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Agrément Certificate

14/5103

Product Sheet 1

KLOBER FLASHINGS

KLOBER WAKAFLEX

This Agrément Certificate Product Sheet⁽¹⁾ relates to Klober Wakaflex, for use on chimneys and side abutment details, on pitched roofs in conjunction with any tiles and slates, as an alternative to lead flashing.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Weathertightness — as part of a complete roof, the product will contribute to resisting the passage of moisture and wind-blown rain, snow and dust into the interior of the building (see section 6).

Properties in relation to fire — the product, when used as part of a complete roof system, will be unrestricted under the national Building Regulations (see section 7).

Strength — the product has adequate strength to resist the loads associated with the installation of the roof (see section 8).

Durability — under normal service conditions, the product will have a service life in excess of 20 years (see section 10).



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: 3 May 2019

John Albon
Chief Scientific Officer

Claire Curtis-Thomas
Chief Executive

Originally certificated on 23 April 2014

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk
Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.
Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

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Regulations

In the opinion of the BBA, Klober Wakaflex, 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 presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



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

Requirement:	B4(2)	External fire spread
Comment:		The product, when used as part of a complete roof, will not affect the fire rating of the roof construction. See section 7 of this Certificate.
Requirement:	C2(b)	Resistance to moisture
Comment:		The product will contribute to a roof satisfying this Requirement. See section 6 of this Certificate.
Regulation:	7	Materials and workmanship (applicable to Wales only)
Regulation:	7(1)	Materials and workmanship (applicable to England only)
Comment:		The product is acceptable. See section 10 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The product can contribute to a roof satisfying the requirements of this Regulation. See sections 9 and 10 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	2.8	Spread from neighbouring buildings
Comment:		The product can be regarded as having a low vulnerability, with reference to clause 2.8.1 ⁽¹⁾⁽²⁾ of this Standard, and will not affect the fire rating of the roof construction. See section 7 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The product will contribute to a roof satisfying clauses 3.10.1 ⁽¹⁾⁽²⁾ , 3.10.7 ⁽¹⁾⁽²⁾ and 3.10.8 ⁽¹⁾⁽²⁾ of this Standard. See section 6 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product can contribute to meeting 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 applicable to conversions
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⁾⁽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(a)(i)	Fitness of materials and workmanship
Comment:	(iii)(b)(i)	The product is acceptable. See section 10 and the <i>Installation</i> part of this Certificate.
Regulation:	28(b)	Resistance to moisture and weather
Comment:		The product will contribute to a roof satisfying this Regulation. See section 6 of this Certificate.

Regulation:	36(b)	External fire spread
Comment:	The product, when used as part of a complete roof, will not affect the fire rating of the roof construction. See section 7 of this 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.

See sections: 1 *Description* (1.2) and 11 *General* (11.2) of this Certificate.

Additional Information

NHBC Standards 2019

In the opinion of the BBA, Klober Wakaflex, 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 6.8 *Fireplaces, chimneys and flues* and 7.2 *Pitched roofs*.

Technical Specification

1 Description

1.1 Klober Wakaflex comprises extruded/laminated layers of polyisobutylene and additives, reinforced with an aluminium rib mesh insert. The lower surface has a layer of adhesive protected with a release foil layer. Butyl strips are applied on both sides along the width of the finished product for adhering to roof tiles/slates.

1.2 The rolls are available with the nominal characteristics of:

Thickness (mm)	2
Roll width (mm)	140, 180, 280, 370 and 560
Length (m)	5
Weight of roll (kg)	2.4, 3.1, 4.8, 6.3 and 9.6
Colour	light grey, anthracite, red, black and brown.

1.3 Wakaflex Sealant, a UV-resistant, silicone-free synthetic rubber sealant, is used to seal between Klober Wakaflex and the wall.

2 Manufacture

2.1 The product is manufactured by an extrusion/lamination process of layers of polyisobutylene and additives, reinforced with an aluminium rib mesh insert.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out 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.

3 Delivery and site handling

3.1 The product is packed in white cardboard boxes, marked with the size, colour, product name, number of rolls per box and the BBA logo incorporating the number of this Certificate.

3.2 The product should be stored upright on a smooth, clean, dry surface, under cover and protected from sunlight.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Klober Wakaflex.

Design Considerations

4 Use

Klober Wakaflex, when designed and installed in accordance with the relevant parts of BS 5534 : 2014, BS 8000-0 : 2014 and BS 8000-6 : 2013, is suitable for use as an alternative flashing material to traditional lead flashing on chimneys and side abutment details, to provide a weatherproof finish in conjunction with a range of tiles and slates.

5 Practicability of installation

The product can be installed by competent roofing slaters and tilers experienced with this type of product.

6 Weathertightness



Klober Wakaflex, when incorporated into a roofing system designed and installed in accordance with conventional good practice, will adequately resist the passage of moisture to the interior of the building and so contribute to the roof satisfying the requirements of the national Building Regulations.

7 Properties in relation to fire



Samples of the product, when tested in accordance with DIN 4102-1 : 1998, achieved a B2 classification for surface spread of flame. Interpretation of this classification indicates that the product will not affect the performance of the roof.

8 Strength

The product will resist the normal impacts associated with installation and use.

9 Maintenance



There are no maintenance requirements, other than a regular visual check for damage. Damaged areas can be repaired by following the Certificate holder's instructions prior to completing the roof covering.

10 Durability



The product, when subjected to normal conditions of exposure and use, will have a service life in excess of 20 years.

Installation

11 General

11.1 Installation of Klover Wakaflex should be strictly in accordance with the Certificate holder's instructions and the relevant recommendations of BS 5534 : 2014, BS 8000-0 : 2014 and BS 8000-6 : 2013.

11.2 The product is worked in the same way as lead flashing. It can be cut with a sharp knife, scissors or snips. Protective gloves should be worn during installation.

11.3 Cutting, folding and working with a lead dresser can be carried out to a minimum temperature of 5°C.

12 Procedure

12.1 The product should only be laid on dry, dust and oil-free surfaces.

12.2 Laps should not be less than 50 mm and when installing the product, a roller should be used to apply pressure.

12.3 The product should be turned into brickwork joints or chased in by not less than 30 mm. Wakaflex Sealant is applied to seal the joint.

12.4 Where the joint area is large or uneven, a welt should be formed with the product at the back of the joint and sealed with Wakaflex Sealant.

12.5 At top edge abutments, the slates should be covered by a minimum of 150 mm with the product and turned up into the wall by 75 mm.

13 Repair

Damage to the product can be repaired easily by patching and sealing the damaged areas. Care must be taken to ensure that the watertightness of the roof is maintained.

Technical Investigations

14 Tests

Tests were carried out and the results assessed to determine:

- dimensional stability
- water vapour transmission
- water vapour resistance
- water absorption
- peel strength
- ash content
- tensile strength
- elongation at break
- tear resistance
- low temperature foldability
- resistance to UV ageing.

15 Investigations

15.1 The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

15.2 An assessment was made of results of a fire test in accordance with DIN 4102-1 : 1998 carried out by an independent test authority.

Bibliography

BS 5534 : 2014 + A2 : 2018 *Slating and tiling for pitched roofs and vertical cladding — Code of practice*

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

BS 8000-6 : 2013 *Workmanship on building sites — Code of practice for slating and tiling of roofs and claddings*

DIN 4102-1 : 1998 *Fire behaviour of building materials and building components; Building materials; concepts, requirements and tests*

16 Conditions

16.1 This Certificate:

- relates only to the product/system 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.

16.2 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.

16.3 This Certificate will remain valid for an unlimited period provided that the product/system 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.

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

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

16.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system 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.