



MALAYSIAN STANDARD

MS 832:2022

Aluminium alloy windows – Specification (Second revision)

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Contents

	Page
Committee representation	ii
Foreword.....	iii
1 Scope.....	1
2 Normative references	1
3 Definitions	1
4 Window types and handing	4
5 Material.....	10
6 Design and construction	12
7 Glazing.....	13
8 Security.....	13
9 Safety.....	13
10 Performance	14
11 Re-testing	20
12 Report.....	20
13 Marking.....	22
 Annexes	
Annex A Normative references	23
Annex B Air leakage test.....	25
Annex C Watertightness test.....	29
Annex D Structural performance test.....	32
Annex E Proof load test	38
Annex F Operation and strength tests	40
Annex G Recommended periods for calibration.....	49
Annex H Inspection/testing program for Aluminium Alloy Windows	50

Committee representation

The National Standards Committee on Building, Construction and Civil Engineering (NSC 04) under whose authority this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Construction Industry Development Board Malaysia
Department of Irrigation and Drainage Malaysia
Department of Standards Malaysia (Secretariat)
Federation of Malaysian Manufacturers
Jabatan Bomba dan Penyelamat Malaysia
Jabatan Kerajaan Tempatan
Jabatan Kerja Raya Malaysia
Malaysian Iron and Steel Industry Federation
Malaysian Timber Industry Board
Master Builders Association Malaysia
Ministry of International Trade and Industry
Pertubuhan Akitek Malaysia
Real Estate and Housing Developers' Association Malaysia
Suruhanjaya Perkhidmatan Air Negara
The Cement and Concrete Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Putra Malaysia
Universiti Sains Malaysia
Universiti Teknologi MARA

The Technical Committee on Aluminium products (NSC 04/TC 5) which developed this Malaysian Standard consists of representatives from the following organisations:

Construction Industry Development Board Malaysia
Construction Research Institute of Malaysia
Department of Standards Malaysia (Secretariat)
Federation of Malaysian Manufacturers – Aluminium Manufacturers Group of Malaysia (AMGM)
Jabatan Kerja Raya Malaysia
IKRAM QAS International Sdn Bhd
Pertubuhan Akitek Malaysia
Royal Institution of Surveyors Malaysia
SIRIM QAS International Sdn Bhd

Co-opted members:

Façade Performance Lab Sdn Bhd
Fenestra Malaysia Sdn Bhd
Persatuan Industri Fasad Malaysia
TUV SUD (M) Sdn Bhd

Foreword

This Malaysian Standard was developed by the Technical Committee on Aluminium Products (NSC 04/TC 5) under the authority of the National Standards Committee on Building, Construction and Civil Engineering (NSC 04).

This second revision of MS 832 cancels and replaces MS 832:2011, *Aluminium alloy windows – Specifications (First revision)*.

Modification in this revision incorporate test method and revise performance criteria inline with the current development of the building construction industries.

Modification in this revision are as follows:

- a) Subclause 5.1 a), amend on anodic coating to comply to ISO 7599;
- b) Subclause 5.1 b), revise requirement on liquid coating to comply to BS4842, AAMA2603, AAMA2604 and AAMA 2605;
- c) Subclause 5.1 c), revise requirement powder coating to comply to BS4842, AAMA2603, AAMA2604 and AAMA 2605;
- d) Subclause 5.3, amend the requirements for operating devices, bearing devices and hardware;
- e) Subclause 5.4, added requirement of thermoplastic (TPV) material and compliance to ASTM C864 and ASTM C509;
- f) Subclause 5.7 as below:
 - i. add in standard MS 2666, Insulating glass unit (IGU) - Performance and evaluation;
 - ii. amend title of MS 2397 solar reflective glass to coated glass;
 - iii. add in standard MS 2676, Wired glass.
- g) Subclause 5.8, added “thermoplastic (TPV)” material;
- h) Subclause 5.9, added “Hot dip galvanising” to comply to MS 739, ISO 10684, ISO 898 or EN 13811;
- i) Subclause 10.1, add in designation of test specimens for proprietary window systems;
- j) Subclause 10.2, rearrange the sequence of tests;
- k) Subclause 10.2.1.1.3 and 10.2.1.1.4, revise the air leakage rates and removed air leakage graphs, *Figure 3a* and *Figure 3b* in previous version;
- l) Subclause 10.2.1.2.3, amend definition of “water leakage”;

MS 832:2022

Foreword *(continued)*

- m) Subclause 10.2.1.4.2, remove requirement for residual deflection in previous version;
- n) Subclause 10.2.2, remove optional status of operation tests in previous version;
- o) Annex F.7, revise test for open/close cycles requirements; and
- p) Annex H, add new annex as informative on inspection/testing programme.

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