

Air cargo equipment — Certified aircraft container for air cargo — Specification and testing

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee ACE/57, Air cargo and ground support equipment, upon which the following bodies were represented:

- Association of Webbing Load Restraint Equipment Manufacturers
- British Airways
- British Narrow Fabrics Association
- Civil Aviation Authority (Airworthiness Division)
- Health and Safety Executive
- Ministry of Defence
- Society of British Aerospace Companies Ltd.
- Society of Motor Manufacturers and Traders Ltd.

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National foreword

This British Standard has been prepared by Technical Committee ACE/57. It is identical with ISO 10327:1995, *Aircraft — Certified aircraft container for air cargo — Specification and testing*, published by the International Organization for Standardization (ISO).

Cross-references

International Standard	Corresponding British Standard
ISO 4171:1993	BS M 71:1994 <i>Air cargo equipment. Interline pallets</i> (Identical)
ISO 7166:1985	BS 2C 8:1988 <i>Specification for rail and stud configuration for aircraft passenger equipment and cargo restraint</i> (Identical)
ISO 8097:1993	BS M 72:1994 <i>Air cargo equipment. Minimum airworthiness requirements and test conditions for certified air cargo unit load devices</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 4116:1986 and ISO 11242 to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 10, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Introduction

For the purpose of this International Standard the minimum essential criteria are identified by use of the key word “shall”. Other recommended criteria are identified by the key word “should”, and while not mandatory, are considered to be of primary importance in providing serviceable, economical, and practical air transport containers. Deviation from recommended criteria should occur only after careful consideration, extensive testing and thorough service evaluation have shown alternative methods to be satisfactory.

1 Scope

This International Standard specifies the basic requirements for the specification and testing of containers that have the nominal base sizes shown in Table 1.

Table 1

Size code of the base in accordance with ISO 8097	Container size	
	mm	in
A	2 235 × 3 175	88 × 125
M	2 438 × 3 175	96 × 125
B	2 235 × 2 743	88 × 108

It provides minimum requirements for a certified aircraft container not exclusively designed for lower deck and wide body aircraft.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 4116:1986, *Air cargo equipment — Ground equipment requirements for compatibility with aircraft unit load devices*.

ISO 4171:1993, *Air cargo equipment — Interline pallets*.

ISO 7166:1985, *Aircraft — Rail and stud configuration for passenger equipment and cargo restraint*.

ISO 8097:1993, *Aircraft — Minimum airworthiness requirements and test conditions for certified air cargo unit load devices*.

ISO 11242:—, *Aircraft — Pressure equalization requirements for cargo container*¹⁾.

IATA, *ULD Technical Manual*, 8th edition²⁾.

3 Base

3.1 Construction

The base shall be enclosed on all four sides by an aluminium extrusion. The corners' integrity with the edges shall be a prime concern. The corner radius shall be 50,8 mm (2 in). The base shall not contain rough or sharp edges potentially dangerous to personnel, cargo, airplane or terminal handling equipment. The construction of the base shall be designed for strength and durability, to withstand harsh treatment in service. The base shall be structurally attached to, and an integral part of, the container assembly. The base shall be removable with hand tools and shall be interchangeable.

The base shall comply with the performance criteria specified in ISO 4171.

3.2 Strength

The minimum core stiffness shall be 429 N m²/m (3 800 lbf in²/in) width/length of core.

4 Superstructure

4.1 Contours

The contour shall conform with the maximum allowable ULD contour. All dimensions shown are external maximum dimensions and provide minimum acceptable airplane clearance (see Figure 1). Any deviation or tolerance shall be to the low side to prevent reduction of clearance.

The maximum allowable ULD contours are shown in the IATA *ULD Technical Manual*, Specification 50/0, Appendix E.

4.2 Fittings and components

4.2.1 Handles and straps

Two flush handles or straps shall be provided for manual movement of the container. Each handle shall provide space suitable for gripping with a gloved hand and shall have a capacity of 445 daN (1 000 lbf) pull in any direction.

¹⁾ To be published.

²⁾ Available from International Air Transport Association, 2000 Peel Street, Montreal, Canada H3A 2R4 or Route de l'Aéroport 33, Case postale 672, 1215 Geneva 15, Switzerland.