

# K-Roc® Framing Slab

Insulation for steel frame systems

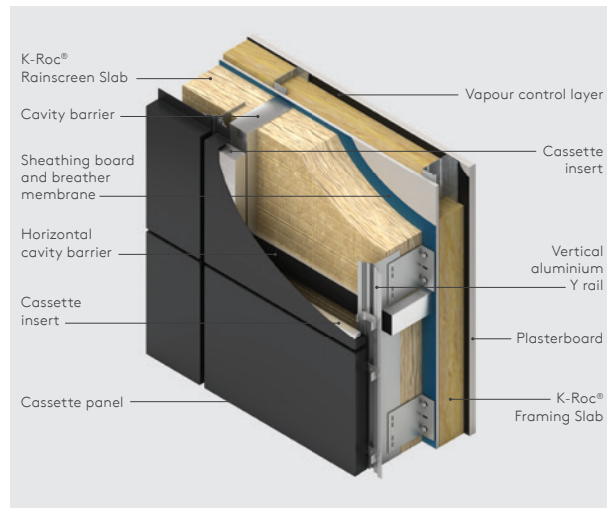


Figure 1 - Typical construction using K-Roc Framing Slab

## The product

K-Roc® Framing Slab is a rock mineral fibre insulation.

## Standard dimensions

K-Roc® Framing Slab is available in the following standard size(s):

| Nominal dimension       | Availability |
|-------------------------|--------------|
| Length (m)              | 1.22         |
| Width (m)               | 0.61         |
| Insulant thickness (mm) | 100, 150     |

## Moisture properties

K-Roc® Framing Slab typically achieves a water vapour resistivity of 5 MNs/gm and a water vapour transmission of 1 MU,  $\mu$  in accordance with BS / I.S. EN 12086: 2013 (Thermal insulating products for building applications. Determination of water vapour transmission properties).

K-Roc® Framing Slab typically achieves a water absorption (short term) of  $\leq 1 \text{ kg/m}^2$  when tested to BS / I.S. EN 1609: 2013 (Thermal insulating products for building applications. Determination of short term water absorption by partial immersion).

K-Roc® Framing Slab typically achieves a water absorption (long term) of  $\leq 3 \text{ kg/m}^2$  when tested to BS / I.S. EN 12087: 2013 (Thermal insulating products for building applications. Determination of long term water absorption by immersion).

## Density

K-Roc® Framing Slab has a density of 28 - 32 kg/m<sup>3</sup>.

## Thermal properties

The  $\lambda$ -values and R-values detailed below are quoted in accordance with BS EN 13162: 2012 + A1: 2015 (Thermal insulating products for buildings. Factory made mineral wool (MW) products. Specification).

### Thermal conductivity

The slabs achieve a thermal conductivity ( $\lambda$ -value) of: 0.036 W/mK.

### Thermal resistance

Thermal resistance (R-value) varies with thickness and is calculated by dividing the thickness of the slab (expressed in metres) by its thermal conductivity. The resulting number is rounded down to the nearest 0.05 (m<sup>2</sup>K/W).

| Insulant thickness (mm) | Thermal resistance (m <sup>2</sup> K/W) |
|-------------------------|---|
| 100                     | 2.75                                    |
| 150                     | 4.15                                    |

NB The thermal performance of rock mineral fibre products is declared in accordance with EN 13162: 2012 + A1: 2015, as required by the EU Construction Product Regulations. EN 13162: 2012 + A1: 2015 does not provide for any assessment of the degradation of thermal performance over time. As such, it is not possible to guarantee that the declared thermal performance of mineral wool will be valid for the lifetime of the product's use.

## Fire performance

K-Roc® Framing Slab achieves European Classification (Euroclass) A1 when classified to EN 13501-1: 2018 (Fire classification of construction products and building elements. Classification using data from reaction to fire tests).

## U-values

Rainscreen façade systems are proprietary, resulting in a wide variation of possible system build-ups, material combinations and mechanisms that are used to fix and support the external cladding to the wall structure. It is advised that the Kingspan Insulation Technical Service Department is contacted for specific U-value calculations (see rear cover for details).

# K-Roc® Framing Slab

## Responsible sourcing

K-Roc® Framing Slab is certified to BES 6001 (Framework Standard for the Responsible Sourcing of Construction Products) 'Good'. K-Roc® Framing Slab is manufactured under a management system certified to ISO 14001: 2015.

NB The above information is correct at the time of writing. Please confirm at the point of need by contacting Kingspan Insulation's Technical Service Department (see below for details), from which copies of the certificates can be obtained.

## Specification clause

K-Roc® Framing Slab should be described in specifications as: The wall insulation shall be K-Roc® Framing Slab \_\_\_\_\_ mm thick: comprising a rock mineral fibre insulation. The product shall be manufactured under a management system certified to ISO 9001: 2015 and ISO 14001: 2015.

## NBS specifications

NBS users should refer to clause(s):  
H92/776 (Thermal Insulation)  
K11 695, P10 140 (Standard and Intermediate)  
K11 55 (Minor Works)  
Pr\_25\_57\_06\_50 Mineral fibre slab insulation (Uniclass 2015)

## Fire stops & cavity barrier strategy

Current guidance to the Building Regulations should be considered with regard to the performance requirements for, and the provision of fire stops and cavity barriers. For specialist advice, including configuration and installation, refer to:

**Kingspan Technical Insulation Ltd**  
[www.kingspanpassivefireprotection.co.uk](http://www.kingspanpassivefireprotection.co.uk)  
+ 44 (0) 1524 388 898

Reference should also be made to 'Structural Timber Buildings Fire Safety in Use Guidance Volume 2 - Cavity Barriers and Fire Stopping' by the Structural Timber Association.

## Fire safety

For guidance regarding the routes to compliance for meeting the fire safety requirements of the Building Regulations / Standards in Great Britain, refer to the relevant Technical Bulletins at [www.kingspaninsulation.co.uk/RisingHigh](http://www.kingspaninsulation.co.uk/RisingHigh).

For Ireland, please contact Kingspan Insulation's Technical Service Department (see below for details).

## General

### Cutting

- The use of dust masks is recommended, in accordance with CDM Guidelines, to prevent inhalation in the event loose fibres become airborne during the process of cutting.
- Cutting should be carried out using a hard steel bladed saw.
- Ensure accurate trimming to achieve close butting joints and continuity of insulation.

### Daily working practice

- At the completion of each day's work, or whenever work is interrupted for extended periods of time, slab edges and joints should be protected from inclement weather.

### Availability

- K-Roc® Framing Slab is available through specialist insulation distributors and selected builders' merchants throughout Great Britain and Ireland.

### Packaging & storage

- The polyethylene packaging of Kingspan Insulation products, which is recyclable, should not be considered adequate for outdoor protection.
- Ideally, slabs should be stored inside a building. If, however, outside storage cannot be avoided, then the slabs should be stacked clear of the ground and covered with an opaque polythene sheet or weatherproof tarpaulin. Slabs that have been allowed to get wet should not be used.

## Great Britain

Kingspan Insulation Ltd  
Pembridge | Leominster | Herefordshire | HR6 9LA

T: +44 (0) 1544 388 601  
E: [info@kingspaninsulation.co.uk](mailto:info@kingspaninsulation.co.uk)  
[www.kingspaninsulation.co.uk](http://www.kingspaninsulation.co.uk)

## Ireland

Kingspan Insulation Ltd  
Castleblayney | County Monaghan

T: +353 (0) 42 979 5000  
E: [info@kingspaninsulation.ie](mailto:info@kingspaninsulation.ie)  
[www.kingspaninsulation.ie](http://www.kingspaninsulation.ie)

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