

Air cargo equipment — Interline pallets

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Aerospace Standards Policy Committee (ACE/-) to Technical Committee ACE/57, 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 under the direction of the Aerospace Standards Policy Committee. It is identical with ISO 4171:1993 *Air cargo equipment — Interline pallets*, published by the International Organization for Standardization (ISO).

The International Standard is a second edition and cancels and replaces the first edition (ISO 4171:1980), of which it constitutes a technical revision. The first edition was not previously dual numbered as a British Standard.

Cross-reference

International Standard	Corresponding British Standard
ISO 7166:1985	BS 2C 8:1988 <i>Specification for rail and stud configuration for aircraft passenger equipment and cargo restraint</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 4116:1986, ISO 4170:1987 and ISO 8097:1986 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 8, 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.

1 Scope

This International Standard establishes dimensional, structural and environmental requirements for pallets used to transport cargo in aircraft using nets meeting the requirements of ISO 4170.

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 4170:1987, *Air cargo equipment — Interline pallet nets*.

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*.

IATA, *Unit Load Devices (ULD) Technical Manual, 5th edition*¹⁾.

3 Dimensions

3.1 Basic pallet sizes

This International Standard establishes five basic sizes of pallets as given in Table 1.

Table 1

Size code in accordance with ISO 8097	Pallet size	
	mm	in
A	2 235 × 3 175	88 × 125
B	2 235 × 2 743	88 × 108
K	1 534 × 1 562	60,4 × 61,5
L	1 534 × 3 175	60,4 × 125
M	2 438 × 3 175	96 × 125

3.2 Basic pallet configuration

The pallets consist of two basic components, a core and edge rails, forming an essentially flat panel designed to transport cargo on aircraft systems and to be handled on ramp and terminals with ground equipment meeting the standards listed in clause 2 as applicable. The aircraft conveyor systems may be defined as given in Table 2.

Table 2

Device	Characteristic	Dimension	
		mm	in
Ball mat	Ball diameter	25,4	1
	Basis ball pitch	127	5
Roller system	Pallet maximum overhang on major axis	362	14,25
	Pallet maximum overhang on minor axis	254	10
	Roller maximum pitch on major axis	673	26,5
	Roller maximum pitch on minor axis	254	10
	Minimum roller diameter	25,4	1
	Minimum roller length	51	2
Swivel caster	Minimum wheel diameter	25,4	1
	Minimum contact length	51	2
	Maximum caster pitch	305	12

4 Construction

4.1 General

4.1.1 Design, material and construction

The design, materials and construction of the pallet shall be of aircraft quality. The design shall be such as to minimize the need for maintenance and to ease and minimize the cost of maintenance and repair.

4.1.2 Surfaces and edges

The pallet surfaces and edges shall present no roughness or sharp edges potentially injurious to personnel or liable to damage cargo, aircraft and ground equipment parts.

4.1.3 Bottom surface

The bottom surface of the pallet shall be nominally flat and continuous.

¹⁾ 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.