



# MALAYSIAN STANDARD

MS 544 : PART 4 :  
SECTION 1 : 2001

## CODE OF PRACTICE FOR STRUCTURAL USE OF TIMBER : PART 4 : TIMBER PANEL PRODUCTS : SECTION 1 : STRUCTURAL PLYWOOD

ICS : 91.080.20

Descriptors : panel products, structural plywood, strength of plywood, structural plywood application, structural plywood durability, structural plywood grade and structural plywood properties.

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### **Committee representation**

The Building and Civil Engineering Industry Standards Committee (ISC D) under whose supervision this Malaysian Standard was developed, comprises representatives from the following Government Ministries, Trade, Commerce and Manufacturing Associations, and Scientific and Professional Bodies:

Association of Consulting Engineers Malaysia  
Construction Industry Development Board Malaysia  
Department of Standards Malaysia  
Department of Occupational Safety and Health  
Jabatan Bomba dan Penyelamat  
Pertubuhan Akitek Malaysia  
Master Builders Association Malaysia  
Ministry of Housing and Local Government (Housing Department)  
Ministry of Works (Public Works Department)  
The Institution of Engineers, Malaysia  
Universiti Teknologi Malaysia

The preparation of this Malaysian Standard is under the supervision of the following representatives of the CIDB Standard Committee:

|   |   |
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| Ir. Mohamed bin Mohd Nuruddin           | General Manager Technology Development Division |
| Megat Kamil Azmi bin Megat Rus Kamarani | Senior Manager Standard and Quality Unit        |
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The Technical Committee on Structural Use of Timber which developed this Malaysian Standard consists of the following representatives:

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| Dr. Abdul Rashid bin Hj. Ab. Malik (Chairman)             | Forest Research Institute Malaysia               |
| Puan Hanishahani Othman (Secretary)                       | Construction Industry Development Board Malaysia |
| Tuan Hj. Mohd Shukari bin Midon                           | Forest Research Institute Malaysia               |
| Encik Hilmi bin Md. Tahir                                 | Jabatan Kerja Raya Malaysia                      |
| Encik Chow Wah/Puan Dang Anom Md. Zin                     | Jabatan Perumahan Negara                         |
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| Prof. Dr. Zainai bin Mohamed/<br>Dr. Abd. Latif bin Saleh | Universiti Teknologi Malaysia                    |
| Prof. Madya Ir. Dr. Mohd Zamin bin Jumaat                 | Universiti Malaya                                |
| Dr. Mohd Ariff bin Jamaludin                              | Universiti Putra Malaysia                        |
| Encik Nor Zamri bin Mat Amin                              | Malaysian Timber Industry Board                  |
| Ir. Yap Chin Tian   | Timber Trade Federation Malaysia                 |
| Tuan Hj. Wahab bin Abdul Razak.                           | General Lumber Fabricators and Builders Bhd      |
| Dr. Peter Kho C. Seng                                     | Sarawak Timber Association                       |
| Encik Lall Singh Gill                                     | Malaysian Wood Moulding and Joinery Council      |
| Encik Mohamad Omar bin Mohamad Khaidzir                   | Forest Research Institute Malaysia               |

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### Committee representation *(continued)*

The Working Group on Timber Panel Products which developed this Malaysian Standard consists of the following representatives:

|  |   |
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| Puan Hanishahani bte.Othman (Secretary)                              | Construction Industry Development Board Malaysia                              |
| Dr. Paridah Md. Tahir  | Universiti Putra Malaysia   |
| Dr. Mohd. Ariff bin Jamaludin  | Universiti Putra Malaysia   |
| Encik Mohamad Omar bin Mohamad Khaidzir                              | Forest Research Institute Malaysia  |
| Encik Mohd. Nor Zamri bin Mat Amin/<br>Encik Mohd Adawi bin Ton Omar | Malaysian Timber Industry Board   |

## **FOREWORD**

This Malaysian Standard was developed by the Technical Committee on Structural Use of Timber established at the Construction Industry Development Board Malaysia (CIDB) under the authority of the Building and Civil Engineering Industry Standards Committee.

CIDB is the Standards-Writing Organisation (SWO) appointed by SIRIM Berhad to develop standards for the construction industry.

This standard is referred to BS 5268 : Part 2 : 1996, 'Structural use of timber code of practice for permissible stress design, materials and workmanship'.

MS 544 consists of the following parts and sections, under the general title, 'Code of practice for structural use of timber' :

- Part 1 : General
- Part 2 : Permissible stress design of solid timber
- Part 3 : Permissible stress design of glued laminated timber
- Part 4 : Timber panel products
  - Section 1 : Structural plywood
  - Section 2 : Marine plywood
  - Section 3 : Cement bonded particleboard
  - Section 4 : Oriented strand board
- Part 5 : Timber joints
- Part 6 : Workmanship, inspection and maintenance
- Part 7 : Testing
- Part 8 : Design, fabrication and installation of prefabricated timber for roof trusses
- Part 9 : Fire resistance of timber structures
  - Section 1 : Method of calculating fire resistance of timber members.
- Part 10 : Preservative treatment of structural timbers
- Part 11 : Recommendation for the calculation basis for span tables
  - Section 1 : Domestic floor joists
  - Section 2 : Ceiling joists
  - Section 3 : Ceiling binders
  - Section 4 : Domestic rafters
- Part 12 : Laminated veneer lumber for structural application.

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