



## Web Dynamics Ltd

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**Agrément  
Certificate  
No 04/4179**

Designated by Government  
to issue  
European Technical  
Approvals

## WEB BREATHER UNDERLAYS IN COLD NON-VENTILATED PITCHED ROOF SYSTEMS

Système de revêtement  
Dachbelagsystem

### Product

• THIS CERTIFICATE RELATES TO WEB BREATHER UNDERLAYS IN COLD NON-VENTILATED PITCHED ROOF SYSTEMS, AS ROOF TILE UNDERLAYS IN TILED OR SLATED PITCHED ROOFS.

• The product comprises one part of a non-ventilated cold pitched roof system and it is important that designers, planners, contractors and/or installers ensure that the roof and ceiling are constructed in accordance with the Certificate holder's instructions and this Certificate.

• Advice on the use of the product in these applications can be sought from the Certificate holder.

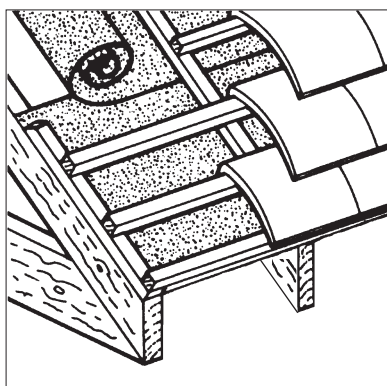
• The product prevents the ingress of wind-blown rain or snow.

• The product is resistant to tearing during installation and flexible at low ambient temperatures.

• The product is permeable to water vapour, but will not allow liquid water to pass through.


• The product is marketed in the UK by the Certificate holder at the address shown on the front page.

These Front Sheets must be read in conjunction with the accompanying Detail Sheets, which provide information on specific systems.



## Regulations — Detail Sheet 1

### 1 The Building Regulations 2000 (as amended) (England and Wales)

 The Secretary of State has agreed with the British Board of Agrément the aspects of performance to be used by the BBA in assessing the compliance of roof tile underlay with the Building Regulations. In the opinion of the BBA, Web Breather Underlays in Cold Non-Ventilated Pitched Roof Systems, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements.

Requirement: C2(b)

Resistance to moisture

Comment:

The product will contribute to a roof meeting this Requirement. See sections 6.1 and 6.2 of these Front Sheets.

Requirement: C2(c)

Resistance to moisture

Comment:

The product can enable a roof to meet this Requirement. See the tinted areas in the *Risk of condensation* section of the relevant Detail Sheet.


Requirement: Regulation 7

Materials and workmanship

Comment:

The product is an acceptable material. See section 9 of these Front Sheets.

### 2 The Building Standards (Scotland) Regulations 1990 (as amended)

 In the opinion of the BBA, Web Breather Underlays in Cold Non-Ventilated Pitched Roof Systems, if used in accordance with the provisions of this Certificate, will satisfy or contribute to satisfying the various Regulations and related Technical Standards as listed below.

Regulation: 10

Fitness of materials and workmanship

Standard: B2.1

Selection and use of materials, fittings, and components, and workmanship

Comment:

The product can contribute to a construction meeting this Standard. See the *Installation* part of these Front Sheets.

Standard: B2.2

Selection and use of materials, fittings, and components, and workmanship

Comment:

The product is an acceptable material. See section 9 of these Front Sheets.

Regulation: 17

Resistance to moisture

Standard: G3.1

Resistance to precipitation — Resistance to precipitation

Comment:

The product will contribute to a roof satisfying this Standard. See sections 6.1 and 6.2 of these Front Sheets.

Regulation: 18

Resistance to condensation


Standard: G4.1

Condensation — Interstitial condensation

Comment:

The product can enable a roof to satisfy this Standard. See the tinted areas in the *Risk of condensation* section of the relevant Detail Sheet.

### 3 The Building Regulations (Northern Ireland) 2000

 In the opinion of the BBA, Web Breather Underlays in Cold Non-Ventilated Pitched Roof Systems, if used in accordance with the provisions of this Certificate, will satisfy or contribute to satisfying the various Building Regulations as listed below.

Regulation: B2

Fitness of materials and workmanship

Comment:

The product is an acceptable material. See section 9 of these Front Sheets.

Regulation:	C4	Resistance to ground moisture and weather
Comment:		The product will contribute to a roof satisfying this Regulation. See sections 6.1 and 6.2 of these Front Sheets.
Regulation:	C5	Condensation
Comment:		The product can enable a roof to satisfy this Regulation. See the tinted areas in the <i>Risk of condensation</i> section of the relevant Detail Sheet.

#### 4 Construction (Design and Management) Regulations 1994 (as amended) Construction (Design and Management) Regulations (Northern Ireland) 1995 (as amended)

Information in this Certificate may assist the client, planning supervisor, designer and contractors to address their obligations under these Regulations.

See sections: 10 *Procedure* (10.8) of these Front Sheets and  
1 *Description* (1.2) of the relevant Detail Sheet.

## Design Data

### 5 General

5.1 Web Breather Underlays in Non-Ventilated Cold Pitched Roof Systems are satisfactory for use in dwellings with non-ventilated tiled or slated roofs of any conventional plan and of any size.

Features<sup>(1)</sup> successfully assessed include:

- duo pitched
- mono-pitched
- hipped
- mansard
- gable ends
- verges
- abutments
- valleys
- room in roof
- dormers
- timber sarking<sup>(2)</sup>.

(1) For roofs incorporating other features, non-conventional roof geometries or construction materials, the advice of the Certificate holder should be sought.

(2) As Scottish practice, with slates nailed through the breather membrane directly onto timber planks (nominally 150 mm wide with a 2 mm gap) without battens.

5.2 The product can be installed by draping over rafters and securing with tiling battens, or installed taut over rafters and secured with counter battens and tiling battens.

5.3 In conventionally-ventilated roof constructions, energy loss by ventilation can account for up to 25% of the total heat lost through the roof. The non-ventilated system will substantially reduce this mechanism of heat loss.

5.4 In non-ventilated roof systems, the risk of condensation is equivalent to, or less than, that attending conventionally-ventilated cold roof systems.

### 6 Weathertightness



6.1 Tests indicate that the product will resist the passage of water and wind-blown snow and dust into the interior of a building under all conditions to be found in a roof constructed in accordance with the relevant clauses of BS 5534 : 2003.

6.2 The product resists penetration of liquid water and consequently may be used as temporary waterproofing prior to the installation of slates or tiles. The period of such use, however, should be kept to a minimum. Advice should be sought from the Certificate holder.

### 7 Properties in relation to fire

7.1 The product has similar properties in relation to fire as those of traditional polyethylene roof tile underlays, which are acceptable under BS 5534 : 2003.

7.2 When the product is used unsupported, there is a risk that fire can spread if the materials are accidentally ignited during maintenance works, eg by a roofer's or plumber's torch. As with all types of sarking material, care should be taken during building and maintenance to avoid the material becoming ignited.

### 8 Maintenance

Damage to the underlays can be repaired easily prior to the installation of slates or tiles by the replacement of the damaged sheet, or for limited areas, by patching and sealing correctly. Care should be taken to ensure that the weathertightness of the roof is maintained.

### 9 Durability



The product will be virtually unaffected by the normal conditions found in a roof space and will have a life comparable to that of traditional roof tile underlays, provided they are not exposed to sunlight for long periods (see section 10.3 of these Front Sheets). Advice regarding exposure can be obtained from the Certificate holder.

# Installation

## 10 Procedure

10.1 Web Breather Underlays in Non-Ventilated Cold Pitched Roof Systems must be installed and fixed in accordance with the Certificate holder’s instructions, this Certificate and the relevant recommendations of BS 5534 : 2003 and BS 8000-6 : 1990. Installation can be carried out under all conditions normal to roofing work.

10.2 The product, when installed as unsupported systems, are fixed in the traditional method for roof tile underlays, ie draped over the rafters.

10.3 In open eaves construction, it is recommended to use eaves guards to conduct water into the gutter.

### Overlaps

10.4 Overlaps must be provided with the minimum dimensions given in Table 1.

*Table 1 Minimum overlaps*

Roof pitch (°)	Horizontal lap (mm)	Vertical laps (mm)
12.5 to 14	225	100
15 to 34	150	100
35+	100	100

10.5 Vertical laps should be staggered by at least 300 mm and detailed to occur at rafters, where the membrane can be secured by battens.

10.6 When detailing hips and valleys, laps must be a minimum of 300 mm.

### Timber plank sarking

10.7 For fully supported roofs (traditional Scottish), the slates can be nailed through the underlay into

the timber plank sarking, normally 150 mm wide with a 2 mm gap.

### Safety

10.8 The product, when wet, have a low coefficient of friction and care should be taken when moving or standing on a surface covered by the materials, during or after wet weather.

## 11 Finishing

11.1 Detailing of abutments, verges and hips must be in accordance with the Certificate holder’s instructions.

11.2 To achieve a convection-tight loft space, it is important that the following details are maintained (see also section 5.5 of the accompanying Detail Sheets):

- all penetrations, eg pipework, electrical fittings to the loft space, must be sealed
- the loft hatch must be securely sealed to ensure a draught-free fit
- the insulation must be pushed into the eaves and against the underlay to avoid gaps.

11.3 The tiling and slating must be carried out in accordance with the relevant clauses of BS 5534 : 2003, BS 8000-6 : 1990 and the Certificate holder’s instructions, especially when using tightly-jointed slates or tiles.

# Bibliography

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

BS 8000-6 : 1990 *Workmanship on building sites — Code of practice for slating and tiling of roofs and claddings*

## Conditions of Certification

### 12 Conditions

12.1 This Certificate:

- (a) relates only to the product that is named, described, installed, used and maintained as set out in this Certificate;
- (b) is granted only to the company, firm or person identified on the front cover — no other company, firm or person may hold or claim any entitlement to this Certificate;
- (c) is valid only within the UK;
- (d) has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective;
- (e) is copyright of the BBA;
- (f) is subject to English law.

12.2 References in this Certificate to any Act of Parliament, Regulation made thereunder, Directive or Regulation of the European Union, Statutory Instrument, Code of Practice, British Standard, manufacturers' instructions or similar publication, are references to such publication in the form in which it was current at the date of this Certificate.

12.3 This Certificate will remain valid for an unlimited period provided that the product and the manufacture and/or fabrication including all related and relevant processes thereof:

- (a) are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA;

(b) continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine; and

(c) are reviewed by the BBA as and when it considers appropriate.

12.4 In granting this Certificate, the BBA is not responsible for:

- (a) the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product;
- (b) the right of the Certificate holder to market, supply, install or maintain the product; and
- (c) the actual works in which the product is installed, used and maintained, including the nature, design, methods and workmanship of such works.

12.5 Any recommendations relating to the use or installation of this product which are contained or referred to in this Certificate are the minimum standards required to be met when the product is used. They do not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date of this Certificate or in the future; nor is conformity with such recommendations to be taken as satisfying the requirements of the 1974 Act or of any present or future statutory, common law or other duty of care. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the installation and use of this product.



In the opinion of the British Board of Agrément, Web Breather Underlays in Cold Non-Ventilated Pitched Roof Systems are fit for their intended use provided they are installed, used and maintained as set out in this Certificate. Certificate No 04/4179 is accordingly awarded to Web Dynamics Ltd.

On behalf of the British Board of Agrément

Date of issue: 8th April 2005

Chief Executive