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**Agrément
Certificate
No 89/2278**
Second issue*

Designated by Government
to issue
European Technical
Approvals

RIW LIQUID ASPHALTIC COMPOSITION

Membrane étanche à l'humidité
Feuchtigkeitssperre


Product



- THIS CERTIFICATE REPLACES CERTIFICATE No 86/1594 AND RELATES TO RIW LIQUID ASPHALTIC COMPOSITION, A COLD APPLIED, BITUMEN SOLUTION.
- The product is used 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.

Regulations

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

 The Secretary of State has agreed with the British Board of Agrément aspects of performance to be used by the BBA in assessing the compliance of waterproofing — tanking (walls and floors) with the Building Regulations. In the opinion of the BBA, RIW Liquid Asphaltic Composition, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements.

Requirement: C2(a)	Resistance to moisture
Comment:	Tests for water resistance on the product indicate that the material will meet the Requirement. See section 8.1 of this Certificate.
Requirement: Regulation 7	Materials and workmanship
Comment:	The product comprises an acceptable material. See section 12.1 of this Certificate.

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2 The Building (Scotland) Regulations 2004



In the opinion of the BBA, RIW Liquid Asphaltic Composition 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 section 12.1 and the <i>Installation</i> part of this Certificate.
Standard:	3.4	Moisture from the ground
Comment:		The product satisfies the requirements of this Standard, with reference to clauses 3.4.1 ⁽¹⁾⁽²⁾ , 3.4.5 ⁽¹⁾⁽²⁾ and 3.4.6 ⁽¹⁾⁽²⁾ . See section 8.1 of this Certificate.
Regulation:	12	Building standards — conversions
Comment:		All comments given for this product 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, RIW Liquid Asphaltic Composition if used in accordance with the provisions of this Certificate can 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 12.1 of this Certificate.
Regulation:	C4	Resistance to ground moisture and weather
Comment:		The product satisfies the requirements of this Regulation. See section 8.1 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 section: *6 Delivery and site handling (6.2).*

Technical Specification

5 Description

5.1 RIW Liquid Asphaltic Composition is a solution of natural and petroleum bitumens in white spirit.

5.2 The product is manufactured in a batch process, and the final product is checked for viscosity, specific gravity, and volatile content.

6 Delivery and site handling

6.1 The product is supplied in 5 litre, 25 litre and 205 litre drums, each drum bearing the product name, batch code and the BBA identification mark incorporating the number of this Certificate.

6.2 The product is classified as flammable under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP3) with a flashpoint of 38°C, and should be stored in a cool place away from naked flames.

6.3 The product has a minimum shelf-life of one year.

7 General

7.1 RIW Liquid Asphaltic Composition is satisfactory for use as a sandwich membrane, for above ground, basement waterproofing within a structure of concrete, brickwork, blockwork or masonry, or as a damp-proof membrane for solid floors.

7.2 The product is compatible with the substrate and is resistant to those chemicals likely to occur in normal service conditions.

8 Weathertightness



8.1 Data examined confirm that the product 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)

Scotland

Mandatory Standard 3.4

Northern Ireland

Regulation C4.

8.2 The product is impervious to water and, when used in accordance with this Certificate, will act as a waterproofing layer capable of accepting minor structural movements without damage.

9 Adhesion

Test data examined by the BBA indicate that the adhesion of the membrane to substrates is satisfactory.

10 Resistance to joint movement

The product can accommodate limited hairline cracking in the substrate, but cannot bridge movement joints, or construction joints between different substrates where movement is likely. In these situations, conventional treatment with sealants and waterstops must be used, and continuity must be maintained between the joint and membrane (the sealant manufacturer should be consulted on the sealant's compatibility, and the need for primers).

11 Resistance to mechanical damage

The product can be damaged by sharp objects and care should be taken when handling materials and equipment over exposed membranes.

12 Durability



12.1 RIW Liquid Asphaltic Composition 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.

12.2 The product is not affected by contact with an alkaline substrate.

Installation

13 General

Installation of RIW Liquid Asphaltic Composition is carried out in accordance with the general requirements of BS 8102 : 1990 and the Certificate holder's application instructions.

14 Procedure

14.1 New concrete, screeds or renderings should have a trowelled, lightly tamped or brushed finish, and be free from defects. Brickwork, blockwork or masonry should be flush pointed. Defects in existing surfaces should be made good. All surfaces must be clean, sound and surface-dry.

14.2 The product must not be applied to exposed surfaces in wet conditions, at temperatures below 5°C, nor if these conditions are likely to occur before the membrane has dried.

14.3 Two coats are applied by brush to concrete floors and walls at, above or below ground level. A first coat of the product is applied by brush at a coverage rate of 1.7 m² per litre. When dry, a second coat is applied at a coverage rate of 2.5 m² per litre. The coats should not be sanded, and the membrane should be linked to any adjacent damp-proof course.

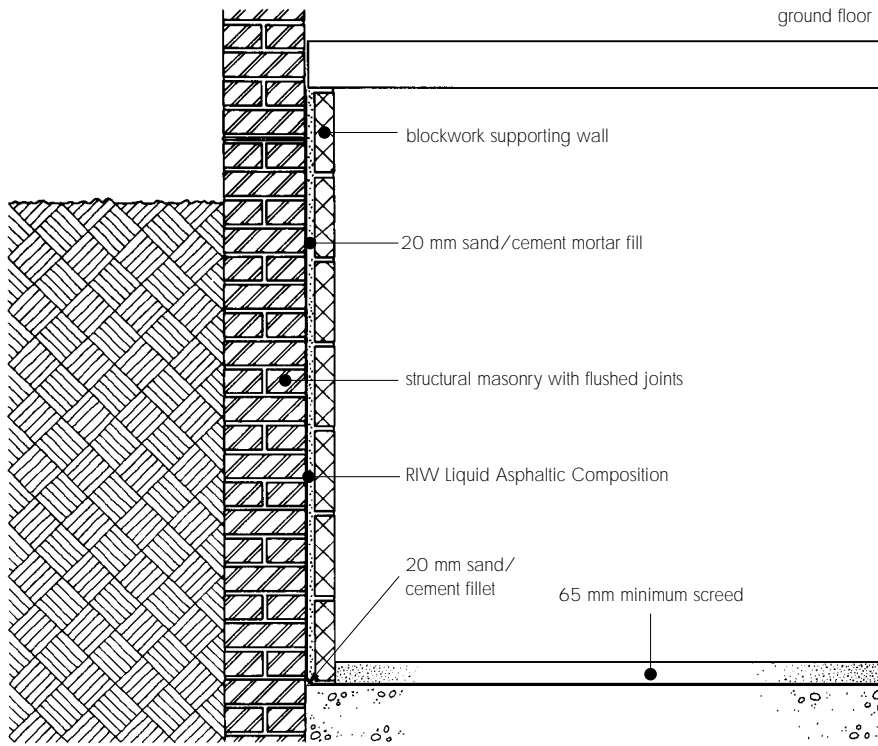
14.4 The product must be allowed to dry fully, throughout its thickness, before a second coat, or any mechanical protection is applied. Under normal conditions of temperature and ventilation, this is possible after 24 hours.

14.5 The product must always be protected by a layer of concrete, un-bonded screed, or by brickwork or blockwork. Alternatively, where back-filling is to occur, the membrane can be protected by a weak rendering or by a layer of rot-roof non-compressible board. Care must be taken to avoid damaging the membrane before and during these operations (see Figure 1).

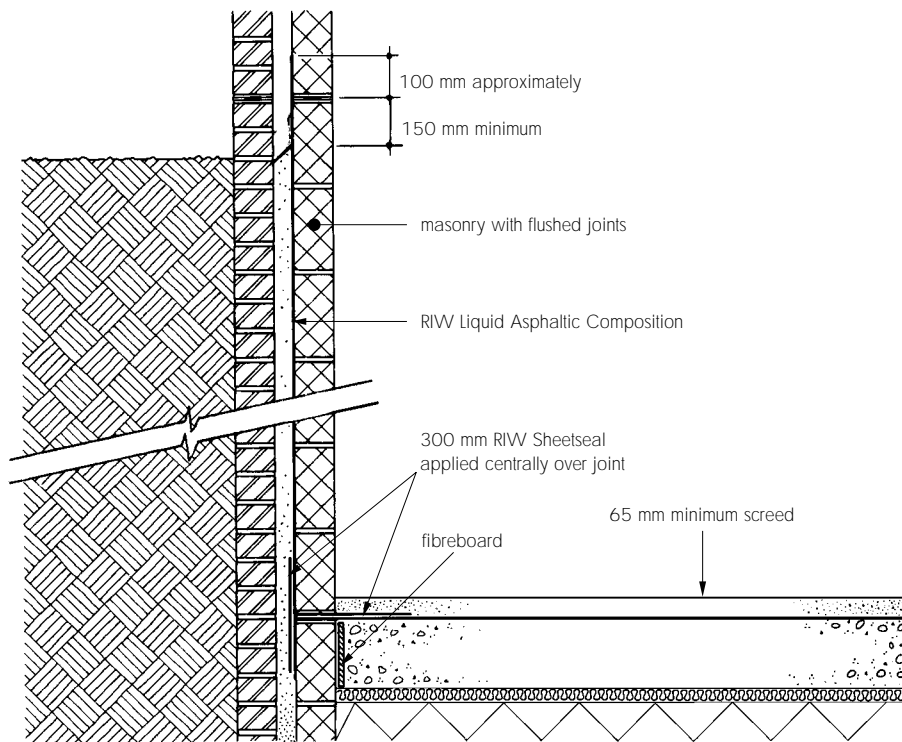
14.6 When used for internal tanking, the membrane is loaded against back pressure, for example, by erecting a brick or blockwork skin, 20 mm from the membrane, and filling the cavity with sand-cement mortar. The outside of the wall is not backfilled until after the membrane has cured (see Figure 1).

14.7 Where the structure is penetrated (eg by pipes, conduits), or movement capability is required at construction joints, or dissimilar materials meet at internal/external angles, then RIW Sheetseal may be used to form a sleeve, link or additional reinforcement respectively at these points.

Figure 1 Installation details

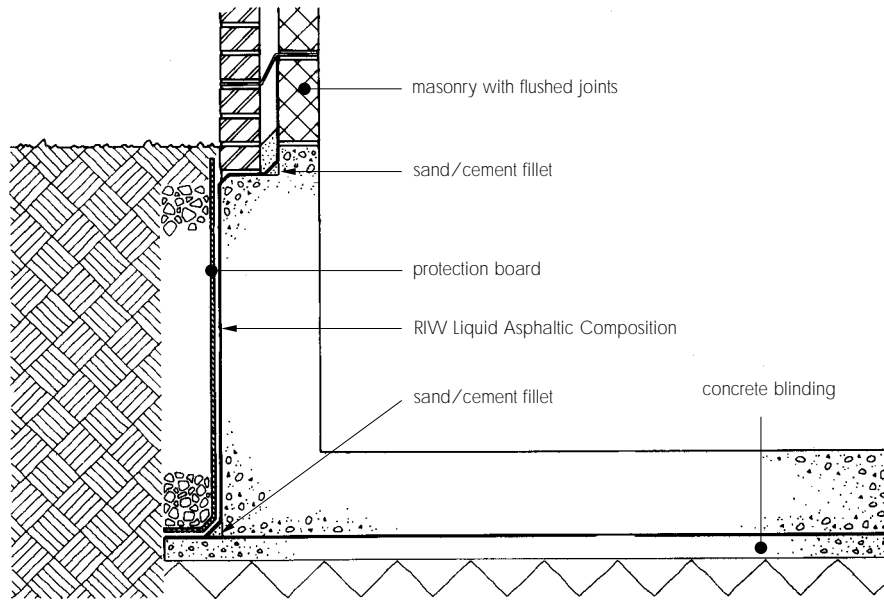


internal tanking (existing building)

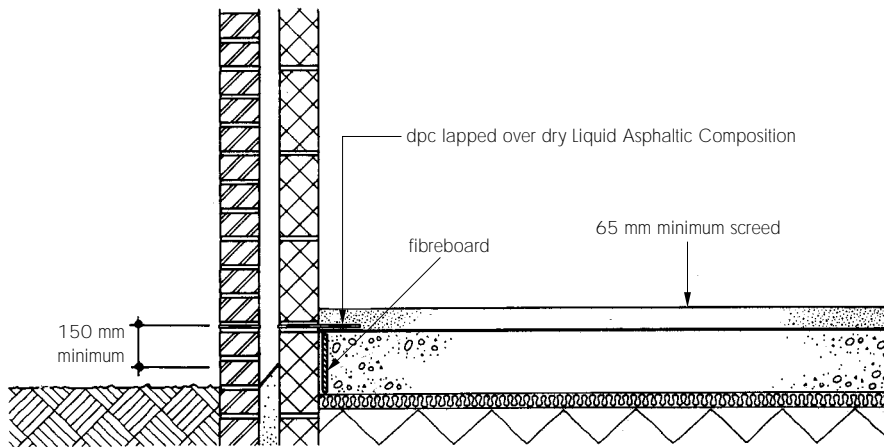


external tanking within cavity wall

Figure 1 Installation details (continued)



external tanking to structural concrete



dpm to ground-floor slab

Technical Investigations

The following is a summary of the technical investigations carried out on RIW Liquid Asphaltic Composition.

15 Tests

The following tests were carried out:

- cold water soak (effect on adhesion)
- heat ageing
- alkali resistance
- effect of hard body impact
- resistance to screeding
- water vapour permeability
- resistance to water pressure
- resistance to crazing.

16 Investigations

16.1 The manufacturing process was examined, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

16.2 A user survey was carried out to assess the performance of the product under service conditions.

16.3 Failure of the product in use has not been reported to the BBA.

Bibliography

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

Conditions of Certification

17 Conditions

17.1 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.

17.2 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.

17.3 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.

17.4 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.

17.5 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, RIW Liquid Asphaltic Composition is fit for its intended use provided it is installed, used and maintained as set out in this Certificate. Certificate No 89/2278 is accordingly awarded to RIW Ltd.

On behalf of the British Board of Agrément

Date of Second issue: 9th September 2005

A handwritten signature in black ink, appearing to read 'G. A. Cooper', is written over a light grey background.

Chief Executive

**Original Certificate issued on 22nd August 1989. This amended version includes updated national Building and CDM Regulations, the addition of the Bibliography and new Conditions of Certification.*

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