



# MALAYSIAN STANDARD

MS 1787-3:2022

**Wood-based panels – Part 3: Determination of  
dimensions of test pieces  
(First revision)  
(ISO 9424:2003, MOD)**

ICS: 79.060

Descriptors: wood-based panels, determination, formaldehyde

© Copyright 2022

DEPARTMENT OF STANDARDS MALAYSIA

## **DEVELOPMENT OF MALAYSIAN STANDARDS**

The **Department of Standards Malaysia (Standards Malaysia)** is the national standards and accreditation body of Malaysia.

The main function of Standards Malaysia is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefitting the health and safety of the public, protecting consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

Malaysian Standards are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. The development of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Section 18A of the act stipulated that, all Malaysian Standards are owned by the Government of Malaysia and no part of a Malaysian Standard can be reproduced in any form without the written permission of the Director General.

For further information on Malaysian Standards, please contact:

**Department of Standards Malaysia**  
Level 4 – 7, Tower 2, Menara Cyber Axis  
Jalan Impact, Cyber 6  
63000 Cyberjaya  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 8008 2900  
Fax: 60 3 8008 2901  
<http://www.jsm.gov.my>  
E-mail: [central@jsm.gov.my](mailto:central@jsm.gov.my)

## Contents

	page
Committee representation .....	ii
Foreword.....	iii
1 Scope.....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Principle .....	1
5 Apparatus .....	1
5.1 Instrument for thickness measurement.....	1
5.2 Instrument for length and width measurement .....	1
6 Test pieces .....	1
6.1 Sampling and cutting.....	1
6.2 Dimensions .....	2
6.3 Conditioning .....	2
7 Procedure .....	2
7.1 Measuring points.....	2
7.2 Thickness measurement.....	2
7.3 Length and width measurement.....	2
8 Test report .....	3

## **MS 1787-3:2022**

### **Committee representation**

The National Standards Committee on Timber, Timber Products and Timber Structures (NSC 22) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Construction Industry Development Board Malaysia  
Department of Standards Malaysia (Secretariat)  
Forest Research Institute Malaysia  
Jabatan Kerajaan Tempatan  
Jabatan Kerja Raya Malaysia  
Malaysian MDF Manufacturers Association  
Malaysian Panel-Products Manufacturers' Association  
Malaysian Timber Council  
Malaysian Timber Industry Board  
Malaysian Wood Industries Association  
Malaysian Wood Moulding & Joinery Council  
Malaysian Wood Preserving Association  
Sabah Timber Industries Association  
Sarawak Timber Association  
Sarawak Timber Industry Development Corporation  
Timber Exporters' Association of Malaysia  
Universiti Putra Malaysia  
Universiti Teknologi MARA

The Technical Committee on Wood-based Panels (NSC 22/TC 3) which supervised development of this Malaysian Standard consists of representatives from the following organisations:

Besgrade Products Sdn Bhd  
Construction Industry Development Board Malaysia  
Department of Standards Malaysia (Secretariat)  
Dongwha Malaysia Sdn Bhd  
Forest Research Institute Malaysia  
HeveaBoard Berhad  
Jabatan Kerja Raya Malaysia  
Jowat Manufacturing (SEA) Sdn Bhd  
Malaysian MDF Manufacturers Association  
Malaysian Panel-Products Manufacturer's Association  
Malaysian Timber Council  
Malaysian Timber Industry Board  
Perceptive Profile Sdn Bhd  
Profina Plywood Sdn Bhd  
Sarawak Timber Industry Development Corporation  
Universiti Putra Malaysia  
Universiti Sains Malaysia  
Universiti Teknologi MARA

## Foreword

This Malaysian Standard was developed by the Technical Committee on Wood-based Panels (NSC 22/TC 3) under the authority of the National Standards Committee on Timber, Timber Products and Timber Structures (NSC 22).

This first revision of MS 1787-3:2022 cancels and replaces MS 1787: Part 3: 2005, *Wood-based panels – Part 3: Determination of dimensions of test pieces*.

The modifications in this revision are as follows:

- a) Figure 1 - addition of the label of test piece and sliding caliper in the figure.
- b) Clause 8 (b) - replaced the word of “sampling report” to “sampling procedure”

MS 1787 consists of the following parts, under the general title, *Wood-based panels*:

- Part 1: *Determination of dimensions of panels*
- Part 2: *Sampling and cutting of test pieces*
- Part 3: *Determination of dimensions of test pieces*
- Part 4: *Determination of moisture content*
- Part 5: *Determination of density*
- Part 6: *Determination of swelling in thickness after immersion in water*
- Part 7: *Determination of dimensional changes associated with changes in relative humidity*
- Part 8: *Determination of moisture resistance under cyclic test conditions*
- Part 9: *Determination of surface soundness*
- Part 10: *Determination of modulus of elasticity in bending and of bending strength*
- Part 11: *Determination of tensile strength perpendicular to the plane of the panel*
- Part 12: *Determination of wet bending strength*
- Part 13: *Determination of screw holding ability*
- Part 14: *Determination of formaldehyde content by perforator method*
- Part 15: *Determination of formaldehyde emission by desiccator method*

This Malaysian Standard will be used in reference to fibreboard, particleboard and oriented strand board, but does not include plywood.

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

NOTE. MOD on the front cover indicates a modified standard i.e., a standard adapted from an International Standard with permitted technical deviations, which are clearly identified and explained. The changes in structure are permitted provided that the altered structured permits easy comparison of the content of the two standards. Modified standards also include the changes permitted under identical correspondence.