

Aircraft ground support equipment — Self-propelled passenger stairs for large capacity aircraft — Functional requirements

ICS 49.090

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee ACE/57, Aircraft cargo systems and ground 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.

This British Standard, having been prepared under the direction of the Engineering Sector Board, was published under the authority of the Standards Board and comes into effect on 15 January 1997

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The following BSI references relate to the work on this standard:
Committee reference ACE/57
Draft for comment 93/717833 DC

ISBN 0 580 26395 9

Amendments issued since publication

Amd. No.	Date	Comments

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National foreword

This British Standard has been prepared by Technical Committee ACE/57 and is identical with ISO 12056:1996 *Aircraft — Self-propelled passenger stairs for large capacity aircraft — Functional requirements*, published by the International Organization for Standardization (ISO).

Cross-references

Publication referred to	Corresponding British Standard
ISO 6966:1993	BS M 74:1994 <i>Air cargo equipment. Basic requirements for aircraft loading equipment</i> (Identical)
ISO 7000:1989	BS 7324:1990 <i>Guide to graphical symbols for use on equipment</i> (Identical)
ISO 11995:1996	BS M 89:1996 <i>Aircraft ground support equipment — Stability requirements for loading and servicing equipment</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 7718:1984, to which normative reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard.

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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

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

1 Scope

1.1 This International Standard specifies the functional, performance and safety requirements for self-propelled passenger boarding stairs intended for access to the cabin of all aircraft types commonly in service in international civil air transport with a cabin door sill height equal to or exceeding 2,54 m (100 in) over the ground.

1.2 The intent of this International Standard is not to specify equipment design, but rather to define minimum functional and performance requirements and highlight those criteria which are recognized as essential in the environment of international airports by aircraft and vehicle manufacturers as well as air-lines and handling agencies.

1.3 This International Standard shall be applied with due reference to national governmental regulations of the country where the vehicle is to be operated. The main though not exclusive areas in which such national regulations may apply are:

- regulations concerning equipment for use by the public;
- stability and other safety requirements applicable to elevating equipment.

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 6966:1993, *Aircraft — Basic requirements for aircraft loading equipment*.

ISO 7000:1989, *Graphical symbols for use on equipment — Index and synopsis*.

ISO 7718:1984, *Aircraft — Connection of passenger loading bridge or transfer vehicle — Interface requirements in the vicinity of main deck passenger doors*.

ISO 11995:1996, *Aircraft — Stability requirements for loading and servicing equipment*.

3 Structure and overall dimensions

3.1 The stairs should preferably be constructed on a standard automotive chassis of appropriate gross weight rating.

3.2 The stairs should consist of telescopic sections with an upper (main) platform and an intermediate platform, and provide a straight ascent/descent to/from the aircraft door.

3.3 The height of the upper platform shall be adjustable by increments of one full step within a range from 2,54 m (100 in) to 5,6 m (220 in).

3.4 The dimensions, laden weight and other characteristics of the vehicle should meet all applicable government regulations for vehicles to be driven on public roadways, when in the fully retracted position.

3.5 The overall height in the fully retracted position shall not exceed 4 m (158 in).

NOTE 1 This requires that the optional canopy described in clause 10 d) be removable, if provided.

3.6 The overall width of the vehicle, with stabilizers retracted, shall not exceed 2,5 m (98 in), or less if so required by locally applicable regulations.

NOTE 2 Overall height and width of the vehicle may be further restricted by public road regulations in certain countries.

3.7 The lowest point of the vehicle's structure shall not be less than 200 mm (8 in) above a horizontal ground. In addition, the vehicle's underclearance shall allow without interference the transversing of two surfaces intersecting at an angle of 3° (5 %) either in bridging or in cresting.

3.8 The overall swept turning radius of the vehicle in the fully extended position shall be less than 12,2 m (40 ft).

3.9 The cab or driver's position shall not project forward of the leading edge of the upper platform when in its fully retracted position.

3.10 The equipment shall meet the appropriate requirements of ISO 6966.