

Steel Frame Slab

Non-combustible thermal insulation designed for use within steel frame constructions

ROCKWOOL Steel Frame Slab is a semi-rigid insulation designed specifically for use between the studs in light gauge steel frame wall constructions.

ROCKWOOL Steel Frame Slab has been tested to BS EN 13501-1 achieving Euroclass reaction to fire classification A1. ROCKWOOL stone wool acts as a barrier to fire, withstanding temperatures over 1,000°C and, crucially, does not produce toxic smoke.

- Thermal performance - low thermal conductivity of 0.034 W/mK
- Non-combustible - Euroclass fire rating of A1, as defined in EN 13501-1
- Sound absorbent by nature - high density, stone wool fibres
- Breathable - water repellent, and vapour permeable. Helps prevent rot and mould
- Durability - no slumping or sagging, maintains performance over time
- Sustainability - produced from abundant, renewable volcanic rock



ROCKWOOL Steel Frame Slab has been designed specifically for quick and easy installation into standard size 600mm steel studs, making it an ideal solution for Modern Methods of Construction.

Steel Frame Slab



ROCKWOOL stone wool insulation provides thermal insulation, maintaining a comfortable indoor environment by protecting against fluctuations in outside temperature. ROCKWOOL Steel Frame Slab has a low product weight - assisting in handling and installation, increasing the volume of product per pack and maximising the efficiency of the ROCKWOOL compression packing technology to improve both transport and storage efficiency.

Urbanisation is a strong trend that brings many benefits. However, with this comes busier roads, railways and airports, a higher population density and more sources of noise. ROCKWOOL stone wool insulation can help to combat this increasingly important issue. Made up of thousands of high-density stone wool fibres that trap sound waves and absorb vibration, ROCKWOOL Steel Frame Slab helps to prevent unwanted noise from disturbing indoor comfort.

Another benefit of ROCKWOOL stone wool insulation is its ability to repel liquid water, while still allowing water vapour to pass through. This allows the construction to both stay dry and be able to breathe; reducing the risk of condensation, which can lead to rot, mould and humidity damage.

Stone wool insulation has a unique physical structure, meaning that it keeps its shape over time, despite changes in temperature or humidity. This dimensional stability means performance is maintained through a building's lifetime. With a 600mm slab width and a dense fibre structure, ROCKWOOL Steel Frame Slab is also quick and easy to fit, creating minimal waste. The slabs are robust and do not sag or slump, nor leave performance sapping gaps in the insulation layer; maximising in-situ performance.

APPLICATIONS

ROCKWOOL Steel Frame Slab has been designed specifically for quick and easy installation into standard size 600mm steel studs. This means less time to install, and a more reliable and long-lasting fit.

Steel Frame Slab

PERFORMANCE

Thermal performance

Steel Frame Slab achieves a thermal conductivity lambda (λ) value of 0.034 W/mK in accordance with BS EN 13162:2012 + A1:2015.

Fire performance

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

Acoustic performance

The Steel Frame Slab can significantly reduce outside sources of noise when used in an external wall.

The non-directional fibre orientation and density of stone wool means that sound waves are trapped, and vibrations dampened which can significantly reduce outside sources of noise when used in an external wall.

ROCKWOOL insulation retains its shape and thickness for the lifetime of the building, which means it performs acoustically decade after decade.

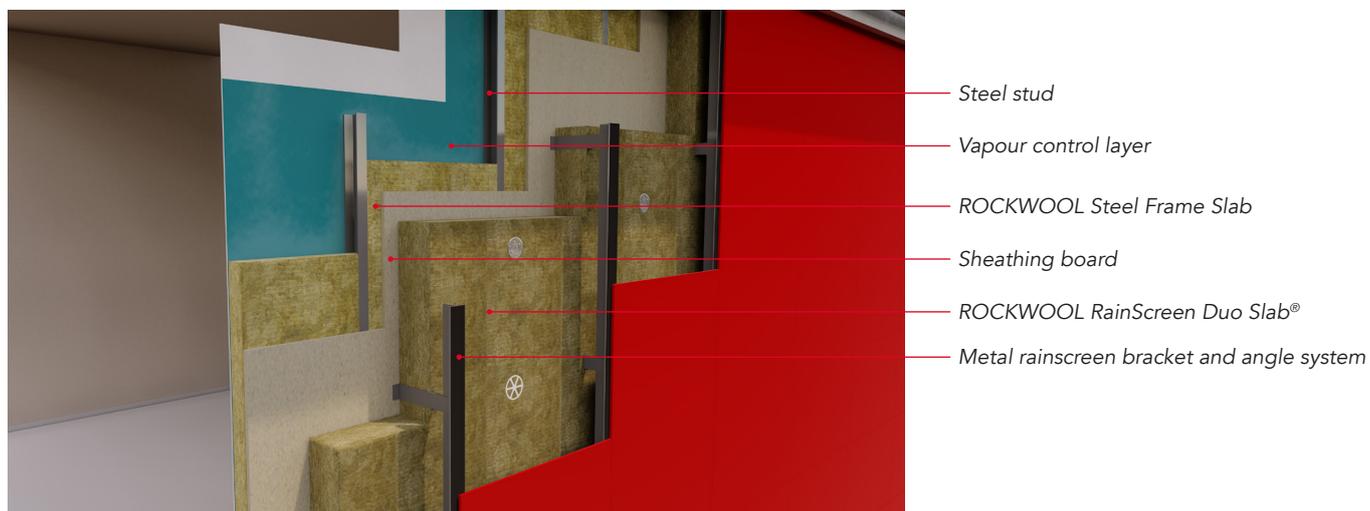
Steel Frame Slab

TYPICAL U-VALUES

Typical wall constructions and U-value are listed in the tables below:

External wall U-values - Example steel frame constructions

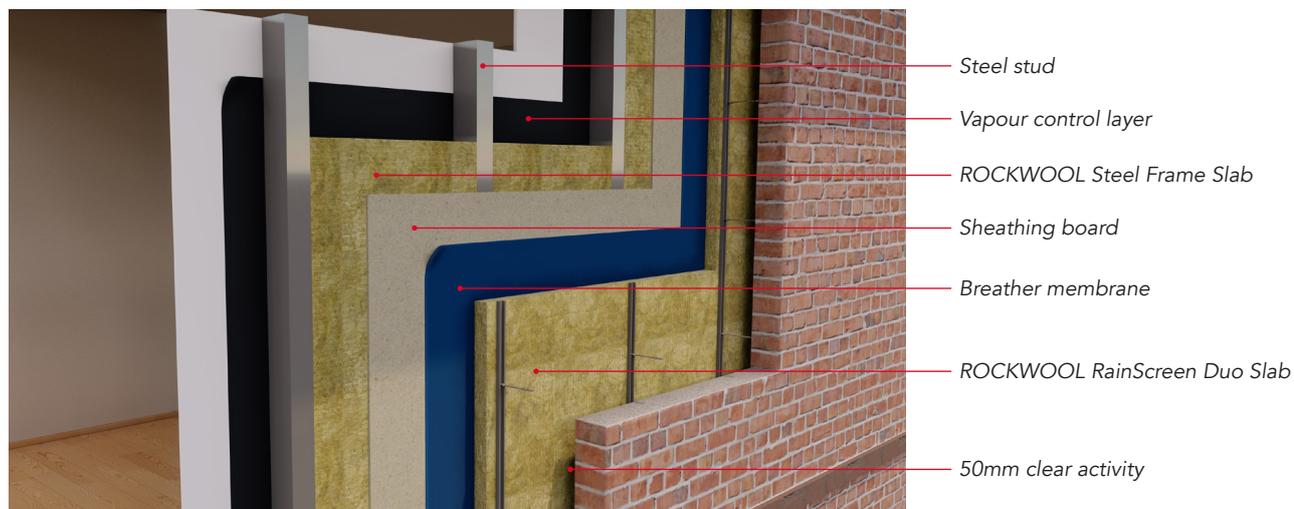
1. Steel Framing System / In-fill Walling with Rainscreen Façade



U-value (W/m ² K)	Stud depth (mm)	Steel Frame Slab (mm)	RainScreen Duo Slab
0.15	150	150	200
0.18	150	150	150
0.20	150	150	125
0.25	150	150	75
0.18	100	100	180
0.20	100	100	150
0.25	100	100	100

Steel Frame Slab

2. Steel Frame System with Brick Outer



U-value (W/m ² K)	Stud depth (mm)	Steel Frame Slab (mm)	RainScreen Duo Slab
0.27	100	100	50
0.24	150	150	50
0.19	100	100	100

Steel Frame Slab

PRODUCT INFORMATION

Length (mm)	Width (mm)	Thickness (mm)
1200	600	Available in a range of sizes between 50mm and 200mm

*Thickness options may be subject to a minimum production volume. Speak to the specification team for guidance.

ADDITIONAL INFORMATION

Durability

ROCKWOOL stone wool is durable by nature. Sample testing from existing buildings shows that ROCKWOOL stone wool retains its performance for at least 65 years* without being affected by compression or temperature and humidity changes.

*FIW, *Durability Project Mineral Wool (2016)*.

Water Resistance and Moisture

ROCKWOOL stone wool repels liquid water due to its fibre orientation and a water repellent additive.

Condensation

ROCKWOOL stone wool insulation allows the construction to breathe, reducing the risk of condensation, which can lead to rot, mould and humidity damage.

STANDARDS AND APPROVALS

Certificate
Steel Frame Slab satisfies the requirements of BS EN 13162 "Thermal insulation products for buildings. Factory made mineral wool (MW) products".
Manufactured under ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems.



INSTALLATION

With an engineered optimal density, the Steel Frame Slabs are light and easy to install, sized to friction fit into 600mm steel studs without the need to cut or create waste. Any cutting that is required can be done quickly and easily, even in awkward spacing, using a sharp knife.

The slabs are compressed and shrink wrapped in polyethylene film, supplied on pallets shrouded with a waterproof hood suitable for outside storage.

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

Steel Frame Slab

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.

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

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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](#).



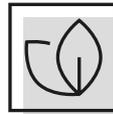
Sustainability

ROCKWOOL products are used to enrich modern living, creating safer, healthier and more climate-resilient communities.

We transform abundant, natural volcanic rock into stone wool insulation products that are used to reduce energy demand, lower fuel bills and help address society's climate change challenges.

ROCKWOOL stone wool insulation is recyclable and can be transformed into new ROCKWOOL products. Please contact us for details of how we can work together to recycle waste ROCKWOOL stone wool material that may be generated during on-site installation.

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).

