MALAYSIAN STANDARD

MS EN 197-1:2014

Cement - Part 1: Composition, specifications and conformity criteria for common cements (First revision)

ICS: 91.100.10

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Committee representation

The Industry Standards Committee on Building, Construction and Civil Engineering (ISC 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
Dewan Bandaraya Kuala Lumpur
Federation of Malaysian Manufacturers
Jabatan Bomba dan Penyelamat Malaysia
Jabatan Kerajaan Tempatan
Jabatan Kerja Raya Malaysia
Malaysian Timber Council
Malaysian Timber Industry Board
Master Builders Association Malaysia
Pertubuhan Akitek Malaysia
Projek Lebuhraya Utara-Selatan Berhad
Real Estate and Housing Developers' Association Malaysia
SIRIM Berhad (Secretariat)
Suruhanjaya Perkhidmatan Air Negara
The Cement and Concrete Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Cement which supervised the adoption of the EN Standard as Malaysian Standard is managed by The Cement and Concrete Association of Malaysia in its capacity as an authorised Standards-Writing Organisation and consists of representatives from the following organisations:

Associated Pan Malaysia Cement Sdn Bhd
Construction Industry Development Board Malaysia
IKRAM QA Services Sdn Bhd
Master Builders Association Malaysia
National Ready Mixed Concrete Association
Negeri Sembilan Cement Industries Sdn Bhd
Pahang Cement Sdn Bhd
Perak-Hanjoong Simen Sdn Bhd
SIRIM Berhad
SIRIM QAS International Sdn Bhd
The Cement and Concrete Association of Malaysia (Secretariat)
The Institution of Engineers, Malaysia
Universiti Kebangsaan Malaysia
Universiti Malaya
Unversiti Teknologi Malaysia

Co-opted members:

Aalborg Portland Malaysia Sdn Bhd
Cement Industries of Malaysia Berhad
CMS Cement Sdn Bhd
Lafarge Cement Sdn Bhd
Tasek Corporation Berhad

Committee representation *(continued)*

The Working Group on EN 197-1 which recommended the adoption of the EN Standard as Malaysian Standard consists of representatives from the following organisations:

Associated Pan Malaysia Cement Sdn Bhd
Cement Industries of Malaysia Berhad
CMS Cement Sdn Bhd
Lafarge Cement Sdn Bhd
Master Builders Association Malaysia
Negeri Sembilan Cement Industries Sdn Bhd
Slag Cement Sdn Bhd
SIRIM QAS International Berhad
Tasek Corporation Berhad
The Cement and Concrete Association of Malaysia (Secretariat)

National foreword

The adoption of the EN Standard as a Malaysian Standard was recommended by the Working Group on EN 197-1 under the authority of the Industry Standard Committee on Building, Construction and Civil Engineering. Development of this standard was carried out by The Cement and Concrete Association of Malaysia which is the Standards Writing Organisation (SWO) appointed by SIRIM Berhad to develop standards for cement.

This Malaysian Standard is identical with EN 197-1:2011, *Cement - Part 1: Composition, specifications and conformity criteria for common cements*, published by the European Committee for Standardisation (CEN) with the exceptions as listed below.

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) informative National Annexes, NA to ND have been included;

d) the following are not included in this scope of Malaysian Standard;

   i) the additional special properties of low heat Portland cement, conformance to BS 1370; and

   ii) other types of cement whose hardening is not primarily due to the hydration of calcium silicates, i.e. high alumina cement, conformance to BS 915-2; and

e) reference to EN Standards should be replaced by corresponding Malaysian Standards as follows:

Referenced EN Standards	Corresponding Malaysian Standards
EN 196-1, *Methods of testing cement - Part 1: Determination of strength*	MS EN 196-1, *Methods of testing cement - Part 1: Determination of strength*
EN 196-2, *Methods of testing cement - Part 2: Chemical analysis of cement*	MS EN 196-2, *Methods of testing cement - Part 2: Chemical analysis of cement*
EN 196-3, *Methods of testing cement - Part 3: Determination of setting time and soundness*	MS EN 196-3, *Methods of testing cement - Part 3: Determination of setting time and soundness*
EN 196-5, *Methods of testing cement - Part 5: Pozzolanicity test for Pozzolana Cement*	MS EN 196-5, *Methods of testing cement - Part 5: Pozzolanicity test for Pozzolana Cement*
EN 196-6, *Methods of testing cement - Part 6: Determination of fineness*	MS EN 196-6, *Methods of testing cement - Part 6: Determination of fineness*
EN 196-7, *Methods of testing cement - Part 7: Methods of taking and preparing samples of cement*	MS EN 196-7, *Methods of testing cement - Part 7: Methods of taking and preparing samples of cement*

National foreword *(continued)*

Referenced EN Standards	Corresponding Malaysian Standards
EN 196-8, *Methods of testing cement - Part 8: Heat of hydration - Solution method*	MS EN 196-8, *Methods of testing cement - Part 8: Heat of hydration - Solution method*
EN 196-9, *Methods of testing cement - Part 9: Heat of hydration - Semi-adiabatic method*	MS EN 196-9, *Methods of testing cement - Part 9: Heat of hydration - Semi-adiabatic method*
EN 197-2, *Cement - Part 2: Conformity evaluation*	MS EN 197-2, *Cement - Part 2: Conformity evaluation*

It is intended that cements from within this range will be specified in further parts of MS EN 197 and MS EN 196 or in other standards.

This Malaysian Standard cancels and replaces MS EN 197-1:2007, *Cement - Part 1: Composition, specifications and conformity criteria for common cements.*

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