

Specification for

**Mechanical
performance of
peg-type casement
stays and face-fixed
wedge-action fasteners**

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- Association of Burglary Insurance Surveyors
- British Hardware Federation
- British Lock Manufacturers' Association
- British Plastics Federation
- British Woodworking Federation
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Foreword

This British Standard has been prepared under the direction of the Elements and Components (of Diverse Materials) Standards Committee.

To date very little work has been done in collecting all the information and knowledge gained in relation to casement stays and fasteners for windows. Because of the complexity of the subject, the material cannot be specified in detail for each piece of every component, likewise dimensions for these pieces cannot be given to suit all materials. Therefore, the scope of this document has been restricted to the mechanical performance of casement stays and fasteners.

The mechanical performance in use of casement stays and fasteners will depend upon the method of fixing employed and the design of the window and related hardware and reference should be made to CP 153 and BS 6375-1 for advice on these topics. Because of the many methods of fixing and the fact that in most cases the fixings are not supplied with the stays and fasteners, the tests specified in this document involve bolting the stays and fasteners to their supports.

CP 153-1 should also be referred to for safety considerations related to provisions for opening and cleaning.

This standard does not cover sampling. It is for the parties concerned to provide for appropriate sampling and testing rates to meet contractual and commercial requirements.

The security of windows against forced entry depends upon many features and is not covered in this document.

In view of the fact that this document covers only the *mechanical* performance of peg-type casement stays and face-fixed wedge-action fasteners it was considered essential that the restricted scope of this document should be brought to the attention of any purchasers of items which are claimed to comply with it. The requirements of clause 3 have, therefore, been incorporated to cover this point.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 12, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

1 Scope

This British Standard specifies requirements for the mechanical performance of peg-type casement stays and face-fixed wedge-action fasteners for use on top hung and side hung aluminium, plastics, steel and wood casement windows up to 1 m² in area.

NOTE The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard the definitions in BS 565 and BS 6100-4.1, BS 6100-4.2 and BS 6100-4.3 apply, together with the following.

2.1 Casement stays

2.1.1

casement stay

a device used in conjunction with complementary items, to hold the opening casement of a window at various positions for ventilation and which may also be used to hold the opening casement in the closed position

2.1.2

casement stay fittings

complementary parts for a casement stay which enable the casement stay to perform its function, whether keeping the opening casement open or closed, e.g. peg plates, peg and hook plates etc.

2.1.3

peg plate

a device consisting of a locating peg mounted on a base plate as shown in Figure 1

2.1.4

twin peg plate

a device consisting of two locating pegs mounted on a common based plate as shown in Figure 1

2.1.5

hook plate

a device into which the free end of the casement stay can be located so that in conjunction with a peg plate the opening casement can be held in the closed position as shown in Figure 1

2.1.6

casement stay length

the overall length of the stay including its end fittings when measured as shown in Figure 1

2.2 Casement features

2.2.1

casement fastener

a device used in conjunction with complementary items principally to secure the opening casement in the closed position, but in addition, it may be designed to hold the casement slightly opened for ventilation purposes

2.2.2

casement fastener fittings

complementary parts for a casement fastener which enable the casement fastener to perform its functions

3 Marking and claims of compliance¹⁾

Casement stays and fasteners shall not be marked with the number of this standard. Any claims of compliance related to this standard shall state clearly that this standard only specifies the mechanical performance of the casement stays and fasteners.

4 Design and construction

4.1 Each item of hardware, including its complementary parts, shall be so designed that when installed in accordance with the manufacturers' fixing instructions, the action of the hardware and the operation of the window shall not be obstructed.

4.2 The hardware shall be free from sharp edges and burrs that might be a hazard to the user.

5 Performance

5.1 **General.** Casement stays and fasteners shall be prepared for testing in accordance with Appendix A. Tests shall be carried out in the order in which they are laid down in Appendix B or Appendix C, as appropriate, after the casement stays and fasteners have been checked for compliance with clause 4.

Each sample shall meet all the relevant requirements of 5.2.

5.2 Test requirements

5.2.1 *All samples.* When tested in accordance with Appendix B or Appendix C, as appropriate, there shall be no fracture or breakage and it shall be possible to operate the casement stay or fastener.

5.2.2 Casement stays

5.2.2.1 When tested in accordance with B.1 the force measured shall be not less than 180 N.

¹⁾ See foreword.

5.2.2.2 When tested in accordance with **B.2** to **B.4** the permanent deformation at any point shall not exceed 1 mm in the direction of loading.

When tested in accordance with **B.5** the permanent deformation at any point shall not exceed 3 mm in the direction of loading.

When tested in accordance with **B.6** the initial 100 N force shall not produce a permanent deformation at any point exceeding 3 mm in the direction of loading and the subsequent 200 N force shall be sustained without sign of fracture.

5.2.3 Casement fasteners

5.2.3.1 When tested in accordance with **C.1** the torque required to turn the fastener handle to the fully engaged position shall not exceed 5 N m.

5.2.3.2 When tested in accordance with **C.2** and **C.3** the maximum permanent deformation shall not exceed 1.0 mm.

5.2.3.3 When tested in accordance with **C.4** the pull-in shall be not less than 0.2 mm, the relative position of the frame shall not have altered by more than 1.0 mm and the operating torque when measured according to **C.1** shall not exceed 5 N m.