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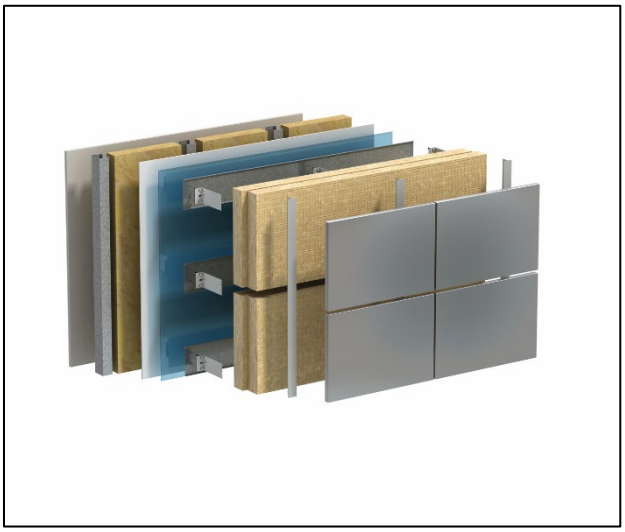
Agrément Certificate
20/5845
Product Sheet 1 Issue 2

K-ROC RAINSCREEN SLAB

K-ROC RAINSCREEN SLAB FOR USE IN RAINSCREEN CLADDING SYSTEMS

This Agrément Certificate Product Sheet(1) relates to K-Roc(2) Rainscreen Slab for use in rainscreen cladding systems, a mineral wool slab for use as a thermal insulation on timber- and steel-frame walls, reinforced concrete, and masonry walls, in new and existing domestic and non-domestic buildings, in conjunction with ventilated cladding systems.

(1) Hereinafter referred to as 'Certificate'
(2) K-Roc is a registered trademark.



The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

Section 1. Mechanical resistance and stability
Section 2. Safety in case of fire
Section 3. Hygiene, health and the environment
Section 4. Safety and accessibility in use
Section 5. Protection against noise
Section 6. Energy economy and heat retention
Section 7. Sustainable use of natural resources
Section 8. Durability

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Second issue: 28 February 2024

Originally certified on 17 December 2020

Hardy Giesler
Chief Executive Officer

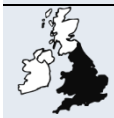
Certificate amended on 25 March 2025 to update ancillary items, applications and tables 6 to 8, and to include reinforced concrete in the scope.

SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that K-Roc Rainscreen Slab for use in rainscreen cladding systems, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	**B3(4)**	**Internal fire spread (structure)**
Comment:		The product is unrestricted by this Requirement. See section 2 of this Certificate.
Requirement:	**B4(1)**	**External fire spread**
Comment:		The product is unrestricted by this Requirement. See section 2 of this Certificate.
Requirement:	**C2(a)**	**Resistance to moisture**
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The product can contribute to satisfying this Requirement. See section 9 of this Certificate.
Requirement:	**C2(c)**	**Resistance to moisture**
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**L1(a)(i)**	**Conservation of fuel and power**
Comment:		The product can contribute to satisfying this Requirement; however, compensating fabric measures may be required. See section 6 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**25B**	**Nearly zero-energy requirements for new buildings**
Regulation:	**26**	**CO_2 emission rates for new buildings**
Regulation:	**26A**	**Fabric energy efficiency rates for new dwellings (applicable to England only)**
Regulation:	**26A**	**Primary energy rates for new buildings (applicable to Wales only)**
Regulation:	**26B**	**Fabric performance values for new dwellings (applicable to Wales only)**
Regulation:	**26C**	**Target primary energy rates for new buildings (applicable to England only)**
Regulation:	**26C**	**Energy efficiency rating (applicable to Wales only)**
Comment:		The product can contribute to satisfying these Regulations; however, compensating fabric/services measures may be required. See section 6 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)**	**Fitness and durability of materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.

Regulation:	**8(3)**	**Fitness and durability of materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	2.4	Cavities
Comment:		The product is unrestricted by this Standard, with reference to clauses 2.4.2(1)(2), 2.4.4(1) and 2.4.6(2). See section 2 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		The product is unrestricted by this Standard, with reference to clauses 2.6.5(1) and 2.6.6(2). See section 2 of this Certificate.
Standard:	3.4	Moisture from the ground
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.4.1(1)(2) and 3.4.5(1)(2). See section 3 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.10.1(1)(2) and 3.10.3(1)(2). See section 9 of this Certificate.
Standard:	3.15	Condensation
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 3.15.1(1)(2), 3.15.4(1)(2) and 3.15.5(1)(2). See section 3 of this Certificate.
Standard:	6.1(b)(c)	Energy demand
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 6.1.1(1) and 6.1.2(2); however, compensating fabric/services measures may be required. See section 6 of this Certificate.
Standard:	6.2	Building insulation envelope
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 6.2.1(1)(2), 6.2.3(1), 6.2.4(2), 6.2.6(1), 6.2.7(1)(2), 6.2.8(1)(2), 6.2.9(1)(2), 6.2.10(1)(2), 6.2.11(2) and 6.2.12(1); however, compensating fabric measures may be required. See section 6 of this Certificate.
Standard:	7.1(a)(b)	Statement of sustainability
Comment:		The product can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting at least a bronze level of sustainability as defined in this Standard. In addition, the product can contribute to a construction meeting a higher level of sustainability as defined in this Standard, with reference to clauses 7.1.4(1), 7.1.6(1)(2), 7.1.7(1), 7.1.9(2) and 7.1.10(2). See section 6 of this Certificate.
Regulation:	**12**	**Building standards – conversion**
Comment:		Comments in relation to the product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1(1) and Schedule 6(1).

(1) Technical Handbook (Domestic).
(2) Technical Handbook (Non-Domestic).

The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	**23(1)(a)(i)**	**Fitness of materials and workmanship**
Comment:	**(iii)(b)(i)(ii)**	The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.

Regulation:	**28(a)**	**Resistance to moisture and weather**
Comment:		The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The product can contribute to satisfying this Regulation. See section 9 of this Certificate.
Regulation:	**29**	**Condensation**
Comment:		The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**35(4)**	**Internal fire spread – structure**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The product is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**39(a)(i)**	**Conservation measures**
Comment:		The product can contribute to satisfying this Regulation; however, compensating fabric measures may be required. See section 6 of this Certificate.
Regulation:	**40(2)**	**Target carbon dioxide emission rate**
Regulation:	**43(1)(2)**	**Renovation of thermal elements**
Regulation:	**43B**	**Nearly zero-energy requirements for new buildings**
Comment:		The product can contribute to satisfying these Regulations; however, compensating fabric/services measures may be required. See section 6 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, K-Roc Rainscreen Slab for use in rainscreen cladding systems, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.1 *External masonry walls*, 6.2 *External timber framed walls*, 6.9 *Curtain walling and cladding* and 6.10 *Light steel framed walls and floors*.

Fulfilment of Requirements

The BBA has judged K-Roc Rainscreen Slab for use in rainscreen cladding systems to be satisfactory for use as described in this Certificate. The product has been assessed for use as a thermal insulation on timber- and steel-frame walls, reinforced concrete, and masonry walls, in new and existing domestic and non-domestic buildings, in conjunction with ventilated rainscreen cladding systems.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. The K-Roc Rainscreen Slab for use in rainscreen cladding systems comprises slabs of stone mineral wool (MW).

The product has the nominal characteristics given in Table 1.

Table 1 Nominal characteristics

Characteristic (unit)	Value
Length (mm)	1200
Width (mm)	600
Thickness (mm)	30 to 200
Edge profile	Square

Ancillary Items

The Certificate holder recommends the following ancillary items for use with the product, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- rainscreen cladding panel and subframe
- brick ties and tie channels
- sheathing and lining board
- breather membrane
- air and vapour control layer (AVCL).

Applications

The product is intended for use as a thermal insulation in the following applications, in new and existing domestic and non-domestic buildings:

- on timber- and steel-frame walls, in conjunction with ventilated rainscreen cladding systems
- on reinforced concrete walls, in conjunction with ventilated rainscreen cladding systems
- on masonry walls (where masonry includes clay and calcium silicate bricks, concrete blocks, and natural and reconstituted stone blocks), in conjunction with ventilated rainscreen cladding systems.

Product assessment – key factors

The product was assessed for the following key factors, and the outcome of the assessments is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Not applicable.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 The product was tested for reaction to fire and the classification is given in Table 2.

Table 2 Reaction to fire classification

Product assessed	Assessment method	Requirement	Result(1)
K-Roc Rainscreen Slab	BS EN 13501-1 : 2018	Value achieved	A1

(1) Warringtonfire, report reference 536800, 16 November 2023, Issue no 1. Copies can be obtained from the Certificate holder on request. The classification is valid for any thicknesses.

2.1.2 On the basis of data assessed, the product is not subject to any restriction on building height or proximity to a relevant boundary by the documents supporting the national Building Regulations.

2.1.3 Designers must refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly in respect of requirements for substrate fire performance, cavity closers and barriers, fire stopping of service penetrations combustibility limitations for other materials and components used in the overall wall construction.

2.2 Resistance to fire

Where the product is incorporated in a wall construction where fire resistance is required by the documents supporting the national Building Regulations, the fire resistance should be confirmed by a suitably competent and experienced individual.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Effectiveness against rising damp

3.1.1 The product was tested for short-term water absorption by partial immersion and the result is given in Table 3.

Table 3 Short-term water absorption by partial immersion

Product assessed	Assessment method	Requirement	Result
K-Roc Rainscreen Slab	BS EN 1609 : 2013	≤ 1 $kg \cdot m^{-2}$	Pass

3.1.2 On the basis of data assessed, the product, when used in a properly drained cavity, will not transfer moisture by capillary absorption and may be used in situations where it bridges the damp proof course (DPC) in walls. Dampness from the ground will not pass through to the inner leaf provided the wall is detailed in accordance with the requirements and provisions of the national Building Regulations.

3.2 Water vapour permeability

3.2.1 The product was tested for water vapour permeability and the result is given in Table 4.

Table 4 Water vapour resistivity

Product assessed	Assessment method	Requirement	Result
K-Roc Rainscreen Slab	BS EN 12086 : 2013	Value achieved	> 5 $MN \cdot s \cdot g^{-1} \cdot m^{-1}$

3.2.2 An AVCL must be used should the condensation risk analysis show that this is necessary.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Thermal conductivity

The product was tested for thermal conductivity (λ_D) and the result is given in Table 5.

Table 5 Thermal conductivity (λ_D)

Product assessed	Assessment method	Requirement	Result
K-Roc Rainscreen Slab (all thicknesses)	BS EN 13162 : 2012	Declared value (λ_D)	0.034 $W \cdot m^{-1} \cdot K^{-1}$

Conservation of fuel and power

6.2.1 Example U values are given in Tables 6 to 8.

Table 6 U values — timber-frame rainscreen system(1)(2)

Target U-value ($W \cdot m^{-2} \cdot K^{-1}$)	K-Roc Rainscreen Slab thickness (clear 140 mm timber-frame) (mm)(3)	K-Roc Rainscreen Slab thickness (fully filled 140 mm timber-frame) (mm)(4)
0.13	—(5)	—(5)
0.15	—(5)	—(5)
0.17	—(5)	—(5)
0.18	—(5)	—(5)
0.21	—(5)	185
0.26	200	90
0.28	175	70
0.30	155	50
0.35	120	30

(1) Construction, external to internal: 10 mm rainscreen cladding, fully ventilated 50 mm clear cavity, K-Roc Rainscreen Slab, breather membrane, 9 mm oriented strand board (OSB) sheathing board (λ = 0.13 $W \cdot m^{-1} \cdot K^{-1}$), 140 mm timber-frame ($\lambda$ = 0.13 $W \cdot m^{-1} \cdot K^{-1}$) (15% fraction), AVCL and 15 mm plasterboard (λ = 0.25 $W \cdot m^{-1} \cdot K^{-1}$).
(2) A fixing correction factor (ΔU_f) of 0.1 $W \cdot m^{-2} \cdot K^{-1}$ has been applied, to allow for the thermal bridging of the channel fixings and rainscreen brackets.
(3) Insulation installed against the sheathing board with no insulation in the timber-frame.
(4) Insulation installed against the sheathing board with 140 mm of insulation in the timber frame (λ = 0.035 $W \cdot m^{-1} \cdot K^{-1}$) with a 15% timber-frame fraction.
(5) See section 6.2.4.

Table 7 U values — steel-frame rainscreen system(1)(2)

Target U-value ($W \cdot m^{-2} \cdot K^{-1}$)	K-Roc Rainscreen Slab thickness (clear 90 mm steel-frame) (mm)(3)	K-Roc Rainscreen Slab thickness (fully filled 90 mm steel-frame) (mm)(4)
0.13	—(5)	—(5)
0.15	—(5)	—(5)
0.17	—(5)	—(5)
0.18	—(5)	—(5)
0.21	—(5)	—(5)
0.26	200	145
0.28	175	120
0.30	155	100
0.35	120	70

(1) Construction, external to internal: 10 mm rainscreen cladding, fully ventilated 50 mm clear cavity, K-Roc Rainscreen Slab, breather membrane, 9 mm oriented strand board (OSB) sheathing board (λ = 0.13 $W \cdot m^{-1} \cdot K^{-1}$), 90 mm light steel-frame (0.2% fraction), VCL and 15 mm plasterboard (λ = 0.25 $W \cdot m^{-1} \cdot K^{-1}$).
(2) A fixing correction factor (ΔU_f) of 0.1 $W \cdot m^{-2} \cdot K^{-1}$ has been applied, to allow for the thermal bridging of the channel fixings and rainscreen brackets.
(3) Insulation installed against the sheathing board with no insulation in the steel-frame.
(4) Insulation installed against the sheathing board with 90 mm of insulation in the steel-frame (λ = 0.035 $W \cdot m^{-1} \cdot K^{-1}$) with a 0.2% steel-frame fraction.
(5) See section 6.2.4.

Table 8 U values — solid reinforced concrete rainscreen system[1][2]

Target U-value ($W \cdot m^{-2} \cdot K^{-1}$)	K-Roc Rainscreen Slab (mm)
0.13	—[3]
0.15	—[3]
0.17	—[3]
0.18	—[3]
0.21	—[3]
0.26	190
0.28	170
0.30	150
0.35	120

(1) Construction, external to internal: 10 mm rainscreen cladding, fully ventilated 50 mm clear cavity, K-Roc Rainscreen Slab, 150 mm reinforced concrete (1% steel), 15 mm cavity (20% adhesive bridge) and 15 mm plasterboard (λ = 0.25 $W \cdot m^{-1} \cdot K^{-1}$).

(2) A fixing correction factor (ΔU_f) of 0.1 $W \cdot m^{-2} \cdot K^{-1}$ has been applied, to allow for the thermal bridging of the channel fixings and rainscreen brackets.

(3) See section 6.2.4.

6.2.2 The U value of a completed wall will depend on the insulation thickness, the number and type of fixings, the wall structure (including the stud cavity insulation type and thickness) and its internal finish.

6.2.3 The product can contribute towards a construction satisfying the national Building Regulations in respect of energy economy and heat retention.

6.2.4 For improved energy or carbon savings, designers must consider appropriate fabric and/or services measures.

7 Sustainable use of natural resources

Not applicable.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in the product were assessed.

8.2 The product was tested for dimensional stability and the result is shown in Table 9.

Table 9 Dimensional stability

Product assessed	Assessment method	Requirement	Result
K-Roc Rainscreen Slab	BS EN 1604 : 2013 (70°C and 90% RH for 48 hours)	Length, width and thickness ≤ 1% change	Pass

8.3 Service life

Under normal service conditions, the product will have a life equivalent to the structure in which it is incorporated, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed by the BBA and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 The wall and sub-frame must be structurally sound, and must be designed and constructed in accordance with the relevant recommendations of:

- BS 5250 : 2021
- BS 8000-3 : 2020
- BS EN 351-1 : 2023
- BS EN 845-1 : 2013
- BS EN 1993-1-2 : 2005 and its UK National Annex
- BS EN 1993-1-3 : 2006 and its UK National Annex
- BS EN 1995-1-1 : 2004 and its UK National Annex
- BS EN 1996-1-1 : 2005 and its UK National Annex
- BS EN 1996-1-2 : 2005 and its UK National Annex
- BS EN 1996-2 : 2006 and its UK National Annex
- BS EN 1996-3 : 2006 and its UK National Annex.

9.1.3 Certain rainscreen systems, such as those with open joints, may require the addition of a breather membrane incorporated into the system. The requirement for a membrane must be determined by the system designer and is outside the scope of this Certificate.

9.1.4 Care must also be taken in the overall design and construction of elements incorporating the system to ensure appropriate:

- sheathing or bracing for frame elements. The system must not be relied on to provide any structural contribution, eg racking strength
- fire resistance, for both elements and junctions
- cavity barriers and fire dampers
- continuity of insulation to minimise thermal bridging
- resistance to the ingress of precipitation and moisture from the ground.

9.1.5 Wind loads must be calculated by a suitably experienced and competent individual in accordance with the principles of BS EN 1991-1-4 : 2005 and its UK National Annex. The higher-pressure coefficients applicable to corners of buildings must be used.

9.1.6 Although the product will not be directly exposed to wind, each installation must be designed to withstand, without damage or permanent deformation, the pressures imposed by wind forces. The product will experience substrate movement which must be considered in the structural design of the construction.

9.1.7 The adequacy of fixing to the structural frame or substrate for specific installations is outside the scope of this Certificate and must be verified by a suitably experienced and competent individual. Particular care is required around window and door openings to ensure that the structure is capable of sustaining additional weight owing to reveal/frame details.

9.1.8 External walls must be in good condition and must resist the ingress of rain.

9.1.9 The designer must select a construction appropriate to the local wind-driven rain index to BS EN 1996-2 : 2006 and its UK National Annex, paying due regard to the design detailing, workmanship and materials to be used. It is essential that such walls are designed and constructed to incorporate the normal precautions.

9.1.10 The air gap between the face of the insulation and the back of the rainscreen panels must be of sufficient width to allow any water passing the joints to run down the back of the rainscreen panels and be discharged externally without wetting the insulation or the backing wall.

9.1.11 Care must be taken to ensure that the types of façades and wall finishes, and the design and detailing around openings, are appropriate for the anticipated exposure conditions and, if necessary, resist the movement of the frame.

9.1.12 The product must be kept dry before the cladding is applied.

9.1.13 The construction must be made weathertight as soon as practically possible to ensure maximum protection of the system.

9.1.14 The detailed provisions given in the documents supporting the national Building Regulations for when the system is installed in close proximity to certain flue pipes and/or heat-producing appliances must be followed.

9.1.15 To resist the passage of moisture from the ground, adequate damp-proof courses (DPCs) and membranes must be provided in accordance with conventional good practice.

9.1.16 Cavity barriers must be provided as required by the documents supporting the national Building Regulations.

9.1.17 Weather resistance is provided by an external cladding system (outside the scope of this Certificate).

9.1.18 Calculations of the thermal transmittance (U value) of a wall must be carried out in accordance with BS EN ISO 6946 : 2017 and BRE Report BR 443 : 2019.

9.1.19 Care must be taken in the overall design and construction of junctions with other elements and openings to minimise thermal bridges and air infiltration. Detailed guidance can be found in the documents supporting the national Building Regulations.

Interstitial condensation

9.1.20 Walls will adequately limit the risk of interstitial condensation when they are designed and constructed in accordance with BS 5250 : 2021.

9.1.21 The product can contribute to maintaining continuity of thermal insulation at junctions with other elements and minimise thermal bridges and air infiltration. Detailed guidance can be found in the documents supporting the national Building Regulations. Advice can also be sought from the Certificate holder.

Surface condensation

9.1.22 In England and Wales, walls will adequately limit the risk of surface condensation adequately where the thermal transmittance (U value) does not exceed 0.7 $W \cdot m^{-2} \cdot K^{-1}$ at any point and the junctions with other elements are designed in accordance with section 9.1.19 of this Certificate.

9.1.23 For buildings in Scotland, wall constructions will be acceptable where the thermal transmittance (U value) of the wall does not exceed 1.2 $W \cdot m^{-2} \cdot K^{-1}$ at any point, and walls are designed and constructed in accordance with the relevant parts of BS 5250 : 2021. Further guidance may be obtained from BRE Report BR 262 : 2002 and section 9.1.19 of this Certificate.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance are provided in Annex A of this Certificate.

9.2.3 Existing constructions must be in a good state of repair, with no evidence of rain penetration or damp. Defects must be made good prior to installation.

9.2.4 Any mould or fungal growth found to be present must be treated.

9.2.5 Installation must not be carried out until the moisture content of any timber is less than 20% by mass.

9.2.6 The slab can be cut using a fine-toothed saw or sharp knife, but care must be taken to prevent damage, particularly to edges.

9.2.7 It is important to ensure a tight fit between slabs. Trimming must be accurate, to achieve close-butted joints and continuity of insulation.

9.2.8 The slabs are fixed against the external face of the sheathing board or against the external face of masonry substrates, in conjunction with a weathertight rainscreen cladding(1), maintaining a cavity to ensure drainage.

(1) Rainscreen cladding systems are proprietary and utilise various mechanisms for attaching rainscreen cladding panels to the wall structure. Site work guidance should be sought from the system manufacturer.

9.2.9 Slabs must be close butted at all vertical and horizontal joints. The horizontal joints of the insulation must be staggered in accordance with good practice.

9.2.10 Fixings must have a minimum head diameter of 70 mm. A typical fixing pattern has 3 fixings per m^2, with one metal fixing at the centre of every slab.

9.2.11 The construction must be made weathertight as soon as is practically possible to ensure maximum protection of the product and the product must be kept dry until the cladding is applied.

9.3 Workmanship

Practicability of installation was assessed by the BBA on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, the product must only be installed by a competent general builder, or a contractor, experienced with this type of product.

9.4 Maintenance and repair

As the product is confined between the wall and the cladding, and has suitable durability (see section 8), and provided the integrity of the cladding is maintained throughout the life of the system, maintenance is not required.

10 Manufacture

10.1 The production processes for the product have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the product is delivered to site in packaging bearing the Certificate holder's name, product name, product description, dimensions, UKCA and CE marking, and the BBA logo incorporating the number of this Certificate.

11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The slabs should be stored clear of the ground, on a clean, level surface, and preferably under cover to protect them from prolonged exposure to moisture or mechanical damage.

11.2.2 Dust masks, gloves and long-sleeved clothing should be worn when cutting and handling the slabs.

11.2.3 Damaged, contaminated or wet slabs must not be used.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the product but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015
Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

CLP Regulations

The Certificate holder has taken the responsibility of classifying and labelling the product under the *GB CLP Regulation* and *CLP Regulation (EC) No 1272/2008 - classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheet(s).

UKCA marking

The Certificate holder has taken the responsibility of UKCA marking the product in accordance with Designated Standard EN 13162 : 2012.

CE marking

The Certificate holder has taken the responsibility of CE marking the product, in accordance with harmonised European Standard EN 13162 : 2012.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 and BS EN ISO 14001 : 2015 by RISE (Certificates 1418 v9 and 1418 M v6 respectively).

Additional information on installation

Installation must be in accordance with the Certificate holder's instructions and this Certificate. A summary of the procedure is provided below:

Procedure

A.1 Cavity barriers should be provided as required by the documents supporting the national Building Regulations.

A.2 The product should be cut and tightly fitted around wall brackets, where these occur.

A.3 For a typical installation, a breather membrane is placed between the sheathing board and the product (see Figures 1 and 2). An AVCL is placed between the plasterboard and the frame (see Figures 1 to 3). Designers should, however, choose a suitable construction on a case-by-case basis for a particular installation.

Figure 1 Timber-frame substrate

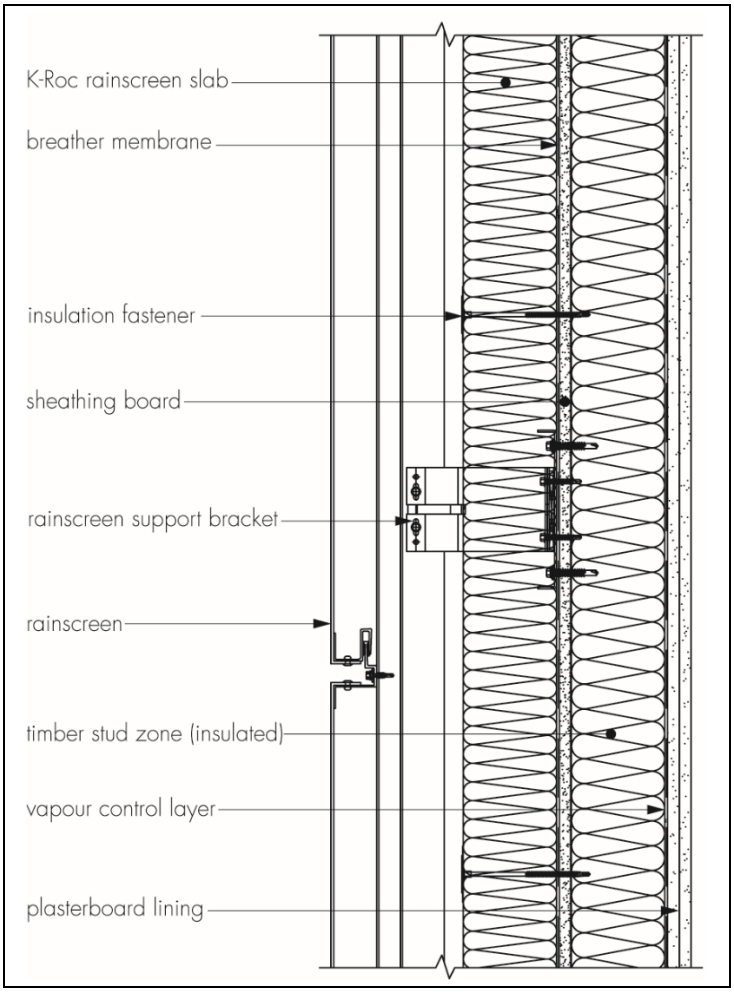


Figure 2 Lightweight steel-frame substrate

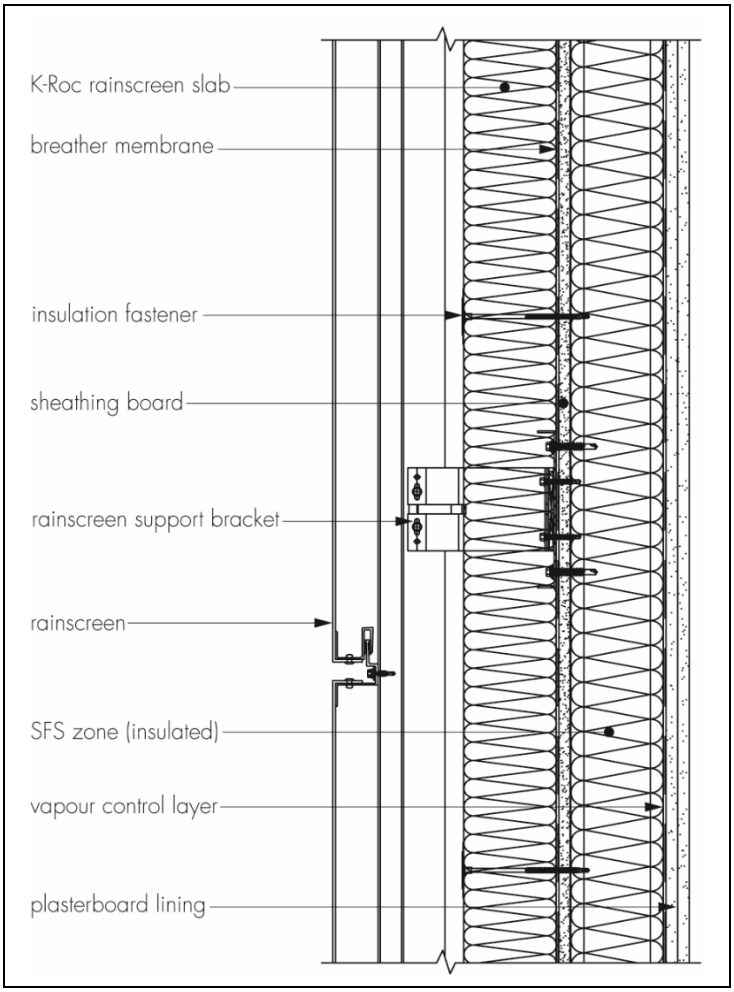
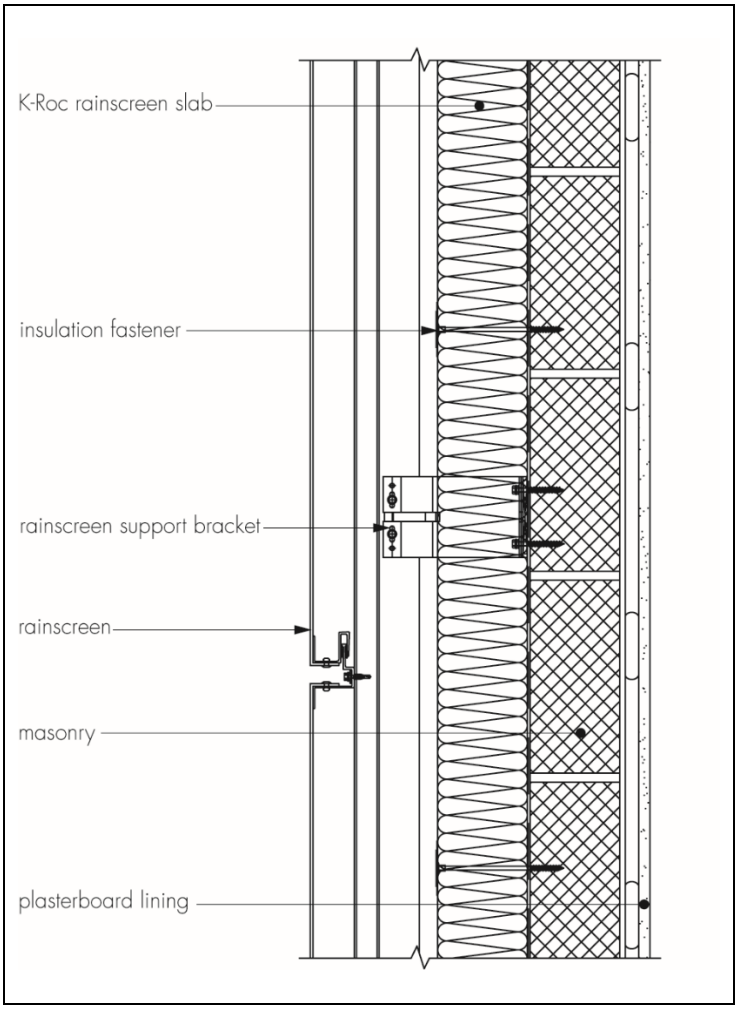


Figure 3 Masonry substrate



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Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.