This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.



## **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



BS EN 81-70:2021 BRITISH STANDARD

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

### **National foreword**

This British Standard is the UK implementation of EN 81-70:2021. It supersedes BS EN 81-70:2018, which is withdrawn.

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 committee manager.

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association and is intended to support essential requirements of the EU legislation detailed in the European foreword. Annex ZA/ZZ describes how the publication relates to the legislation.

For the Great Britain market (England, Scotland and Wales), if the UK Government has designated this publication for conformity with UKCA marking legislation and has not amended the essential requirements of that legislation, Annex ZA/ZZ and any references to EU law in the publication should be read in accordance with the designation as applying to UK legislation in the same way as to EU law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

For the Northern Ireland market, UK law will continue to implement relevant EU law subject to periodic confirmation. References to EU legislation are therefore still valid.

More information on legislation can be found at www.gov.uk.

#### **Contractual and legal considerations**

This publication has been prepared in good faith, however no representation, warranty, assurance or undertaking (express or implied) is or will be made, and no responsibility or liability is or will be accepted by BSI in relation to the adequacy, accuracy, completeness or reasonableness of this publication. All and any such responsibility and liability is expressly disclaimed to the full extent permitted by the law.

This publication is provided as is, and is to be used at the recipient's own risk.

The recipient is advised to consider seeking professional guidance with respect to its use of this publication.

This publication is not intended to constitute a contract. Users are responsible for its correct application.

© The British Standards Institution 2021 Published by BSI Standards Limited 2021

ISBN 978 0 539 12345 6

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 2021.

BRITISH STANDARD BS EN 81-70:2021

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

### Amendments/corrigenda issued since publication

Date Text affected

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

#### EN Q1\_70

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

## **EUROPÄISCHE NORM**

April 2021

ICS 91.140.90

Supersedes EN 81-70:2018

#### **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.

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, 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 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

## **Contents**

Page

Europ	oean foreword	3
0	Introduction	5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Significant hazards and barriers to accessibility	6
5	Safety requirements and/or protective measures	
5.1	General	
5.2	Entrances - Door openings	
5.3	Car dimensions and equipment in the car	
5.3.1	Car dimensions	
5.3.2	Equipment in the car	
5.4	Control devices and signals	
5.4.1	General	
5.4.2	Control devices and signals for collective control systems	
5.4.3	Control devices and signals for destination control systems	17
6	Verification of safety requirements and/or protective measures	19
7	Information for use	22
Annex	x A (normative) Categories of disability considered	23
Annex	x B (normative) Extra large control devices	24
<b>B.1</b>	Introduction	24
<b>B.2</b>	Landing control devices	24
<b>B.3</b>	Car control devices	24
Annex	x C (normative) Touch screen devices for destination control systems	26
Annex	x D (informative) Guidance for increased accessibility and usability	27
Annex	x ZA (informative) Relationship between this European Standard and the essential	
	requirements of Directive 2014/33/EU aimed to be covered	28
Biblio	graphy	29

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

#### **European foreword**

This document (EN 81-70:2021) 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 October 2021, and conflicting national standards shall be withdrawn at the latest by April 2023.

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 81-70:2018.

In comparison with the previous edition, 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.

No technical changes have been made during this revision.

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.

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.

BS EN 81-70:2021

EN 81-70:2021 (E)

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

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, 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 Kingdom.

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

#### 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.

#### EN 81-70:2021 (E)

This is a preview of "BS EN 81-70:2021". Click here to purchase the full version from the ANSI store.

#### 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 <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 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).