



# MALAYSIAN STANDARD

MS 2015-1:2017

## Public toilets - Part 1: Design criteria (First revision)

ICS: 03.080.30

Descriptors: public toilets, criteria requirement, design, location, toilet units

© Copyright 2017

DEPARTMENT OF STANDARDS MALAYSIA

## DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** is the national standards and accreditation body of Malaysia.

The main function of STANDARDS MALAYSIA is to foster and promote standards, standardisation and accreditation as a means of advancing the national economy, promoting industrial efficiency and development, benefiting the health and safety of the public, protecting the consumers, facilitating domestic and international trade and furthering international cooperation in relation to standards and standardisation.

Malaysian Standards (MS) are developed through consensus by committees which comprise balanced representation of producers, users, consumers and others with relevant interests, as may be appropriate to the subject at hand. To the greatest extent possible, Malaysian Standards are aligned to or are adoption of international standards. Approval of a standard as a Malaysian Standard is governed by the Standards of Malaysia Act 1996 [Act 549]. Malaysian Standards are reviewed periodically. The use of Malaysian Standards is voluntary except in so far as they are made mandatory by regulatory authorities by means of regulations, local by-laws or any other similar ways.

For the purposes of Malaysian Standards, the following definitions apply:

**Revision:** A process where existing Malaysian Standard is reviewed and updated which resulted in the publication of a new edition of the Malaysian Standard.

**Confirmed MS:** A Malaysian Standard that has been reviewed by the responsible committee and confirmed that its contents are current.

**Amendment:** A process where a provision(s) of existing Malaysian Standard is altered. The changes are indicated in an amendment page which is incorporated into the existing Malaysian Standard. Amendments can be of technical and/or editorial nature.

**Technical corrigendum:** A corrected reprint of the current edition which is issued to correct either a technical error or ambiguity in a Malaysian Standard inadvertently introduced either in drafting or in printing and which could lead to incorrect or unsafe application of the publication.

NOTE: Technical corrigenda are not to correct errors which can be assumed to have no consequences in the application of the MS, for example minor printing errors.

STANDARDS MALAYSIA has appointed **SIRIM Berhad** as the agent to develop, distribute and sell Malaysian Standards.

For further information on Malaysian Standards, please contact:

**Department of Standards Malaysia**  
Ministry of Science, Technology and Innovation  
Level 1 & 2, Block 2300, Century Square  
Jalan Usahawan  
63000 Cyberjaya  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 8318 0002  
Fax: 60 3 8319 3131  
<http://www.jsm.gov.my>  
E-mail: [central@jsm.gov.my](mailto:central@jsm.gov.my)

OR **SIRIM Berhad**  
(Company No. 367474 - V)  
1, Persiaran Dato' Menteri  
Section 2, P. O. Box 7035  
40700 Shah Alam  
Selangor Darul Ehsan  
MALAYSIA

Tel: 60 3 5544 6000  
Fax: 60 3 5510 8095  
<http://www.sirim.my>  
E-mail: [msonline@sirim.my](mailto:msonline@sirim.my)

## Contents

	<b>Page</b>
Committee representation .....	ii
Foreword.....	iv
Introduction.....	v
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions.....	1
4 Performance requirements.....	4
5 Design of public toilets.....	5
6 Location.....	11
7 Number of toilet units.....	14
8 Expectations of users.....	17
Annex A Design features and criteria.....	19
Annex B Toilet fittings and criteria.....	21
Annex C Number of toilet units - Examples of calculations .....	26
Annex D Number of sanitary facilities.....	34
Annex E Public toilet facilities - Examples of layouts .....	40
Annex F Guide plans for toilet units .....	44
Bibliography .....	67

## **Committee representation**

The Industry Standards Committee on Building, Construction and Civil Engineering (ISC 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 Malaysia  
Department of Standards Malaysia  
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  
Pertubuhan Akitek Malaysia  
Pertubuhan Perancang Malaysia  
Projek Lebuh raya 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 Putra Malaysia  
Universiti Sains Malaysia  
Universiti Teknologi Malaysia

The Technical Committee on Building Design and Construction which supervised the development of this Malaysian Standard consists of representatives from the following organisations:

Construction Industry Development Board Malaysia  
IKRAM QA Services Sdn Bhd  
Jabatan Bomba dan Penyelamat Malaysia  
Jabatan Kerja Raya Malaysia  
Jabatan Perkhidmatan Pembetulan  
KLCC Projek Berhad  
Master Builders Association Malaysia  
Pertubuhan Akitek Malaysia  
Pertubuhan Juruukur Malaysia  
SIRIM Berhad (Secretariat)  
Suruhanjaya Perkhidmatan Air Negara  
Syarikat Perumahan Negara Berhad  
The Institution of Engineers, Malaysia  
Universiti Teknologi MARA

### **Committee representation** *(continued)*

The Working Group on Public Toilets which developed this Malaysian Standard consists of representatives from the following organisations:

Dewan Bandaraya Kuala Lumpur  
Federation of Malaysian Manufacturers - Malaysian Ceramic Industry Group  
Forum Air Malaysia  
Harta Maintenance Sdn Bhd  
International Islamic University Malaysia  
Jabatan Kerajaan Tempatan  
Jabatan Kerja Raya Malaysia  
Majlis Perbandaran Subang Jaya  
Malaysia Airports Holding Berhad  
Pejabat Mufti Wilayah Persekutuan  
Perbadanan Putrajaya  
Persatuan Pengurusan Kompleks Malaysia  
Pertubuhan Akitek Malaysia  
Projek Lebuhraya Utara-Selatan Berhad  
Quality Restroom Association Malaysia  
SIRIM Berhad (Secretariat)  
The Institution of Engineers, Malaysia  
Universiti Kebangsaan Malaysia

#### **Co-opted members:**

International Islamic University Malaysia