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Agrément Certificate

11/4860

Product Sheet 1

VITASEAL EXPANDING JOINT SEALANT TAPE

VITASEAL 600 SEALING TAPES

PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate relates to VitaSeal 600 Sealing Tapes, for use as a weathertight seal in structural and expansion joints in new or existing joints in structural units of timber, plastics, masonry, metal, concrete and perimeter seals for windows and doors.

AGRÉMENT CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Weathertightness — the products will resist the passage of wind-driven rain, snow, run-off water and dust into the interior of the building (see section 5).

Durability — the products have a service life of up to 20 years (see section 7).

The BBA has awarded this Agrément Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of First issue: 20 September 2011

Simon Wroe
Head of Approvals — Materials

Greg Cooper
Chief Executive

The BBA is a UKAS accredited certification body — Number 113. The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

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Regulations

In the opinion of the BBA, VitaSeal 600 Sealing Tapes, if used in accordance with the provisions of this Certificate, will meet or contribute to meeting the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales)

Requirement:	C2(b)	Resistance to moisture
Comment:		The products will contribute to a wall meeting this Requirement. See section 5.1 of this Certificate.
Requirement:	Regulation 7	Fitness of materials and workmanship
Comment:		The products are acceptable materials. See section 7 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)	Fitness and durability of materials and workmanship
Comment:		The use of the products satisfies the requirements of this Regulation. See section 7 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards — construction
Standard:	3.10	Precipitation
Comment:		The products will contribute to satisfying this Standard, with reference to clauses 3.10.1 ⁽¹⁾⁽²⁾ and 3.10.7 ⁽¹⁾⁽²⁾ of this Standard. See section 5.1 of this Certificate.
Standard:	7.1(a)	Sustainability
Comment:		The products can contribute to meeting the relevant requirements of Regulation 9, Standards 1 to 6 and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.
Regulation:	12	Building standards — conversions
Comment:		Comments made in relation to these products under Regulation 9, Standards 1 to 6 also apply to this Regulation, with reference to clauses 0.12.1 ⁽¹⁾⁽²⁾ and Schedule 6 ⁽¹⁾⁽²⁾ . (1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).



The Building Regulations (Northern Ireland) 2000 (as amended)

Regulation:	B2	Fitness of materials and workmanship
Comment:		The products are acceptable. See section 7 and the <i>Installation</i> part of this Certificate.
Regulation:	C4(b)	Resistance to ground moisture and weather
Comment:		The products will contribute to a wall satisfying this Regulation. See section 5.1 of this Certificate.

Construction (Design and Management) Regulations 2007

Construction (Design and Management) Regulations (Northern Ireland) 2007

In the opinion of the BBA, there is no information in this Certificate which relates to the obligations of the client, CDM co-ordinator, designer and contractors under these Regulations.

Non-regulatory Information

NHBC Standards 2011

NHBC accepts the use of VitaSeal 600 Sealing Tapes, when installed and used in accordance with this Certificate, in relation to *NHBC Standards*, Chapter 6.1, *External masonry walls*, Chapter 6.9, *Curtain walling and cladding*.

1 Description

1.1 VitaSeal 600 Sealing Tapes are manufactured from blocks of open cell polyurethane foam, cut into stripes at the required thickness before being impregnated with flame-retardant acrylic resins. The adhesive layer is applied during the process to one side of the material to aid final installation. The impregnated foam is then compressed to approximately 15% of its initial size before being cut into rolls of the required width.

1.2 The tapes have the nominal characteristics of:

Colour Black/Grey

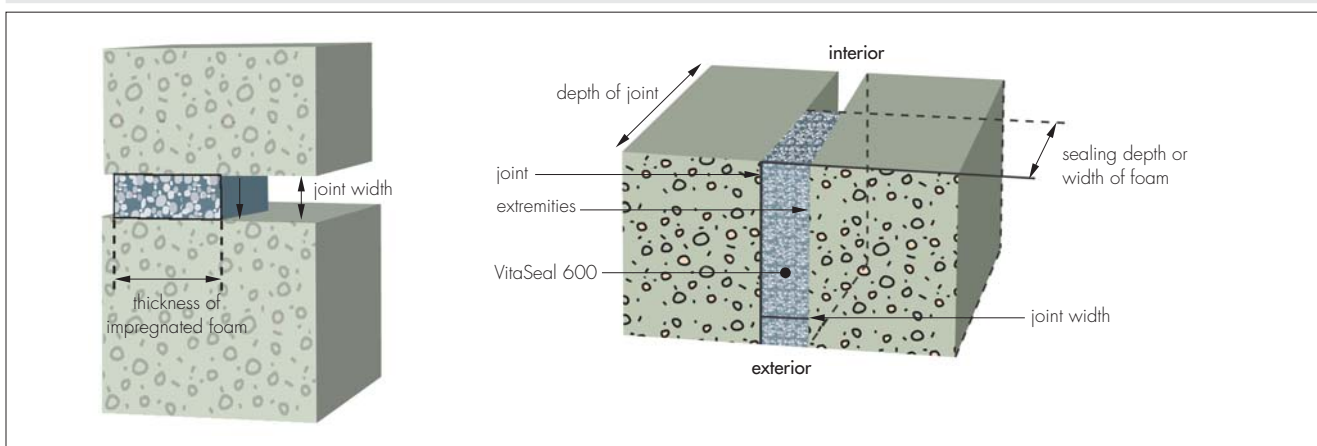
Density ($\text{kg}\cdot\text{m}^{-3}$)
 600 10 2-4 90
 600 40 24-40 110

Cross-section various (see Table 1)

Table 1 Tape dimensions		
Gap to be filled (mm)	Tape width into joint depth (mm)	VitaSeal 600 grade
1-3	10	600 10 1-3
2-4	10	600 10 2-4
	15	600 15 2-4
3-7	10	600 10 3-7
	15	600 15 3-7
	20	600 20 3-7
	25	600 25 3-7
5-10	15	600 15 5-10
	20	600 20 5-10
	25	600 25 5-10
7-12	15	600 15 7-12
	20	600 20 7-12
8-15	20	600 20 8-15
	30	600 30 8-15
10-18	20	600 20 10-18
	25	600 25 10-18
	30	600 30 10-18
13-24	30	600 30 13-24
	40	600 40 13-24
24-40	40	600 40 24-40

1.3 When fitted in a joint the tapes re-expand to fill and seal the joint (see Figure 1), providing a weathertight seal the optimum final compression is 20% of the fully expanded thickness.

Figure 1 Typical tape installation



1.4 The adhesive layer is protected while on the roll with a silicone release paper.

1.5 Quality control checks are carried out on the foam, impregnating mixture and on the finished product.

2 Delivery and site handling

2.1 Tapes are supplied pre-compressed, wound into rolls and secured by a leader tape.

2.2 Tapes are delivered in cartons, the contents of which vary according to size of tapes, bearing the manufacturer's name and size of tapes.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on VitaSeal 600 Sealing Tapes.

Design Considerations

3 Use

3.1 VitaSeal 600 Sealing Tapes are satisfactory for use to provide a weathertight seal to structural and expansion joints, and in new or existing joints in structural units of timber, plastics, masonry, metal and concrete.

3.2 When particularly wide joints are to be sealed, two or more tapes may be superimposed to achieve the final overall compression of between 20% and 33% of the fully expanded dimension (typical tape sizes for various joint widths are given in Table 1).

4 Practicability of installation

The products are designed to be installed by a competent general builder or contractor.

5 Weathertightness



5.1 To achieve optimum resistance to water penetration, the tape should be used under 80% compression. However, the tape has a satisfactory weathertightness if used at 75% compression.

5.2 The tapes are not designed to withstand a head of water; in these situations the advice of the Certificate holder should be sought.

6 Maintenance

As the tapes are confined within the wall and have suitable durability (see section 7), maintenance is not required.

7 Durability



Results of assessed data from accelerated laboratory tests, indicate that the products will have a service life of at least 20 years.

Installation

8 General

8.1 Installation of VitaSeal 600 Sealing Tapes must be carried out in accordance with the Certificate holder's instructions. The tapes may be installed in all conditions likely to occur in practice; however care should be taken when used at lower ambient temperatures.

8.2 Joints must be clean and free from debris, for example, dirt and mortar residue, likely to obstruct adhesion. The inner surfaces of the joints to be filled should be as smooth as possible. To achieve a perfect seal in masonry the changes in level at mortar joints must be as small as possible.

8.3 To ensure a weathertight seal, the tape size for the joint width should achieve at least 75% compression and be chosen in accordance with Table 1.

8.4 The tape will start to re-expand as soon as it is unwound from the roll. The rate of expansion is temperature dependent, and at low temperatures the rate can be increased by the gentle application of heat. At high temperatures the tapes should be stored in a cool environment prior to use.

9 Application

9.1 The dimensions of the joint to be filled govern the size of tape to be used, but the depth of the joint must not be less than the width of the tape. For particularly wide joints, two or more tapes may be used together.

9.2 When tapes are used to seal between prefabricated units during construction, the seal must be bonded to the unit already in position. The adjoining unit can then be fitted.

9.3 Joints should be designed and the tapes positioned to ensure that differential movement between panels does not tend to force the product out of the joint.

9.4 The length of the joint to be sealed must be measured and an overlap of 10 mm per metre run allowed when the tape is cut to the required length. The silicone release paper must be removed and the tape positioned in the joint before significant expansion of the tape occurs.

Figure 2 Typical end joints

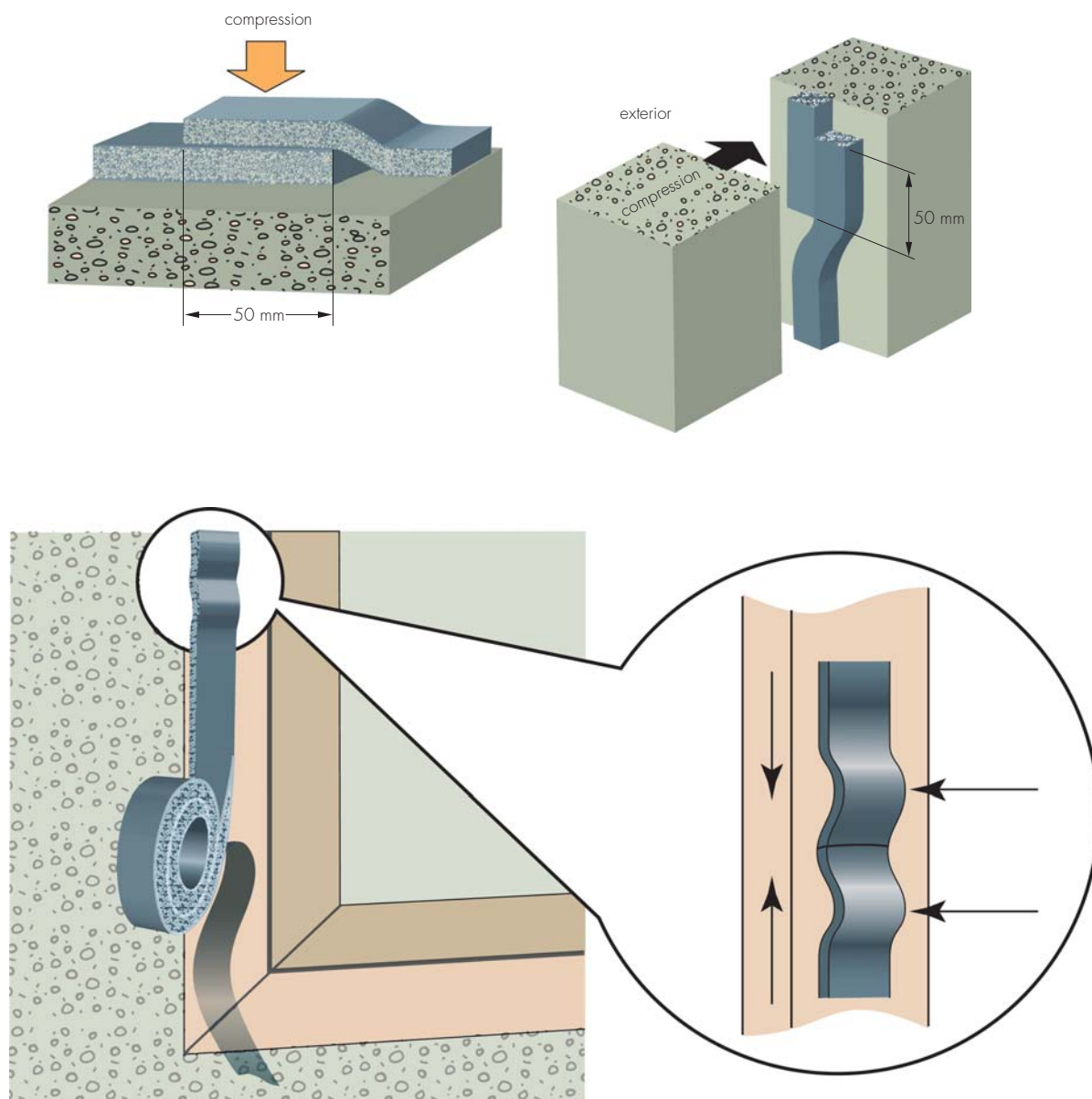
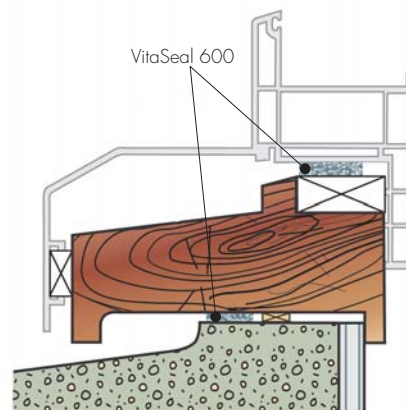
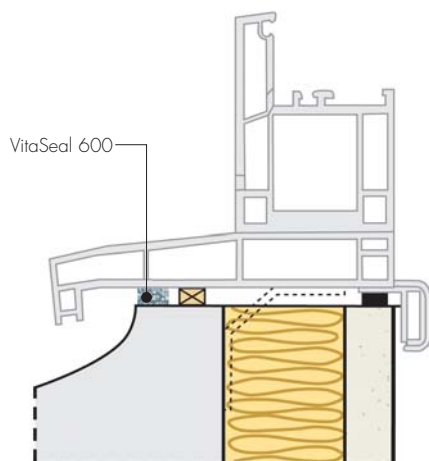
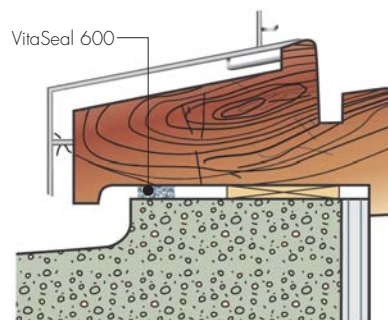
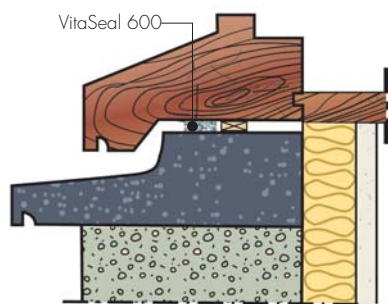
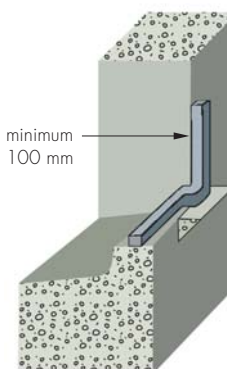
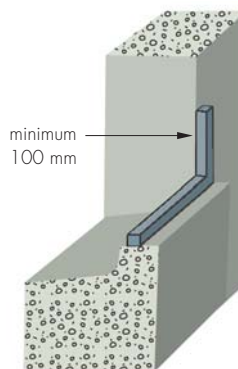
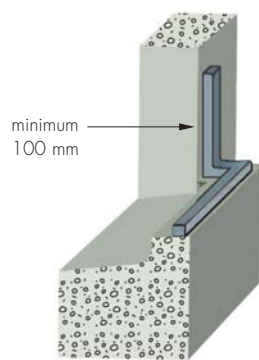
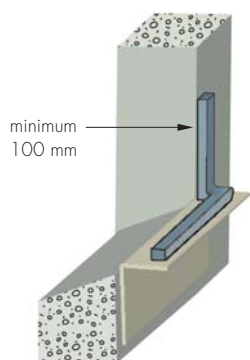


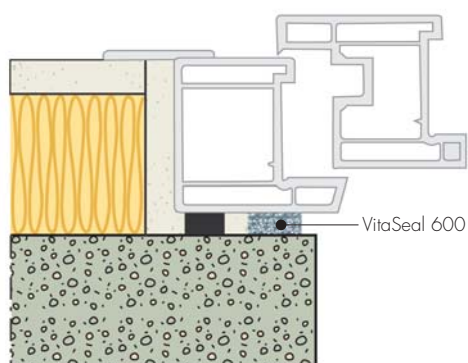
Figure 3 Typical installation details



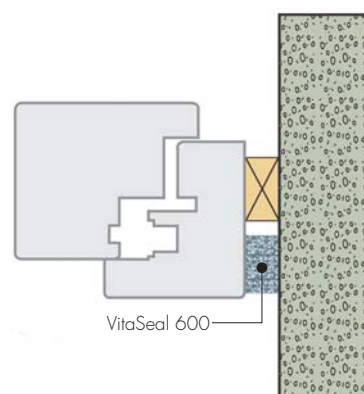
under window sill/ledge application



wall mounted joinery



joinery using tunnel method



joinery on suspended floors

10 Tests

10.1 Tests were conducted in Germany by MPA BAU Hannover, the results assessed by the BBA in relation to:

- air permeability coefficient at 10 Pa
- driving rain tightness of joints
- driving rain tightness of braces of joints
- resistance to change in temperatures
- resistance to UV radiation in presence of moisture
- compatibility with adjoining construction materials
- reaction to fire
- water vapour diffusion coefficient.

10.2 Tests were also carried out by the BBA and the results assessed to establish:

- width and thickness of fully expanded tape
- density of fully expanded tape
- tensile strength and elongation
- compression set.

11 Investigations

A factory visit was carried out to evaluate the manufacturing process and the methods used for quality control.

12 Conditions

12.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page — no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- 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.

12.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

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

12.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

12.5 In issuing this Certificate, the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- 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/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal.

12.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal 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, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.