Ripp(juurdepääsu)seadmete ohutusnõuded. Kavandamisarvutused, stabiilsuskriteeriumid, valmistamine, katsed KONSOLIDEERITUD TEKST

Safety requirements on Suspended Access Equipment - Design calculations, stability criteria, construction - Tests CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1808:1999+A1:2010 sisaldab Euroopa standardi EN 1808:1999+A1:2010 ingliskeelset teksti.	This Estonian standard EVS-EN 1808:1999+A1:2010 consists of the English text of the European standard EN 1808:1999+A1:2010.
Standard on kinnitatud Eesti Standardikeskuse 30.09.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 09.06.2010.	Date of Availability of the European standard text 09.06.2010.
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EUROPEAN STANDARD

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English Version

Safety requirements on Suspended Access Equipment - Design calculations, stability criteria, construction - Tests

Exigences de sécurité aux plates-formes suspendues à niveaux variables - Calculs, stabilité, construction - Essais

Sicherheitsanforderungen an hängende Personenaufnahmemittel - Berechnung, Standsicherheit, Bau - Prüfungen

This European Standard was approved by CEN on 19 February 1999 and includes Amendment 1 approved by CEN on 13 May 2010.

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Foreword

This document (EN 1808:1999+A1:2010) has been prepared by Technical Committee CEN/TC 98 "Lifting platforms", 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of an identical text or by endorsement, at the latest by December 2010, and conflicting national standards shall be withdrawn at the latest by December 2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1, approved by CEN on 2010-05-13.

This document supersedes EN 1808:1999.

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 EU Directive(s).

▌A1⟩ For relationship with EU Directives, see informative Annexes ZA and ZB, which are integral parts of this document. ⟨A1▌

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, Croatia, 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

[A1] This European Standard is a type C standard as stated in EN ISO 12100. [A1]

The machinery concerned and the extent to which hazards are covered are indicated in the scope of this standard.

It is assumed that:

— Negotiations shall take place between manufacturer and user about specific local installation conditions;

— Risk analysis of each component that may be incorporated in a complete SAE installation has been made. Rules have been drawn up on the basis of this assumption;

— The safety requirements of this standard have been drawn up on the basis that the components are

a) designed in accordance with the usual engineering practice and calculation codes, including all failure modes,

b) of sound mechanical and electrical construction,

c) made of materials with adequate strength and of suitable quality, and

d) be free of defects;

— Harmful materials, such as asbestos are not used;

— The equipment is kept in good working order;

— Any mechanical device manufactured according to good practice and the requirements of this standard shall not deteriorate to the point of creating a hazard without being detected;

— The ambient temperature range is between - 10° C and + 55° C. Additional requirements for equipment intended for use outside the ambient temperature range are set out in annex D;

— The parapets and roofs are of adequate strength for the SAE equipment to be installed.

1 Scope

1.1 Application

This standard specifies the safety requirements for Suspended Access Equipment (SAE).

It is applicable to both permanent and temporary equipment which may be powered or hand operated and which are defined in clause 3.

1.2 Hazards

This European Standard deals with significant hazards pertinent to SAE, when they are used as intended and under the conditions foreseen by the manufacturer (See clause 4). This European standard specifies appropriate technical measures to eliminate or reduce risks arising from the significant hazards.

1.3 Exclusions

The following are not covered:

a) operation in severe conditions (e.g. extreme environmental conditions, corrosive environment, strong magnetic fields, etc.);

b) operation subject to special rules (e.g. potentially explosive atmospheres, work on live lines);

c) transportation of passengers from one level to another;

d) handling of loads, the nature of which could lead to dangerous situations (e.g. molten metal, acids/bases, radioactive materials, brittle loads);

e) hazards occuring when handling suspended loads in conjunction with the suspended platform;

f) hazards occuring when used on public roads, over water, or wherever it is not possible to lower the platform to a safe position;

g) hazards arising from wind pressure acting on loads having a surface area in excess of 2 m²;

h) SAE using cableless control systems.

The following applications for SAE are excluded from this standard:

— Access to working areas with an incline in excess of 45° compared to the vertical;

— Working platforms suspended by cranes;

— Silo access equipment;

— Access equipment using fibre ropes or chains for the suspension of the platform;

— SAE intended to be used underground;

— SAE powered by combustion engines;

— SAE intended to be used in shafts.

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] EN 280:2001, *Mobile elevating work platforms — Design calculations — Stability criteria — Construction — Safety — Examinations and tests* [A1]

[A1] *deleted text* [A1]

EN 294:1992, *Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs*

EN 418:1992, *Emergency stop equipment, functional aspects — Principles for design*

EN 614-1:1995, *Safety of machinery — Ergonomic design principles — Part 1: Terminology and general principles*

EN 954-1:1996, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

EN 982:1996, *Safety requirements for fluid power systems and their components — Hydraulics*

EN 983:1996, *Safety requirements for fluid power systems and their components — Pneumatics*

EN 1050:1996, *Safety of machinery — Risk assessment*

EN 60204-1:1992, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements*

EN 60529:1991, *Degrees of protection provided by enclosures (IP-code) (IEC 60529:1989)*

EN 60947-5-1:1991, *Low-voltage switchgear and controlgear — Part 5: Control circuit devices and switching elements — Section 1: Electromechanical control circuit devices and switching elements*

[A1] *deleted text* [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)*

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

3 Definitions

For the purpose of this standard, the following definitions apply. They are classified in terms of key words.

3.1
building maintenance unit (BMU)
BMUs are SAE intended to be permanently installed and dedicated to a specific building or structure. BMUs consist of a platform, suspended from a suspension rig which is generally a trolley unit with hoist, operating either on rails or on a suitable surface, e.g. concrete track. Monorails with traversing trolleys or other suspension rigs, e.g. davits, fixed to the building, from which a platform may be suspended, shall be considered as parts of a BMU

NOTE BMU are intended to be used by operators for inspection, cleaning and maintenance of a building where the general public may have access below the suspended platform.