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Agrément Certificate
11/4860
Product Sheet 1 Issue 5

VITASEAL EXPANDING JOINT SEALANT TAPE

VITASEAL 600

This Agrément Certificate Product Sheet(1) relates to Vitaseal 600, for use as a weathertight seal in structural and expansion joints in new or existing structural units of timber, plastics, masonry, metal, concrete and as perimeter seals for windows.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

Section 1. Mechanical resistance and stability
Section 2. Safety in case of fire
Section 3. Hygiene, health and the environment
Section 4. Safety and accessibility in use
Section 5. Protection against noise
Section 6. Energy economy and heat retention
Section 7. Sustainable use of natural resources
Section 8. Durability

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Fifth issue: 13 September 2024
Originally certified on 20 September 2011

Hardy Giesler
Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

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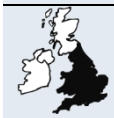
SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Vitaseal 600, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The product will contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**7(1)**	**Materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
Requirement:	**L1(a)(i)**	**Conservation of fuel and power**
Comment:		The product can contribute to minimising heat loss at lintels, jambs and sills. See section 6 of this Certificate.
Regulation:	**25B**	**Nearly zero-energy requirements for new buildings**
Regulation:	**26**	**CO_2 emission rates for new buildings**
Regulation:	**26A**	**Fabric energy efficiency rates for new dwellings (applicable to England only)**
Regulation:	**26A**	**Primary energy consumption rates for new buildings (applicable to Wales only)**
Regulation:	**26B**	**Fabric performance values for new dwellings (applicable to Wales only)**
Regulation:	**26C**	**Target primary energy rates for new buildings (applicable to England only)**
Regulation:	**26C**	**Minimum energy efficiency rating (applicable to Wales only)**
Comment:		The product can contribute to satisfying these Regulations. See section 6 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 product can contribute to satisfying this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	**9**	**Building standards - construction**
Standard:	3.10	Precipitation
Comment:		The product will contribute to satisfying this Standard, with reference to clause 3.10.1[(1)(2)]. See section 3 of this Certificate.
Standard	6.1(b)(c)(d)	Energy demand and carbon dioxide emissions
Standard:	6.2	Building insulation envelope
Comment:		The product can contribute to minimising heat loss at lintels, jambs and sills, with reference to clauses 6.1.1[(1)], 6.1.2[(2)], 6.2.4[(1)] and 6.2.5[(2)] of these Standards. See section 6 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product can contribute to satisfying 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 - conversion**
Comment:		Comments in relation to the product under Regulation 9, Standards 1 to 6, 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).

The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	**23(a)(i)**	**Fitness of materials and workmanship**
Comment:	**(iii)(b)(i)**	The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The product can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**39(a)(i)**	**Conservation measures**
Regulation:	**40(2)**	**Target carbon dioxide emission rate**
Regulation:	**43(1)(2)**	**Renovation of thermal elements**
Regulation:	**43B**	**Nearly zero-energy requirements for new buildings**
Comment:		The product can contribute to minimising heat loss at lintels, jambs and sills. See section 6 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, Vitaseal 600, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.1 *External masonry*, 6.7 *Doors, windows and glazing walls* and 6.9 *Curtain walling and cladding.*

In Scotland, Northern Ireland and other areas of very severe exposure, check reveals should be used, and an appropriate sealant applied between the window frame and the structure.

Fulfilment of Requirements

The BBA has judged Vitaseal 600 to be satisfactory for use as described in this Certificate. The product has been assessed as a weathertight seal in structural and expansion joints in new or existing structural units of timber, plastics, masonry, metal, concrete and as perimeter seals for windows.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. Vitaseal 600 consists of an open-cell polyurethane foam impregnated acrylic resins. On one side includes an adhesive layer to aid installation, protected by a silicone release paper. The product is available in black or grey.

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.

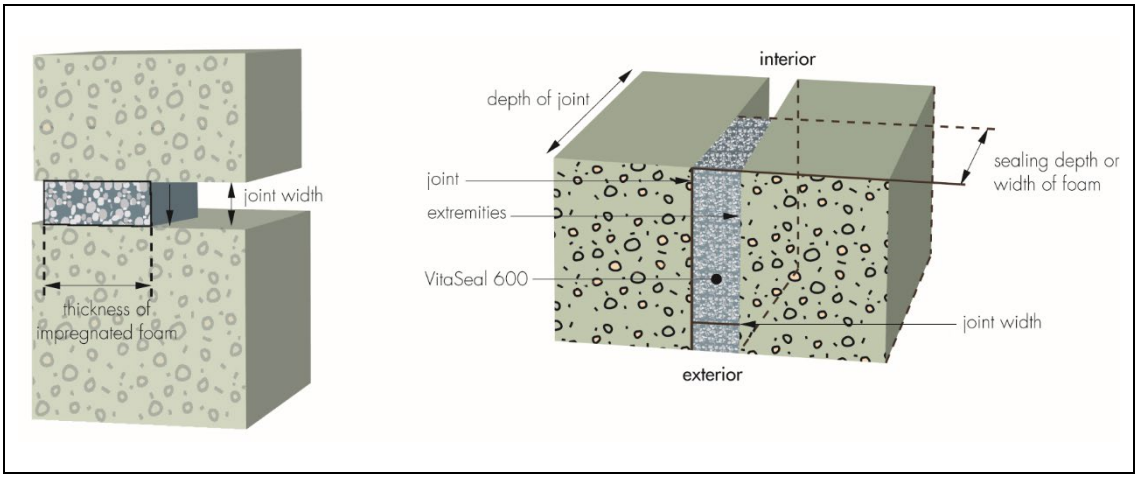
The dimensions of the tapes are given in Table 1.

Table 1 Tape dimensions

Vitaseal 600 size/code number	Suitable joint depth (mm)	Suitable joint width (mm)
600 10 1–3	10	1–3
600 15 1–3	15	1–3
600 20 1–3	20	1–3
600 30 1–3	30	1–3
600 10 2–4	10	2–4
600 15 2–4	15	2–4
600 20 2–4	20	2–4
600 30 2–4	30	2–4
600 10 3–7	10	3–7
600 15 3–7	15	3–7
600 20 3–7	20	3–7
600 30 3–7	30	3–7
600 15 5–10	15	5–10
600 20 5–10	20	5–10
600 30 5–10	30	5–10
600 15 7–12	15	7–12
600 20 7–12	20	7–12
600 30 7–12	30	7–12
600 20 8–15	20	8–15
600 30 8–15	30	8–15
600 30 10–18	30	10–18
600 30 13–24	30	13–24
600 40 13–24	40	13–24
600 30 17–32	30	17–32
600 40 24–40	40	24–40

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 installation



Applications

The product is intended for use on the following substrates:

- concrete
- brick
- masonry
- wood
- PVC-U
- steel
- aluminium.

Product assessment – key factors

The product was assessed for the following key factors, and the outcome of the assessment is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Not applicable.

2 Safety in case of fire

2.1 The Certificate holder has not declared a reaction to fire classification for the product to BS EN 13501-1 : 2018.

2.2 On the basis of data assessed, the use of the product is unrestricted in terms of height and distance to a relevant boundary by the documents supporting the national Building Regulations.

2.3 Cavity barriers must be used to satisfy the requirements of the documents supporting the national Building Regulations.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Weathertightness

3.1.1 Results of weathertightness tests are given in Table 2.

Table 2 Weathertightness

Product assessed	Assessment method	Requirement	Result
TRS 600 30 / 10-18 15 mm joint width	Driving rain tightness of joints to DIN 18542 : 1999 Section 7.3,	No detectable water or moisture penetration up to a pressure of 600 Pa	Pass
TRS 600 30 / 10-18 15 mm joint width	Driving rain tightness of joints to DIN 18542 : 1999 Section 7.4,	No detectable water or moisture penetration up to a pressure of 600 Pa	Pass

3.1.2 On the basis of the data assessed, the product will resist the passage of water, wind-driven rain and dust into the interior of a building.

3.1.3 The product satisfies the Class 9A requirements of BS EN 12208 : 2000.

3.2 Condensation

3.2.1 The result of a water vapour resistance tests is given in Table 3.

Table 3 Water vapour resistance

Product assessed	Assessment method	Requirement	Result
TRS 600 30 / 10-18 12 mm joint width	Water vapour diffusion coefficient (μ) to DIN 18542 : 1999 Section 7.9,	≤100	Pass

3.2.2 The product will not adversely affect the risk of interstitial condensation, provided they are used in conjunction with a suitable air and vapour control layer (AVCL).

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

6.1 Airtightness

6.1.1 The result of an airtightness test is given in Table 3.

Table 3 Airtightness

Product assessed	Assessment method	Requirement	Result
TRS 600 30 / 10-18 15 mm joint width	Air permeability coefficient to DIN 18542 : 1999 Section 7.2,	≤ 0.1 $m^3 \cdot (h \cdot m \cdot (daPa)^{1.01})^{-1}$	Pass

6.1.2 The product is an air barrier and, when installed correctly, can contribute to junctions minimising heat loss by unplanned air infiltration. The air infiltration classification according to BS EN 12207 : 2016 for suitable windows used in combination with the components will be at least Class 2. Guidance in this respect is found in the documents supporting the national Building Regulations.

7 Sustainable use of natural resources

Not applicable.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in this product were assessed.

8.2 Specific test data were assessed as given in Table 4.

Table 4 Durability

Product assessed	Assessment method	Requirement	Result
TSR 600 40 / 24 – 40	Compression set to BS EN ISO 1856 : 2001 Method A	Value achieved	3.48%
TSR 600 40 / 24 – 40	Compression set to BS EN ISO 1856 : 2001 Method B	Value achieved	
	Control		4.71%
	Heat aged for 56 days at 80°C		2.44%
TRS 600 30 / 10-18 12 mm joint width	Compatibility with adjoining construction materials to DIN 18542 : 1999 Section 7.7,	Up to 80 °C	Pass
TSR 600 10 / 2 – 4	Elongation to BS EN ISO 1798 : 2008	Value achieved	
	Control		249.9%
	Heat aged for 56 days at 80°C		103.7%
TSR 600 10 / 2 – 4	Tensile strength to BS EN ISO 1798 : 2008	Value achieved	
	Control		150 kPa
	Heat aged for 56 days at 80°C		120 kPa
TRS 600 30 / 10-18 9 mm joint width	Resistance to change in temperature to DIN 18542 : 1999 Section 7.5,	No change to impair its function	Pass
TRS 600 30 / 10-18 12 mm joint width	Resistance to UV radiation in the presence of moisture to DIN 18542 : 1999 Section 7.6,	No change to impair its function	Pass

8.3 Service life

Under normal service conditions, the product will have a service life of up to 20 years, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed by the BBA, and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 To provide a weathertight seal, the tape size must be chosen with a thickness suitable for the operational joint depth and width, as detailed in Table 1. To achieve optimum resistance to water penetration, the product must be used under 80% compression. However, the tapes have satisfactory weathertightness if used at 75% compression.

9.1.3 The product is not designed to withstand a head of water; in these situations, the advice of the Certificate holder must be sought but such advice is outside the scope of this Certificate.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance are provided in Annex A of this Certificate.

9.2.3 The product may be installed in all conditions likely to occur in practice; however care must be taken when used at lower ambient temperatures.

9.2.4 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 must 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.

9.2.5 To ensure a weathertight seal, the tape size for the joint width must achieve at least 50% compression and be chosen in accordance with Table 1.

9.2.6 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 must be stored in a cool environment prior to use.

9.2.7 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.

9.2.8 When the 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.

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

9.2.10 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

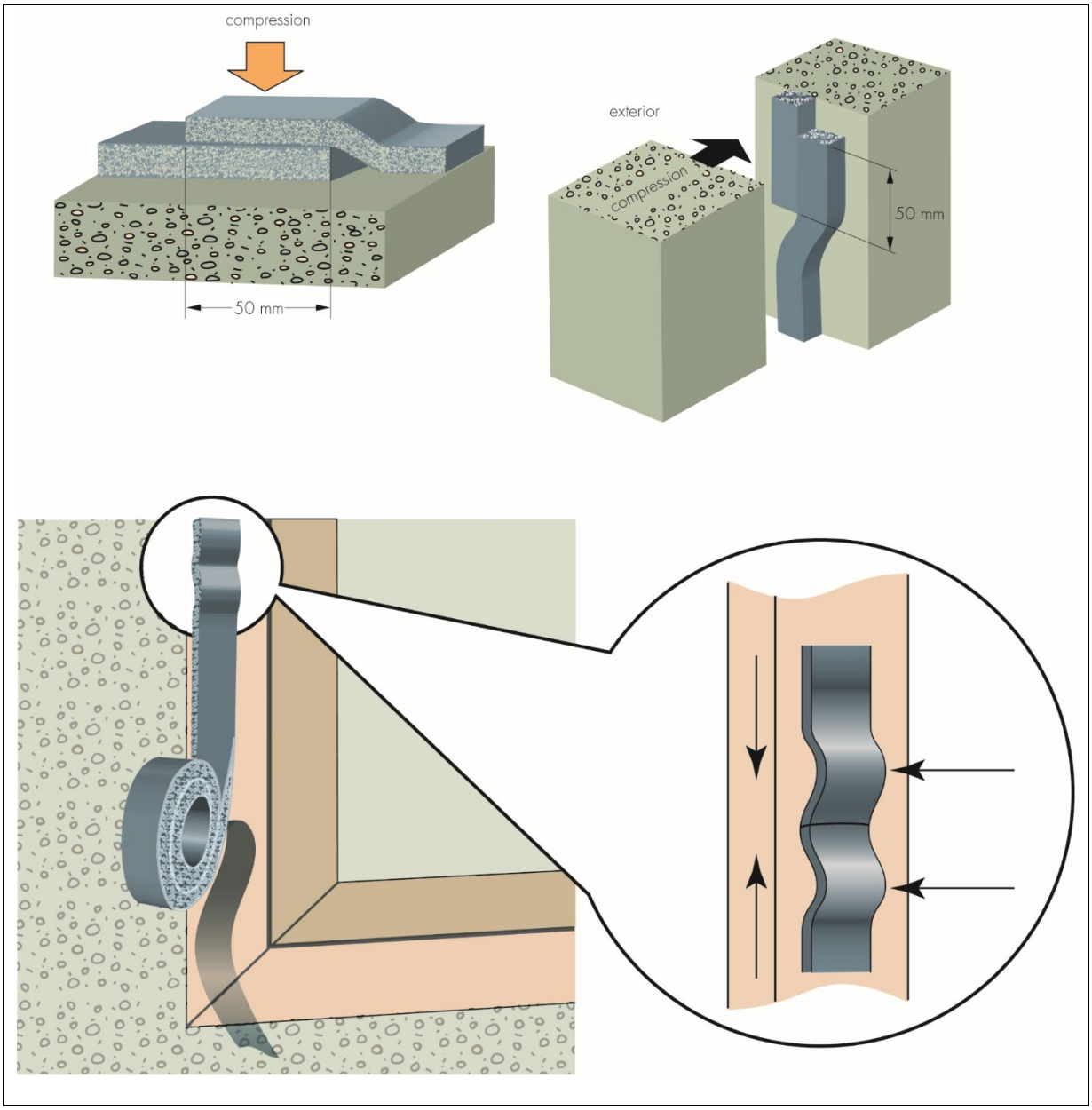
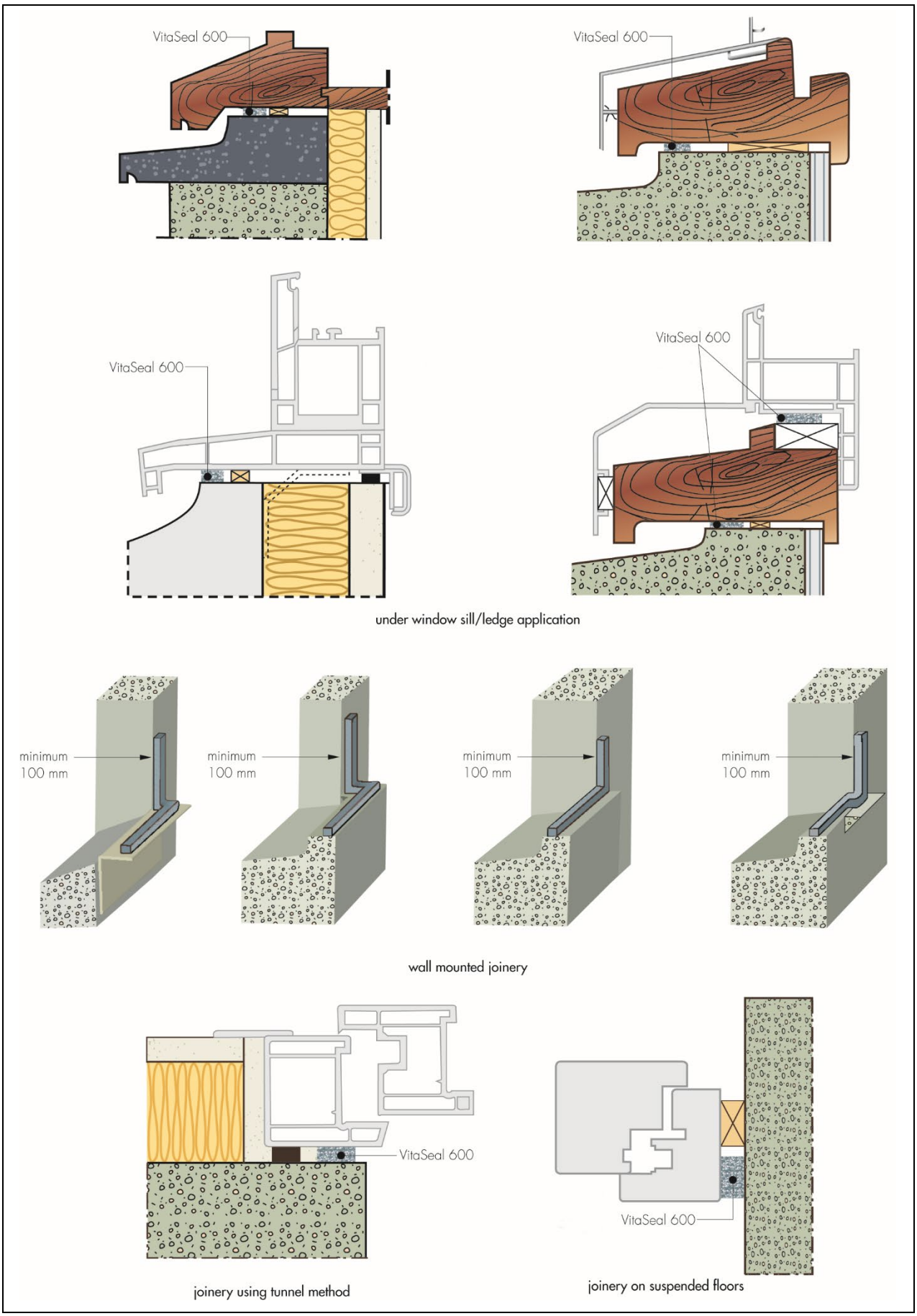


Figure 3 Typical installation details



9.3 Workmanship

Practicability of installation was assessed, on the basis of the Certificate holder's information and site visits to witness installations in progress. To achieve the performance described in this Certificate, installation of the product must be carried out by a competent general builder, or a contractor, experienced with this type of product.

9.4 Maintenance and repair

9.4.1 Ongoing satisfactory performance of the product in use requires that they are suitably maintained. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate. The following requirements apply in order to satisfy the performance assessed in this Certificate:

9.4.2 As the tapes are confined within the wall and have suitable durability maintenance is not required.

9.4.3 Damaged tape must be replaced. The Certificate holder must be consulted for suitable methods of replacing damaged products, but such advice is outside the scope of this Certificate.

10 Manufacture

10.1 The production processes for the product have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the product is delivered to site in cartons, the contents of which vary according to the size of the tapes, and bear the Certificate holder's name and the tape size.

11.2 The tapes are supplied pre-compressed, wound onto rolls and secured by a leader tape.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the product but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015
Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by Bureau Veritas (Certificate FR0779126-1).

Bibliography

BS EN 12208 : 2000 *Windows and doors – Watertightness – Classification*

BS EN ISO 1798 : 2008 *Flexible cellular polymeric materials – Determination of tensile strength and elongation at break*

BS EN ISO 1856 : 2001 *Flexible cellular polymeric materials – Determination of compression set*

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*

BS EN 12207 : 2016 *Windows and doors – Air permeability – Classification*

BS EN 13501-1 : 2018 *Fire classification of construction products and building elements*

DIN 18542 : 1999 *Impregnated Cellular Plastics Strips For Sealing External Joints – Requirements And Testing*

Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product 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.

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.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product 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.

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

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 or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product 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.

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