontal loft spaces.

It's been developed to give temperature control both in the cool winters, as well as hotter summers, meaning your customers can live in comfort all year-round and keep their heating bills low.

### Benefits:

- Non-combustible (Euroclass A1)
- Water repellent and vapour permeable
- Excellent acoustic performance
- Friction fit for a faster installation



Cavity Wall



Lofts



Timber Frame Wall

THERMAL Product	Thickness (mm)	Length (mm)	Width (mm)	Coverage per pack (m <sup>2</sup> )	Pieces per pack	Packs per pallet	Euroclass Fire Rating
Timber Frame Slab	90	1200	570	4.10	6	9	A1
	140	1200	570	2.73	4	9	A1
Insulation Cavity Batt	100	1200	455	3.28	6	20	A1
Insulation Roll	100	1200	1200	6.60	2	15	A1

# Sound Insulation



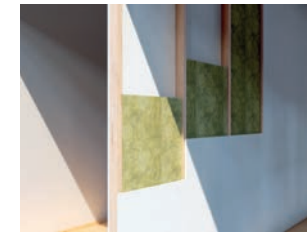
ROCKWOOL Sound Insulation Slab is stone wool insulation, manufactured to a high density with open fibres so sound waves are trapped and vibrations dampened, making it ideal for use in residential buildings such as home offices, bedrooms, TV and gaming rooms.

The solution can be used in walls, floors and lofts to control acoustics.

ROCKWOOL Sound Slab has achieved Quiet Mark™ approval, an independent certificate that's awarded to the lowest noise technology and acoustic solutions.

### Benefits:

- Outstanding noise reduction - Quiet Mark™ approved
- Patented ROCKWOOL FLEXI Edge® for perfect friction fitting without gaps
- Non-combustible (Euroclass A1)




Partition Wall



Internal Floor



Separating Floor

SOUND Product	Thickness (mm)	Length (mm)	Width (mm)	Coverage per pack (m <sup>2</sup> )	Pieces per pack	Packs per pallet	Euroclass Fire Rating
Sound Slab 	50	1200	600	8.64	12	12	A1
	50	1200	400	5.76	12	20	A1
	70	1200	600	5.76	8	12	A1
	100	1200	600	4.32	6	15	A1
	100	1200	400	2.88	6	25	A1

# Wall solutions

Buildings with performance to last.

As a non-combustible insulation material, ROCKWOOL stone wool delivers proven fire resilience. A robust and durable solution, when used in internal and external wall constructions, ROCKWOOL insulation supports compliance with the latest fire safety standards while enabling flexibility over building fabric design.

The acoustic properties of stone wool also reduce the transmission of unwanted sound through external walls into a building, helping to create comfortable interior spaces even in areas where high levels of environmental noise are present.

With friction-fit and tight joints, ROCKWOOL external wall solutions simplify installation, supporting increased efficiency and reducing margin for error on-site.

## External Walls

- Masonry cavity - full fill
- Timber frame cavity wall
- Ventilated rainscreen

## Party Walls

- Masonry cavity
- Timber frame

## Internal Partitions

- Timber/metal stud partition
- Enhanced timber/metal stud partition





## Thermal performance for walls

The following tables outline the U-values that are required by building regulations for applications:

**Table 1a: Dwellings (new)**

Fabric element	Part L1a 2013 (England) (W/m <sup>2</sup> K)	Section 6 2019 (Scotland) (W/m <sup>2</sup> K)	Part L1a 2014 (Wales) (W/m <sup>2</sup> K)	Technical Guidance Document (Ireland) (W/m <sup>2</sup> K)	Technical Booklet F1 (N. Ireland) (W/m <sup>2</sup> K)
Wall	0.18	0.17	0.18	0.18	0.20
Roof	0.13	0.11	0.13	0.16	0.13
Floor	0.13	0.15	0.13	0.16	0.20
Party wall	0.00	0.00	0.00	-	0.20

**Table 1b: Dwellings (existing)**

Fabric element	Part L1a 2013 (England)		Section 6 2019 (Scotland)		Part L1a 2014 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F1 (N. Ireland)	
	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	*Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)
Wall	0.28	0.55 C 0.30 E/I	0.22	0.30	0.21	0.55 C 0.30 E/I	0.55 C 0.35 •	0.55 C 0.30 •	0.55 C 0.30 •	0.55 C 0.30 •
Pitched roof - ceiling	0.16	0.16	0.15	0.25	0.15	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.18	0.18	0.18	0.25	0.15	0.18	0.25	0.18	0.18	0.18
Flat roof	0.18	0.18	0.18	0.25	0.15	0.18	0.25	0.18	0.18	0.18
Floor	0.22	0.25	0.18	0.25	0.18	0.25	0.45	0.25	0.25	0.25

\*U-values quoted assume that the existing walls and roof are better than 0.70 and 0.35 respectively.

C Cavity E/I External or internal • Other

**Table 2a: Buildings other than dwellings (new)**

Fabric element	Part L2a 2013 (England) (W/m <sup>2</sup> K)	Section 6 2019 (Scotland) (W/m <sup>2</sup> K)		Part L2a 2014 (Wales) (W/m <sup>2</sup> K)	Technical Guidance Document (Ireland) (W/m <sup>2</sup> K)	Technical Booklet F2 (N. Ireland) (W/m <sup>2</sup> K)
		Naturally ventilated (W/m <sup>2</sup> K)	Mechanically ventilated (W/m <sup>2</sup> K)			
Wall	0.26	0.23	0.20	0.26	0.21	0.28
Roof	0.18	0.18	0.16	0.18	0.16 P 0.20 F	0.16 PC 0.18 PR 0.18 F
Floor	0.22	0.22	0.20	0.22	0.21	0.22

P Pitched PC Pitched (ceiling) PR Pitched (rafter) F Flat

**Table 2b: Buildings other than dwellings (existing)**

Fabric element	Part L2b 2013 (England)		Section 6 2019 (Scotland)		Part L2b 2014 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F1 (N. Ireland)	
	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	*Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)
Wall	0.28	0.55 C 0.30 E/I	0.25	0.30	0.26	0.55 C 0.30 E/I	0.55 C 0.30 •	0.55 C 0.30 •	0.55 C 0.30 •	0.55 C 0.30 •
Pitched roof - ceiling	0.16	0.16	0.15	0.25	0.15	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.18	0.18	0.15	0.25	0.18	0.18	0.25	0.18	0.18	0.18
Flat roof	0.18	0.18	0.15	0.25	0.18	0.18	0.25	0.18	0.18	0.18
Floor	0.22	0.25	0.20	0.25	0.22	0.25	0.45	0.25	0.25	0.25

\*U-values quoted assume that the existing walls and roof are better than 0.70 and 0.35 respectively.

C Cavity E/I External or internal • Other



## Acoustic performance for walls

### Separating construction

Protection against sound from other parts of a building and/or adjoining buildings.

Approved Document E (England & Wales)/ G (Northern Ireland)		Walls (dB)
Airborne $D_{nT,W} + C_{tr}$ dB (minimum values)	New build	45 (*43)
	Change of use	45
Impact $L'_{nT,w}$ dB (maximum values)	New build	-
	Change of use	-

Technical Handbook Domestic Section 5 (Scotland)		
Airborne $D_{nT,W} + C_{tr}$ dB (minimum values)	New build	56**
	Change of use	53***
Impact $L'_{nT,w}$ dB (maximum values)	New build	-
	Change of use	56**

Technical Guidance Document E (Ireland)		
Airborne $D_{nT,W} + C_{tr}$ dB (minimum values)	New build	53
	Change of use	53
Impact $L'_{nT,w}$ dB (maximum values)	New build	-
	Change of use	-

\*Lower limit applies only to 'rooms for residential purposes'

\*\*Applies to new build and conversions of non traditional buildings

\*\*\*Applies to conversions of traditional buildings

### Single dwelling

Houses, flats and rooms for residential purposes, whether purpose-built or formed by material change of use.

Airborne Sound Insulation $R_w$ dB (maximum values)	Walls ( $R_w$ dB)
Approved Document E (England & Wales)/ G (Northern Ireland)	40
Technical Handbook Domestic Section 5 (Scotland)	40
Technical Guidance Document E (Ireland)	Refer to 'Separating construction' (Ireland) table on opposite page

## Visit the **NEW ROCKWOOL** Installer Portal

Alongside our range of cost-effective, easy-to-fit stone wool insulation products that are purpose designed for the trade, we've created a heap of handy tools to make your life easier.

From straight-to-the-point installation guides and advice on making the most of government funding schemes, to tips on why stone wool is the best choice for your customers, you'll find all you need to keep clients happy and your business profitable.

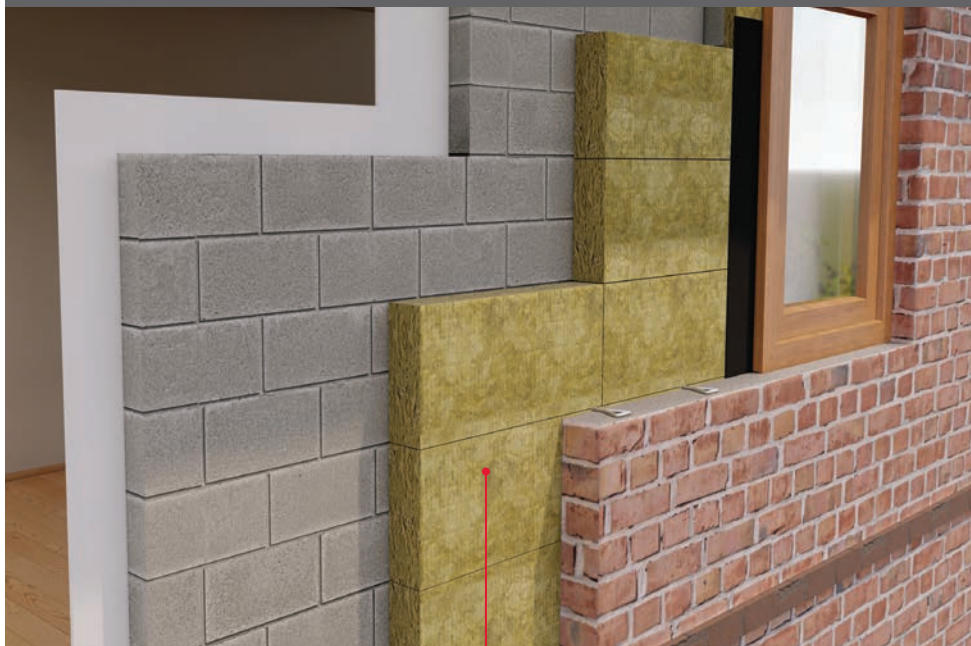
Visit the ROCKWOOL Installer Portal now -  
[www.rockwool.com/uk/installer-information](http://www.rockwool.com/uk/installer-information)





# External walls

## Masonry cavity - full fill



Thermal Cavity Batt

Full Fill insulation for domestic and non-domestic exterior walls.

ROCKWOOL® Thermal Cavity Batts are non-combustible, water repellent and vapour permeable, are quick and easy to fit without gaps, and do not require the use of additional cavity barriers and retaining clips.

### Benefits:

- BBA certified for all exposure zones
- Quick and easy installation without gaps
- Non-combustible (Euroclass A1)
- No additional cavity barriers required
- No insulation retaining clips needed
- Water repellent and vapour permeable

## Product and application performance

Inner block Full Fill cavity thickness (mm)	Dense (1.130 W/mK) U-value (W/m <sup>2</sup> K)	Medium dense (0.470 W/mK) U-value (W/m <sup>2</sup> K)	Aircrete standard (0.150 W/mK) U-value (W/m <sup>2</sup> K)
100	0.31	0.29	0.27
200	0.17	0.16	0.16

U-values based on 102mm facing brick and an internal finish of plasterboard on dabs.

## Standards and approvals

Product	CE marking	Reaction to fire	Fire resistance	3rd party certification
Thermal Cavity Batt	✓	Euroclass A1	-	BBA Approved (Certificate 15/5237)

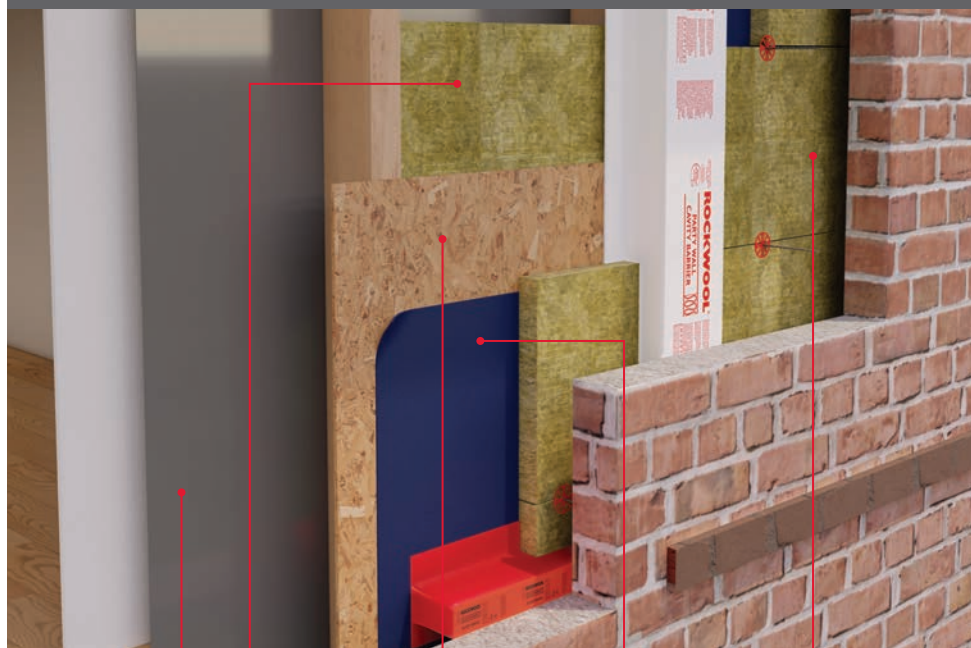
## Product requirement

Product	Length (mm)	Width (mm)	Available thicknesses (mm)
Thermal Cavity Batt	1200	455	100



# External walls

## Timber frame cavity wall



Vapour control layer

ROCKWOOL Thermal Timber Frame Slab

Sheathing board

Breather membrane

RAINSCREEN DUO SLAB®

ROCKWOOL Thermal Timber Frame Slab is manufactured at 570mm widths in order to reduce the need for cutting, waste and to reduce installation time.

The slabs also provide excellent thermal performance, A1 fire resistance and are water repellent and vapour permeable, meaning that the construction can breathe to prevent trapped moisture which can cause rot, mould and mildew. The addition of RAINSCREEN DUO SLAB® as a sheathing insulation further adds to the thermal performance, to achieve ever reducing U-value targets.

### Benefits:

- Non-combustible (Euroclass A1)
- Water repellent
- Vapour permeable (breathable)
- 570mm slab width for fast fitting without gaps
- Additional sheathing insulation achieves low U-values

## Product and application performance

Thermal Timber Frame Slab (mm)	RAINSCREEN DUO SLAB® Sheathing insulation (mm)	Service Void & Reflective Vapour Control Layer	Reflective breather membrane	U-value (W/m²K)
90	N/A	✓	✓	0.26
90	50	✓		0.24
140	N/A		✓	0.23
140	N/A	✓	✓	0.20
140	50			0.19
140	50	✓		0.17

Based on 9% timber bridging.

### Standards and approvals

Product	CE marking	Reaction to fire	Fire resistance	3rd party certification
Thermal Timber Frame Slab	✓	Euroclass A1	-	-
RAINSCREEN DUO SLAB®	✓	Euroclass A1	-	BBA Approved (Certificate 17/5402)
*PWCB & TCB	-	-	Integrity: 60 mins Insulation: 30-60 mins	-
**ROCKCLOSE®	-	-	Integrity: 60 mins Insulation: 30 mins	-

\*Meets the criteria of Approved Document E, Section 2 - Separating walls and associated flanking constructions for new buildings. \*\*Meets the criteria of Approved Document L, Section 3 - Thermal Bridges.

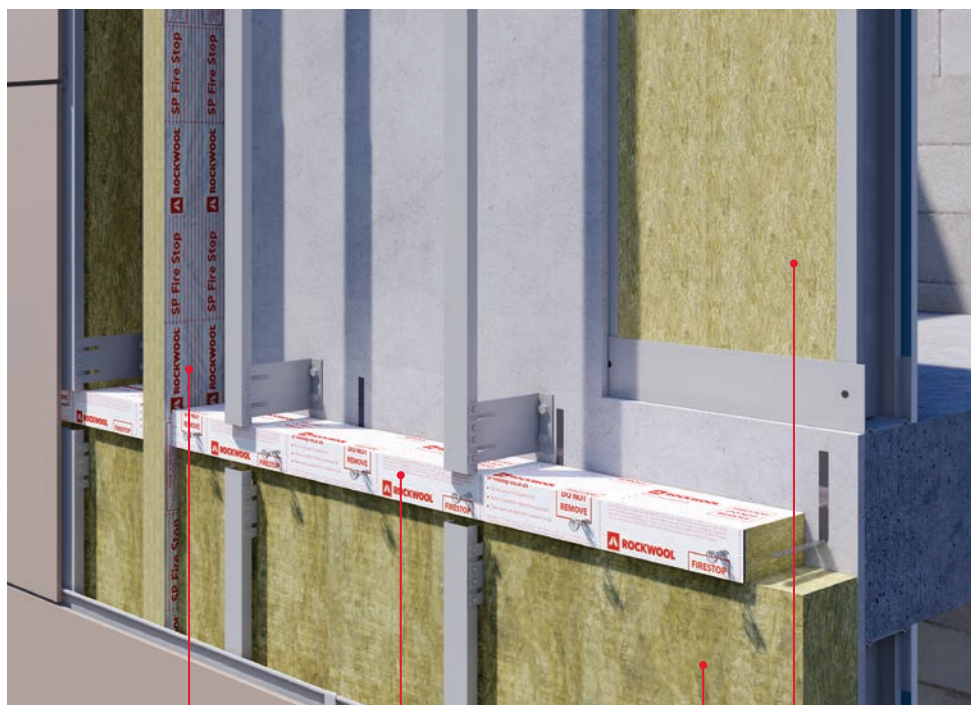
### Product requirement

Product	Length (mm)	Width (mm)	*Approved thickness range (mm)
Thermal Timber Frame Slab	1200	400, 570	50-200
RAINSCREEN DUO SLAB®	1200	600	50-230
ROCKWOOL TCB	1200	65 - 210	65-160
ROCKWOOL PWCB	1200	200	65-160

\*Thickness options may be subject to a minimum production volume. For further information on our standard thickness range please contact [www.rockwool.com/uk](http://www.rockwool.com/uk)



# External walls



ROCKWOOL  
SP Firestop

ROCKWOOL  
SP Firestop OSCB

ROCKWOOL  
RAINSCREEN DUO SLAB®

ROCKWOOL  
Steel Frame Slab

## Rainscreen cladding systems

ROCKWOOL provides the RAINSCREEN DUO-SLAB® as a resilient, dual-density insulation board designed for use within ventilated rainscreen systems on steel frame and masonry substrates.

The slabs feature a robust outer surface, and a resilient inner face has a high resistance to wind and rain during construction. Because of its unique dual density construction RAINSCREEN DUO-SLAB® requires fewer fixings, thus providing a cost-effective solution in over-cladding applications.

### Benefits:

- Non-combustible (Euroclass A1) - suitable for buildings over 18m
- High resistance to wind and rain
- Fewer fixings required for installation
- Dual density - robust front face resists damage and over-driving of fixings

## Application performance

U-value (W/m²K)	Steel Frame Slab Thickness (mm)	RAINSCREEN DUO SLAB® Thickness (mm)
0.26	150	60
0.21	150	100
0.18	150	150

## Standards and approvals

Product	CE marking	Reaction to fire	Fire resistance	3rd party certification
RAINSCREEN DUO SLAB®	✓	Euroclass A1	-	BBA Approved (Certificate 17/5402)
Steel Frame Slab	✓	Euroclass A1	-	-
*SP Firestop System	-	-	Integrity: Up to 120 mins** Insulation: Up to 120 mins**	Certifire (CF5836)
SP Firestop OSCB	-	-	Integrity: Up to 120 mins Insulation: Up to 120 mins	-

\*Meets the criteria of Approved Document E, Section 2 - Separating walls and associated flanking constructions for new buildings. \*\*Subject to the application.

Whilst the external wall is not typically required to have a Fire Resistance performance itself, the compartment floors and walls abutting it do, as such the SP Firestop systems have been tested within representative wall and floor substrates to prove their fire resistance performance. It is important to note that the Fire Resistance performance of the firestop is only as good as the performance of the supporting substrates in to which it is installed. Where Fire-stopping is installed up to a non-fire resisting external wall then the performance of the fire-stop will be limited to the performance of the wall itself.

## Product requirement

Product	Length (mm)	Width (mm)	*Approved thickness range (mm)
Steel Frame Slab	1200	600	50-200
RAINSCREEN DUO SLAB®	1200	600	50-230
SP Firestop System	1000/1200	650/1000	75-90
SP Firestop OSCB	1000	75-575	90

\*Thickness options may be subject to a minimum production volume.

For further information on our standard thickness range please contact [www.rockwool.com/uk](http://www.rockwool.com/uk)



## Party wall

### Masonry cavity



Full Fill Cavity Batt

*FIREPRO® Acoustic Intumescent Sealant can be used at junctions as a solution to seal gaps between the floor and wall to further prevent flanking transmission*



The ROCKWOOL Thermal Cavity Batt provides a full-fill solution to achieve both Part E of the building regulations "Resistance to the Passage of Sound" through Robust Detail solutions, and Part L "Conservation of Fuel and Power" of the building regulations, by eliminating the "Thermal Bypass Effect" achieving a U-value of 0.00 W/m<sup>2</sup>K.

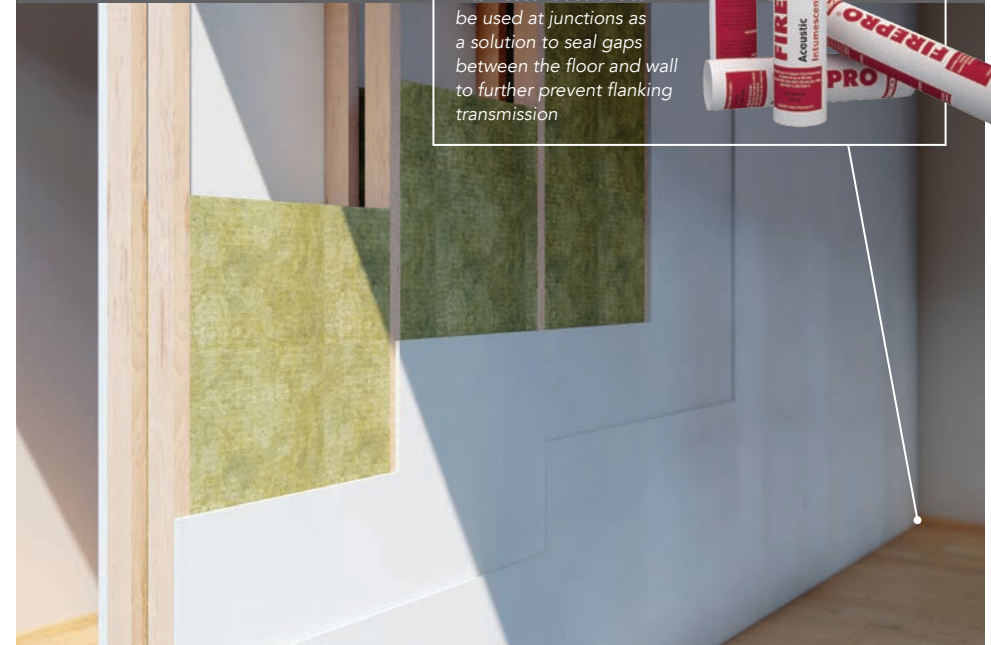
#### Benefits:

- Contributes to an effective zero U-value party wall (when used in conjunction with the ROCKWOOL® PWCB)
- Quick and easy to install
- Non-combustible (Euroclass A1) fire rating
- Highly sound absorbent



## Party wall

### Timber frame



*FIREPRO® Acoustic Intumescent Sealant can be used at junctions as a solution to seal gaps between the floor and wall to further prevent flanking transmission*



ROCKWOOL Sound Slab can be used to provide a full-fill solution to achieve both Part E of the building regulations "Resistance to the Passage of Sound" through Robust Detail solutions, and Part L "Conservation of Fuel and Power" of the building regulations, by eliminating the "Thermal Bypass Effect" achieving a U-value of 0.00 W/m<sup>2</sup>K.

#### Benefits:

- Contributes to an effective zero U-value party wall (when used in conjunction with the ROCKWOOL® PWCB)
- Patented ROCKWOOL FLEXI® Edge ensures fast friction fit
- Quick and easy to install
- Non-combustible (Euroclass A1) fire rating
- Highly sound absorbent





## Application performance

E-WT1: Timber frame	Performance
Independent timber frames with a minimum 50mm gap	Airborne Sound Reduction In excess of DnT,w + Ctr 45 dB
Minimum 240mm between inside lining faces	
70mm ROCKWOOL Sound Slab in both frames	
2 or more layers of plasterboard (22kg/m <sup>2</sup> ) to each side of the wall	
E-WM-1: Masonry cavity	Performance
Masonry cavity with 1850 - 2300 kg/m <sup>3</sup> blocks	Airborne Sound Reduction In excess of DnT,w + Ctr 45 dB
100mm cavity width fully filled with Thermal Cavity Batt	
13mm wet plaster (min 10kg/m <sup>2</sup> ) both sides	
Flanking wall (external wall) fully filled with Thermal Cavity Batt	

### Product requirement, standards and approvals

Product	Thickness (mm)	Width (mm)	Length (mm)	CE marking	Reaction to fire
Sound Insulation Slab	50, 70 & 100	400 & 600	1200	✓	Euroclass A1
Thermal Cavity Batt	100	455	1200	✓	Euroclass A1

# ROCKWOOL Resource Hubs...

Digital specification support for insulation applications.

Use the Resource Hubs to identify the right non-combustible stone wool insulation products for specific applications.

Mapped to key insulation application areas, the ROCKWOOL Resource Hubs provide access to technical tools, data, guidance and installation support all in one place:



**FIREPRO®**  
When specifying FIREPRO® products, the suite of resources provides guidance on all things passive fire protection.



**Ventilated Façade**  
Bringing together all relevant technical literature, the resource hub helps specifiers to navigate routes to compliance when using ventilated façades.



**Acoustic**  
Helping to better understand the role of building acoustics, specialist acoustics resources for creating safe and sound environments can be found here.



**HVAC**  
A comprehensive suite of resources designed to save time and make it easier to deliver robust project specifications.



**Flat Roof**  
Support the design of flat roof insulation with specialist tools, guidance and technical data.

Explore the ROCKWOOL Resource Hubs now.

[rockwool.com/uk/resource-hubs](https://rockwool.com/uk/resource-hubs)





# Internal walls

## Timber and metal stud



Sound Insulation Slab

ROCKWOOL Sound Slab delivers exceptional acoustic performance, due to its density and non-directional fibre orientation; which traps sound waves and dampens vibration.

Made from stone also means excellent fire resilience, being non-combustible and able to withstand temperatures in excess of 1000°C.

Tested in numerous configurations, Sound Slab offers performance to meet acoustic regulations as well as provide high performance solutions that significantly improve on minimum regulatory requirements.

### Benefits:

- Non-combustible (Euroclass A1)
- Patented ROCKWOOL FLEXI® Edge provides a tight friction fit to maximise performance
- Meets or exceeds Part E (Sound) and Part B (Fire) of the building regulations

## Application performance

Timber Stud Internal Partition Wall Test report ref: 24502-SRL-RP-XT-004-P1	Metal Stud Internal Partition Wall Test report ref: 24502-SRL-RP-XT-006-P1
63 x 38mm timber studs at 600mm centres	50mm metal C stud
50mm Sound Insulation Slab between the studs	50mm Sound Insulation Slab between the studs
One layer of 12.5mm standard plasterboard to each side of the wall	One layer of 12.5mm standard plasterboard to each side of the wall
<b>Performance (Airborne Sound Reduction) Rw 42dB</b>	<b>Performance (Airborne Sound Reduction) Rw 42dB</b>

High Performance Timber Stud Wall Test report ref: 24502-SRL-RP-XT-005-P1	High Performance Metal Stud Wall Test report ref: 4502-SRL-RP-XT-007-P1
63 x 38mm timber studs at 600mm centres	70mm metal C stud
50mm Sound Insulation Slab between the studs	70mm Sound Insulation Slab between the studs
Two layers of 15mm acoustic plasterboard to each side of the wall	Two layers of 15mm acoustic plasterboard to each side of the wall
<b>Performance (Airborne Sound Reduction) Rw 50dB</b>	<b>Performance (Airborne Sound Reduction) Rw 60dB</b>

## Product requirement, standards and approvals

Product	Thickness (mm)	Width (mm)	Length (mm)	CE marking	Reaction to fire
Sound Slab	50, 70 & 100	400 & 600	1200	✓	Euroclass A1

# Floor solutions

The ROCKWOOL Trade Insulation range helps you create warm, safe and quiet homes for your customers.

Our range includes products for insulating ground floors, solutions for concrete and timber applications, along with high performing options for separating floors too.

Friction fitted on-site, ROCKWOOL flooring solutions are easy to install with the tight joints reducing both sound flanking and heat loss.

## Ground floors

- Ground bearing slabs
- Suspended concrete beam and block
- Suspended timber floors

## Separating floors

- Timber separating floor
- One hour fire floor



## Thermal performance for floors

The following tables outline the U-values that are required by building regulations for specific applications:

### Dwellings (new)

Fabric Element	Floor (W/m <sup>2</sup> K)
Part L1a 2013 (England)	0.13
Section 6 2019 (Scotland)	0.15
Part L1a 2014 (Wales)	0.13
Technical Guidance Document L (Ireland)	0.16
Technical Booklet F1 (Northern Ireland)	0.20

### Dwellings (existing)

Fabric Element (W/m <sup>2</sup> K)		Floor (W/m <sup>2</sup> K)
Part L1a 2013 (England)	Extension	0.22
	Thermal upgrade	0.25
Section 6 2019 (Scotland)	*Extension	0.18
	Thermal upgrade	0.25
Part L1a 2014 (Wales)	Extension	0.18
	Thermal upgrade	0.25
Technical Guidance Document L (Ireland)	Thermal upgrade	0.45
Technical Booklet F1 (Northern Ireland)	Thermal upgrade	0.25

\*U-values quoted assume that the existing walls and roof are better than 0.70 and 0.35 respectively.

### Buildings other than dwellings (new)

Fabric Element		Floor (W/m <sup>2</sup> K)
Part L2a 2013 (England)		0.22
Section 6 2019 (Scotland)	Naturally ventilated	0.22
	Mechanically ventilated	0.20
Part L2a 2014 (Wales)		0.22
Technical Guidance Document L (Ireland)		0.21
Technical Booklet F2 (Northern Ireland)		0.22

### Buildings other than dwellings (existing)

Fabric Element (W/m <sup>2</sup> K)		Floor (W/m <sup>2</sup> K)
Part L2b 2013 (England)	Extension	0.22
	Thermal upgrade	0.25
Section 6 2019 (Scotland)	*Extension	0.20
	Thermal upgrade	0.25
Part L2b 2014 (Wales)	Extension	0.22
	Thermal upgrade	0.25
Technical Guidance Document L (Ireland)	Thermal upgrade	0.45
Technical Booklet F2 (Northern Ireland)	Thermal upgrade	0.25

\*U-values quoted assume that the existing walls and roof are better than 0.70 and 0.35 respectively.



## Acoustic performance for floors

### Separating construction

Approved Document E (England & Wales)/ G (Northern Ireland)		Floors & stairs (dB)
Airborne $D_{nT,W} + C_{tr}$ dB (minimum values)	New build	45
	Change of use	43
Impact $L'_{nT,w}$ dB (maximum values)	New build	62
	Change of use	64

Technical Handbook Domestic Section 5 (Scotland)		
Airborne $D_{nT,W} + C_{tr}$ dB (minimum values)	New build	56*
	Change of use	53**
Impact $L'_{nT,w}$ dB (maximum values)	New build	56*
	Change of use	58*

Technical Guidance Document E (Ireland)		
Airborne $D_{nT,W} + C_{tr}$ dB (minimum values)	New build	53
	Change of use	53
Impact $L'_{nT,w}$ dB (maximum values)	New build	53
	Change of use	58

\*Applies to new build and conversions of non traditional buildings

\*\*Applies to conversions of traditional buildings

### Single dwelling

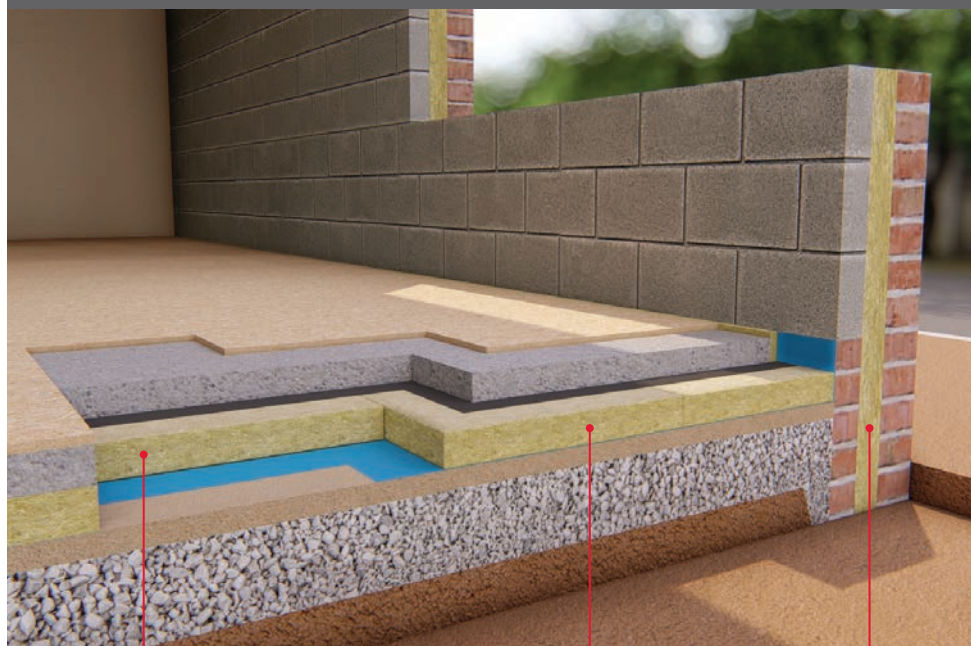
Airborne Sound Insulation $R_w$ dB (maximum values)	Floors & stairs ( $R_w$ dB)
Approved Document E (England & Wales)/ G (Northern Ireland)	43
Technical Handbook Domestic Section 5 (Scotland)	43
Technical Guidance Document E (Ireland)	See Table 1 - Separating constructions





# Ground floors

## Ground bearing slab



Thermal  
ROCKFLOOR®

Thermal ROCKFLOOR®  
to perimeter edge

ROCKWOOL  
Thermal Cavity Batt

Thermal ROCKFLOOR® is a dual density thermal insulation solution designed for ground floors, and can be placed below the concrete slab or screed.

The dual density allows for unevenness and imperfections on the sub-floor side to be absorbed, while the high density surface provides the required load resistance.

### Benefits:

- High compressive strength
- Minimises thermal bridging
- Easy handling and fitting
- Absorbs subfloor imperfections
- Can be placed over or under the over site slab

## Suspended concrete beam & block



Thermal  
ROCKFLOOR®

ROCKWOOL  
Thermal Cavity Batt

Thermal ROCKFLOOR® is a dual density thermal insulation solution designed for ground floors, and is suitable for use under most floor constructions including flooring grade T&G chipboard, OSB or plywood.

The dual density allows for unevenness and imperfections on the sub-floor side to be absorbed, while the high density surface provides the required load resistance.

### Benefits:

- High compressive strength
- Minimises thermal and acoustic bridging
- Easy handling and fitting
- Absorbs subfloor imperfections



## Product and application performance

### Thermal ROCKFLOOR®

Thickness required\* (mm)

U-value (W/m <sup>2</sup> K)		P/A Ratio				
		0.1	0.2	0.3	0.4	0.5
0.22	Ground	0	50	80	95	100
	Suspended	30	80	100	115	120
0.20	Ground	0	65	95	110	120
	Suspended	50	100	120	130	135
0.18	Ground	0	85	115	130	150
	Suspended	65	120	140	150	160
0.15	Ground	40	120	150	170	180
	Suspended	110	160	180	190	200
0.13	Ground	70	160	190	210	220
	Suspended	150	200	210	230	230

\*Thickness options may be subject to a minimum production volume

### Standards and approvals

Product	CE marking	Reaction to fire	Thermal conductivity (W/m <sup>2</sup> K)
Thermal ROCKFLOOR®	✓	Euroclass A1	0.038

### Product requirement

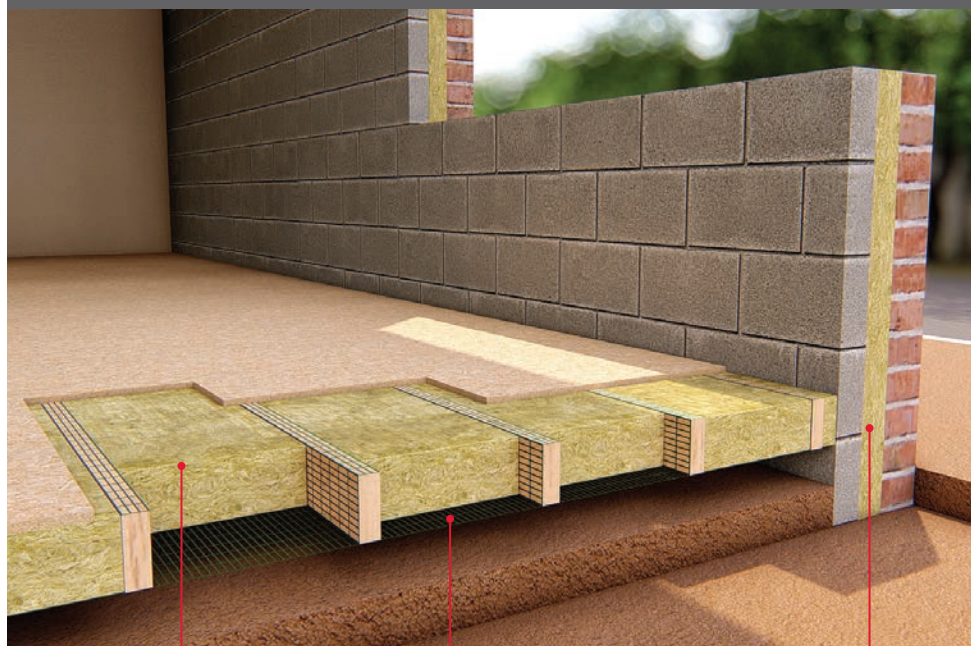
Product	Length (mm)	Width (mm)	*Approved thickness range (mm)
Thermal ROCKFLOOR®	1000	600	50-185

\*Thickness options may be subject to a minimum production volume



# Ground floors

## Suspended timber



ROCKWOOL Thermal Timber Frame Slab

Supporting wire mesh

ROCKWOOL Thermal Cavity Batt

ROCKWOOL Thermal Timber Frame Slab provides thermal insulation for suspended timber floors.

The semi rigid slabs enable a tight friction fit that eliminates gaps; reducing thermal bridging and cold spots.

### Benefits:

- Non-combustible (Euroclass A1)
- Fits standard 600mm centre floor joists
- Excellent thermal, acoustic and fire properties
- Fast and easy to handle and install

## Product and application performance

### Thermal Timber Frame Slab between joists

Thickness required (mm)

U-value (W/m <sup>2</sup> K)	P/A Ratio				
	0.1	0.2	0.3	0.4	0.5
0.22	90	90	140	140	140
0.20	90	140	140	140	180
0.18	90	140	180	180	180
0.15	140	180	230	230	230
0.13	180	230	280	280	280

Based on 9% timber bridging

### Standards and approvals

Product	CE marking	Reaction to fire	Fire resistance
Thermal Timber Frame Slab	✓	Euroclass A1	-

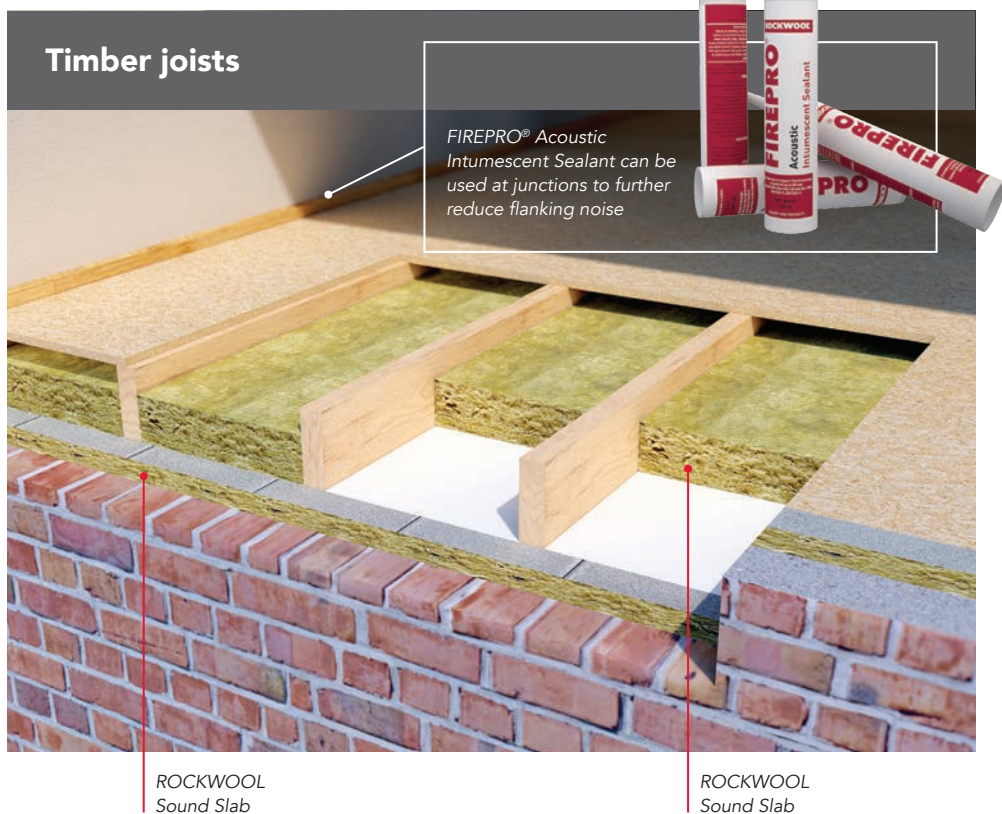
### Product requirement

Product	Length (mm)	Width (mm)	Approved thicknesses (mm)
Thermal Timber Frame Slab	1200	570	90 & 140





## Intermediate floors



ROCKWOOL Sound Slab delivers outstanding acoustic performance between the joists of internal floors due to its high density and non-directional fibre orientation, which traps sound waves and dampens vibration.

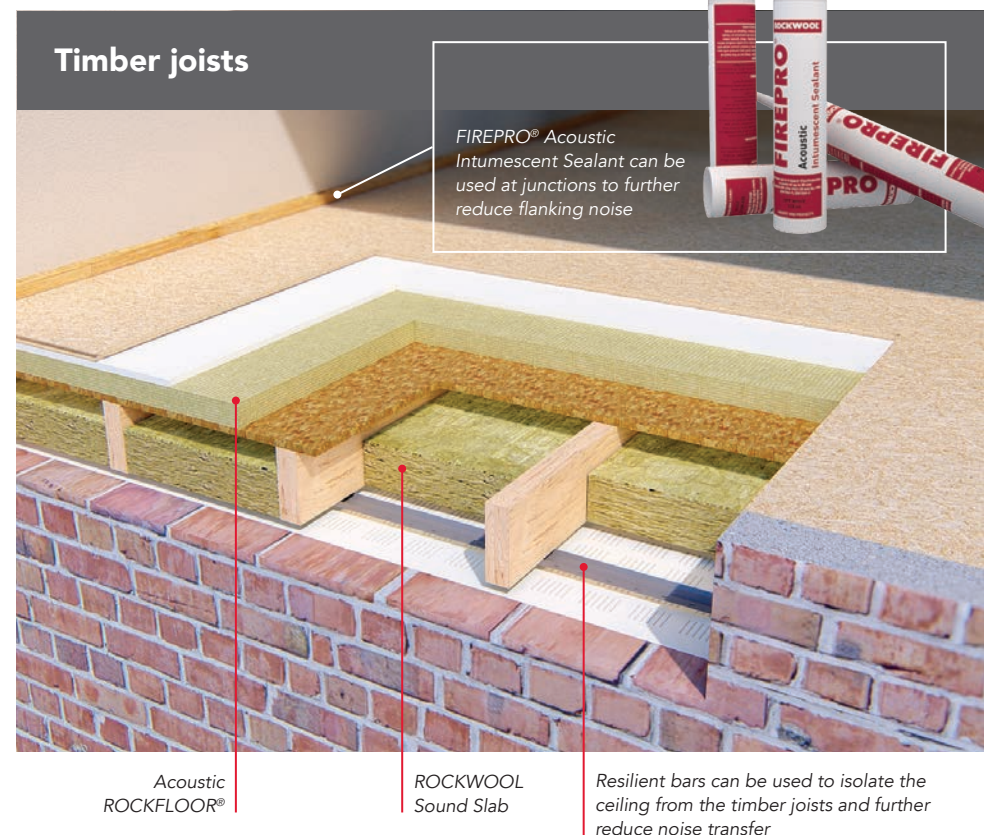
Being made from stone means Sound Slab is non-combustible and able to withstand temperatures over 1,000°C, achieving the highest Euroclass reaction to fire classification of A1.

### Benefits:

- Non-combustible (Euroclass A1)
- Patented ROCKWOOL FLEXI® Edge offers accurate fit to all widths
- 40dB sound reduction for internal floors
- Excellent thermal, acoustic and fire properties
- Fast and easy to handle and install



## Separating floors



ROCKWOOL Acoustic ROCKFLOOR® is a stone wool board designed to achieve the additional requirement of impact, or structure-borne vibration noise, in a separating floor.

This ultra high density layer is installed directly onto the floor deck to provide a platform for a floating floor which will deliver both acoustic and fire protection in a separating floor construction.

### Benefits:

- Non-combustible (Euroclass A1)
- Absorbs sound waves and dampens vibrations
- High surface compressive strength
- Sustainable and recyclable



## Product and application performance

Example specification Test report ref: 24502-SRL-RP-XT-008-P1	Performance
18mm T&G Chipboard	Airborne Reduction $R_w (C; Ctr) = 65dB$
30mm Acoustic ROCKFLOOR®	
15mm acoustic plasterboard	
15mm OSB	
100mm Sound Slab	Impact Reduction $L_{n,w} = 52dB$
195 x 47mm solid joists at 400mm centres	
Resilient bar at 400mm centres	
Two layers 15mm acoustic plasterboard	

### Standards and approvals

Product	CE marking	Reaction to fire
Acoustic ROCKFLOOR®	✓	Euroclass A1
Sound Slab	✓	Euroclass A1

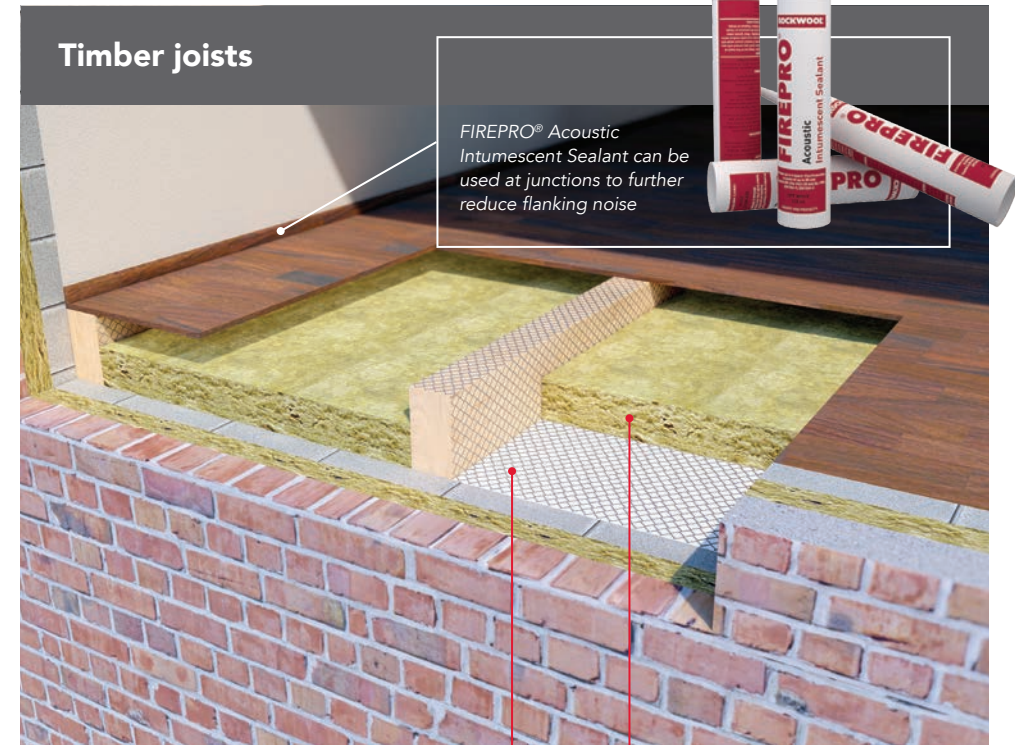
### Product requirement

Product	Length (mm)	Width (mm)	*Approved thickness range (mm)
Acoustic ROCKFLOOR®	1000	600	25-50
Sound Slab	1200	400 & 600	50, 70 & 100

\*Thickness options may be subject to a minimum production volume



## One hour fire floor



Combined with a wire mesh, ROCKWOOL Sound Slab can provide a 60 minute fire resistant floor

ROCKWOOL Sound Slab

ROCKWOOL Sound Slab can be used to upgrade timber joisted floors to provide a one-hour fire rating in addition to providing high levels of airborne sound reduction.

Combine with ROCKWOOL ROCKFLOOR® to achieve impact sound requirements for separating floor constructions. The fire floor can be installed from above or below and provides a non-combustible barrier that reduces the spread of fire between floors.

#### Benefits:

- Non-combustible (Euroclass A1)
- Up to 1 hour fire resistance (BS476 Part 21)
- Excellent thermal, acoustic and fire properties
- Fast and easy to handle and install

# Roof solutions

The ROCKWOOL Insulation range provides access to solutions that suit all roofing applications.

From warm pitched roofs with rafter and loft insulation, to new flat roofs and refurbishment projects, the ROCKWOOL Insulation range has got you covered.

Plus, with a range of roofing ancillaries including non-combustible upstand boards, acoustic membranes and angle fillets, delivering quality installations that perform has never been easier.

- Cold pitched roofs
- Warm pitched roofs
- Flat roofs
- Roofing ancillaries





## Thermal performance for roofs

The following tables outline the U-values that are required by building regulations for applications:

**Table 1a: Dwellings (new)**

Fabric element	Part L1a 2013 (England) (W/m <sup>2</sup> K)	Section 6 2019 (Scotland) (W/m <sup>2</sup> K)	Part L1a 2014 (Wales) (W/m <sup>2</sup> K)	Technical Guidance Document (Ireland) (W/m <sup>2</sup> K)	Technical Booklet F1 (N. Ireland) (W/m <sup>2</sup> K)
Wall	0.18	0.17	0.18	0.18	0.20
Roof	0.13	0.11	0.13	0.16	0.13
Floor	0.13	0.15	0.13	0.16	0.20
Party wall	0.00	0.00	0.00	-	0.20

**Table 1b: Dwellings (existing)**

Fabric element	Part L1a 2013 (England)		Section 6 2019 (Scotland)		Part L1a 2014 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F1 (N. Ireland)	
	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	*Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)
Wall	0.28	0.55 C 0.30 E/I	0.22	0.30	0.21	0.55 C 0.30 E/I	0.55 C 0.35 •	0.55 C 0.30 •	0.55 C 0.30 •	0.55 C 0.30 •
Pitched roof - ceiling	0.16	0.16	0.15	0.25	0.15	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.18	0.18	0.18	0.25	0.15	0.18	0.25	0.18	0.18	0.18
Flat roof	0.18	0.18	0.18	0.25	0.15	0.18	0.25	0.18	0.18	0.18
Floor	0.22	0.25	0.18	0.25	0.18	0.25	0.45	0.25	0.25	0.25

\*U-values quoted assume that the existing walls and roof are better than 0.70 and 0.35 respectively.

C Cavity E/I External or internal • Other

**Table 2a: Buildings other than dwellings (new)**

Fabric element	Part L2a 2013 (England) (W/m <sup>2</sup> K)	Section 6 2019 (Scotland) (W/m <sup>2</sup> K)		Part L2a 2014 (Wales) (W/m <sup>2</sup> K)	Technical Guidance Document (Ireland) (W/m <sup>2</sup> K)	Technical Booklet F2 (N. Ireland) (W/m <sup>2</sup> K)
		Naturally ventilated (W/m <sup>2</sup> K)	Mechanically ventilated (W/m <sup>2</sup> K)			
Wall	0.26	0.23	0.20	0.26	0.21	0.28
Roof	0.18	0.18	0.16	0.18	0.16 P 0.20 F	0.16 PC 0.18 PR 0.18 F
Floor	0.22	0.22	0.20	0.22	0.21	0.22

P Pitched PC Pitched (ceiling) PR Pitched (rafter) F Flat

**Table 2b: Buildings other than dwellings (existing)**

Fabric element	Part L2b 2013 (England)		Section 6 2019 (Scotland)		Part L2b 2014 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F1 (N. Ireland)	
	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	*Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Extension (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)	Thermal upgrade (W/m <sup>2</sup> K)
Wall	0.28	0.55 C 0.30 E/I	0.25	0.30	0.26	0.55 C 0.30 E/I	0.55 C 0.30 •	0.55 C 0.30 •	0.55 C 0.30 •	0.55 C 0.30 •
Pitched roof - ceiling	0.16	0.16	0.15	0.25	0.15	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.18	0.18	0.15	0.25	0.18	0.18	0.25	0.18	0.18	0.18
Flat roof	0.18	0.18	0.15	0.25	0.18	0.18	0.25	0.18	0.18	0.18
Floor	0.22	0.25	0.20	0.25	0.22	0.25	0.45	0.25	0.25	0.25

\*U-values quoted assume that the existing walls and roof are better than 0.70 and 0.35 respectively.

C Cavity E/I External or internal • Other



# Cold pitched roofs

## Horizontal loft insulation



Thermal Roll

Thermal Cavity Batt

ROCKWOOL Thermal Roll is a medium density stone wool insulation developed specifically for lofts. As a non-combustible material, it can withstand temperatures in excess of 1000°C. ROCKWOOL stone wool insulation does not burn nor contribute any significant toxic smoke.

Thermal Roll comes in a 200mm thickness split into two 100mm layers for quick and easy installation, laying 100mm between the joists and 200mm over the joists to achieve a 300mm thickness to meet building regulations.

### Benefits:

- Non-combustible (Euroclass A1)
- Twin roll format can be used as a single 100mm layer between joists and as a 200mm layer over the joists
- Highly sound absorbent
- Sustainable and recyclable

## Application performance

U-value (W/m <sup>2</sup> K)	Thermal Roll between joists (mm)	Thermal Roll over joists (mm)	Total insulation thickness (mm)
0.14	100	200	300
0.11	100	300	400

## Product requirement, standards and approvals

Product	Thickness (mm)	Width (mm)	Length (mm)	Lambda (W/mK)	CE marking	Reaction to fire
Thermal Insulation Roll	100	1200	2750	0.044	✓	Euroclass A1





## Warm pitched roofs

### Pitched roof rafters: Room in a roof Insulation



Full Fill  
Cavity Batt

ROCKWOOL  
FLEXI®

HARDROCK®  
Multi-Fix

The ROCKWOOL warm pitched roof solution is compatible with all types of roof systems.

Designed as a between and over the rafter system to provide habitable space in pitched roof spaces.

Made up of ROCKWOOL Thermal Timber Frame Slab between the joists and HARDROCK® Multi-Fix Overlay Boards mechanically fixed over the rafters, the system delivers thermal, fire and acoustic performance.

#### Benefits:

- Non-combustible (Euroclass A2, s1-d0)
- Dual density HARDROCK® provides high compression strength as well as excellent acoustic properties
- Protects against external noise pollution such as rain noise, aircraft, road and rail

## Application performance

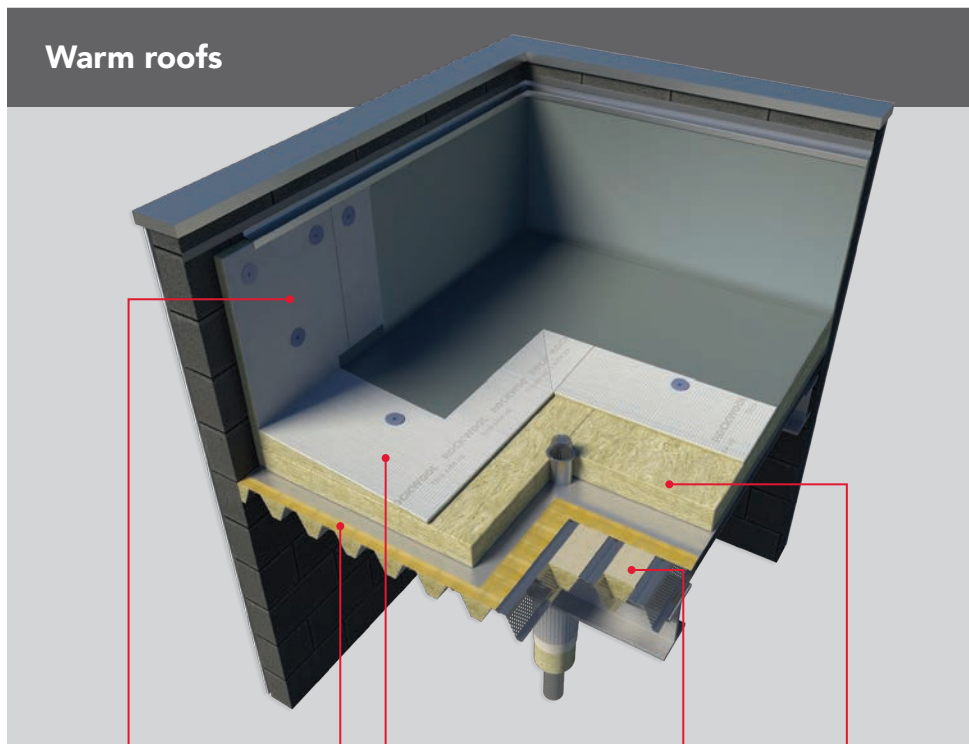
U-value (W/m²K)	HARDROCK® over the rafters (mm)	Thermal Timber Frame Slab between joists (mm)
0.19	60	140
0.17	85	140
0.15	115	140
0.13	150	140

Based on 9% timber bridging.

## Product requirement, standards and approvals

Product	Thickness (mm)	Width (mm)	Length (mm)	Lambda (W/mK)	CE marking	Reaction to fire
Thermal Timber Frame Slab	90 & 140	570	1200	0.034	✓	Euroclass A1
HARDROCK® Multi-Fix DD	60-185	1200	1000	0.039	✓	Euroclass A1

  **Flat roofs**



**Warm roofs**

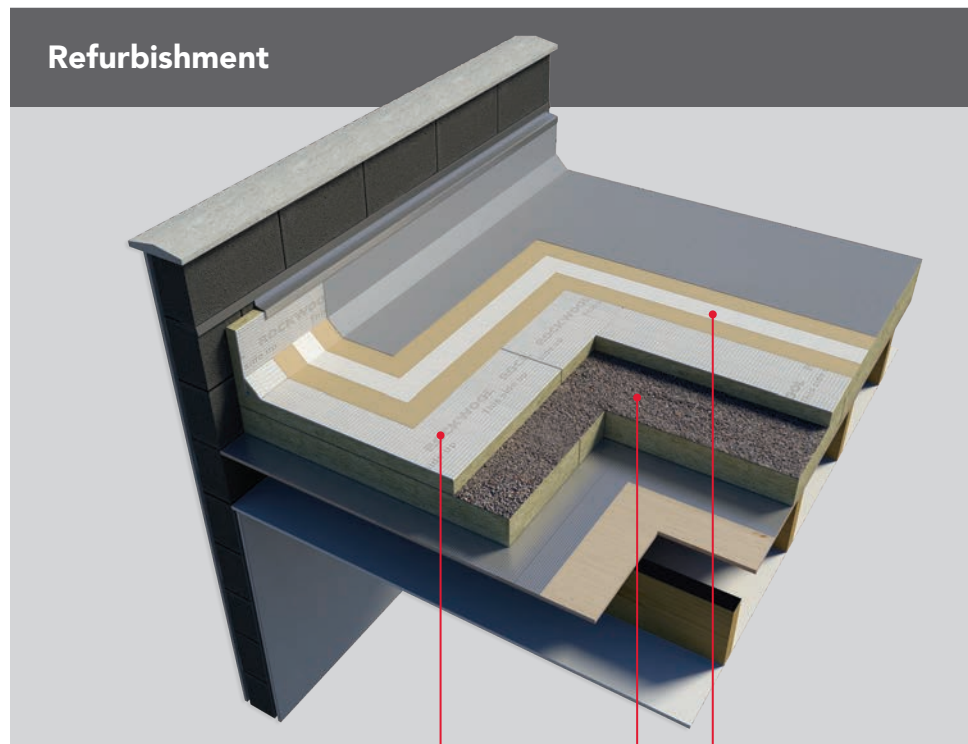
HARDROCK® UB34      ROCKWOOL Acoustic Membrane      HARDROCK® Multi-Fix (DD) & HARDROCK® Multi-Fix Tapered      ROCKWOOL Acoustic Infills      HARDROCK® Multi-Fix Underlay

ROCKWOOL HARDROCK® Range provides a versatile insulation solution for flat roofs, suitable for areas subject to pedestrian traffic and frequent maintenance, and compatible with all roof covering types - including torch-on, pour-and-roll, single ply, EPDM, liquid-applied, and green roofs.

As well as delivering proven thermal and fire performance, the HARDROCK® range also helps to control noise ingress.

- Benefits:**
- Suitable for any building type
  - Compatible with all roof covering types
  - Non-combustible (Euroclass A2, s1-d0)
  - Delivers thermal, fire and acoustic performance

  **Flat roofs**



**Refurbishment**

HARDROCK® Multi-Fix (DD) Recovery Board      Existing roof system      New Waterproof Membrane (Liquid, GRP, Bitumen, EPDM or Single-Ply)

The 30mm HARDROCK® Multi-Fix Recovery Board has been purposely designed to simplify repair and refurbishment of domestic or non-domestic flat roof systems.

The ROCKWOOL Recovery Board can be used to isolate and prepare the surface of existing roof systems, providing the perfect platform for the installation of new waterproofing membranes.

- Benefits:**
- Simplifies roof repair and refurbishment
  - Non-combustible (Euroclass A2, s1-d0)
  - Delivers thermal, fire and acoustic performance.

## Application performance



In addition to being non-combustible, up to 120 minutes integrity and insulation to BS EN 1365 Part 2 can be achieved with HARDROCK® Multi-Fix DD when installed as a double-layer system.



### THERMAL INSULATION

Insulation layer 1 (mm)	Insulation layer 2 (mm)	Single ply membrane U-value (W/m²K)	Bitumen (2 layer felt) U-value (W/m²K)
150	60	0.18	0.18
150	85	0.16	0.16
150	105	0.15	0.15



### SOUND INSULATION

Insulation layer 1 (mm)	Insulation layer 2 (mm)	Airborne Reduction (dB)	Rain intensity (dB)	Airborne Reduction (dB)	Rain intensity (dB)
150	60	R <sub>w</sub> 44	L <sub>IA</sub> 48.7	R <sub>w</sub> 45	L <sub>IA</sub> 47.5
150	85	R <sub>w</sub> 45	L <sub>IA</sub> 47.8	R <sub>w</sub> 46	L <sub>IA</sub> 46.7
150	105	R <sub>w</sub> 46	L <sub>IA</sub> 47.1	R <sub>w</sub> 47	L <sub>IA</sub> 46.1

Based on D60 profiled steel deck. Further variations available on request.

### Standards and approvals

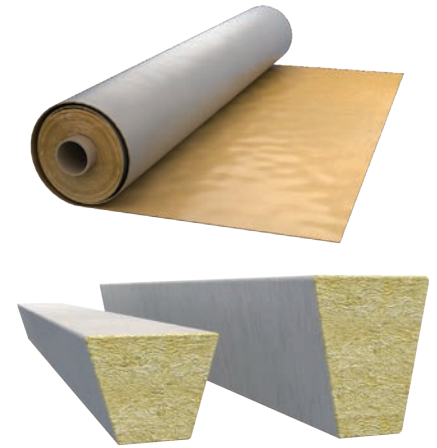
Product	CE marking	Reaction to fire	Fire resistance (minutes)	3rd party certification
HARDROCK® Multi-Fix	✓	Euroclass A2, s1-d0	120	LPCB (Certificate 022e)

## Roofing ancillaries

### Acoustic Membrane & Acoustic Infills

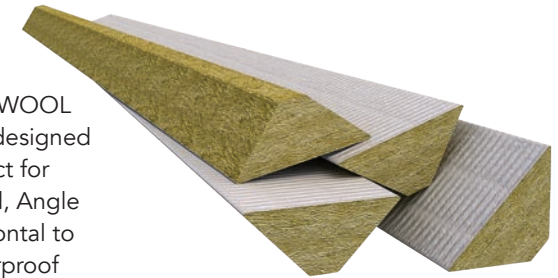
For the most demanding of acoustic specifications, ROCKWOOL Acoustic Membrane can improve airborne and rain noise performance even further.

Additionally, the underside of a perforated metal deck roof can be used to control build up of internal noise, reducing the reverberation time through the enhanced absorption offered by ROCKWOOL Acoustic Infills.



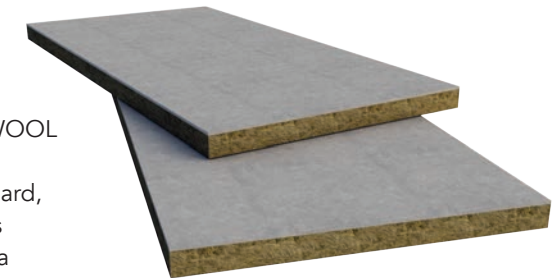
### Multi-Fix Angle Fillets

Manufactured from high density ROCKWOOL stone wool, Multi-Fix Angle Fillets are designed to be installed at 90° abutments. Perfect for where roof insulation meets an upstand, Angle Fillets smooth the transition from horizontal to vertical while fully supporting the waterproof membrane.



### HARDROCK® UB34

Consisting of non-combustible ROCKWOOL insulation faced with an exterior grade non-combustible 6mm fibre cement board, HARDROCK UB34 achieves a Euroclass fire classification of A2, s1-d0, offering a non-combustible solution for insulating upstands and parapet walls.





# Fire Stopping solutions



FIREPRO®  
Acoustic  
Intumescent  
Sealant

FIREPRO®  
High Expansion  
Intumescent  
Sealant

FIREPRO®  
Insulated  
Fire Sleeve

FIREPRO® Ablative  
Coated Batt

RockLap H&V  
Pipe Section

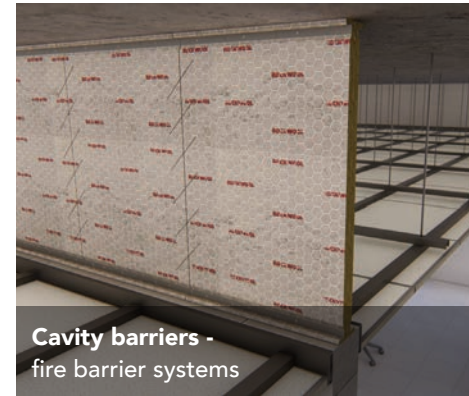
Fire Stopping solutions ensure that the fire resistance of protected walls, floors and roofs are never compromised by services or voids.

Our comprehensive range of penetration seals, cavity barriers, cavity fire stops and linear joint seals ensure that cables, pipes, trunking, or ductwork, or the voids that they pass through, don't provide the weak link through which fire can spread

## Benefits:

- Comprehensive range for sealing penetrations and voids
- Detailed installation guidance available
- FIREPRO® solution finder tool to assist finding the right solution

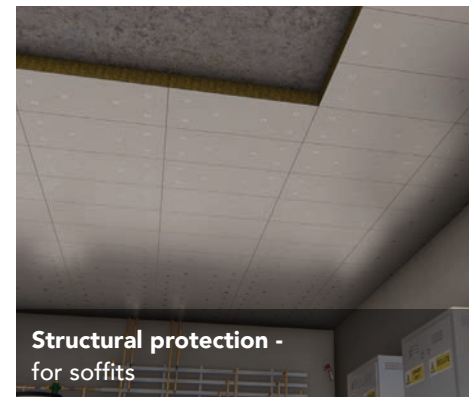
## ROCKWOOL specialist ranges for Fire Protection, Fire Stopping and HVAC



Cavity barriers -  
fire barrier systems



Cavity barriers -  
slab edge fire stopping



Structural protection -  
for soffits



Structural protection -  
for steel beams



Pipes -  
thermal, acoustic and fire insulation

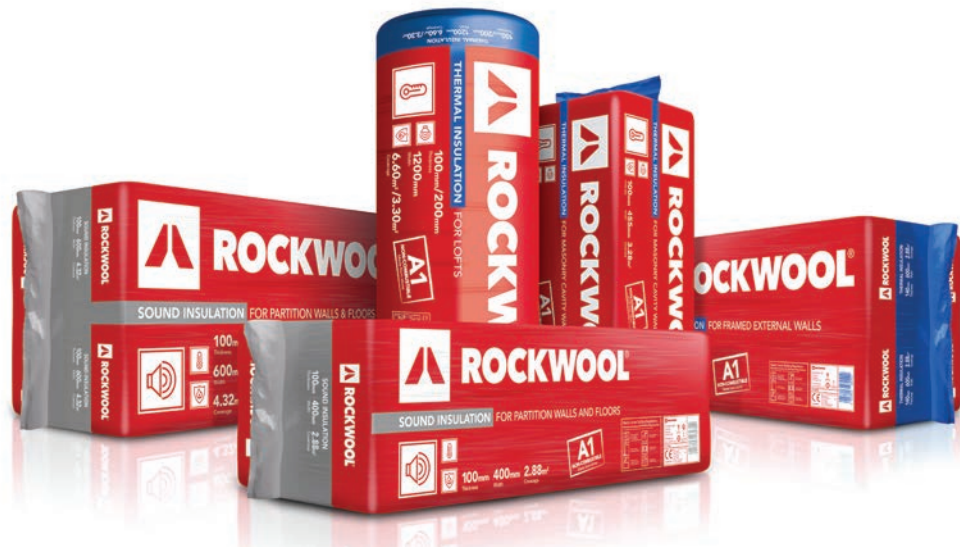


Ducts -  
thermal, acoustic and fire insulation

# Technical support



It's not just about market-leading products. Our solutions are complemented by a package of technical support and advice, tools, and exceptional customer service, all built with you in mind.



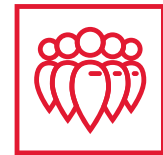
## Technical advice

For technical product and application queries, we're just a call, email or tweet away.



## Digital tools

Our online tools help with everything from calculating thermal performance to the amount of materials you'll need - there's even a handy stockist finder too.



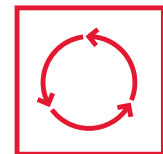
## Product selection

Our expert team is on hand to help you identify the right ROCKWOOL product for your job.



## Product availability

Our new logistics centre has significantly improved production capacity, so you can be confident in getting what you need, when you need it.



## Supporting sustainability

From our Bridgend facility, we recycle unused ROCKWOOL product and offcuts, helping to reduce waste.

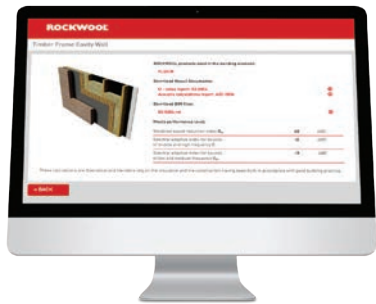
# Digital tools

Visit [www.rockwool.com/uk](http://www.rockwool.com/uk) to access the following digital tools - all designed to save time and make your life easier when using ROCKWOOL non-combustible insulation solutions.



## Materials Calculator

Use our materials calculator to work out the number of packs you need for your next project.



## Acoustic Calculator

The ROCKWOOL Acoustic Calculator has been developed to provide reliable acoustic predictions for multiple building applications.



## U-value Calculator

Our U-value calculation tool allows you to quickly and easily calculate the thermal performance of walls, floors and roofs, with around 2,500 predetermined calculations all completed under the BBA/TIMSA U-value competency scheme. It also helps you to identify the correct product and thickness to meet your customers' requirements.

# Get in touch

If you need further support and advice, we're here to help.

For all technical product and application queries, please contact our technical solutions team via [technical.solutions@rockwool.co.uk](mailto:technical.solutions@rockwool.co.uk) or call 01656 868 490.

Our technical team are contactable during the following times:

- Monday: 9am - 5pm
- Tuesday: 9am - 5pm
- Wednesday: 9am - 5pm
- Thursday: 9am - 5pm
- Friday: 9am - 4pm

For our customer support team, email [customersupportcentre@rockwool.co.uk](mailto:customersupportcentre@rockwool.co.uk) or call 01656 868 400.

Our customer support centre is open:

- Monday: 6.30am - 6.30pm
- Tuesday: 6.30am - 6.30pm
- Wednesday: 6.30am - 6.30pm
- Thursday: 6.30am - 6.30pm
- Friday: 6.30am - 5.30pm

You can also reach us on social media @ROCKWOOLUK





**ROCKWOOL Limited**

Pencoed  
Bridgend  
CF35 6NY

01656 862 621  
[info@rockwool.co.uk](mailto:info@rockwool.co.uk)  
[www.rockwool.com/uk](http://www.rockwool.com/uk)

Version 1.02 December 2021

