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Agrément Certificate
14/5103
Product Sheet 1

HAUS PROFI

HAUS PROFI WAKAFLEX

This Agrément Certificate Product Sheet⁽¹⁾ relates to Haus Profi Wakaflex, for use on chimneys and side abutment details on pitched roofs in conjunction with the Redland range of tiles and slates, excluding Natural Slate, 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 into the interior of the building (see section 6).

Properties in relation to fire — data indicate that the product when used as part of a complete roof will be unrestricted under the 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 an expected 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

Simon Wroe
Head of Approvals — Materials

Claire Curtis-Thomas
Chief Executive

Date of First issue: 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.

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Regulations

In the opinion of the BBA, Haus Profi Wakaflex, if installed, used and maintained in accordance with this Certificate, will 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:	Data to DIN 4102-1 : 1998 indicate that 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 meeting this Requirement. See section 6 of this Certificate.
Regulation: 7	Materials and workmanship
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 construction satisfying this Regulation. See sections 9 and 10 and the <i>Installation</i> part of this Certificate.
Regulation: 9	Building standards applicable to construction
Standard:	Spread from neighbouring buildings
Comment:	Data to DIN 4102-1 : 1998 indicate that the product can be regarded as having a low vulnerability, with reference to clause 2.8.1 ⁽¹⁾⁽²⁾ , 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 satisfying clauses 3.10.1 ⁽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:	All comments given for this 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

Regulation: 23(a)(i)(iii)(b)(i)	Fitness of materials and workmanship
Comment:	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:	Data to DIN 4102-1 : 1998 indicate that the product, when used as part of a complete roof construction, will not affect the fire rating of the roof construction. See section 7 of this Certificate.

Construction (Design and Management) Regulations 2007

Construction (Design and Management) Regulations (Northern Ireland) 2007

Information in this Certificate may assist the client, CDM co-ordinator, designer and contractors to address their obligations under these Regulations.

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

Additional Information

NHBC Standards 2014

NHBC accepts the use of Haus Profi Wakaflex, provided it is installed, used and maintained in accordance with this Certificate, in relation to *NHBC Standards*, Chapters 6.8 *Fireplaces, chimneys and flues* and 7.2 *Pitched roofs*.

Technical Specification

1 Description

1.1 Haus Profi 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)	280, 370 and 560
Length (m)	5
Weight of roll (kg)	3.2, 6.8, 10.4
Colour	lead grey, anthracite, red, brown.

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 including the number of this Certificate.

3.2 The product should be stored upright on 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 Haus Profi Wakaflex.

Design Considerations

4 General

4.1 Haus Profi Wakaflex, when designed and installed in accordance with the relevant parts of BS 5534 : 2003 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.

4.2 The product should not be used on pitched roofs where a top edge abutment ventilation system has been installed as it is designed to be held in place by lead flashing.

5 Practicability of installation

The product can be installed readily by competent roofing slaters and tilers.

6 Weathertightness



Tests confirm that Haus Profi 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 meeting the requirements of the national Building Regulations:

England and Wales — Approved Document C, Requirement C2(b), Section 6

Scotland — Mandatory Standard 3.10, clauses 3.10.1⁽¹⁾⁽²⁾ and 3.10.8⁽¹⁾⁽²⁾

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland — Regulation 28(b).

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



Damaged areas can be repaired by following the Certificate holder's instructions.

10 Durability



The product, when subjected to normal conditions of exposure and use, will retain its integrity for a period of at least 20 years.

Installation

11 General

11.1 Installation of Haus Profi Wakaflex should be strictly in accordance with the Certificate holder's instructions and the relevant recommendations of BS 5534 : 2003 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.

Technical Investigations

12 Tests

Tests were carried out on the product 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.

13 Investigations

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

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

Bibliography

BS 5534 : 2003 *Code of practice for slating and tiling (including shingles)*

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*

14 Conditions

14.1 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.

14.2 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.

14.3 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.

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

14.5 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.

14.6 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.