



SLOVENSKI STANDARD
oSIST prEN 17232:2018

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Vodna igralna oprema - Varnostne zahteve, preskusne metode in zahteve za obratovanje

Water play equipment and features - Safety requirements, test methods and operational requirements

Wasserspielgeräte - Sicherheitstechnische Anforderungen, Prüfverfahren und betriebliche Anforderungen

Équipements et éléments de jeux aquatiques - Exigences de sécurité, méthodes d'essai et exigences de fonctionnement

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ICS:

97.220.40	Oprema za športe na prostem in vodne športe	Outdoor and water sports equipment
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Water play equipment and features - Safety requirements, test methods and operational requirements

Équipements et éléments de jeux aquatiques -
Exigences de sécurité, méthodes d'essai et exigences de
fonctionnement

Wasserspielgeräte - Sicherheitstechnische
Anforderungen, Prüfverfahren und betriebliche
Anforderungen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 136.

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

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European foreword

This document (prEN 17232:2018) 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 document is currently submitted to the CEN Enquiry.

iTeh STANDARD PREVIEW
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Introduction

For the quality of reading and understanding this document, the following wording is used:

- shall = requirement;
- should = recommendation;
- may = permission;
- can = possibility.

It is not the purpose of the requirements of this document to lessen the contribution that water play equipment/feature makes to the child's development and/or play, which is meaningful from an educational point of view.

Risk-taking is an essential feature of play provision and of all environments in which children legitimately spend time playing. Play provision aims to offer children the chance to encounter acceptable risks as part of a stimulating, challenging and controlled learning environment. Play provision should aim at managing the balance between the need to offer risk and the need to keep children safe from serious harm.

The principles of safety management are applicable both to workplaces in general as well as to play provision. However, the balance between safety and benefits is likely to be different in the two environments. In play provision, exposure to some degree of risk might be of benefit because it satisfies a basic human need and gives children the chance to learn about risk and consequences in a controlled environment.

Respecting the characteristics of children's play and the way children benefit from playing in a water environment with regard to development, children need to learn to cope with risk and this can lead to bumps and bruises and even occasionally a broken limb. The aim of this document is first and foremost to prevent accidents with a disabling or fatal consequence, and secondly to lessen serious consequences caused by the occasional mishap that inevitably will occur in children's pursuit of expanding their level of competence, be it socially, intellectually or physically.

Without striving for completeness, among others the following features could be considered when designing, installing and using water play equipment/feature:

- a) Water (and air) emitting - as described in EN 13451-3;
- b) Without water (or air) emitting - e.g. a playground feature;
- c) Solo features - e.g. one step stone;
- d) Groups of features - e.g. a group of step stones;
- e) Normally dry features but with wetted surface by e.g. water cannons, sprays etc.;
- f) Climbable features (intended to);
- g) Not climbable features (and not intended to) - e.g. an elevated spray park structure;
- h) Additional features not intended to be climbed but with the possibility - e.g. artificial rocks, supporting constructions;
- i) Raised and (often) combined features (spray park) with also waterslides connected - e.g. a raised spray ground structure;
- j) Raised and (often) combined features (spray park) without waterslides connected - e.g. a raised spray park structure.

prEN 17232:2018 (E)**1 Scope**

This document specifies safety requirements, test methods and operational requirements for non-floating water play equipment, features and structures in areas intended for water activities for public use (non-domestic). Water is an integral part in the use of the play equipment/feature/structures covered in this document.

The purpose of this document is to ensure a proper level of safety when playing in, on or around water play equipment/feature(s), and at the same time to promote activities and features known to benefit children because they provide valuable experiences that will enable them to cope with situations outside the water play equipment/feature(s).

This document also applies for spray parks.

The following are excluded:

- a) floating leisure articles according to EN ISO 25649 series;
- b) artificial climbing walls according to EN 12572 series;
- c) toys according to EN 71 series;
- d) Water slides according to EN 1069 series;
- e) climbing walls used in the swimming pool surround according to prEN 17164.
- f) Water equipment/features (e.g. fountains) not intended for playing.

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 1069 (all parts), *Water slides*

EN 1176 (all parts), *Playground equipment and surfacing*

EN 1177, *Impact attenuating playground surfacing - Determination of critical fall height*

EN 13451 (all parts), *Swimming pool equipment*

EN 13451-1:2011+A1:2016, *Swimming pool equipment - Part 1: General safety requirements and test methods*

EN 15288-2, *Swimming pools - Part 2: Safety requirements for operation*

EN ISO 3834 (all parts), *Quality requirements for fusion welding of metallic materials (ISO 3834 (all parts))*

EN ISO 14732:2013, *Welding personnel - Qualification testing of welding operators and weld setters for mechanized and automatic welding of metallic materials (ISO 14732:2013)*

EN ISO 15607, *Specification and qualification of welding procedures for metallic materials - General rules (ISO 15607)*

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

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

ISO 3864-3, *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs*

ISO 7001, *Graphical symbols — Public information symbols*

ISO 20712-1, *Water safety signs and beach safety flags — Part 1: Specifications for water safety signs used in workplaces and public areas*

ISO 22727, *Graphical symbols — Creation and design of public information symbols — Requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 15288-1 and the following 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 <http://www.iso.org/obp>

3.1

water play equipment/feature

equipment and features including components and constructional elements that incorporate water as an element intended for playing

3.2

spray park

specific barefoot recreational area installed with water play equipment/features without water retention accessible to the users

3.3

pool, swimming and bathing pool

artificial structure for swimming and/or bathing purposes continuously flooded with treated water in which several persons can be present either simultaneously or in temporal succession

3.4

climbable features

water play equipment/feature that allows the user to move on it or in it by the use of a hand and foot/leg support

3.5

public use

use of an installation open to everyone or to a defined group of users, not designated solely for the owner's/proprietor's/operator's family and guests independently from paying an entrance fee

[SOURCE: EN 15288-1:2008+A1:2010, 3.5]

prEN 17232:2018 (E)**3.6
swimming pool equipment**

components installed in and around a basin, designated:

- to operate the basin and its functionally adjoining areas;
- to use it and its functionally adjoining areas

Note 1 to entry: These components can be part of the swimming pool technology (e.g. water inlets or outlets), to assist the users (e.g. ladders), for competitive and training use (e.g. starting platforms), for leisure (e.g. fountains).

[SOURCE: EN 13451-1:2011+A1:2016, 3.1]

**3.7
minimum zone for use**

minimum space required for anyone who may come into contact with equipment

[SOURCE: EN 13451-1:2011+A1:2016, 3.11]

**3.8
falling space**

space in, on or around the equipment that can be passed through by a user falling from an elevated part of the equipment

[SOURCE: EN 1176-1:2017, 3.7]

**3.9
elevated playing surface**

accessible area on a play equipment/feature where the play occurs and where the user can fall or jump off

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**3.10
playing surface**

surface of a water play equipment/feature from which the use of the playground equipment commences and which comprises at least the impact area

**3.11
minimum space**

smallest space required for the safe installation and use of the equipment

[SOURCE: EN 13451-1:2011+A1:2016, 3.10]

**3.12
impact area**

area that can be hit by a user after falling through the falling space

Note 1 to entry: The water surface is not considered as an impact area.

[SOURCE: EN 1176-1:2017 - modified: Note 1 to entry added]

**3.13
fall height to water surface**

maximum vertical distance from the elevated play surface to the underlying water surface

3.14**total fall height**

maximum vertical distance from elevated play surface to the impact area below

3.15**diving**

active movement from outside the water into the water head and arms forward

3.16**jumping**

active movement from outside the water into the water feet forward

3.17**handrail**

rail intended to assist the user to balance

[SOURCE: EN 1176-1:2017, 3.21]

3.18**barrier**

means of segregation to prevent movement or access

[SOURCE: EN 13451-1:2011+A1:2016, 3.14]

3.19**safety barrier**

barrier designed to prevent users from falling over, through or beneath

[SOURCE: EN 13451-1:2011+A1:2016, 3.15] [N 17232:2020](#)

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3.20**protrusion**

object, or a portion of an object, that stands or protrudes in/into the minimum zone for use

3.21**edge**

line being formed by two surfaces of something solid which meet one another

[SOURCE: EN 13451-1:2011+A1:2016, 3.8]

3.22**corner**

point being formed by two or more edges which meet one another

[SOURCE: EN 13451-1:2011+A1:2016, 3.9]

3.23**shearing point**

place where part of the equipment can move past a fixed or other moving part, or past a fixed area so that persons, or parts of their body, can be cut

[SOURCE: EN 1176-1:2017, 3.11]

prEN 17232:2018 (E)**3.24****entrapment**

hazard presented by the situation in which a body, or part of a body, the hair or clothing can become trapped

Note 1 to entry: Entrapment hazard can arise from situations where the body, its parts, etc. get trapped, but also from situations where the body of the user has no complete freedom to emerge from the water, e.g. when swimming underneath a stepladder.

[SOURCE: EN 13451-1:2011+A1:2016, 3.7]

[SOURCE: EN 13451-1:2011+A1:2016, 3.12]

3.25**free area**

unobstructed area in front of an entrance to the swim-under area for facilitating rescue activities

3.26**forced movement**

movement of the user caused by the equipment (e.g. swinging, sliding, carousel rotation etc.) which, once started, cannot be totally controlled by the user

Note 1 to entry: Rationale — falls are not considered forced movement as they are not imposed on the user by the equipment but occur for other reasons.

[SOURCE: EN 1176-1:2017, 3.34 - modified by deleting Note 2 to entry]

3.27**crushing point**

place where parts of the equipment can move against each other, or against a fixed area so that persons, or parts of their body, can be crushed

[SOURCE: EN 1176-1:2017, 3.10]

3.28**grid**

component to cover an overflow channel or an opening, designed to allow the passage of water

[SOURCE: EN 13451-1:2011+A1:2016, 3.17]

3.29**grip**

holding of the hand around the entire circumference of a support

Note 1 to entry: See Figure 1.