INTERNATIONAL STANDARD 668

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Freight containers — External dimensions and ratings

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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,* and circulated to the Member Bodies in October 1972.

It has been approved by the Member Bodies of the following countries:

Australia	Germany	Romania
Austria	Hungary	South Africa, Rep. of
Belgium	India	Sweden
Brazil	Israel	Switzerland
Bulgaria	Japan	Thailand
Canada	Netherlands	Turkey
Czechoslovakia	New Zealand	United Kingdom
Egypt, Arab Rep. of	Poland	U.S.A.
France	Portugal	U.S.S.R.

No Member Body expressed disapproval of the document.

This International Standard cancels and replaces ISO Recommendation R 668-1970.

Printed in Switzerland

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 m^3 (35.3 ft^3) or more.

The term *freight container* includes neither vehicles nor conventional packing.

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

3 CLASSIFICATION AND DESIGNATION OF FREIGHT CONTAINERS

3.1 Three 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 container, having a cross-section of 2 591 mm × 2 438 mm (8 ft 6 in × 8 ft), are shown in Table 1;

— those of series 2, having a uniform height of 2 100 mm (6 ft 11 in), are shown in Table 2;

— 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) are shown in Table 3.

NOTE — Series 1 containers are intended for intercontinental traffic. Series 2 and 3 containers are intended essentially for internal continental systems.

The actual dimensions of series 1, series 2 and series 3 freight containers, and their tolerances, are given in Table 4.

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	
1C	2 438	8		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		

* The exact lengths in millimetres are shown in Table 4.

** In certain countries there are legal limitations to this length.

*** In certain countries there are legal limitations to this height.

TABLE 2 – **Nominal dimensions of series 2 freight containers, intended for internal continental systems**

Freight container designation	Series 2							
	Height*			Width*			Length*	
	mm	ft*	in	mm	ft*	in	mm	ft*	in
2A	2 100	6	11	2 300	7	7	2 920	9	7
2B	2 100	6	11	2 100	6	11	2 400	7	11
2C	2 100	6	11	2 300	7	7	1 450	4	9

* The exact dimensions in feet are shown in Table 4.

TABLE 3 – **Nominal dimensions of series 3 freight containers, intended 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 in feet are shown in Table 4.

** In certain countries there are legal limitations to this width.

4 OVERALL DIMENSIONS AND RATINGS

4.1 The overall external dimensions, tolerances and ratings are given in Table 4.

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

TABLE 4 – **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 −0.187 5	2 438	0 −5	8		0 −0.187 5	12 192	0 −10	40		0 −0.375	30 480	67 200
	1AA	2 591	0 −5	8	6	0 −0.187 5	2 438	0 −5	8		0 −0.187 5	12 192	0 −10	40		0 −0.375	30 480	67 200
	1B	2 438	0 −5	8		0 −0.187 5	2 438	0 −5	8		0 −0.187 5	9 125	0 −10	29	11.25	0 −0.375	25 400	56 000
	1C	2 438	0 −5	8		0 −0.187 5	2 438	0 −5	8		0 −0.187 5	6 058	0 −6	19	10.5	0 −0.25	20 320	44 800
	1D	2 438	0 −5	8		0 −0.187 5	2 438	0 −5	8		0 −0.187 5	2 991	0 −5	9	9.75	0 −0.187 5	10 160	22 400
	1E	2 438	0 −5	8		0 −0.187 5	2 438	0 −5	8		0 −0.187 5	1 968	0 −5	6	5.5	0 −0.187 5	7 110	15 700
	1F	2 438	0 −5	8		0 −0.187 5	2 438	0 −5	8		0 −0.187 5	1 460	0 −3	4	9.5	0 −0.125	5 080	11 200
SERIES 2	2A	2 100	0 −5	6	10.5	+ 0.187 5 0	2 300	0 −5	7	6.5	+ 0.187 5 0	2 920	0 −5	9	7	0 −0.187 5	7 110	15 700
	2B	2 100	0 −5	6	10.5	+ 0.187 5 0	2 100	0 −5	6	10.5	+ 0.187 5 0	2 400	0 −5	7	10.5	0 −0.187 5	7 110	15 700
	2C	2 100	0 −5	6	10.5	+ 0.187 5 0	2 300	0 −5	7	6.5	+ 0.187 5 0	1 450	0 −5	4	9	+ 0.062 5 −0.125	7 110	15 700
SERIES 3	3A	2 400	± 6	7	10.5	± 0.25	2 650	± 7	8	8.75	± 0.25	2 100	± 5	6	10.5	± 0.187 5	5 080	11 200
	3B	2 400	± 6	7	10.5	± 0.25	1 325	± 3	4	4.15	± 0.125	2 100	± 5	6	10.5	± 0.187 5	5 080	11 200
	3C	2 400	± 6	7	10.5	± 0.25	1 325	± 3	4	4.15	± 0.125	2 100	± 5	6	10.5	± 0.187 5	2 540	5 600

* Based on 1 ton = 2 240 lb.