

STN	Plavecké bazény pre verejnost' Časť 1: Bezpečnostné požiadavky pri navrhovaní	STN EN 15288-1 94 0403
------------	--	--

Swimming pools for public use - Part 1: Safety requirements for design

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 05/19

Obsahuje: EN 15288-1:2018

Oznámením tejto normy sa ruší
STN EN 15288-1+A1 (94 0403) z marca 2011

128827

EUROPEAN STANDARD

EN 15288-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2018

ICS 97.220.10

Supersedes EN 15288-1:2008+A1:2010

English Version

Swimming pools for public use - Part 1: Safety requirements for design

Piscines à usage public - Partie 1 : Exigences de sécurité pour la conception

Schwimmbäder - Teil 1: Sicherheitstechnische Anforderungen an Planung und Bau

This European Standard was approved by CEN on 10 September 2018.

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 15288-1:2018 (E)

Contents	Page
European foreword.....	4
Introduction	6
1 Scope.....	7
2 Normative references.....	7
3 Terms and definitions	7
4 Classification.....	9
4.1 Swimming pool type 1	9
4.2 Swimming pool type 2	9
4.3 Swimming pool type 3	10
5 Safety related design factors and requirements.....	10
5.1 General.....	10
5.2 Occupancy.....	10
5.3 Layout.....	11
5.4 Public-safety information systems	11
5.5 Materials.....	12
5.6 Safety of barefoot areas	12
5.6.1 Finishes to wet areas.....	12
5.6.2 Slip resistance	12
5.7 General areas for bathers.....	13
5.7.1 General.....	13
5.7.2 Accessible pathways, floors.....	13
5.7.3 Steps and ramps.....	14
5.7.4 Emergency routes	14
5.7.5 Walls, pillars and protruding structures.....	14
5.7.6 Lighting, illumination and glare prevention	15
5.7.7 Acoustic design of indoor pool buildings	15
5.7.8 Pool hall heating and ventilation	16
5.7.9 Heated surfaces.....	16
5.8 Specific areas	17
5.8.1 Pool surrounds.....	17
5.8.2 Pool basin edge	19
5.8.3 Pool basin.....	19
5.9 Additional requirements for wave pools.....	21
5.10 Pool covers	22
5.11 First aid rooms	22
5.12 Control points.....	23
5.13 Storage rooms/areas for water treatment chemicals.....	23
5.13.1 General.....	23
5.13.2 Rooms for chlorination facilities using chlorine gas.....	24
5.14 Plant rooms and related equipment	24
5.14.1 General.....	24
5.14.2 Filtration plant room and related equipment	24
5.14.3 Disinfection and pH control plant room and related equipment	24
5.14.4 Coagulation and Flocculation equipment.....	25

6	Pool water distribution effectiveness	26
Annex A	(normative) Dye test	27
A.1	General	27
A.2	Chemicals for the dye test and dosing.....	27
A.3	Preparation of the dye test.....	27
A.4	Carrying out the dye test.....	28
A.5	Dye test for pre-fabricated pools with integrated systems	28
A.6	Verifying and documentation of the dye test.....	28
	Bibliography	29

EN 15288-1:2018 (E)**European foreword**

This document (EN 15288-1:2018) has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment", the secretariat of which is held by DIN.

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 June 2019, and conflicting national standards shall be withdrawn at the latest by June 2019.

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 15288-1:2008+A1:2010.

In relation to EN 15288-1:2008+A1:2010 the following main amendments have been made:

- a) introduction has been revised;
- b) scope has been revised by excluding EN 16582 by noting, that National and/or local legislation and instructions may apply;
- c) normative references have been updated;
- d) definition "Indoor swimming pools" has been revised;
- e) definition of private use has been deleted;
- f) definition "ramp" has been added;
- g) definition "therapeutic pool" has been revised;
- h) definition "Finnish overflow" has been deleted;
- i) definition "rest ledge" has been revised;
- j) definition "bather" has been revised;
- k) definition "bund" has been added;
- l) definition "reverberation time" has been added;
- m) definition "sound pressure level" has been added;
- n) definition "freeboard" has been added;
- o) classification Type 3 pools has been revised by excluding private use pools;
- p) new clause "Occupancy" has been added;
- q) water depth for the Depth indications where the pool floor profile changes abruptly has been changed;

- r) new clause "safety of barefoot" area has been added by adding requirements for the finish of the wet area and the slip resistance;
- s) requirements for steps and ramps have been revised;
- t) requirements for lighting, illumination and glare prevention have been revised;
- u) acoustic requirements have been revised;
- v) recommendation for a certain number of means of access around the pool basin has been added;
- w) additional requirements for wave pools have been added;
- x) clause "Plant rooms and related equipment" has been revised;
- y) new clause "Pool water distribution effectiveness" has been added to this standard and it has been revised;
- z) Annex A "Dye test" has been moved from EN 15288-2 to EN 15288-1 and it has also been revised;
- aa) wording aligned with EN 15288-2;
- bb) Bibliography has been updated.

This standard series EN 15288 "*Swimming pools for public use*" consists of the following parts:

- *Part 1: Safety requirements for design*
- *Part 2: Safety requirements for operation*

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

EN 15288-1:2018 (E)**Introduction**

Design is a key factor for a safe swimming pool. All of those involved in designing new pools or upgrading existing ones will need to give the highest priority to ensuring that they provide users and staff with a safe facility. Four steps need to be developed in order to achieve this:

- a) the layout of the pool hall (if any) and the pool basin (including its dimensions, profile and any water features) should be designed to make the safe use and supervision of the pool achievable without complex or costly management arrangements;
- b) the layout of the ancillary areas, including changing areas, clothes storage, shower and toilet areas, the plant room and chemical stores should be similarly designed for safe use;
- c) the structural elements, materials, finishes and details, including the pool hall enclosure (if any), pool basin and equipment and the way they are assembled should be the most appropriate to achieving a safe-to-use physical environment;
- d) relevant planning criteria for safe and functionally correct maintenance.

There are specific sources of information from which the technical design and planning standards recommended in the design of swimming pools can be obtained. Those involved in the process of specifying, designing and constructing pools should be familiar with these design and planning standards and should ensure that they are given careful consideration in all pool projects.

It is also important to draw the attention of those involved in the design process to the implications of their work for the pool operator. What might be thought of as a small change in the layout of the pool or in the finishes specified could have a significant impact on the ability of the pool to be used safely. If that change is ill-considered and creates a serious design flaw, the result might be an increase in accidents. More likely, it will be an increase in the cost of operating the pool (perhaps through the employment of additional staff) to compensate for the resulting problems.

One way of anticipating the management consequences of design decisions is to include a qualified/competent pool operational person on the design team. This person should give advice and guidance during the various development stages of the project.

This standard includes requirements, recommendations and notes. While compliance with requirements is mandatory to fulfil this standard, recommendations indicate best practices and notes give additional information and/or explanations.

1 Scope

This document specifies safety requirements relevant to certain aspects of the design and construction of classified pools according to Clause 4. It is intended for those concerned with the design, construction, planning and operation of classified swimming pools. It provides guidance about the risks associated by identifying the design characteristics required for a safe environment.

The requirements of this document are applicable to all new classified pools and, as appropriate, to specific refurbishments of classified existing pools.

This document has limited application to classified pools which consist of segregated areas of rivers, lakes or the sea but this document should be followed where relevant.

National and/or local legislation may apply.

This document is not applicable to domestic swimming pools according to EN 16582 (all parts). Further definitions of domestic swimming pools and/or use are given in EN 16582.

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 1838, *Lighting applications — Emergency lighting*

EN 12193, *Light and lighting — Sports lighting*

EN 13451-1, *Swimming pool equipment — Part 1: General safety requirements and test methods*

EN 13451-2, *Swimming pool equipment — Part 2: Additional specific safety requirements and test methods for ladders, stepladders and handle bends*

EN 13451-3, *Swimming pool equipment — Part 8: Additional specific safety requirements and test methods for leisure water features*

EN ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs (ISO 7010)*

HD 60364-7-702, *Low-voltage electrical installations — Part 7-702: Requirements for special installations or locations — Swimming pools and fountains*

EN 60849, *Sound systems for emergency purposes (IEC 60849)*

koniec náhl'adu – text ďalej pokračuje v platenej verzii STN