#### ISSUE: March, 2006

# **CAVITY FIT RESTRICTOR**

# Designed for use with all Securistyle Domestic hinges

Designed for ease of use and consistent performance, the Cavity Fit Restrictor will restrict windows to comply with the requirements of BS 8213.

# **Applications**

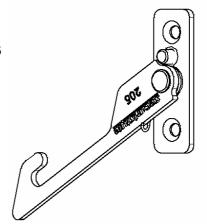
- Suitable for use with Defender Standard, Vector, Vector Plus, Easy Clean and Egress hinges
- Domestic and light commercial windows on the ground floor or upper floor

# **Product features**

- Restricts windows to 100mm max opening
- Tested to BS 6375 Part 2 to withstand a force of 600N when opened to the restricted position
- · No routing of the profile required

# **Customer benefits**

- · Visibly effective.
- · Securistyle quality and guaranteed performance



It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



# **CONTENTS - DEFENDER® CAVITY FIT RESTRICTOR**

|  |            | SECTION | SHEET |
|--|------------|---------|-------|
| Application and Selection                                    |            |         |       |
| Application  |            | 3.1     | 1     |
| Selection  |            | 3.1     | 1     |
| FITTING INSTRUCTIONS: Position and Clearances                |            |         |       |
| CAVITY FIT RESTRICTOR  |            | 3.1     | 2     |
| FITTING INSTRUCTIONS: Vent and Frame Preparation and Fitting |            |         |       |
| Vent and Frame preparation and F                             | itting     | 3.1     | 3     |
| FITTING INSTRUCTIONS: Screws                                 |            |         |       |
| Fixing Screws  |            | 3.1     | 5     |
| FITTING INSTRUCTIONS: Fixing Hole Reference                  |            |         |       |
| Fixing Hole References                                       |            | 3.1     | 6     |
| PERFORMANCE AND MAINTENANCE                                  |            |         |       |
| Environmental Constraints                                    |            | 3.2     | 1     |
| Maintenance & Lubrication                                    |            | 3.2     | 1     |
| Operating Life   |            | 3.2     | 1     |
| Corrosion Resistance   |            | 3.2     | 2     |
| PRODUCT SPECIFICATION  |            |         |       |
| Product and Materials Specification                          | 1          | 3.3     | 1     |
| Standard Applicable to CAVITY FIT                            | RESTRICTOR | 3.3     | 1     |

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006

# **ANCILLARY DEVICES**

#### CAVITY FIT RESTRICTOR

SECTION 3.1 SHEET 1 of 6

# **Application and Selection - CAVITY FIT RESTRICTOR**

# **Application**

#### General:

- 3.1.1 The CAVITY FIT RESTRICTOR is primarily designed to be used with Egress/Easy Clean hinges where fire escape is the primary requirement but the opening must be restricted to afford child safety.
- 3.1.2 The restrictor can also be used with other side hung domestic hinges.

#### Operation:

- 3.1.3 In normal operation the restrictor is sprung against the cavity locating pin and allows the vent to open until the hook engages against the pin. For full opening of the window the vent has to be pulled back slightly to allow the hook to be released.
- 3.1.4 On closing the window the restrictor automatically relocates.

#### Selection

#### General:

- 3.1.5 CAVITY FIT RESTRICTOR is available in right and left hand variants RC1L & RC1R.
- 3.1.6 Three sizes of Cavity Locator Pin are available to suit the cavity heights: -

SC1 - 13mm Cavity

SC2 - 16mm Cavity

SC3 - 17mm Cavity

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006

# **FITTING INSTRUCTIONS: Position and Clearances**

#### **CAVITY FIT RESTRICTOR**

- 3.1.7 The Standard and Highline versions are designed to be fitted between two flat and parallel rigid faces that conform to the measurements shown below.
- 3.1.8 The vent and outer frame location recess or up stand, if any, must be as shown in Fig. 1.

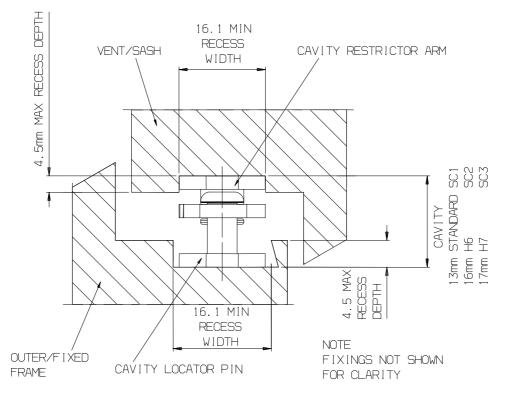


Fig. 1

# Not to Scale, All dimensions in mm

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



# ANCILLARY DEVICES

**CAVITY FIT RESTRICTOR** 

SECTION 3.1 SHEET 3 of 6

# FITTING INSTRUCTIONS: Vent and Frame Preparation and Fitting

# **Vent Preparation and Fitting**

#### **Preparation:**

3.1.9 No routing of the profile is required unless the profile silhouette does not conform to the clearances requirements (see Position and Clearances).

#### Fitting:

3.1.10 Position the Cavity Restrictor Arm RC1L/RC1R preferably in the hinge location channel on the vent with the hook pointing on an angle towards the vent opening. See Fig. 2

Alternatively the Cavity Restrictor Arm can be positioned within any vent aperture which conforms to the clearance requirements of Fig. 1.

**Note:** The closer the Cavity Restrictor Arm is positioned to the hinge the greater the opening angle of the vent will be, subsequently the further away the Cavity Restrictor Arm is positioned from the hinge the smaller the opening angle of the vent will be.

#### Fixing:

3.1.11 Insert fixings through the holes in the Cavity Restrictor Arm base once you are satisfied with its position. If possible pick up on any screw location ports\* and/or reinforcement.

# Frame Preparation and Fitting

# Preparation:

3.1.12 No routing of the profile is required unless the profile silhouette does not conform to the clearances requirements (see previous section).

#### Fitting:

3.1.13 Position the Cavity Location Pin SC1, SC2 or SC3 preferably in the hinge location channel on the frame so as the vent is opened the Cavity Location Pin engages in the hook of the Cavity Restrictor Arm. See Fig. 2

Alternatively the Cavity Restrictor Arm can be positioned within any vent aperture which conforms to the clearance requirements of Fig. 1.

It is the responsibility of the user to ensure that this document is at the latest issue.

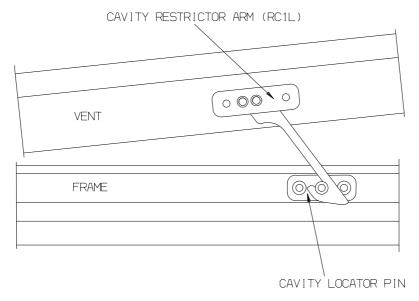
Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006

# FITTING INSTRUCTIONS: Vent and Frame Preparation and Fitting



NOTE
WHEN FITTING THE CAVITY LOCATOR PIN ENSURE THAT
IT IS FULLY ENGAGED IN THE HOOK OF THE CAVITY
RESTRICTOR ARM WHEN THE WINDOW IS AT ITS MAXIMUM
RESTRICTED OPENING

Fig. 2

#### Fixing:

3.1.14 Insert fixings through the holes in the Cavity Locator Pin base. If possible pick up on any screw location ports\* and/or reinforcement.

\*Certain profiles incorporate a groove to assist with screw positioning/insertion.

For screw specification refer to subsequent section.

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006

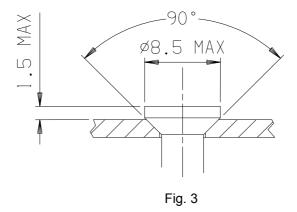
#### **FITTING INSTRUCTIONS: Screws**

## Fixing Screws

3.1.15 Use minimum No. 8 (dia. 4.3mm) fixing screws for PVCu or minimum dia 3.9 reinforcing screw. No. 10 (dia. 4.8mm) fixing screws are also acceptable, and indeed may be required for certain profiles. The screw and profile suppliers should be consulted for specific recommendations.

#### **Recommendations:-**

- 3.1.16 Countersunk head screws. See Fig. 3.
- 3.1.17 Screw manufacturers' recommended pilot hole sizes must be adhered to at all times and if any instructions are supplied by window system manufacturers/suppliers, such as "screw into reinforcement", it is important that they are followed.
- 3.1.18 When fitting, extreme care must be taken not to strip the thread as deterioration in performance will result.
- 3.1.19 It is has been shown that Austenitic and certain types of Modified Martensitic fixings provide superior corrosion resistance when subject to BS 7479.



**Note:** It is the responsibility of the window manufacturer to ensure the fixing screws have adequate strength to withstand the forces exerted upon the CAVITY FIT RESTRICTOR during standard operation and testing in accordance with BS 6375 Part 2.

# Not to Scale, All dimensions in mm

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



SECTION 3.1 SHEET 6 of 6

# **FITTING INSTRUCTIONS: Fixing Hole Reference**

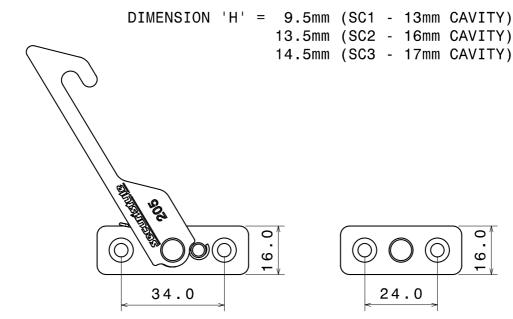
# Fixing hole reference

#### 3.1.20 Dimensions of CAVITY FIT RESTRICTOR





ISSUE: March, 2006



# Not to Scale, All dimensions in mm

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



#### PERFORMANCE AND MAINTENANCE

#### **Environmental Constraints**

- 3.2.1 Normal operating conditions are:
  - 1.2.1.1 Operating temperature range -20°C to +60°C
  - 1.2.1.2 Operating humidity range 10% Relative Humidity to 95% Relative Humidity
- 3.2.2 The materials used will not degrade due to ultra violet light, or when using neutral acidity non solvent cleaning chemicals, at a rate faster than other parts of the window assembly. However, the practice of cleaning brickwork with acidic based products will have serious effects if allowed to come into contact with hardware. Corrosion or failure of hardware as a result of this practice will not be covered by the warranty issued on such products. For further advice on procedures for protecting the window during this operation, please contact the window manufacturer or hardware supplier.

#### **Maintenance and Lubrication**

- 3.2.3 As with most mechanical devices, Cavity Fit Restrictors require periodic maintenance and lubrication. The Cavity Restrictor Arm in general and particularly the pivot, and spring must be kept free from dirt, debris and any obstructions at all times.
  - 3.2.3.1 **At Time of Installation** Lubricate all pivot points with light machine oil and wipe away excess, one drop per pivot is sufficient. We suggest one of the following lubricants or equivalent:
    - a. General light engineering oil with corrosion inhibitors such as Castrol Everyman or 3 in 1 oil (available in aerosol can for convenience).

**Note:** Solvent based aerosol sprays e.g. WD40 are <u>not</u> suitable for this application.

- 3.2.3.2 **Every Five Years** Carry out the following checks every five years:
  - Clean any dirt or debris from the Cavity Restrictor Arm and clear any obstructions from the pivot.
  - b. Apply lubrication as detailed in 1.2.4.1 above.
  - c. Check the tightness and security of all fixing screws and rivets.

# Operating Life

- 3.2.4 To attain optimum operating life all criteria listed above under; environmental constraints, and maintenance and lubrication must be adhered to.
- 3.2.5 Cavity Fit Restrictors will function normally for up to 30,000 cycles under normal conditions of use. This performance is subject to compliance with SECURISTYLE® installation and maintenance instructions.

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006

# FITTING INSTRUCTIONS

**CAVITY FIT RESTRICTOR** 

SECTION 3.2 SHEET 2 of 2

#### PERFORMANCE AND MAINTENANCE

#### **Corrosion Resistance**

- 3.2.6 When subjected to a 96 hour neutral salt spray test to BS 7479: 1991 / ISO 9227: 1990 the Cavity Fit Restrictor remains functional. There is no significant surface pitting caused by corrosion. Some surface discolouration is to be expected.
- 3.2.7 If a Cavity Fit Restrictor is fitted in an area where it is exposed to a corrosive atmosphere, e.g. salt laden sea air in coastal locations, we recommended that in addition to the general maintenance and lubrication:
  - 3.2.7.1 All metal surfaces are lightly coated with lubrication oil or sprayed with a proprietary anticorrosion spray. It is important to follow the manufacturer's instructions for any products used.
  - 3.2.7.2 Maintenance operations may need to be carried out more frequently. This is dependent on the severity of the prevailing conditions.

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006

#### PRODUCT SPECIFICATION

# **Product and Materials Specification**

- 3.3.1 All components are made from Austenitic Stainless steel to BS EN ISO 10088/2 GRADE 1.4301: 1995
  - 3.3.1.1 **Surface Finish** All surface finishes are of good commercial quality.
    - 2.5mm stainless steel components are of cold rolled finish and are edge dressed to remove the sharp edges as far as is practical.
    - Stainless steel components will not display surface blemishes, pits or scratches of greater area than 20 sq. mm or 0.25 mm maximum depth.

# Standards Applicable to Cavity Fit Restrictor

- 3.3.2 The relevant standards applicable are:
  - 3.3.2.1 BS 6375 : Part 2 : 1987. Section 5 Testing. Ref. appendix A (A.7 Test 6).
  - 3.3.2.2 BS 8213 : Part 1 : 1991. Section 2. Safety in use. Point 5.1.2.

It is the responsibility of the user to ensure that this document is at the latest issue.

Due to our policy of continual product improvement we reserve the right to alter specifications without notice.

It is the responsibility of the window manufacturer to ensure that the finished window meets the required performance and safety specification.



ISSUE: March, 2006