

SINGAPORE STANDARD  
**SS 212 : 2007**  
(ICS 91.060.50)

SPECIFICATION FOR  
**Aluminium alloy windows**

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## Foreword

This Singapore Standard was prepared by the Technical Committee on Architectural Works under the purview of the Building and Construction Standards Committee.

It is a revision of SS 212 : 2000. The main changes in this revision are as follows:

1. Materials of fastenings and fixings shall be of stainless steel Type 304 (minimum). A new clause on the material and rigidity of stainless steel friction hinges is included. The clause specifies that the hinge shall be securely held by sufficient number of fastener in accordance with manufacturers' specifications.
2. Thickness of aluminium profile that receives the fixing of friction hinge shall be not less than 2.75 mm thick is recommended.
3. Definition and figure of full height windows are included. Windows or fixed glass panels below the height of barrier shall comply with Building Control Regulations. The use of laminated glass is recommended for the fixed glass panel below the height of barrier.
4. References to BS have been updated to BS EN wherever applicable.
5. Jumping track test requirement is introduced for sliding windows.

In preparing this specification, reference is made to the following publications:

- |    |                 |   |
|----|-----------------|---|
| 1. | ASTM E 283 : 04 | Standard test method for determining the rate of air leakage through exterior windows, curtain walls, and doors under specified pressures differences across the specimen                                 |
| 2. | ASTM E 330 : 02 | Standard test method for structural performance of exterior windows, curtain walls, and doors by uniform static air pressure difference   |
| 3. | ASTM E 331 : 00 | Standard test method for water penetration of exterior windows, curtain walls, and doors by uniform static air pressure difference  |
| 4. | BS 4873 : 2004  | Specification for aluminium alloy windows   |
| 5. | BS 6375 : 1999  | Performance for windows<br><br>Part 1 – Classification for weathertightness (including guideline on selection and specification)<br><br>Part 2 – Specification for operation and strength characteristics |
| 6. | SS 381 : 1996   | Materials and performance tests for aluminium curtain walls   |
| 7. | AAMA : 501      | Methods of test for exterior walls  |

Acknowledgement is made for the use of information from the above publications.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. SPRING Singapore shall not be held responsible for identifying any or all of such patent rights.

### NOTE

1. *Singapore Standards are subject to periodic review to keep abreast of technological changes and new technical developments. The revisions of Singapore Standards are announced through the issue of either amendment slips or revised editions.*
2. *Compliance with a Singapore Standard does not exempt users from legal obligations.*

## Specification for aluminium alloy windows

### 1 General

#### 1.1 Scope

This Singapore Standard specifies materials, construction, finishes, hardware and performance standards for aluminium alloy windows. It also provides recommended co-ordinating sizes. This standard does not relate to secondary inner windows and louvre windows. For windows along open corridors, they do not have to be tested for watertightness. Any windows or fixed glass panels below the height of barrier shall comply with the Building Control Regulations.

#### 1.2 Normative references

The reference documents in Annex G are indispensable for the application of this Singapore Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the references document (including any amendments) applies.