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Agrément Certificate

17/5403

Product Sheet 1

YALE HANDLES

VIRAGE ESPAGNOLETTE HANDLES

This Agrément Certificate Product Sheet⁽¹⁾ relates to Virage Espagnolette Handles, for use as lockable handles for PVC-U, timber or aluminium windows, to allow secure closure of window sashes.

(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

Resistance to wear and fatigue — the products have sufficient resistance to wear under normal use to provide a service life consistent with that of a window (see section 5).

Durability — the products have been tested and classified to BS EN 1670 : 2007 and have adequate resistance to corrosion in the conditions envisaged throughout the expected life of the windows, when installed in areas not subject to particularly corrosive conditions (see section 7).



The BBA has awarded this 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: 3 March 2017

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.

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Regulations

In the opinion of the BBA, the use of Virage Espagnolette Handles is not subject to the national Building Regulations.

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

In the opinion of the BBA, this Certificate does not include any content which relates to the obligations of the client, designer (including Principal Designer) and contractor (including Principal Contractor) under these Regulations.

Additional Information

NHBC Standards 2017

NHBC accepts the use of Virage Espagnolette Handles, provided they are installed, used and maintained in accordance with this Certificate in relation to *NHBC Standards*, Chapter 6.7 *Doors, windows and glazing*.

Technical Specification

1 Description

1.1 Virage Espagnolette Handles are available as inline and offset configurations in a range of colours (see Table 1).

Table 1 Virage Espagnolette Handles — range

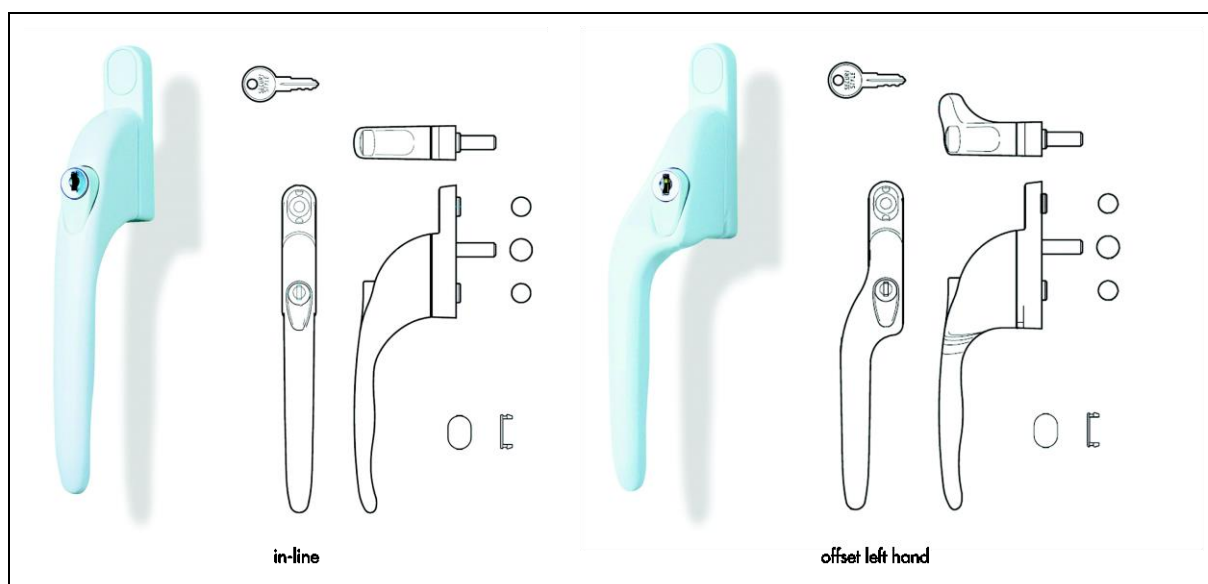
Base metal	Colour	Coating type
Zinc alloy	White	Powder
	Black	Powder
	Chrome	Electroplated
	Satin Chrome	Electroplated
	Brass	Electroplated

1.2 A 7 mm square spindle drive locates into the gearbox of the espagnolette⁽¹⁾ locking system and will drive the cams and shootbolts into their locking position.

(1) Outside the scope of this Certificate.

1.3 The components of the handles (see Figure 1) are made from zinc alloy die-casting to BS EN 1774 : 1997. Components have either a powder- or an electroplated-coating (see Table 1).

Figure 1 Typical Virage Espagnolette Handles



2 Manufacture

2.1 The component parts of the handle consist of a latch plate, zinc grip, zinc back plate and washer, riveted together in the manufacturing process. A spindle is then driven in through 'interference fit' into the grip and a lock assembly is fitted into the lock position in the grip. The handle is packaged together with cover caps, keys and where requested screws.

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 being operated by the manufacturer are being maintained.

2.3 The management systems of the manufacturer have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2008.

3 Delivery and site handling

3.1 The products are packed in cardboard boxes, each containing 25 handles; boxes are labelled with the BBA logo, incorporating the number of this Certificate.

3.2 Boxes should be stored under cover in a clean area to avoid damage.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Virage Espagnolette Handles.

Design Considerations

4 Use

4.1 Virage Espagnolette Handles are suitable for use in top-hung and side-hung windows made from PVC-U, timber or aluminium. Windows must have a sash design suitable for the correct fixing of the handle, and associated

espagnolette⁽¹⁾ and keeps⁽¹⁾, using appropriate screws⁽¹⁾ through the profiles or reinforcement. The Certificate holder can advise on the suitability of window profiles.

(1) Outside the scope of the Certificate.

4.2 The products are available in offset or inline configurations to suit the design of the window system.

5 Resistance to wear and fatigue

5.1 The handles were tested for cyclic operation in accordance with BS EN 1191 : 2012 and achieved Class 3 — Heavy Duty, when classified to BS EN 12400 : 2002 (see Table 2).

Table 2 Endurance results

Description	Comments
Virage Espagnolette Handles	Normal operation after 20, 000 cycles

5.2 The handles were also tested for resistance to excessive operating force of casement fasteners in accordance with BS 6462 : 1985, Appendix C3, and passed the requirements.

6 Maintenance

6.1 The products can be cleaned using a soft sponge and soapy water. Solvent-based, corrosive or abrasive cleaners must not be used. They should be cleaned every 12 months to minimise wear and to ensure smooth operation.

6.2 If damage occurs, the products can be replaced by removing the fixing screws and replacing the handle.

7 Durability

7.1 The products were tested for resistance to salt spray as defined in BS EN 1670 : 2007 and achieved Grade 3 — High corrosion resistance.

7.2 The products are constructed from durable materials and, when installed in accordance with this Certificate, will last the expected life of the window, when windows are installed in areas not subject to particularly corrosive conditions (such as coastal locations or near sources of industrial pollutants). In such cases, handles may have to be replaced within the life of the window.

7.3 The products may need to be replaced within the life of a window if they become damaged.

8 Reuse and recyclability

The products are made from zinc alloy, which can be recycled.

Installation

9 General

Installation of Virage Espagnolette Handles must be carried out in accordance with the Certificate holder's instructions, using suitable corrosion-resistant screws⁽¹⁾.

(1) Outside the scope of this Certificate.

10 Procedure

The handles are screwed to the window sash, aligning the square spindle drive into the gearbox of the associated espagnolette locking system⁽¹⁾.

(1) Outside the scope of this Certificate.

11 Tests

Tests were carried out to determine:

- cyclic operation in accordance with BS EN 1191 : 2012
- excessive operating force of casement fasteners in accordance with BS 6462 : 1985, Appendix C3
- resistance to salt spray in accordance with BS EN 1670 : 2007
- resistance to scratching in accordance with BS EN ISO 2409 : 2013.

12 Investigations

12.1 An assessment was made of the durability of the products.

12.2 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.

Bibliography

BS 6462 : 1985 *Specification for Mechanical Performance of Peg-Type Casement Stays and Face-Fixed Wedge-Action Fasteners*

BS EN 1191 : 2012 *Windows and doors — Resistance to repeated opening and closing — Test method*

BS EN 1670 : 2007 *Building hardware — Corrosion resistance — Requirements and test methods*

BS EN 1774 : 1997 *Zinc and zinc alloys — Alloys for foundry purposes — Ingot and liquid*

BS EN 12400 : 2002 *Windows and pedestrian doors — Mechanical durability — Requirements and classification*

BS EN ISO 2409 : 2013 *Paints and varnishes — Cross-cut test*

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

13 Conditions

13.1 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 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.

13.2 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.

13.3 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.

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

13.5 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.

13.6 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.