



# EWI System Holders

## Non-combustible thermal insulation

### Non-combustible

- ROCKWOOL stone wool achieves the highest 'A1 – Non-combustible' rating under the European Reaction to Fire Classification System
- This means that it doesn't burn and won't contribute to any stage of a fire

### Durable

- ROCKWOOL slabs are dimensionally stable and won't shrink or degrade over the lifetime of the building
- The dense outer surface provides a solid face for base coat application, and helps to prevent overdriven fixings
- Offers a high resistance to wind and rain when exposed during installation
- Tried and tested: EWI providers across Europe have been using ROCKWOOL in their systems for over 40 years

### Breathable

- The breathable open-cell structure of ROCKWOOL stone wool allows water vapour to pass through, while the randomly oriented water-repellent fibres work to prevent water ingress
- ROCKWOOL stone wool has a vapour resistance similar to that of still air

### Thermal performance

- When tightly butt jointed, the fibres of adjacent slabs will effectively knit together
- This eliminates heat losses that would otherwise be caused by gaps between slabs

### Acoustic performance

- EWI systems incorporating ROCKWOOL slabs can add significant mass to the building envelope, helping to limit the transfer of sound and vibration, while the fibrous nature of the product also helps to stop sound through absorption
- Test evidence demonstrates an improvement to the weighted sound reduction,  $R_w$ , of up to 8 dB (substrate-dependent)



**Put simply, ROCKWOOL is made from rock. Our manufacturing process recreates the inside of an active volcano, using a cupola furnace to melt volcanic basalt rock at temperatures of up to 1,500°C.**

The liquid rock is channelled into a chamber where it is spun into strands. These strands are collected, then mixed with a small amount of binder and water-repelling agent to form stone wool insulation products.

# EWI System Holders

## External Wall Dual Density Slabs

External Wall Dual Density Slab is a stone wool insulation solution specifically developed for use in external wall insulation systems.

Made using a ROCKWOOL-patented 'dual density' manufacturing process, the top layer of each slab has a distinctly higher density than the remainder of the product. This provides a robust outer surface for applying render and accepting fixings, while the resilient underside can accommodate unevenness in the substrate.

To aid installation the top layer is branded with 'THIS SIDE UP', allowing for quick and easy identification of the outer surface.

## PERFORMANCE

### Fire

Euroclass A1 – non-combustible

### Thermal

Thermal conductivity 0.036W/mK

### Strength

Tensile strength perpendicular to faces  $\geq 10\text{kPa}$

Compressive  $\geq 10\text{kPa}$

### U-values

U-value (W/m <sup>2</sup> K)	External Wall Dual Density Slab (mm)	
	New build steel frame <sup>1</sup>	Refurbishment 215mm block <sup>2</sup>
0.30	50	110
0.29	60	110
0.28	60	120
0.27	60	120
0.26	70	130
0.25	70	130
0.24	80	140
0.23	80	140
0.22	90	150
0.21	100	160
0.20	100	170
0.19	110	170
0.18	120	190
0.17	130	200
0.16	140	210

EWI System on:

<sup>1</sup> 12mm Cement Particle Board, 100mm Steel Frame filled with 100mm ROCKWOOL Flexi, 2 x 12.5mm Plasterboard.

<sup>2</sup> 215mm Dense Concrete Block, 13mm Plaster.

## PRODUCT INFORMATION

Length	Width	Thickness
1200mm	600mm	50-25mm (10mm increments)

# EWI System Holders

## External Wall HD Slab

External Wall HD Slab is a stone wool insulation solution specifically for use in external wall insulation systems where a higher density slab required.

### PERFORMANCE

#### Fire

Euroclass A1 – non-combustible

#### Thermal

Thermal conductivity 0.038 W/mK (30 – 40mm) / 0.039 W/mK (> 40mm)

#### Strength

Tensile strength perpendicular to faces  $\geq 15$  kPa

Compressive  $\geq 10$  kPa

### PRODUCT INFORMATION

Length	Width	Thickness
1200mm	600mm	30-200mm (10mm increments)

# EWI System Holders

## Double Layering

Insulation thicknesses greater than 250mm can be achieved by installing slabs in two layers.

Where possible both layers should be of the same thickness, e.g. 2 x 150mm to meet 300mm – otherwise, for ease of identification on site, two visually dissimilar thicknesses should be chosen.

### Fixing instructions

Installation is started from the left side of the façade at base track level.

When using two different slab thicknesses, the thinner of the two is installed first. To avoid thermal bridging the slabs are installed in a brick bond pattern.

### First layer

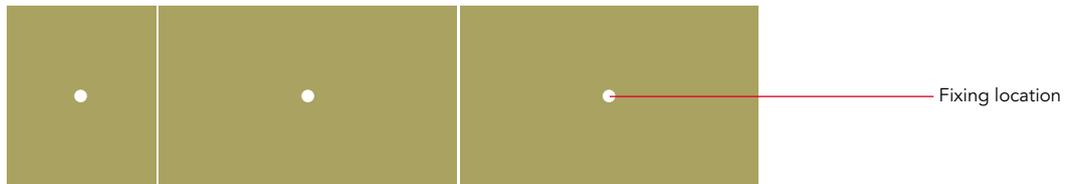
The first slab to be installed is cut in half (i.e. measuring 600x600mm), as per Figure 1 below. This is to ensure that the second layer is offset by half a slab length. The run is then continued to the right with full size slabs.

Each slab is affixed with adhesive and one centrally located fixing.

### Second layer

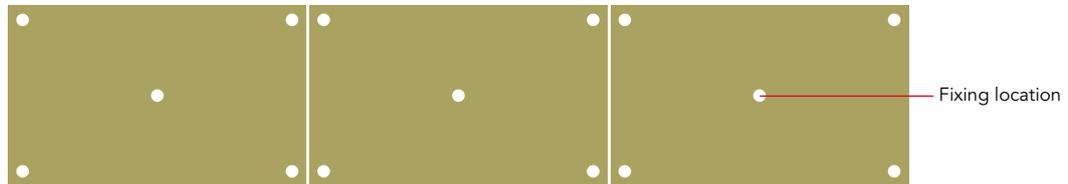
The second layer is started and continued from left to right using full-size slabs. Each slab is affixed with 5 fixings per board in the pattern shown in Figure 2. There is no need for adhesive between the layers.

Figure 1  
First layer



Per board: one centrally located fixing.

Figure 2  
Second layer



Per board: one centrally located fixing, and four located 100-150mm diagonally from each corner.  
Note: Number of fixings required may increase subject to project-specific wind load calculations.

Having completed the first course of two layers, the second course is then installed in the same way – i.e. the first layer is started with a half board from the left side as per Figure 1, followed by the second layer as per Figure 2.

## PACKAGING

The product is supplied on pallets. For full details of packaging specifications and minimum order quantities, please see the EWI System Holder's Ordering Guide

## HANDLING & STORAGE

Slabs should be stored indoors or under waterproof covering.

## QUALITY ASSURANCE

ROCKWOOL operates a Quality Management System which complies with the requirements of BS EN ISO 9001:2008 and is registered by BSI-QA under Certificate No. FM 02262.

# EWI System Holders

## 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](mailto:marketcom@rockwool.com)

#### Trademarks

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

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To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

# EWI System Holders

## 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](#).



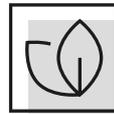
### Sustainability

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).

