

## DuPont de Nemours (Luxembourg) S.à r.l

Rue General Patton

L-2984

Luxembourg

Tel: 0117 452 9052/9053

e-mail: [tyvek.construction@dupont.com](mailto:tyvek.construction@dupont.com)

website: [www.dupont.co.uk/building.html](http://www.dupont.co.uk/building.html)



**Agrément Certificate**

**90/2548**

Product Sheet 4 Issue 6

### TYVEK CONSTRUCTION MEMBRANES

#### DUPONT AIRGUARD CONTROL AIR LEAKAGE BARRIER

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to the DuPont AirGuard<sup>(2)</sup> Control Air Leakage Barrier, for use as an air barrier in walls and floors of new build construction and renovation in timber-frame, steel-frame and masonry walls and floor structures.

(1) Hereinafter referred to as 'Certificate'.

(2) AirGuard is a registered trademark of E.I. du Pont de Nemours & Co. or its affiliates.

#### 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 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 Sixth issue: 6 June 2024

Originally certified on 08 April 2008

Hardy Giesler  
Chief Executive Officer

*This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.*

*The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).*

*Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.*

*The Certificate should be read in full as it may be misleading to read clauses in isolation.*

*Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.*

#### British Board of Agrément

1<sup>st</sup> Floor, Building 3, Hatters Lane  
Croxley Park, Watford  
Herts WD18 8YG

©2024

tel: 01923 665300  
[clientservices@bbacerts.co.uk](mailto:clientservices@bbacerts.co.uk)  
[www.bbacerts.co.uk](http://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 the DuPont AirGuard Control Air Leakage Barrier, 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)

<b>Requirement:</b>	<b>B3(4)</b>	<b>Internal fire spread</b>
Comment:		The product can contribute to satisfying this Requirement. See section 2 of this Certificate.
<b>Requirement:</b>	<b>B4(1)</b>	<b>External fire spread</b>
Comment:		The product is restricted by this Requirement. See section 2 of this Certificate.
<b>Requirement:</b>	<b>C2(b)</b>	<b>Resistance to moisture</b>
Comment:		The product will contribute to satisfying this Requirement. See section 3 of this Certificate.
<b>Requirement:</b>	<b>C2(c)</b>	<b>Resistance to moisture</b>
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
<b>Regulation:</b>	<b>L1(a)(i)</b>	<b>Conservation of fuel and power</b>
Comment:		The product can contribute to satisfying this Requirement. See section 6 of this Certificate.
<b>Regulation:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>25B</b>	<b>Nearly zero-energy requirements for new buildings</b>
<b>Regulation:</b>	<b>26</b>	<b>CO<sub>2</sub> emission rates for new buildings</b>
<b>Regulation:</b>	<b>26A</b>	<b>Fabric energy efficiency rates (applicable to England only)</b>
<b>Regulation:</b>	<b>26A</b>	<b>Primary energy efficiency rates for new buildings (applicable to Wales only)</b>
<b>Regulation:</b>	<b>26B</b>	<b>Fabric performance values for new dwellings (applicable to Wales only)</b>
<b>Regulation:</b>	<b>26C</b>	<b>Target primary energy rates for new buildings (applicable to England only)</b>
<b>Regulation:</b>	<b>26C</b>	<b>Energy efficiency rating (applicable to Wales only)</b>
Comment:		The product can contribute to satisfying these Regulations. See section 6 of this Certificate.



#### The Building (Scotland) Regulations 2004 (as amended)

<b>Regulation:</b>	<b>8(1)</b>	<b>Fitness and durability of materials and workmanship</b>
Comment:		The product can contribute to satisfying this Regulation. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>9</b>	<b>Building standards – construction</b>
Standard:	<b>2.4</b>	<b>Cavities</b>
Comment:		The product can contribute to satisfying this Standard with respect to clause 2.4.2 <sup>(1)(2)</sup> . See section 2 of this Certificate.

Standard: Comment:	3.15	Condensation The product can contribute to satisfying this Standard, with reference to clauses 3.15.1 <sup>(1)(2)</sup> and 3.15.5 <sup>(1)(2)</sup> . See section 3 of this Certificate.
Standard: Comment:	6.1(b)(c)(d)	Carbon dioxide emissions The product can contribute to satisfying this Standard, with reference to clauses 6.1.1 <sup>(1)</sup> and 6.1.2 <sup>(2)</sup> . See section 6 of this Certificate.
Standard: Comment:	6.2	Building insulation envelope The product can contribute to satisfying the requirements of these Standards, with reference to clauses 6.2.4 <sup>(1)</sup> , 6.2.5 <sup>(2)</sup> , 6.2.6 <sup>(2)</sup> , 6.2.10 <sup>(1)</sup> , 6.2.11 <sup>(1)(2)</sup> and 6.2.12 <sup>(1)</sup> . See section 6 of this Certificate.
Standard: Comment:	7.1(a)(b)	Statement of sustainability The product 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. In addition, the product can contribute to a construction meeting a higher level of sustainability as defined in this Standard, with reference to clauses 7.1.4 <sup>(1)</sup> , 7.1.6 <sup>(1)(2)</sup> , 7.1.7 <sup>(1)</sup> , 7.1.9 <sup>(2)</sup> and 7.1.10 <sup>(2)</sup> . See section 6 of this Certificate.
Regulation: Comment:	12	<b>Building standards – conversion</b> All comments given for the product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 <sup>(1)(2)</sup> and Schedule 6 <sup>(1)(2)</sup> .

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



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

Regulation: Comment:	23(1)(a)(i) (iii)(b)(i)	<b>Fitness of materials and workmanship</b> The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation: Comment:	29	<b>Condensation</b> The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation: Comment:	35(4)	<b>Internal fire spread – structure</b> The product can contribute to satisfying this Regulation. See section 2 of this Certificate.
Regulation: Comment:	36(a)	<b>External fire spread</b> The product is restricted by this Regulation. See section 2 of this Certificate.
Regulation: Comment:	39(a)(i)	<b>Conservation measures</b> The product can contribute to satisfying this Regulation. See section 6 of this Certificate.
Regulation: Regulation: Comment:	40(2) 43B	<b>Target carbon dioxide emission rate</b> <b>Nearly zero-energy requirements for new buildings</b> The product can contribute to satisfying these Regulations. See section 6 of this Certificate.

## Additional Information

### NHBC Standards 2024

In the opinion of the BBA, the DuPont AirGuard Control Air Leakage Barrier, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to NHBC

## Fulfilment of Requirements

The BBA has judged the DuPont AirGuard Control Air Leakage Barrier to be satisfactory for use as described in this Certificate. The product has been assessed for use as an air barrier in walls and floors of new build construction and renovation in timber-frame, steel-frame and masonry walls and floor structures.

## ASSESSMENT

### Product description and intended use

The Certificate holder provided the following description for the product under assessment. The DuPont AirGuard Control Air Leakage Barrier consists of a spunbond polypropylene substrate coated with a polyolefin-copolymer.

The product has the nominal characteristics given in Table 1.

*Table 1 Nominal characteristics of DuPont AirGuard Control Air Leakage Barrier*

Characteristic (unit)	Value
Thickness (mm)	0.32
Mass per unit area ( $\text{g}\cdot\text{m}^{-2}$ )	108
Roll length (m)	50
Roll width (m)	1.5, 2.8
Colour	Blue top side and grey lower side

### Ancillary Items

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

- Tyvek<sup>(1)</sup> Acrylic Tape (2060B) — a single-sided tape for sealing joints.
- Tyvek Double-sided Tape (1310D) — an acrylic tape for use in repairing and sealing the membrane.
- Tyvek Butyl Tape (1311B) — a double-sided tape for sealing penetrations, eg behind metal brackets and timber battens under compression
- AirGuard Tape (1310V) — single-sided acrylic tape for sealing uneven surfaces
- Tyvek FlexWrap EZ — for sealing building penetrations.

(1) Tyvek is a registered trademark of E.I. du Pont de Nemours & Co. or its affiliates.

### Applications

The product is intended for use as an air barrier, and it is satisfactory for use as an alternative to traditional vapour control layers using a low vapour resistant insulation in combination with a breather membrane. Further information is given in BRE Report BR 262 : 2002.

### Definitions for products and applications inspected

In the absence of other guidance, suitable external masonry wall, external timber framed wall, curtain walling and light cladding, and light steel frame wall constructions are defined as those designed and built in accordance with NHBC Standards 2024, Chapters 6.1, 6.2, 6.9 and 6.10 respectively.

## Product assessment – key factors

The product was assessed for the following key factors, and the outcome of the assessments 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 Reaction to fire

2.1.1 The result of a reaction to fire test is given in Table 2.

*Table 2 Reaction to fire test*

Product assessed	Assessment method	Requirement	Result
DuPont AirGuard Control Air Leakage Barrier	Reaction to fire classification in accordance with EN 13501-1 : 2018 <sup>(1)</sup> tested in accordance with EN ISO 11925-2 : 2020	Value achieved	Class E

(1) Classification report FIRES-CR-218-22-AUPE issued by FIRES s.r.o. A copy of the report is available from the Certificate holder on request.

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

2.1.3 In England, Wales and Northern Ireland, the product must not be used on buildings that have a storey at least 18 m above ground level and which contain one or more dwellings, an institution, a room for residential purposes (excluding, in Wales and Northern Ireland only, any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools and, additionally in Northern Ireland, nursing homes and places of lawful detention.

2.1.4 In Scotland, the use of the product is unrestricted in terms of height and proximity to a relevant boundary by the documents supporting the national Building Regulations.

2.1.5 Designers must refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly in respect of requirements for substrate fire performance, cavity barriers, service penetrations and combustibility limitations for other materials and components used in the overall construction.

## 3 Hygiene, health and the environment

Data were assessed for the following characteristics.

### 3.1 Weathertightness

3.1.1 The result of a weathertightness test is given in Table 3.

*Table 3 Weathertightness tests*

Product assessed	Assessment method	Requirement	Result
DuPont AirGuard Control Air Leakage Barrier	Watertightness to BS EN 1928 : 2000 (A) at 2 kPa	No leakage	Pass

3.1.2 On the basis of data assessed, DuPont AirGuard Control Air Leakage Barrier provides an effective control to the passage of liquid water and water vapour and will contribute to limiting the risk of interstitial condensation.

### 3.2 Condensation

3.2.1 Results of water vapour resistance tests are given in Table 4.

**Table 4 Water vapour resistance**

Product assessed	Assessment method	Requirement	Result
DuPont AirGuard Control Air Leakage Barrier	Water vapour transmission rate to BS 3177: 1959 75% RH at 25°C	Value achieved	0.01 g·m <sup>-2</sup> day <sup>-1</sup>
	Air permeability to BS EN 12114 : 2000 at 50 Pa	Value achieved	1.5 m <sup>3</sup> ·h <sup>-1</sup> ·m <sup>-2</sup>

3.2.2 A condensation risk analysis was carried out based on the results given in Table 4, and satisfactory conclusions were drawn.

3.2.3 The risk of condensation occurring will depend upon the properties and vapour resistance of other materials used in the construction, the internal and external conditions and the effectiveness of the product's installation.

3.2.4 Consideration must be given in the overall installation to minimising penetrations by services. Joints at ceilings/ walls and wall/floor junctions must be sealed to offer significant resistance to water vapour transmission. Sealing must also be carried out in accordance with the Certificate holder's instructions.

3.2.5 Constructions must be in accordance with the nominal recommendations of BS 5250 : 2021 using a minimum air layer equivalent value ( $s_d$ ) of not less than 2 m (equivalent to a water vapour resistance of 10 MN·s·g<sup>-1</sup>) for the product.

3.2.6 On the basis of data assessed, product joints can have a satisfactory resistance to air movement.

### 3.3 Resistance to mechanical damage

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

**Table 5 Mechanical damage tests**

Product assessed	Assessment method	Requirement	Result
DuPont AirGuard Control Air Leakage Barrier	Nail tear to MOAT 27 : 1983	≥35 N	
	Longitudinal direction		Pass
	Transverse direction		Pass
	Tensile strength to BS EN 12311 : 2000	Value achieved	
	Longitudinal direction		560 N·(50mm) <sup>-1</sup>
	Transverse direction		195 N·(50mm) <sup>-1</sup>
	Elongation to BS EN 12311 : 2000	Value achieved	
	Longitudinal direction		14%
	Transverse direction		15%

3.3.2 On the basis of data assessed, the product has adequate strength to resist the loads associated with construction and installation.

3.3.3 The wet strength of the product was assessed using test data from a relevant representative product. The product is not adversely affected by water and will retain its properties when wet.

## 4 Safety and accessibility in use

Not applicable.

## 5 Protection against noise

Not applicable.

## 6 Energy economy and heat retention

Data were assessed for the following characteristics.

## 6.1 Thermal performance

6.1.1 Results of emissivity tests are given in Table 6.

Table 6 Emissivity tests			
Product assessed	Assessment method	Requirement	Result
DuPont AirGuard Control Air Leakage Barrier	Indicative emissivity to ASTM C 1371 – 98 Control	$\leq 0.1$	Pass

6.1.2 When lapped, fixed and taped correctly, the product acts as an air barrier and can contribute to elements and junctions minimising heat loss by unplanned air infiltration and exfiltration. Guidance in this respect can be found in the documents supporting the national Building Regulations.

## 7 Sustainable use of natural resources

The product is made from a mix of polyolefins, which can be recycled.

## 8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in this product were assessed.

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

Table 7 Results of durability tests			
Product assessed	Assessment method	Requirement	Result
DuPont AirGuard Control Air Leakage Barrier	Dimensional stability to BS EN 1107-2 : 2001	$\leq \pm 2\%$	
	Longitudinal direction		Pass
	Transverse direction		Pass
	Water vapour permeability to BS 3177 : 1959 75% RH at 25°C	Value achieved	
	Exposed to creosote		10 MN·s·g <sup>-1</sup>
	Exposed to oil of cedarwood		8.14 MN·s·g <sup>-1</sup>
	Exposed to aqueous preservative (Insecta Osmose K33 - 10% soln.)		20 MN·s·g <sup>-1</sup>
	Exposed to distilled turpentine		19.4 MN·s·g <sup>-1</sup>
	Resistance to tearing (nail shank) to MOAT 27 : 1983	$\geq 35$ N	
	Longitudinal direction		Pass
	Transverse direction		Pass
	Resistance to tearing (nail shank) to MOAT 27 : 1983	Value achieved	
	Heat aged at 70°C for 28 days		
	Longitudinal direction		132 N
	Transverse direction		134 N
	Resistance to water penetration to BS EN 1928 : 2000 at 2 kPa and aged to BS EN 13859-1 : 2005 Annex C	No leakage	Pass
	Indicative emissivity to ASTM C 1371 – 98 Aged for 336 hours UVA at 50 °C, followed by 90 days at 70 °C, followed by 500 hours at 90% RH at 45 °C	$\leq 0.1$	Pass

### 8.3 Service life

Under normal service conditions, the product will have a life equivalent to the structure in which it is incorporated, 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 It is essential that proper care and attention is given to maintaining the product's integrity and continuity.

9.1.3 Existing walls must be in a good state of repair with no evidence of rain penetration, damp or frost damage.

9.1.4 Suspended concrete and suspended timber ground floors incorporating the product must include suitable ventilation.

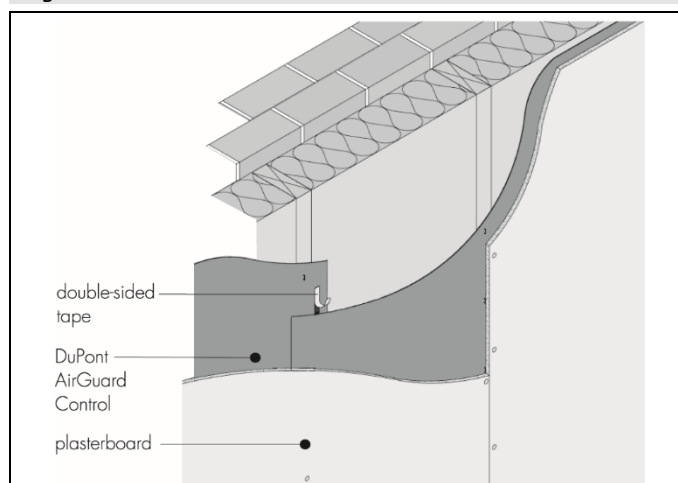
#### 9.2 Installation

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 the Certificate holder's instructions and good building practice. A summary of instructions and guidance is in Annex A.

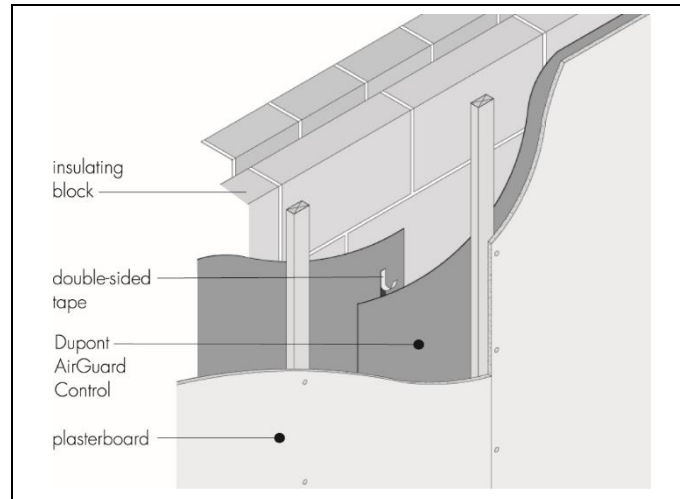
9.2.3 Where wood preservatives and damp-proofing treatments containing solvents have been applied, sufficient time must be allowed for solvents to disperse before the product is installed.

*Figure 1 Solid wall*

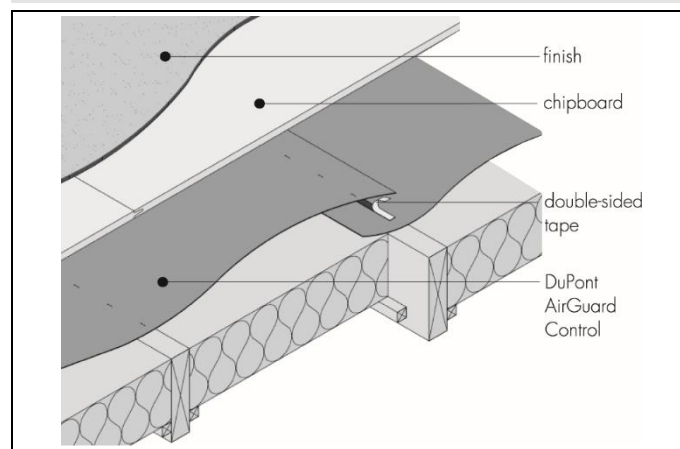




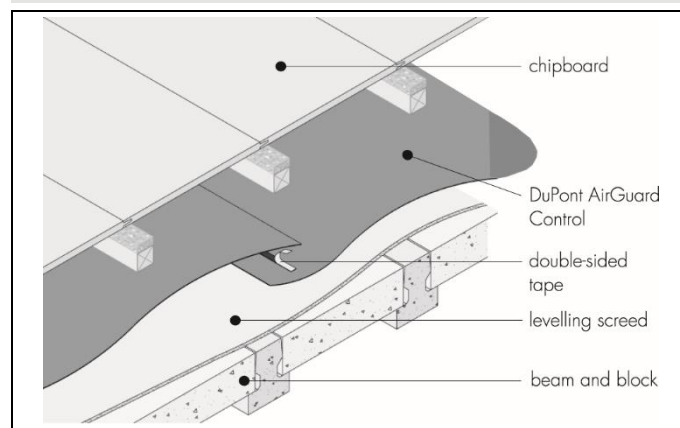
**Figure 2 Cavity wall**



**Figure 3 Timber floor**



**Figure 4 Suspended concrete floor**



9.2.4 For timber-frame installations, the product must be positioned on the warm side of the thermal insulation and held in place by staples to the background structure. Joints between adjacent sheets of the material must be lapped 100 mm over a support and be sealed with a strip of Tyvek Double-sided Tape (1310D).

9.2.5 At all penetrations and abutments, the product must be cut neatly to fit as closely as possible and the joint sealed with a strip of Tyvek Double-sided Tape (1310D), Tyvek Butyl Tape (1311B) or Tyvek FlexWrap EZ, depending on the nature of the substrate at the abutments or the penetrating object for penetrations.

9.2.6 Internal linings must be applied directly onto the product and fixed through it in the normal manner. Preferably, the internal lining must be set on spacer battens, leaving a gap behind the lining which can accommodate wiring and other services and reduce the need for penetrations of the membrane.

9.2.7 When used in steel frame constructions, the product is fastened to the steelwork using an appropriate fixing system such as a 25 mm steel framing screw with an EPDM rubber washer in accordance with the Certificate holder's instructions. Fixing must be at maximum 500 mm centres. Tyvek Double-sided Tape (1310D) or Tyvek Butyl Tape (1311B) can also be used for temporary adhesion and to reduce the number of fixings through the membrane.

9.2.8 When used in masonry constructions, the product is fastened to the masonry using an appropriate anchor fixing system or a masonry nail/screw and an EPDM rubber washer. Fixing should be at maximum 500 mm centres. Tyvek Double-sided Tape (1310D) can be used to fix the membrane in addition to the mechanical method. For airtightness, Tyvek Butyl Tape must be used at fixing points where a compressible washer is not employed. A primer can be applied to chalky or porous masonry to seal the surface and improve adhesion before applying adhesive tape.

### 9.3 Workmanship

Practicability of installation was assessed by the BBA, on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, the product must be installed by a competent general builder, or a contractor, experienced with this type of product.

### 9.4 Maintenance and repair

9.4.1 As the product is confined within a wall or floor structure and has suitable durability, maintenance is not required. Any damaged areas must be repaired or replaced before completion.

9.4.2 Damage to the product must be repaired with Tyvek Acrylic Tape (2060B) or AirGuard Tape (1310V).

9.4.3 Extensively damaged areas must be made good by overlaying a new sheet sealed in place with Tyvek Acrylic Tape (2060B), Tyvek Double-sided Tape (1310D) or AirGuard Tape (1310V).

## 10 **Manufacture**

10.1 The production processes for the product 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 product is delivered to site in packages bearing the marketing company's name, the grade identification and the BBA logo incorporating the number of this Certificate.

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

11.2.1 Rolls must be stored flat on their sides, on a smooth, clean, dry surface, under cover and protected from sunlight.

## ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the product 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.

### CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard EN 13984 : 2013.

### Management Systems Certification for production

The management systems of the manufacturer have been assessed and registered as meeting the requirements of EN ISO 9001 : 2015 by DQS GmbH (Certificate 000093 QM15).

### Additional information on installation

#### Condensation

A.1 The risk of condensation occurring will depend upon the properties and vapour resistance of other materials used in the construction, the internal and external conditions and the effectiveness of the product's installation.

A.2 Consideration must be given in the overall installation to minimising penetrations by services. Joints at ceilings/ walls and wall/floor junctions must be sealed to offer significant resistance to water vapour transmission. Sealing must also be carried out in accordance with the Certificate holder's instructions.

A.3 In England and Wales, walls and floors will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed  $0.7 \text{ W} \cdot \text{m}^{-2} \cdot \text{K}^{-1}$  at any point, and the junctions and openings are designed in accordance with the relevant requirements of limiting thermal bridging and air leakage.

A.4 For buildings in Scotland, wall and floor constructions will be acceptable when the thermal transmittance (U value) does not exceed  $1.2 \text{ W} \cdot \text{m}^{-2} \cdot \text{K}^{-1}$  at any point, and the junctions with other elements are designed in accordance with the guidance referred to in BS 5250 : 2021. Further guidance may be obtained from BRE Report BR 262 : 2002.

## Bibliography

- ASTM C 1371 – 1998 *Standard test method for determination of emittance of materials near room temperature using portable emissometers*
- BRE Report BR 262 : 2002 *Thermal insulation : avoiding risk*
- BS 3177 : 1959 (1995) *Method for determining the permeability to water vapour of flexible sheet materials used for packaging*
- BS 5250 : 2021 *Code of practice for control of condensation in buildings*
- BS EN 1107-2 : 2001 *Flexible sheets for waterproofing – Determination of dimensional stability*
- BS EN 1928 : 2000 *Flexible sheets for waterproofing – Bitumen, plastic and rubber sheets for roof waterproofing - determination of watertightness*
- BS EN 12114 : 2000 *Thermal performance of buildings – Air permeability of building components and building elements – Laboratory test methods*
- BS EN 12311 : 2000 *Flexible sheets For waterproofing – Determination of tensile properties – Bitumen sheets for roof waterproofing*
- BS EN 13859-1 : 2005 *Flexible sheets for waterproofing – Definitions and characteristics of underlays – Underlays of discontinuous roofing*
- BS EN 13859-2 : 2014 *Flexible sheets for waterproofing – Definitions and characteristics of underlays – Underlays for walls*
- EN 13501-1 : 2018 *Fire classification of construction products and building elements – Part 1: classification using data from reaction to fire tests*
- EN 13984 : 2013 *Flexible sheets for waterproofing – plastic and rubber vapour control layers – Definitions and characteristics*
- EN ISO 9001 : 2015 *International standard for quality management systems*
- EN ISO 11925-2 : 2020 *Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: single-flame source test*
- MOAT 27 : 1983 *UEAtc Technical Guide for the Assessment of Roof Waterproofing Systems made of Reinforced APP or SBS Polymer Modified Bitumen Sheets*

## 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
- 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.

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

1<sup>st</sup> Floor, Building 3, Hatters Lane  
Croxley Park, Watford  
Herts WD18 8YG

©2024

tel: 01923 665300  
clientservices@bbacerts.co.uk  
[www.bbacerts.co.uk](http://www.bbacerts.co.uk)