

Irish Standard I.S. EN 1069-2:2017

# Water slides - Part 2: Instructions

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#### I.S. EN 1069-2:2017

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T +353 1 807 3800

1 Swift Square, F+353 1 807 3838 T+353 1 857 6730 Northwood, Santry F+353 1 857 6729 E standards@nsai.ie Dublin 9 W NSAl.ie W standards.ie

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#### **National Foreword**

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EUROPEAN STANDARD

EN 1069-2

NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

August 2017

ICS 97.220.40

Supersedes EN 1069-2:2010

### **English Version**

# Water slides - Part 2: Instructions

Toboggans aquatiques - Partie 2: Instructions

Wasserrutschen - Teil 2: Hinweise

This European Standard was approved by CEN on 14 May 2017.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

# EN 1069-2:2017 (E)

# **Contents** Page

Europ	oean foreword	3	
Introd	duction	4	
1	Scope	5	
2	Normative references	5	
3	Terms and definitions	5	
4	Operation		
4.1 4.2	GeneralGuidelines to the operational risk assessment		
4.3	Risk reduction		
4.4	Basic elements for the identification of proper supervision		
4.5	Technical operation		
4.6	Emergency instructions		
4.7	Incident logbook	8	
5	Instructions for users	8	
5.1	Planning and use of signage		
5.2	Signage at the entrance of a slide		
5.3	Additional user information	11	
6	Documentation	12	
7	Maintenance instructions		
7.1	General		
7.2	Servicing		
7.3	Repair		
7.4	Modifications		
8	Inspections		
8.1	Inspection by the operator		
8.2	Independent periodic thorough inspection	14	
9	Commissioning		
10	Quality of Water	15	
Annex	x A (normative) Safety and information signs for water slides		
Annex	x B (informative) Example of the risk assessment	23	
<b>B.1</b>	Example of general risk assessment procedure	23	
<b>B.2</b>	Example of risk assessment about users spacing in Type 3 slide	28	
<b>B.3</b>	Example of risk assessment about users spacing in Type 5 slide	34	
Table	able B.4 — Hazards identification, risk estimation, risk evaluation		
Biblio	graphy	39	

# **European foreword**

This document (EN 1069-2:2017) 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 February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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 document supersedes EN 1069-2:2010.

EN 1069, Water slides, consists of:

- Part 1: Safety requirements and test methods
- Part 2: Instructions

In relation to EN 1069-2:2010 the following main amendments have been made:

- a) the document has been editorially revised;
- b) a risk in 4.2 "Guidelines to the operational risk assessment" has been added;
- c) in 8.1.1 "Routine visual inspection" one additional requirement was included;
- d) in 8.2.2 "Inspection procedure" the relevant components for the test have been changed;
- e) the requirements for 8.2.3 "Periodical practical sliding test" have been changed;
- f) Figure A.5 "Minimum/Maximum height of the user" has been divided in a) minimum height, b) maximum height, c) maximum age and d) minimum age;
- g) in B.2.3 "Limits of the water slide Use limits" a requirement to the basic information has been changed.

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 1069-2:2017 (E)

# Introduction

The provision of water slide installations is increasing, also are the concerns over the number of injuries resulting from the use of water slides, many of which are of a serious nature.

Many of the injuries have resulted from foreseeable circumstances and, given proper knowledge and control, could have been prevented.

A standard or a code of practice for instructions and the operation of water slides is seen as the most appropriate way to achieve an improvement in safety.

#### 1 Scope

This European Standard is applicable to water slides as defined in EN 1069-1:2017, 3.3.

This European Standard establishes the instructions for use, operation and maintenance as well as the documentation and commissioning of water slides.

#### 2 Normative references

The following 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 1069-1:2017, Water slides — Part 1: Safety requirements and test methods

EN 15288-1, Swimming pools — Part 1: Safety requirements for design

EN 15288-2:2008, Swimming pools - Part 2: Safety requirements for operation

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

EN ISO 9606-1, Qualification testing of welders - Fusion welding - Part 1: Steels (ISO 9606-1)

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

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 7010, Graphical symbols — Safety colours and safety signs — Registered safety signs

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

ISO 20712-3:2014, Water safety signs and beach safety flags — Part 3: Guidance for use

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 1069-1:2017 and the following apply.

#### 3.1

#### operator

company, organization, authority or person with overall control and responsibility for the water slide facility

# 3.2

#### platform

EN 1069-2:2017 (E)

area providing access to the start section

#### 3.3

#### raft

type of ride enhancement device for one or more users

## **Operation**

#### 4.1 General

EN 15288-2 applies and EN 15288-1 shall be considered if appropriate. The following subclauses give specific advice related to water slides.

# 4.2 Guidelines to the operational risk assessment

An operational risk assessment shall be performed by the slide operator, based on the results of the design risk assessment, as a basis for the identification of the proper supervision, following the requirements of EN 15288-2. In addition, and referring to the fact that impact between the users proved to be a critical issue, also the following risks shall be taken into consideration:

- a) inappropriate spacing at the start between users;
- b) sliding position (e.g. sitting) can bring the user to an involuntary stop:
- c) significant differences in speed can cause collisions of users;
- d) significant differences in speed caused by:
  - 1) different sliding positions;
  - 2) different bathing costume respectively wearing hardly any bathing costume (e.g. G-string type);
  - 3) different fitness, size, weight and age of user;
  - 4) Stopping or changing water flow rate (malfunction of water supply);
- e) reasonably foreseeable risky behaviours by the users:
  - 1) higher risk of collision between users at a splashdown area in contrast to a catch unit;
- suitability for children;
- g) foreseeable users categories (e.g. adults, children, both) and number of users (e.g. chain sliding allowed):
- h) allowed use of ride enhancement devices (e.g. mattresses, rafts);
- i) Unauthorised access.

Examples of general and specific risk assessments are given in Annex B.



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