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**ISO 6346**

Fourth edition
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# Freight containers — Coding, identification and marking

*Conteneurs pour le transport de marchandises — Codage, identification et marquage*



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# Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 104, *Freight containers*, Subcommittee SC 4, *Identification and communication,* in collaboration with European Committee for Standardization (CEN) Technical Committee CEN/TC 119, *Intermodal loading units and Cargo securing (ILUCS),* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 6346:1995), which has been technically revised. It also incorporates the Amendment ISO 6346:1995/Amd 3:2012.

The main changes are as follows:

— Incorporation of previous amendments to the standard to include the provision of markings to identify containers with reduced stacking or racking;

— Inclusion of new markings to identify over width containers;

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

# Freight containers — Coding, identification and marking

## 1 Scope

**1.1** This document provides a system for the identification and presentation of information about freight containers. The identification system is intended for general application, for example in documentation, control and communications (including automatic data processing systems), as well as for display on the containers themselves.

The methods of displaying identification and certain other data (including operational data) on containers by means of permanent marks are included.

**1.2** This document specifies:

a) a container identification system, with an associated system for verifying the accuracy of its use, having:

   — mandatory marks for the presentation of the identification system for visual interpretation, and

   — features to be used in optional Automatic Equipment Identification (AEI) and electronic data interchange (EDI);

b) a coding system for data on container size and type, with corresponding marks for their display;

c) operational marks, both mandatory and optional;

d) physical presentation of marks on the container.

**1.3** The terms "mandatory" and "optional" in this document are used to differentiate those ISO marking provisions which shall necessarily be fulfilled by all containers from those which are not required of all containers. The optional marks are included to further comprehension and promote uniform application of the optional mark. If a choice has been made to display an optional mark, the provisions laid down in this document relating to the mark shall be applied. The terms "mandatory" and "optional" do not refer to requirements of any regulatory body.

**1.4** This document applies to all freight containers covered by International Standards ISO 668, parts 1 to 5 of ISO 1496, ISO 8323 and should, wherever appropriate and practicable, be applied:

— to containers other than those covered by the International Standards mentioned in Clause 2;

— to container-related and/or detachable equipment.

NOTE 1 Containers marked according to previous editions of ISO 6346 need not be re-marked.

**1.5** This document does not cover temporary operational marks of any kind, permanent marks, data plates, etc. which may be required by intergovernmental agreements, national legislation or nongovernmental organizations.

NOTE 2 Some of the major international conventions whose container-marking requirements are not covered in this document are as follows:

— International Convention for Safe Containers (1972, as amended) (CSC), International Maritime Organization (IMO);

— Customs Convention on Containers 1956 and 1972, related to temporary admission and transport under customs seal.

— Convention on Temporary Admission (Istanbul, 26 June 1990), related to temporary admission.

It should not be assumed that this list is exhaustive.

This document does not cover the display of technical data on tank containers (see ISO 1496-3), nor does it, in any way, include identification marks or safety signs for items of cargo which may be carried in freight containers.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10374, *Freight containers — Automatic identification*

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

## 4 Identification system and its associated marks

### 4.1 Identification system

#### 4.1.1 General

The identification system shall consist only of the following elements, all of which shall be included:

— owner code: three letters (see 4.1.2);

— equipment category identifier: one letter (see 4.1.3);

— serial number: six numerals (see 4.1.4);

— check digit: one numeral (see 4.1.5).

#### 4.1.2 Owner code

Reference (1) in Figures 1 to 4

The container owner's code shall consist of three capital letters, shall be unique and shall be registered with the Registration Authority.

The name and contact information of the Registration Authority for this document can be found at www.iso.org/maintenance_agencies.

#### 4.1.3 Equipment category identifier

Reference (2) in Figures 1 to 4

The equipment category identifier consists of one capital letter of the Latin alphabet as follows:

— U for all freight containers;

— J for detachable freight container-related equipment;

— Z for trailers and chassis.

#### 4.1.4 Serial number

Reference (3) in Figures 1 to 4

The container serial number shall consist of six Arabic numerals. If the series of significant numerals does not total six, they shall be preceded by sufficient zeroes to make up six numerals (for example, if the series of significant numerals is 1234, the serial number is 001234).

#### 4.1.5 Check digit

*Re*ference (4) in Figures 1 to 4

The check digit provides a means of validating the transmission accuracy of the owner code and serial number and shall be determined as in Annex A. The check digit shall validate the owner code, equipment category identifier and serial number of the container.

### 4.2 Identification marks

The use of marks in accordance with the identification system specified in 4.1, i.e. owner code, equipment category identifier, serial number and check digit, is mandatory for freight containers and recommended for all equipment as stated in 4.1.3. The characteristics (size, shape, layout, etc.) detailed in 7.1 and 7.2.1 shall be displayed as nearly as practicable in accordance with Clause 7, i.e., legible to the human eye.

## 5 Size and type codes and their associated marks

### 5.1 Purpose

The type and main external dimensions of the container shall be identified with codes marked on the container. Only those freight containers which conform with both the ISO top-handling capability and structural stacking requirements set forth in ISO 1496 shall be marked with size and type codes in accordance with 5.2.2 and 5.2.3.

### 5.2 Size and type codes

#### 5.2.1 General

This information is mandatory for the marking of containers covered by the International Standards listed in Clause 2 and shall be coded as in 5.2.2 and 5.2.3.

The size and type codes, when displayed on the container, shall be used as a whole, i.e., the information must not be broken into its component parts.

The size and type codes shall be displayed in accordance with Clause 7.

#### 5.2.2 Size: two alphanumeric characters

Reference (5) in Figures 1 to 4

The container size (i.e. external dimensions) shall be indicated by two characters as follows:

— First character: numeric or alphabetic character representing the length.

— Second character: numeric or alphabetic character representing the width and the height.

These two characters shall be determined in accordance with Annex D.

### 5.2.3 Type: two characters

Reference (6) in Figures 1 to 4

The container type and main characteristics shall be indicated by two characters as follows:

— First character: alphabetic character representing the container type.

— Second character: numeric or alphabetic character representing main characteristics related to the container type.

These two characters shall be selected in accordance with Annex E.

NOTE For the purpose of exchanging data when indication of the main characteristics is not essential, the "type group code designation" as shown in Annex E can be used.

# 6 Operational marks

## 6.1 General

The marks in this section are not intended to correspond to any particular code (e.g., for use in data transmission or any other purpose). They are solely intended as markings for use on freight containers to convey certain information or give visual warnings.

## 6.2 Mandatory operational marks

### 6.2.1 Maximum gross and tare masses

The maximum gross and tare masses shall be marked on a container as:

MAX GROSS 00 000 kg
00 000 lb

TARE 00 000 kg
00 000 lb

For safety reasons, containers tested in conformance with the approved methods specified in that part of ISO 1496 applicable to the type of container in question, i.e., parts 1, 2, 3, 4 or 5 of ISO 1496, shall be uniformly marked with the maximum gross mass used for those tests.

Furthermore, the "maximum gross mass" marked on the container in accordance with this document shall be identical to that shown on the CSC Safety Approval Plate.

As indicated above, the masses shall be expressed in both kilograms (kg) and pounds (lb).

NOTE 1 kg = 2 204 lb.

### 6.2.2 Air/surface container symbol

All air/surface containers shall display the symbol specified in Annex B.

#### 6.2.3 Warning sign of overhead electrical danger

All containers equipped with ladders shall display a warning sign in accordance with the details given in Annex C.

#### 6.2.4 Height mark for containers higher than 2,6 m (8 ft 6 in)

All containers higher than 2,6 m (8 ft 6 in) shall bear the following mandatory marks:

a) on both sides, a height mark similar to that described in Annex F;

b) an area of alternating black and yellow stripes on the top members of each end frame and side wall at each corner adjacent to the corner fitting, of 300 mm (12 in) minimum length, that can be seen from the ground or from the top. See Figure 5.

In addition, any other optional marks, such as a mirror image of the mark described in Annex F, may be displayed at any convenient location (e.g., front wall).

#### 6.2.5 Width mark for containers with an overall width greater than 2 438 m (8 ft).

All containers with an overall width greater than 2 438 m (8 ft) shall bear a mark similar to that described in Annex G on the ends and the roof at both ends.

Where there is insufficient space to fit the marking on the ends or the roof, for example on tank containers, the marking shall be as wide as is practicable on the ends and may be omitted on the roof.

### 6.3 Optional operational mark (maximum mass of payload)

It is common industry practice to mark containers with maximum payload in addition to the maximum gross and tare masses.

If used, the maximum mass of payload should be marked on a container in accordance with the requirements of 6.2.1, positioned after the maximum gross and tare masses as follows:

| | |
|---|---|
| **MAX GROSS** | **00 000 kg** |
| | **00 000 lb** |
| **TARE** | **00 000 kg** |
| | **00 000 lb** |
| **PAYLOAD** | **00 000 kg** |
| | **00 000 lb** |

## 7 Physical display of marks

### 7.1 Size and colour of marks

The letters and numerals of the owner code, equipment category identifier, serial number and check digit shall be not less than 100 mm (4 in) high.

The letters and numerals for MAX GROSS, TARE and, when used, PAYLOAD shall be not less than 50 mm (2 in) high.

All characters shall be of proportionate width and thickness, they shall be durable and in a colour contrasting with that of the container.

## 7.2 Layout and location of marks

The requirements of this clause are particularly applicable to containers of the “closed box” type. For containers of other types, all possible practicable steps should be taken to follow the marking layout and location given for the “closed box” type of container.

### 7.2.1 Layout of marks

#### 7.2.1.1 General

The layout of the owner code, equipment category identifier, serial number and check digit on containers shall preferably be in one single horizontal line (see Figure 1). Where constructional features of the container dictate otherwise, the layout may be vertical (see Figure 2).

The layout of size and type codes should, as far as practicable, be in a single horizontal line underneath the horizontal line giving the owner code, equipment category identifier, serial number and check digit (see Figure 1).

When the owner code, equipment category identifier, serial number and check digit are displayed vertically, the size and type codes should be placed adjacent to the other mandatory marks (see Figure 2 and Figure 3).

If, on some special-purpose containers, a fully horizontal or fully vertical layout is not possible, the layout of the other mandatory identification marks shall be maintained in the horizontal or vertical groupings as specified below (see Figure 3 and Figure 4).

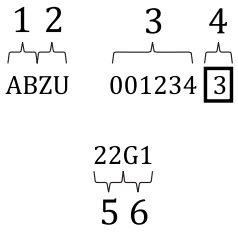
On those special-purpose containers where a fully horizontal or fully vertical layout is not possible and the layout of the other mandatory identification marks is horizontal, the size and type codes should be placed beneath the other mandatory marks (see Figure 4).

The size and type codes should be used as a whole (see 5.2).

The owner code and equipment category identifier shall be joined and shall be separated from the serial number by at least one character space. The serial number shall be separated from the check digit by one character space and the check digit shall be displayed in a box.

EXAMPLE

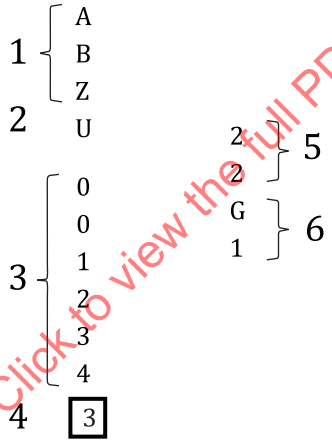
A general purpose container in accordance with ISO 1496, having passive vents at the upper part of the cargo space, a length of 6 068 mm, a width of 2 438 mm, a height of 2 591 mm, having a unique registered owner code of ABZ, an equipment category identifier of U and a serial number of 001234 will have the layout as shown in Figure 1 to Figure 4.




**Key**

1 owner's code
2 category identifier
3 serial number
4 check digit
5 size code
6 type code

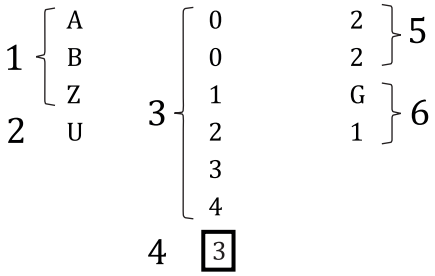
**Figure 1 — Mandatory identification marks - preferred horizontal layout**




**Key**

1 owner's code
2 category identifier
3 serial number
4 check digit
5 size code
6 type code

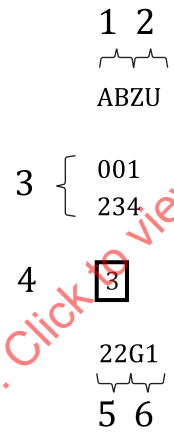
**Figure 2 — Mandatory identification marks - preferred vertical layout**




**Key**

1 owner's code
2 category identifier
3 serial number
4 check digit
5 size code
6 type code

**Figure 3 — Mandatory identification marks - Alternative (multiple column) vertical layout**




**Key**

1 owner's code
2 category identifier
3 serial number
4 check digit
5 size code
6 type code

**Figure 4 — Mandatory identification marks - Alternative horizontal grouping layout**



#### 7.2.1.2 Mandatory operational marks

The layout of maximum gross and tare masses shall be as stated in 6.2.1.

The layout of the air/surface container symbol shall be as shown in Annex B.

The layout of the sign warning of overhead electrical danger shall be as shown in Annex C.

The layout of the height mark for containers having a height greater than 2,6 m shall be as stated in Annex F.

The layout for the width mark for containers having a width greater than 2 438 m shall be as stated in Annex G.

#### 7.2.1.3 Optional operational mark (maximum mass of payload)

Where marked, the layout of payload shall be as stated in 6.3.

### 7.2.2 Location of marks

#### 7.2.2.1 Mandatory identification marks

The mandatory marks of 4.1 and 5.2, i.e., owner code, equipment category identifier, serial number, check digit, and size and type codes, shall be positioned on the container as far as practicable as shown in Figure 5.

Containers with reduced stacking or reduced racking strength shall have size-type code marks on the front (blind end) and on the roof at either end.

#### 7.2.2.2 Operational marks

The mandatory operational marks of 6.2.1, i.e., maximum gross and tare masses, shall be positioned on the container as far as practicable as shown in Figure 5.

The location of the air/surface container symbol shall be as given in Annex B.

The location of the symbol warning of overhead electrical danger shall be as given in Annex C.

The location of the height warning symbol shall be as given in Annex F and shown in Figure 5.

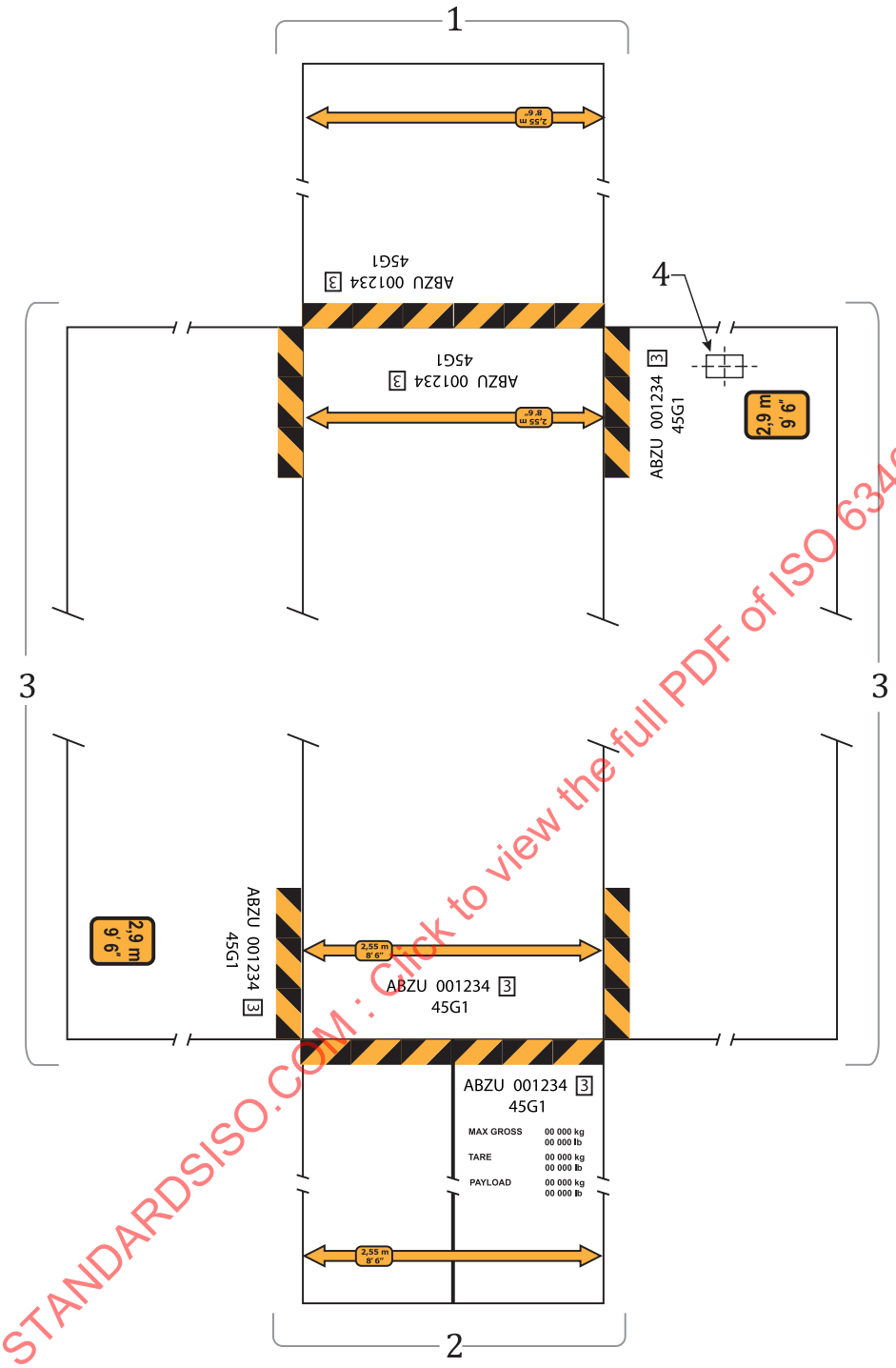
The location of the width mark shall be as given in Annex G and shown in Figure 5.

The optional operational mark of 6.3, i.e., maximum payload or net mass, shall be positioned on the container as far as practicable as shown in Figure 5.

#### 7.2.2.3 Other marks and devices

Marks other than those stipulated by this document shall be displayed on the container so that they do not in any way interfere with the marks described in this document.

For the Automatic Equipment Identification (AEI) system, the AEI tag shall be positioned on the container as specified in ISO 10374.






**Key**

| | | | |
|---|---|---|---|
| 1 | blind / front end | 3 | container side |
| 2 | door / rear end | 4 | automatic equipment identifier tag |

NOTE 1 Black and yellow stripes adjacent to the corner fitting can be reduced to a length of 300 mm min.

NOTE 2 Size and type marking on the roof and on the front (blind end) are optional except for containers with reduced stacking and/or racking.

NOTE 3 Mounting of AEI tag is optional.

NOTE 4 “PAYLOAD” marking is optional.

**Figure 5 — Location of mandatory and optional marks**

# Annex A
(normative)

# Determination of check digit

The check digit of a container identification system is determined by following the procedure outlined in A.1 to A.4. A sample calculation is presented in A.5.

## A.1 Numerical equivalents of container owner code, category identifier and serial number

Each letter of the owner code, the equipment category identifier and each numeral of the serial number all be consecutively allocated a numerical value in accordance with Table A.1.

## A.2 Weighting factor

Each numerical equivalent, determined in accordance with A.1, shall be multiplied by a weighting factor in the range $2^0$ to $2^9$. The weighting factor $2^0$ is applied to the first letter of the owner code, and then in increasing powers of 2, rising to $2^9$ for the last digit of the serial number.

## A.3 Modulus

The sum of the products obtained according to A.2 shall be divided by a modulus of value eleven.

**Table A.1 — Equivalent values**

| Owner code/category identifier | | | | Serial number |
|---|---|---|---|---|
| Letter | Equivalent value | Letter | Equivalent value | Numeral or equivalent value [a] |
| A | 10 | N | 25 | 0 |
| B | 11 | O | 26 | 1 |
| C | 12 | P | 27 | 2 |
| D | 13 | Q | 28 | 3 |
| E | 14 | R | 29 | 4 |
| F | 15 | S | 30 | 5 |
| G | 17 | T | 31 | 6 |
| H | 18 | U | 32 | 7 |
| I | 19 | V | 34 | 8 |
| J | 20 | W | 35 | 9 |
| K | 21 | X | 36 | |
| L | 23 | Y | 37 | |
| M | 24 | Z | 38 | |

NOTE The equivalent values 11, 22 and 33 are omitted as they are multiples of the modulus (see A.3).

[a] The serial number and its equivalent value are identical.

## A.4 Value of check digit

Table A.2 indicates the check digit value corresponding to the remainder value of the division effected in conformity with A.3.

**Table A.2 — Check digit value**

| Remainder[a] | Check digit |
|---|---|
| 10 | 0 |
| 9 | 9 |
| 8 | 8 |
| 7 | 7 |
| 6 | 6 |
| 5 | 5 |
| 4 | 4 |
| 3 | 3 |
| 2 | 2 |
| 1 | 1 |
| 0 | 0 |

[a] Where it is required to avoid the duplication resulting from the value zero being assigned as a remainder of both10 and 0, it is recommended that serial numbers resulting in remainders of 10 should not be used.

## A.5 Sample calculation of the check digit

| Stage | Calculation | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| I | Owner code: | | | | Serial number | | | | | |
| | Z | E | P | U | 0 | 0 | 3 | 7 | 2 | 5 |
| II | Equivalent factors: | | | | | | | | | |
| | 38 | 15 | 27 | 32 | 0 | 0 | 3 | 7 | 2 | 5 |
| III | Weighting factors | | | | | | | | | |
| | 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 |
| IV | Product of columns in lines II and III | | | | | | | | | |
| | 38 | 30 | 108 | 256 | 0 | 0 | 192 | 896 | 512 | 2 560 |

The sum of all the products in line IV = 4 592

The sum divided by the modulus $11 = 417 + \frac{5}{11}$

The remainder is 5 and, by referring to Table A.2, it is found that the check digit is 5 in this case.

# Annex B
(normative)

# Symbol to denote air/surface container

To denote that a container is an air/surface container with stacking limitations, the symbol depicted below shall be used.

The symbol shall be located in the top left-hand corner of the end walls, side walls and the roof, where appropriate (see ISO 8323).

The aircraft in the symbol shall be at least 130 mm (5 in) high and 360 mm (14 in) long. The stacking symbol shall be at least 280 mm (11 in) high and 260 mm (10 in) wide. The recommended proportions should be used. The capital letters shall be at least 80 mm (3 in) high.

The colour of the symbol should be black. If the colour of the container is such that the symbol does not show clearly, a panel of a suitable colour, preferably white, should be provided as background.

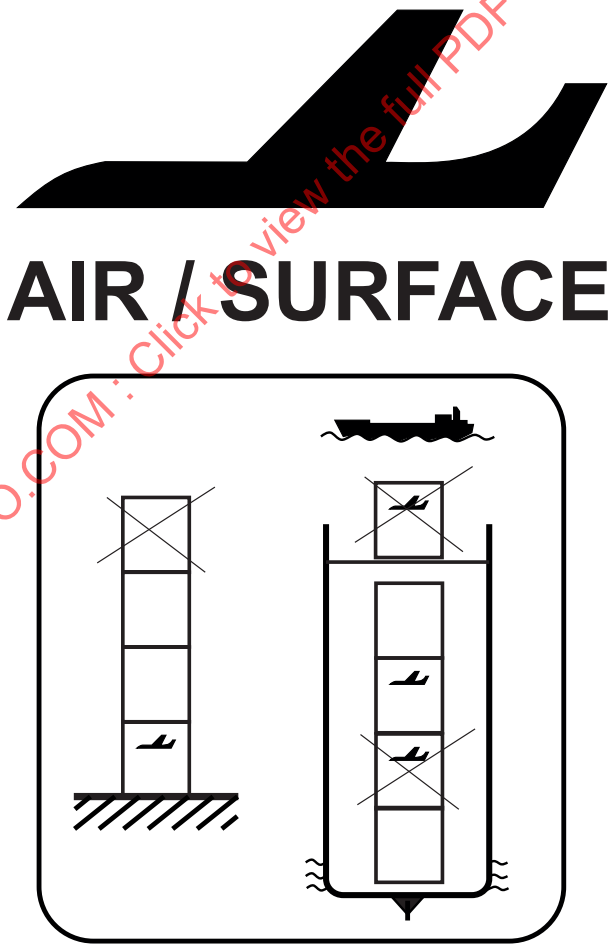



**Figure B.1 — Symbol to denote air/surface container**

# Annex C
(normative)

# Sign warning of overhead electrical danger

The mandatory sign warning of overhead electrical danger for all containers equipped with ladders shall consist of a black symbol on a yellow background, surrounded by a black border (see example below).

The height of the symbol (lightning flash) shall be a minimum of 175 mm (6 875 in).

The size of the warning sign, measured between the outside edges of the black border, shall be not less than 230 mm (9 in).

The mark shall be located in an area adjacent to the ladder.

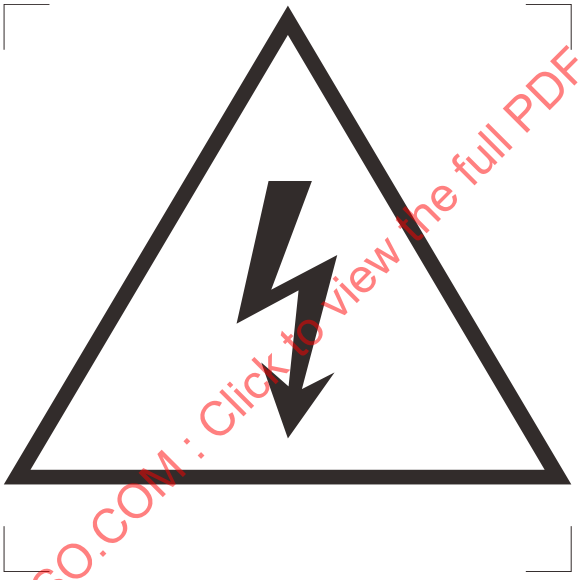


**Figure C.1 — Caution, risk of electric shock – IEC 60417 - 6042**

# Annex D
(normative)

# Size code designation

The two alphanumeric characters used to designate the size code of a container are chosen as follows:

— first character, representing the length, in accordance with Table D.1;

— second character, representing the width and height, in accordance with Table D.2.

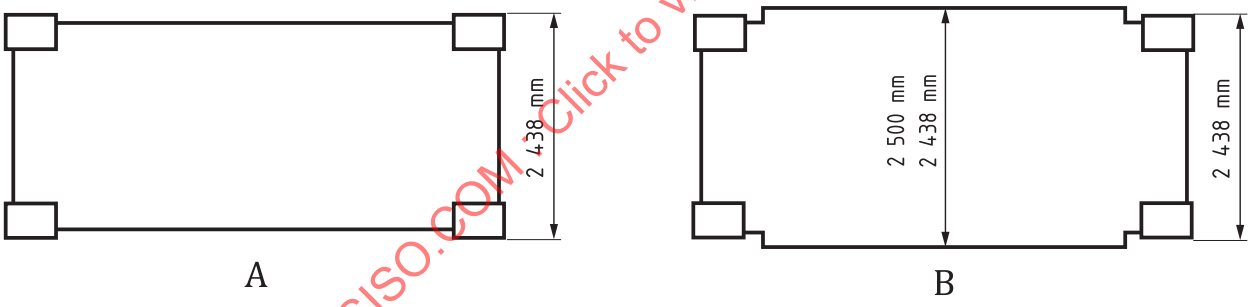
**Table D.1 — First size-code character**

| Container length[a] | | | Code character |
|---|---|---|---|
| mm | ft | in | |
| 2 991 | 10 | | 1 |
| 6 058 | 20 | | 2 |
| 9 125 | 30 | | 3 |
| 12 192 | 40 | | 4 |
| 13 716 | 45 | | 5 |
| Unassigned | | | 6 |
| Unassigned | | | 7 |
| Unassigned | | | 8 |
| Unassigned | | | 9 |
| 7 150 | | | A |
| 7 315 | 24 | | B |
| 7 430 | 24 | 6 | C |
| 7 450 | - | | D |
| 7 820 | - | | E |
| 8 100 | - | | F |
| 12 500 | 41 | | G |
| 13 106 | 43 | | H |
| 13 600 | - | | K |
| Unassigned | | | L |
| 14 630 | 48 | | M |
| 14 935 | 49 | | N |
| 16 154 | 53 | | P |
| Unassigned | | | R |

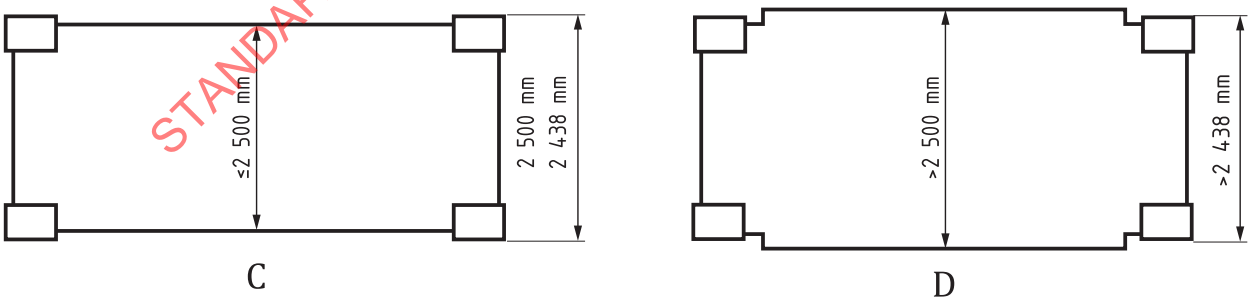
[a] Imperial dimensions are nominal lengths, for example a 20ft container is actually 19 ft 10 ½ in, see ISO 668.

**Table D.2 — Second size-code character**

| Container height | | Code character | | | |
|---|---|---|---|---|---|
| | | Container Width | | | |
| | | 2 438 mm at Corner fittings (8 ft) Figure D.1 a) | | > 2 438 mm at corner fittings Figure D.1 b) | |
| | | 2 438 mm (8 ft) Overall | > 2 438 mm (8 ft) & ≤ 2 500 mm Overall | ≤ 2 500 mm Overall | > 2 500 mm Overall |
| mm | ft in | **Diagram A** | **Diagram B** | **Diagram C** | **Diagram D** |
| 2 438 | 8 | 0 | | | |
| 2 591 | 8 6 | 2 | R | C | L |
| 2 742 | 9 | 4 | S | D | M |
| 2 896 | 9 6 | 5 | T | E | N |
| > 2 896 | >9 6 | 6 | U | F | P |
| 2 438 > h > 1 219 | 8 > h > 4 | 7[a] | | | |
| 1 295[a] | 4 3 | 8 | | | |
| ≤ 1 219 | ≤ 4 | 9 | | | |
| [a] Container height 1 295 mm / 4 ft 3 in strictly excluded from this category | | | | | |




**a) 2 438 mm width at Corner Fittings**




**b) >2 438 mm width at Corner Fittings**

**Figure D.1 — Container widths**

# Annex E
(normative)

# Type Code designation

Table E.1 gives the codes to identify the container type and other characteristics related to its type, for the purpose of preparing container fleet/stock inventory or for exchange of operational data.

The detailed type code list does not cover all the possible characteristics of any type of container. Indeed, for some types, individual categories have not been listed at all, as it is considered that further detailed study is necessary before a satisfactory breakdown can be agreed.

**E.2** Where alternative unassigned code numbers exist and where a code number is desired for a container having important characteristics not mentioned in Table E.1, it is recommended that the highest unassigned number in the appropriate block be used, pending further allocation of code numbers by the ISO/TC 104 subcommittees concerned.

**E.3** Where other characteristics related to the container type are unspecified or unknown, the container type shall be identified by its group code as indicated in Table E.1 in the column "Type group code designation".

**Table E.1 — Detailed type-code**

| Code | Type designation | Type group code | Main characteristics | Detailed type code[a] | Detailed type code[b] |
|---|---|---|---|---|---|
| **G** | **General purpose container without ventilation** | | | | |
| | | GP | — Opening(s) at one end or both ends | G0 | GA |
| | | | — Passive vents at upper part of cargo space | G1 | GB |
| | | | — Opening(s) at one or both ends plus "full" opening(s) on one or both sides | G2 | GD |
| | | | — Opening(s) at one or both ends plus "partial" opening(s) on one or both sides | G3 | GG |
| | | | — (unassigned) | G4 | GJ |
| | | | — (unassigned) | G5 | GM |
| | | | — (unassigned) | G6 | GV |
| | | | — (unassigned) | G7 | GW |
| | | | — (unassigned) | G8 | GX |
| | | | — With bulk capabilities | G9 | GY |
| **V** | **General purpose container with ventilation** | | | | |

[a] For containers designed and tested with full stacking and racking capabilities, as defined in the ISO 1496 series.

[b] This includes containers designed and tested with reduced stacking and/or racking capabilities, but not containers that are approved or operated with one door off or otherwise operated with a temporary reduced capability.

[c] 100 kPa = 1 bar = 105 Pa = 105 N/m2 = 14,5 ibf/in2.

**Table E.1** *(continued)*

| Code | Type designation | Type group code | Main characteristics | Detailed type code[a] | Detailed type code[b] |
|---|---|---|---|---|---|
| | | VH | — Non-mechanical system, vents at lower and upper parts of cargo space | V0 | VA |
| | | | — (unassigned) | V1 | VB |
| | | | — Mechanical ventilation system, located internally | V2 | VD |
| | | | — (unassigned) | V3 | VG |
| | | | — Mechanical ventilation system, located externally | V4 | VEJ |
| | | | — (unassigned) | V5 | VM |
| | | | — (unassigned) | V6 | VV |
| | | | — (unassigned) | V7 | VW |
| | | | — (unassigned) | V8 | VX |
| | | | — (unassigned) | V9 | VY |
| **B** | **Dry bulk cargo** | | | | |
| | — Non-pressurised, box type | BU | — Closed | B0 | BA |
| | | | — Airtight | B1 | BB |
| | | | — (unassigned) | B2 | BD |
| | | | — Rear Discharge / Cat flap type | B3 | BG |
| | | | — Rear Discharge / full width opening | B4 | BJ |
| | | | — Rear Discharge / full width fixed | B5 | BM |
| | | | — with removable hard top equipped with full length hinged hatch, and full length and width bottom discharge | B6 | BV |
| | | | — with open top container with full length and width bottom discharge | B7 | BW |
| | | | — Front Discharge / full width | B8 | BX |
| | | | — Side Discharge | B9 | BY |
| **S** | **Named cargoes and non-cargo carrying containers** | | | | |
| | — Named cargo | SN | — Livestock carrier | S0 | SA |
| | | | — Automotive carrier | S1 | SB |
| | | | — Live fish carrier | S2 | SD |
| | | | — (unassigned) | S3 | SG |
| | — Non-cargo carrying containers | SC | — Generator | S4 | SJ |
| | | | — (unassigned) | S5 | SM |
| | | | — (unassigned) | S6 | SV |
| | | | — (unassigned) | S7 | SW |

[a] For containers designed and tested with full stacking and racking capabilities, as defined in the ISO 1496 series.

[b] This includes containers designed and tested with reduced stacking and/or racking capabilities, but not containers that are approved or operated with one door off or otherwise operated with a temporary reduced capability.

[c] 100 kPa = 1 bar = 105 Pa = 105 N/m2 = 14,5 ibf/in2.

**Table E.1** *(continued)*

| Code | Type designation | Type group code | Main characteristics | Detailed type code[a] | Detailed type code[b] |
|---|---|---|---|---|---|
| | | | — Non-cargo carrying container for sensitive installed equipment | S8 | SX |
| | | | — Non-cargo carrying containers for residential or commercial use | S9 | SY |
| **R** | **Thermal container** | | | | |
| | — Refrigerated | RE | — Mechanically refrigerated | R0 | RA |
| | — Refrigerated and heated | RT | — Mechanically refrigerated and heated | R1 | RB |
| | — Self-powered | RS | — Mechanically refrigerated | R2 | RD |
| | | | — Mechanically refrigerated and heated | R3 | RG |
| | | | — (unassigned) | R4 | RJ |
| | — Integrated machinery | RI | — Integrated mechanically refrigerated and heated | R5 | RM |
| | | | — (unassigned) | R6 | RV |
| | — Heated | RH | — Heated | R7 | RW |
| | | | — Heated, self-powered | R8 | RX |
| | | | — (unassigned) | R9 | RY |
| **H** | **Thermal container** | | | | |
| | — Refrigerated and/or heated with removable equipment | HR | — Refrigerated and/or heated with removable equipment located externally, heat transfer coefficient $K$ = 0.4 W/(m$^2$-K) | H0 | HA |
| | | | — Refrigerated and/or heated with removable equipment located internally | H1 | HB |
| | | | — Refrigerated and/or heated with removable equipment located externally, heat transfer coefficient $K$ = 0.7 W/(m$^2$-K) | H2 | HD |
| | | | — (unassigned) | H3 | HG |
| | | | — (unassigned) | H4 | HJ |
| | — insulated | HI | — Insulated; heat transfer coefficient $K$ = 0.4 W/(m$^2$-K) | H5 | HM |
| | | | — Insulated; heat transfer coefficient $K$ = 0. W/(m$^2$-K) | H6 | HV |
| | | | — (unassigned) | H7 | HW |
| | — Eutectic | HE | — Eutectic, remote mechanical refrigeration | H8 | HX |
| | | | — (unassigned) | H9 | HY |
| **W** | **Foldable containers** | | | | |

[a] For containers designed and tested with full stacking and racking capabilities, as defined in the ISO 1496 series.

[b] This includes containers designed and tested with reduced stacking and/or racking capabilities, but not containers that are approved or operated with one door off or otherwise operated with a temporary reduced capability.

c 100 kPa = 1 bar = 105 Pa = 105 N/m2 = 14,5 ibf/in2.

**Table E.1** *(continued)*

| Code | Type designation | Type group code | Main characteristics | Detailed type code[a] | Detailed type code[b] |
|---|---|---|---|---|---|
| | — Foldable general-purpose containers | WR | — container folding on their base structure | W0 | WA |
| | | WS | — container folding on their side structure | W1 | WB |
| | | | — (unassigned) | W2 | WD |
| | | | — (unassigned) | W3 | WG |
| | | | — (unassigned) | W4 | WJ |
| | | | — (unassigned) | W5 | WM |
| | | | — (unassigned) | W6 | WV |
| | | | — (unassigned) | W7 | WW |
| | | | — (unassigned) | W8 | WX |
| | | | — (unassigned) | W9 | WY |
| **U** | **Open-top container** | | | | |
| | | UT | — Opening(s) at one or both ends | U0 | UA |
| | | | — Opening(s) at one or both ends, plus removable top member(s) in end frames | U1 | UB |
| | | | — Opening(s) at one or both ends, plus opening(s) on one or both sides | U2 | UD |
| | | | — Opening(s) at one or both ends, plus opening(s) on one or both sides plus removable top member(s) in end frames | U3 | UG |
| | | | — Opening(s) at one or both ends, plus partial opening on one side and full opening on the other side | U4 | UJ |
| | | | — (unassigned) | U5 | UM |
| | | | — Open topped container with removable hard top | U6 | UV |
| | | | — (unassigned) | U7 | UW |
| | | | — (unassigned) | U8 | UX |
| | | | — Coil carrier | U9 | UY |
| **P** | **Platform (container)** | | | | |
| | — Platform-based container with incomplete superstructure: | PL | — Platform (container) | P0 | PA |
| | Fixed | PF | — Two complete and fixed ends | P1 | PB |
| | | | — Fixed posts, either free-standing or with removable top member | P2 | PD |
| | Folding (collapsible) | PC | -— Folding complete end structure | P3 | PG |

[a] For containers designed and tested with full stacking and racking capabilities, as defined in the ISO 1496 series.

[b] This includes containers designed and tested with reduced stacking and/or racking capabilities, but not containers that are approved or operated with one door off or otherwise operated with a temporary reduced capability.

c 100 kPa = 1 bar = 105 Pa = 105 N/m2 = 14,5 ibf/in2.