

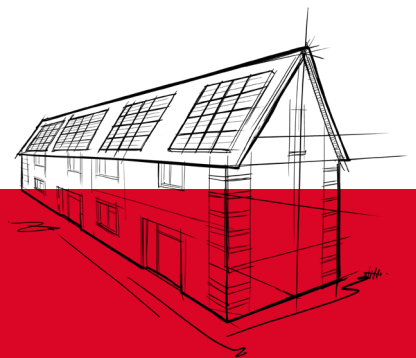


High Performance Partial Fill Cavity Slab

Thermal insulation for masonry cavity walls

High Performance Partial Fill Cavity Slab is a semi-rigid partial fill insulation solution for masonry and framed cavity wall construction. It is designed to withstand typical conditions on-site and absorb any irregularities on the inner leaf. Consists of a robust outer surface engineered to a resilient inner face. The slabs knit together when tightly butt jointed, eliminating heat loss caused by gaps.

- Thermal conductivity as low as 0.034 W/mK (0.034 W/mK 50 - 89mm; 0.035 W/mK >90mm)
- Non-combustible - Euroclass A1 classification as defined in EN 13501-1
- Robust front-face resists damage
- Slabs knit together allowing an accurate fit with adjacent slab to help eliminate gaps
- The slab features an additive to make the product highly water repellent
- BBA certified for use as a partial application with masonry inner and outer leaves. BBA Certification 93/2884



High Performance Partial Fill Cavity Slab offers a stable and durable solution for the thermal insulation of external walls.

Just like stone, ROCKWOOL stone wool insulation is durable by nature. Lasting 65 years (and counting), its performance is unaffected by weather, humidity, temperature changes or compression - and needs no technical supervision or refurbishment.

Source: Testing done at Danish Technical Institute (DTI) in 2023; FIW, Durability Project Mineral Wool (2016), p. 14.

High Performance Partial Fill Cavity Slab



APPLICATIONS

Buildings up to and including 12 metres:

- The product can be used in any exposure zone where a residual cavity width of 50mm or greater is maintained. However, the use of the product does not preclude the need to apply any external render coat or other suitable finish in severe exposure zones where such application would be normal practice.
- The minimum residual cavity width to be maintained during construction must be 25mm. To achieve this requirement, a greater nominal residual cavity width may need to be specified at the design stage to allow for inaccuracies inherent in the building process (a residual cavity nominally 50mm wide will be required by the NHBC where normal standards of tolerance and workmanship are adopted).

Buildings over 12 metres in height:

The width of the residual clear cavity to be achieved should be a minimum of 50mm, and the following requirements apply:

- From ground level, the maximum height of continuous cavity walls must not exceed 12 metres.
- Above 12 metres, the maximum height of continuous cavity walls must not exceed 7 metres.
- In both cases breaks should be in the form of continuous horizontal cavity trays discharging to the outside.
- Where the cavity width is reduced for structural reasons, e.g. by the intrusion of ring beams, a minimum residual cavity width of 25mm must be maintained and extra care must be taken with fixings and weatherproofing, e.g. the inclusion of a cavity tray.

High Performance Partial Fill Cavity Slab

PERFORMANCE

Thermal performance

High Performance Partial Fill Cavity Slab achieves a thermal conductivity lambda (λ) value of 0.032 W/mK up to 90mm thickness. Thicknesses over 90mm have a thermal conductivity of 0.035 W/mK in accordance with BS EN 13162:2012 + A1:2015.

Fire performance

High Performance Partial Fill Cavity Slab 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 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.

TYPICAL U-VALUES

Internal block W/mK	Medium dense - 1400-1450kg/m ³ 0.470 W/mK		Aircrete Hi Strength - 750kg/m ³ 0.190 W/mK		Aircrete Standard - 600kg/m ³ 0.150 W/mK	
	Light plaster U-value	P/board on dab U-value	Light plaster U-value	P/board on dab U-value	Light plaster U-value	P/board on dab U-value
80	0.31	0.31	0.30	0.29	0.29	0.28
100	0.28	0.27	0.26	0.25	0.25	0.24
120	0.24	0.23	0.23	0.22	0.22	0.21
135	0.22	0.21	0.21	0.20	0.20	0.18
150	0.20	0.19	0.19	0.18	0.19	0.18



- Inner leaf blockwork
- High Performance Partial Fill
- Wall ties
- Outer leaf facing blockwork

High Performance Partial Fill Cavity Slab

DESIGN GUIDANCE

The following guidance regarding wall ties is given in good faith and is not intended to override any good practice recommendations (refer also to BBA Certificate 93/2884).

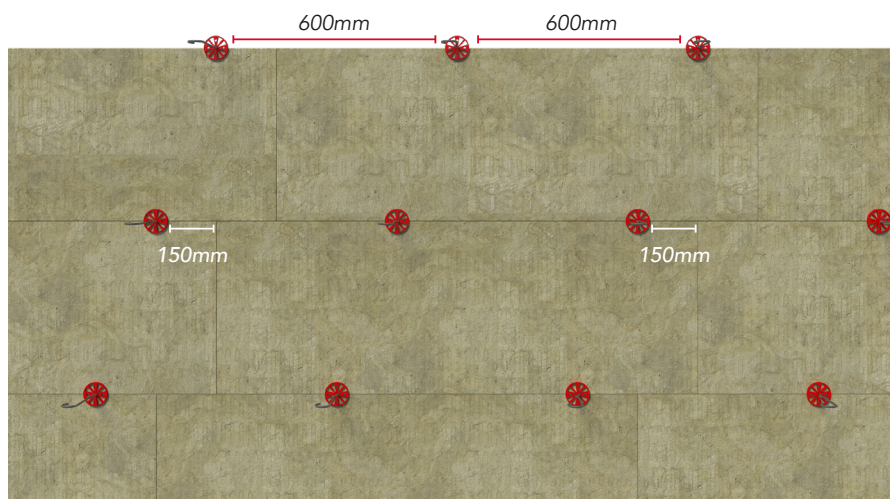
Designing the cavity wall

- The outer leaf is the first line of defence against rain and the following will help to improve its effectiveness:
- Before designing the width of the cavity, consider the dimensional tolerances of the components which make up the wall and the width of the residual airspace
- Specify weather-struck, flush or bucket handle joints. Recessed joints increase the risk of water penetration in high exposure zones. Ensure that all bed and perpend joints in the external wall are fully filled with mortar
- Vertical damp proof courses at wall openings should project at least 25mm into the cavity

Wall ties

Wall ties should be built into each leaf with a minimum embedment of 50mm. However, some manufacturers recommend an embedment of 62.5mm to allow for site tolerances. Drip features on a wall tie should be placed at the centre of an open cavity.

The specifier must ensure that the retaining clips used are suitable for the selected wall tie. See diagram below for the wall tie and retaining clip placement pattern. This wall tie stagger pattern ensures that no more than 450mm of slab overhangs a fixing.



High Performance Partial Fill Cavity Slab

PRODUCT INFORMATION

Length (mm)	Width (mm)	Thickness (mm)
1200	600	Available in a range of sizes between 50mm and 230mm

*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

The product will resist the transfer of water across the cavity. The orientation of the water repellent fibres prevent water crossing the wall construction, providing the slabs are correctly installed and sound building techniques are applied to the cavity wall construction (see our installation manual for further guidance on this). Any water penetrating the outer leaf will drain down the surface of the slab.

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
High Performance Partial Fill 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.
BBA (British Board of Agreement) Certified for use in buildings up to 12m high and for use in multi-storey applications up to 25m in height. Certificate no. 93/2884.



INSTALLATION

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.

SPECIFICATION CLAUSES

The following NBS clauses include High Performance Partial Fill Cavity Slab:

F30:12, F30:15

High Performance Partial Fill Cavity 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.

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

To apply, write to:
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High Performance Partial Fill Cavity Slab

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](#).



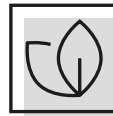
Sustainability

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).

