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TEKST**

Aircraft ground support equipment - Specific requirements -
Part 1: Passenger stairs CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12312-1:2001+A1:2009 sisaldab Euroopa standardi EN 12312-1:2001+A1:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 30.06.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 29.04.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12312-1:2001+A1:2009 consists of the English text of the European standard EN 12312-1:2001+A1:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 30.06.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 29.04.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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Võtmesõnad: aircraft ground support equipment, passenger stairs, requirements

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English Version

**Aircraft ground support equipment - Specific requirements - Part
1: Passenger stairs**

Matériels au sol pour aéronefs - Exigences particulières -
Partie 1: Escaliers passagers

Luftfahrt-Bodengeräte - Besondere Anforderungen - Teil 1:
Fluggasttreppen

This European Standard was approved by CEN on 11 May 2001 and includes Amendment 1 approved by CEN on 1 March 2009.

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Contents

	page
Foreword.....	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 List of hazards.....	6
5 Safety requirements and/or measures	6
5.1 General requirements.....	6
5.2 Stair flight	7
5.3 Platforms	8
5.4 Guard rails	8
5.5 Raising devices and stability.....	9
5.6 Controls, monitoring devices and displays for self-propelled passenger stairs.....	9
5.7 Auxiliary means for powered passenger stairs.....	9
5.8 Canopy.....	10
5.9 Automatic levelling system	10
6 Information for use	10
6.1 Marking	10
6.2 Warnings.....	10
6.3 Instructions	11
7 Verification of requirements	11
Annex A (informative) Examples of passenger stairs	12
Annex B (normative) List of hazards.....	13
Annex ZA (informative)  Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC 	16
Annex ZB (informative)  Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC 	17
Bibliography	18

Foreword

This document (EN 12312-1:2001+A1:2009) has been prepared by Technical Committee CEN/TC 274 "Aircraft ground support equipment", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

This document includes Amendment 1, approved by CEN on 2009-03-01.

This document supersedes EN 12312-1:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

A1 For relationship with EC Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. A1

The Parts of EN 12312 Aircraft ground support equipment — Specific requirements are:

- Part 1: Passenger stairs
- Part 2: Catering vehicles
- Part 3: Conveyor belt vehicles
- Part 4: Passenger boarding bridges
- Part 5: Aircraft fuelling equipment
- Part 6: Deicers and deicing equipment
- Part 7: Aircraft movement equipment
- Part 8: Maintenance stairs and platforms
- Part 9: Container/Pallet loaders
- Part 10: Container/Pallet transfer transporters
- Part 11: Container/Pallet dollies and loose load trailers
- Part 12: Potable water service equipment
- Part 13: Lavatory service equipment
- Part 14: Disabled/Incapacitated passenger boarding equipment
- Part 15: Baggage and equipment tractors
- Part 16: Air start equipment
- Part 17: Air conditioning equipment
- Part 18: Oxygen/Nitrogen units
- Part 19: Aircraft jacks, axle jacks and hydraulic tail stanchions
- Part 20: Ground power equipment

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This European Standard defines health and safety requirements, as well as some functional and performance requirements, for stairs including a built-in source of power (see Clause 1, Scope) intended for passengers embarking/disembarking aircraft.

The minimum essential criteria are considered to be of primary importance in providing safe, serviceable, economical, and practical passenger stairs. Deviations from the recommended criteria should occur only after careful consideration, extensive testing, risk assessment and service evaluation have shown alternative methods or conditions to be satisfactory.

This European standard is a Type C standard as defined in A1 EN ISO 12100 A1.

1 Scope

This Part of EN 12312 deals with the technical requirements to minimise the hazards listed in clause 4 which can arise during the commissioning, the operation and the maintenance of passenger stairs when carried out in accordance with the specifications given by the manufacturer or his authorised representative. It also takes into account some requirements recognized as essential by the health and safety authorities, aircraft and vehicle manufacturers as well as airlines and handling agencies.

This standard applies to:

- self-propelled stairs with seated driver (see annex A);
- pedestrian controlled stairs;
- towable stairs equipped with powered means, e.g. for height adjustment, stabilizers (see annex A);
- automatic levelling systems of stairs;

for embarking/disembarking of passengers.

NOTE 1 Powered should be also understood as manual effort stored in springs or hydraulic accumulators, etc., the dangerous action of which can be produced or can continue after the manual effort has ceased or directly applied manual effort for lifting or lowering loads.

NOTE 2 Those clauses of this standard that can apply may also be used as a guideline for the design of towable stairs without powered means.

This standard does not apply to pneumatic systems.

This standard does not establish requirements for hazards caused by noise and vibration.

This Part of EN 12312 is not applicable to passenger stairs which are manufactured before the date of publication by CEN of this standard.

A1 This part of EN 12312 is intended to be used in conjunction with EN 1915-1, EN 1915-2, EN 1915-3 (for vehicles) and EN 1915-4.

Noise is dealt with in EN 1915-4. A1

2 Normative references

A1 The following referenced documents are indispensable for the application 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. A1

A1 *deleted text* A1

A1 deleted text **A1**

EN 1050:1996, *Safety of machinery — Principles for risk assessment*

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EN 1175-1:1998, *Safety of machinery — Industrial trucks — Part 1: Electrical requirements for battery powered trucks*

A1 EN 1386, *Aluminium and aluminium alloys — Tread plate — Specifications* **A1**

EN 1837:1999, *Safety of machinery — Integral lighting of machines*

EN 1915-1:2001, *Aircraft ground support equipment — General requirements — Part 1: Basic safety requirements*

EN 1915-2:2001, *Aircraft ground support equipment — General requirements — Part 2: Stability and strength requirements, calculations and test methods*

A1 EN 1915-4, *Aircraft ground support equipment — General requirements — Part 4: Noise measurement methods and reduction* **A1**

A1 EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)* **A1**

A1 EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)* **A1**

A1 EN ISO 13850:2008, *Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)* **A1**

A1 ISO 7718, *Aircraft - Main-deck passenger doors — Interface requirements for connection with passenger-boarding bridge or transfer vehicle* **A1**

A1 ISO 16004, *Aircraft ground equipment — Passenger boarding bridge or transfer vehicle — Requirements for interface with aircraft doors* **A1**

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1915-1 and **A1** EN ISO 12100-1:2003 and EN ISO 12100-2:2003 **A1** apply together with the following:

3.1

passenger stair

stair designed for the embarking and disembarking of passengers between the aircraft and the ground

3.2

stair flight

series of steps between ground level and platform or between two platforms

3.3

riser height (R)

distance between the surface of the tread of one step and the surface of a step above or below when measured perpendicularly between the tread surfaces

3.4

tread depth (T)

distance from one step nosing to the adjacent step nosing when measured parallel to the tread surface

3.5

step width

maximum usable width measured along the nose of the step