

INTERNATIONAL STANDARD



668

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Freight containers — External dimensions and ratings

Conteneurs pour le transport de marchandises — Dimensions extérieures et masses brutes maximales

Second edition — 1976-07-15

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Descriptors : cargo transportation, freight containers, specifications, dimensions, weight (mass), ratings, classifications, designation.

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 668 was drawn up by Technical Committee ISO/TC 104, *Freight containers*.

This second edition was circulated to the Member Bodies in March 1975 and has been approved by the Member Bodies of the following countries :

Australia	Hungary	Romania
Austria	Ireland	South Africa, Rep. of
Belgium	Israel	Spain
Brazil	Italy	Sweden
Canada	Japan	Switzerland
Czechoslovakia	Mexico	Turkey
Denmark	Netherlands	United Kingdom
Finland	New Zealand	U.S.S.R.
France	Norway	
Germany	Poland	

The Member Bodies of the following countries expressed disapproval of the document on technical grounds :

Cuba
U.S.A.

This second edition cancels and replaces the first edition (i.e. ISO 668-1973).



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Freight containers — External dimensions and ratings

AMENDMENT 1

Amendment 1 to International Standard 668-1976 was developed by Technical Committee ISO/TC 104, *Freight containers*, and was circulated to the member bodies in January 1977.

It has been approved by the member bodies of the following countries :

Australia	Germany	New Zealand
Austria	India	Norway
Belgium	Iran	South Africa, Rep. of
Canada	Ireland	Spain
Chile	Israel	Sweden
Czechoslovakia	Italy	Switzerland
Cuba	Japan	Turkey
Denmark	Korea, Rep. of	U.S.A.
France	Netherlands	Yugoslavia

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Hungary	United Kingdom
Poland	U.S.S.R.

Page 1

Clause 2 : Add new definition :

"2.2 ISO container : A container complying with all relevant ISO container standards in existence at the time of its manufacture".

Renumber **"2.2 rating . . ."** as **"2.3 rating . . ."**.

Clause 3 : Delete the second sentence and replace by the following :

"NOTE — Series 3 containers are intended essentially for internal continental systems. For dimensions as well as strength and testing requirements, see ISO/TR . . . 1)".

Add the corresponding footnote :

"1) In preparation."

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Page 2

Clause 4 :

Replace sub-clause 4.1 by the following :

“One series of freight containers is approved :

- those of series 1, having a uniform cross-section of 2 438 mm × 2 438 mm (8 ft × 8 ft) and the 1AA, 1BB and 1CC containers, having a cross-section of 2 591 mm × 2 438 mm (8 ft 6 in × 8 ft), shown in table 1.

The actual dimensions of series 1 freight containers and their tolerances are given in table 2.”

In the first footnote to table 1, replace “table 3” by “table 2”.

Delete the existing table 2.

Add the following new sub-clause :

“4.2 Reduced height containers are permissible for tank, open top, bulk, platform and platform based type containers.”

Clause 5 : In sub-clause 5.1, replace “table 3” by “table 2”.

Page 3

Delete series 3 containers and their dimensions, tolerances and ratings from the existing table 3.

Renumber table 3 as table 2.

Page 5

Renumber table 4 as table 3.

Freight containers — External dimensions and ratings

1 SCOPE AND FIELD OF APPLICATION

This International Standard establishes a classification of freight containers based on external dimensions, and specifies the associated ratings.

2 DEFINITIONS

For the purpose of this International Standard, the following definitions apply :

2.1 freight container : An article of transport equipment

- a) of a permanent character and accordingly strong enough to be suitable for repeated use;
- b) specially designed to facilitate the carriage of goods by one or more modes of transport, without intermediate reloading;
- c) fitted with devices permitting its ready handling, particularly its transfer from one mode of transport to another;

d) so designed as to be easy to fill and empty;

e) having an internal volume of 1 m³ (35.3 ft³) or more.

The term freight container includes neither vehicles for conventional packing.

2.2 rating : The maximum gross weight¹⁾. It is the maximum permissible combined weight of the freight container and its contents.

3 APPLICATION

Series 1 containers are intended for intercontinental traffic.

Series 3 containers are intended essentially for internal continental systems.

1) The term "weight" is used here instead of the technical term "mass", in order to conform to current commercial practice.

4 CLASSIFICATION AND DESIGNATION OF FREIGHT CONTAINERS

4.1 Two series of freight containers are approved :

— those of series 1, having a uniform cross-section of 2 438 mm × 2 438 mm (8 ft × 8 ft) and the 1AA, 1BB and 1CC containers, having a cross-section of 2 591 mm × 2 438 mm (8 ft 6 in × 8 ft), shown in table 1;

— those of series 3, having a uniform height of 2 400 mm (7 ft 11 in) and a uniform length of 2 100 mm (6 ft 11 in), shown in table 2.

The actual dimensions of series 1 and series 3 freight containers, and their tolerances, are given in table 3.

TABLE 1 — Nominal dimensions of series 1 freight containers, intended for intercontinental traffic

Freight container designation	Series 1						
	Height			Width		Nominal length*	
	mm	ft	in	mm	ft	mm	ft in
1A	2 438	8		2 438	8	12 000**	40**
1AA	2 591***	8***	6	2 438	8	12 000**	40**
1B	2 438	8		2 438	8	9 000	30
1BB	2 591***	8***	6	2 438	8	9 000	30
1C	2 438	8		2 438	8	6 000	20
1CC	2 591***	8***	6	2 438	8	6 000	20
1D	2 438	8		2 438	8	3 000	10
1E	2 438	8		2 438	8	2 000	6 8
1F	2 438	8		2 438	8	1 500	5

* The exact lengths are shown in table 3.

** In certain countries there are legal limitations to the overall length of vehicle and load.

*** In certain countries there are legal limitations to the overall height of vehicle and load.

TABLE 2 — Nominal dimensions of series 3 freight containers, intended essentially for internal continental systems

Freight container designation	Series 3								
	Height*			Width*			Length*		
	mm	ft	in	mm	ft	in	mm	ft	in
3A	2 400	7	11	2 650	8**	8	2 100	6	11
3B	2 400	7	11	1 325	4	4	2 100	6	11
3C	2 400	7	11	1 325	4	4	2 100	6	11

* The exact dimensions are shown in table 3.

** In certain countries there are legal limitations to the overall width of vehicle and load.

5 OVERALL DIMENSIONS AND RATINGS

5.1 The overall external dimensions, tolerances and ratings are given in table 3.

5.2 The dimensions and tolerances apply when measured at the temperature of 20 °C (68 °F); measurements taken at other temperatures shall be adjusted accordingly.

5.3 The diagonal tolerances on the assembly of the corner fittings are given in the annex.

TABLE 3 — Actual dimensions, permissible tolerances and ratings

Series	Freight container designation	Height				Width				Length				Rating (maximum gross weight)	
		mm	Tolerances mm	ft in	Tolerances in	mm	Tolerances mm	ft in	Tolerances in	mm	Tolerances mm	ft in	Tolerances in	kg	lb*
SERIES 1	1A	2 438	0 - 5	8	0 - 3/16	2 438	0 - 5	8	0 - 3/16	12 192	0 - 10	40	0 - 3/8	30 480	67 200
	1AA	2 591	0 - 5	8 6	0 - 3/16	2 438	0 - 5	8	0 - 3/16	12 192	0 - 10	40	0 - 3/8	30 480	67 200
	1B	2 438	0 - 5	8	0 - 3/16	2 438	0 - 5	8	0 - 3/16	9 125	0 - 10	29 11,25	0 - 3/8	25 400	56 000
	1BB	2 591	0 - 5	8 6	0 - 3/16	2 438	0 - 5	8	0 - 3/16	9 125	0 - 10	29 11,25	0 - 3/8	25 400	56 000
	1C	2 438	0 - 5	8	0 - 3/16	2 438	0 - 5	8	0 - 3/16	6 058	0 - 6	19 10,5	0 - 1/4	20 320	44 800
	1CC	2 591	0 - 5	8 6	0 - 3/16	2 438	0 - 5	8	0 - 3/16	6 058	0 - 6	19 10,5	0 - 1/4	20 320	44 800
	1D	2 438	0 - 5	8	0 - 3/16	2 438	0 - 5	8	0 - 3/16	2 991	0 - 5	9 9,75	0 - 3/16	10 160	22 400
	1E	2 438	0 - 5	8	0 - 3/16	2 438	0 - 5	8	0 - 3/16	1 968	0 - 5	6 5,5	0 - 3/16	7 110	15 700
	1F	2 438	0 - 5	8	0 - 3/16	2 438	0 - 5	8	0 - 3/16	1 460	0 - 3	4 9,5	0 - 1/8	5 080	11 200
	SERIES 3	3A	2 400	± 6	7 10 1/2	± 1/4	2 650	± 7	8 8 3/4	± 1/4	2 100	± 5	6 10 1/2	± 3/16	5 080
3B		2 400	± 6	7 10 1/2	± 1/4	1 325	± 3	4 4 5/32	± 1/8	2 100	± 5	6 10 1/2	± 3/16	5 080	11 200
3C		2 400	± 6	7 10 1/2	± 1/4	1 325	± 3	4 4 5/32	± 1/8	2 100	± 5	6 10 1/2	± 3/16	2 540	5 600

* Based on 1 ton = 2 240 lb.

ANNEX

ASSEMBLED CORNER FITTINGS – DIAGONAL TOLERANCES
(see 5.3)

