

BS 6375-1:2015+A1:2016



BSI Standards Publication

# Performance of windows and doors

Part 1: Classification for weathertightness and guidance on selection and specification

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### Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 18, an inside back cover and a back cover.

## Foreword

### Publishing information

This part of BS 6375 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 March 2015. It was prepared by Subcommittee B/538/1, *Windows*, under the authority of Technical Committee B/538, *Doors, windows, shutters, hardware and curtain walling*. A list of organizations represented on these committees can be obtained on request to their secretary.

### Supersession

This part of BS 6375 supersedes BS 6375-1:2015, which is withdrawn.

### Relationship with other publications

BS 6375 is published in three parts:

- Part 1: *Classification for weathertightness and guidance on selection and specification;*
- Part 2: *Specification for operation and strength characteristics;*
- Part 3: *Additional performance characteristics.*

It is related to the European product standard for windows and external pedestrian doorsets, BS EN 14351<sup>1)</sup> (see also *Information about this document*).

### Information about this document

This is a full revision of the standard and introduces the following principal change:

The method of calculating wind load in Annex A has been revised. It is now required to use either the method specified in BS EN 1991-1-4:2005 and the National Annex to BS EN 1991-1-4, or the abbreviated method which has been recalculated in accordance with BS EN 1991-1-4.

BS 6375 has been prepared to provide guidance on the selection of performance characteristics for windows and doorsets intended for the UK market. The full range of characteristics is provided in the various parts of BS EN 14351.

BS EN 14351 is the harmonized European Standard for windows and external doorsets and is the standard to be referenced if the product is to be CE marked. Not all the characteristics listed in BS EN 14351 are required for CE marking, and of those that are required, only those mandated (i.e. covered by national building regulations) in the UK need be declared.

The majority of characteristics identified in BS EN 14351 have a number of performance levels. BS 6375 provides guidance to the specifier and the manufacturer on an appropriate level for the UK market. This can be by a single value for a product characteristic or by a value for a particular service condition. For example, a doorset in a public building might need to meet a more severe level of performance for some characteristics than a doorset in a dwelling.

Specifiers are not obliged to use a particular performance level but need to be aware that unnecessarily selecting a more severe performance level can incur a cost penalty out of proportion to the performance advantage.

<sup>1)</sup> Only the first part of BS EN 14351 has been published to date. Part 2 (Internal doors) is still in preparation.

BS EN 14351 and BS 6375 cover a range of products and characteristics and are therefore divided into parts. BS EN 14351 is divided into product groups and BS 6375 is divided into performance characteristics. Not all characteristics will be applicable to all product groups or to all end uses. In addition, BS 6375 may be used for product groups not covered by BS EN 14351.

BS 6375 does not identify a recommended performance level for any characteristic that is recommended in national regulations (e.g. U values for windows); these levels are subject to statute.

If a manufacturer wishes to declare a CE marked performance this has to be declared against the appropriate part of BS EN 14351. Manufacturers wishing to CE mark products are advised to seek advice from the relevant national regulatory authority.

Text introduced or altered by Corrigendum No. 1 is indicated in the text by tags C1 C1. Minor editorial changes are not tagged.

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### **Presentational conventions**

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

*Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

### **Contractual and legal considerations**

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

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## 1 Scope

BS 6375 is the national application document for BS EN 14351. This part of BS 6375 specifies the exposure categories related to test pressure levels for air permeability, watertightness and wind resistance for external windows and doorsets. It is applicable to all types of vertical windows and doorsets, and includes windows in which the opening lights are not fully framed, e.g. adjustable glass louvres. It is applicable to both factory-glazed and site-glazed products.

The standard excludes patent glazing (see Note) and curtain walls that span across horizontal structural members of floors, but includes the opening lights within a vertical patent glazing or curtain walling system.

*NOTE Recommendations for the design and installation of patent glazing are given in BS 5516.*

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS EN 1026, *Windows and doors – Air permeability – Test method*

BS EN 1027:2000, *Windows and doors – Watertightness – Test method*

BS EN 1991-1-4:2005, *Eurocode 1 – Actions on structures – Part 1-4: General actions – Wind actions*

NA to BS EN 1991-1-4:2005, *UK National Annex to Eurocode 1 Actions on structures – Part 1-4: General actions – Wind actions*

BS EN 12207:2000, *Windows and doors – Air permeability – Classification*

BS EN 12208, *Windows and doors – Watertightness – Classification*

BS EN 12210, *Windows and doors – Resistance to wind load – Classification*

BS EN 12211, *Windows and doors – Resistance to wind load – Test method*

BS EN 14351 (all parts), *Windows and doors – Product standard, performance characteristics*

## 3 Terms and definitions

For the purposes of this part of BS 6375, the following terms and definitions apply.

### 3.1 design height ( $h$ )

maximum height of a wall in which a window or doorset occurs

*NOTE In the case of a dormer window, this is the building ridge height.*

### 3.2 doorset

complete unit, as installed, comprising door leaf, door frame, any associated side panels and/or top lights, and any operating hardware, locks and accessories

*NOTE This is also known as a door assembly.*