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Aluminium alloy windows and doorsets – Specification

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 29 February 2016. It was prepared by Subcommittee B/538/1, *Windows and Doors*. A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Supersession

This British Standard supersedes BS 4873:2009, which is withdrawn.

Relationship with other publications

The requirements and properties for aluminium window and door extrusions are specified in BS EN 755-1, BS EN 755-2, BS EN 755-9, BS EN 12020-1 and BS EN 12020-2.

This British Standard also relates to the following standards.

- a) BS EN 14351-1 is the harmonized European product standard for windows and external pedestrian doorsets without resistance to fire and smoke leakage characteristics. It gives a list of performance characteristics and classifications of performance, but does not give guidance on determining the appropriate classification for any specific application.
- b) The BS 6375 series are the national application documents in the UK, giving performance requirements and guidance for the selection of appropriate classes of performance from BS EN 14351-1.
- c) BS 8213-4 provides guidance on the survey and installation of windows and external pedestrian doorsets.

Information about this document

This is a full revision of the standard, and introduces changes which take into account:

- a) the development of window and doorset design; and
- b) the publication of new and revised European Standards.

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.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause J.1.1, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex A, the product shall ...'". This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

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.

1 Scope

This British Standard specifies requirements for the design, construction and performance of aluminium alloy windows and external pedestrian doorsets, thermally or non-thermally improved, including constituent materials and glazing.

This British Standard does not apply to composite doorsets as defined in BS 8529, but it does cover doorsets that are predominantly aluminium framed (stile and rail construction) with replaceable composite panels.

This British Standard applies to windows and doorsets fabricated in a factory, to be installed vertically ($\pm 15^\circ$) into the external face of buildings, as single or multi-light units, or in coupled assemblies where appropriate, of the following types:

- a) windows:
 - 1) hinged: side-hung, top-hung, bottom-hung, tilt before turn or turn before tilt;
 - 2) projecting: side-hung and top-hung (including reversible windows);
 - 3) pivoted: horizontal and vertical;
 - 4) sliding: horizontal and vertical (including tilting-in sash to vertical);
 - 5) fixed lights;
 - 6) fixed casement;
 - 7) parallel opening;
 - 8) double opening French casement;
 - 9) louvred, adjustable;
- b) doorsets:
 - 1) single leaf, single-swing or double-swing hinged or pivoted doors with or without side lights and top lights;
 - 2) double leaf, single-swing or double-swing hinged or pivoted doors with or without side lights and top lights;
 - 3) sliding doors (includes tilt and slide and lift and slide doors);
 - 4) sliding folding doors.

This British Standard is applicable to windows in which a casement or sash frame member is no longer than 3 m and in which a door leaf frame member is no longer than 3.5 m. This British Standard does not apply to curtain walls that span across horizontal structural members of floors, but it is applicable to windows or doorsets fitted within a curtain walling system.

This British Standard is not applicable to secondary windows applied to convert existing single windows into double or coupled windows.

NOTE Guidance on the evaluation of conformity is given in Annex A. Guidance on durability and recycling is given in Annex B.

2 Normative references

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