
Prostori za gledalce - 7. del: Vhodni in izhodni elementi ter poti

Spectator facilities - Part 7: Entry and exit elements and routes

Zuschaueranlagen - Teil 7: Ein- und Ausgangsanlagen und Wege

Installations pour spectateurs - Éléments et itinéraires d'entrée et de sortie

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91.040.10	Javne stavbe	Public buildings
97.200.10	Gledališka, odrska in studijska oprema ter delovne postaje	Theatre, stage and studio equipment
97.220.10	Športni objekti	Sports facilities

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Spectator facilities - Part 7: Entry and exit elements and routes

Installations pour spectateurs - Partie 7 : Éléments et
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Zuschaueranlagen - Teil 7: Eingangs- und
Ausgangsanlagen und Wege

This European Standard was approved by CEN on 30 November 2013.

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Foreword

This document (EN 13200-7:2014) has been prepared by Technical Committee CEN/TC 315 “Spectator facilities”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by September 2014, and conflicting national standards shall be withdrawn at the latest by September 2014.

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.

This European Standard (EN 13200), with the general title *Spectator facilities*, is divided into different parts:

- EN 13200-1, *Spectator facilities — Part 1: General characteristics for spectator viewing area*;
- CEN/TR 13200-2, *Spectator facilities — Layout criteria of service area — Part 2: Characteristics and national situations*;
- EN 13200-3, *Spectator facilities — Part 3: Separating elements — Requirements*;
- EN 13200-4, *Spectator facilities — Part 4: Seats — Product Characteristics*;
- EN 13200-5, *Spectator facilities — Part 5: Telescopic stands*;
- EN 13200-6, *Spectator facilities — Part 6: Demountable (temporary) stands*;
- EN 13200-7, *Spectator facilities — Part 7: Entry and exit elements and routes* [the present document];
- prEN 13200-8, *Spectator facilities — Part 8: Safety Management*;
- prEN 13200-9, *Spectator facilities — Part 9: Communications systems in spectator facilities*.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European standard has been prepared in order to specify the general design criteria for entry and exit systems (including entry and exit elements and routes) used in spectator facilities under normal and emergency conditions.

Within this European Standard, minimum and recommended values for dimensions are occasionally presented. It should be recognized that these values are to be considered as values that in part, recognize different national requirements as a basic provision. The provision and nature of facilities for persons with special needs will invariably impact upon spectator facilities. Special needs embraces spectators with learning difficulties, impaired hearing, impaired vision, mobility impairment, children and elderly people.

Attention is drawn to the fact that in certain countries additional requirements may be applicable due to existing national regulations.

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EN 13200-7:2014 (E)

1 Scope

This European Standard specifies safety and design characteristics of entry and exit elements of passage that are used in spectator facilities, either singularly or in combination, to provide a route.

2 Normative references

The following referenced documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, *Safety rules for the construction and installations of lifts — Particular applications for passenger and good passengers lifts — Part 70: Accessibility to lifts for persons including persons with disability*

EN 115 (all parts), *Safety of escalators and moving walks*

EN 12193, *Light and lighting — Sports lighting*

EN 13200-1:2012, *Spectator facilities — Part 1: General characteristics for spectator viewing area*

ISO 7001, *Graphical symbols — Public information symbols*

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3 Terms and definitions

For the purpose of this document, the terms and definitions given in EN 13200-1:2012 and the following apply.

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entry capacity

number of spectators who can enter the facility in a fixed interval of time

3.2

entry elements

individual components of the entry system that provide for the passage of spectators

3.3

entry route

combination of elements that provides for the passage of spectators from their point of entry to the viewing accommodation

3.4

exit capacity

number of spectators to exit the facility in a specified interval

3.5

exit elements

individual components of the exit system that provide for the passage of spectators

3.6

exit route

combination of elements that provides for the passage of spectators from their viewing accommodation to a final exit from the facility

3.7**landing**

level surface at the head, foot or between flights of stair ways or ramps

3.8**access control element**

mechanical or electronic device, including those for people with special needs, which can control count and record of spectator entry

3.9**point of entry**

location at which a spectator first passes through an access control element

3.10**turnstile**

mechanical and or electronic device with revolving arms which allows singular passage, including counting

Note 1 to entry: A turnstile is not always an appropriate entry device for a person with special needs.

3.11**concourse**

circulation area with access to and from the spectator viewing accommodation which can serve as a meeting area for spectators for purposes of refreshment and entertainment

Note 1 to entry: Direct access to toilet facilities may also be provided.

3.12**passageway**

access route to a sector or block

Note 1 to entry: A passageway, on level ground, slope or stair, includes vomitory and gangway.

3.13**stairway**

succession of steps including any landing at the head and foot of the steps or between flights that enables pedestrian passage between levels

3.14**rate of passage**

number of persons per meter width per minute that can pass through the specified element of an entry or exit route

3.15**flow capacity**

number of spectators that can safely pass through a given width of a space in a specified time

3.16**ramp**

slope designed to enable the passage of a pedestrian or wheel chair user from one level to another

3.17**place of safety**

place where a person is no longer in danger from fire or other emergencies

3.18**final exit**

termination of an escape route from a building or facility giving direct access to a place of safety

EN 13200-7:2014 (E)**3.19****vomitory**

element of passage that provides entry to or exit from the viewing area

3.20**circulation**

free movement of spectators within a spectator facility

3.21**external perimeter barrier**

barrier which separates the external area from the spectator's service area

3.22**queue pre-selection device**

element that directs a spectator towards a specific passageway or route

3.23**refuge**

area separated from fire by fire-resisting construction of at least 90 min

Note 1 to entry: It is a temporarily safe space for people with special needs to wait for an evacuation lift or assistance up or down stairs.

3.24**risk assessment**

overall process comprising a risk analysis and a risk evaluation

Note 1 to entry: Risk analysis is a systematic use of available information to identify hazards and to estimate the risk. Risk evaluation is a procedure based on the risk analysis to determine whether the acceptable level of risk has been achieved.

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3.25**free flow exit system**

unobstructed exit route that provides means for spectators to reach, from the viewing area exits, the final exit from the facility or a place of safety in case of an emergency

4 Entry and exit — General characteristics**4.1 General**

The movement of spectators within a facility is characterized by their ingress, the nature of the event and their egress upon conclusion of the event.

An exceptional occurrence can initiate a full or partial emergency evacuation.

Spectator movements will occur in the areas schematically indicated in Figure 1 and Figure 2 as:

- viewing area;
- services area;
- external area.

The areas are defined in EN 13200-1 (see 3.3, 3.4 and 3.18).

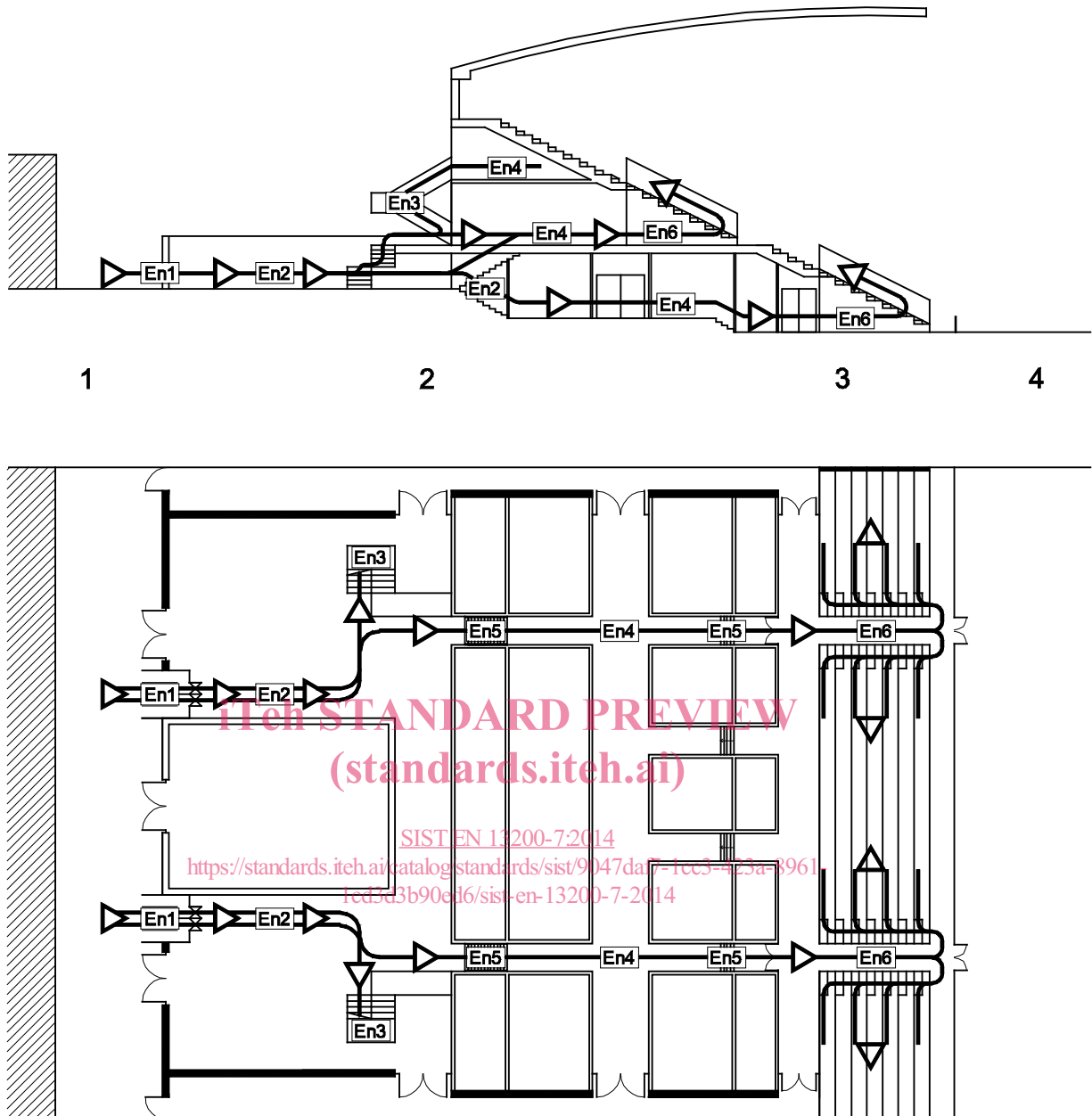
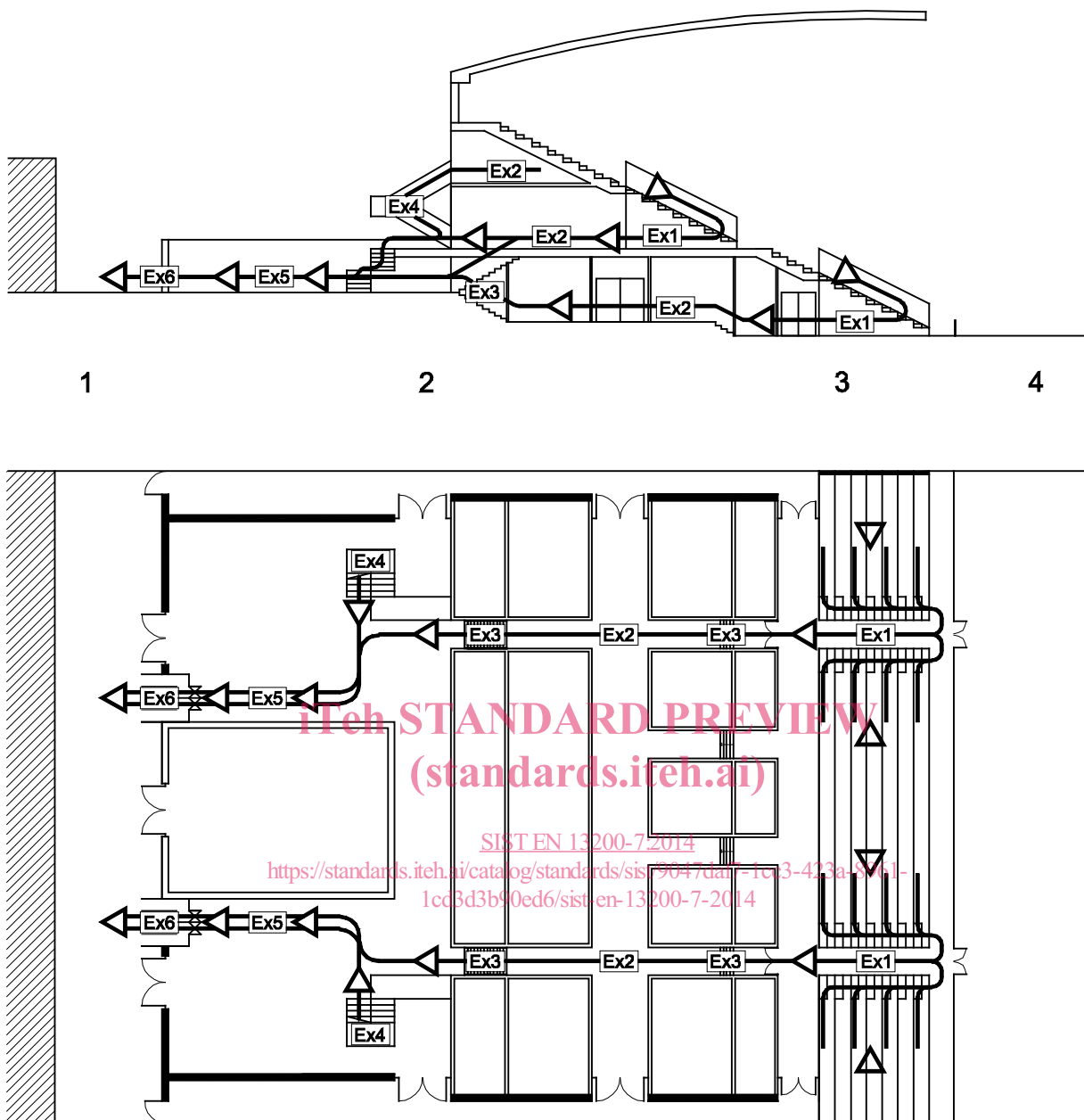


Figure 1 — Entry system

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**Key**

- 1 external area
- 2 services area
- 3 viewing area
- 4 activity area
- Ex1 vomitories
- Ex2 horizontal inside routes
- Ex3 vertical inside routes
- Ex4 vertical outside routes
- Ex5 horizontal outside routes
- Ex6 exit point

Figure 2 — Exit system