MALAYSIAN STANDARD

MS 1933: PART 11:2007

METHODS OF TEST FOR MASONRY UNIT - PART 11: DETERMINATION OF WATER ABSORPTION OF AGGREGATE CONCRETE, MANUFACTURED STONE AND NATURAL STONE MASONRY UNITS DUE TO CAPILLARY ACTION AND THE INITIAL RATE OF WATER ABSORPTION OF CLAY MASONRY UNITS

ICS: 91.100.15; 91.100.30, 91.080.30

Descriptors: principle, apparatus, procedure, masonry

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Committee representation

The Building and Civil Engineering Industry Standards Committee (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
Department of Standards Malaysia
Jabatan Bomba dan Penyelamat Malaysia
Jabatan Kerja Raya Malaysia
Jabatan Perumahan Negara
Malaysian Timber Industry Board
Master Builders Association Malaysia
Ministry of International Trade and Industry
Pertubuhan Akitek Malaysia
Suruhanjaya Tenaga
The Chartered Institute of Building Malaysia
The Institution of Engineers, Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Bricks and Blocks which supervises adoption of the EN Standard consists of representatives from the following organisations:

Cement and Concrete Association

Construction Industry Development Board

Jabatan Bomba dan Penyelamat Malaysia

Jabatan Kerja Raya Malaysia (Cawangan Pakar dan Kejuruteraan Awam)

Master Builders Association Malaysia

Pertubuhan Akitek Malaysia

Real Estate & Housing Developers Association

SIRIM QAS International Sdn Bhd (Building and Building Materials Testing Section)

SIRIM QAS International Sdn Bhd (Product Certification Section)

The Chartered Institute of Building Malaysia

Universiti Sains Malaysia

Universiti Teknologi Malaysia

Co-opted members:

Blacktop Industry Sdn Bhd

Integrated Brickworks Sdn Bhd

FOREWORD

The adoption of the EN Standard as a Malaysian Standard was recommended by the Technical Committee on Bricks and Blocks under the authority of the Building and Civil Engineering Industry Standards Committee.

This Malaysian Standard is identical with EN 772-11:2000*, Methods of test for masonry units – Part 11: Determination of water absorption of aggregate concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units,* 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"; and

b) the comma which is used as a decimal sign (if any), to read as a point.

MS 1933 consists of the following parts, under the general title *Methods of test for masonry units:*

Part 1: Determination of compressive strength;

Part 2: Determination of percentage area of voids in masonry units (by paper indentation);

Part 3: Determination of net volume and percentage of voids of clay masonry units by hydrostatic weighing;

Part 4: Determination of real and bulk density and of total and open porosity for natural stone masonry units;

Part 5: Determination of the active soluble salts content of clay masonry units;

Part 6: Determination of bending tensile strength of aggregate concrete masonry units;

Part 7: Determination of water absorption of clay masonry damp proof course units by boiling in water;

Part 9: Determination of volume and percentage of voids and net volume of clay and calcium silicate masonry units by sand filling;

Part 10: Determination of moisture content of calcium silicate and autoclaved aerated concrete units;

Part 11: Determination of water absorption of aggregate concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units;

Part 13: Determination of net and gross dry density of masonry units (except for natural stone);

Part 14: Determination of moisture movement of aggregate concrete and manufactured stone masonry units;

Part 15: Determination of water vapour permeability of autoclaved aerated concrete masonry units;

Part 16: Determination of dimensions;

Part 19: Determination of moisture expansion of large horizontally perforated clay masonry units; and

Part 20: Determination of flatness of faces of masonry units.

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