

Accessibility and usability of the built environment -
Functional requirements

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17210:2021 sisaldab Euroopa standardi EN 17210:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 17210:2021 consists of the English text of the European standard EN 17210:2021.
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English version

Accessibility and usability of the built environment - Functional requirements

Accessibilité et utilisabilité de l'environnement bâti -
Exigences fonctionnelles

Barrierefreiheit und Nutzbarkeit der gebauten
Umgebung - Funktionale Anforderungen

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European foreword

This document (EN 17210:2021) has been prepared by the Joint Technical Committee CEN-CENELEC/JTC 11 “Accessibility in the built environment”, the secretariat of which is held by UNE.

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of an identical text or by endorsement, at the latest by July 2021 and conflicting national standards shall be withdrawn at the latest by January 2024.

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 has been prepared under Mandate M/420 given to CEN-CENELEC and ETSI by the European Commission and the European Free Trade Association in support of European accessibility requirements for public procurement in the built environment.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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 has been developed in response to mandate M/420 of the European Commission, providing a standard for procurement of an accessible and usable built environment. The main goal of this document is to contribute to the implementation of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) in Europe.

The functional requirements and recommendations in this document are formulated with qualitative terms and describe the objectives which have to be reached, based on the diversity that a wide range of users presents (goals for protection) and can be used as criteria for awarding public contracts (in support of the Public Procurement Directives) as well as for other purposes, i.e. for accessibility legislation. This document does not prescribe or describe how these functional requirements should be met and thus it is not intended that this document will conflict with national accessibility standards.

This document specifies a range of functional accessibility and usability requirements and recommendations for many of the elements of construction, assembly, interior settings, components and fittings, which comprise the built environment. These functional accessibility requirements relate to the constructional aspects of outdoor pedestrian and urban areas, approaches and access to buildings, indoor circulation and use of facilities within buildings, egress from buildings in the normal course of events, and evacuation in the event of an emergency.

The functional accessibility and usability requirements in this document are based on the widest range of user needs and target groups as identified in Phase I of Mandate M/420. These requirements support the diversity of all persons and a life-course perspective, i.e. persons with physical impairments, persons with sensory impairments, persons with allergies, persons with learning difficulties/cognitive impairments and persons with mental-ill-health, persons with age-related conditions, but also persons in different stages of life, as children, adults and older persons.

This document also specifies the functional accessibility and usability requirements and recommendations to enable the use of wheeled mobility devices in the built environment. The type of wheeled mobility devices to be facilitated, and consequently the amount of space to be allocated, may be determined by national standards or regulations and/or a procuring body may specify the provision of space for larger electric wheelchairs and mobility scooters in certain types of buildings.

For the purpose of this document, the term 'accessibility' refers to both 'accessibility and usability'.

For specific building uses (see Clauses 16 to 20), such as accommodation, cultural, leisure and sport use, administrative, service and employment buildings, and outdoor and urban areas and transport facilities, the basic functional accessibility requirements are supplemented by key requirements and recommendations supported by other related standards or guidance documents.

This document is based to a great extent on ISO 21542:2011 *Building construction – Accessibility and usability of the built environment* (under revision) and where not sufficient, supplemented with references to alternative and/or complementary documents (identified in Phase I of Mandate M/420).

This document is intended to assist primarily public procurers and also architects, engineers, facility managers, ergonomists and other stakeholders in their respective areas of work, enabling them to require, specify, design and assess conformity related to the accessibility of the built environment, using a common framework and a common language, thus ensuring accessibility for all.

As a general structure, explanations on the motives for the requirements and recommendations given in this document are given in previous short informative 'Rationale', understood as a background.

The technical performance criteria to fulfil the functional requirements given in this document, based on classes, detailed dimensions, etc. will be exemplified by a CEN-CENELEC Technical Report “*Accessibility and usability of the built environment - Technical performance criteria and specifications*” (TR 1), currently under development, and may also be determined by national building regulations, national standards, or any other national guidance.

Another CEN-CENELEC Technical Report (TR 2) on the assessment of conformity to the functional requirements given in this document and the technical specifications given in NWI JT011002 is currently also under development.

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1 Scope

This document describes basic, minimum functional requirements and recommendations for an accessible and usable built environment, following "Design for All"/"Universal Design" principles which will facilitate equitable and safe use for a wide range of users, including persons with disabilities.

The requirements and recommendations given in this document are applicable across the full spectrum of the built environment.

These functional accessibility and usability requirements and recommendations are relevant to the design, construction, refurbishment or adaptation, and maintenance of built environments including outdoor pedestrian and urban areas.

NOTE 1 'Design for All' and 'Universal Design' share a similar inclusive design philosophy. "Universal Design" means the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. "Universal Design" does not exclude assistive devices for particular groups of persons with disabilities where this is needed.

NOTE 2 Terms such as "design for all", "universal design", "accessible design", "barrier-free design", "inclusive design" and "transgenerational design" are often used interchangeably with the same meaning.

NOTE 3 This document does not cover management and maintenance issues, but provides basic information in Annex B.

NOTE 4 All figures are provided as examples. They are described by their title and key and do not provide additional information. Some figures show negative examples to be avoided; these are identified by the insertion of a red cross on them. A list of all the figures included in this document is given in the informative Annex C.

NOTE 5 In the case of refurbishment or adaptations of existing buildings or infrastructures, a specific study including feasibility determines the extent to which the functional requirements and recommendations can be met.

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 54-23, *Fire detection and fire alarm systems - Part 23: Fire alarm devices - Visual alarm devices*

EN 81-20, *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, *Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lifts - Part 70: Accessibility to lifts for persons including persons with disability*

EN 81-72, *Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lifts - Part 72: Firefighters lifts*

EN 115-1, *Safety of escalators and moving walks - Part 1: Construction and installation*

EN 12183, *Manual wheelchairs - Requirements and test methods*

EN 12184, *Electrically powered wheelchairs, scooters and their chargers - Requirements and test methods*

EN 13200-1, *Spectator facilities - Part 1: General characteristics for spectator viewing area*

EN 16005, *Power operated pedestrian doorsets - safety in use - requirements and test methods*

EN 301549, *Accessibility requirements for ICT products and services*

EN 60118-4, *Electroacoustics - Hearing aids - Part 4: Induction-loop systems for hearing aid purposes - System performance requirements (IEC 60118-4)*

EN 81-76¹⁾, *Safety rules for the construction and installation of lifts - Particular applications for passengers and goods passenger lifts - Part 76: Evacuation of persons with disabilities using lifts*

CEN/TR 15894, *Building hardware - Door fittings for use by children, elderly and disabled people in domestic and public buildings - A guide for specifiers*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

accessibility

provision of buildings, parts of buildings, or outdoor built environments for people, regardless of disability, age or gender, to be able to gain access to them, into them, to use them and exit from them

Note 1 to entry: Accessibility includes ease of independent approach, entry, evacuation and/or use of a building and its services and facilities, and outdoor spaces by all of the potential users with an assurance of person health, safety and welfare during the course of those activities.

[SOURCE: ISO 21542:2011, 3.2, modified]

3.2

accessible format

use of different presentations to make information accessible by the use of another sensory ability, e.g. visual information presented in audio and tactile formats; audio information presented in visual formats

3.3

access statement

report that provides a framework to demonstrate how accessibility for all users is delivered in a development and how design for all solutions have been adopted

3.4

area of rescue assistance

evacuation temporary refuge

building space directly adjoining, and visible from, a main vertical evacuation route, robustly and reliably protected from heat, smoke and flame during and after a fire, where people requiring assistance can temporarily wait with confidence for further information, instructions, and rescue assistance, without obstructing or interfering with the evacuation of other building users

Note 1 to entry: "Robust" means structurally hardened and resistant to mechanical damage during the fire and for a period of time afterwards, i.e. the cooling phase.

[SOURCE: ISO 21542:2011, 3.3]

1) Under preparation. Stage at the time of publication: prEN 81-76.