Widopan Produkte GmbH

Ostereichen 3 21714 Hammah Germany

Tel: 00 49 4144 69 821-0

e-mail: info@widopan.de

website: www.widopan.de

WIDOPAN ROOF WATERPROOFING SYSTEMS

WIDOPAN FD ROOF WATERPROOFING SYSTEM

This Agrément Certificate Product Sheet⁽¹⁾ relates to the Widopan FD Roof Waterproofing System, a flexible, unsaturated polyester reinforced roof waterproofing system, for use on flat (including protected zero fall) roofs and pitched roofs, including blue, green and brown roofs, in combination with a storm water attenuation system⁽²⁾, and on podium decks. balconies and walkways.

- (1) Hereinafter referred to as 'Certificate'.
- (2) The storm water attenuation system is outside the scope of this 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 — the system will resist the passage of moisture to the interior of a building (see section 6).

Properties in relation to fire — the system may contribute to a roof being unrestricted under the national Building Regulations (see section 7).

Adhesion — the adhesion of the system is sufficient to resist the effects of any likely wind suction

and the effects of thermal or other minor movement likely to occur in practice (see section 8).

Slip resistance — the system, when wet or dry, has a satisfactory co-efficient of friction to enable its use in pedestrian areas (see section 9).

Resistance to mechanical damage — the system will accept, without damage, the limited foot traffic and loads associated with installation and maintenance (see section 10).

Resistance to penetration of roots — the system will resist the penetration of plant roots (see section 11).

Durability — under normal service conditions, the unprotected system will have a service life in excess of 35 years (see section 13).

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 Agrement

Date of Fifth issue: 15 December 2020

Originally certificated on 31 October 2007

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 MUST check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly. Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément Bucknalls Lane Watford Herts WD25 9BA

©2020 Page 1 of 12

tel: 01923 665300 clientservices@bbacerts.co.uk www.bbacerts.co.uk





07/4488

Product Sheet 1





Hardy Giesler

Chief Executive Officer

Regulations

In the opinion of the BBA, the Widopan FD Roof Waterproofing System, 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 Bui | ilding Regulations 2010 (England and Wales) (as amended) |
|--|---------|--|
| Requirement: | B4(1) | External fire spread |
| Comment: | | The system, in some circumstances, is restricted by this Requirement. See section 7.4 of this Certificate. |
| Requirement: Comment: | B4(2) | External fire spread On a suitable substructure, the system can enable a roof to be unrestricted under this Requirement. See sections 7.1 to 7.3 of this Certificate. |
| Requirement: Comment: | C2(b) | Resistance to moisture The system will enable a roof to satisfy this Requirement. See section 6.1 of this Certificate. |
| Regulation: Comment: | 7(1) | Materials and workmanship The system is acceptable. See sections 13.1 and 13.2 and the <i>Installation</i> part of this Certificate. |
| en e | The Bui | ilding (Scotland) Regulations 2004 (as amended) |
| Regulation: | 8(1)(2) | Durability, workmanship and fitness of materials |
| Comment: | | The system is acceptable and satisfies the requirements of this Regulation. See sections 12.1, 13.1 and 13.2 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 system, when applied to a suitable structure, can be regarded as having low vulnerability and can enable a roof to be unrestricted under this Standard, with reference to clause $2.8.1^{(1)(2)}$. See sections 7.1 to 7.3 of this Certificate. |
| Standard: | 3.10 | Precipitation |
| Comment: | 5.10 | The system will enable a roof to satisfy the requirements of this Standard, with reference to clauses $3.10.1^{(1)(2)}$ and $3.10.7^{(1)(2)}$. See section 6.1 of this Certificate. |
| Standard: | 7.1(a) | Statement of sustainability |
| Comment: | | The system 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 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 $6^{(1)(2)}$. |
| | | Technical Handbook (Domestic). Technical Handbook (Non-Domestic). |
| | The Bui | ilding Regulations (Northern Ireland) 2012 (as amended) |



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

Regulation:23(a)(b)(i)Fitness of materials and workmanshipComment:The system is acceptable. See sections 13.1 and 13.2 and the Installation part of this
Certificate.

| Regulation: Comment: | 28(b) | Resistance to moisture and weather The system can enable a roof to satisfy the requirements of this Regulation. See section 6.1 of this Certificate. |
|--------------------------------|-------|---|
| Regulation: Comment: | 36(b) | External fire spread On suitable substructures, the use of the system can enable a roof to be unrestricted under the requirements of this Regulation. See sections 7.1 to 7.3 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 section: 3 *Delivery and site handling* of this Certificate.

Additional Information

NHBC Standards 2020

In the opinion of the BBA, the Widopan FD Roof Waterproofing System, 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 and balconies*.

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

CE marking

The Certificate holder has taken the responsibility of CE marking the system in accordance with European Technical Assessment 05/0210, issued under ETAG 005 : 2004, Parts 1 and 4.

Technical Specification

1 Description

1.1 The Widopan FD Roof Waterproofing System is a three-part, unsaturated polyester resin, reinforced with polyester fleece.

1.2 Widopan FD resin has the nominal characteristics of:

| Specific gravity (g·cm⁻³) | 1.013 |
|------------------------------------|----------------------------|
| Curing with activator (minutes) | |
| time to rain resistant | 20 |
| time to foot-traffic accessibility | 30 |
| Flashpoint (°C) | 34 |
| Colours | anthracite and light grey. |
| | |

1.3 The levels of Use Categories in accordance with ETAG 005 : 2004 from ETA 05/0210 are:

| External fire performance class | BROOF(t1) |
|----------------------------------|-----------------------------|
| Reaction to fire Euroclass | E |
| Categorisation by working life | W3 (25 years) |
| Categorisation by climatic zones | M (moderate) and S (severe) |
| Categorisation by imposed loads | |
| most compressible substrate | P4 |
| least compressible substrate | P4 |
| Categorisation by roof slope | S1 (<5%) to S4 (>30%) |
| | |

Categorisation by surface temperature

| Lowest | TL4 (-30°C) |
|--|-----------------|
| highest | TH4 (90°C) |
| Resistance to wind loads | >50 kPa |
| Statement on dangerous substances ⁽¹⁾ | none contained. |

(1) Dangerous substances as listed in the European Commission database.

1.4 Other items used with the system, and included in the scope of this Certificate, are:

- reinforcement a non-woven polyester fleece for use in reinforcing the waterproofing layer
- Widopan Hardener for use in curing
- Widopan Activator for use in curing with proportions dependent on temperature
- Widopan Primer a polyurethane used for preparing substrates prior to the application of the main system
- kiln-dried sand (for primer) for broadcasting into the wet surface of the applied primer (grain size 0.3 0.8 mm)
- kiln-dried sand (for wearing coat) for addition to the wearing course as an anti-slip finish (grain size 0.8 1.1 mm). Decorative coloured quartz sand can be used as an alternative.

2 Manufacture

2.1 The liquid components of the system are manufactured by a batch-blending process.

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.

2.3 The management system of Widopan Produkte GmbH has been assessed and registered as meeting the requirements of EN ISO 9001 : 2015 by United Registrar of Systems Ltd (Certificate 60699).

3 Delivery and site handling

3.1 The system components are delivered to site bearing the component's name, health and safety data, the Certificate holder's name and the BBA logo incorporating the number of this Certificate. The components are available in the pack sizes detailed in Table 1.

| Table 1 Pack sizes | |
|--------------------|----------------------------------|
| Component | Pack sizes |
| Widopan FD | 10 and 20 kg cans |
| reinforcement | 1.05 m length roll, weighs 11 kg |
| Widopan Hardener | 0.6 kg Plastic Bag |
| Widopan Activator | 0.5 kg Dosing-Bottle |
| Widopan Primer | 10 and 20 kg Plastic Canister |
| kiln-dried sand | 25 kg Plastic Bag |

3.2 The resin components, accelerator and primer must be kept tightly sealed, and stored in a cool, ventilated location away from ignition sources and other chemicals. Storage temperatures of between 0 and 25°C will give the component a shelf-life of six months; at higher temperatures, the shelf-life will reduce progressively.

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

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on the Widopan FD Roof Waterproofing System.

Design Considerations

4 General

4.1 The Widopan FD Roof Waterproofing System is satisfactory for use as a waterproofing layer in:

- warm or cold exposed roofs on flat and pitched roofs with limited access
- inverted roof specifications using aggregate ballast on flat roofs, including zero fall roofs, with limited access
- protected inverted roof specifications using pavers or other suitable protection on flat roofs, including zero fall roofs, with limited or pedestrian access
- green roof (extensive) specifications on flat roofs, including zero fall roofs, with limited or pedestrian access, or pitched roofs with limited access
- roof garden (intensive) specifications on flat roofs, including zero fall roofs, with limited or pedestrian access
- brown roof specifications on flat roofs, including zero fall roofs, with limited or pedestrian access
- blue roof specifications on flat roofs, including zero fall roofs
- podium decks
- balconies with pedestrian access
- walkways.

4.2 The system is suitable for use on the following substrates:

- concrete
- plastic
- wood
- metal
- reinforced bitumen membranes (including mineral-surfaced)
- PUR or PIR insulation boards
- mineral wool insulation batts.

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

- roof garden (intensive) a roof with a substantial layer of growing medium with planting that can include shrubs and trees, and generally accessible to pedestrians
- green roof (extensive) a roof with a shallow layer of growing medium planted with low-maintenance plants such as mosses, sedums, grasses and some wild flower species
- brown roof a roof with a growing medium selected to allow indigenous plant species to inhabit the roof over time; no deliberate planting is undertaken
- blue roof a flat roof designed to allow controlled attenuation of rain fall during storm events as part of a SUDS good practice policy⁽¹⁾. Guidance on the design of blue roofs is available in NFRC Technical Guidance Note for the construction and design of Blue Roofs Roofs and podiums with controlled temporary water attenuation.

(1) The storm water attenuation system is outside the scope of this Certificate.

4.4 Limited access roofs are defined for the purposes of this Certificate as those subjected only to pedestrian traffic for maintenance of the roof covering, cleaning of gutters etc. Where traffic in excess of this is envisaged, additional protection to the waterproofing membrane must be provided, as specified by the Certificate holder. Pedestrian access roofs are defined for the purposes of this Certificate as those not subject to vehicular traffic.

4.5 Flat roofs are defined for the purpose of this Certificate as those having a minimum finished fall of 1:80⁽¹⁾.

(1) NHBC Standards 2020 require a minimum fall of 1:60 for green roofs and roof gardens

4.6 Pitched roofs are defined for the purpose of this Certificate as those having falls in excess of 1:6.

4.7 Zero fall roofs are defined for the purpose of this Certificate as those having a finished fall of between 0 and $1:80^{(1)}$ degrees. Recommendations for the design of roof falls are available in the Liquid Roofing and Waterproofing Association (LRWA) Note 7 — Specifier Guidance for Flat Roof Falls.

(1) NHBC Standards 2020 require a minimum fall of 1:60 for green roofs and roof gardens.

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

4.9 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* 2020, Chapter 7.1.

4.10 Structural decks for green roofs, roof gardens, brown roofs and blue roofs to which the system is to be applied must be suitable to transmit the dead and imposed loads experienced in service. Allowance needs to be made for loading deflections to ensure that the free drainage of water is maintained.

4.11 Imposed loads, dead loading and wind load specifications are calculated by a suitably experienced and competent individual, in accordance with BS EN 1991-1-1 : 2002, BS EN 1991-1-3 : 2003 and BS EN 1991-1-4 : 2005, and their UK National Annexes.

4.12 Recommendations for the design of green roofs, roof garden and brown roofs specifications are available within the latest edition of *The GRO Green Roof Code, Green Roof Code of Best Practice for the UK*.

4.13 The drainage systems for inverted roofs, zero fall roofs, green roofs, roof gardens, brown roofs or blue roofs must be correctly designed, and the following points should be addressed:

- provision made for access for maintenance purposes
- for zero fall roofs, it is particularly important to identify the correct drainage points, to ensure that drainage is sufficient and effective
- dead loads for green roofs and roof gardens can increase if the drains become partially or completely blocked causing waterlogging of the drainage layer
- additional guidance for inverted roof specifications is given in BBA Information Bulletin No 4 *Inverted roofs Drainage and U value corrections*.

4.14 Insulation materials to be used in conjunction with the system must be in accordance with the Certificate holder's instructions and must be either:

- 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.

4.15 The NHBC requires that the roof membrane, once installed, be visually inspected and electronically tested for its waterproofing integrity prior to the installation of the green roof/roof garden system in accordance with of *NHBC Standards* 2020, Chapter 7.1, Clause 7.1.9. Any damage to the membrane is repaired in accordance with section 17 of this Certificate.

5 Practicability of installation

The system must only be installed by installers who have been trained and approved by the Certificate holder.

6 Weathertightness



6.1 The system will adequately resist the passage of moisture to the interior of a building and enable a roof to comply with the requirements of the national Building Regulations.

6.2 To achieve a weathertight coating it is essential that the application rate is as quoted in the Certificate holder's literature for the relevant system.

7 Properties in relation to fire



7.1 When tested to DD CEN/TS 1187 : 2012, Test 4, a system comprising an 18 mm plywood primed with Widopan Primer, and with the Widopan FD resin applied in two coats, reinforced with a non-woven polyester, achieved Class $B_{ROOF}(t4)^{(1)}$.

(1) Exova Warringtonfire, Test report No 338068. Report available from the Certificate holder.

7.2 In the opinion of the BBA, a roof incorporating the system will be unrestricted in terms of proximity to a boundary under the national Building Regulations in the following circumstances:

- Protected or inverted roof specifications, including an inorganic covering listed in the Annex of Commission Decision 2000/553/EC,
- a roof garden covered with a drainage layer of gravel 100 mm thick and a soil layer 300 mm thick,
- irrigated roof gardens, green roofs and brown roofs.

7.3 The designation of other specifications should be confirmed by reference to the requirements of the documents supporting the national Building Regulations.



7.4 The system, when used in pitches of greater that 70°, excluding upstands, should not be used on buildings in England and Wales that have a storey at least 18 m above ground level and contain: one or more dwellings, an institution, a room for residential purposes (excluding any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools.

7.5 If allowed to dry, plants used in a roof garden may allow flame spread across the roof. This must be taken into consideration when selecting suitable plants for the roof. Appropriate planting irrigation and/or protection should be applied to ensure the overall fire-rating of the roof is not compromised.

8 Adhesion

8.1 The adhesion of the system to the substrates listed in section 4.2, is sufficient to resist the effects of any wind suction, elevated temperatures, thermal shock or minor movement likely to occur in practice.

8.2 Where the system is installed over insulation boards, the resistance to wind uplift will be dependent on the cohesive strength of the insulation and the method the boards are secured to the roof deck. This must be taken into account when selecting a suitable insulation material.

8.3 The growing medium used in intensive plantings must not be of the type that will be removed, or become delocalised, owing to wind scour experienced on site.

8.4 It should be recognised that the type of plants used in roof gardens could significantly affect the expected wind loads experienced in service.

9 Slip resistance

The system, with a sand finish, has satisfactory slip resistance in both dry and wet conditions, and may be used in pedestrian access areas.

10 Resistance to mechanical damage

10.1 The system can accept, without damage, the limited foot traffic and light concentrated loads associated with installation and maintenance. However, reasonable care should be taken to avoid puncture by sharp objects or concentrated loads.

10.2 For areas of pedestrian access such as balconies and walkways, an anti-slip finish is applied.

10.3 The system is capable of accepting minor structural movement while remaining weathertight.

11 Resistance to penetration of roots

When used in green roofs, brown roofs and roof gardens, the waterproofing will adequately resist penetration by plant roots.

12 Maintenance



12.1 The system must be the subject of six monthly inspections and maintenance in accordance with BS 6229 : 2018, Chapter 7, to ensure continued performance.

12.2 Green roofs, brown roofs and roof gardens must be the subject of regular inspections, particularly in autumn after leaf fall and in spring, to ensure unwanted vegetation and other debris are cleared from the roof and drainage outlets (see section 4.13). Guidance is available within the latest edition of *The GRO Green Roof Code – Green Roof Code of Best Practice for the UK*.

12.3 Where damage has occurred it should be repaired in accordance with section 17 and the Certificate holder's instructions.

13 Durability



13.1 Under normal service conditions, the system will have a service life in excess of 35 years.

13.2 When fully protected and subject to normal service conditions in an inverted roof specification with an open covering (eg aggregate pavers), the system can provide an effective barrier to the transmission of liquid water and water vapour for the design life of the roof in which it is incorporated.

13.3 However, in situations where maintenance or repair of any of the components in the roof structure are necessary (eg protection layer, insulation), the durability of the system may be reduced. In these circumstances, the Certificate holder should be consulted.

13.4 An estimation cannot be given for the life of green roof and roof garden specifications owing to the nature of use; however, under normal circumstances, it should be significantly greater than for open coverings.

Installation

14 General

14.1 Installation of the Widopan FD Roof Waterproofing System must be in accordance with the relevant clauses of BS 6229 : 2018, BS 8000-0 : 2014, BS 8000-4 : 1989, Liquid Roofing and Waterproofing Association (LRWA) Note 7 – *Specifier Guidance for Flat Roof Falls*, the Certificate holder's instructions and the provisions of this Certificate.

14.2 The system must be applied when the air and substrate temperatures are greater than -5°C. Special precautions may be necessary when temperatures exceed 35°C, as shown in the Certificate holder's Technical Data sheets.

14.3 Detailing (eg upstands) is carried out in accordance with the Certificate holder's instructions.

14.4 Soil or other bulk material must not be stored on one area of the roof prior to installation, to ensure that localised overloading does not occur.

15 Site and surface preparation

15.1 Substrates on which the system is applied must be properly prepared in accordance with the Certificate holder's instructions.

15.2 Adhesion to substrates will depend on the condition and cleanness of the substrate. Substrates must be visibly dry, sound and free from loose materials or contamination (eg moss or algae).

15.3 High-pressure sand-blasting or water-jetting may be used to remove loose or flaking materials, but the substrate must be visibly dry before application of the system.

15.4 Damaged areas of the substrate (eg broken fibre-cement sheets or blistered bitumen roofing felt) must be removed, replaced or repaired.

15.5 Deck surfaces must be free from sharp projections, such as protruding fixing bolts and concrete nibs.

15.6 Gutters and outlets are checked to ensure that they are, and remain, clear of all debris.

15.7 The substrate is primed with Widopan Primer, prior to application of the system, at a coverage rate of 300 to 500 g \cdot m⁻².

15.8 Kiln-dried quartz sand, with a grain size of 0.3 - 0.8 mm, is broadcast into the wet primer.

16 Application

16.1 The system is mixed on site by adding the hardener to the resin in the correct proportion, and the activator in the proportion given in Table 2 in respect of the surface/air temperature, and stirring in accordance with the mixing instructions.

| Table 2 Activator prop | ortion | |
|------------------------|------------------------------------|-----------------|
| Surface and/or air | Approximate amount of Widopan | Pot life (mins) |
| temperature (°C) | Activator per kg of Widopan FD (g) | |
| -5 – 0 | 30 | 30 - 40 |
| 1-5 | 25 | 25 – 35 |
| 6 - 10 | 20 | 20 - 30 |
| 11 – 15 | 15 | 20 – 25 |
| 16 – 20 | 10 | 15 – 20 |
| 21 – 35 | 5 | 10 - 20 |

16.2 The first coat of Widopan FD is applied using a lambswool roller and spread evenly. The polyester reinforcement is rolled into the wet resin and pressed free of trapped air using the roller. The reinforcement must have an overlap of at least 50 mm and sufficient resin must be beneath the reinforcement to maintain the system's bond.

16.3 A second layer of Widopan FD is applied and evenly spread.

16.4 The total coverage of the system is between 2.4 and 3 kg \cdot m⁻², giving a finished cured thickness of 2.3 mm.

16.5 An anti-slip finish is applied, where necessary, for use on balconies, walkways or other areas of pedestrian access, in accordance with the Certificate holder's instructions.

17 Repair

The repair of minor damage to the system can be achieved effectively by cleaning back to the unweathered material and recoating the damaged area with the membrane at the total application rate stated in section 16.

18 Tests

Tests were conducted on Widopan FD Roof Waterproofing System and the results assessed to determine:

- water vapour diffusion resistance coefficient (μ)
- tensile strength and elongation at break
- watertightness at a six-metre head of water
- tensile bond strength on concrete, steel, bitumen felt, softwood and plastic
- dynamic indentation at -20°C on mineral wool and concrete
- static indentation on mineral wool and concrete
- fatigue cycling
- root resistance
- coefficient of friction
- UV ageing (1000 MJ·m⁻² at 60°C) (severe conditions)
- heat ageing (200 days at 80°C)
- water exposure (180 days at 60°C)
- the effect of application temperatures
- the effect of day joints
- reaction to fire.

19 Investigations

19.1 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.

19.2 Data on fire performance were assessed.

19.3 Visits to existing sites of over 30 years old were carried out to assess the durability of the system.

Bibliography

BS 6229 : 2018 Flat roofs with continuously supported flexible waterproof coverings — 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 8217 : 2005 Reinforced bitumen membranes for roofing - Code of practice

BS EN 1991-1-1 : 2002 Eurocode 1 : Actions on structures — General actions — Densities, self-weight, imposed loads for buildings

NA to BS EN 1991-1-1 : 2002 UK National Annex to Eurocode 1 : Actions on structures — General actions — Densities, self-weight, imposed loads for buildings

BS EN 1991-1-3 : 2003 + A1 : 2015 Eurocode 1 : Actions on structures — General actions — Snow loads NA to BS EN 1991-1-3 : 2003 + A1 : 2015 UK National Annex to Eurocode 1 : Actions on structures — General actions — Snow loads

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

DD CEN/TS 1187 : 2012 Test methods for external fire exposure to roofs

EN ISO 9001 : 2015 Quality management systems — Requirements

ETAG 005 : 2004 – Part 1 Guideline for European Technical Approval of Liquid Applied Roof Waterproofing Kits – General ETAG 005 : 2004 – Part 4 Guideline for European Technical Approval of Liquid Applied Roof Waterproofing Kits – Specific Stipulations for Kits Based on Flexible Unsaturated Polyester

20 Conditions

20.1 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.

20.2 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.

20.3 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.

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

20.5 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.

20.6 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.

| British Board of Agrément | | |
|---------------------------|-------|-------------------------------|
| Bucknalls Lane | | tel: 01923 665300 |
| Watford | | clientservices@bbacerts.co.uk |
| Herts WD25 9BA | ©2020 | www.bbacerts.co.uk |