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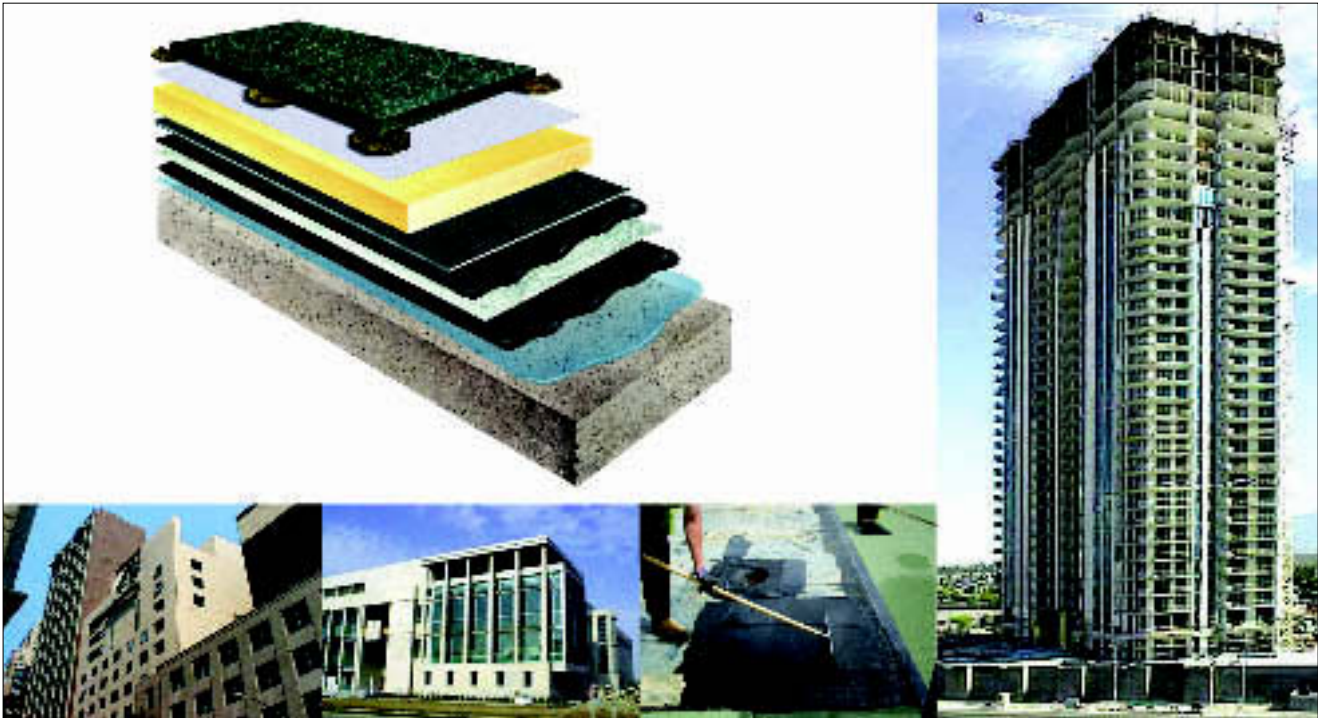
**Agrément
Certificate
No 06/4350**

Designated by Government
to issue
European Technical
Approvals

BAKOR 790-11EV MONOLITHIC HOT APPLIED ROOFING AND WATERPROOFING SYSTEM

Revêtement d'étanchéité, couche d'étanchéité
Dachabdichtungen, Feuchtigkeitssperre

Product



• THIS CERTIFICATE RELATES TO THE BAKOR 790-11EV MONOLITHIC HOT APPLIED ROOFING AND WATERPROOFING SYSTEM, A ONE-PART, HOT-APPLIED RUBBERISED BITUMEN MEMBRANE.


• This system is for use on inverted or protected flat roofs with limited access, new or existing horizontal and vertical surfaces to form a sandwich membrane for above-ground and basement waterproofing on a structure of concrete, brickwork, blockwork or masonry, to form a damp-proof membrane for solid floors.

• Installation is carried out by trained contractors (using specialist equipment) approved by the Certificate holder.

These Front Sheets must be read in conjunction with the accompanying Detail Sheets, which provide information specific to the particular application.

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 and basement waterproofing systems with the Building Regulations. In the opinion of the BBA, the Bakor 790-11EV Monolithic Hot Applied Roofing and 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:	On flat roofs, the system, when used in an inverted roof specification including a minimum surface finish of 50 mm of aggregate, may be deemed to be of designation AA. See the tinted areas of the <i>Properties in relation to fire</i> section of the appropriate accompanying Detail Sheet.
Requirement: C2(b)	Resistance to moisture
Comment:	Tests for water resistance on the membrane indicate that the system will meet this Requirement. See the tinted areas of the <i>Weather-tightness</i> section of the accompanying Detail Sheets.
Requirement: Regulation 7	Materials and workmanship
Comment:	The product comprises acceptable materials. See the tinted areas of the <i>Durability</i> section of the accompanying Detail Sheets.

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2 The Building (Scotland) Regulations 2004



In the opinion of the BBA, the Bakor 790-11EV Monolithic Hot Applied Roofing and Waterproofing System, if used in accordance with the provisions of this Certificate, will satisfy or contribute to satisfying the various Regulations and related Mandatory Standards as listed below.

Regulation:	8	Fitness and durability of materials and workmanship
Regulation:	8(1)	Fitness and durability of materials and workmanship
Comment:		The product can contribute to a construction meeting this Regulation. See the tinted areas of the <i>Durability</i> section and the <i>Installation</i> part of the accompanying Detail Sheets.
Regulation:	9	Building standards — construction
Standard:	2.8	Spread from neighbouring buildings
Comment:		On flat roofs, the system, when used in an inverted roof specification including a minimum surface protection of 50 mm of aggregate, may be considered of designation AA and satisfy the requirements of this Standard, with reference to clauses 2.8.1 ⁽¹⁾⁽²⁾ and 2.8.2 ⁽¹⁾⁽²⁾ . See the tinted areas of the <i>Properties in relation to fire</i> section of the appropriate accompanying Detail Sheet.
Standard:	3.4	Moisture from the ground
Comment:		The system can enable a wall and/or floor to satisfy the requirements of this Standard, with reference to clauses 3.4.1 ⁽¹⁾⁽²⁾ , 3.4.2 ⁽¹⁾⁽²⁾ and 3.4.4 ⁽¹⁾⁽²⁾ to 3.4.7 ⁽¹⁾⁽²⁾ respectively. See the tinted area of the <i>Weathertightness</i> section of the accompanying Detail Sheet 3.
Standard:	3.10	Precipitation
Comment:		Tests for water resistance on the membrane indicate that the use of the system can enable a roof to satisfy the requirements of this Standard, with reference to clauses 3.10.1 ⁽¹⁾⁽²⁾ and 3.10.6 ⁽¹⁾⁽²⁾ . See the tinted area of the <i>Weathertightness</i> section of accompanying Detail Sheet 2.
Regulation:	12	Building standards — conversions
Comment:		All comments given for this system under Regulation 9, also apply to this Regulation with reference to clause 0.12.1 ⁽¹⁾⁽²⁾ and Schedule 6 ⁽¹⁾⁽²⁾ .
		(1) Technical Handbook (Domestic).
		(2) Technical Handbook (Non-Domestic).

3 The Building Regulations (Northern Ireland) 2000



In the opinion of the BBA, the Bakor 790-11EV Monolithic Hot Applied Roofing and 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 the tinted areas of the <i>Durability</i> section of the accompanying Detail Sheets.
Regulation:	C4	Resistance to ground moisture and weather
Comment:		Tests for water resistance of the membrane indicate that the use of the system will satisfy the requirements of this Regulation. See the tinted areas of the <i>Weathertightness</i> section of the accompanying Detail Sheets.
Regulation:	E5	External fire spread
Comment:		On flat roofs, the system, when used in an inverted roof specification including a minimum surface protection of 50 mm of aggregate, may be considered of designation AA. See the tinted areas of the <i>Properties in relation to fire</i> section of the appropriate accompanying 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: *6 Delivery and site handling* (6.1 and 6.4) of these Front Sheets.

Technical Specification

5 Description

5.1 The Bakor 790-1 1EV Monolithic Hot Applied Roofing and Waterproofing System is a formulated combination of refined bitumen, synthetic rubbers and other additives, manufactured by heating and blending together.

5.2 Bauder Polyester Reinforcement Sheet is a 60 gm⁻² spunbonded, polyester reinforcement membrane for use as a reinforcing to the membrane.

5.3 Ancillary products used with the Bakor 790-1 1EV include:

- Bauder Butyl Flashing — 1.0 mm thick, flexible detailing sheet, used to reinforce the membrane at expansion joints where movement is likely to occur, and for details and upstands
- Bauder AP2 Protection Sheet — polyester based, mineral surfaced, bitumen protection membrane
- Bauder AP3 Protection Sheet — high-density polymeric protection board
- Bauder Penetrating Primer — for surface preparation
- Bauder Polymer Primer — for surface preparation
- Bauder G4E Sheet — torch-applied base sheet.

5.4 Quality control checks are performed on incoming raw materials, during production, and on the finished product. Checks include:

- penetration
- viscosity
- softening point
- flow.

6 Delivery and site handling

6.1 Bakor 790-1 1EV is delivered to site in 226 kg drums bearing the product name, the manufacturer's name and the BBA identification mark incorporating the number of this Certificate.

6.2 Each drum contains 10 cakes of Bakor 790-1 1EV individually wrapped in polythene film. Each cake has a nominal weight of 22.6 kg.

6.3 Reinforcing and protection layers are packaged with labels bearing the Bauder trade name and should be stored under cover and kept dry.

6.4 The primers are classified under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3) and all containers bear the appropriate hazard warning label(s). Flashpoints and hazard classification are given in Table 1.

Table 1 Flashpoint and hazard classification

Component	Flashpoint (°C)	Classification
Penetrating Primer	43	Flammable
Polymer Primer	6	Highly flammable/Harmful

Design Data

7 Adhesion

7.1 Test data for the Bakor 790-1 1EV Monolithic Hot Applied Roofing and Waterproofing System indicate that the adhesion of the membrane to substrates is satisfactory.

7.2 When used over construction or expansion joints, the membrane can accommodate the minor structural movement likely to occur under normal service conditions. The methods described in sections 6.4 and 6.5 of Detail Sheet 2 and section 5.4 of Detail Sheet 3 should be followed.

8 Effects of temperature

Providing the substrate is dry and frost free, the membrane can be installed down to the lowest possible site working temperatures found in the United Kingdom.

9 Resistance to puncture

9.1 Data indicate that provided there are no sharp objects present on the membrane's surface prior to and during installation of the protective layer, the system will not be damaged by normal foot traffic.

9.2 Although the membrane can withstand loads, it can be damaged by concentrated point loads and these should be avoided.

10 Maintenance

Damage to the membrane can be adequately repaired by patching in accordance with the Certificate holder's instructions.

Technical Investigations

The following is a summary of the technical investigations carried out on the Bakor 790-1 1EV Monolithic Hot Applied Roofing and Waterproofing System.

11 Tests

Samples of Bakor 790-1 1EV Monolithic and the reinforcements were obtained from the manufacturer for the purpose of testing. Tests performed by the BBA, which give typical results for the materials, are summarised in Tables 2 to 4.

12 Investigations

The manufacturing process was examined, including the methods adopted for quality control.

Table 2 Physical properties of reinforcements

Test (units)	Method ⁽¹⁾	Mean results		
		Bauder Polyester Reinforcement	Bauder Butyl Flashing	Bauder AP2 Protection
Thickness (mm)	direct	0.16	1.1	4.1
Weight per unit area (kgm ⁻²)	direct	0.03	1.2	4.8
Tensile strength (N)	BS EN 29073-3			
longitudinal		60	—	—
transverse		32	—	—
Elongation (%)	BS EN 29073-3			
longitudinal		33	—	—
transverse		26	—	—
Tensile strength (N)	BS 903-A2			
longitudinal		—	68	—
transverse		—	61	—
Elongation (%)	BS 903-A2			
longitudinal		—	426	—
transverse		—	463	—
Tensile strength (N per 50 mm)	BS EN 12311-1			
longitudinal		—	—	1475
transverse		—	—	1420
Elongation (%)	BS EN 12311-1			
longitudinal		—	—	31
transverse		—	—	30

(1) The test documents are detailed in the *Bibliography*.
— not tested.

Table 3 Physical properties — unreinforced membrane

Test (units)	Method ⁽¹⁾	Mean results
Fines content (%)	MOAT No 64	21.2
Penetration at 50°C (dmm)	CAN/CGSB 37.50-M89	
unaged		135
remelted ⁽²⁾		120
prolonged heating ⁽³⁾		115
Flow at 60°C (mm)	CAN/CGSB 37.50-M89	
unaged		<1
remelted ⁽²⁾		0
prolonged heating ⁽³⁾		0
Low temperature flexibility (°C)	CAN/CGSB 37.50-M89	
unaged		-25
heat ageing ⁽⁴⁾		-5
water exposure ⁽⁵⁾		-20

(1) The test documents are detailed in the *Bibliography*.
 (2) Remelted 7 times at 180°C to 200°C temperature range.
 (3) Prolonged heating 5 hours at 215°C.
 (4) Heat aged 200 days at 70°C.
 (5) Water exposure 180 days at 60°C.

Table 4 Service performance of system

Test (units)	Method ⁽¹⁾	Mean result
Water vapour permeability (gm ⁻² day ⁻¹)	BS 3177 (75% RH/25°C)	0.26
Water vapour resistance (MNsg ⁻¹)	BS 3177 (75% RH/25°C)	788
Head of water	MOAT 27 : 5.1.4 (6 metre head)	pass
Dynamic indentation ⁽²⁾	EOTA TR 006	
unaged		I ₃
heat aged ⁽³⁾		I ₃
Static indentation ⁽²⁾	EOTA TR 007	
unaged		L ₃
water exposure ⁽⁴⁾		L ₃
Fatigue cycling	EOTA TR 008	
unaged		pass
heat aged ⁽³⁾		pass

(1) The test documents are detailed in the *Bibliography*. The numbers after the reference to MOAT No 27 are referring to the specific section within that document.
 (2) Tested with integral protection.
 (3) Heat aged 200 days at 70°C.
 (4) Water exposure 180 days at 60°C.

Bibliography

BS 903-A2 : 1995 *Physical testing of rubber — Method for determination of tensile stress-strain properties*

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

BS EN 12311-1 : 2000 *Flexible sheets for waterproofing — Determination of tensile properties — Part 1 — Bitumen sheets for roof waterproofing*

BS EN 29073-3 : 1992 *Textiles — Test methods for nonwovens — Determination of tensile strength and elongation*

CAN/CGSM 37.50-M89 *Hot-Applied Rubberized Asphalt for Roofing and Waterproofing*

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

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

EOTA Technical Report TR 008 (May 1999), *Liquid Applied Roof Waterproofing Kits (LARWK) — Determination of the resistance to fatigue movement*

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

MOAT No 64 : 2001 *UEAtc Technical Guide for the assessment of Roof Waterproofing Systems made of Reinforced APP or SBS Polymer Modified Bitumen Sheets*

Conditions of Certification

13 Conditions

13.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page — no other company, firm or person may hold or claim any entitlement to this Certificate
- 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.

13.2 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.

13.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant 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.

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

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- individual installations of the product or system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

13.5 Any information relating to the manufacture, supply, installation, use and maintenance of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used and maintained. It does 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 information 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 manufacture, supply, installation, use and maintenance of this product/system.



In the opinion of the British Board of Agrément, the Bakor 790-11EV Monolithic Hot Applied Roofing and Waterproofing System is fit for its intended use provided it is installed, used and maintained as set out in this Certificate. Certificate No 06/4350 is accordingly awarded to Bauder Ltd.

On behalf of the British Board of Agrément

Date of issue: 28th July 2006

Chief Executive

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British Board of Agrément

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For technical or additional information,
contact the Certificate holder (see
front page).
For information about the Agrément
Certificate, including validity and
scope, tel: Hotline 01923 665400,
or check the BBA website.



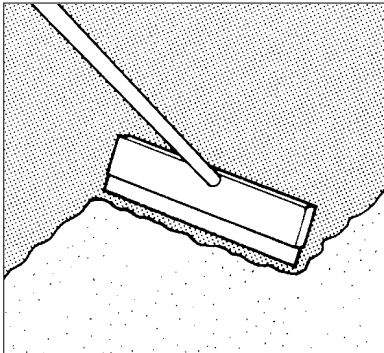
Bauder Ltd

BAKOR 790-11EV HOT APPLIED MONOLITHIC MEMBRANE ROOFING SYSTEM

Certificate No 06/4350

DETAIL SHEET 2

Product



- THIS DETAIL SHEET RELATES TO THE BAKOR 790-11EV HOT APPLIED MONOLITHIC MEMBRANE ROOFING SYSTEM.
- The system is for use on flat roofs with limited access in either
 - an inverted roof specification
 - a protected roof specification (eg covered by pavers or other suitable protection).

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, general information relating to the applications, and the Conditions of Certification, respectively.

Design Data

1 General

1.1 The Bakor 790-11EV Hot Applied Monolithic Membrane Roofing System is satisfactory for use on flat, limited or pedestrian access roofs as:

- a waterproofing layer in an inverted roof specification
- a waterproofing layer protected by pavers or other suitable protection
- a waterproofing layer (tanking specification) on a flat roof with a zero fall slope.

1.2 Limited access roofs are defined for the purpose of this Certificate as those roofs subjected only to pedestrian traffic for such duties as maintenance of the roof covering and cleaning of gutters. Where traffic in excess of this is envisaged, special precautions such as additional protection to the membrane must be taken.

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

1.4 When designing flat roofs, twice the minimum finished fall should be assumed, unless a detailed analysis of the roof is available, including such information as overall and local deflection, and direction of falls.

1.5 Insulation materials used in conjunction with the product must be:

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

1.6 Precast concrete and concrete block decks to which the product is to be applied must comply with the relevant requirements of BS 6229 : 2003, BS 8217 : 2005 and, where appropriate, NHBC Standards, Chapter 7.1, or the Zurich Building Guarantee Technical Manual, section 4 Superstructure, sub-section

Flat roofs (page 266-268), where applicable, the manufacturer's instructions.

2 Weathertightness



2.1 Data examined confirm that when completely sealed and consolidated, the membrane will adequately resist the passage of moisture to the inside of the building and so meet or satisfy the relevant requirements of the national Building Regulations:

England and Wales

Approved Document C, Requirement C2

Scotland

Mandatory Standard 3.10, clauses 3.10.1⁽¹⁾⁽²⁾ and 3.10.6⁽¹⁾⁽²⁾

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland

Regulation C4.

2.2 The membrane is impervious to water and, when used in the systems described, will give a waterproofing layer capable of accepting minor structural movements without damage.

3 Properties in relation to fire



3.1 The membrane, when used in an inverted roof specification including a minimum surface finish of 50 mm of aggregate, shall be deemed to meet BS 476-3 : 2004 designation EXT F.A.A.

3.2 The designation of other specifications should be confirmed by:

England and Wales

test or assessment with Clause A1, Appendix A of the Approved Document B

Scotland

test to conform with Mandatory Standard 2.8, clauses 2.8.1⁽¹⁾⁽²⁾ and 2.8.2⁽¹⁾⁽²⁾

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland

test or assessment by a UKAS accredited laboratory or an independent consultant with appropriate experience.

4 Durability



4.1 Baker 790-11EV Hot Applied Roof Waterproofing Membrane, when fully protected and subject to normal service conditions, will provide an effective barrier to the transmission of liquid water and water vapour for the design life of the roof in which it is incorporated.

4.2 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

5 General

5.1 The Baker 790-11EV Hot Applied Monolithic Membrane Roofing System must be installed in accordance with the Certificate holder's instructions, on a dry and frost-free substrate. After rain or snow, at least one full day of good drying conditions must be allowed before installation can recommence. Once applied, the membrane is not affected by rain, snow or frost.

5.2 To assess the suitability of a substrate to receive the membrane, initial tests must be carried out. If bonding problems occur, advice should be sought from the Certificate holder.

5.3 Prior to the application of the membrane to the substrate, defects such as cracks, irregularities, and areas of potential weakness should be made good, and the substrate cleaned. Any gaps, irregularities and areas of potential weakness may be filled with latex modified repair mortar. Where faults are not critical, additional membrane may be used to fill in.

5.4 The substrate should be primed with either Bauder Penetrating Primer or Bauder Polymer Primer and allowed to dry before the application of the membrane. Coverage will vary depending on the porosity of the substrate, but should be between 4 m² and 16 m² per litre depending on which primer is used.

5.5 Baker 790-11EV will adhere to metal, plywood and timber details. Metal should be free from oil, rust, paint or other coatings liable to affect the bond.

5.6 The membrane should be covered with a protective layer as soon as possible after installation, in accordance with the Certificate holder's instructions.

6 Procedure

6.1 Cakes of the membrane are heated in a mechanically-agitated heater which has a double jacket containing a heat transfer mineral oil, and is fitted with thermometers to measure the melt and oil temperatures.

6.2 The nominal temperature range for the molten membrane is 180°C to 200°C. The temperature of the melt should never exceed 215°C.

6.3 The melt is discharged from the heater into a suitable container and applied to the roof using long-handled, rubber-bladed squeegees.

6.4 The membrane, when used over construction joints, should be reinforced with Bauder Polyester Reinforcement Sheet.

6.5 When used across expansion joints or between differing abutting substrates, ie metal outlet flange and concrete deck, the membrane should be reinforced with Bauder Butyl Flashing.

6.6 The first layer of membrane should have a minimum thickness of 3 mm.

6.7 The Bauder polyester reinforcement should be embedded by lightly brushing it into the first layer of the membrane whilst it is still warm and tacky. The reinforcement overlaps should be at least 75 mm.

6.8 The second layer of membrane, applied over the top of the reinforcement, should have a minimum thickness of 3 mm.

6.9 Either Bauder AP2 or AP3 should be installed over the membrane as soon as possible in accordance with the appropriate specification.

6.10 The insulation and/or surface protection is installed in accordance with the chosen roof specification.

Bibliography

BS 476-3 : 2004 *Fire tests on building materials and structures — Classification and method of test for external fire exposure to roofs*

BS 6229 : 2003 *Flat roofs with continuously supported coverings — Code of practice*

BS 8217 : 2005 *Reinforced bitumen membranes for roofing — Code of practice*



On behalf of the British Board of Agrément

Date of issue: 28th July 2006

Chief Executive

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For technical or additional information, contact the Certificate holder (see front page).

For information about the Agrément Certificate, including validity and scope, tel: Hotline 01923 665400, or check the BBA website.



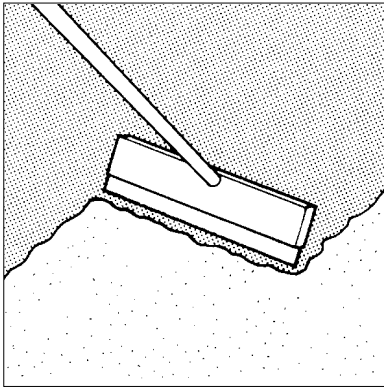
Bauder Ltd

Certificate No 06/4350

BAKOR 790-1 1EV HOT APPLIED MONOLITHIC MEMBRANE DAMP-PROOFING SYSTEM

DETAIL SHEET 3

Product



- THIS DETAIL SHEET RELATES TO THE Bakor 790-1 1EV HOT APPLIED MONOLITHIC MEMBRANE DAMP-PROOFING SYSTEM.
- The system is for use on new or existing horizontal and vertical surfaces to form a sandwich membrane for above-ground and basement waterproofing on a structure of concrete, brickwork, blockwork or masonry, or to form a damp-proof membrane for solid floors.

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations, general information relating to the applications, and the Conditions of Certification, respectively.

Design Data

1 General

1.1 The Bakor 790-1 1EV Hot Applied Monolithic Membrane Damp-proofing System is satisfactory for use as a sandwich membrane, for above- and below-ground waterproofing within a structure of concrete, brickwork, blockwork or masonry, or as a damp-proof membrane for solid floors.

1.2 The membrane is compatible with the substrate and is resistant to those chemicals likely to occur in normal practice.

1.3 Where contact with materials used as damp-proof courses is likely, consideration must be given to the thermal stability of that material, due to the high temperatures reached during installation.

2 Weathertightness

2.1 Data examined confirm that when completely sealed and consolidated, the membrane will adequately resist the passage of moisture to the inside of the building and so meet or satisfy the relevant requirements of the national Building Regulations:

England and Wales

Approved Document C2(a), Section 4.7

Scotland

Mandatory Standard 3.4, clauses 3.4.2⁽¹⁾⁽²⁾ and 3.4.4 to 3.4.7⁽¹⁾⁽²⁾

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland

Regulation C4.

2.2 The membrane is impervious to water and, will act as a waterproofing layer capable of accepting minor structural movements without damage.

3 Durability



The Bakor 790-1 1EV Hot Applied Monolithic Membrane Damp-proofing System, when fully protected and subjected to normal service conditions, will provide an effective barrier to the transmission of liquid water and water vapour for the design life of the structure in which it is incorporated.

Installation

4 General

4.1 The Bakor 790-1 1EV Hot Applied Monolithic Membrane Damp-proofing System must be installed in accordance with the relevant requirements of CP 102 : 1973, BS 8102 : 1990 and the Certificate holder's instructions.

4.2 Concrete or screeded surfaces should have a smooth finish, free from loosely-adhering material and sharp protrusions. Concrete should be dry and dust free. Surfaces should be primed with either Bauder Penetrating Primer or Bauder Polymer Primer and allowed to dry before application of the membrane. Coverage will vary depending on the porosity of the substrate, but should be between 4 m² and 16 m² per litre depending on which primer is used.

4.3 Vertical surfaces of brickwork, blockwork and, if necessary masonry, should be rendered to provide an even surface. Brickwork or blockwork

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not rendered must be flush pointed to give a smooth surface without sudden changes in level.

4.4 The membrane must be covered with a protective layer, in accordance with the Certificate holder's instructions, as soon as possible after installation.

5 Procedure

5.1 Cakes of the membrane are heated in a mechanically-agitated heater, which has a double jacket containing a heat transfer mineral oil, and is fitted with thermometers to measure the melt and oil temperatures.

5.2 The nominal temperature range for the molten membrane is between 180°C and 200°C. The temperature of the melt should never exceed 215°C.

5.3 The melt is discharged from the heater into a container capable of holding the melt, and applied to the surface using long-handled, rubber-bladed squeegees for horizontal surfaces and a suitable spreader for vertical surfaces.

5.4 When used over construction joints the membrane should be reinforced with a strip of Bauder polyester sheet incorporated into the membrane.

5.5 When used over bridging joints the membrane should also be reinforced with Bauder Butyl Flashing.

5.6 The minimum thickness of the first layer of the membrane should be 3 mm.

5.7 The Bauder polyester reinforcement should be embedded by lightly brushing into the first layer while it is still warm and tacky. The reinforcement overlaps should be at least 75 mm.

5.8 The second coat of membrane applied over the top of the reinforcement should be a minimum thickness of 3 mm.

5.9 Either Bauder AP2 or AP3 should be installed over the membrane as soon as possible in accordance with the appropriate specification.

5.10 The surface protection (eg screed) is installed in accordance with the chosen waterproofing specification.

5.11 When used for internal tanking the membrane should be loaded against back pressure in accordance with BS 8102 : 1990.

Bibliography

BS 8102 : 1990 *Code of practice for protection of structures against water from the ground*

CP 102 : 1973 *Code of practice for protection of buildings against water from the ground*



On behalf of the British Board of Agrément

Date of issue: 28th July 2006

A handwritten signature in black ink, appearing to read 'G. A. Cooper'.

Chief Executive