LIFTIDE VALMISTAMISE JA PAIGALDAMISE OHUTUSEESKIRJAD. INIMESTE JA KAUBA TRANSPORDI LIFTIDE ERIOTSTARBELISED RAKENDUSED. OSA 70: INIMESTE, KAASA ARVATUD PUUETEGA INIMESTE LIGIPÄÄS LIFTIDELE

Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lift - Part 70: Accessibility to lifts for persons including persons with disability



## EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 81-70:2021+A1:2022 sisaldab Euroopa standardi EN 81-70:2021+A1:2022 ingliskeelset teksti.	ThisEstonianstandardEVS-EN81-70:2021+A1:2022 consists of the English text of the European standard EN 81-70:2021+A1:2022.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.	
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.07.2022.		
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.	
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#### ICS 91.140.90

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN 81-70:2021+A1

July 2022

ICS 91.140.90

Supersedes EN 81-70:2021

**English Version** 

## Safety rules for the construction and installation of lifts -Particular applications for passenger and goods passenger lift - Part 70: Accessibility to lifts for persons including persons with disability

Règles de sécurité pour la construction et l'installation des élévateurs - Applications particulières pour les ascenseurs et ascenseurs de charge - Partie 70 : Accessibilité aux ascenseurs pour toutes les personnes y compris les personnes avec handicap Sicherheitsregeln für die Konstruktion und den Einbau von Aufzügen - Besondere Anwendungen für Personen- und Lastenaufzüge - Teil 70: Zugänglichkeit von Aufzügen für Personen einschließlich Personen mit Behinderungen

This European Standard was approved by CEN on 12 January 2021 and includes Amendment 1 approved by CEN on 8 May 2022.

This European Standard was corrected and re-issued by the CEN-CENELEC Management Centre on 21 September 2022.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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## **European foreword**

This document (EN 81-70:2021+A1:2022) 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 January 2023, and conflicting national standards shall be withdrawn at the latest by July 2024.

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

This document includes Amendment 1 approved by CEN on 8 May 2022.

This document supersedes A) EN 81-70:2021 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $A_1$   $A_1$ .

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

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

In comparison with A EN 81-70:2018 (A), the following significant changes have been made:

- Clarification of relationship to other EN 81 standards;
- Information on building related issues deleted;
- Information in assumptions on negotiations deleted;
- Scope editorially modified;
- Normative references updated;
- References to negotiations in Clause 5 deleted;
- Optional use of additional control devices deleted;
- References to EN 81-20 and EN 81-28 deleted in verification table;
- Content of information for use updated;
- Annex ZA is modified;
- Bibliography updated.

The need for this Amendment 1 was based on the following points:

- Modified requirements on luminance contrast by changing from LRV difference to Michelson contrast for symbols to their background;
- Addition of requirement for illumination of control devices;

— New Annex for guidance on measurement of luminance contrast. 🔄

The content of this document provides the enhanced design rules, examinations and tests for lifts which are intended to be used by persons including persons with disability. This document can only be used in conjunction with the EN 81-20:2020 which gives the basic requirements for passenger and goods passenger lifts.

This document is part of the EN 81 series of standards. The structure of the EN 81 series is described in CEN/TR 81-10:2008.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United A DI DI CULOR O DI CUL Kingdom.

### **0** Introduction

#### 0.1 General

This document is a type C standard as stated in EN ISO 12100:2010.

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

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

#### 0.2 Principles

For the revision of this document the following have been considered:

- a) practical experience with the first version of this standard;
- b) market demand for including new technology;
- c) CEN-CENELEC Guide 6;
- d) current legal framework for accessibility and usability, in particular:

The non-discrimination clause (art 6a) based on disability and age of Article 19 of consolidated version 2016 of the Treaty of Lisbon of the European Union requests a new understanding of diversity of users in the built environment, transport and products, similar to that established in information and communication technologies.

The UN Convention on the Rights of Persons with Disabilities with reference also to accessibility in the built environment – considering human diversity, social inclusion and equality for all people - is the first ratified EU agreement on human rights and ratified also by most Member States. It is also the first international legally binding instrument on human rights setting minimum standards for the rights for people with disabilities around the world.

## 1 Scope

This document specifies the minimum requirements for the safe and independent access and use of lifts by persons, including persons with disabilities. It covers the needs of persons with disabilities according to Annex A.

NOTE For guidance on solutions for increased accessibility and usability, see Annex D.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 81-20:2020, Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 20: Passenger and goods passenger lifts

EN ISO 12100:2010, Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)

ISO 4190-5:2006, Lift (Elevator) installation - Part 5: Control devices, signals and additional fittings

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100:2010, EN 81-20:2020 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <u>https://www.iso.org/obp</u>
- IEC Electropedia: available at http://www.electropedia.org/

#### 3.1

#### collective control system

lift control system where required direction of travel is registered on the landing and the destination floor is registered in the car

#### 3.2

#### destination control system

lift control system where the destination floor is registered on the landing

#### 3.3

#### accessibility button

means to activate enhanced accessibility features or services for a single trip

## 4 Significant hazards and barriers to accessibility

This clause contains all significant hazards, hazardous situations and events as far as they are dealt with in this standard, identified by risk assessment as significant for this type of machinery and which require actions to eliminate or reduce the risk (see Table 1).

In this document, barriers to accessibility and additional risks encountered by the person with disability or by the devices used by that person are identified particularly in Table 1, No 8 (ergonomic hazards).