Derivados Asfalticos Normalizados SA (DANOSA)
Polígono Industrial Sector 9
19290 Fontanar
Guadalajara Spain

Tel: 00 34 658 68 50
e-mail: info@danosa.com
website: www.danosa.com

Agrément Certificate
10/4787
Product Sheet 2

DANOSA REINFORCED BITUMINOUS MEMBRANE ROOF WATERPROOFING SYSTEMS

POLYDAN 50/GP ELAST AND ELAST+ GREEN GARDEN MEMBRANES

This Agrément Certificate Product Sheet(1) relates to POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes, a modified bitumen waterproofing membrane for use in roof garden or green roof applications.

(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 — the membrane will resist the passage of moisture into the interior of a building (see section 6).

Properties in relation to fire — the membrane, when used in a suitable specification, will enable a roof to be unrestricted under the national Building Regulations (see section 7).

Resistance to wind uplift — resistance to wind uplift is dependent upon the top layers of the roof garden/green roof specification (see section 8).

Resistance to mechanical damage — the membrane will accept, without damage, the limited foot traffic and loads associated with installation and maintenance (see section 9).

Resistance to root penetration — the membrane adequately resists plant root penetration (see section 10).

Durability — under normal service conditions, the membrane will provide a durable waterproof covering with a service life of at least 30 years (see section 12).

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 Third issue: 11 January 2019

Originally certificated on 8 October 2010

John Albon – Head of Approvals Construction Products

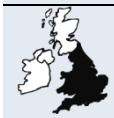
Claire Curtis-Thomas
Chief Executive

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.

British Board of Agrément
Bucknalls Lane
Watford
Herts WD25 9BA
©2019
tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk

Regulations

In the opinion of the BBA, POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes, 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: When used in irrigated roof gardens or green roofs, use of the membrane can be unrestricted under this Requirement. See sections 7.1 to 7.3 of this Certificate.

Requirement: **C2(b)** **Resistance to moisture**
Comment: The membrane, including joints, will enable a roof to satisfy this Requirement. See section 6.1 of this Certificate.

Regulation: **7** **Materials and workmanship (applicable to Wales only)**
Regulation: **7(1)** **Materials and workmanship (applicable to England only)**
Comment: The membrane is acceptable. See section 12 and the *Installation* part of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation: **8(1)(2)** **Durability, workmanship and fitness of materials**
Comment: The membrane satisfies the requirement of this Regulation. See sections 11.1, 11.2 and 12 and the *Installation* part of this Certificate.

Regulation: **9** **Building standards applicable to construction**
Standard: 2.8 Spread from neighbouring buildings
Comment: When used in irrigated roof gardens or green roofs, the membrane can be regarded as having low vulnerability under clause 2.8.1(1)(2) of this Standard. See sections 7.1 and 7.3 of this Certificate.

Standard: 3.10 Precipitation
Comment: The membrane, including joints, 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 membrane 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 membrane is acceptable. See section 12 and the *Installation* part of this Certificate.

Regulation: **28(b)** **Resistance to moisture and weather**
Comment: The membrane, including joints, will enable a roof to satisfy this Regulation. See section 6.1 of this Certificate.

Regulation:	**36(b)**	**External fire spread**
Comment:		When used in irrigated roof gardens or green roofs, use of the membrane can 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 sections: 1 *Description* (1.2) and 3 *Delivery and site handling* (3.3) of this Certificate.

Additional Information

NHBC Standards 2019

In the opinion of the BBA, POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN membranes, 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*.

CE marking

The Certificate holder has taken the responsibility of CE marking the product, in accordance with harmonised European Standard EN 13707 : 2013. An asterisk (*) appearing in this Certificate indicates that data shown are given in the manufacturer's Declaration of Performance.

Technical Specification

1 Description

1.1 POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes are torch-on, styrene-butadiene-styrene (SBS) copolymer modified bitumen waterproofing sheets, including an anti-root additive, with a polyester reinforcement.

1.2 The membrane is manufactured to the nominal characteristics of:

Thickness (mm)	3.5
Reaction to fire*	Euroclass E
Roll width (m)	1.0
Roll length (m)	8.0
Roll weight (kg)	40
Mass per unit area ($kg \cdot m^{-2}$)	5.0
Watertightness*	pass
Tensile strength * (N per 50 mm)	
longitudinal	900
transverse	650
Elongation at break * (%)	
longitudinal	45
transverse	45
Resistance to root penetration	pass
Static loading * (kg)	
method A	≥ 20
method B	≥ 20
Impact * (mm)	
method A	≥ 1000
method B	≥ 1500
Low temperature flexibility * (°C)	≤ –15

Chemical agents durability	pass
Reinforcement mass per unit area ($g \cdot m^{-2}$)	180
Top surface finish	mineral
Lower surface finish	polyethylene film
Mineral finish colour	green.

1.3 Other membranes, covered in Product Sheet 1 of this Certificate, that can be used with the membrane are:

- GLASDAN 24 AP ELAST
- GLASDAN 30 P ELAST
- ESTERDAN 30 P ELAST
- GLASDAN 30 AP ELAST
- ESTERDAN 30 P ELAST AUTOADHESIVO
- ESTERDAN 30 P ELAST SEMIADHESIVO
- ESTERDAN 40 P ELAST
- ESTERDAN 48 P ELAST
- POLYDAN 180-30 P ELAST
- POLYDAN 180-40 P ELAST
- POLYDAN 180-48 P ELAST.

1.4 Ancillary products used in conjunction with the membrane are:

- BITUMEN PRIMER — a high penetration bituminous primer for preparation of porous surfaces
- BITUMEN PRIMER SA — a fast drying synthetic primer for use with the self-adhesive membranes
- BITUMEN PRIMER HM — a high penetration synthetic primer
- BITUMEN PRIMER+ — a fast drying bituminous primer, available in drums or a sprayable version in canisters
- GLASDAN 30P POL — a glass-reinforced polymer modified bitumen membrane with a polyethylene film finish on both sides, for use as an alternative underlay
- surface, for use as an alternative underlay
- GLASDAN 40 P POL — a glass-reinforced polymer-modified bitumen membrane with a polyethylene film finish, for use as an alternative underlayGLASDAN 800 P PERFORADO — a glass-reinforced oxidised bitumen perforated venting layer with a polyethylene film finish, for use in partial-bond specifications.

1.5 Ancillary products used in conjunction with the membrane, but outside the scope of this Certificate, are:

- SELF-DAN AL+ 1200 — a self-adhesive modified bitumen membrane with aluminium foil on the upper surface, for use in detailing around penetrations in the waterproofing system and as a vapour control layer
- MINERAL WOOL ANGLE FILLET — for use at upstands to give a 45° angle to aid membrane detailing
- DANOFELT PY 300 — a needle punched polyester geotextile for use as separation layer
- SBS LIGHTNING CLIP — a lighting conductor clip to hold a lightning conductor strip, incorporating a SBS membrane flange to allow welding to the waterproofing membrane
- DANODREN JARDIN— a high density polyethylene (HDPE) sheet moulded studs for use as a drainage board
- DANECREN R20 — a high density polyethylene (HDPE) sheet moulded studs for use as a drainage board
- DANOLOSA — a paving slab incorporating an extruded polystyrene insulation.

2 Manufacture

2.1 The membrane is manufactured using conventional continuous bitumen coating techniques.

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 Derivados Asfalticos Normalizados SA t/a DANOSA has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by Bureau Veritas Certification (Certificate ES083321-1).

3 Delivery and site handling

3.1 The membrane is delivered to site in rolls on pallets shrink-wrapped in polythene. Every roll has a label bearing the product name, Certificate holder's name, production identification numbers, CE Marking details, product characteristics and the BBA logo incorporating the number of this Certificate.

3.2 Individual rolls should be stored upright on a clean, level surface, away from excessive heat and kept dry.

3.3 The Certificate holder has taken the responsibility of classifying and labelling the product under the *CLP Regulation (RC) 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 POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes.

Design Considerations

4 Use

4.1 POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes are satisfactory for use as a top layer membrane in roof waterproofing systems in:

- flat roofs in green roof (extensive planting) specifications
- flat roofs in roof garden (intensive planting) specifications
- biodiverse roof specifications.

4.2 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
- biodiverse roof — a roof with a growing medium selected to allow indigenous plant species to inhabit the roof over time.

4.3 Limited access roofs are defined for the purpose 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, special precautions, such as additional protection to the membrane, must be taken.

4.4 Flat roofs are defined for the purpose of this Certificate as those having a minimum finished fall of 1:80(1). For design purposes, twice the minimum finished fall should be assumed, unless a detailed analysis of the roof is available, including overall and local deflection, direction of falls, etc. Pitched roofs are defined as those having falls greater than 1:6.

(1) *NHBC Standards* 2019 require a minimum fall of 1:60 for green roofs and roof gardens.

4.5 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

4.6 Imposed loads, dead loading and wind load specifications should 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

4.7 Decks to which the membrane is to be applied must comply with the relevant requirements of BS 6229 : 2018, BS 8217 : 2005 and, where appropriate, *NHBC Standards* 2019, Chapter 7.1.

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

4.9 The drainage system for both green roofs and roof gardens must be correctly designed, and provision made for access for maintenance purposes. Dead loads for green roofs and roof gardens can increase if the drains become partially or completely blocked causing waterlogging of the drainage layer.

4.10 Insulation systems or materials used in conjunction with the membrane must be either:

- as described in the relevant clauses of BS 8217 : 2005, or
- the subject of a current BBA Certificate and be used in accordance with, and within the limitations of, that Certificate.

5 Practicability of installation

Installation of POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes must only be carried out by experienced roofing contractors.

6 Weathertightness

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

6.2 The membrane is impervious to water and will achieve a weathertight roof capable of accepting minor structural movement without damage.

7 Properties in relation to fire

7.1 In the opinion of the BBA, a roof incorporating the membrane will be unrestricted under the national Building Regulations in the following circumstances:

- a roof garden covered with a drainage layer of gravel 100 mm thick and a soil layer 300 mm thick
- when protected by an inorganic covering (eg gravel or paving slabs) listed in the Annex of Commission Decision 2000/553/EC.

7.2 In the opinion of the BBA, irrigated green roofs and roof gardens will also be unrestricted under the national Building Regulations.

7.3 The designation of other specifications (eg on combustible substrates) should be confirmed by:

England and Wales — test or assessment in accordance with Approved Document B, Appendix A, Clause 1
Scotland — tests to confirm compliance with Mandatory Standard 2.8, with reference to clause 2.8.1[(1)(2)]

(1) Technical Handbook (Domestic).
(2) Technical Handbook (Non-Domestic).

Northern Ireland — test or assessment by a UKAS-accredited laboratory, or an independent consultant with appropriate experience

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

8 Resistance to wind uplift

8.1 The membrane, when used with a suitable roof garden or green-roof specification, will adequately resist the effects of wind uplift likely to occur in practice.

8.2 The soil used in intensive plantings should not be of a type that will be removed, or become localised, owing to wind scour experienced on site.

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

8.4 The ballast requirements for loose-laid systems should be calculated in accordance with the relevant parts of BS EN 1991-1-4 : 2005 and the UK National Annex. The membrane should always be ballasted with a minimum depth of 50 mm of aggregate. In areas of high-wind exposure, the Certificate holder's advice should be sought. Alternatively, concrete slabs on suitable supports can be used.

9 Resistance to mechanical damage

9.1 Prior to installation of the upper layers of the membrane, the waterproofing can accept the limited foot traffic and light concentrated loads associated with installation operations.

9.2 Where regular foot traffic is envisaged, protection, such as, DANOLOSA, paving on bearer pads or similar suitable pedestrian surfaces should be used.

10 Resistance to root penetration

10.1 The waterproofing membrane, including joints, will adequately resist penetration by plant roots.

10.2 Where there is a run-off from a large sill or gully onto the roof surface, the build-up of silt may allow the germination of seeds; this type of detail should therefore be avoided. Any growth occurring will be restricted and will not normally affect the performance of the roof and will be no worse than that occurring on normal flat roofs.

11 Maintenance

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

11.2 Guidance is available within the latest edition of *The GRO Green Roof Code – Green Roof Code of Best Practice for the UK.*

11.3 Where damage has occurred it should be repaired in accordance with section 15 and the Certificate holder's instructions.

12 Durability

The membrane, when subjected to normal conditions of use in a roof, will provide a durable waterproof covering with a service life of at least 30 years.

Installation

13 General

13.1 Installation of POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes and detailing is carried out in accordance with the Certificate holder's instructions, the relevant clauses of BS 8000 : 2014, BS 8000-4 : 1989 and BS 8217 : 2005, and this Certificate.

13.2 Substrates to which the membranes are to be applied must be, sound, dry, clean and free from sharp projections such as nail heads and concrete nibs. The substrate should be prepared using the appropriate primer, in accordance with the Certificate holder's instructions, prior to installation of the waterproofing system.

13.3 The membrane may be laid in conditions normal to roofing work and must not be laid in rain, snow or heavy fog, nor if the temperature falls below 5°C, unless precautions against surface condensation have been taken.

13.4 The roofing layers must always be installed with staggered overlaps and in such a manner that no counter-seams in the direction of the outlets are made.

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

14 Procedure

Fully bonded

14.1 Bonding is achieved by melting the lower surface by torching and pressing the membrane down ensuring no trapped air beneath the membrane. Care must be taken not to overheat the membrane.

14.2 Asuitable first layer is installed with side laps of 80 mm and end laps of 100 mm with an offset of a minimum of 300 mm between end laps. The top layer/capsheet is laid over the first layer in the same direction and fully bonded. The top layer/capsheets are installed with side laps a minimum of 80 mm and end laps 100 mm wide. Laps between the membrane and any base sheets should be offset by a minimum of 300 mm. A bead of molten material must extrude from all laps to indicate a satisfactory seal.

Partially bonded

14.3 When partially bonding, a layer of either GLASDAN 800 P PERFORADO or ESTERDAN 30 P ELAST SEMIADHESIVO is loose laid across the substrate edge to edge. The GLASDAN 800 P PERFORADO is laid with 100 mm wide side and end laps and terminated at the base of the MINERAL WOOL ANGLE FILLET. ESTERDAN 30 P ELAST SEMIADHESIVO is installed in accordance with sections 14. To 14.

14.4 Where no MINERAL WOOL ANGLE FILLET is used the GLASDAN 800 P PERFORADO is terminated 100 mm from the roof edge and around all penetrations.

14.5 A suitable first layer is fully bonded over the venting layer in the same direction with side laps of 80 mm and end laps of 100 mm.

14.6 The top layer/capsheet is laid over the first layer in the same direction and fully bonded. The top layer/capsheets are installed with, for the mineral surfaced membranes, side laps determined by the selvedge edge, and, for sanded top layers, side laps a minimum of 80 mm and end laps 100 mm wide. Laps between the membrane and any base sheets should be offset by a minimum of 300 mm. A bead of molten material must extrude from all laps to indicate a satisfactory seal.

Loose-laid and ballasted

14.7 A separation layer is loose-laid over the substrate in accordance with the Certificate holder's instruction with side and end overlaps of 100 mm.

14.8 The first layer is loose-laid over the separation layer with side laps of 80 mm and end laps of 100 mm wide. The laps are sealed by torch welding.

14.9 The top layer is laid over the first layer in the same direction and fully bonded. The top layer/capsheets are installed with side laps of 80 mm and end laps 100 mm wide. Laps between the membrane and any base sheets should be offset by a minimum of 300 mm. A bead of molten material must extrude from all laps to indicate a satisfactory seal.

14.10 The waterproofing system is ballasted with a minimum of 50 mm depth of rounded aggregate graded 20 to 40 mm.

14.11 Where concrete tiles are used, the waterproofing system is first covered with either DANOFELT PY 300 of sand into which the tiles are set.

Heat-activated self-adhesive

14.12 The first strip of ESTERDAN 30 P ELAST AUTOADHESIVO or ESTERDAN 30 P ELAST SEMIADHESIVO is laid out in the correct position of the roof deck. The membrane is rolled back towards the centre revealing the release film underneath. At a point close to the centre of the roll, the release film is carefully cut across the width of the roll without cutting through the membrane.

14.13 The release film is peeled back to expose part of the lower surface, which is then pressed down onto the decking and the release film is gradually peeled back, ensuring that no air is trapped beneath the membrane and brushed and/or rolled onto the substrate.

14.14 Overlaps for the underlay must be a minimum of 80 mm for side laps and 100 mm end laps.

14.15 The capsheet is then applied as described in section 14.6. The heat from the application of the capsheet will activate the adhesive on the lower face of the first layer to give a full bond.

15 Repair

Clean area of debris and prime with the recommended primer. The damaged area is patched using underlay and capsheet, the patch should extend a minimum of 100mm past the area of damage. The patch is torch-bonded to the original membrane.

Technical Investigations

16 Tests

16.1 Tests were carried out on POLYDAN 50/GP ELAST and ELAST+ GREEN GARDEN Membranes, and the results assessed to determine:

Coating mass

- ring and ball temperature
- penetration at 25°C
- low temperature flexibility
- elasticity recovery
- ring and ball temperature after heat ageing at 70°C for six months
- low temperature flexibility after heat ageing at 70°C for six months
- elasticity recovery after heat ageing at 70°C for six months

Membrane

- tensile strength and elongation
- nail tear
- static indentation
- dynamic indentation
- fatigue cycling

- heat resistance
- dimensional stability
- fatigue cycling after heat ageing at 70°C for six months.

16.2 Heat ageing at 70°C for 240 days was carried out and low temperature flexibility and heat resistance to assess an extension of durability.

17 Investigations

17.1 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.

17.2 An assessment was made of reports of fire tests.

17.3 An assessment was made of declared values for CE Marking including root penetration.

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 8747 : 2007 *Reinforced bitumen membranes (RBMs) for roofing — Guide to selection and specification*

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*

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

EN 13707 : 2013 *Flexible sheets for waterproofing — Reinforced bitumen sheets for roof waterproofing — Definitions and characteristics*

18 Conditions

18.1 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.

18.2 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.

18.3 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.

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

18.5 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.

18.6 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.