



MALAYSIAN STANDARD

MS 1462-4-1:2021

**Metal scaffolding – Part 4: Temporary works
equipment - Section 1: Scaffolds - Performance
requirements and general design
(First revision)**

ICS: 91.220

Descriptors: scaffolds, platform, performance, general design, temporary work, mobile access towers

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Committee representation

The National Standards Committee on Building, Construction and Civil Engineering (NSC D) under whose authority this Malaysian Standard was adopted, 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
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Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Steel Products (TC/D/4) which supervised the adoption of the EN Standard as Malaysian Standard consists of representatives from the following organisations:

Construction Industry Development Board Malaysia
Department of Occupational Safety and Health Malaysia
Department of Standards Malaysia (Secretariat)
Malaysia Steel Association
Malaysian Iron and Steel Industry Federation
Malaysian Structural Steel Association
Master Builders Association Malaysia
SIRIM QAS International Sdn Bhd
The Institution of Engineers, Malaysia
Universiti Malaya
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Universiti Teknologi MARA

Co-opted members:

Construction Research Institute of Malaysia
Master Builders Association Malaysia

The Working Group on Tubular and Prefabricated Scaffolding (WG/D/4-3) which supervised the adoption of this EN Standard as Malaysian Standard consists of representatives from the following organisations:

Aerial Global Sdn Bhd
Construction Industry Development Board Malaysia
Construction Research Institute of Malaysia
Department of Occupational Safety and Health Malaysia
Department of Standards Malaysia (Secretariat)
Jabatan Kerja Raya Malaysia
Leform Sdn Bhd
SIRIM QAS International Sdn Bhd
Southern Pipe Industry (M) Sdn Bhd
Sumi-Tech Industrial Supplies Sdn Bhd
Universiti Teknologi MARA

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National foreword

The adoption of the EN Standard as a Malaysian Standard was recommended by the Working Group on Tubular and Prefabricated Scaffolding under the authority of the National Standards Committee on Building, Construction and Civil Engineering.

This Malaysian Standard is identical with EN 12811-1:2003, *Temporary works equipment - Part 1: Scaffolds - Performance requirements and general design*, published by the European Committee for Standardization (CEN). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, "this European Standard" should read "this Malaysian Standard";
- b) the comma which is used as a decimal sign (if any), to read as a point;
- c) the number and the title of this Malaysian Standard has been changed to "MS 1462-4-1, *Metal scaffolding - Part 4: Temporary Works Equipment - Section 1: Scaffolds - Performance Requirements and General Design*" in order to retain the sequence of MS 1462 series;
- d) in the key of Figure 5, line 3, "see Table 4" to read as "see Table 3";
- e) in Equation 10 the value "2.4M_{B,d}" to read as "2.0M_{B,d}";
- f) in Table C.1 the bending moment M_{B,k} in kN·m for class B, the value "2.4" to read as "1.4";
- g) in the title of Figure C.2, "and C" to be deleted;
- h) changes in reference standard at clause 6.2.7 and Annex A regarding wind loads with MS 1553, *Code of Practice on Wind Loading for Building Structure*;
- i) changes in reference of standard at clause 4.2.3 regarding Timber and Timber based materials with MS 544 series on Timber; and
- j) reference to European Standards should be replaced by corresponding Malaysian Standards as follows:

Referenced European Standards

EN 74-1, *Couplers, spigots and baseplates for use in falsework and scaffolds - Part 1: Couplers for tubes - Requirements and test methods*.

EN 12810-1, *Façade scaffolds made of prefabricated elements - Part 1: Product specifications*.

Corresponding Malaysian Standards

MS 1462-2-3, *Metal Scaffolding - Part 2 : Tubular (tube and coupler) scaffolds - Section 3: Specification for steel and aluminium couplers, fitting and accessories*.

MS 1462-3-1, *Metal Scaffolding - Part 3 : Prefabricated scaffolds - Section 1 : Specification for steel and aluminium modular system scaffolding*.

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National foreword (continued)

Referenced European Standards

EN 12810-2, *Façade scaffolds made of prefabricated elements - Part 2: Methods of particular design and assessment.*

EN 12811-2, *Temporary works equipment - Part 2: Information on materials*

EN 1990, *Eurocode 1: Basis of structural design*

EN 1993-1-1, *Eurocode 3: Design of steel structures - Part 1-1: General rules and rules for buildings*

BS 2482, *Specification for timber scaffold board*

Corresponding Malaysian Standards

MS 1462-3-2, *Metal Scaffolding - Part 3 : Prefabricated scaffolds - Section 2 : Particular methods of structural design for steel and aluminium modular system scaffolding.*

MS 1462-4-2, *Metal Scaffolding - Part 4: Temporary Works Equipment - Section 2: Information of Materials*

MS EN 1990, *Eurocode 1: Basis of structural design*

MS EN 1993-1-1, *Eurocode 3: Design of steel structures - Part 1-1: General rules and rules for buildings*

MS 544 series

This Malaysian Standard consists of the following parts, under the general title *Metal Scaffolding*:

Part 1: Prefabricated scaffolds - specification for steel frame scaffolding

Part 2: Tubular (tube and coupler) scaffolds - Section 1: Specification for steel tubes Part 2: Tubular (tube and coupler) scaffolds - Section 2: Specification for aluminium tubes

Part 2: Tubular (tube and coupler) scaffolds - Section 3: Specification for steel and aluminium couplers, fitting and accessories

Part 3: Prefabricated scaffolds - Section 1: Specification for steel and aluminium modular system scaffolding

Part 3: Prefabricated scaffolds - Section 2: Particular methods of structural design for steel and aluminium modular system scaffolding

Part 4: Temporary works equipment - Section 1: Performance requirements and general design

Part 4: Temporary works equipment - Section 2: Information of materials

This Malaysian Standard cancels and replaces MS 1462-4-1:2013, *Metal scaffolding - Part 4: Temporary works equipment - Section 1: Scaffolds – Performance requirements and general design.*

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