



MALAYSIAN STANDARD

MS ISO 668:2009

SERIES 1 FREIGHT CONTAINERS - CLASSIFICATION, DIMENSIONS AND RATINGS (FIRST REVISION) (ISO 668:1995, AMD. 1:2005, AMD. 2:2005, IDT)

ICS: 55.180.10

Descriptors: containers, freight containers, classification, dimensions, ratings, designations

© Copyright 2009

DEPARTMENT OF STANDARDS MALAYSIA

DEVELOPMENT OF MALAYSIAN STANDARDS

The **Department of Standards Malaysia (STANDARDS MALAYSIA)** 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. 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.

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

Century Square, Level 1 & 2
Blok 2300, Jalan Usahawan
63000 Cyberjaya
Selangor D.E.
MALAYSIA

Tel: 60 3 8318 0002

Fax: 60 3 8319 3131

<http://www.standardsmalaysia.gov.my>

E-mail: central@standardsmalaysia.gov.my

OR **SIRIM Berhad**

(Company No. 367474 - V)
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
Committee representation.....		iii
National foreword.....		iv
1	Scope	1
2	Normative references	1
3	Definitions.....	1
4	Classification and designation.....	2
5	Dimensions, tolerances and ratings	3
Table 1	Nominal lengths.....	3
Table 2	External dimensions, permissible tolerances and ratings for series 1 freight containers.....	6
Table 3	Minimum internal dimensions and door opening dimensions for series 1 freight containers.....	6
Table A1	Corner fitting locations (centre-to-centre distances and diagonal tolerances).....	7
Figure A1	Corner fitting locations.....	8
Figure B1	Base structures of containers.....	10
Figure B2	1CC, 1C or 1CX containers - Minimum requirements.....	10
Figure B3	1CC, 1C or 1CX containers - Requirements if five pairs of load transfer areas are to be fitted	11
Figure B4	1BBB, 1BB, 1B or 1BX containers - Minimum requirements	11
Figure B5	1BBB, 1BB, 1B or 1BX containers - Requirements if six pairs of load transfer areas are to be fitted	11
Figure B6	1AA, 1A or 1AX containers without gooseneck tunnel - Minimum requirements.....	12
Figure B7	1AA, 1A or 1AX containers without gooseneck tunnel - Requirements if six pairs of load transfer areas are to be fitted	12

CONTENTS *(continued)*

	Page
Figure B8 1AAA, 1AA, 1A or 1AX containers with gooseneck tunnel - Minimum requirements.....	13
Figure B9 1AAA, 1AA, 1A or 1AX containers with gooseneck tunnel - Requirements if seven pairs of load transfer areas are to be fitted	13
Figure B10 Minimum requirements for load transfer areas in the vicinity of the gooseneck tunnel.....	14
Figure C1 Dimensions of gooseneck tunnels	16
Annex A Corner fittings	7
Annex B Details of requirements for load transfer areas in base structures of containers.....	9
Annex C Dimensions of gooseneck tunnels	15

Committee representation

The Industry Standards Committee on Packaging and Distribution (ISC K) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Department of Civil Aviation Malaysia
Department of Environment
Department of Standards Malaysia
Federation of Malaysian Freight Forwarders
Federation of Malaysian Manufacturers
Jabatan Pengangkutan Jalan Malaysia
Keretapi Tanah Melayu Berhad
Malaysia Marine Department
Malaysian Plastics Manufacturers Association
Malaysian Pulp and Paper Manufacturers Association
Ministry of Domestic Trade and Consumer Affairs
Ministry of International Trade and Industry
Port Klang Authority
SIRIM Berhad (Secretariat)
Universiti Putra Malaysia

The Technical Committee on Freight Containers which recommended the adoption of the ISO Standard consists of representatives from the following organisations:

Bintulu Port Authority
International Shipowners Association of Malaysia
Jabatan Pengangkutan Jalan Malaysia
Keretapi Tanah Melayu Berhad
Klang Multi Terminal Sdn Bhd
Malaysia Marine Department
Malaysian Shipowners Association
MISC Berhad
Northport (Malaysia) Berhad
Port Klang Authority
SIRIM Berhad (Secretariat)
Suruhanjaya Pelabuhan Pulau Pinang Berhad
The International Force Group

Co-opted members:

Port of Tanjung Pelepas
Sinspec (Malaysia) Sdn Bhd

MS ISO 668:2009

NATIONAL FOREWORD

The adoption of the ISO Standard as a Malaysian Standard was recommended by the Technical Committee on Freight Containers under the authority of the Industry Standards Committee on Packaging and Distribution.

This Malaysian Standard is the first revision of MS ISO 668, *Series 1 freight containers - Classification, dimensions and ratings*.

This Malaysian Standard is identical with ISO 668:1995, *Series 1 freight containers - Classification, dimensions and ratings*, including its Amendment 1:2005 and Amendment 2:2005, published by the International Organization for Standardization (ISO). However, for the purposes of this Malaysian Standard, the following apply:

- a) In the source text, "this International Standard" has been replaced by "this Malaysian Standard"
- b) the comma which is used as a decimal sign (if any), has been replaced by a point; and
- c) reference to International Standards should be replaced by equivalent Malaysian Standards as follows:

<u>Referenced International Standards</u>	<u>Corresponding Malaysian Standards</u>
ISO 830, <i>Freight containers - Terminology</i>	MS ISO 830, <i>Freight containers - Terminology</i>
ISO 1161:1984, <i>Series 1 freight containers - Corner fittings - Specification</i>	MS ISO 1161:2000, <i>Series 1 freight containers - Corner fittings - Specification</i>
ISO 1496-1:1990, <i>Series 1 freight containers - Specification and testing - Part 7: General cargo containers for general purposes</i>	MS ISO 1496-1:1999, <i>Series 1 freight containers - Specification and testing - Part 7: General cargo containers for general purposes</i>
ISO 1496-2:1988 <i>Series 1 freight containers - Specification and testing - Part 2: Thermal containers</i>	MS ISO 1496-2, <i>Series 1 freight containers - Specification and testing - Part 2: Thermal containers</i>
ISO 6346:1995, <i>Freight containers - Coding, identification and marking</i>	MS ISO 6346:2000, <i>Freight containers - Coding, identification and marking</i>

Major modifications in this revision are as follows:

- a) table 1, addition of row 1EEE and 1EE and its requirements before row 1AAA;

NATIONAL FOREWORD *(continued)*

- b) table 2, for 1BBB, 1BB, 1B, 1BX, 1CC, 1C and 1CX containers, replacing the rating *R* by 30 380 kg and 67 200 lb two right hand columns respectively;
- c) table 2, conversion of "mm" into "inch" on the tolerances; for 1BBB, 1BB, 1B, 1BX containers, the tolerance in "inch" on length, *L*, was modified to $\frac{0}{-3/8}$ instead of $\frac{0}{-3/16}$;
- d) table 2, inserting information on 1EEE and 1EE before row 1AAA;
- e) incorporation of a new subclause 5.2.3 on "Gooseneck tunnels (optional)";
- f) subclause 5.3.2.2, second paragraph, insert "1EE," before 1AA and in the last paragraph, insert "1EEE" before "1AAA";
- g) table 3, incorporation of the following row, "1EEE" and "1EE" before row "1AAA":
- h) incorporation of annexes, Annex B "Details of requirements for load transfer areas in base structures of containers" and Annex C "Dimensions of gooseneck tunnels"; and
- i) table A1, insertion of the following row, "1EEE" and "1EE" before row "1AAA".

This Malaysian Standard has been redrafted in order to provide a structure consistent with that of other Malaysian Standards. The amendments have been incorporated in this standard.

This Malaysian Standard cancels and replaces MS ISO 668:1999.

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

NOTE. IDT on the front cover indicates an identical standard i.e. a standard where the technical content, structure, wording (or is an identical translation) of a Malaysian Standard is exactly the same as in an International Standard or is identical in technical content and structure although it may contain the minimal editorial changes specified in clause 4.2 of ISO/IEC Guide 21-1.