



THERMAL

Trade Application Guide

For Installers

Choose the right ROCKWOOL®
insulation for your project



SOUND



A man with a beard, wearing a blue hoodie and red gloves, is shown in profile, working on a wall. He is applying a material, likely insulation, to the wall. The background is a plain wall with some wooden framing visible on the right side.

Welcome

Welcome to the Trade Application Guide. This guide is designed to help you choose the right ROCKWOOL insulation for your project.

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 domestic projects.

What to use where

Our guide to using the ROCKWOOL Trade 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

What's New?	4
Strengths of stone wool	6
Applications at a glance	7

Building Regulations 8

Thermal	9
Fire	10
Acoustics	11
Robust Detail	12

Trade Range 14

Thermal insulation	16
Sound insulation	17

Wall solutions 18

Thermal performance for walls	20
Acoustic performance for walls	24
External walls - masonry cavity	26
External walls - timber frame	30
Party wall - masonry cavity	32
Party wall - timber frame	33
Internal walls - timber and metal stud	36

Floor solutions 38

Thermal performance for floors	40
Acoustic performance for floors	42
Ground floors	44
Intermediate floors	50
Separating floors	51
One hour fire floor	53

Roof solutions 54

Thermal performance for roofs	56
Cold pitched roofs	60
Warm pitched roofs	62
Flat roofs	64
Roofing ancillaries	67

Fire stopping solutions 68

Technical support 70

Digital tools 72

Get in touch 73

What's New

New products for new regulations

Building regulations have got tougher with new thermal performance standards and, depending on where you're working in the UK, more guidance on how insulation is fitted.

To make it easier to meet these requirements, we've extended our Trade Range.

THERMAL INSULATION CAVITY SLAB 32

NOW IN 150mm

We've added a new 150mm thickness of Thermal Cavity Slab 32 for masonry cavity walls. The new 150mm thickness joins our 100mm Thermal Cavity Slab 32 and 140mm Thermal Frame Slab 32 products which are all manufactured using patented NyRock® technology.



Benefits:

- A low 0.032 W/mK lambda rating for greater thermal performance and energy saving capabilities, making it easier to comply with new thermal regulations
- Easy installation - just friction fit, without precise cutting
- Durability - proven to retain its thermal insulation properties for up to 65 years*
- Euroclass A1 non-combustible reaction to fire classification
- Water repellent

SOUND INSULATION SLAB

NOW IN 140mm

Our new 140mm Sound Insulation Slab has a dual benefit, providing acoustic performance plus, with a 0.035 W/mK lambda, it can be used thermally in timber frame buildings.



Benefits:

- Absorbs sound waves to reduce noise
- Multi purpose - external timber framed walls and internal floors
- Flexible edge for easy fitting

* Testing conducted at the Danish Technological Institute in 2023, using ROCKWOOL products taken from an external wall system.

New packaging

We've updated the packaging used to protect our Trade Range products during transport, handling and storage to improve its impact on the environment.

Less plastic - Our new Trade Range product packaging is produced using 30% recycled plastic and is 100% recyclable.

Less ink - We've reduced the amount of ink on our product packaging to just two primary colours and made it mostly transparent. This makes it easier to recycle.

Increased efficiency - Our packaging allows for compression packing meaning more insulation per pack and more efficient deliveries.

Clearer labelling - You'll also find new labels on our Trade Range:

ROCKWOOL
ROCKWOOL Ltd. | Pencoed, Brigid CF35 6NY | UK
www.rockwool.com/uk Tel: +44 (0) 1656 862621

THERMAL CAVITY BATT FOR MASONRY CAVITY WALLS **100 mm THICKNESS**

3.28m²
Coverage per pack

x6
Pieces per pack

Product Code: **191845**

Thermal Conductivity: **0.037**
 λ_d W/m.K

Euroclass EN13501-1: **A1**

HANDLING INSTRUCTIONS The mechanical effects of fibres in contact with skin may cause temporary itching.

- Cover exposed skin. When working in unventilated areas, wear a face mask.
- Wastes should be disposed of according to local regulations.
- Ventilate working area if possible.
- Clean area using vacuum equipment.
- Rinse in cold water before washing.
- Wear goggles if working overhead.

EN13162:2012+A1:2015

CE 0751 THB 14
0751-CPR-393.0-01
DoP No. RWUK-CE-0207-04

MW-EN13162-T2-WS-WL(P)-MU1

DoP: See <http://dop.rockwool.com>

KM06661
BS EN 13162

003-SDG-5-477232
BS EN 13162

EUCB

BBA APPROVAL INSPECTION TESTING CERTIFICATION - CERTIFICATE 10020

GB01WER3LINE220230706 17:03:32:22 FO No. 12345678

5 013423 282484

Digital product information

ensuring information is always up to date

Clearer product information

with key info bold and at a glance

Clear technical and certification marks

Get the job done with 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 homes to be proud of and a great reputation for their business.

Stone wool insulation is made from basalt rock, a resource naturally replenished by the Earth. For decades, we've been harnessing six unique and innate qualities of stone, creating products that are non-combustible, thermally efficient, sound absorbent, moisture resistant, durable and recyclable.



Non-combustible - Euroclass A1

ROCKWOOL stone wool is made from natural volcanic basalt rock that is inherently non-combustible. This means our insulation can withstand temperatures in excess of 1000°C and if exposed to flames, will not fuel or spread a fire, nor contribute significant amounts of toxic smoke.



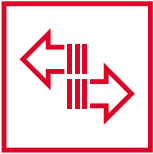
Thermal performance

Our stone wool insulation traps air in its structure making it 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.



Acoustic performance

Stone wool insulation reduces noise transmission thanks to its open porous structure that traps sound waves. Suitable for both external and internal walls, it can limit noise from outside, but also between spaces.



Fast to install

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



Built to last

In tests on materials from real-life construction sites, ROCKWOOL stone wool has shown to retain its insulating properties for more than 65 years without a drop in performance*. What's more, it doesn't attract water or encourage the growth of mould, fungi or bacteria.

* Testing conducted at the Danish Technological Institute in 2023, using ROCKWOOL products taken from an external wall system.

Made for the trade

The ROCKWOOL Trade Range is a collection of proven to perform, easy-to-fit products for a wide range of applications in the 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										
 Cavity Batt 37/Slab 32	✓		✓							
 Frame Slab 32		✓		✓		✓				✓
 Loft Insulation										✓
 SOUND INSULATION										
 Sound Insulation Slab			✓*		✓	✓		✓	✓**	

*140mm Sound Insulation Slab only. **100mm Sound Insulation Slab only.

Building Regulations

The ROCKWOOL Trade Range has been designed to help achieve building regulations across thermal, fire and acoustic requirements.





Building Regulations: Thermal

Approved Document Part 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.

From 2022, new regulations for thermal performance were rolled out across the UK and Northern Ireland focused on reducing CO_2 emissions.

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

For more detail on the changes and guidance on how ROCKWOOL solutions can help you meet these new levels of thermal performance, including dwelling recipes, signpost them to rockwool.com/uk/thermal-regulation-guides or scan the QR code.



The ROCKWOOL U-value Calculator

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

Calculate U-values for individual projects using ROCKWOOL stone wool insulation.

Simply search 'ROCKWOOL U-value' on an 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. The declared Euroclass classification indicates the product's 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
A1 A2-s1, d0	Non-combustible
B	Combustible
C	
D	
E	
F	

ROCKWOOL stone wool insulation is **NON-COMBUSTIBLE**, meaning it does not burn, does not contribute to fire growth and presents no smoke hazard.

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

Each application section of this guide includes relevant acoustic regulation tables with sound pressure measured in dB (decibels).

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).





Building Regulations: 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.

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.

ROCKWOOL Trade Range products can be used as part of Robust Details specifications. See opposite for an example in a masonry separating wall construction.

For more information and other construction details, visit robustdetails.com



MASONRY
Separating Walls

Trade Range solution:

100mm Cavity Batt 37

Meets the requirement of
Robust Detail E-WM-1
when wall cavity insulation is
specified

ROCKWOOL Trade Range

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

External Timber Walls

Frame Slab 32

140 x 570 (328253)

Lofts and Ceilings

Thermal Insulation Roll (Loft Roll)

100 x 1200 x 2750 (180900)

Separating Masonry Walls

Cavity Batt 37

100 x 455 (180898)

External Masonry Cavity Walls

Cavity Slab 32

150 x 455 (350214)

Suspended Floors

Frame Slab 32

140 x 570 (328253)

External Timber Walls

Sound Slab

140 x 600 (350206)

One Hour Fire Floors

100mm Sound Slab

100 x 400 (180891)

Metal Partition and Separating Walls

Sound Slab

50, 70, 100 x 600 (274413, 180887, 180889)

Intermediate Floors

Sound Slab

100 x 400 (180891)

Timber Partition and Separating Walls

Sound Slab

50, 70, 100 x 600 (274413, 180887, 180889)

50, 100 x 400 (278709, 180891)



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
- Fast to install
- Proven durability



Cavity Wall



Lofts



Timber Frame Wall

THERMAL Product	Thickness (mm)	Length (mm)	Width (mm)	Coverage per pack (m ²)	Pieces per pack	Packs per pallet	Euroclass Fire Rating
Cavity Batt 37	100	1200	455	3.28	6	20	A1
Cavity Slab 32	100	1200	455	2.18	4	12	A1
NEW >>	150	1200	455	1.09	2	16	A1
Frame Slab 32	140	1200	570	2.05	3	9	A1
Loft Insulation	100	1200	1200	6.60	2	15	A1

Sound Insulation

ROCKWOOL Sound 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:

- Noise reduction - Quiet Mark™ approved
- ROCKWOOL Flexi® edge for fast 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 ²)	Pieces per pack	Packs per pallet	Euroclass Fire Rating
	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
NEW >>	140	1200	600	2.88	4	12	A1

Wall solutions

Buildings with performance to last.

As a non-combustible insulation material, ROCKWOOL stone wool delivers fire resilience. A robust and durable solution, when used in internal and external wall constructions.

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 L1 2021 (England) (W/m ² K)	Section 6 2022 (Scotland) (W/m ² K)	Part L1 2022 (Wales) (W/m ² K)	Technical Guidance Document (Ireland) (W/m ² K)	Technical Booklet F1 2022 (N. Ireland) (W/m ² K)
Wall	0.18	0.15	0.13	0.13	0.15
Roof	0.11	0.09	0.11	0.11	0.13
Floor	0.13	0.12	0.11	0.14	0.20
Party wall	0.00	0.00	0.00	-	0.13

Table 1b: Dwellings (existing)

Fabric element	Part L1 2021 (England)		Section 6 2022 (Scotland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension* (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.18	0.55 C 0.30 E/I	0.17	0.17
Pitched roof - ceiling	0.15	0.16	0.12	0.12
Pitched roof - rafter	0.15	0.16	0.12	0.12
Flat roof	0.15	0.16	0.12	0.12
Floor	0.18	0.25	0.15	0.15

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

CCavity **E/I**External or internal



Thermal performance for walls

Table 1b: Dwellings (existing)

Fabric element	Part L1 2022 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F1 2022 (N. Ireland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.18 H 0.21 F	0.55 C 0.30 E/I	0.18	0.55 C 0.35 •	0.28	0.55 C 0.30 •
Pitched roof - ceiling	0.13	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.13	0.16	0.16	0.25	0.18	0.18
Flat roof	0.13	0.16	0.20	0.25	0.18	0.18
Floor	0.15	0.25	0.18	0.45 GF 0.25 OEF	0.22	0.25

CCavity **E/I**External or internal •Other **H**Houses **F**Flats **GF**Ground floors

OEFOther exposed floors



Thermal performance for walls

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

Table 2a: Buildings other than dwellings (new)

Fabric element	Part L2 2021 (England) (W/m ² K)	Section 6 2022 (Scotland) (W/m ² K)	Part L2 2022 (Wales) (W/m ² K)	Technical Guidance Document (Ireland) (W/m ² K)	Technical Booklet F2 2022 (N. Ireland) (W/m ² K)
Wall	0.26	0.21	0.26	0.21	0.21
Roof	0.16 P 0.18 F	0.16	0.20	0.16 P 0.20 F	0.16 P 0.20 F
Floor	0.18	0.18	0.22	0.21	0.21

PPitched **PC**Pitched (ceiling) **PR**Pitched (rafter) **F**Flat

Table 2b: Buildings other than dwellings (existing)

Fabric element	Part L2 2021 (England)		Section 6 2022 (Scotland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension* (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.26	0.55 C 0.30 E/I	0.21	0.21
Pitched roof - ceiling	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.16	0.18	0.16	0.16
Flat roof	0.18	0.18	0.16	0.16
Floor	0.18	0.25	0.18	0.18

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

CCavity **E/I**External or internal



Thermal performance for walls

Table 2b: Buildings other than dwellings (existing)

Fabric element	Part L2 2022 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F2 2022 (N. Ireland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.21 D 0.26 A	0.55 C 0.30 E/I	0.21	0.55 C 0.35 •	0.21	0.55 C 0.30 •
Pitched roof - ceiling	0.15 D 0.15 A	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.15 D 0.18 A	0.18	0.16	0.25	0.16	0.18
Flat roof	0.15 D 0.18 A	0.18	0.20	0.25	0.20	0.18
Floor	0.18 D 0.22 A	0.25	0.21	0.45 GF 0.25 OEF	0.21	0.25

CCavity **E/I**External or internal •Other **D**Domestic in character **A**All other buildings

GFGround floors **OEF**Other exposed floors



Acoustic performance for walls

Separating construction

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

England, Wales and Northern Ireland

Approved Document E		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	-

Scotland

Technical Handbook Domestic Section 5		
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**

Ireland

Technical Guidance Document E		
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



Acoustic performance for walls

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





External walls

Masonry cavity - Partial fill

Trade Range solution:

**150mm
Cavity Slab 32**

U-value achieved:
0.17 W/(m²k)



12.5mm
plasterboard
on dabs

100mm
standard
aircrete

50mm
Clear cavity
space

150mm
Cavity
Slab 32

102mm
facing brick
outer

Partial fill insulation for domestic and non-domestic exterior walls.

ROCKWOOL Thermal Cavity Slab 32 is non-combustible, water repellent and vapour permeable, and is quick and easy to fit without gaps.

Benefits:

- BBA certificate 22/6335
- Quick and easy installation
- Non-combustible (Euroclass A1)
- Water repellent and vapour permeable

Product and application performance

Inner block Partial fill cavity thickness	Dense (1.130 W/mK) U-value (W/m ² K)	Medium dense (0.470 W/mK) U-value (W/m ² K)	Aircrete standard (0.150 W/mK) U-value (W/m ² K)
100mm Cavity Slab 32	0.26	0.25	0.23
150mm Cavity Slab 32	0.18	0.18	0.17

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
Cavity Slab 32	✓	Euroclass A1	-	BBA Approved (Certificate 22/6335)

Product requirement

Product	Length (mm)	Width (mm)	Available thicknesses (mm)
Cavity Slab 32	1200	455	100 & 150

The 100mm and 150mm thicknesses shown are specifically from the ROCKWOOL Trade Range of products.

Other thickness are available in our commercial range to meet specified U-values requirements, and may be subject to minimum order quantities.

All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.



External walls

Masonry cavity - Full fill

Trade Range solution:

**150mm
Cavity Slab 32**

U-value achieved:

0.18 W/(m²k)



12.5mm
plasterboard
on dabs

100mm
standard
aircrete

150mm
Cavity
Slab 32

102mm
facing brick
outer

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

ROCKWOOL Thermal Cavity Slab 32 is non-combustible, water repellent and vapour permeable, is quick and easy to fit without gaps, and does not require the use of additional cavity barriers and retaining clips, when used in a full fill application.

Benefits:

- BBA certified
- Quick and easy installation
- 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	Dense (1.130 W/mK) U-value (W/m ² K)	Medium dense (0.470 W/mK) U-value (W/m ² K)	Aircrete standard (0.150 W/mK) U-value (W/m ² K)
100mm Cavity Slab 32	0.27	0.26	0.24
150mm Cavity Slab 32	0.19	0.19	0.18

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
Cavity Batt 32	✓	Euroclass A1	-	BBA Approved (Certificate 22/6335)

Product requirement

Product	Length (mm)	Width (mm)	Available thicknesses (mm)
Cavity Batt 32	1200	455	100 & 150

The 100mm and 150mm thicknesses shown are specifically from the ROCKWOOL Trade Range of products.

Other thickness are available in our commercial range to meet specified U-values requirements, and may be subject to minimum order quantities.

All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.



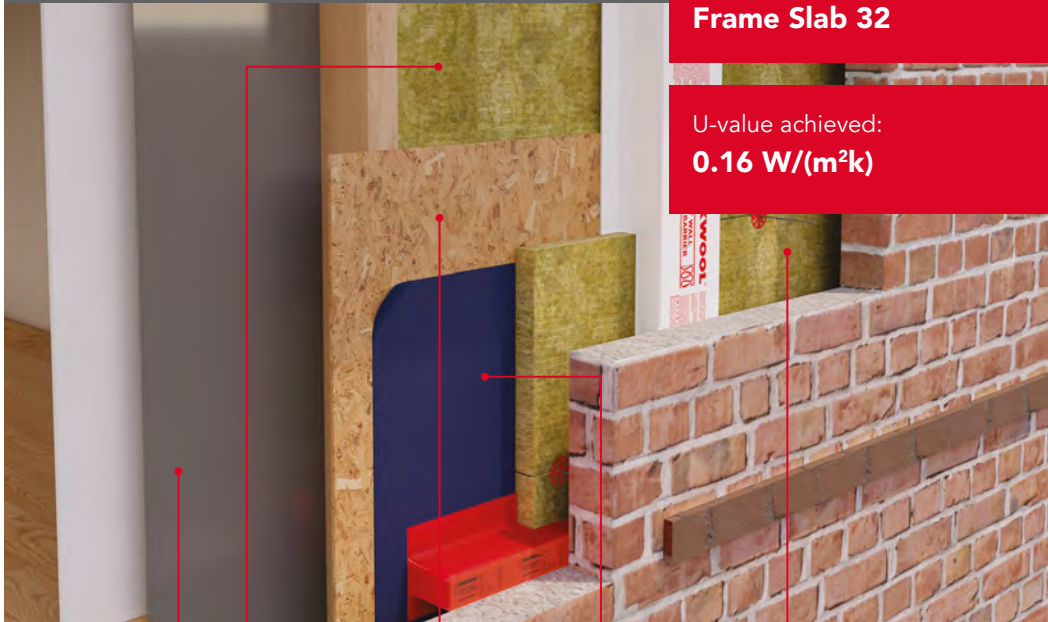
External walls

Timber frame cavity wall

Trade Range solution:

**140mm
Frame Slab 32**

U-value achieved:
0.16 W/(m²k)



Vapour
control layer

140mm
Frame Slab 32

Sheathing
board

Breather
membrane

NyRock®
RainScreen 032

ROCKWOOL Thermal Frame Slab 32 is a semi-rigid stone wool insulation slab designed specifically for use between the studwork of timber frame constructions.

The 570mm slab width makes installation easy, ensuring that the slabs friction fit, without the need for precise cutting and without leaving performance reducing gaps.

The addition of NyRock RainScreen 032 as a sheathing insulation further adds to the thermal performance, to achieve ever reducing U-value targets.

Alternatively, consider Sound Slab in this application - ideal for where acoustics and thermal matter.

Our 140mm Sound Insulation Slab has a dual benefit, providing acoustic performance plus, with a 0.035 W/mK lambda, it can be used thermally in timber frame buildings.



Product code: 350206

Product and application performance

Frame Slab 32 (mm)	NyRock Rainscreen 032 Sheathing insulation (mm)	Standard VCL	Tyvek AirGuard	Protect VCL Foil	U-value (W/m ² K)
140	50	✓			0.18
140	50		✓		0.17
140	50			✓	0.16

Facing brick 102.5mm: Cavity behind masonry R Value 0.18; Breather membrane (standard) NyRock RainScreen over OSB/ NyRock Frame between solid Timber Studs, Std. VCL/with 23mm service void. 12.5mm plasterboard finish.

Standards and approvals

Product	CE marking	Reaction to fire	Fire resistance	3rd party certification
Frame Slab 32	✓	Euroclass A1	-	-
NyRock RainScreen 032	✓	Euroclass A1	-	BBA Approved (Certificate 22/6417)
*PWCB & TCB	-	-	Integrity: Up to 120 mins Insulation: Up to 45 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.

***Application dependent. See classification document for full performance details.

Product requirement

Product	Length (mm)	Width (mm)	*Approved thickness range (mm)
Frame Slab 32	1200	570	140
NyRock RainScreen 032	1200	600	50-200
ROCKWOOL TCB	1200	65 - 210	65-160
ROCKWOOL PWCB	1200	200	65-160

* Other thickness are available in our commercial range to meet specified U-values requirements, and may be subject to minimum order quantities. All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.



Party wall

Masonry cavity

Trade Range solution:

100mm Cavity Batt 37

Meets the requirement of
Robust Detail E-WM-1
when wall cavity insulation
is specified



100mm
Cavity Batt 37

*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 37 provides a full-fill solution to achieve both Part E of the building regulations "Resistance to the Passage of Sound" through Robust Detail solutions. It also supports 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/m²K.

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
- Sound absorbent



Party wall

Timber frame

Trade Range solution:

70mm Sound Slab

Meets the requirement of

Robust Detail E-WT-1



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 Sound Slab provides a full-fill solution to achieve both Part E of the building regulations "Resistance to the Passage of Sound" through Robust Detail solutions. It also supports 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/m²K.

Benefits:

- Contributes to an effective zero U-value party wall (when used in conjunction with the ROCKWOOL PWCB)
- Flexible edge ensures fast friction fit
- Quick and easy to install
- Non-combustible (Euroclass A1) fire rating
- 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 ²) to each side of the wall	
E-WM-1: Masonry cavity	
Masonry cavity with 1850 - 2300 kg/m ³ blocks	Airborne Sound Reduction In excess of DnT,w + Ctr 45 dB
100mm cavity width fully filled with Thermal Cavity Batt 37	
13mm wet plaster (min 10kg/m ²) both sides	
Flanking wall (external wall) fully filled with Thermal Cavity Batt 37	

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
Sound Slab	140	600	1200	✓	Euroclass A1
Thermal Cavity Batt 37	100	455	1200	✓	Euroclass A1

ROCKWOOL thermal regulation guides



The latest thermal regulations for England, Wales and Scotland unpacked



Suggested substrate constructions to help meet or exceed the new thermal regulations



Whole house dwelling recipes for easier specification



Download now:



rockwool.com/uk/thermal-regulation-guides



rockwool.com/uk



Internal walls

Timber and metal stud

Trade Range solution:

Sound Slab



Sound Slab

ROCKWOOL Sound Slab has been designed for use in internal and separating walls and floors, reducing noise from adjacent properties, and from other rooms within the same dwelling.

Noise is reduced by ROCKWOOL Sound Slab in two distinct ways, firstly by reducing the transmission of sound waves through the air, and secondly through damping of vibration based impact noise travelling through a structure.

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)
- Flexible edge provides a tight friction fit to maximise performance
- Provides noise reduction - Quiet Mark™ approved

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 Slab between the studs	50mm Sound 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
Performance (Airborne Sound Reduction) Rw 42dB	Performance (Airborne Sound Reduction) Rw 42dB
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 Slab between the studs	70mm Sound 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
Performance (Airborne Sound Reduction) Rw 50dB	Performance (Airborne Sound Reduction) Rw 60dB

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
	140	600	1200	✓	Euroclass A1

Floor solutions

The ROCKWOOL Trade Range features solutions for every area of the home.

This includes products for insulating ground floors, solutions for concrete and timber applications, along with 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 ² K)
Part L1 2021 (England)	0.13
Section 6 2022 (Scotland)	0.12
Part L1 2022 (Wales)	0.11
Technical Guidance Document L (Ireland)	0.14
Technical Booklet F1 2022 (Northern Ireland)	0.13

Dwellings (existing)

Fabric Element (W/m ² K)		Floor (W/m ² K)
Part L1 2021 (England)	Extension	0.18
	Thermal upgrade	0.25
Section 6 2022 (Scotland)	*Extension	0.15
	Thermal upgrade	0.15
Part L1 2022 (Wales)	Extension	0.15
	Thermal upgrade	0.25
Technical Guidance Document L (Ireland)	Extension	0.18
	Thermal upgrade	0.45 (ground floors) 0.25 (other exposed floors)
Technical Booklet F1 2022 (Northern Ireland)	Extension	0.22
	Thermal upgrade	0.25

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



Thermal performance for floors

Buildings other than dwellings (new)

Fabric Element	Floor (W/m ² K)
Part L2 2012 (England)	0.18
Section 6 2022 (Scotland)	0.18
Part L2 2022 (Wales)	0.22
Technical Guidance Document L (Ireland)	0.21
Technical Booklet F2 2022 (Northern Ireland)	0.21

Buildings other than dwellings (existing)

Fabric Element (W/m ² K)		Floor (W/m ² K)
Part L2 2022 (England)	Extension	0.18
	Thermal upgrade	0.25
Section 6 2022 (Scotland)	*Extension	0.18
	Thermal upgrade	0.18
Part L2 2022 (Wales)	Extension	0.18 (domestic in character) 0.22 (all other buildings)
	Thermal upgrade	0.25
Technical Guidance Document L (Ireland)	Extension	0.21
	Thermal upgrade	0.45 (Ground floors) 0.25 (other exposed floors)
Technical Booklet F2 2022 (Northern Ireland)	Extension	0.21
	Thermal upgrade	0.25

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

All stated U-values should be verified with the ROCKWOOL technical solutionsteam before ordering.



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



Acoustic performance for floors

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

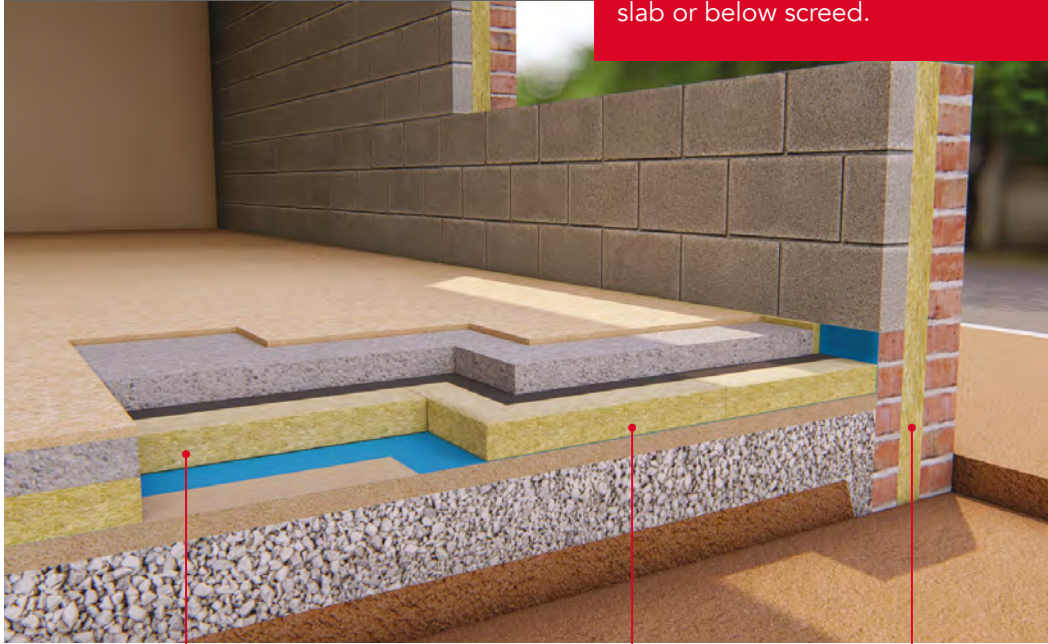




Ground floors

Ground bearing slab

Thermal RockFloor® can be installed below the concrete slab or below screed.



*Thermal
RockFloor*

*Thermal RockFloor
to perimeter edge*

*ROCKWOOL
150mm Cavity Slab 32*

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:

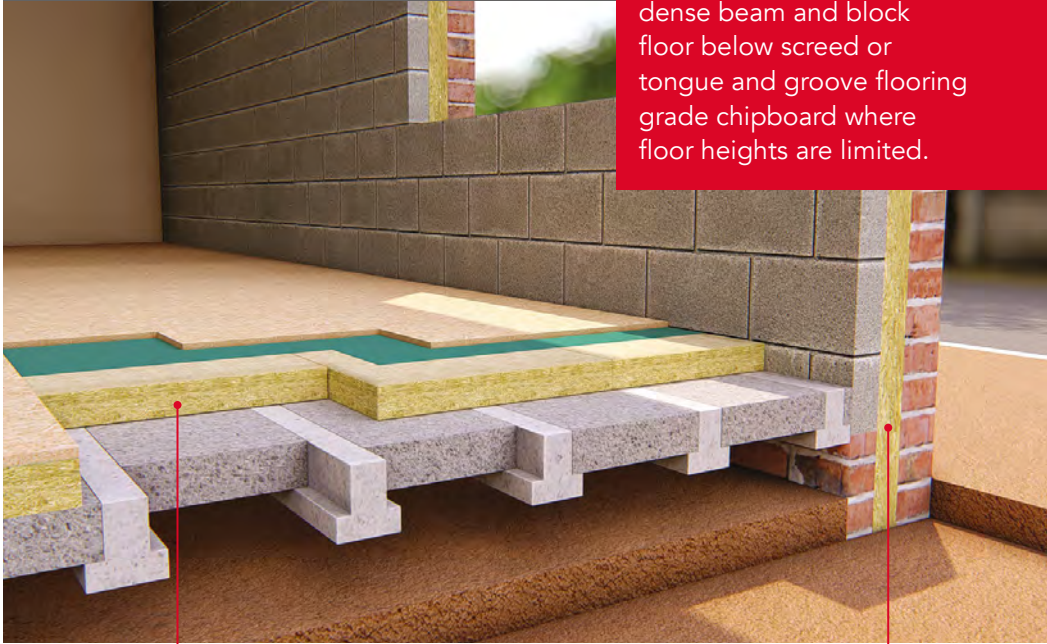
- Minimises thermal bridging
- Easy handling and fitting
- Absorbs subfloor imperfections
- Can be placed over or under the over site slab



Ground floors

Suspended concrete beam & block

ROCKWOOL Thermal RockFloor is laid over the dense beam and block floor below screed or tongue and groove flooring grade chipboard where floor heights are limited.



*Thermal
RockFloor*

*ROCKWOOL
150mm Cavity Slab 32*

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:

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



Product and application performance

Thermal RockFloor

Thickness required* (mm)

Construction 1: Ground bearing slab

U-values P/A ratio	0.25	0.22	0.20	0.18	0.15	0.13	0.11
0.1	nil	nil	nil	25*	40	70	110
0.2	30	50	65	85	120	160	200
0.3	60	80	95	115	150	190	235
0.4	75	95	110	130	170	210	255
0.5	80	100	120	150	180	220	265
0.7	95	115	130	150	200	230	280
0.9	105	125	140	160	200	235	285

Construction 1: Ground bearing slab

U-values P/A ratio	0.25	0.22	0.20	0.18	0.15	0.13	0.11
0.1	nil	30	50	65	110	150	175
0.2	65	80	100	120	160	200	245
0.3	80	100	120	140	180	210	265
0.4	95	115	130	150	190	230	265
0.5	100	120	135	160	200	230	285
0.7	105	130	145	165	210	245	285
0.9	115	130	150	170	210	245	285

*Total thickness shown may require multiple layers of insulation and may not reflect the commercial thicknesses available, and may be subject to minimum order quantities. All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.



Product and application performance

Standards and approvals

Product	CE marking	Reaction to fire	Thermal conductivity (W/m ² K)
Thermal RockFloor	✓	Euroclass A1	0.038

Product requirement

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

*Total thickness shown may require multiple layers of insulation and may not reflect the commercial thicknesses available, and may be subject to minimum order quantities. All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.



Ground floors

Suspended timber

Trade Range solution:

140mm Thermal Frame Slab 32

U-value achieved:

0.13 (0.1 P/A Ratio)



ROCKWOOL
Thermal Frame Slab 32

Supporting
wire mesh

ROCKWOOL
150mm Cavity Slab 32

ROCKWOOL Thermal Frame Slab 32 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
- Fast and easy to handle and install

Product and application performance

Thermal Frame Slab 32 between joists

Thickness required (mm)

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

Based on 9% timber bridging

Standards and approvals

Product	CE marking	Reaction to fire	Fire resistance
Thermal Frame Slab 32	✓	Euroclass A1	-

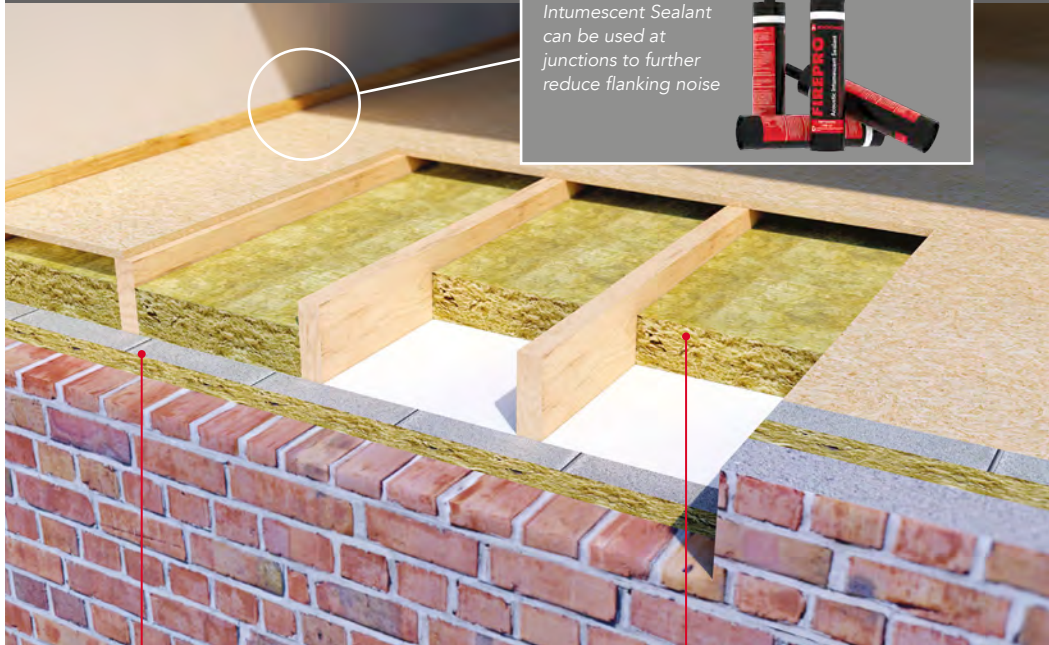
Product requirement

Product	Length (mm)	Width (mm)	Approved thicknesses (mm)
Thermal Frame Slab 32	1200	570	140



Intermediate floors

Timber joists



FirePro® Acoustic Intumescent Sealant can be used at junctions to further reduce flanking noise



ROCKWOOL
Sound Slab

ROCKWOOL
Sound Slab

ROCKWOOL Sound Slab has been designed for use between the joists of internal floors.

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.

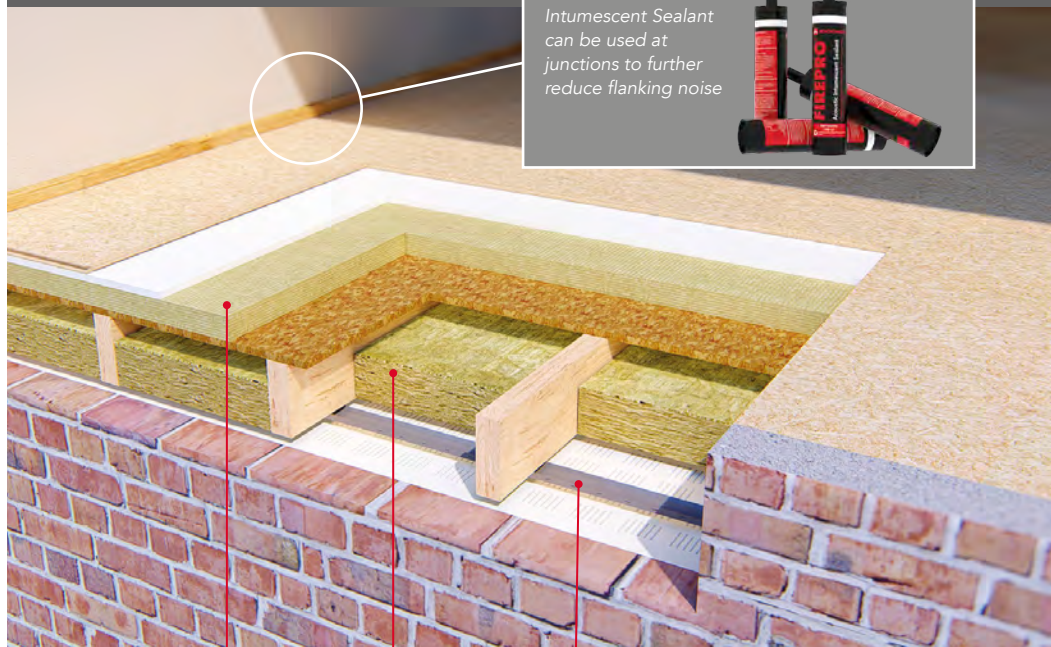
Benefits:

- Non-combustible (Euroclass A1)
- Flexible edge offers accurate fit to all widths
- 40dB sound reduction for internal floors
- Fast and easy to handle and install



Separating floors

Timber joists



FirePro® Acoustic Intumescent Sealant can be used at junctions to further reduce flanking noise



Acoustic RockFloor

ROCKWOOL Sound Slab

Resilient bars can be used to isolate the ceiling from the timber joists and further reduce noise transfer

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.

The 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



Product and application performance

Example specification Test report ref: 24502-SRL-RP-XT-008-P1	Performance
18mm T&G Chipboard	Airborne Reduction $R_w (C; Ctr) = 65dB$ Impact Reduction $L_{n,w} = 52dB$
30mm Acoustic RockFloor	
15mm acoustic plasterboard	
15mm OSB	
100mm Sound Slab	
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

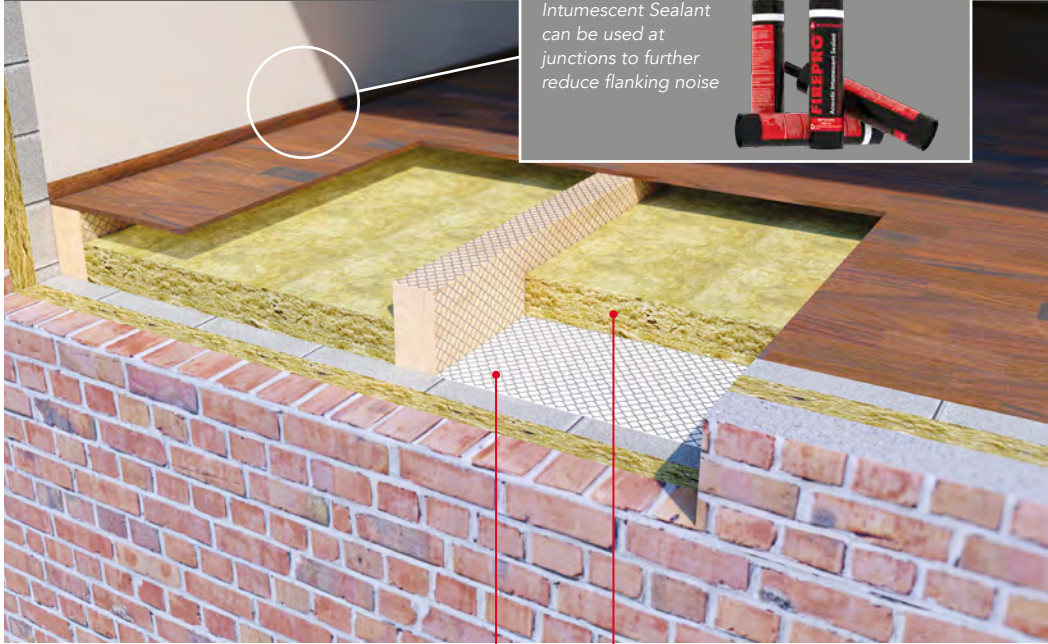
Product	Length (mm)	Width (mm)	*Approved thickness range (mm)
Acoustic RockFloor	1000	600	25-50
Sound Slab	1200	400 & 600	50, 70 & 100
	1200	600	140

*Thickness options may be subject to a minimum production volume



One hour fire floor

Timber joists



FirePro® Acoustic Intumescent Sealant can be used at junctions to further reduce flanking noise



Combined with a wire mesh, a 100mm thickness of ROCKWOOL Sound Slab can provide a 60 minute fire resistant floor

100mm Sound Slab

ROCKWOOL 100mm 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)
- Thermal, acoustic and fire properties
- Fast and easy to handle and install

Roof solutions

The ROCKWOOL 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, our collection of solutions have 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 L1 2021 (England) (W/m ² K)	Section 6 2022 (Scotland) (W/m ² K)	Part L1 2022 (Wales) (W/m ² K)	Technical Guidance Document (Ireland) (W/m ² K)	Technical Booklet F1 2022 (N. Ireland) (W/m ² K)
Wall	0.18	0.15	0.13	0.13	0.15
Roof	0.11	0.09	0.11	0.11	0.13
Floor	0.13	0.12	0.11	0.14	0.20
Party wall	0.00	0.00	0.00	-	0.13

Table 1b: Dwellings (existing)

Fabric element	Part L1 2021 (England)		Section 6 2022 (Scotland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension* (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.18	0.55 C 0.30 E/I	0.17	0.17
Pitched roof - ceiling	0.15	0.16	0.12	0.12
Pitched roof - rafter	0.15	0.16	0.12	0.12
Flat roof	0.15	0.16	0.12	0.12
Floor	0.18	0.25	0.15	0.15

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

CCavity **E/I**External or internal



Thermal performance for roofs

Table 1b: Dwellings (existing)

Fabric element	Part L1 2022 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F1 2022 (N. Ireland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.18 H 0.21 F	0.55 C 0.30 E/I	0.18	0.55 C 0.35 •	0.28	0.55 C 0.30 •
Pitched roof - ceiling	0.13	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.13	0.16	0.16	0.25	0.18	0.18
Flat roof	0.13	0.16	0.20	0.25	0.18	0.18
Floor	0.15	0.25	0.18	0.45 GF 0.25 OEF	0.22	0.25

CCavity **E/I**External or internal •Other **H**Houses **F**Flats **GF**Ground floors

OEFOther exposed floors



Thermal performance for roofs

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

Table 2a: Buildings other than dwellings (new)

Fabric element	Part L2 2021 (England) (W/m ² K)	Section 6 2022 (Scotland) (W/m ² K)	Part L2 2022 (Wales) (W/m ² K)	Technical Guidance Document (Ireland) (W/m ² K)	Technical Booklet F2 2022 (N. Ireland) (W/m ² K)
Wall	0.26	0.21	0.26	0.21	0.21
Roof	0.16 P 0.18 F	0.16	0.20	0.16 P 0.20 F	0.16 P 0.20 F
Floor	0.18	0.18	0.22	0.21	0.21

Table 2b: Buildings other than dwellings (existing)

Fabric element	Part L2 2021 (England)		Section 6 2022 (Scotland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension* (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.26	0.55 C 0.30 E/I	0.21	0.21
Pitched roof - ceiling	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.16	0.18	0.16	0.16
Flat roof	0.18	0.18	0.16	0.16
Floor	0.18	0.25	0.18	0.18

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

CCavity **E/I**External or internal



Thermal performance for roofs

Table 2b: Buildings other than dwellings (existing)

Fabric element	Part L2 2022 (Wales)		Technical Guidance Document (Ireland)		Technical Booklet F2 2022 (N. Ireland)	
	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)	Extension (W/m ² K)	Thermal upgrade (W/m ² K)
Wall	0.21 D 0.26 A	0.55 C 0.30 E/I	0.21	0.55 C 0.35 •	0.21	0.55 C 0.30 •
Pitched roof - ceiling	0.15 D 0.15 A	0.16	0.16	0.16	0.16	0.16
Pitched roof - rafter	0.15 D 0.18 A	0.18	0.16	0.25	0.16	0.18
Flat roof	0.15 D 0.18 A	0.18	0.20	0.25	0.20	0.18
Floor	0.18 D 0.22 A	0.25	0.21	0.45 GF 0.25 OEF	0.21	0.25

CCavity **E/I**External or internal **•**Other **D**Domestic in character **A**All other buildings

GFGround floors **OEF**Other exposed floors



Cold pitched roofs

Horizontal loft insulation



Thermal Roll

Thermal Cavity Slab 32

ROCKWOOL Thermal Insulation Roll has been designed to maximise home energy efficiency by reducing heat transfer through the roof. Thermal Roll has the effect of both helping to reduce heating bills and improving home comfort, helping keep occupants warmer in the winter and cooler in the summer.

Thermal Insulation Roll is non combustible and can withstand temperatures in excess of 1000°C.

Benefits:

- Non-combustible (Euroclass A1)
- 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.

Application performance

U-value (W/m ² K)	Thermal Roll between joists (mm)	Thermal Roll over joists (mm)	Total insulation thickness (mm)
0.14	100	200	300
0.09	100	400	500

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

All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering.





Warm pitched roofs

Pitched roof rafters: Room in a roof Insulation



Frame Slab 32

HardRock® Multi-Fix (DD)

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.

The system comprises a high density ROCKWOOL HardRock Multi-Fix (DD) board mechanically fixed over the rafters with Frame Slab 32.

Benefits:

- Non-combustible (Euroclass A2, s1-d0)
- Dual density HardRock® acoustic properties
- Protects against external noise pollution such as rain noise, aircraft, road and rail

Application performance

U-value (W/m ² K)	HardRock [®] over the rafters (mm)	Frame Slab 32 between joists (mm)
0.16	85	140
0.14	115	140
0.11	185	140

47mm wide rafters at 600mm centres 7.8% timber bridging Overlay board: ROCKWOOL HardRock[®] Multi-fix (DD) 60mm or 85mm. Between rafters: ROCKWOOL Frame Slab 32 fully filling.

Product requirement, standards and approvals

Product	Thickness (mm)	Width (mm)	Length (mm)	Lambda (W/mK)	CE marking	Reaction to fire
Frame Slab 32	140	570	1200	0.032	✓	Euroclass A1
HardRock [®] Multi-Fix DD	60-185	1200	1000	0.039	✓	Euroclass A1

The thicknesses shown are to meet the specified U-values and may not reflect the commercial thicknesses available, and may be subject to minimum order quantities. All stated U-values should be verified with the ROCKWOOL technical solutions team before ordering. Double layering would need to be considered with a structural engineer.

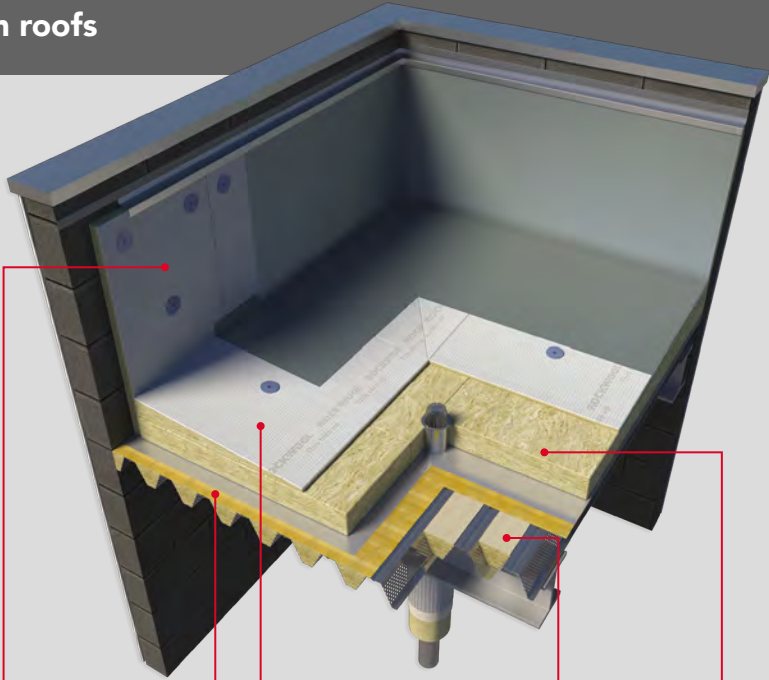
Note: The RockFall system is suitable for most roof pitches. It is not designed to add to the structural stability of the roof.

- Advice regarding the requirements for any additional bracing etc, must be sought from a qualified engineer or the truss manufacturer (see "installation guidance" for further detail).
- The ROCKWOOL HardRock Multi-Fix (DD) board is not an alternative to cross bracing; the roof design should be based on the following structural euro codes and recommendations:
 - BS EN 1991-1-1: imposed loads for buildings.
 - BS EN 1991-1-3: snow loads.
 - BS EN 1991-1-4: wind actions.



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.

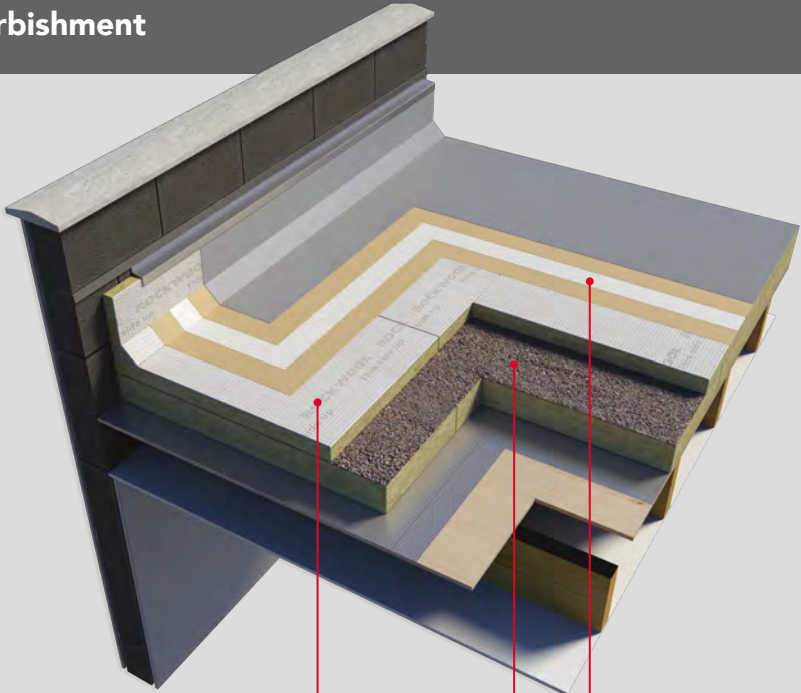
Benefits:

- 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.

*Subject to the application



THERMAL INSULATION

Insulation layer 1 (mm)	Insulation layer 2 (mm)	Single ply membrane U-value (W/m ² K)	Bitumen (2 layer felt) U-value (W/m ² K)
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 _w 44	L _{IA} 48.7	R _w 45	L _{IA} 47.5
150	85	R _w 45	L _{IA} 47.8	R _w 46	L _{IA} 46.7
150	105	R _w 46	L _{IA} 47.1	R _w 47	L _{IA} 46.1

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

Standards and approvals

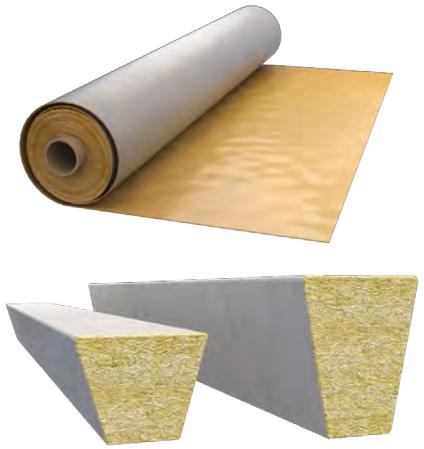
Product	CE marking	Reaction to fire	Fire resistance (minutes)	3rd party certification
HardRock® Multi-Fix	✓	Euroclass A2, s1-d0	120	LPCB (Certificate 022e)

Roofing ancillaries

Acoustic Membrane & Acoustic Infills

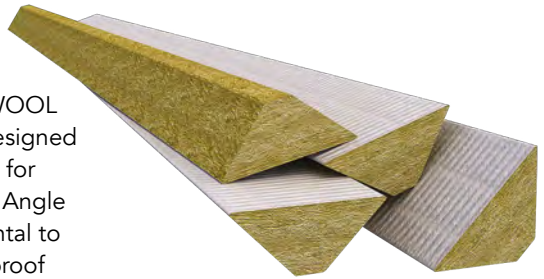
For the most demanding of acoustic specifications, ROCKWOOL Acoustic Membrane can improve airborne and rain noise performance even further.

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.



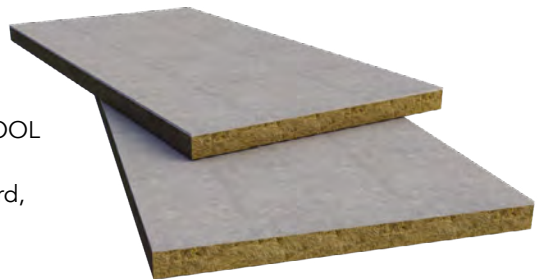
Multi-Fix Angle Fillets

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.

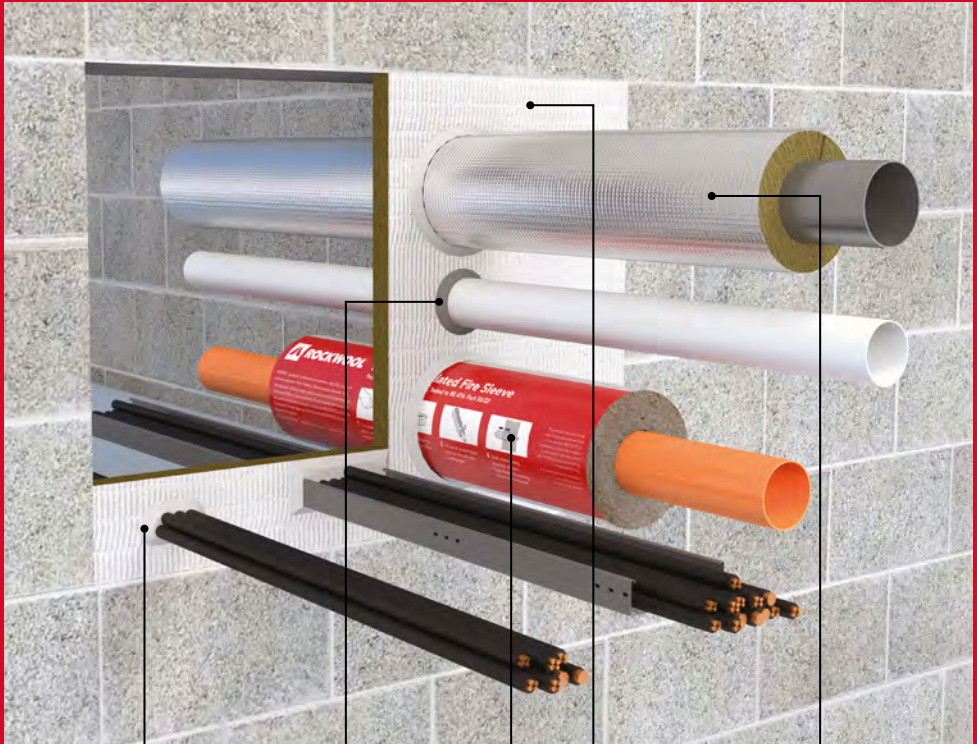


HardRock® UB34

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*

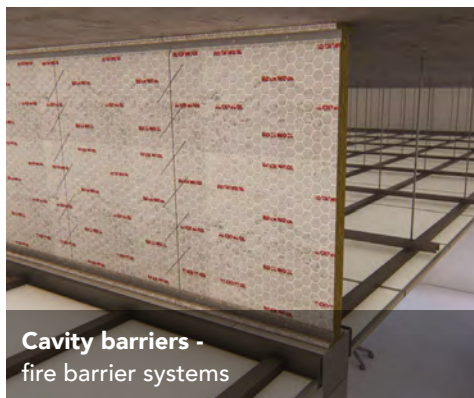
Fire Stopping solutions ensure that the fire resistance of protected walls, floors and roofs are never compromised by services or voids.

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

ROCKWOOL specialist ranges for fire protection, fire stopping and building services



Cavity barriers -
fire barrier systems



Cavity fire stops -
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 support



Technical advice

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



Digital tools

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



Product selection

Our expert team is on hand to help you with any technical questions and choosing the right product for the job.



Product availability

Our 60,000m² logistics centre helps ensure robust product available and efficient lead times.



Supporting sustainability

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

Digital tools

Visit www.rockwool.com/uk to access the following digital tools - all designed to save time and make your jobs easier.



Materials Calculator

Use our materials calculator to work out the number of packs needed.



Acoustic Calculator

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



U-value Calculator

Our U-value tool calculates the thermal performance of walls, floors and roofs quickly and easily, with around 2,500 predetermined calculations available. It then signposts to the correct product and thickness to meet 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.com 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 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



LEGAL NOTICES

General safety requirements – Building Safety Act 2022

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

ROCKWOOL Limited reserves the right to amend the specification of its products without notice. Changes to the ROCKWOOL manufacturing process, or to pertinent regulations, may be reflected in changes to tested and certified product performance. Whilst ROCKWOOL Limited endeavours to keep its publications up to date, readers will appreciate that between publications there may be pertinent changes in the law or other developments affecting the accuracy of the information contained in our publications.

ROCKWOOL Limited does not accept responsibility for the consequences of using (including testing or certifying) its products in applications different from those explicitly described in the relevant ROCKWOOL product datasheets. Expert advice should be sought, and ROCKWOOL Limited should be contacted, where such different use is contemplated, or where the extent of any use described by ROCKWOOL Limited is in doubt.

The ROCKWOOL Trademark

ROCKWOOL® - our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the world.

The ROCKWOOL trademark is one of the most important assets of the ROCKWOOL Group, and is therefore well-protected and defended by ROCKWOOL throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion, you must apply for a Trade Mark Usage Agreement.

To apply, write to:
marketcom@rockwool.com

Trademarks

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

ROCKWOOL®, RockClose®, RainScreen Duo Slab®, HardRock®, RockFloor®, Flexi®, RockFall®, FirePro®, DuctRock®, BeamClad®, NyRock®

© ROCKWOOL 2024.
All rights reserved.

Photography and illustrations

The product illustrations are the property of ROCKWOOL Limited and have been created for indicative purposes only.

If you require permission to use ROCKWOOL images, you must apply for a Usage Agreement.

To apply, write to:
marketcom@rockwool.com

Unless indicated below, the photography and illustrations used in this guide are the property of ROCKWOOL Limited. We reserve all rights to the usage of these images.

Page 2: Tim Bishop
Page 8: Shutterstock
Page 11: Tim Bishop
Page 16: Rick Gem
Page 25: Tim Bishop
Page 35: Shutterstock
Page 55: Shutterstock

HEALTH & SAFETY

A Material Safety Data Sheet is available and can be downloaded from www.rockwool.com/uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

ROCKWOOL Limited

Pencoed
Bridgend
CF35 6NY

01656 862 621
info@rockwool.co.uk
www.rockwool.com/uk

Version 2.00 May 2024

