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Agrément Certificate

02/3916

Product Sheet 2 Issue 3

IKO SELF-ADHESIVE ROOFING SYSTEMS

IKO EASYSEAL AIR AND VAPOUR CONTROL LAYER

This Agrément Certificate Product Sheet⁽¹⁾ relates to the IKO Easyseal Air and Vapour Control Layer, a reinforced modified bitumen membrane, with a non-woven polyester reinforcement and incorporating an aluminium foil laminate, for use as a high-resistance air and vapour control layer (AVCL) in flat built-up roofing systems and other insulated roof waterproofing systems with limited access

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

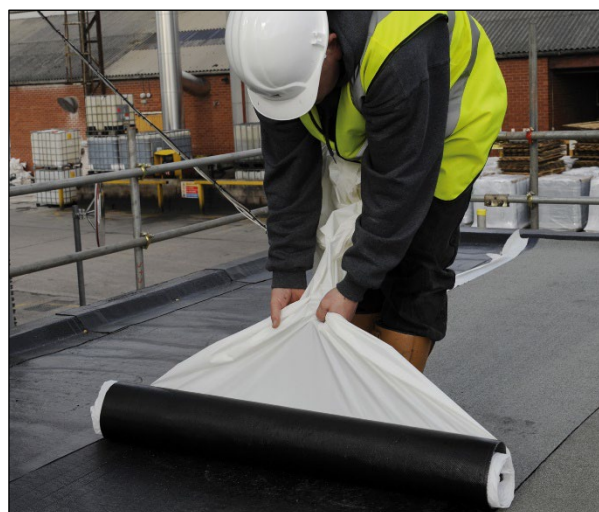
- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

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 system described herein. This system 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 Third issue: 17 October 2024

Originally certified on 24 May 2016

Hardy Giesler
Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

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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 the IKO Easyseal Air and Vapour Control Layer, 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: B4(2)	External fire spread
Comment:	The fire rating of a roof containing the system will depend on the other components of the system and must be determined on a case-by-case basis. See section 2 of this Certificate.
Requirement: C2(c)	Resistance to moisture
Comment:	The system can contribute to enabling a roof to satisfy this Requirement. See section 3 of this Certificate.
Regulation: 7(1)	Materials and workmanship
Comment:	The system is acceptable. See sections 8 and 9 of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation: 8(1)	Fitness and durability of materials and workmanship
Comment:	The use of the system can satisfy this Regulation. See sections 8 and 9 of this Certificate.
Regulation: 9	Building standards – construction
Standard: 2.8	Spread from neighbouring buildings
Comment:	The fire rating of a roof containing the system will depend on the other components of the system and must be determined on a case-by-case basis. See section 2 of this Certificate.
Standard: 3.15	Condensation
Comment:	The system can contribute to enabling a roof to satisfy this Standard, with reference to clauses 3.15.1 ⁽¹⁾⁽²⁾ , 3.15.3 ⁽¹⁾⁽²⁾ , 3.15.5 ⁽¹⁾⁽²⁾ and 3.15.6 ⁽¹⁾⁽²⁾ . See section 3 of this Certificate.
Standard: 7.1(a)	Statement of sustainability
Comment:	The system can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.
Regulation: 12	Building standards – conversion
Comment:	All comments given for the system under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 ⁽¹⁾⁽²⁾ and Schedule 6 ⁽¹⁾⁽²⁾ .

(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) The system is acceptable. See sections 8 and 9 of this Certificate.

Regulation: 29 **Condensation**

Comment: The system can contribute to enabling a roof to satisfy this Regulation. See section 6 of this Certificate

Regulation: 36(b) **External fire spread**

Comment: The fire rating of a roof containing the system will depend on the other components of the system and must be determined on a case-by-case basis. See section 2 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, the IKO Easyseal Air and Vapour Control Layer, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 7.1 *Flat roofs, terraces and balconies*.

In addition, in the opinion of the BBA, the system when installed and used in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards for Conversions and Renovations*, taking account of other relevant guidance within the chapter and the suitability of the substrate to receive the system.

The NHBC Standards do not cover the use of the system in the refurbishment of existing roofs.

Fulfilment of Requirements

The BBA has judged the IKO Easyseal Air and Vapour Control Layer to be satisfactory for use as described in this Certificate. The system has been assessed as a high-resistance air and vapour control layer (AVCL) in flat built-up roofing systems and other insulated roof waterproofing systems.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. The IKO Easyseal Air and Vapour Control Layer is a self-adhesive reinforced modified bitumen membrane with a non-woven polyester reinforcement incorporating an aluminium foil laminate and a release film on the lower surface and along the selvedge on upper surface.

The system has the nominal characteristics given in Table 1.

Table 1 Nominal characteristics

Characteristic (unit)	Declared value
Roll length (m)	15
Roll width (m)	1
Mass per unit area (kg·m ⁻²)	2.4
Roll weight (kg)	36

Ancillary Items

The Certificate holder recommends the use of IKOpro Easyseal Bonding Agent prior to the application of the system, but this product has been assessed by the BBA and is outside the scope of this Certificate.

Applications

The system is intended for use as an AVCL in flat roof systems where a high resistance to water vapour transmission is required, as defined in the relevant recommendations of BS 6229 : 2018, in either of the following waterproofing or insulation specifications:

- built-up roofing to the relevant recommendations of BS 8217 : 2005
- roof waterproofing or insulation systems covered by a current BBA Certificate when laid in accordance with, and within the limitations imposed by, that Certificate.

Definitions for products and applications inspected

The following terms are defined for the purpose of this Certificate as:

- limited access roof — a roof subjected only to pedestrian traffic for maintenance of the roof covering, cleaning of gutters, etc
- flat roof — a roof having a minimum finished fall of 1:80⁽¹⁾
- pitched roof — a roof having a fall in excess of 1:6.

Product assessment – key factors

The system 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 External fire spread

2.1.1 The properties in relation to fire will be dependent on the other components of the system and must be determined on a case-by-case basis.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Weathertightness

3.1.1 Results of weathertightness are given in Table 2.

Table 2 Weathertightness

System assessed	Assessment method	Requirement	Result
IKO Easyseal Air and Vapour Control Layer adhered to a timber deck substrate	Wind uplift to MOAT 64 : 4.3.2 : 2001 ⁽¹⁾	Value achieved	-5.5 KPa
IKO Easyseal Air and Vapour Control Layer on primed concrete	Peel from substrate to MOAT 64 : 4.3.3 : 2001 ⁽¹⁾	25 N·(50 mm) ⁻¹	Pass

(1) Testing before harmonised standards

3.1.2 On the basis of data assessed, the adhesion of the bonded system is sufficient to resist the effects of wind suction, elevated temperatures and thermal shock conditions likely to occur in practice and remain watertight.

3.1.3 The design wind resistance must be determined by using the appropriate partial factors, to be calculated by a suitably experienced and competent individual in accordance with BS EN 1991-1-4 : 2005 and its UK National Annex.

3.2 Condensation

3.2.1 Water vapour transmission properties were assessed on the basis of existing test data for representative related systems and data provided.

3.2.2 On the basis of data assessed, the system provides an effective control to the passage of liquid water and water vapour and contributes to limiting the risk of interstitial condensation.

3.3 Resistance to mechanical damage

3.3.1 Tensile properties, dynamic indentation, static indentation and low temperature flexibility were assessed on the basis of existing test data for representative related systems.

3.3.2 On the basis of data assessed, while resistance to foot traffic in service is dependent on the other system components, the system can accept, without damage, the limited foot traffic associated with installation. Reasonable care must be taken to avoid sharp objects or concentrated loads.

3.3.3 The system has sufficient resistance to minor structural movement while remaining watertight.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Not applicable.

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 this system were assessed.

8.2 Specific test data were assessed for the following:

Table 3 Durability

System assessed	Assessment method	Requirement	Result
IKO Easyseal Air and Vapour Control Layer on primed concrete	Peel from substrate to MOAT 64 : 4.3.3 : 2001 ⁽¹⁾ after heat ageing for 28 days at 80°C	25 N·(50 mm) ⁻¹	Pass

(1) Testing before harmonised standards

8.3 The effect of heat ageing on the IKO Easyseal Air and Vapour Control Layer and the top coating mass were assessed on the basis of existing test data for representative related systems.

8.4 Service life

Under normal service conditions, the system will have a life at least as long as the roof waterproofing, 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 Decks to which the system is to be applied must comply with the relevant requirements of BS 6229 : 2018, BS 8217 : 2005 and, where appropriate, *NHBC Standards 2024*, Chapter 7.1.

9.1.3 When designing flat roofs, twice the minimum finished fall must be assumed, unless a detailed analysis of the roof is available, including overall and local deflection and direction of falls.

9.1.4 On tall buildings or in areas subject to higher wind forces, mechanical fixings must be used to restrain the system, as specified by the Certificate holder.

9.1.5 Insulation used in conjunction with the system must be approved by the Certificate holder and be:

- as described in the relevant clauses of BS 6229 : 2018, or
- the subject of a current BBA Certificate and used in accordance with, and within the limitations of, that 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, the Certificate holder's instructions and the relevant clauses of BS 8000-0 : 2014, BS 8000-4 : 1989 and BS 8217 : 2005.

9.2.3 The system may be laid in conditions normal to roofing work. It must not be laid in rain, snow or heavy fog.

9.2.4 Deck surfaces must be clean, dry and free from dust, contaminants and sharp projections such as nail heads and concrete nibs. The surface of the substrate must have sufficient cohesive strength to resist the specific calculated wind load acting upon the structure.

9.2.5 The suitability of the roof construction, and in particular the immediate substrate, to accept the bonded AVCL must be checked before installation. Daily pull-off tests must be carried out to confirm satisfactory adhesion.

9.2.6 For concrete and screeded concrete decks, surfaces must be primed with IKOpro Easyseal Bonding Agent, and the system fully bonded to the primed deck.

9.2.7 For metal decks, the upper profile of the decking must be primed with IKOpro Easyseal Bonding Agent, and the system fully bonded to the primed upper profile of the metal deck.

9.2.8 Profiled metal decks must give a bonding area of at least 33% of the total projected surface area. Deck stiffeners cannot be counted as a satisfactory bond area, and this must be allowed for in the calculation of the bonded area for a particular application. Confirmation must be sought from the structural metal deck manufacturer for the specific deck profile installed.

9.2.9 The system must be applied with minimum side lap of 75 mm and end lap of 100 mm. All laps must be fully sealed by hot air welding techniques, with a visible bead of bitumen 5 to 15 mm exuded from all side and end laps.

9.2.10 The system must always line up with the waterproofing system to ensure that the insulation is always enveloped.

9.2.11 At falls in excess of 5° (1:11), precautions against slippage, as required by BS 8217 : 2005, must be observed.

9.2.12 The self-adhesive AVCL is installed by removing the release film from the lower surface and unrolling the membrane onto the substrate, ensuring that it is properly bonded and that no air is trapped under the membrane, and consolidating using a hand roller.

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, installation of the system must be carried out by competent roofing contractors experienced with this type of system.

9.4 Maintenance and repair

9.4.1 As the system is part of a built-up roof specification and has suitable durability, maintenance is not required. However, any damage occurring before enclosure must be repaired.

9.4.2 In the event of any damage, the system can be effectively repaired prior to the installation of the upper layers of the system, in accordance with the Certificate holder's instructions.

10 **Manufacture**

10.1 The production processes for the system 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 system 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 system is delivered in taped packaging bearing the Certificate holder's name 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 Rolls must be stored on end on a clean, level surface and under cover.

Supporting information in this Annex is relevant to the system 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 system 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).

CE marking

The Certificate holder has taken the responsibility of CE marking the system in accordance with harmonised European Standard EN 13970 : 2004.

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 by BSI and BS EN ISO 14001 : 2015 by Lucideon (Certificates Q05233 and 24709 respectively).

Additional information on installation

A.1 Most surfaces are primed with IKOpro Easyseal Bonding Agent, and the system is fully bonded to the primed deck.

Bibliography

BS 6229 : 2018 *Flat roofs with continuously supported flexible waterproof coverings — Code of practice*

BS 8217 : 2005 *Reinforced bitumen membranes for roofing — Code of practice*

BS 8000-0 : 2014 *Workmanship on construction sites — Introduction and general principles*

BS 8000-4 : 1989 *Workmanship on building sites — Code of practice for waterproofing*

BS EN 1991-1-4 : 2005 + A1 : 2010 *Eurocode 1 — Actions on structures — General actions — Wind actions*

NA to BS EN 1991-1-4 : 2005 + A1 : 2010 *UK National Annex to Eurocode 1 Actions on structures — General actions — Wind actions*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

EN 13970 : 2004 *Flexible sheets for waterproofing — Bitumen water vapour control layers — Definitions and characteristics*

MOAT 64 : 2001 *UEAtc Technical Guide for the Assessment of Roof Waterproofing Systems made of Reinforced APP or SBS Polymer Modified Bitumen Sheets*

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.

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