



MALAYSIAN STANDARD

MS EN 196-1:2021

Methods of testing cement – Part 1: Determination of strength (First revision)

ICS: 91.100.10

Descriptors: cement, determination, strength

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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 developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Construction Industry Development Board Malaysia
Department of Irrigation and Drainage
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
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Real Estate & Housing Developers' Association Malaysia
Suruhanjaya Perkhidmatan Air Negara
The Cement & Concrete Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Putra Malaysia
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Cement (NSC D/TC 25) which supervised the adoption of the EN Standard as Malaysian Standard consists of representatives from the following organisations:

Cement Industries of Malaysia Berhad
CMS Cement Sdn Bhd
Construction Industry Development Board Malaysia
Department of Standards Malaysia (Secretariat)
Hume Cement Sdn Bhd
Jabatan Kerja Raya Malaysia
Master Builders Association Malaysia
National Ready-Mixed Concrete Association of Malaysia
SIRIM QAS International Sdn Bhd (Testing Services Department)
Tasek Corporation Berhad
The Cement & Concrete Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Kebangsaan Malaysia
Universiti Malaya
Universiti Teknologi MARA
YTL Cement Berhad

The Working Group on Cement Testing Method (NSC D/TC 25/WG 3) which recommended the adoption of the EN Standard as Malaysian Standard consists of representatives from the following organisations:

Cement Industries of Malaysia Berhad
Department of Standards Malaysia (Secretariat)
Hume Cement Sdn Bhd
NS Cement Industries Sdn Bhd
Slag Cement Sdn Bhd
The Cement & Concrete Association of Malaysia
Universiti Kebangsaan Malaysia

MS EN 196-1:2021

National foreword

The adoption of the EN Standard as a Malaysian Standard was recommended by the WG on Cement Testing Method under the authority of the Building, Construction and Civil Engineering National Standards Committee.

This Malaysian Standard cancels and replaces MS EN 196-1:2007, *Method of testing cement – Part 1: Determination of strength*

This Malaysian Standard is identical with EN 196-1:2016, *Methods of testing cement – Part 1: Determination of strength*, 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; and
- c) reference to European Standards should be replaced by corresponding Malaysian Standards as follows:

Referenced European Standards

Corresponding Malaysian Standards

EN 197-1, <i>Cement - Part 1: Composition, specifications and conformity criteria for common cements</i>	MS EN 197-1, <i>Methods of testing cement - Part 1: Determination of strength</i>
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EN 197-7, <i>EN 196-7, Methods of testing cement – Part 7: Method of taking and preparing samples of cement</i>	MS EN 196-7, <i>Methods of testing cement - Part 7: Method of taking and preparing samples of cement</i>
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This standard specifies the reference procedures for the preparation and testing of mortar prism made with CEN Standard sands from various sources and compacted by a standard jolting apparatus and the use of alternative compacting equipment and procedures.

MS EN 196 consists of the following parts under the general title *Methods of testing Cement*:

Part 1: Determination of strength

Part 2: Chemical analysis of cement

Part 3: Determination of setting time and soundness

Part 5: Pozzolanicity test for Pozzolana Cement

Part 6: Determination of fineness

Part 7: Methods of taking and preparing samples of cement

National foreword *(continued)*

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