Thermal Frame Slab 32

Thermal insulation designed specifically for use within timber frames.

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 slab delivers insulation with optimised density and performance; offering a low thermal conductivity designed to meet and exceed thermal building regulations.

- Low thermal conductivity of 0.032 W/mK.
- Thermal Frame Slab 32 is able to resist temperatures of over 1,000°C, and achieves the highest Euroclass A1 non-combustibility classification as defined in EN 13501-1.
- The dimensional stability means the slabs will not slump or sag after installation for at least 50 years, and probably longer.*
- The slab is available in 570mm widths for 600mm timber frame applications.

**Testing done at Danish Technical Institute (DTI) in 2023, "Testing ROCKWOOL insulation from CPH airport hangar 4".*

ROCKWOOL Thermal Frame Slab 32 is manufactured using NyRock® technology.

It delivers the most thermally efficient stone wool frame insulation currently available in the UK and Ireland.†

†Correct at time of publication, based on publicly available performance data of comparable stone wool products

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Thermal Frame Slab 32

APPLICATIONS

Thermal Frame Slab 32 has been designed specifically for installation into the standard size 600mm studs, of external timber or steel frame walls.

Stone wool insulation has a unique physical structure and durability, meaning that it keeps its shape over time, despite changes in temperature or humidity. With its dense fibre structure, Thermal Frame Slab 32 fits into frame systems, and can help minimise waste by reducing cutting and excess offcuts.

When ROCKWOOL stone wool slabs are tightly joined together, the edges knit together providing a continuous insulating layer of trapped pockets of air with no gaps and no associated loss of thermal performance.*

This product is intended for use on the external side of the vapour barrier.

PERFORMANCE

Thermal performance

Thermal conductivity of 0.032 W/mK in accordance with BS EN 13162:2012 + A1:2015.

Fire performance

Thermal Frame Slab 32 is non-combustible achieving a reaction to fire classification of A1, as defined in EN13501-1.

Acoustic performance

The non-directional fibre orientation and density of ROCKWOOL stone wool helps absorb sound waves and dampen vibrations, reducing the transmission of external noise when used in external wall applications.

**ROCKWOOL Technical Bulletin 3 – Performance Gap*

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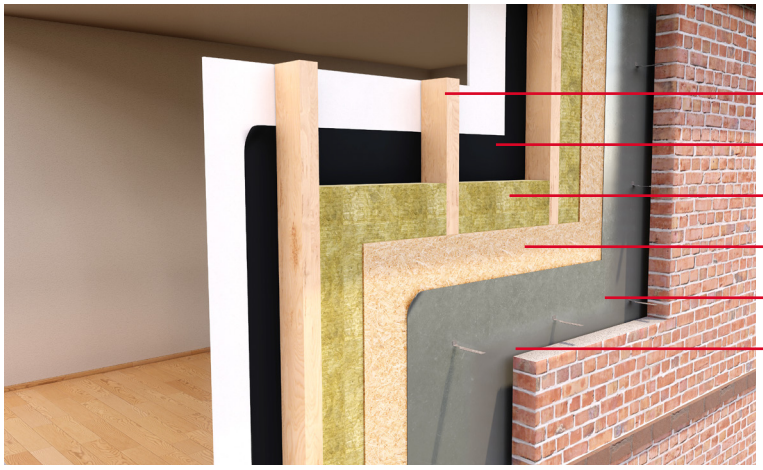
Thermal Frame Slab 32

Application performance – Timber frame external wall

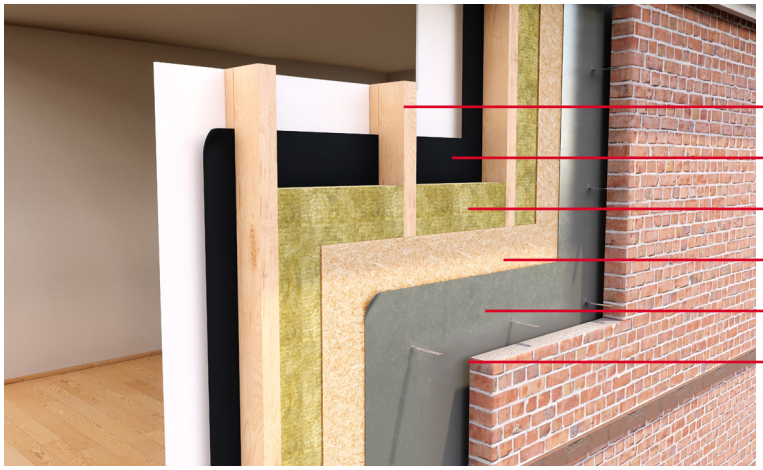
Timber frame external wall with brick finish / insulation between the studs, without service void:

Timber frame slab (mm)	Stud depth	U-value (W/m²K)	Vapour control layer	Breather membrane		
			Standard	Standard	Tyvek Reflex	Protect TF200 Thermo
140	140	0.27	✓	✓		
140	140	0.24	✓		✓	
140	140	0.23	✓			✓



Insulation between the studs, with service void:

Timber frame slab (mm)	Stud depth	U-value (W/m²K)	Vapour control layer			Breather membrane		
			Standard	Tyvek Air guard	Protect VC Foil Ultra	Standard	Tyvek Reflex	Protect TF200 Thermo
140	140	0.25	✓			✓		
140	140	0.21		✓			✓	
140	140	0.20			✓			✓



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Thermal Frame Slab 32

PRODUCT INFORMATION

Thickness	Thermal resistance m²K/W	Width (mm)	Length (mm)	Pieces/ pack	Area/ pack (m²)	Packs/ pallet	Pieces/ pallet
140	4.35	570	1200	3	2.05	9	12

ADDITIONAL INFORMATION

Durability

Tests of our stone wool recovered from old buildings have shown that it retains its performance characteristics – thermal, mechanical, fire resistance – for at least 50 years, and probably longer. A test of a 65-year-old stone wool sample found in 2023 during a renovation of Copenhagen airport showed that these characteristics had not diminished after 65 years.*

**Testing done at Danish Technical Institute (DTI) in 2023, "Testing ROCKWOOL insulation from CPH airport hangar 4"*

Water resistance and moisture

ROCKWOOL stone wool insulation is water repellent and non-hygroscopic, meaning it will not absorb water from the surrounding environment. It retains its thermal performance even in humid conditions, helping to support the durability of the building fabric.

Condensation

ROCKWOOL stone wool insulation is vapour permeable, reducing the risk of condensation, which can lead to rot, mould, and humidity damage.

Vapour control and breather membranes – managing moisture

A vapour control layer is essential on the 'warm' side of the insulation and frame, to reduce the risk of condensation forming inside the building. Thermal benefits can be achieved by using high performance vapour control membranes when they have a low emissivity reflective surface, and 20mm or more of non-ventilated air space. The benefit to the u-value can be seen in the performance tables.

The low emissivity R-values used in the calculations for the service zone are based on manufacturers claims:

- Standard VCL = 0.180 m²K/W
- Tyvek AirGuard = 0.680 m²K/W
- Protect VC Foil = 0.780m2 K/W

Breather membranes

A vapour permeable membrane on the outside of the sheathing board is also necessary, this protects the timber frame from water penetration whilst allowing water vapour to escape. Again, enhanced thermal benefits are offered by reflective low emissivity membranes, where there is a clear air space of 20mm or more. The effect on the overall wall u-value can be seen in the tables.

The low emissivity R-values of the external cavity used in the calculations above are based on manufacturers claims:

- Standard breather membrane = 0.180m²K/W
- Tyvek Reflex = 0.540m²K/W
- Protect TF200 Thermo = 0.770m²K/W

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Thermal Frame Slab 32

STANDARDS AND APPROVALS

Certificate
Manufactured in accordance with BS EN 13162:2012+A1:2015 Thermal insulation products for buildings. Factory made mineral wool (MW) products. Designation code: MW-EN 13162-T4-WS-WL(P)-MU1.
Manufactured under ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems.

INSTALLATION

The product must be installed in accordance with the current ROCKWOOL guidelines. For further information please visit **rockwool.com/uk** or contact our Technical Solutions Team on 01656 868490.

SPECIFICATION CLAUSES

The following NBS clauses include Thermal Frame Slab 32:

P10
140
K10
145
155
165

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Thermal Frame Slab 32

BUILDING SAFETY AND PRODUCT USE

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®

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Health and safety

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

Photography and illustrations

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

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

To apply, write to:
marketcom@rockwool.com

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Thermal Frame Slab 32

Company:	ROCKWOOL Limited
Version:	Version 1.04 August 2026 *(to check this is the latest version, please refer to rockwool.com/uk)*
Revised on:	10.08.2026
Product name:	Thermal Frame Slab 32
Replaces version:	Version 1.03 October 2025
Changes made:	• Updated application information
Additional information:	N/A

Please ensure you are using the latest version of this document by verifying it on our official website. Do not rely on printed or previously downloaded copies, as these may be out of date.

Please contact the ROCKWOOL Technical Support Team if you would like to access archived versions of this document.

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ROCKWOOL stone wool – safe to install and live alongside

There are no hazardous classifications associated with stone wool insulation manufactured by ROCKWOOL UK according to EU REACH and UK REACH regulations on health and the environment.

ROCKWOOL safe use instruction sheets and material safety data sheets (where applicable) can be downloaded here.

Sustainability

ROCKWOOL products are used to help enrich modern living, supporting more resilient and comfortable buildings.

We transform abundant, natural volcanic rock into stone wool insulation products that help our customers tackle energy consumption, noise pollution, fire resilience, and climate change challenges such as water scarcity and flooding.

Since our stone wool is endlessly recyclable with no loss in its performance properties, we can take back clean, uncontaminated new off-cuts and unused ROCKWOOL stone wool insulation from construction sites in the UK. Our service, Rockcycle®, takes back our stone wool and recycles it back into production where it is used to make new ROCKWOOL products.

Our annual sustainability reports, which set out progress against our sustainability goals, and further details of the positive impacts of using our products can be found on our website.

Environment

ROCKWOOL takes a fact-based, auditable approach to documenting our progress in maximising our products' positive impact and minimising the effect our operations have on the environment, backed by third-party references and methodologies. Further details can be found online in our annual sustainability report.

Our high-tech production process uses filters, pre-heaters, after-burners and other cleaning and collection systems that help to reduce the effects of our manufacturing operations on the environment.

ROCKWOOL stone wool insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

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