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English Version

**Safety rules for the construction and installation of lifts - Existing lifts - Part 82: Improvement of the accessibility of existing lifts for persons including persons with disability**

Règles de sécurité pour la construction et l'installation des  
élévateurs - Ascenseurs existants - Partie 82 :  
Amélioration de l'accessibilité aux ascenseurs existants  
pour toutes des personnes y compris des personnes avec  
handicap

Sicherheitsregeln für die Konstruktion und den Einbau von  
Aufzügen - Bestehende Aufzüge - Teil 82: Erhöhung der  
Zugänglichkeit von bestehenden Aufzügen für Personen  
einschließlich Personen mit Behinderungen

This Technical Specification (CEN/TS) was approved by CEN on 25 September 2007 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

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## Foreword

This document (CEN/TS 81-82:2008) has been prepared by Technical Committee CEN/TC 10 “Lifts, escalators and moving walks”, the secretariat of which is held by AFNOR.

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

CEN/CENELEC have embarked on a programme of work to produce a series of related machinery and lift safety standards as part of European standardisation. This document makes use of and refers to EN 81-70.

This document is part of the EN 81 series of standards: “*Safety rules for the construction and installation of lifts*”. This is the first edition of this Technical Specification.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, 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 the United Kingdom.

## Introduction

### Background of this Technical Specification

More than 4 million lifts are in use today in the EU and EFTA, and almost 50 % were installed more than 25 years ago. Existing lifts were installed to the safety and accessibility level appropriate at that time. This level is less than today's state of the art.

New technologies and social expectations have led to today's state of the art for accessibility resulting in different levels of accessibility across Europe. However, users expect a common acceptable level of safety and accessibility.

There is a growing trend for people to live longer and for disabled people to expect access and design for all. Therefore it is especially important to provide a safe means of vertical transport for all lift users including disabled and elderly persons without assistance.

Furthermore, the life cycle of a lift is longer than most other transportation systems and building equipment, which therefore means that lift design, performance, safety and accessibility can fall behind modern technologies. If existing lifts are not upgraded to today's state of the art, the number of problems related to accessibility will increase as the proportion of the population with disabilities increase thereby resulting in a less accessible environment for the society in general.

With the freedom of movement of people within the EU for all users including users with disabilities, familiarity with the different installations is becoming more desirable.

CEN/TS 81-82 has been prepared to address these issues. This Technical Specification is to help owners, authorities and lift designers/manufacturers to find practical solutions and ways of applying EN 81-70 to existing lifts to improve accessibility and use by persons including persons with disability. Where due to practical reasons EN 81-70 cannot be fully applied, this Technical Specification provides alternative proposals.

In such cases it is still considered an advantage to apply parts of EN 81-70. For example, if the existing entrance opening is not large enough for a wheelchair and cannot be modified, it is still a major improvement to make the lift controls suitable for other types of disability.

Such changes/improvements could enable elderly and disabled people to remain living in their own homes instead of having to re-locate to specialised nursing homes.

### Use of this Technical Specification

This Technical Specification can be used by:

- a) national authorities to determine a specific programme of implementation;
- b) owners to follow their responsibilities according to existing regulations (e.g. national building regulations, anti discrimination acts);
- c) maintenance companies and/or inspection bodies to inform the owners on the accessibility level of their installations;
- d) owners to upgrade the existing lifts on a voluntary basis if no regulations exist by making an audit of an existing lift installation using Annex A and Annex B.

## 1 Scope

**1.1** This Technical Specification provides rules on how to apply EN 81-70 referred to in EN 81-80:2003, 5.2.1 [1] to existing lifts to improve their accessibility for persons including persons with disability.

**1.2** This document applies to permanently installed lifts serving defined landing levels, having a car designed for the transportation of persons or persons and goods and moving between guide rails inclined not more than 15° to the vertical.

## 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 81-70:2003, *Safety rules for the construction and installations of lifts - Particular applications for passenger and good passenger lifts - Part 70: Accessibility to lifts for persons including persons with disability*

## 3 Terms and definitions

For the purposes of this Technical Specification, the terms and definitions given in the EN 81 series of standards apply.

## 4 List of significant hazards

EN 81-70:2003, Clause 4 applies.

## 5 Requirements for safe access and use and/or protective measures

### 5.1 General

The general accessibility of the building needs to be taken into account.

### 5.2 Entrances – Door opening

#### 5.2.1 Entrance clear opening

If the size of the car is in accordance with Table 1 of EN 81-70:2003, the minimum entrance clear opening shall be 800 mm.

**NOTE** National regulations can require more than 800 mm. Type 2 lifts should be provided with an entrance clear opening of 900 mm, according to ISO 4190-1 (series B) [8], and type 3 lifts with a clear opening of 1 100 mm.

The car and landing doors shall be constructed as automatic power operated horizontally sliding doors. If that is not the case and if it's not possible to do so, the manual door shall be converted to a power operated door.

If the lift is equipped with hinged doors at the landings and if the size of the lift doesn't allow the use by a wheel chair user, the accessibility can nevertheless be improved for impaired mobility users by the installation of automatic power operated horizontally sliding doors even if the car entrance has to be reduced (e.g. existing hinged doors with a car entrance of 800 mm replaced by automatic power operated horizontally sliding doors with a car entrance of 700 mm).

Existing folding car doors may remain if the accessibility for wheel chair users is not restricted.