

MALAYSIAN STANDARD

MS 147: 2001

SPECIFICATION FOR QUALITY OF VITREOUS CHINA SANITARY APPLIANCES (FIRST REVISION)

ICS: 91.140.70

Descriptors: vitreous china, sanitary appliances, quality of glazing, definitions, tolerances, test

methods

© Copyright

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

The Department of Standards Malaysia (DSM) is the national standardisation and

accreditation body.

The main function of the Department 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 are developed through consensus by committees which comprise of

balanced representation of producers, users, consumers and others with relevant interests,

as may be appropriate to the subject in hand. These standards where appropriate 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.

The Department of Standards appoints SIRIM Berhad as the agent to develop Malaysian

Standards. The Department also appoints SIRIM Berhad as the agent for distribution and

sale of Malaysian Standards.

For further information on Malaysian Standards, please contact:

Department of Standards Malaysia

Tingkat 21, Wisma MPSA Persiaran Perbandaran 40675 Shah Alam

Selangor D.E.

Tel: 60 3 5519 8033 Fax: 60 3 5519 2497

http://www.dsm.gov.my

Email:central@dsm.gov.my

OR SIRIM Berhad

1, Persiaran Dato' Menteri P.O. Box 7035, Section 2 40911 Shah Alam

Selangor D.E.

Tel: 60 3 5544 6000 Fax: 60 3 5510 8095

http://www.sirim.my

CONTENTS

	Page	е
	Committee representation	ii iii
1 2 3 4 5 6 7 8 9 10 11 12 13	Scope Definitions Quality of glazing Tolerances Visual examination Water absorption Crazing Chemical resistance. Resistance to staining Warpage Manufacturer's certificate. Marking. Certification mark	1 1 3 4 4 4 5 5 5 5 5 5 5 5 5 5
Tables		
1 C1 D1	Blemishes and defects permitted	6 12 14
Append	ices	
A B C D	Test for water absorption Test for crazing Test for chemical resistance Test for resistance to staining Test for warnage	7 9 11 13

MS 147: 2001

Committee representation

The Building and Civil Engineering Industry Standards (ISC D) Committee under whose supervision this Malaysian Standard was developed, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Chartered Institute of Building Malaysia
Construction Industry Development Board Malaysia
Department of Standards Malaysia
Jabatan Bekalan Elektrik dan Gas
Jabatan Bomba dan Penyelamat Malaysia
Master Builders Association
Ministry of Housing and Local Government (Housing Department)
Ministry of Works
Pertubuhan Akitek Malaysia
The Institution of Engineers, Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Sanitary Ware which developed this Malaysian Standard consists of representatives from the following organisations:

Construction Industry Development Board Malaysia

Goh Ban Huat Berhad

Jabatan Kerja Raya

Kementerian Perdagangan Antarabangsa dan Industri

Master Builders Association Malaysia

Pertubuhan Akitek Malaysia

The Institution of Engineers, Malaysia

Universiti Kebangsaan Malaysia

Sanitec Johnson Suisse Sdn. Bhd.

Sime Inax Sdn. Bhd.

SIRIM Berhad

SIRIM QAS Sdn Bhd

MS 147: 2001

FOREWORD

This Malaysian Standard was developed by the Technical Committee on Sanitary Ware under the authority of the Building and Civil Engineering Industry Standards Committee.

This Malaysian Standard was prepared based on BS 3402: 1969,' Specification for quality of vitreous china sanitary appliances'. During development of this standard, reference was also made to AS 1976: 1992, 'Vitreous china used in sanitary appliances' and SS 42: 1971, 'Quality of vitreous china sanitary appliances'.

This Malaysian Standard deals with quality of vitreous china appliances and details the test by which quality shall be assessed. The main changes featured in this standard include :

Clause 2 Definitions

A few new definitions were added, some were revised and some were eliminated from the standard.

Clause 12 Marking and Clause 13 Certification mark

Both are new clauses, introduced for marking and certification purposes.

Table 1

Table 1 is the combination of the previous tables which were Table 1, Table 2 and Table 3. Major changes have been made to the maximum permitted blemishes and defect to the appliances.

Appendix D

Test for burning was eliminated from the standard.

Appendix E

Test for warpage was introduced in the standard.

This revised standard supersedes MS 147 : 1973, 'Specification for quality of vitreous china sanitary appliances"

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