Widopan Produkte GmbH
Ostereichen 3
21714 Hammah
Germany

Tel: 00 49 4144 69 821-0
e-mail: info@widopan.de
website: www.widopan.de

Agrément Certificate
07/4488
Product Sheet 2 Issue 4

WIDOPAN ROOF WATERPROOFING SYSTEMS

WIDOCRYL-PM(-TEN)/-DETAIL

This Agrément Certificate Product Sheet(1) relates to Widocryl-PM(-TEN)/-Detail, a two-part polymethacrylic resin reinforced roof waterproofing system, for use on flat roofs, balconies, terraces, and covered walkways, including protected zero fall applications.

(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 Fourth issue: 17 February 2025
Originally certified on 20 September 2010

Hardy Giesler
Chief Executive Officer

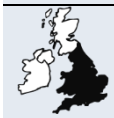
British Board of Agrément
1st Floor, Building 3, Hatters Lane
Croxley Park, Watford
Herts WD18 8YG
tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk

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 Widocryl-PM(-TEN)/-Detail, 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(1)**	**External fire spread**
Comment:		The use of the system on balconies is restricted by this Requirement in some circumstances. See section 2 of this Certificate.
Requirement:	**B4(2)**	**External fire spread**
Comment:		On a suitable substructure, the system may enable a roof to be unrestricted by this Requirement. See section 2 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The system will enable 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.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The use of the systems on balconies is restricted by this Regulation. See sections 8 and 9 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Fitness and durability of materials and workmanship**
Comment:		The use of the system satisfies this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	**8(3)**	**Fitness and durability of materials and workmanship**
Comment:		The use of the system on balconies is restricted by this Regulation. See section 2 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	2.2	Separation
Standard:	2.7	Spread on external walls
Comment:		The use of the system on balconies is restricted by these Standards, with reference to clauses 2.2.7(1) and 2.7.2(1)(2). See section 2 of this Certificate.
Standard:	2.8	Spread from neighbouring buildings
Comment:		The system, when applied to a suitable substructure, may enable a roof to be unrestricted by this Standard, with reference to clause 2.8.1(1)(2). See section 2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The system will enable a roof to satisfy this Standard, with reference to clauses 3.10.1(1)(2) and 3.10.7(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:		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)(ii) (iii)(iv)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	23(2)	**Fitness of materials and workmanship**
Comment:		The use of the system on balconies is restricted by this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The system will enable a roof to satisfy this Regulation. See section 3 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The use of the system on balconies is restricted by this Regulation in some circumstances. See section 2 of this Certificate.
Regulation:	**36(b)**	**External fire spread**
Comment:		On a suitable substructure, the system may enable a roof to be unrestricted by this Regulation. See section 2 of this Certificate.

Additional Information

NHBC Standards 2025

In the opinion of the BBA, Widocryl-PM(-TEN)/-Detail, 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 refurbishment of existing roofs.

Fulfilment of Requirements

The BBA has judged Widocryl-PM(-TEN)/-Detail to be satisfactory for use as described in this Certificate. The system has been assessed for use on flat roofs, balconies, terraces, and covered walkways, including protected zero fall applications.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. Widocryl-PM(-TEN)/-Detail is a two-part polymethacrylic resin reinforced with a non-woven polyester fleece or mesh and consists of:

- Widocryl PM — a polymethacrylic resin, available in Grey
- Widocryl-Clear-PM — a clear version of Widocryl PM used to seal the wearing course
- Widocryl Top Coat Colour — a version of Widocryl PM, used to seal the wearing course, available in a range of colours
- Widocryl Hardener — a catalyst powder used for curing
- 120 Gram and 165 Gram Reinforcements — a non-woven polyester mesh (120 $g \cdot m^{-2}$) and fleece (165 $g \cdot m^{-2}$) used for reinforcing the system
- Kiln-dried sand (for basecoat) and bulking powder — mixed into the Widocryl-PM(-TEN)/-Detail resin for application as the surface waterproofing layer of the system (grain size 0.1 – 0.3 mm)
- Widocryl PM Thixo filling powder — mixed with the Widocryl-PM(-TEN)/-Detail resin and kiln-dried sand (grain size 0.1 – 0.3 mm).

Ancillary Items

The following ancillary items are essential to use with the system and have been assessed with the system:

- PVA chips — for addition to the wearing course as a decorative finish (available in a standard range of colours)
- 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 natural quartz sand, coloured granite granules or crushed marble – for use as an alternative to kiln dried sand.

Applications

The system is intended for use on balconies, terraces and covered walkways for pedestrian access, on the following substrates:

- concrete
- reinforced bitumen membranes
- timber
- metal
- polyurethane (PUR) or polyisocyanurate (PIR) insulation boards.

The system is also satisfactory for use in protected zero fall and flat roofs on concrete substrates.

Definitions for products and applications inspected

The following terms have been 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
- pedestrian access roof — a roof subjected to increased access to that defined for a limited access roof, but not open to vehicular traffic
- zero fall roof — a roof having a finished fall which can vary between 0 and 1:80
- flat roof — a roof having a minimum finished fall of 1:80
- 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 assessment 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 When tested to DD CEN/TS 1187 : 2012, Test 4, and classified to EN 13501-5 : 2016, the construction given in Table 1 of this Certificate achieved B_{ROOF}(t4) for slopes below 10°.

Table 1 Tested construction — system 1(1)

Substrate	Primer	First waterproofing layer	Reinforcement	Second waterproofing layer	Top layer
20 mm fibre cement board(2)	Widocryl PM concrete primer(2)	Widocryl PM Membrane, applied at 1400 g·m^{-2}	Widopan Fabric Polyester fleece loose laid	Widocryl PM Membrane, applied at 1400 g·m^{-2}	Widocryl PM coloured topcoat, applied at 300 g·m^{-2}

(1) Fire test and classification reports, 18859D and 18859F, respectively, issued by Warringtonfiregent. Copies of the reports are available from the Certificate holder on request.
(2) This component is outside the scope of this Certificate.

2.1.2 Test data for the construction given in Table 2 of this Certificate, when classified to EN 13501-5 : 2016, achieved B_{ROOF}(t4) for slopes below 10°.

Table 2 Tested construction — system 2(1)

Layer	Construction(1)
Substrate(2)	22 mm thick OSB, of density 600 kg·m^{-3}
Vapour Barrier(2)	0.6mm self-adhesive vapour barrier
Adhesive (2)	Insulation adhesive applied at 50 g·m^{-2}
Insulation (2)	PIR insulation board with mineral fleece backing, adhered 50 to 150 mm thickness
Carrier membrane (2)	0.6 mm self- adhesive vapour barrier
Primer(2)	Widocryl Universal Primer applied at 320 g·m^{-2}
Base layer	Widocryl PM roller applied, 2.3 mm total thickness of base and top layers and reinforcement.
Reinforcement	Polyester Fleece 165 0.9 to 1.1 mm thickness
Top layer	Widocryl PM roller applied

(1) Fire classification report reference 22306E , conducted by Warringtonfire. Copies are available from the Certificate holder on request.
(2) These components are outside the scope of this Certificate.

2.1.3 On the basis of data assessed, the construction listed in Table 1 of this Certificate will be unrestricted by the documents supporting the national Building Regulations with respect to proximity to a relevant boundary.

2.1.4 A roof incorporating the system will be similarly unrestricted under the national Building Regulations with respect to proximity to a relevant boundary when protected by an inorganic covering (eg gravel or paving slabs) listed in the Annex of Commission Decision 2000/553/EC.

2.1.5 The classification and permissible areas of use of other specifications must be confirmed by reference to the requirements of the documents supporting the national Building Regulations.

2.2 Reaction to fire

2.2.1 The result of a reaction to fire test is given in Table 3.

Table 3 Result of a reaction to fire test

System assessed	Assessment method	Requirement	Result[(1)]
Widocryl PM Waterproofing System	Classified to BS EN 13501-1 : 2007	Classification achieved	E

(1) Reaction to fire classification report, 23000575, issued by MPA NRW. A copy of the report is available from the Certificate holder on request.

2.2.2 On the basis of data assessed, the system will be restricted in use under the documents supporting the national Building Regulations in some cases.

2.2.3 In England, unless covered with a protection with a reaction to fire of class A1 or A2-s1, d0, for example 40 mm thick cast stone slabs, the system must not be used on balconies of residential buildings with a storey 11 m or more in height or balconies of buildings that have a storey at least 18 m above ground level, and contain one or more dwellings, an institution, a room for residential purposes, student accommodation, care homes, sheltered housing, hospitals, dormitories in boarding schools, hotels, hostels or boarding houses.

2.2.4 In Wales, unless covered with a protection with a reaction to fire of class A1 or A2-s1, d0, for example 40 mm thick cast stone slabs, the system must not be used on balconies of buildings that have a storey at least 18 m above ground level, and contain one or more dwellings, an institution, a room for residential purposes, student accommodation, care homes, sheltered housing, hospitals, dormitories or boarding schools.

2.2.5 In Northern Ireland, unless covered with a protection with a reaction to fire of class A1 or A2-s1, d0, for example 40 mm thick cast stone slabs, the system must not be used on balconies of buildings 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, dormitories in boarding schools, nursing homes and places of lawful detention.

2.2.6 In Scotland, the system must not be used on balconies of buildings with a storey at a height of 11 m or more above the ground.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Weathertightness

3.1.1 Results of weathertightness tests are given in Table 4.

Table 4 Weathertightness

Product assessed	Assessment method	Requirement	Result
Widocryl-PM(-TEN)/-Detail	Watertightness to EOTA TR-003 : 2004	No leakage	Pass
Widocryl-PM(-TEN)/-Detail	Water vapour diffusion coefficient (μ) to EN ISO 12572 : 2001 (23°C / 85% RH)	Value achieved	5150
Widocryl-PM(-TEN)/-Detail	Resistance to delamination to EOTA TR-004 : 2004	≥ 50 kPa	
- on concrete			Pass
- on steel			Pass
- on bitumen membrane			Pass
- on day joint			Pass

3.1.2 On the basis of data assessed, the system will adequately resist the passage of moisture to the inside of a building and so satisfy the requirements of the national Building Regulations.

3.1.3 The adhesion of the system is sufficient to resist the effects of wind suction, elevated temperature and thermal shock conditions likely to occur in practice and remain weathertight.

3.1.4 The resistance to wind uplift for warm roofs will be dependent on the cohesive strength of the insulation and the method by which it is secured to the roof deck. This must be taken into account when selecting a suitable insulation material.

3.2 Resistance to mechanical damage

3.2.1 Results of resistance to mechanical damage tests are given in Table 5.

Table 5 Resistance to mechanical damage

Product assessed	Assessment method	Requirement	Result
Widocryl-PM(-TEN)/-Detail	Tensile strength to EN ISO 527-3 : 1996	Value achieved	
	Control		10.7 MPa
	Cured at 0°C		7.6 MPa
	Cured at 30°C		10.7 MPa
Widocryl-PM(-TEN)/-Detail	Elongation to EN ISO 527-3 : 1996	Value achieved	
	Control		283%
	Cured at 0°C		235%
	Cured at 30°C		263%
Widocryl-PM(-TEN)/-Detail	Dynamic indentation to	Value achieved	
- on steel	EOTA TR-006 : 2004		I_4
- on mineral wool insulation	Tested at 23°C		I_4
- on concrete	Tested at -30°C		I_4
Widocryl-PM(-TEN)/-Detail	Static indentation to	Value achieved	
- on steel	EOTA TR-007 : 2004		L_4
- on mineral wool insulation	Tested at 23°C		L_4
- on steel	Tested at 90°C		L_4
Widocryl-PM(-TEN)/-Detail - on concrete	Fatigue cycling to EOTA TR-008 : 2004 Tested at -10°C, 1000 cycles	Watertight and less than 75 mm delamination from the substrate	Pass

3.2.2 On the basis of data assessed, the system can accept, without damage, the limited foot traffic and light concentrated loads associated with installation, maintenance and pedestrian traffic on defined walkways and the effects of minor structural movement while remaining weathertight.

3.2.3 Where traffic in excess of the examples given in section 3.2.2 is envisaged, such as for maintenance of lift equipment, a walkway must be provided (for example, using concrete slabs supported on bearing pads). Reasonable care must be taken to avoid puncture by sharp objects or concentrated loads.

4 Safety and accessibility in use

Data were assessed for the following characteristic.

4.1 Skid resistance

4.1.1 Results of skid resistance tests are given in Table 6.

Table 6 Skid resistance

Product assessed	Assessment method	Requirement	Result
Widocryl-PM(-TEN)/-Detail - on concrete, kiln dried sand finish	Coefficient of friction (μ) to BBA Method T1/10	Pendulum test value (PTV) of ≥ 36	
	Dry		74
	Wet		65
- on concrete, PVA chip finish	Dry		55
	Wet		31

4.1.2 On the basis of data assessed, the system with a kiln dried sand finish, has low risk of slip in both dry and wet conditions, and may be used in pedestrian access areas.

4.1.3 The system with a PVA chip finish, has a satisfactory slip resistance in dry conditions and has a moderate risk of slip when wet, as defined in *The Assessment of Floor Slip Resistance — The UK Slip Resistance Group Guidelines*; Issue 6, 2024, and care must be taken when walking on the surface when wet.

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 the system were assessed.

8.2 Specific test data were assessed as given in Table 7.

Table 7 Durability

Product assessed	Assessment method	Requirement	Result
Widocryl-PM(-TEN)/-Detail	Resistance to delamination to EOTA TR-004 : 2004	≥ 50kPa	
- on concrete	Water exposure to EOTA TR-012 : 2004		Pass
- on bitumen membrane	at 60°C for 180 days		Pass
- on steel			Pass
Widocryl-PM(-TEN)/-Detail	Tensile strength to EN ISO 527-3 : 1996	Value achieved	
	Heat aged at 80°C for 200 days		11.0 MPa
	UV aged for 1000 $MJ \cdot m^{-2}$ (Xenon Arc at 60°C)		8.1 MPa
Widocryl-PM(-TEN)/-Detail	Elongation to EN ISO 527-3 : 1996	Value achieved	
	Heat aged at 80°C for 200 days		263%
	UV aged for 1000 $MJ \cdot m^{-2}$ (Xenon Arc at 60°C)		225%
Widocryl-PM(-TEN)/-Detail	Dynamic indentation to EOTA TR-006 : 2004	Value achieved	
- on steel	Heat aged at 80°C for 200 days,		I_4
- on mineral wool insulation	tested at -30°C		I_4
- on concrete	UV aged for 1000 $MJ \cdot m^{-2}$ (Xenon Arc at 60°C), tested at -10°C		I_4
Widocryl-PM(-TEN)/-Detail	Static indentation to EOTA TR-007 : 2004	Value achieved	
- on steel	Water exposure at 60°C for		L_4
- on mineral wool insulation	30 days, tested at 90°C		L_4
Widocryl-PM(-TEN)/-Detail	Fatigue cycling to EOTA TR-008 : 2004	Watertight and	Pass
	Heat aged at 80°C for 200 days, tested at -10°C, 50 cycles	less than 75 mm delamination from the substrate	
Widocryl-PM(-TEN)/-Detail	Crack bridging capability to EOTA TR-013 : 2004	No cracking	Pass

8.3 Service life

Under normal service conditions, the system will have a life in excess of 25 years 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* 2025, Chapter 7.1.

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

9.1.4 Terraces and balconies to which the system is to be applied, must be designed in accordance with BS 8579 : 2020.

9.1.5 Structural decks 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.

9.1.6 Imposed loads, dead loads and wind loadings must be 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.

9.1.7 The drainage systems for zero fall roofs must be correctly designed, and the following points must be addressed:

- provision made for access for maintenance purposes
- for protected zero fall roofs, it is particularly important to identify the correct drainage points, to ensure that drainage is sufficient and effective.

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

- as described in the relevant clauses of BS 6229 : 2018, or
- the subject of a current BBA Certificate and be 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, the relevant clauses of BS 6229 : 2018, BS 8000-0 : 2014 and BS 8000-4 : 1989 and the *Liquid Roofing and Waterproofing Association (LRWA) Note 7 – Specifier Guidance for Flat Roof Falls*.

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

9.2.4 The substrate must also be free from sharp projections such as nail heads and concrete nibs. Power-floated concrete, cement slurry, dirt and grease must be shot blasted or mechanically abraded to help ensure the primer can penetrate into the surface. The Certificate holder's advice must be sought as to the suitability of the substrate to receive the system and for suitable cleaning procedures, including the use of a proprietary surface cleaner/HSE approved fungicidal wash where required, but such advice is outside the scope of this Certificate.

9.2.5 Rough substrates must be made good using the appropriate levelling compound in accordance with the Certificate holder's instructions.

9.2.6 Defects such as large cracks must be repaired prior to application of the system in accordance with the Certificate holder's instructions.

9.2.7 Installation must not be carried out during inclement weather (eg rain, fog or snow) or when the substrate or air or material temperature exceed 30°C, as shown in the Certificate holder's Technical Data sheets. The substrate temperature must be at least -5°C during application and curing.

9.2.8 Previously coated areas must be checked for integrity and adequate adhesion to the substrate. Adhesion checks must be carried out to ensure that the system is compatible with the existing surface. The Certificate holder must be consulted for details of suitable test methods and requirements before use, but such advice is outside the scope of this Certificate. If the substrate requires preparing after bond testing, the appropriate methods (such as high pressure washing, captive shot blasting or other mechanical abrasive methods) can be used. Advice must be sought from the Certificate holder, but such advice is outside the scope of this Certificate.

9.2.9 The system must be mixed on site by adding the hardener to the resin in the correct proportion, and the hardener in the proportion given in Table 8 in respect of the surface/air temperature. The resin must be stirred prior to addition of the hardener.

Table 8 Hardener proportion to give a 20 to 30 minute cure time

Surface and/or air temperature (°C)	Hardener per litre of Widocryl-PM(-TEN)/-Detail (ml)
-5	100
5	75
15	50
25	25
30	15

9.2.10 The Widocryl PM is mixed in proportion with the hardener in accordance with Table 7. The resin is then mixed at a volume ratio of 1 litre of resin to 1 litre of kiln-dried sand to 1 litre of Widocryl PM Thixo filling powder, and mechanically mixed.

9.2.11 The polyester mesh reinforcement must be laid out on the surface to be sealed, and the resin/sand mixture is poured onto the surface and spread evenly with a trowel at a rate of 1.5 $kg \cdot m^{-2}$.

9.2.12 At penetrations and other weak points in the substrate, an additional coating resin (including hardener) with polyester fleece reinforcement must be applied at a rate of 2.8 $kg \cdot m^{-2}$.

9.2.13 The overlap of reinforcement layers must be at least 50 mm The overlap to other materials is to be determined for each case separately, but must not be less than 100 mm.

9.2.14 The wearing course must be applied using either a fleece roller or serrated spatula. The resin (including hardener) must be applied at a rate of 2 $kg \cdot m^{-2}$, producing a wearing layer approximately 1.5 mm thick. PVA chips, natural quartz sand, coloured granite granules or crushed marble can be broadcast into the resin layer while still wet as a decorative finish.

9.2.15 The wearing surface is sealed with Widocryl-Clear-PM or a Widocryl Top Coat Colour.

9.2.16 Following installation, the treated surface must be tested using a non-destructive test, eg holiday test, where required. Damaged areas must be repaired in accordance with section 9.4.

9.2.17 Detailing (eg upstands) must be carried out in accordance with the Certificate holder's instructions.

9.2.18 The NHBC requires that the system, once installed, is inspected in accordance with *NHBC Standards* 2025, Chapter 7, Clause 7.1.11, including undergoing an appropriate integrity test, where required. Any damage to the system assessed in this Certificate must be repaired in accordance with section 9.4 of this Certificate and reinspected, in order to maintain system performance.

9.3 Workmanship

Practicability of installation was assessed by the BBA and 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 installers who have been trained and approved by the Certificate holder.

9.4 Maintenance and repair

9.4.1 Ongoing satisfactory performance of the system in use requires that it is suitably maintained. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate.

9.4.2 The following requirements apply in order to satisfy the performance assessed in this Certificate:

9.4.2.1 The roof system must be the subject of six-monthly inspections and maintenance in accordance with the recommendations of BS 6229 : 2018, Chapter 7 and the Certificate holder's own maintenance requirements. These inspections must be carried out by a suitably experienced individual to ensure continued satisfactory performance. This must include an examination of the condition of the roof finishes and ensure that drain outlets and gutters are kept clear and unblocked.

9.4.3 In the event of damage, repair must be carried out in accordance with the Certificate holder's instructions. Repairs are made by cutting out the damaged section and grinding or sanding the surrounding area to a smooth surface extending 100 mm in each direction from the damaged area. The area to be covered must be thoroughly cleaned before application of the system. Application must be restricted to the repair area, with care taken not to overcoat existing areas.

9.4.4 If minor damage occurs, it is repaired by cleaning back to the unweathered material and recoating the damaged area with the membrane at the appropriate application rate as described in 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 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 system components are delivered to site in packaging bearing the component's name, health and safety data, the Certificate holder's name and the BBA logo incorporating the number of this Certificate.

11.2 The packaging of the system components is given in Table 9.

Table 9 Details of packaging

Component	Pack sizes
Widocryl-PM(-TEN)/-Detail PMMA resin	13 kg cans
Reinforcement 120 gram	1.05 m length roll, weighs 8.29 kg
Reinforcement 165 gram	1.05 m length roll, weighs 10.65 kg
Widocryl Hardener	0.3 kg plastic bags
Widocryl Primers	10 kg cans
Kiln-dried sand	25 kg plastic bags

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

11.3.1 The resin components, accelerator and primer must be kept tightly sealed, and stored in a cool, ventilated location away from sources of ignition and other chemicals.

† ANNEX A – SUPPLEMENTARY INFORMATION

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 components 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 product in accordance with EAD 030350-00-0402.

Management Systems Certification for production

The management system of Widopan Produkte GmbH has been assessed and registered as meeting the requirements of ISO 9001 : 2015 by United Registrar of Systems Ltd (Certificate 60699/A/0001/UK/En).

Additional Guidance

A.1 For zero fall roofs reference must be made to the appropriate clauses in Liquid Roofing and Waterproofing Association (LRWA) Note 7 – *Specifier Guidance for Flat Roof Falls*.

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 8579 : 2020 *Guide to the design of balconies and terraces*

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*

EN 13501-5 : 2016 *Fire classification of construction products and building elements — Classification using data from external fire exposure to roof tests*

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

EAD 030350-00-0402 — *Liquid applied roof waterproofing kits*

EN 13501-1 : 2007 + A1 : 2009 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*

EN ISO 527-3 : 1996 *Plastics — Determination of tensile properties — Test conditions for films and sheets*

ISO 9001 : 2015 *Quality management systems — Requirements*

EN ISO 12572 : 2001 *Hygrothermal performance of building materials and products — Determination of water vapour transmission properties*

EOTA TR-003 : 2004 — *Determination of the resistance to delamination*
EOTA TR-004 : 2004 — *Determination of the watertightness*
EOTA TR-006 : 2004 — *Determination of the resistance to dynamic indentation*
EOTA TR-007 : 2004 — *Determination of the resistance to static indentation*
EOTA TR-008 : 2004 — *Determination of the resistance to fatigue movement*
EOTA TR-012 : 2004 — *Determination of the exposure procedure for accelerated ageing by hot water*
EOTA TR-013 : 2004 — *Determination of crack-bridging capability*

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
- 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
- and any matter arising out of or in connection with it or its subject matter (including non-contractual disputes or claims) is governed by and construed in accordance with the law of England and Wales.
- the courts of England and Wales shall have exclusive jurisdiction to settle any matter arising out of or in connection with this Certificate or its subject matter (including non-contractual disputes or claims).

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.

British Board of Agrément
1st Floor, Building 3, Hatters Lane
Croxley Park, Watford
Herts WD18 8YG
tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk