

**Liftide valmistamise ja paigaldamise
ohutuseeskirjad. Reisijate ja kaupade
veoks mõeldud liftide eriotstarbelised
rakendused. Osa 71: Vandalismikindlad
liftid**

Safety rules for the construction and installation of
lifts - Particular applications to passenger lifts and
goods passenger lifts - Part 71: Vandal resistant lifts

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 81-71:2005+A1:2007 sisaldab Euroopa standardi EN 81-71:2005+A1:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.01.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 81-71:2005+A1:2007 consists of the English text of the European standard EN 81-71:2005+A1:2006.</p> <p>This document is endorsed on 29.01.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This document gives additional and deviating requirements to EN 81-1 and EN 81-2 as applicable in order to ensure the safety of lift users and the availability of lifts, which may be used for vandal resistant purposes. In all other respects such lifts are designed in accordance with EN 81-1, including Amendment A2 or EN 81-2, including Amendment A2. This document deals with the significant hazards, hazardous situations and events relevant to lifts which can be affected by vandalism (as listed in Clause 4) when they are used under the conditions as foreseen by the installer.</p>	<p>Scope: This document gives additional and deviating requirements to EN 81-1 and EN 81-2 as applicable in order to ensure the safety of lift users and the availability of lifts, which may be used for vandal resistant purposes. In all other respects such lifts are designed in accordance with EN 81-1, including Amendment A2 or EN 81-2, including Amendment A2. This document deals with the significant hazards, hazardous situations and events relevant to lifts which can be affected by vandalism (as listed in Clause 4) when they are used under the conditions as foreseen by the installer.</p>
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English Version

Safety rules for the construction and installation of lifts -
Particular applications to passenger lifts and goods passenger
lifts - Part 71: Vandal resistant lifts

Règles de sécurité pour la construction et l'installation des
élévateurs - Applications particulières pour les ascenseurs
et les ascenseurs de charge - Partie 71: Ascenseurs
résistant aux actes de vandalisme

Sicherheitsregeln für Konstruktion und Einbau von
Aufzügen - Besondere Anwendungen für Personen- und
Lastenaufzüge - Teil 71: Schutzmaßnahmen gegen
mutwillige Zerstörung

This European Standard was approved by CEN on 19 October 2006.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 81-71:2005+A1:2006) has been prepared by Technical Committee CEN/TC 10 "Lifts, escalators and moving walks", the secretariat of which is held by AFNOR.

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 June 2007 and conflicting national standards shall be withdrawn at the latest by June 2007.

This document includes Amendment 1, approved by CEN on 2006-10-19.

This document supersedes EN 81-71:2005.

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

This document 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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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

The lifts concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

This document is a Type C Standard as stated in EN 1070.

When the provisions of this C standard are different from those which are stated in type A or B standards, the provisions of this document take precedence over the other standards, for lifts that have been designed and built according to the provisions of this document.

This document provides guidance to the building designer, customer etc. and requirements for design, where it is considered additional security or other measures may be required in order to protect against the risk of vandalism. The customer will need to consider the extent of additional protection required, as covered by the enclosed proposals, which may be adopted according to the environment in which the lift installation is situated and the type of vandalism that is likely to be experienced. Every lift is subject to some amount of careless or rough use. Lifts built to EN 81-1 or EN 81-2 offer a reasonable degree of protection against this and are referred to in this document as Category 0. This document addresses additional protective measures against deliberate acts that may result in equipment damage or injury to persons.

With regard to potential hazards for vandalism the following factors are taken into consideration:

- degree of accessibility to the installation;
- the surrounding area;
- observation by others in the vicinity;
- extent of building security and surveillance of lift(s);
- period of access to the building, including the lift(s) (24 h);
- vulnerability of lift.

The clauses in this document apply to both Category 1 lifts and Category 2 lifts as defined in this document (see Annex A) unless otherwise stated in the text.

The following assumptions were made whilst writing this document:

- the lift is designed to meet the basic requirements detailed in EN 81-1 or EN 81-2, including Amendment A2;
- the building and/or the lift structure are at least in accordance with the advice given in Annex A, which form the basis of the negotiations outlined in 0.2.5 of EN 81-1:1998 or EN 81-2:1998;
- the lift, its well, landing and access areas, machinery spaces(s) and all associated equipment are properly maintained in good, safe working order.

The forces exerted on the lift and its equipment will be as a result of manual effort or by item(s) such as those defined in Annex E.

1 Scope

This document gives additional and deviating requirements to EN 81-1 and EN 81-2 as applicable in order to ensure the safety of lift users and the availability of lifts, which may be used for vandal resistant purposes. In all other respects such lifts are designed in accordance with EN 81-1, including Amendment A2 or EN 81-2, including Amendment A2. This document deals with the significant hazards, hazardous situations and events relevant to lifts which can be affected by vandalism (as listed in Clause 4) when they are used under the conditions as foreseen by the installer.

It does not cover building security or Category O lifts (see definition 3.2).

2 Normative references

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.

EN 81-1:1998, *Safety rules for the construction and installation of lifts – Part 1: Electric lifts*

EN 81-2:1998, *Safety rules for the construction and installation of lifts – Part 2: Hydraulic lifts*

EN 81-72, *Safety rules for the construction and installation of lifts – Particular applications for passenger and goods passenger lifts – Part 72: Firefighters lifts*

EN 81-73:2005, *Safety rules for the construction and installation of lifts – Particular applications for passenger and goods passenger lifts – Part 73: Behaviour of lifts in the event of fire*

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

EN 13501-1, *Fire classification of construction products and building elements – Part 1: Classification using test data from reaction to fire tests*

EN 60529, *Specification for degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)*

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

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 81-1:1998 and EN 81-2:1998 apply as well as the following additional definitions.

3.1

car ceiling

parts of the car roof accessible from inside the car

3.2

category 0 lift

lift designed to meet the basic requirements of EN 81-1 or EN 81-2