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Agrément Certificate

19/5627

Product Sheet 1

PPG ARCHITECTURAL COATINGS UK LIMITED PAINT SYSTEMS

JOHNSTONE'S STORMSHIELD SILICONE MASONRY PAINT

This Agrément Certificate Product Sheet⁽¹⁾ relates to Johnstone's Stormshield Silicone Masonry Paint, for use as an exterior masonry coating.

(1) Hereinafter referred to as 'Certificate'.

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

Permeability — the product is permeable to water vapour and has good resistance to water penetration (see section 6).

Properties in relation to fire — the product is classified as Class 0 or 'low risk' as defined in the national Building Regulations and its use is restricted in some cases (see section 7).

Durability — in normal conditions, the product has good colour stability and will perform satisfactorily for more than 15 years (see section 9).



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 First issue: 1 March 2019

John Albon – Head of Approvals
Construction Products

Claire Curtis-Thomas
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.

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

British Board of Agrément

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Regulations

In the opinion of the BBA, Johnstone's Stormshield Silicone Masonry Paint, 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 presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



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

Requirement:	B4(1)	External fire spread
Comment:	The use of the product on non-combustible substrates can enable a wall to be unrestricted by this Requirement. See sections 7.1 to 7.4 of this Certificate.	
Regulation:	7	Materials and workmanship (applicable to Wales only)
Regulation:	7(1)	Materials and workmanship (applicable to England only)
Comment:	The product is acceptable. See section 9.1 and the <i>Installation</i> part of this Certificate.	
Regulation:	7(2)	Materials and workmanship (applicable to England only)
Comment:	The product is restricted by this Regulation. See sections 7.1 and 7.4 of this Certificate.	



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:	The use of the product satisfies the requirements of this Regulation. See sections 8 and 9.1 and the <i>Installation</i> part of this Certificate.	
Regulation:	9	Building standards applicable to construction
Standard:	2.6	Spread to neighbouring buildings
Standard:	2.7	Spread on external walls
Comment:	The product is not classified as 'non-combustible' and is therefore restricted by these Standards, with reference to clauses 2.6.4 ⁽¹⁾⁽²⁾ , 2.6.5 ⁽¹⁾ , 2.6.6 ⁽²⁾ and 2.7.1 ⁽¹⁾⁽²⁾ . See sections 7.1, 7.2, 7.5 and 7.6 of this Certificate.	
Standard:	7.1(a)(b)	Statement of sustainability
Comment:	The product 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 applicable to conversions
Comment:	All comments given for 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)(b)(i)	Fitness of materials and workmanship
Comment:	The product is acceptable. See section 9.1 and the <i>Installation</i> part of this Certificate.	
Regulation:	36(a)	External fire spread
Comment:	The use of the product on non-combustible substrates can enable a wall to be unrestricted under this Regulation. See sections 7.1 to 7.3 of this 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.

See sections: 1 *Description* (1.3) and 3 *Delivery and site handling* (3.1 and 3.4) of this Certificate.

Technical Specification

1 Description

1.1 Johnstone's Stormshield Silicone Masonry Paint is a masonry coating for external use, based on a resin emulsion containing pigments, extenders, biocides and other additives.

1.2 The product is available in white and pastel shades.

1.3 Johnstone's Performance Coatings Sterilisation Wash is used to prepare weathered surfaces showing signs of organic growth. The product is approved for this use under the *Control of Pesticides (Amendment) Regulations 1997* (HSE No. 7359).

1.4 Johnstone's Stormshield Stabilising Solution is used to stabilise friable or chalking surfaces.

2 Manufacture

2.1 The product is manufactured by mixing resin and solvents with pigments and additives in a batch-blending process.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out 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.

2.3 The management systems of PPG Architectural Coatings UK Limited have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2008 and BS EN ISO 14001 : 2004 by BSI (Certificates FMO 1265 and EMS 73683 respectively).

3 Delivery and site handling

3.1 The product is supplied in 5 litre containers bearing the Certificate holder's name, date code and the BBA logo incorporating the number of this Certificate.

3.2 The product should be protected from frost during transit and when stored on site.

3.3 The product has a shelf-life of two years. Degradation of the materials does not occur but there may be some settling. Partly used containers can be re-stored provided they are airtight.

3.4 The Certificate holder has taken the responsibility of classifying and labelling the product under the *CLP Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheet(s).

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Johnstone's Stormshield Silicone Masonry Paint.

Design Considerations

4 Use

4.1 Johnstone's Stormshield Silicone Masonry Paint is satisfactory for use as a masonry coating in exterior applications.

4.2 The product is satisfactory for application by roller, brush or spray to the following substrates:

- (a) in-situ or precast concrete (dense and lightweight)
- (b) concrete blockwork (dense and lightweight)
- (c) brickwork (stock, facing and calcium silicate bricks)⁽¹⁾
- (d) renders (sand/cement and sand/lime/cement)
- (e) calcium silicate, fibre-reinforced cement sheets or insulation boards
- (f) surfaces (d) and (e) treated with Johnstone's Stormshield Stabilising Solution
- (g) surfaces painted with gloss, oil or emulsion paints.

(1) In new constructions, the brick manufacturer's recommendations for overcoating materials must be followed.

4.3 The scope of this Certificate includes the face of the wall above damp proof course (dpc) level, and excludes horizontal surfaces such as ledges, sills and coping. Parapet walls must have effective dpc's in the correct positions.

4.4 The effect of pre-treatments or an existing coating on the surface's fire properties is defined in section 7.

5 Practicability of installation

Johnstone's Stormshield Silicone Masonry Paint is designed to be applied by operatives familiar with this type of product.

6 Permeability

6.1 When tested to BS EN ISO 7783 : 2011, samples of the product gave an S_d value of 0.073 m which classifies the coating as V_1 (High) for water vapour transmission rate according to BS EN 1062-1 : 2004, Table 4.

6.2 When tested to BS EN 1062-3 : 2008, samples of the product gave a water transmissibility of 0.099 kg/(m²·h^{0.5}) which classifies the coating as W_3 (Low) for liquid water permeability according to BS EN 1062-1 : 2004, Table 5.

6.3 The coating tends to shed water and considerably reduce the amount of water that can be absorbed by the substrate during rain.

7 Properties in relation to fire



7.1 A sample of Johnstone's Stormshield Silicone Masonry Paint on 9 mm calcium silicate substrate gave a fire propagation index (I) of 1.2 and a sub-index (i1) of 1.0 when tested to BS 476-6 : 1989⁽¹⁾, and a Class 1 result when tested to BS 476-7 : 1997⁽²⁾. This material combination is therefore a Class 0/'low risk' surface as described in the national Building Regulations.

(1) Report number P102127-1005 Issue 1 BRE Global.

(2) Report number P102127-1005 Issue 1 BRE Global.

7.2 This performance may not be achieved by other colours of the product, nor if it is applied over other previous coatings. The designations of other colours or material combinations should be confirmed by test or assessment by a UKAS-accredited laboratory.



7.3 In England, Wales and Northern Ireland, the product is not classified as non-combustible or of limited combustibility and may be used on buildings at any proximity to a boundary. For buildings with a storey more than 18 m above the ground, designers should consider the impact on the risk of fire spread over the wall.



7.4 The product should not be used on buildings in England that have a storey at least 18 m above ground level and contain; one or more dwellings, an institution, a room for residential purposes (excluding any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools.



7.5 The product is classified as 'Low Risk' in Scotland and may be used on buildings more than 1 m from a boundary and, on houses, 1 m or less from a boundary. With minor exceptions, the panels should be included in calculations of unprotected area, except on houses where the external wall behind has the appropriate fire resistance.

7.6 In Scotland, the product should not be used on domestic high-rise buildings (having a storey more than 18 m above the ground).

8 Maintenance



8.1 The coatings will withstand frequent washing without deterioration. A soft bristle brush should be used.

8.2 For recoating, it is usually neither necessary nor possible to remove the existing coating completely. The surface should be prepared by washing or brushing, and may be re-coated with Johnstone's Stormshield Silicone Masonry Paint.

9 Durability



9.1 In normal conditions, two coats of Johnstone's Stormshield Silicone Masonry Paint, properly applied to the substrates listed in section 4, will have a good colour stability and will perform satisfactorily for more than 15 years.

9.2 In industrial atmospheres the coatings may become dirty and, to maintain their appearance, more frequent cleaning or re-coating may be necessary.

9.3 There will be a gradual change in colour which will not be excessive, but the coatings will be discoloured by water runs, and care must be taken to ensure that the normal architectural details for shedding water clear of the building are present and functioning.

9.4 The coatings may be abraded, particularly at ground-floor level, by carelessness in use, eg if bicycles or gardening tools are repeatedly leant against them.

Installation

10 General

Application of Johnstone's Stormshield Silicone Masonry Paint should be carried out in accordance with the relevant clauses of BS 6150 : 2006 and BS 8000-12 : 1989.

11 Preparation

11.1 The substrates listed in section 4 must be sound, free from dirt and grease and reasonably dry. Joints in new brickwork and blockwork should be finished flush, and mortar joints in existing work repointed if necessary and allowed to cure.

11.2 The product can bridge hairline cracks in the substrate but larger cracks should be filled and patched in accordance with the Certificate holder's instructions.

11.3 Any organic growth should be removed mechanically from old surfaces, and Johnstone's Performance Coating Sterilisation Wash applied in accordance with the Certificate holder's instructions, left overnight, rinsed with clean water and allowed to dry. Any remaining loose material should be removed using a stiff brush.

11.4 If the substrate is chalking, absorbent or friable, or has been decorated previously, any loose material should be removed with a stiff brush. A priming coat of Johnstone's Stormshield Stabilising Solution should be applied and allowed to dry overnight before the product is applied.

12 Application

12.1 The product is applied by roller or brush in two coats and can also be spray applied. The product may be diluted with 10% water for spray application. The Certificate holder can advise on suitable types of spray equipment.

12.2 The product should not be applied in wet weather, at temperatures below 10°C, or when frost is expected. Freshly coated work must be protected from rain.

12.3 The coverage achieved will depend on the method of application and the texture and suction of the substrate; normally it will be approximately 7 to 8 m² per litre per coat.

12.4 To avoid patchiness owing to drying edges, work should be carried to an internal or external angle or to a feature. Alternatively, joints may be made to coincide with downpipes etc. On large unbroken areas, sufficient operatives should be available to maintain a flowing edge.

12.5 The drying time varies, depending on the substrate and atmospheric conditions. In favourable conditions, two coats can be applied on the same day.

Technical Investigations

13 Tests

13.1 Samples of the product were tested and the results assessed to determine:

- resistance to artificial weathering
- water vapour permeability
- resistance to impact
- extensibility
- adhesion to substrate.

13.2 An evaluation was made of data in relation to:

- resistance to algal growth
- surface spread of flame
- fire propagation
- liquid water permeability.

14 Investigations

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

14.2 A visit to a site in progress was carried out to assess the installation of the product.

Bibliography

BS 476-6 : 1989 + A1 : 2009 *Fire tests on building materials and structures — Method of test for fire propagation for products*

BS 476-7 : 1997 *Fire tests on building materials and structures — Method of test to determine the classification of the surface spread of flame of products*

BS 6150 : 2006 + A1 : 2014 *Painting of buildings — Code of practice*

BS EN ISO 7783 : 2011 *Paints and varnishes — Determination of water-vapour transmission properties. Cup method*

BS EN 1062-1 : 2004 *Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Classification*

BS EN 1062-3 : 2008 *Paints and varnishes — Coating materials and coating systems for exterior masonry and concrete — Determination of liquid water permeability*

BS 8000-12 : 1989 *Workmanship on building sites — Code of practice for decorative wallcoverings and painting*

BS EN ISO 9001 : 2008 *Quality management systems — Requirements*

BS EN ISO 14001 : 2004 *Environmental management systems — Requirements with guidance for use*

15 Conditions

15.1 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.

15.2 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.

15.3 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.

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

15.5 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
- actual 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
- any claims by the manufacturer relating to CE marking.

15.6 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.