



Conica Technik

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**Agrément
Certificate
No 99/3660**
Second issue*

Designated by Government
to issue
European Technical
Approvals

CONIROOF ROOF WATERPROOFING SYSTEM

Revêtement d'étanchéité pour toitures
Dachabdichtungen

Product



• THIS CERTIFICATE RELATES TO THE CONIROOF ROOF WATERPROOFING SYSTEM, A LIQUID-APPLIED POLYURETHANE WATERPROOF MEMBRANE SYSTEM.

• The Coniroof Roof Waterproofing System is for use on flat, pitched, inverted or protected roof specifications with limited access.

• The system is manufactured by Conica Technik, a Division of MBT (Schweiz) AG in Switzerland, and is marketed in the UK by MBT Feb, Albany House, Swinton Hall Road, Swinton, Manchester M27 4DT.
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Both Conica Technik and MBT Feb are Degussa Group Companies.

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, the Coniroof Roof Waterproofing System, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements.

Requirement: **B4(2)**

External fire spread

Comment:

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 to 12.3 of this Certificate.

Requirement: **C4**

Resistance to weather and ground moisture

Comment:

Tests for water resistance on the system indicate it meets this Requirement. See section 9.3 of this Certificate.

Requirement: **Regulation 7**

Materials and workmanship

Comment:

The system comprises acceptable materials. See sections 15.1 to 15.4 of this Certificate.

Electronic Copy

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



In the opinion of the BBA, the Coniroof Roof Waterproofing 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.

Regulation:	10	Fitness of materials and workmanship
Standards:	B2.1 and B2.2	Selection and use of materials, fittings, and components, and workmanship
Comment:		The system complies with these Standards. See sections 15.1 to 15.4 of this Certificate.
Regulation:	12	Structural fire precautions
Standard:	D9.1	Fire spread from adjoining buildings
Comment:		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 to 12.3 of this Certificate.
Regulation:	17	Resistance to moisture
Standard:	G3.1	Resistance to precipitation
Comment:		Data examined for water resistance of the system indicate that it can enable a roof to satisfy the requirements of this Standard. See section 9.3 of this Certificate.

3 The Building Regulations (Northern Ireland) 2000



In the opinion of the BBA, the Coniroof Roof Waterproofing System, 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 system comprises acceptable materials. See sections 15.1 to 15.4 of this Certificate.
Regulation:	C4	Resistance to ground moisture and weather
Comment:		Tests for water resistance of the system indicate that it can enable a roof to meet the requirements of this Regulation. See section 9.3 of this Certificate.
Regulation:	E5	External fire spread
Comment:		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 to 12.3 of this Certificate.

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 and 13 Precautions during application.*

Technical Specification

5 Description

5.1 The Coniroof Roof Waterproofing System is a multi-layered system comprising a series of substrate sealers, primers, waterproofing membranes and protective coatings. The selection of materials is dependent on the substrate to be waterproofed and consists of the following products:

Conipur 275 — a two-component solvent-free polyurethane coating for use as a preparation layer on asphalt substrates

Conipur 78 — a two-component solvent-free polyurethane coating for use as a preparation layer on aged, built-up felt substrates

Conipox 77Z — a two-component solvent-free epoxy coating for use as a preparation layer on concrete substrates

Conipur 255 — a two-component solvent-free polyurethane elastic waterproof coating

Conipur 257FL — a two-component solvent-free polyurethane elastic waterproof coating with enhanced fire resistant properties

Conipur 265Z — a two-component solvent-free polyurethane elastic waterproof coating available as self-levelling, slightly thixotropic for sloping surfaces, and highly thixotropic for vertical surfaces

Conipur 79 — a one-component polyurethane primer for application to substrates sealed with Conipur 275, Conipur 78 or Conipox 77Z and for priming timber substrates

Conipur 258 — a one-component UV resistant polyurethane protective coating available in the range of standard colours given in Table 1

Conipur 63HE — a two-component UV-resistant polyurethane protective coating available in the range of standard colours detailed in Table 1.

Table 1 Protective coating standard colours⁽¹⁾

Colour	RAL ⁽²⁾ reference
Tomato red	3013
Olive green	6003
Basalt grey	7012
Concrete grey	7023
Stone grey	7030
Pebble grey	7032

(1) Other non-standard colours are available to order.

(2) German colour standards.

5.2 Ancillary materials for use with the system are:

Conipox 81 — Anti-corrosion primer for use on ferrous metal surfaces

Conipur 84 — Primer for use on non-ferrous metal surfaces

Dried, graded sand — nominal 0.2–0.6 mm oven-dried silica sand for spreading into the preparation layer prior to the application of the primer to provide a mechanical key and improve interlayer adhesion

Conipur 259 — a one-component UV-resistant polyurethane protective coating

Conipox 76 — a two-component epoxy primer for adhering new coating to existing coating.

5.3 A series of quality control checks are performed on incoming raw materials, during production and on the finished product.

6 Delivery and site handling

6.1 All Coniroof components are delivered to site in resealable containers, either as single component or as working kits, with each component packed separately in the specified, mixed proportions.

6.2 Each container bears a label with the manufacturer's name, product name, component name, batch code number, colour and hazard warning.

6.3 The components are classified under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3) and the containers bear the appropriate hazard warning labels. The flashpoints and hazard classification for the components are given in Table 2.

6.4 The containers must be kept tightly sealed and stored in a cool, well-ventilated place, away from foodstuffs.

6.5 When correctly stored, Coniroof components will have a shelf-life of at least six months, provided exposure to high temperatures, frost and moisture are avoided.

Table 2 Flashpoint and hazard classifications

Material (part)	Flashpoint (°C)	Classification
Conipox 77Z (A)	180	Irritant
Conipox 77Z (B)	120	Corrosive
Conipur 79	24	Flammable ⁽¹⁾
Conipur 255 (A)	150	Harmful
Conipur 255 (B)	>200	Harmful
Conipur 257FL (A)	>100	Harmful
Conipur 257FL (B)	>100	Harmful
Conipur 265Z (A)	>100	Harmful
Conipur 265Z (B)	>100	Harmful
Conipur 275 (A)	>200	Irritant
Conipur 275 (B)	>200	Harmful
Conipox 81 (A)	>110	Irritant
Conipox 81 (B)	>110	Corrosive
Conipur 63HE (A)	47	Harmful
Conipur 63HE (B)	>200	Harmful
Conipur 258	>40	Harmful
Conipox 76 (A)	>110	Irritant
Conipox 76 (B)	>101	Corrosive
Conipur 259	48	Irritant
Conipur 78	>200	Harmful
Conipur 84	>23	Harmful, Flammable ⁽¹⁾

(1) Extremely flammable, highly flammable and flammable materials must be isolated and stored in accordance with the Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972.

Design Data

7 General

7.1 The Coniroof Roof Waterproofing System is satisfactory for use as a waterproof layer on:

- flat or pitched exposed roofs, for new work or for refurbishment of structurally sound roofs with limited access
- inverted and protected roof specifications with limited access
- inverted roof specifications with limited access designed with zero falls
- podium suspended slab roofs.

7.2 Installation must be carried out only by specialist roofing contractors trained and approved by the Certificate holder and who are equipped with the appropriate spray equipment.

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

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 deflections, direction of falls, etc.

7.5 Limited access roofs are those 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 an optional pigmented non-slip finish, provided by incorporating dried sand between two coats of the protective coating.

8 Substrates

8.1 By the selective use of system components, Coniroof can be applied to concrete, built-up felt (aged and new) asphalt and timber substrates.

8.2 For specification details and when application to other substrates is being considered the advice of the Certificate holder must be sought.

9 Weathertightness

9.1 To ensure weathertightness, it is essential that the system is correctly applied and the coverage rates are in accordance with those stipulated by the Certificate holder.

9.2 The system will maintain its physical properties and perform 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 the Coniroof Roof Waterproofing System, 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

Regulation 17, Standard G3.1

Northern Ireland

Regulation C4.

10 Adhesion

The adhesion of the Coniroof Roof Waterproofing System to the acceptable substrates (see 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

The system 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 The Coniroof Roof Waterproofing System incorporating Conipur 257FL applied to a 8 mm thick cement board and tested to BS 476-3 : 1958, was designated EXT.F.AA and EXT.S.AA. It may be assumed that these ratings would be achieved on other non-combustible substrates.

12.2 Tests carried out on the system incorporating Conipur 255 achieved an EXT.FC rating for spread of flame. When used on a suitable non-combustible (concrete) substrate it may be deemed to meet BS 476-3 : 1958, designation EXT.F.AC.

12.3 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 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 certain components of the Coniroof Roof Waterproofing System may cause irritation to the respiratory system, eyes and skin. Some components contain isocyanates and the system should be used only in areas with sufficient ventilation and air movement to prevent the build-up of harmful vapours. Contact with skin, eyes and clothing must be avoided. The Certificate holder's instructions and the relevant working procedures must be observed at all times.

13.2 Vapours given off from Conipur 79 and Conipur 84 during application are highly flammable and are generally more dense than air. They will tend to move to the lowest point (eg downslopes, gullies). These products should be used only in the areas with sufficient ventilation to prevent build-up of vapours which could form an explosive mixture. All sources of ignition should be eliminated during application.

13.3 Once cured, the system releases no flammable vapours.

14 Maintenance and repair

14.1 In accordance with good roofing practice, the membrane should be inspected on a regular basis.

14.2 In the event of minor damage, ie cuts and perforations of the protective coatings, repair is carried out by cleaning the damaged areas and patching with the appropriate Coniroof coating using normal application techniques.

14.3 Where damage is more substantial, the damaged area including the membrane should be cut back to sound material and made level with the existing surface. Any break in the membrane should be taped with a debonding tape. An area of membrane extending 150 mm around the damaged portion should be abraded mechanically, vacuumed and cleaned. The entire exposed area, including substrate, is coated with Conipox Primer 76 and the abraded membrane area lightly blinded with dried silica sand and allowed to dry. The appropriate coating system is then applied in accordance with section 17.

15 Durability



15.1 The Coniroof Roof Waterproofing System has been used in Switzerland and Germany since the early 1980's and early installations are performing satisfactorily.

15.2 Accelerated weathering tests confirm that satisfactory retention of physical properties is achieved and for an exposed system, with adequate repair and maintenance, indicate an expected life of at least 25 years.

15.3 When used in an inverted roof specification and subjected to normal service conditions, the system will provide an effective barrier to the transmission of liquid water for the design life of the roof in which it is incorporated.

15.4 However, in situations where maintenance or repair of any of the components in the roof structure are necessary (eg protection layer, insulation, or deck), the durability of the membrane may be reduced. In these circumstances, the Certificate holder should be consulted.

Installation

16 General

16.1 The Coniroof Roof Waterproofing System must be applied in accordance with the Certificate holder's product technical data sheets.

16.2 Joints in the substrate, eg construction joints in concrete, should be covered with a debonding tape prior to overcoating.

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 the system.

16.4 Substrates must be structurally sound. Existing blisters should be star cut and levelled. A debonding tape should be used over large cracks in the substrate.

16.5 During installation of the system, the ambient and substrate temperatures and relative humidity should be monitored. Work should be temporarily suspended if the temperature and/or relative humidity is outside the range specified by the Certificate holder for the product to be applied.

17 Application

Preparation layer

17.1 A choice of three preparation layers Conipox 77Z, Conipur 78 and Conipur 275 is available for use on concrete, aged felt and asphalt respectively.

17.2 The two components (Parts A and B) are supplied in pre-weighed packs in the correct mix ratios.

17.3 The two components are mixed together using a mechanical paddle mixer to ensure a homogeneous mix.

17.4 Mixed material is applied evenly to the substrate by squeegee, roller or brush at a nominal coverage rate of 0.35 kgm^{-2} . The substrate porosity and application condition may affect the coverage rate. Dried, graded sand is immediately and evenly blinded over the entire wet surface by hand or mechanically, at a nominal coverage rate of 1 kgm^{-2} .

17.5 When sufficiently cured the surface is vacuumed to remove any loose sand prior to the application of the primer.

Primer

17.6 The single component primer, Conipur 79, is applied by airless spray at a nominal coverage rate of 0.06 kgm^{-2} .

17.7 A curing period of approximately two hours, subject to atmospheric conditions, should be allowed prior to the application of the waterproofing membrane.

17.8 If the waterproofing membrane is not applied within 24 hours after the application of the primer then the surface should be re-primed.

Waterproofing membrane

17.9 Once the primer has cured, the Conipur 255 or 257FL is applied using heated spray equipment. The two components, Parts A and B, are pre-heated separately to between 45°C and 50°C , the temperature is maintained during distribution to the spray nozzle. At the nozzle they are mixed in the correct proportions and sprayed at a constant delivery rate.

17.10 The membrane is applied at a coverage rate of between 1.5 kgm^{-2} and 2.0 kgm^{-2} which relates to a thickness of between 1.5 mm to 2.0 mm.

17.11 The membrane sets within 20 to 30 seconds and is sufficiently cured after one to two hours to receive the specified protective coating.

17.12 At day joints where fresh membrane is to be joined to laid membrane up to 48 hours old, the new application should be butted to the existing membrane.

17.13 Where day joints are over 48 hours old, the new application should be lapped over the existing membrane by at least 100 mm. The margin must be cleaned mechanically and primed with Conipur 79 prior to the new application of the membrane.

Protective coating

17.14 Once the waterproofing membrane has cured, Conipur coating 63HE protective coating is applied by airless spray or roller at a nominal coverage rate of 0.20 kgm^{-2} .

18 Alternative materials

The following materials should be used only where specified by the Certificate holder in accordance with the appropriate product data sheet and the Certificate holder's instructions.

Primers

Conipox 81
Conipur 84
Conipox 76.

Protective coatings

Conipur 258
Conipur 259.

Waterproofing membrane

Conipur 265Z — used for hand-application where spray-application is not possible, and suitable for use only where the service temperature is not expected to be above 60°C for prolonged periods.

Technical Investigations

The following is a summary of the technical investigations carried out on the Coniroof Roof Waterproofing System.

19 Tests

The results of the characterisation and performance tests conducted by the BBA on The Coniroof Roof Waterproofing System are summarised in Tables 3 and 4 respectively.

Table 3 Tests on physical properties

Test (units)	Method ⁽¹⁾	Mean result
Ash content (%)	BS 2782-4 :	
Conipur 255	Method 470E	0.5 ⁽²⁾
Conipur 257FL		1.0
Water absorption (%)	BS 2782-4 :	
Conipur 255	Method 430A	2.98
Conipur 257FL/63HE		2.6
Conipur 257FL/258		2.1
Conipur 265Z/63HE		1.5
Water vapour permeability (gm ⁻² day ⁻¹)	BS 3177 (25°C/75% RH)	
Conipur 255		19.21
Conipur 257FL/63HE		16.0
Conipur 257FL/258		12.0
Conipur 265Z/63HE		9.2
Tensile strength/elongation (Nmm ⁻² /%)	BS 2782-3 : Method 320A ⁽³⁾	
Conipur 255/63HE		
Control		7.1/324
Heat aged ⁽⁴⁾		7.0/313
Exposed to UV ⁽⁵⁾		6.6/286
Exposed to water ⁽⁶⁾		9.5/474
Conipur 257FL/63HE		
Control		4.9/209
Heat aged ⁽⁴⁾		4.6/147
Exposed to UV ⁽⁵⁾		5.4/233
Exposed to water ⁽⁶⁾		5.3/185
Conipur 257FL/258		
Control		7.8/405
Heat aged ⁽⁴⁾		5.0/228
Exposed to UV ⁽⁵⁾		7.5/392
Exposed to water ⁽⁶⁾		7.0/416
Conipur 265Z/63HE		
Control		12.0/658
Heat aged ⁽⁴⁾		0.4/53
Exposed to UV ⁽⁵⁾		6.8/564
Exposed to water ⁽⁶⁾		13.6/775

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

(2) Test carried out in accordance with ISO 1270.

(3) Tests carried out at 23°C and cross-head speed of 200 mm min⁻¹.

(4) 200 days at 80°C.

(5) 1000 MJ m⁻² total radiant exposure at severe conditions as defined in EOTA Technical Report TR 010.

(6) Surface exposure to water at 60°C for 180 days.

20 Other investigations

20.1 An assessment was made of existing data relating to Conipur 255 from the Conidec Car Park Deck System, subject of BBA Agrément Certificate No 93/2879.

20.2 An assessment was made of independent fire test reports relating to the system's performance in fire on non-combustible substrates.

20.3 An assessment was made of independent test data relating to root resistance of the Conipur 255 coating. The tests, carried out to

DIN 4062 : 1978 indicate that the coating is root resistant in accordance with the DIN standard.

20.4 Visits were made to existing sites in Switzerland to assess the system's performance in service.

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

Table 4 Tests on service performance

Test	Method ⁽¹⁾	Mean result
Low temperature flexibility (°C)	MOAT No 27 : Method 5.4.2	
Conipur 257FL/63HE		No cracking at -30°C
Conipur 265Z/63HE		protective layer cracked at -30°C
Resistance to water penetration	MOAT No 27 : Method 5.1.4	
Conipur 255		No damage to waterproofing membrane
Conipur 257FL/63HE		No water penetration
Conipur 265Z/63HE		No water penetration
Tensile bond strength (Nmm ⁻²)	Draft EOTA Technical Report TR 004	
Concrete substrate (Conipox 77Z, Conipur 79/255/63HE)		
Control		1.60
Heat aged ⁽²⁾		1.63
Exposed to water ⁽³⁾		1.77
Plywood (wpb) substrate (Conipur 79/257FL/63HE)		
Control		1.53
Heat aged ⁽²⁾		1.37
Exposed to water ⁽³⁾		1.35
Mastic Asphalt substrate (Conipur 275/79/257FL/63HE)		
Control		2.01
Heat aged ⁽²⁾		2.44
Exposed to water ⁽³⁾		0.39
Unaged bituminous felt substrate (Conipur 257FL/63HE)		
Control		0.67
Heat aged ⁽²⁾		0.66
Aged bituminous felt substrate (Conipur 78/79/257FL/63HE)		
Control		1.01
Heat aged ⁽²⁾		0.98

continued

Table 4 Tests on service performance (continued)

Test	Method ⁽¹⁾	Mean result
Resistance to dynamic indentation	Generally to Draft EOTA	
Conipur 255/63HE	Technical Report F	
Expanded polystyrene (23°C)		L ₄
Concrete (23°C)		L ₃
Concrete (-30°C)		L ₃
Heat aged ⁽²⁾		
Concrete (-30°C)		L ₃
Exposed to UV ⁽⁴⁾		
Concrete (-10°C)		L ₃
Conipur 257FL/63HE		
Expanded polystyrene (23°C)		L ₄
Concrete (23°C)		L ₃
Concrete (-30°C)		L ₃
Heat aged ⁽²⁾		
Concrete (-30°C)		L ₄
Exposed to UV ⁽⁴⁾		
Concrete (-10°C)		L ₃
Conipur 257FL/258		
Expanded polystyrene (23°C)		L ₄
Concrete (23°C)		L ₂
Concrete (-30°C)		L ₃
Heat aged ⁽²⁾		
Concrete (-30°C)		L ₃
Exposed to UV ⁽⁴⁾		
Concrete (-10°C)		L ₂
Conipur 265Z/63HE		
Expanded polystyrene (23°C)		L ₄
Concrete (23°C)		L ₄
Concrete (-30°C)		L ₃
Heat aged ⁽²⁾		
Concrete (-30°C)	(Sample degraded and shattered on test)	
Exposed to UV ⁽⁴⁾		
Concrete (-10°C)		L ₃
Resistance to static indentation	Generally to Draft EOTA	
Conipur 255/63HE	Technical Report TR 007	
Expanded polystyrene (23°C)		L ₂
Concrete (23°C)		L ₄
Concrete (90°C)		L ₄
Exposed to water ⁽³⁾		
Concrete (90°C)		L ₄
Conipur 257FL/63HE		
Expanded polystyrene (23°C)		L ₂
Concrete (23°C)		L ₄
Concrete (90°C)		L ₄
Exposed to water ⁽³⁾		
Concrete (90°C)		L ₄
Conipur 257FL/258		
Expanded polystyrene (23°C)		L ₂
Concrete (23°C)		L ₄
Concrete (90°C)		L ₄
Exposed to water ⁽³⁾		
Concrete (90°C)		L ₄
Conipur 265Z/63HE		
Expanded polystyrene (23°C)		L ₄
Concrete (23°C)		L ₄
Concrete (90°C)		L ₂
Exposed to water		
Concrete (90°C)		L ₄
Resistance to fatigue cycling	Draft EOTA	
Conipox 77Z/Conipur 79/257FL/63HE (1000 cycles)	Technical Report TR 008	
Heat aged ⁽²⁾ (50 cycles)		No damage to waterproofing membrane
Conipox 77Z/Conipur 79/255/63HE		
Control (1000 cycles)		
Heat aged ⁽²⁾ (50 cycles)		No damage to waterproofing membrane

continued

Table 4 Tests on service performance (continued)

Test	Method ⁽¹⁾	Mean result
Crack bridging capability	Draft EOTA	
Conipox 77Z/Conipur 79/257FL	Technical Report TR 013	
Control		No damage
Heat aged ⁽⁵⁾		No damage
Resistance to cracking	BBA Test Method T1/12	
Conipur 255		
0°C		No damage to the membrane at
23°C		2.5 mm crack width ⁽⁶⁾
Wet film flow	BBA ad-hoc method	
Conipur 265Z (thixotropic grade)		No flow recorded

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

(2) 200 days at 80°C

(3) Surface exposure to water at 60°C for 180 days

(4) 1000 MJ m⁻² total radiant exposure at severe conditions as defined in EOTA Technical Report TR 010

(5) 91 days at 70°C.

(6) Test stopped at 2.5 mm crack width.

Bibliography

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

BS 2782-3 : Methods 320A to 320F : 1976 *Methods of testing plastics — Mechanical properties — Tensile strength, elongation and elastic modulus*

BS 2782-4 : Methods 430A to 430D : 1983 *Methods of testing plastics — Chemical properties — Determination of water absorption at 23°C — Determination of water absorption at 23°C with allowance for water-soluble matter — Determination of boiling water absorption — Determination of boiling water absorption with allowance for water-soluble matter*

BS 2782-4 : Method 470E : 1991 *Methods of testing plastics — Chemical properties — Determination of ash — Poly(vinyl chloride)*

BS 3177 : 1959 *Method for determining the permeability to water vapour of flexible sheet materials used for packaging*

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

ISO 1270 : 1975 *Plastics — PVC resins — Determination of ash and sulphated ash*

Draft EOTA Technical Report TR 004 (May 1999), *Liquid Applied Roof Waterproofing Kits (LARVK) — Determination of the resistance to delamination*

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

Draft EOTA Technical Report TR 007 (May 1999), *Liquid Applied Roof Waterproofing Kits (LARVK) — Determination of the resistance to static indentation*

Draft EOTA Technical Report TR 008 *Liquid applied Roof Waterproofing Kits (LARWK) — Determination of the resistance to fatigue movements*

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

Draft EOTA Technical Report TR 013 *Liquid applied Roof Waterproofing Kits (LARWK) — Determination of crack bridging capability*

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

Conditions of Certification

21 Conditions

21.1 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) has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective;
- (d) is copyright of the BBA.

21.2 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, shall be construed as references to such publication in the form in which it was current at the date of this Certificate.

21.3 This Certificate will remain valid for an unlimited period provided that the product and the manufacture and/or fabricating process(es) 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 by the BBA or its agents; and
- (c) are reviewed by the BBA as and when it considers appropriate.

21.4 In granting this Certificate, the BBA makes no representation as to:

- (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 of individual installations of the product, including methods and workmanship.

21.5 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, the Coniroof Roof Waterproofing System is fit for its intended use provided it is installed, used and maintained as set out in this Certificate. Certificate No 99/3660 is accordingly awarded to Conica Technik.

On behalf of the British Board of Agrément

A handwritten signature in black ink, appearing to read 'P. Q. Newson', is written over a light grey background.

Date of Second issue: 3rd October 2002

Chief Executive

**Original Certificate issued on 13th December 1999. This amended version includes change of Certificate holder's name and contact numbers, the marketing company's address, reference to revised national Building Regulations and CDM Regulations, and corrections to EOTA Technical Report numbers.*