



BSI Standards Publication

Accessibility and usability of the built environment — Technical performance criteria and specifications

National foreword

This Published Document is the UK implementation of CEN/TR 17621:2021.

The UK participation in its preparation was entrusted to Technical Committee B/559, Design of an Accessible and Inclusive Environment.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Published by BSI Standards Limited 2021

ISBN 978 0 539 16753 5

ICS 91.040.01

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This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 November 2021.

Amendments/corrigenda issued since publication

Date	Text affected
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TECHNICAL REPORT

CEN/TR 17621

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

June 2021

ICS 91.040.01

English version

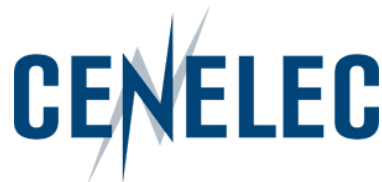
Accessibility and usability of the built environment - Technical performance criteria and specifications

Accessibilité et utilisabilité de l'environnement bâti -
Critères et spécifications de performance technique

Barrierefreiheit und Nutzbarkeit der gebauten
Umgebung - Technische Leistungskriterien und
Anforderungen

This Technical Report was approved by CEN on 23 May 2021. It has been drawn up by the Technical Committee CEN/CLC/JTC 11.

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Contents		Page
European foreword		5
Introduction		5
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Legal and policy background and associated benefits	8
5	Diversity of users and design considerations	8
6	Wayfinding	8
6.1	Wayfinding, orientation and navigation	8
6.2	Wayfinding information	8
6.3	Visual contrast	9
6.4	Tactile information	14
6.5	Audible information and hearing enhancement	19
6.6	Signage	20
6.7	Graphical symbols	25
7	Access in the outdoor environment	26
7.1	Accessible routes	26
7.2	Street furniture	36
7.3	Pedestrian crossings	38
7.4	Squares and plazas	44
7.5	'Shared Space' design approach	45
7.6	Plantings	46
7.7	Pedestrian bridges and underpasses	47
8	Arrival and departure areas - Parking areas	48
8.1	Rationale	48
8.2	Boarding points/Set-down points	48
8.3	Location of designated accessible parking spaces	49
8.4	Number of designated accessible parking spaces	49
8.5	Design of designated accessible parking space	50
8.6	Pedestrian paths in car parks	51
8.7	Signage of designated parking spaces	51
8.8	Access from parking space to an adjacent higher pedestrian path	52
8.9	Surface	52
8.10	Indoor parking	52
8.11	Cycle parking	52
9	Horizontal circulation in buildings	52
9.1	Entrances	52
9.2	Corridors and passageways	58
9.3	Doors	62
9.4	Windows	67
9.5	Patios, balconies, terraces	69
9.6	Surface finishes and materials	70
10	Vertical circulation in buildings and outdoors	73
10.1	Ramps	73
10.2	Steps and stairs	79

10.3	Handrails	83
10.4	Lifts	88
10.5	Vertical and inclined lifting platforms.....	99
10.6	Escalators and moving walks	104
11	Specific indoor and outdoor areas, equipment and provisions.....	104
11.1	Service counters for information, ticketing and reception	104
11.2	Waiting and queuing areas	106
11.3	Seating and resting areas.....	107
11.4	Storage areas, lockers and baggage storage	110
11.5	Kitchen areas and kitchenettes	111
11.6	Facilities for assistance dogs (outdoor and indoor)	114
12	Sanitary accommodation	114
12.1	Accessible toilets.....	114
12.2	Toilets for general use	124
12.3	Sanitary facilities for other users	125
12.4	Showers and bathrooms.....	131
13	User interface, controls and switches	134
13.1	Rationale.....	134
13.2	Public ICT information screens	134
13.3	ICT user interfaces	135
13.4	Controls and switches	136
13.5	Examples of general use elements	138
14	Fire safety for all - Evacuation and emergency exits	139
14.1	Concept for Fire safety for all	139
14.2	Fire engineering design objectives	139
14.3	Evacuation for all	139
14.4	Assistive fire evacuation: Areas of rescue assistance.....	139
14.5	Emerging fire evacuation technologies	140
14.6	Fire defence plans.....	140
14.7	Lifts for emergency evacuation	140
14.8	Emergency warning systems, signals and information	140
14.9	Emergency exit doors.....	141
15	Environmental conditions in buildings	141
15.1	Lighting.....	141
15.2	Acoustics	148
15.3	Indoor air quality.....	154
16	Accommodation	154
16.1	General	154
16.2	Hotels.....	155
16.3	Student accommodation	159
16.4	Adaptable housing.....	160
17	Cultural, leisure and sport buildings.....	164
17.1	General	164
17.2	Auditoriums, concert halls and similar	164
17.3	Libraries.....	167
17.4	Museums	169
17.5	Heritage buildings and sites	171
17.6	Retail and shopping buildings	175
17.7	Sport facilities	177
17.8	Restaurants, bars and cafés	178

17.9	Swimming pools, saunas	181
18	Administrative, service and employment buildings	182
18.1	General.....	182
18.2	Conference venues.....	182
18.3	Offices.....	183
18.4	Healthcare buildings.....	184
18.5	Educational buildings.....	189
18.6	Laboratories	191
18.7	Banks, post offices	192
18.8	Industrial buildings.....	193
18.9	Courts, police stations and detention facilities.....	194
18.10	Religious buildings.....	195
19	Outdoor and urban areas.....	196
19.1	General.....	196
19.2	Playgrounds.....	196
19.3	Garden, parks and nature parks.....	197
19.4	Beaches	197
20	Transport facilities.....	198
20.1	General.....	198
20.2	Taxi facilities	198
20.3	Bus and coach facilities.....	199
20.4	Rail facilities	204
20.5	Metro/underground facilities	206
20.6	Tram and light rail facilities	207
20.7	Airport facilities	208
20.8	Ports facilities	209
20.9	Cable car facilities.....	210
20.10	Service stations.....	210
	Annex A (informative) Visual contrast charts	212
	Annex B (informative) Examples of pedestrian crossings	215
	Annex C (informative) List of figures	222
	Bibliography.....	226

European foreword

This document (CEN/TR 17621:2021) 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC 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.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN and CENELEC websites.

Introduction

This document exemplifies the technical performance criteria and specifications to fulfil the functional requirements given in the European Standard EN 17210. It demonstrates a proposal, or proposals, to achieve the EN requirements and recommendations, drawing on performance criteria and specifications given in International Standard ISO 21542, where these exist and/or with examples from other standards and guidance documents, where relevant.

Alternatively, national standards or regulations may be used to determine the technical performance criteria and specifications to fulfil the functional requirements of the EN 17210.

Another CEN-CENELEC Technical Report (CEN/TR 17622) will detail the assessment of conformity to the functional requirements given in the European Standard EN 17210.

This document is intended to be read alongside EN 17210. The structure in CEN/TR 17621 follows the EN structure, listing the equivalent headings, clauses and bullet points (a), b), c) etc.) and providing a way, or ways, to achieve the functional requirements and recommendations.

Where there are no technical criteria related to the EN clause / sub-clause, such as the Rationale, this is stated rather than leaving this blank.

Technical performance criteria and specifications from ISO 21542:2011 are used in the CEN/TR 17621 as the main source of information, and this is not referenced as the source each time, as this would be repetitive. When the source is ISO 21542:2021 (Enquiry version) we include this source in brackets, and other sources are also referenced.

Other sources are used where these have been identified as providing information not covered in ISO 21542 or useful supplementary information.

Additional sources include:

- EN 16584-1, *Railway applications – Design for PRM use – General requirements – Part 1: Contrast,*
- EN 16584-2, *Railway applications – Design for PRM use – General requirements – Part 2: Information.*
- EN 16584-3, *Railway applications – Design for PRM use – General requirements – Part 3: Optical and friction characters.*
- EN 16587, *Railway applications – Design for PRM use – Requirements for obstacle free routes for infrastructure,*
- Other specific ENs and product related ENs,
- National standards,
- Guidance on a specific matter.

See also the Bibliography.

1 Scope

This document has been developed to support EN 17210, "Accessibility and usability of the built environment – Functional requirements". This document provides and exemplifies technical performance criteria and specifications for an accessible and usable built environment, following the Design for All/Universal design principles. The document specifies what is necessary to align with these principles which will facilitate equitable and safe use for a wide range of users.

The technical performance criteria and specifications are applicable across the full spectrum of the built environment and can be used as criteria for awarding public contracts (in support of the Public Procurement Directives).

These technical performance criteria and specifications are specifically applicable to the design, construction, refurbishment or adaptation, and maintenance of public or public-use environments including external areas.

Alternatively, national standards and regulations can determine the technical performance criteria and specifications to fulfil the functional requirements of EN 17210.

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 (UN CRPD).

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.

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 17210, *Accessibility and usability of the built environment - Functional requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 17210 and the following apply:

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

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <http://www.electropedia.org/>

3.1

light reflectance value

LRV

proportion of visible light reflected by a surface at all wavelengths and directions when illuminated by a light source

Note 1 to entry: *LRV* is also known as the luminance reflectance factor or CIE Y value (see International Commission on Illumination, CIE, Publication 15:2004, 3rd Edition, *Colorimetry*).

Note 2 to entry: The *LRV* is expressed on a scale of 0 to 100, with a value of 0 points for pure black and a value of 100 points for pure white.

[SOURCE: ISO 21542:2011, definition 3.41]