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BSI Standards Publication

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

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National foreword

This British Standard is the UK implementation of EN 81-70:2018. It supersedes BS EN 81-70:2003, which will be withdrawn on 31 August 2019.

The UK participation in its preparation was entrusted to Technical Committee MHE/4, Lifts, hoists and escalators.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2018
Published by BSI Standards Limited 2018

ISBN 978 0 580 91413 3

ICS 91.140.90

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 May 2018.

Amendments/corrigenda issued since publication

Date	Text affected
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EUROPÄISCHE NORM

May 2018

ICS 91.140.90

Supersedes EN 81-70:2003

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 ascenseurs - 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 26 June 2017.

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

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 81-70:2018) 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 November 2018, and conflicting national standards shall be withdrawn at the latest by May 2020.

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 supersedes EN 81-70:2003 and EN 81-70:2003/A1:2004.

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.

EN 81-70:2018 is a full revision of the standard which reflects developments since the publication of EN 81-70:2003 and experience gained from its application. Consequently, most clauses have been changed. The main changes can be identified as:

- the addition of detailed specifications for contrast requirements;
- the increase of door widths;
- the deletion of items which are now covered by EN 81-20 (protection device on doors, stopping and levelling accuracy);
- the addition of two more lift car types;
- the clarification of arrangement and design of handrails;
- improved requirements for the design and arrangement of control devices and indicators;
- improved requirements for the arrangement of landing controls for lift groups;
- the addition of detailed requirements for landing control devices for destination control systems using touch screens;
- the clarification of requirements for extra large buttons;
- the deletion of previous Annexes A, C, D and E which included background and guidance information. Some of this information has been transferred into normative requirements. For remaining information, reference to ISO 21542 has been added.

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

0 Introduction

0.1 General

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

The machinery concerned and the extent to which hazards, hazardous situations and 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 standard 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.

0.3 Assumptions

Intensive studies have been made on the different categories of disability to establish related hazards and their risks (see Annex A).

The application of this standard is based on following assumptions:

- a) It is the responsibility of national building regulations to specify in which buildings accessible lifts according to this standard will be installed.
- b) National building regulations will not conflict with the provisions of this standard.
- c) Obstacle-free accessibility on the landing floors is provided on all eligible floors.
- d) Visual and tactile floor guidance systems for finding lifts and their landing control stations in a building are considered by building planners and building designers.

0.4 Negotiations

It is assumed that negotiations have been made for each contract between the customer and the supplier/installer about:

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- a) the intended use of the lift, particularly concerning the kind of expected passengers which may have an impact on the selection of appropriate and optional solutions of this standard (e.g. for buildings where a higher level of accessibility may be foreseen according to Annex D);
- b) temporary activation of specific features of the lift;
- c) environmental conditions;
- d) civil engineering problems;
- e) other aspects related to the place of installation e.g. how to ensure guidance to passengers about the specific operational features of the lift.

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1 Scope

This European Standard specifies the minimum requirements for the safe and independent access and use of lifts by a wide range of persons, including persons with disabilities.

It is applicable to new passenger and goods passenger lifts according to EN 81-20. For other types of lifts, e.g. inclined lifts according to EN 81-22, this standard can usefully be taken as a basis.

NOTE 1 For guidance on solutions for increased accessibility and usability see Annex D.

NOTE 2 For the upgrading of accessibility of existing lifts in line with the recommendation of the European Commission dated 8th of June, 1995 (95/216/EC) concerning improvements to safety of existing lifts, see EN 81-82.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 81-20:2014, *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 81-28:2018, *Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 28: Remote alarm on 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 and EN 81-20:2014 and the following apply.

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).