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**Agrément
Certificate
No 95/3109**
Third issue*

Designated by Government
to issue
European Technical
Approvals

TRIFLEX-D ROOF COVERING SYSTEM

Revêtement d'étanchéité pour toitures
Dachabdichtungen

Product



Typical applications


- THIS CERTIFICATE REPLACES CERTIFICATE No 90/2536/C AND RELATES TO TRIFLEX-D, A COLD LIQUID-APPLIED, UNSATURATED POLYESTER ROOF WATERPROOF COVERING, REINFORCED WITH A POLYESTER FABRIC.

- The Triflex-D Roof Covering System is for use as a waterproofing layer on flat or pitched roofs, for new work or for repairing or maintaining the waterproof layer of existing structurally sound roofs with limited access.

- The system is manufactured by Follmann & Co, of Minden, Germany and marketed in the United Kingdom by Triflex (UK) Ltd.

Regulations

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 waterproofing membranes with the Building Regulations. In the opinion of the BBA, Triflex-D Roof Covering System, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements.

Requirement: **B4**

Comment:

External fire spread

The system achieved an EXT.F.AA fire rating on a fibre reinforced cement board substrate when tested in accordance with BS 476-3 : 1958. It may be assumed that this rating would also be achieved on roofs with non-combustible decks. See sections 12.1 and 12.2 of this Certificate.

Requirement: **C4**

Comment:

Resistance to weather and ground moisture

Tests for water resistance indicate that the system, when correctly installed, can enable the roof to meet this Requirement. See section 9.3 of this Certificate.

Requirement: **Regulation 7**

Comment:

Materials and workmanship

The product comprises acceptable materials. See section 15 of this Certificate.

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



In the opinion of the BBA, Triflex-D Roof Covering System, 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.

<p>Regulation: 10 Standard: B2.1 Comment:</p>	<p>Fitness of materials and workmanship Selection and use of materials, fittings, and components, and workmanship The product can contribute to a construction meeting this Standard. See the <i>Installation</i> part of this Certificate.</p>
<p>Standard: B2.2 Comment:</p>	<p>Selection and use of materials, fittings, and components, and workmanship The product is an acceptable material. See section 15 of this Certificate.</p>
<p>Regulation: 12 Standard: D9.1 Comment:</p>	<p>Structural fire precautions Fire spread from an adjoining building Data obtained from tests to BS 476-3 : 1958 indicate that on suitable substructures the use of the system will enable a roof to be unrestricted under the requirements of these Regulations. See sections 12.1 and 12.2 of this Certificate.</p>
<p>Regulation: 17 Standard: G3.1 Comment:</p>	<p>Resistance to moisture Resistance to precipitation — Resistance to precipitation Data examined for water resistance of the system indicate that the use of the system can enable a roof to satisfy the requirements of this Standard. See section 9.3 of this Certificate.</p>

3 The Building Regulations (Northern Ireland) 2000



In the opinion of the BBA, Triflex-D Roof Covering System, if used in accordance with the provisions of this Certificate, will satisfy or contribute to satisfying the various Building Regulations as listed below.

<p>Regulation: B2 Comment:</p>	<p>Fitness of materials and workmanship The product comprises acceptable materials. See section 15 of this Certificate.</p>
<p>Regulation: C4 Comment:</p>	<p>Resistance to ground moisture and weather Tests for water resistance of the membrane indicate that the use of the system can enable a roof to meet the requirements of this Regulation. See section 9.3 of this Certificate.</p>
<p>Regulation: E5 Comment:</p>	<p>External fire spread Data obtained from tests to BS 476-3 : 1958 indicate that on suitable substructures the use of Triflex-D will enable a roof to be unrestricted under the requirements of this Regulation. See sections 12.1 and 12.2 of this Certificate.</p>

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: 6 *Delivery and site handling* (6.1, 6.3 to 6.5) and 13 *Precautions during application* (13.1 and 13.2).

Technical Specification

5 Description

5.1 The Triflex-D Roof Covering System is a cold liquid-applied, pre-accelerated, unsaturated polyester coating, reinforced with a fabric consisting of a minimum of 90% polyester and a maximum of 10% polypropylene.

5.2 Triflex-D is made up by mixing the following components in the correct proportions:

- Triflex-D (resin component)⁽¹⁾ — based on an unsaturated polyester resin which is dissolved in a reactive monomer (styrene)
- Triflex-D (catalyst) — a white powder catalyst and hardener based on benzoyl peroxide dispersed in a solid plasticiser.

(1) This component is available in two grades, Standard and Winter.

5.3 The characteristics of the polyester fabrics are given in Table 1.

	Needled fabric	Knitted fabric
Weight per unit area (gm ⁻²)	110	205
Tensile strength (N per 50 mm)		
transverse direction	≥130	≥450
longitudinal direction	≥150	≥600
Elongation at break (%)		
transverse direction	≥50	≥110
longitudinal direction	≥75	≥70

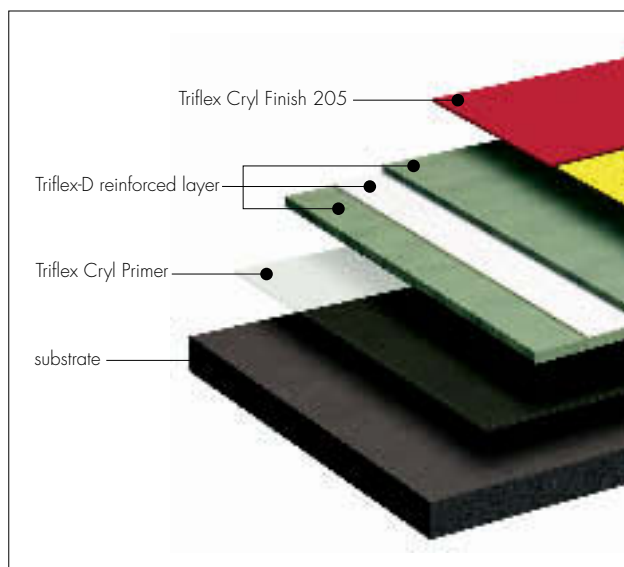
5.4 Ancillary materials available are:

- Triflex Powder — for scattering over the finished coating to give a tack-free surface
- Triflex Cleaner — for cleaning equipment and preparing old Triflex-D surfaces

- Triflex Cryl Paste — for repairing/filling small substrate defects
- Triflex Thixotropic Agent — thixotropic agent
- Triflex Cryl Primer 276 — a two-component fast curing, methyl methacrylate-based primer, for applying to the substrates listed in section 8.2(a)
- Triflex Cryl Primer 222 — a two-component fast curing, elastic methyl methacrylate-based primer, for applying to substrates listed in section 8.2(b)
- Triflex Cryl Finish 205 — a pigmented finish for use if protection from dirt on the surface is required. A 0.2 mm to 0.6 mm fire-dried quartz can be incorporated into the cryl finish to provide a non-slip finish for walkways
- Triflex Cryl Finish 205 Anti-skid — a pigmented finish incorporating anti-skid granules.

5.5 The two components, Triflex-D (resin component), Triflex-D (catalyst) are mixed in the correct proportions and applied on site. A Triflex-D system cross-section is shown in Figure 1.

Figure 1 Triflex-D system cross-section



Quality control

5.6 Checks are carried out on raw materials. The basic resin is checked to determine:

- colour
- density
- viscosity
- gel time.

After one day's hardening

- Shore A hardness
- tensile strength
- elongation at break.

5.7 Prior to application, checks are made to ensure that the substrate is in a suitable condition (see section 1.6).

5.8 During application, visual checks of the coating are made for evenness and formation of bubbles.

5.9 The finished surface is inspected after hardening to ensure that the coating has fully cured.

5.10 Following completion of the coating, samples prepared on site are checked for:

- thickness
- Shore A hardness
- tensile strength and elongation at break
- resistance to tear.

Site observations

5.11 For each area coated, a report is prepared giving the following site details:

- site
- time work commenced and finished
- size of the roof surface
- pitch of the roof
- nature of the roof surface to be coated
- quantity of Triflex-D applied
- coating method (single- or two-coat application)
- prevailing weather conditions
- air temperature.

6 Delivery and site handling

6.1 Components of the Triflex-D Roof Covering System are packed together in the correct mix proportions as given in Table 2.

Table 2 Details of packs

Triflex-D component	Weight (kg)
Triflex-D (resin component)	23.00
Triflex-D (catalyst)	0.70

6.2 The resin is delivered in white, metal drums and bears a blue label. The catalyst is delivered in a plastic bag and bears a yellow label. Each container also carries a label indicating the manufacturer's name, batch code number and hazard warning.

6.3 Triflex Cryl Primer 276 and Triflex Cryl Primer 222 are supplied in packs of between 10.2 kg and 10.6 kg, with a label bearing the manufacturer's name, and hazard warnings.

6.4 Triflex-D resins, catalyst, primers, finish and cleaner are all classified under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3), and bear the appropriate hazard warning label. The flashpoints and classification of components are given in Table 3.

Table 3 Flashpoint and hazard classification

Materials	Flashpoint (°C)	Classification
Triflex-D (resin component)	28	flammable ⁽¹⁾ , harmful
Triflex-D (catalyst)	—	oxidising, irritant
Triflex Cryl Primer 276	10	highly flammable ⁽¹⁾ , irritant
Triflex Cryl Primer 222	10	highly flammable ⁽¹⁾ , highly irritant
Triflex Cleaner	−4	highly flammable ⁽¹⁾
Triflex Cryl Finish 205	12	highly flammable ⁽¹⁾ , irritant
Triflex Cryl Paste	10	highly flammable ⁽¹⁾ , irritant

(1) These components should be stored in accordance with the *Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972*.

6.5 The containers of the Triflex-D components must be kept tightly sealed and stored in a cool, ventilated place away from other chemicals.

6.6 When correctly stored, the components of Triflex-D will last for a maximum period of six months at a storage temperature of above 0°C, but below 25°C.

Design Data

7 General

7.1 The Triflex-D Roof Covering System is satisfactory for use as a waterproof layer on flat, including completely flat, or pitched roofs, for new work or for repairing or maintaining the waterproof layer of existing structurally sound roofs with limited access.

7.2 Installation must be carried out only by specialist roofing contractors trained and approved by the Certificate holder.

7.3 Flat roofs are defined for the purpose of this Certificate as those roofs having a minimum finished fall of 1:80. Completely flat roofs are defined for the purpose of this Certificate as those roofs having a finished fall of less than 1:80. Pitched roofs are defined as those having falls in excess of 1:6.

7.4 For design purposes on flat roofs, 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.

7.5 Decks to which the product is to be applied must comply with the relevant requirements of BS 6229 : 2003, BS 8218 : 1998, BS 8217 : 1994 and, where appropriate, NHBC Standards, Chapter 7.1 or the Zurich Building Guarantees Technical Standards, Page 234.

7.6 Limited access roofs are defined for the purpose of this Certificate as those roofs that are subjected only to pedestrian traffic for maintenance of the roof covering and cleaning of gutters, etc. Where traffic in excess of this is envisaged, special precautions, such as additional protection to the membrane, must be taken, eg the incorporation of the optional pigmented non-slip finish.

8 Substrates

8.1 Triflex-D can be applied to the following substrates without using a primer:

- bituminous felt
- steel (galvanized and stainless)
- aluminium
- copper
- zinc
- lead
- glass
- PVC-U

- polyurethane
- acrylic
- polyester
- glass-reinforced plastic.

8.2 Before Triflex-D is applied to the following substrates they must be treated with the primer indicated:

(a) *Triflex Ceryl Primer 276*

- dry concrete decks and floor screeds (at least four weeks old)
- lightweight concrete
- timber
- ethylene vinyl acetate (EVA) sheeting
- polyisobutylene (PIB) sheeting.

(b) *Triflex Ceryl Primer 222*


- asphalt
- bitumens and tars

8.3 When application to other substrates is being considered the advice of the Certificate holder's should be sought.

9 Weathertightness

9.1 To achieve weathertightness, it is essential that the coating is correctly applied and the coverage rate is in accordance with that stipulated by the manufacturer's product manual.

9.2 A Triflex-D coating will maintain its integrity as a weathertight coating in all normal conditions of exposure and can accept, without damage, minor movements of the substrate.

 9.3 Tests confirm that Triflex-D, when completely sealed and consolidated, will adequately resist the passage of moisture to the inside of the building and so meet the requirements of:

England and Wales

Approved Document C, Requirement C4, Section 5.1

Scotland

Standard G3.1, Regulation 17

Northern Ireland

Regulation C4.

10 Adhesion

The adhesion of Triflex-D to the acceptable substrates listed in section 8 is sufficient to resist the effects of wind suction, elevated temperature, thermal shock or minor structural movement likely to occur in practice.

11 Resistance to foot traffic

A Triflex-D coating can accept, without damage, the limited foot traffic and light concentrated loads associated with installation and maintenance operations. Reasonable care is required, however, to avoid puncture by sharp objects.

12 Properties in relation to fire



12.1 A system comprising Triflex-D applied to a 6 mm thick, fibre reinforced cement sheet, when tested to BS 476-3 : 1958, was designated EXT.F.AA. It may be assumed that this rating would be achieved on other non-combustible decks.

12.2 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 A1.

Scotland

Test to conform to standard D9.1.

Northern Ireland

Test or assessment by a UKAS accredited fire testing laboratory, or an independent consultant with appropriate experience.

13 Precautions during application

13.1 Vapours from the components of Triflex-D roof coating may cause irritation to the respiratory system, eyes and skin. Therefore the system should be used only in areas with sufficient ventilation to prevent the build-up of vapours.

13.2 The manufacturer's instructions and the relevant safety regulations (see section 5) for working procedures must be adhered to at all times.

13.3 The components of Triflex-D must not be allowed to get into the waste drainage system.

14 Maintenance and repair

The repair of minor damage to Triflex-D roof covering, such as cuts and perforations, can be quickly and simply achieved by applying another layer over the damaged area.

15 Durability



The product has been used in Germany since 1976 and has performed satisfactorily. Accelerated weathering tests confirm that satisfactory retention of physical properties is achieved and indicate an expected life in excess of 25 years.

Installation

16 General

16.1 The Triflex-D Roof Covering System must be applied in accordance with the manufacturer's product manual. Work must not be carried out when rain is likely and the ambient temperature at the time of laying must lie between 5°C and 35°C. With increasing temperature the reaction time and hence the pot life will be reduced.

16.2 Joints in the substrate, such as expansion joints in concrete, should be treated with a Triflex-D

joint detail. The coating application then proceeds in the usual manner.

16.3 Substrates to which the coating is to be applied must be dry, clean and free from loose particles, paint, grease and oil or other contaminants which may affect the adhesion of Triflex-D.

16.4 Substrates should also be free from physical defects such as cracks, insecure sheets. Existing blisters should be cut out and indentations and cracks repaired with Triflex Cryl Paste or Triflex Mortar.

16.5 Where appropriate, the substrate should be primed with either Triflex Cryl Primer 276 or Triflex Cryl Primer 222 (see section 8.2).

17 Manual application

17.1 The Triflex-D Roof Covering System should be made up on site by mixing Triflex-D resin component and Triflex-D catalyst in the correct proportions.

17.2 The Triflex-D resin drums should be stirred using a slow-speed mechanical agitator for a minimum of two minutes.

17.3 The catalyst is then added and the two components should be mixed, using a slow-speed mechanical agitator for a minimum of two minutes.

17.4 The mixture should be applied within the pot life of the material (approximately 20 minutes).

17.5 If work is interrupted for more than three hours, and before work is continued, the old coating, in areas where the new coating overlaps, must be cleaned with Triflex Cleaner and allowed to dry. The overlap area must not be less than 100 mm wide.

17.6 Should work be completed, or interrupted for longer than 15 to 20 minutes, tools must be thoroughly cleaned using Triflex Cleaner.

Two-layer coating

17.7 The first coat of Triflex-D should be applied with a lambswool roller to the prepared surface at a coverage rate of 1.5 kgm⁻², and a polyester fabric (110 gm⁻²) rolled into the wet area and pressed free of trapped air using the lambswool roller. The fabric reinforcement should have an overlap of at least 50 mm, and sufficient resin must remain beneath the fabric to maintain the mechanical properties of the system.

17.8 To embed the fabric completely, a further layer of resin must be applied at a rate of 0.5 kgm⁻² wet in wet and evenly distributed so that the overall coverage for the first stage is approximately 2.0 kgm⁻².

17.9 As soon as the surface can be walked on⁽¹⁾, the whole area should be given a top coating of at least 1.0 to 1.5 kgm⁻². The finished coating must have a minimum dry film thickness of

2.5 mm. The total consumption of material should be approximately 3.0 to 3.5 kgm⁻².

(1) In any case, three hours maximum; any longer and the surface of Triflex-D will require reactivating as described in section 17.5.

17.10 Twenty-four hours after completion, the finished coating should be either dusted with Triflex Powder to make the surface completely tack free or sealed with Triflex Ceryl Finish as a protection against dirt.

Single-layer coating

17.11 This method of application can only be used on smooth substrates. A first coating of Triflex-D is applied at a coverage rate of 2.0 kgm⁻² into which a 205 gm⁻² polyester fabric is rolled, ensuring that no air is trapped underneath. A second coating of Triflex-D is applied wet in wet, at a coverage rate of 1.0 kgm⁻². The finished coating must have a minimum dry film thickness of 2.0 mm. The total consumption of material should be approximately 3.0 kgm⁻².

17.12 Areas of junctions should be coated using the two-layer method and the 110 gm⁻² polyester fabric.

Technical Investigations

The following is a summary of the technical investigations carried out on Triflex-D Roof Covering System.

18 Tests

18.1 The results of tests on the system, carried out by MPA Nordrhein-Westfalen, of Dortmund, Germany, are given in Tables 4 to 6.

Table 4 Tests on physical properties — general

Test (units)	Method ⁽¹⁾	Mean result
Solids content (%)	DIN 53216-1	
white labelled component		76.7
blue labelled component		75.3
Ash content (%)	DIN 53568-1	
white labelled component		29.8
blue labelled component		28.1
Shore hardness (A scale)	DIN 53568-1	
upper face		59
lower face		61
Water absorption ⁽²⁾ (%)	DIN 53495	
7 days		1.7
Water absorption ⁽³⁾ (gm ⁻²)		
42 days		21.4
Water vapour permeability (gm ⁻² day ⁻¹)	DIN 53122-1 (23°C/85% RH)	1.29

(1) The test methods are detailed in the *Bibliography*. Numbers in the table refer to sections/parts of the various documents.

(2) Full immersion.

(3) Exposure to water on one side, under a 100 mm head of pressure.

Table 5 Tests on physical properties — directional

Test (units)	Method ⁽¹⁾	Mean results long ⁽²⁾ trans ⁽³⁾	
Tensile strength ⁽⁴⁾ (N per 50 mm)	DIN 53455 (200 mm min ⁻¹ at 23°C and 10 mm min ⁻¹ at 20°C)	1060	810
control at 23°C		2047	1830
control at -20°C		1557	1067
heat aged ⁽⁵⁾		1023	767
alkali ⁽⁶⁾			
Elongation at break ⁽⁴⁾ (%)	DIN 53455 (200 mm min ⁻¹ at 23°C and 10 mm min ⁻¹ at -20°C)	72	98
control at 23°C		18	25
control at -20°C		59	59
heat aged ⁽⁵⁾		70	103
alkali ⁽⁶⁾			
Modulus of elasticity ⁽⁷⁾ (Nmm ⁻¹)	DIN 53457 (1 mm min ⁻¹)	46.4	21.4
Tear strength (Nmm ⁻¹)	DIN 53515 (500 mm min ⁻¹)	29.7	27.1
Dimensional stability ⁽⁸⁾	DIN 53377	-0.23	-0.76

(1) The test methods are detailed in the *Bibliography*. Numbers in the table refer to sections/parts of the various documents.

(2) Longitudinal direction.

(3) Transverse direction.

(4) Fully reinforced.

(5) Heat aged 180 days at 80°C.

(6) Aged 42 days in Ca(OH)₂ at 23°C.

(7) Modulus of elasticity between 1% and 2% elongation.

(8) After 42 days at 80°C.

Table 6 Tests on service performance

Test (units)	Method ⁽¹⁾	Mean result
Static indentation concrete EPS	MOAT 27 : 5.1.9	L ₄ L ₃
Dynamic indentation perlite EPS	MOAT 27 : 5.1.10	I ₃ I ₃
Dynamic indentation after UV exposure ⁽²⁾ concrete perlite	EOTA Draft TR-006 and TR-010	I ₃ I ₃
Low temperature flexibility at -10°C	DIN 53361	no cracks
Peel (N per 50 mm) concrete control heat aged ⁽³⁾	MOAT 27 : 5.1.3	52.1 ⁽⁴⁾ 174.0 ⁽⁴⁾
zinc control heat aged ⁽³⁾		76.0 ⁽⁵⁾ 53.7 ⁽⁵⁾
bitumen felt control heat aged ⁽³⁾		10.2 ⁽⁶⁾ 17.3 ⁽⁵⁾
Resistance to roots	DIN 4062	satisfactory

(1) The test methods are detailed in the *Bibliography*. Numbers in the table refer to sections/parts of the various documents.

(2) Heat aged 28 days at 80°C.

(3) UV exposure for class 'W2' and climatic zone 'M'. Humidity during dry period not controlled.

(4) Failure within Triflex coating.

(5) Failure between Triflex and substrate.

(6) Failure within bitumen felt.

18.2 Test data for bond tensile shear strength carried out by MPA Nordrhein-Westfalen was examined, and was found to be satisfactory.

18.3 The BBA carried out fatigue cycling testing to MOAT No 27 : 1983. Both control and the 28 days at 80°C gave satisfactory results.

18.4 Tests for assessing the ageing characteristics and durability, in accordance with ETAG 005 Part 1 and Part 4 were carried out by Deutsches Institut für Bautechnik (DIBt) on the Triflex-D system. The results of these tests indicate that the system can retain satisfactory physical properties and have a working life of up to 25 years.

19 Investigations

19.1 Data relating to the performance of Triflex-D when tested to BS 476-3 : 1958, on non-combustible substrates, were examined.

19.2 A visit to the manufacturing facility in Germany was made to assess production and quality control procedures.

19.3 Data from previous assessments on sites in progress and existing sites were re-examined.

19.4 A user survey was performed to examine the product's performance in use.

Bibliography

BS 476-3 : 1958 *Fire tests on building materials and structures — External fire exposure roof test*

BS 8217 : 1994 *Code of practice for built-up felt roofing*

BS 8218 : 1998 *Code of practice for mastic asphalt roofing*

CP 143-1 : 1958 *Code of practice for sheet roof and wall coverings — Aluminium, corrugated and troughed*

CP 143-10 : 1973 *Code of practice for sheet roof and wall coverings — Galvanized corrugated steel — Metric units*

DIN 4062 : 1978 *Cold processable plastic jointing materials for sewer drains; jointing materials for prefabricated parts of concrete, requirements, testing and processing*

DIN 53122-1 : 1974 *Testing of plastics films, elastomer films, paper, board and other sheet materials — Determination of water vapour transmission rate; Gravimetric process*

DIN 53216-1 : 1983 *Determining the non-volatile content — High temperature method for coating materials*

DIN 53361 : 1982 *Testing of artificial leather and similar sheet materials; Determination of suppression at groove in coolness*

DIN 53377 : 1969 *Testing of plastic films; Determination of dimensional stability*

DIN 53455 : 1981 *Testing of plastics, tensile test*

DIN 53457 : 1987 *Testing of plastics; Determination of the elastic modulus by tensile, compression and bend testing*

DIN 53495 : 1984 *Testing of plastics; Determination of water absorption*

DIN 53515 : 1977 *Determination of tear strength of rubber, elastomers and plastic film using Graves angle test piece with nick*

DIN 53568-1 : 1974 *Testing of plastics, rubber and elastomers; Determination of residue on ignition without chemical pre-treatment of the sample*

MOAT No 27 : 1983 *General Directive for the Assessment of Roof Waterproofing Systems*

EOTA Technical Report TR 006 (May 1999) *Liquid Applied Roof Waterproofing Kits (LARWK) — Determination of the resistance to dynamic indentation*

EOTA Technical Report TR 010 (May 1999) *Liquid Applied Roof Waterproofing Kits (LARWK) — Exposure procedure for artificial weathering*

Guideline for European Technical Approval of 'Liquid applied roof waterproofing kits', ETAG 005, edition March 2000, Part 1: 'General' and Part 4: 'Specific stipulations for kits based on flexible unsaturated polyester'.

Conditions of Certification

20 Conditions

20.1 This Certificate:

- (a) relates only to the product that is 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.

20.2 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.

20.3 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.

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

- (a) the presence or absence of any patent 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 nature or standard of individual installations of the product or any maintenance thereto, including methods and workmanship.

20.5 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, Triflex-D Roof Covering System is fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

Certificate No 95/3109 is accordingly awarded to Triflex (UK) Ltd.

On behalf of the British Board of Agrément

Date of Third issue: 12th July 2004

Chief Executive

**Original Certificate issued to Triflex (UK) Ltd on 15th March 1995. This amended version includes references to revised national Building Regulations, Standards and CDM Regulations, additional test reference and amended statement on Durability and new Conditions of Certification.*