



## **Lifts, escalators and moving walks**

### **Part 12: Facilities for persons with disabilities (EN 81-70:2018, MOD)**

This national standard is the adoption of EN 81-70:2018 with national modifications as set out in Appendices ZZ and ZB to take account of Australian conditions with the permission of the European Committee for Standardization – CEN, Rue de la Science 23, B – 1040 Brussels, Belgium.

AS 1735.12:2020

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- Australian Chamber of Commerce and Industry
- Australian Elevator Association
- Australian Industry Group
- Communications, Electrical and Plumbing Union — Electrical Division
- Engineers Australia
- Lift Engineering Society of Australia
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## **Lifts, escalators and moving walks**

### **Part 12: Facilities for persons with disabilities (EN 81-70:2018, MOD)**

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## Preface

This Standard was prepared by the Standards Australia Committee ME-004 Lift Installations, to supersede AS 1735.12—1999.

The objective of this Standard is to specify the minimum requirements for the safe and independent access and use of lifts by a wide range of persons, including persons with disabilities.

This Standard is an adoption with national modifications and has been reproduced from EN 81-70:2018, *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*. The modifications are additional requirements and are set out in Appendices ZZ and ZA, which have been added at the end of the source text.

Appendix ZZ lists the variations to EN 81-70:2018 for the application of this Standard in Australia.

Appendix ZA specifies wayfinding information to enable a person with disabilities to independently use passenger lifts.

As this Standard is reproduced from an International Standard, the following apply:

- (a) In the source text “EN 81-70” and “this European Standard” should read “an Australian Standard”.
- (b) A full point substitutes for a comma when referring to a decimal marker.

The terms “normative” and “informative” are used in Standard to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

NOTES

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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:

- 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).