

Revised

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

**ISO RECOMMENDATION
R 668**

DIMENSIONS AND RATINGS OF FREIGHT CONTAINERS

2nd EDITION

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This second edition supersedes the first edition.

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BRIEF HISTORY

The ISO Recommendation R 668, *Dimensions and ratings of freight containers*, was drawn up by Technical Committee ISO/TC 104, *Freight containers*, the Secretariat of which is held by the American National Standards Institute (ANSI).

Work on this question led to the adoption of Draft ISO Recommendation No. 804, which was circulated to all ISO Member Bodies for enquiry in May 1965. It was approved by 20 Member Bodies. Five Member Bodies opposed the approval of the Draft (Australia, France, Ireland, Poland and the U.S.S.R.).

The Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided in February 1968 to accept it as an ISO RECOMMENDATION.

BRIEF HISTORY RELATING TO THE 2nd EDITION

The revision of ISO Recommendation R 668-1968 was undertaken in 1969 and consists of minor modifications and of the addition of a supplementary container height in Table 3.

This revision was approved by the majority of the P-Members of ISO/TC 104, and, in an abbreviated procedure, as Draft ISO Recommendation No. 2183 was submitted direct to the ISO Council, which decided to accept it as the second edition of ISO Recommendation R 668.

This edition cancels and supersedes the first edition of ISO Recommendation R 668-1968.

DIMENSIONS AND RATINGS OF FREIGHT CONTAINERS

1. DEFINITIONS

1.1 A *freight container* is 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.

1.2 *Rating*, for the purposes of this document, means the maximum gross weight and is the maximum permissible combined weight of the freight container and of its contents.

2. CLASSIFICATION AND DESIGNATION OF FREIGHT CONTAINERS

2.1 Two series of freight containers are approved :

- those of series 1, having a uniform cross-section of $2\,438 \text{ mm} \times 2\,438 \text{ mm}$ (8 ft \times 8 ft) and the 1AA container having a cross-section of $2\,591 \text{ mm} \times 2\,438 \text{ mm}$ (8 ft 6 in \times 8 ft) are shown in Table 1;
- those of series 2, having a uniform height of $2\,100 \text{ mm}$ (6 ft 10 1/2 in), are shown in Table 2.

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

TABLE 1 Nominal dimensions of series 1 freight containers

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	5

* The exact lengths in millimetres are shown in Table 3.

** 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

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 3.

3. OVERALL DIMENSIONS AND RATINGS

3.1 The overall external dimensions, tolerances and ratings are given in Table 3.

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

TABLE 3 - Actual dimensions, permissible tolerances and ratings

Freight container designation	Height			Width			Length			Rating (max. gross weight)		
	mm	Tolerances mm	ft in	mm	Tolerances mm	ft in	mm	Tolerances mm	ft in	Tolerances in	kg	tons (1 ton = 2 240 lb)
		in			in			in				
1A	2 438	0 -5	8	2 438	0 -5	8	12 192	0 -10	40	0 -0.375	30 480	30
1AA	2 591	0 -5	8 6	2 438	0 -5	8	12 192	0 -10	40	0 -0.375	30 480	30
1B	2 438	0 -5	8	2 438	0 -5	8	9 125	0 -10	29	11.25 -0.375	25 400	25
1C	2 438	0 -5	8	2 438	0 -5	8	6 058	0 -6	19	10.5 -0.25	20 320	20
1D	2 438	0 -5	8	2 438	0 -5	8	2 991	0 -5	9	9.75 -0.187 5	10 160	10
1E	2 438	0 -5	8	2 438	0 -5	8	1 968	0 -5	6	5.5 -0.187 5	7 110	7
1F	2 438	0 -5	8	2 438	0 -5	8	1 460	0 -3	4	9.5 -0.125	5 080	5
2A	2 100	0 -5	6 10.5	2 300	0 -5	7 6.5	2 920	0 -5	9	7 -0.187 5	7 110	7
2B	2 100	0 -5	6 10.5	2 100	0 -5	6 10.5	2 400	0 -5	7	10.5 -0.187 5	7 110	7
2C	2 100	0 -5	6 10.5	2 300	0 -5	7 6.5	1 450	0 -5	4	9 +0.062 5 -0.125	7 110	7