SVENSK STANDARD
SS-EN 81-72:2020

Säkerhetsregler för konstruktion och installation av hissar – Särskilda applikationer för person- och varupersonhissar – Del 72: Brandbekämpningshissar

Safety rules for the construction and installation of lifts – Particular applications for passenger and goods passenger lifts – Part 72: Firefighters lifts

Svenska Institutet för Standarder

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Denna standard är såld av
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Svenska Institutet för Standarder

Europastandarden EN 81-72:2020 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 81-72:2020.

Denna standard ersätter SS-EN 81-72:2015, utgåva 2 och SS-EN 81-72:2015, utgåva 2.

The European Standard EN 81-72:2020 has the status of a Swedish Standard. This document contains the official version of EN 81-72:2020.

This standard supersedes the SS-EN 81-72:2015, edition 2 and SS-EN 81-72:2015, edition 2.

EUROPEAN STANDARD

NORME EUROPÉENNE

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English Version

Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lifts - Part 72: Firefighters lifts

Règles de sécurité pour la construction et l'installation des élévateurs - Applications particulières pour les ascenseurs et ascenseurs de charge - Partie 72 : Ascenseurs pompiers

Sicherheitsregeln für die Konstruktion und den Einbau von Aufzügen - Besondere Anwendungen für Personen- und Lastenaufzüge - Teil 72: Feuerwehraufzüge

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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 81-72:2020) 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of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by July 2022.

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 81-72:2015.

This document is a revision of EN 81-72:2015 in order to align its Annex ZA to the new format and requirements as laid out in the EU Commission Standardization Request “M/549 C (2016) 5884 final”. During this revision no technical changes are made and the technical requirements of this document remain identical to EN 81-72:2015, with the exception of the normative references in the text which have been updated to the latest versions of the documents.

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 95/16/EC amended by 2006/42/EC and 2014/33/EU, see informative Annex ZA, which is an integral part of this document.

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.

Introduction

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

Firefighters lifts are used to bring the firefighters and their equipment to the required floors.

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

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.

The following assumptions were made in writing this document.

Negotiations have been made between the owner, customer, building designers, fire authorities or other relevant bodies and installer concerning:

a) the intended use of the lift;

b) environmental conditions;

c) civil engineering problems;

d) interfaces between the lift and the building management system (BMS) or fire detection system;

e) the firefighting strategy;

f) smoke management, e.g. pressurizing system impact to the lift system such as sway of travelling cables and operation of landing doors;

g) water management, and where applicable, the highest permissible water level in the pit, e.g. 0,5 m;

h) other aspects related to the place of the installation and the rescue of persons from within the car;

i) power supply including regenerative power during secondary power supply operation;

j) size of safe area(s);

k) the need for an additional firefighters car key switch and availability of the key.

Developers and architects will need to take account of national building regulations in providing a suitable fire resistant structure of the building, safe areas, fire detection and extinguisher systems. Examples are shown in Annex B and Annex F.

1 Scope

1.1 This document specifies the additional or deviating requirements to EN 81-20:2020 for new passenger and goods passenger lifts, which can be used for firefighting and evacuation purposes under firefighters control.

1.2 This document applies, when the following conditions are fulfilled:

— the lift well and the lift environment are designed to restrict the ingress of fire, heat and smoke to the lift well, machinery spaces and safe areas;

— the building design limits the flow of water into the lift well;

— the firefighters lift is not used as an escape route;

— the lift well and the lift environment are fire protected for at least to the same level as the building structure;

— the power supply is secure and reliable;

— the electrical cable(s) providing power to the lift is fire protected to the same fire protection level as given to the lift well structure;

— a suitable maintenance and verification plan is implemented.

1.3 This document does not cover:

— the use of lifts with partially enclosed wells for use as firefighters lifts;

— lifts installed in new or existing buildings, which are not included in fire resisting building structure;

— important modification to existing lifts.

1.4 This document does not define:

— the number of firefighters lifts and the floors to be served during firefighting operations;

— size of safe area(s);

— the use of other than the highest deck of a multi deck lift for firefighting operations.

1.5 This document deals with the significant hazards, hazardous situations and events relevant to firefighters lifts (as listed in Clause 4) when they are used as intended and under the conditions as foreseen by the installer.

1.6 The following significant hazards are not dealt with in this document and are assumed to be addressed by the building designer:

— not having enough or correctly located firefighters lifts to move the firefighters up the building;

— a fire in the firefighters lift well, safe area, machinery space or car;

— the absence of building floor identification signs at any floor;

— water management is not operating correctly.

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 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*

EN 81-71:2018+AC:2019, *Safety rules for the construction and installation of lifts - Particular applications to passenger lifts and goods passenger lifts - Part 71: Vandal resistant lifts*

EN 81-73:2020, *Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lifts - Part 73: Behaviour of lifts in the event of fire*

EN 131-1:2015+A1:2019, *Ladders - Part 1: Terms, types, functional sizes*

EN 60529:1991[1)], *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

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

ISO 8100-30:2019, *Lifts for the transport of persons and goods - Part 30: Class I, II, III and VI lifts installation*

1) This document is impacted by the amendments EN 60529:1991/A1:2000 and EN 60529:1991/A2:2013.