



SLOVENSKI STANDARD

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Varnostna pravila za konstruiranje in vgradnjo dvigal (liftov) - Dvigala za prevoz oseb in blaga - 21. del: Nova osebna in osebno-tovorna dvigala v obstoječih stavbah

Safety rules for the construction and installation of lifts - Lifts for the transport of persons and goods - Part 21: New passenger and goods passenger lifts in existing building

Sicherheitsregeln für die Konstruktion und den Einbau von Aufzügen - Aufzüge für den Personen- und Gütertransport - Teil 21: Neue Personen- und Lastenaufzüge in bestehenden Gebäuden

Règles de sécurité pour la construction et l'installation des élévateurs - Élévateur pour le transport de personnes et d'objets - Partie 21 : Ascenseurs et ascenseurs de charge neufs dans les bâtiments existants

Ta slovenski standard je istoveten z: prEN 81-21

ICS:

91.140.90 Dvigala. Tekoče stopnice Lifts. Escalators

oSIST prEN 81-21:2026

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EUROPEAN STANDARD
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DRAFT
prEN 81-21

December 2026

ICS 91.140.90

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English Version

**Safety rules for the construction and installation of lifts -
Lifts for the transport of persons and goods - Part 21: New
passenger and goods passenger lifts in existing building**

Règles de sécurité pour la construction et l'installation
des élévateurs - Élévateur pour le transport de
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von Aufzügen - Aufzüge für den Personen- und
Gütertransport - Teil 21: Neue Personen- und
Lastenaufzüge in bestehenden Gebäuden

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 10.

If this draft becomes a European Standard, 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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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prEN 81-21:2026 (E)**European foreword**

This document (prEN 81-21:2026) has been prepared by Technical Committee CEN/TC 10 “Lifts, escalators and moving walks”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 81-21:2022.

prEN 81-21:2026 includes the following significant technical changes with respect to EN 81-21:2022:

- updating of references and their associated requirements with regard to EN ISO 8100-1:2026;
- removal of chapter on counterweight/balancing weight in separate well;
- removal of automatic extending apron;
- update of Annex ZA including a table for Machinery Regulation (EU) 2023/1230.

This document is intended to be used in conjunction with EN ISO 8100-1:2026, 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 standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Introduction

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

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document.

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

When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

The main concern dealt with in this document is the reduction of top and pit clearances that may be required due to site conditions. The adopted principle of safety is based on two levels of achievement: first by means of an electrical stopping of the lift car, then by means of a mechanical stopping of the lift car.

In order to have a uniform understanding of the requirements of this document, an existing building within the terms of this document is understood to be one which was already in use before the lift was installed. A building whose internal structure is completely renewed is considered as a new building within the terms of this document.

1 Scope

This document specifies the safety rules related to passenger and goods/passenger lifts installed in existing buildings or existing wells where limitations enforced by building constraints mean that some requirements of EN ISO 8100-1:2026 cannot be met.

It addresses the following constraints and gives requirements for alternative solutions:

- existing perforate walls of the lift well;
- reduction in available well are leading to reduced distance between car, counterweight or balancing weight;
- reduced building dimensions and clearances leading to:
 - reductions in available space for headroom and pit;
 - reduced car roof balustrade dimensions;
 - reduced height of sill apron;
 - reduced height of machine and/or pulley room;
 - reduced available area for access door/trap door;
 - reduction in available height of landing doors.

This document is not applicable to lifts installed before the date of its publication.

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 ISO 8100-1:2026, *Lifts for the transport of persons and goods — Part 1: Safety rules for the construction and installation of passenger and goods passenger lifts (ISO 8100-1:2026, including corrected version 2026-05)*

EN ISO 8100-2:2026, *Lifts for the transport of persons and goods — Part 2: Design rules, calculations, verifications and tests of lift components (ISO 8100-2:2026)*

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

EN ISO 13857:2019, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2019)*

ISO 3864-1:2011, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 7010:2019, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100:2010, EN ISO 8100-1:2026 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Safety requirements and/or protective measures

4.1 General

Lifts within the scope of this standard shall comply with the relevant safety requirements and/or protective measures of the following clauses where one or several requirements in EN ISO 8100-1:2026 cannot be fulfilled. In addition, lifts shall be designed according to the principles of EN ISO 12100:2010 for relevant but not significant hazards, which are not dealt with by this document.

4.2 Perforate wall of the lift well

4.2.1 Where the lift is installed in an existing lift well enclosure, which is not imperforate as per EN ISO 8100-1:2026, 4.2.5.2.1, the minimum distances between the moving parts of the lift and the openings in the well enclosure shall be in accordance with EN ISO 13857:2019, Table 5 and 4.2.4.3 or 4.2.4.2.

4.2.2 An imperforate screen shall be provided around the landing door locking device(s) where parts to unlock the locking device can be reached from outside the well by means of a straight, round object with a length of 300 mm and a diameter of 1 mm.

4.3 Distance between car, counterweight or balancing weight

Where due to existing building constraints the distance between car and counterweight or balancing weight as per EN ISO 8100-1:2026, 4.2.5.5.3 cannot be fulfilled the following shall apply.

The guidance shall ensure that the car and its associated components shall be at a distance of at least 25 mm from the counterweight or balancing weight and its associated components.

Retaining devices on the car and counterweight or balancing weight shall be provided to maintain the car and the counterweight or balancing weight guided to avoid collision if the guidance has failed.

The retaining devices shall withstand the horizontal forces in accordance with EN ISO 8100-1:2026, 4.7.2.3.1 a).

4.4 Refuge spaces on car roof and clearances in headroom

4.4.1 General

Where due to existing building constraints the refuge spaces on the car roof and/or clearances in the headroom as per EN ISO 8100-1:2026, 4.2.5.7 cannot be fulfilled when the car is at its highest position as per EN ISO 8100-1:2026, 4.2.5.6.1 the requirements from 4.4.2 to 4.4.7 shall apply.