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**Agrément
Certificate
No 90/2516**
Fourth issue*

Designated by Government
to issue
European Technical
Approvals

VANDEX BB 75

Produit d'étanchéité hydraulique
Hydraulisches Dichtungsmittel

Product




• THIS CERTIFICATE RELATES TO VANDEX BB 75, A CEMENTITIOUS WATERPROOFING COMPOUND.

• Vandex BB 75 is used in one or two coats for internal or external waterproofing of new or existing structures of concrete, brickwork, stonework and blockwork, or to waterproof water retaining structures.

• Vandex BB 75 is applied by brush, spray or trowel.

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 waterproofing-tanking (walls and floors) with the Building Regulations. In the opinion of the BBA, the use of Vandex BB 75 in new constructions, if used in accordance with the provisions of this Certificate, will meet the relevant requirements. In the opinion of the BBA, the use of Vandex BB 75 in an existing building is not subject to these Regulations, but action to satisfy Requirement C2 and Regulation 7 may be necessary for a 'Material change of use' as defined in Regulation 5(a).

Requirement: C2(a)(b)

Comment:

Resistance to moisture

The product adequately resists the passage of moisture. See section 13 of this Certificate.

Requirement: Regulation 7

Comment:

Materials and workmanship

The product is acceptable. See section 13 of this Certificate.

2 The Building (Scotland) Regulations 2004



In the opinion of the BBA, the use of Vandex BB 75 in new constructions, if used in accordance with the provisions of the Certificate, will satisfy or contribute to satisfying the various Regulations and related Mandatory Standards as listed below. In the opinion of the BBA, the use of Vandex BB 75 in an existing building is not controlled by these Regulations, but action to satisfy the Regulations and related Mandatory Standards below may be necessary for a 'Conversion' as defined in Regulation 4 of these Regulations.

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 satisfying this Regulation. See section 13 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards – construction
Standard:	3.4	Moisture from the ground
Standard:	3.10	Precipitation
Comment:		The product adequately resists the passage of moisture and can contribute to satisfying these Standards, with reference to clauses 3.4.1 ⁽¹⁾⁽²⁾ , 3.4.2 ⁽¹⁾⁽²⁾ , 3.4.7 ⁽¹⁾⁽²⁾ and 3.10.1 ⁽¹⁾⁽²⁾ respectively. See section 13 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, the use of Vandex BB 75 in new constructions, if used in accordance with the provisions of this Certificate, will satisfy the various Building Regulations as listed below. In the opinion of the BBA, the use of Vandex BB 75 in an existing building is not controlled by these Regulations, but action to satisfy Regulations B2 and C4 may be necessary for a 'Material change of use' under Regulation A9.

Regulation:	B2	Fitness of materials and workmanship
Comment:		The product is acceptable. See section 13 of this Certificate.
Regulation:	C4	Resistance to ground moisture and weather
Comment:		The product adequately resists the passage of moisture. See section 13 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* (6.1 and 6.2)

Technical Specification

5 Description

5.1 Vandex BB 75 is a grey, cementitious compound containing Portland cement, graded sands, aggregates and chemical additives. It is supplied in powder form to be mixed with water on site and applied as a slurry.

5.2 It is produced by a continuous batch blending process.

5.3 Quality control is exercised over the raw materials during manufacture and on the finished product.

5.4 Vandex Plug is a cement-based, quick-setting hydraulic compound, used to staunch running water or seepage through concrete or masonry.

6 Delivery and site handling

6.1 Vandex BB 75 is packed in 25 kg PE lined paper bags. Each sack or container carries a label bearing the BBA identification mark incorporating the number of this Certificate.

6.2 Vandex BB 75 and Vandex Plug are cement-based products and must be stored in dry conditions, and handled using routine precautions for cement-based products.

Design Data

7 General

7.1 Vandex BB 75, when used in one or two coats in the proportions defined in section 16, provides an effective barrier against the transmission of liquid water and can be applied without difficulty to brickwork, stonework, blockwork or concrete substrates by competent contractors.

7.2 The product is satisfactory for use:

- for interior and exterior waterproofing of concrete, brickwork, stone and blockwork structures,
- for waterproofing concrete floors, or
- as a waterproofing system, eg reservoirs, tanks, pools.

7.3 New buildings must be designed to withstand the hydrostatic pressure expected in service.

7.4 Continuity should be maintained with any membrane (new or existing) in the basement floor using a flexible waterproof joint.

8 Resistance to movement

The product is unable to accommodate movement due to settlement and can only be used where

settlement is not anticipated, or in conjunction with waterproof movement joints. The Certificate holder can advise on suitable materials.

9 Fixings

9.1 Special measures are necessary to avoid breaching the waterproof rendering when attaching fixings. The measures include:

- the use of epoxy resin or polyurethane adhesives to bond lightweight fixings to the coated surface;
- recesses, made in the substrate to accept heavy-duty fittings, are coated with the product to form waterproof pockets. These are filled with an appropriate mortar and then coated with the product to provide continuity of the surface coating; and
- the use of floor standing supports.

9.2 If these techniques cannot be applied and it is necessary to breach the coating, the recess formed in the substrate must be filled with the product.

10 Sulfate resistance

10.1 Vandex BB 75 is based on Portland cement and may be used in soils or groundwater of Class DS1, as defined in BRE Special Digest 1 : 2005 *Concrete in aggressive ground*.

10.2 Where the brickwork has a high sulfate content, or is efflorescing, the advice of the Certificate holder should be sought.

10.3 The Certificate holder can provide an analytical service on samples of substrate, soil and groundwater.

11 Resistance to damage

11.1 The coating is vulnerable to damage during installation, and in service, particularly in heavily trafficked areas where there is a risk of impact or abrasion.

11.2 Coatings of the product on walls can be protected by boarding, a sand/cement mix, Vandex Refurbishment Plaster White or a proprietary cement-based renovating plaster.

12 Internal application on a basement wall

12.1 If the product is applied to the inside of a basement wall, the wall structure will remain cold and wet, with subsequent risks of condensation and frost damage.

12.2 The condensation risk can be minimised by the application of a coat of Vandex Refurbishment Plaster White or other proprietary lightweight, cement-based, renovating plaster and the provision of adequate heating and ventilation and/or the use of a dehumidifier.

13 Durability



Under normal conditions of use, Vandex BB 75 will provide an effective barrier to the transmission of liquid water for the life of the building to which it is applied.

Installation

14 General

14.1 When installing Vandex BB 75, workmanship should comply with BS 8000-4 : 1989.

14.2 The product may be applied under most normal site conditions, but external application should not be attempted during rain nor at temperatures below 5°C.

15 Surface preparation

15.1 Before application, all mortar joints must be flush-pointed, defects made good and irregular surfaces given a trowelled or floated finish with an appropriate sand/cement mix. When installing a render, the mortar joints should be raked out to a depth of a least 10 mm.

15.2 Water infiltration through the surface to be treated is either diverted by drainage or concentrated at weepholes which will be plugged with Vandex Plug after the application of the final coat.

15.3 All surfaces must be clean, sound, keyed, and free from existing coatings or contamination, eg paint, laitance, dirt, surface water.

15.4 A new concrete surface may be bush-hammered, scabbled or grit-blasted to remove any laitance.

15.5 If the surface shows frost damage, the affected area is removed and replaced before the product is applied.

16 Application

16.1 A slurry is prepared by mechanically mixing 25 kg of Vandex BB 75 with 5 litres to 5.75 litres of potable water for brush and trowel applications, or 5.75 to 6.25 litres for spray application.

16.2 The substrate must be saturated before the product is applied but it must be free from surface water.

16.3 The product is applied to the substrate in one or two applications dependant on the type of application required to achieve the coating thickness and application rate given in Table 1.

Table 1 Coating thicknesses and application rate

Water seepage	Minimum ⁽¹⁾ coating thickness (mm)	Application rate (kgm ⁻²)
Ground moisture	1.5	3.0
Pressureless surface water and seepage	2.0	4.0
Water under pressure, water tanks, reservoirs and below ground structures	3.0	6.0

(1) Maximum thickness of the coating is 5 mm.

16.4 The first coat of the product is applied by vigorously working into and laying over the surface using a masonry brush, or by trowelling, or spraying at a maximum coverage rate of 4 kgm⁻². Application should be carried out to ensure a flowing edge is maintained. If this is not possible, when application is continued the previously applied coat should be overlapped.

16.5 As soon as the first coat has hardened sufficiently (after approximately four to six hours), the second coat may then be applied by brush, spray or trowel at a maximum coverage rate of 4 kgm⁻².

16.6 Each coat is examined for damage and areas of incomplete coverage before the next coat is applied.

16.7 Mixed Vandex BB 75 should be used within 30 minutes and discarded if re-stirring does not restore its workability.

16.8 Once the final coating has fully hardened, the weeps should be stopped using Vandex Plug. Any recesses are coated with Vandex BB 75, filled with an appropriate mortar and coated with the product to provide continuity of the surface coating.

16.9 A coat of proprietary cement-based plaster or sand/cement mix may be applied to protect it from damage during service.

16.10 Floors waterproofed with the product are protected by a screed finish.

Technical Investigations

The following is a summary of the technical investigations carried out on Vandex BB 75.

17 Tests and investigations

17.1 An examination was made of independent test data to determine:

- bulk density
- sieve analysis
- halogen content
- setting time
- stability of mix
- water retention of mix
- resistance to water pressure
- flexural strength
- compressive strength
- water vapour permeability
- modulus of elasticity
- shrinkage and swelling
- adhesion.

17.2 An independent report on the manufacturing process was examined, including methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

17.3 A visit was made to a site in progress to assess the practicability of installation.

Additional Information

The management systems of Vandex International Ltd and Vandex Isoliermittel GmbH have been assessed and registered as meeting the requirements of ISO 9001 : 2000 and ISO 14001 : 2004 by SQS Swiss Association for Quality Management Systems (Registration No 30786).

Bibliography

BS 8000-4 : 1989 *Workmanship on building sites — Code of practice for waterproofing*

ISO 9001 : 2000 *Quality management systems — Requirements*

ISO 14001 : 2004 *Environmental management systems — Specification with guidance for use*

Conditions of Certification

18 Conditions

18.1 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.

18.2 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.

18.3 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.

18.4 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.

18.5 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, Vandex BB 75 is fit for its intended use provided it is installed, used and maintained as set out in this Certificate. Certificate No 90/2516 is accordingly awarded to Vandex International Ltd.

On behalf of the British Board of Agrément

Date of Fourth issue: 10th November 2006

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

Chief Executive

**Original Certificate issued 30th August 1990. This amended version includes change of Certificate holder, reference to revised national Building Regulations and Standards, and new Conditions of Certification.*

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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.