Swimming pool equipment - Part 5: Additional specific safety requirements and test methods for lane lines and W. Solotono dividing line



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for |
|---|---|
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 06.08.2014. | Date of Availability of the European standard is 06.08.2014. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. | published in the official bulletin of the Estonian Centre for Standardisation. |
| See Eesti standard EVS-EN 13451-5:2014 sisaldab Euroopa standardi EN 13451-5:2014 inglisekeelset teksti. | This Estonian standard EVS-EN 13451-5:2014 consists of the English text of the European standard EN 13451-5:2014. |

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 97.220.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation: Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD NORME EUROPÉENNE

EN 13451-5

EUROPÄISCHE NORM

August 2014

ICS 97.220.10

Supersedes EN 13451-5:2001

English Version

Swimming pool equipment - Part 5: Additional specific safety requirements and test methods for lane lines and dividing line

Équipement de piscine - Partie 5: Exigences de sécurité et méthodes d'essai complémentaires spécifiques aux lignes de nage et lignes d'eau de séparation des espaces

Schwimmbadgeräte - Teil 5: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Schwimmbahnleinen und Trennseilanlagen

This European Standard was approved by CEN on 28 June 2014.

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, 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: Avenue Marnix 17, B-1000 Brussels

Contents

| Cont | tents | | Page |
|-------|----------------------------------|---|----------------------------|
| | · 6. | | |
| orew | | | |
| | Scope | | 4 |
| | Normative references | | 4 |
| | Terms and definitions | | 4 |
| | Lane lines | | 4 |
| .1 | Safety requirements | | 4 |
| 1.1 | | | |
| 1.2 | | | |
| 1.3 | Tensioning device | | 4 |
| 1.4 | Safety link | | 5 |
| 1.5 | | | |
| .1.6 | | | |
| .1.7 | | | |
| .1.8 | Safe operation | | 5 |
| .2 | | | |
| | Dividing lines |) | 5 |
| .1 | General | | 5 |
| 2 | Forms | | 5 |
| .3 | Safety requirements | | 6 |
| 3.1 | | | |
| 3.2 | Dividing rope | | 6 |
| 3.3 | Dividing rope holders | | 6 |
| .3.4 | | | |
| .4 | Test method | | 6 |
| .4.1 | | | |
| .4.2 | | | |
| .4.3 | Testing of dividing rope holders | | 6 |
| .5 | Marking | | 6 |
| iblio | graphy | | 7 |
| • | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | \ ' // |
| | | | |
| | | | <i>((((((((((</i> |
| | | | O. |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Foreword

This document (EN 13451-5:2014) 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 2015 and conflicting national standards shall be withdrawn at the latest by February 2015.

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 13451-5:2001.

In relation to EN 13451-5:2001, the following main changes have been made:

- a) the title has been extended by adding dividing lines;
- b) the Scope has been extended by adding dividing lines;
- c) the Scope has been updated by referring to EN 15288-1 and EN 15288-2;
- d) Safety requirements and test methods for dividing lines have been added;
- e) Annex A has been deleted.

This European Standard EN 13451, Swimming pool equipment, consists of the following parts:

- Part 1: General safety requirements and test methods;
- Part 2: Additional specific safety requirements and test methods for ladders, stepladders and handle bends;
- Part 3: Additional specific safety requirements and test methods for inlets and outlets and water/air based water leisure features;
- Part 4: Additional specific safety requirements and test methods for starting platforms;
- Part 5: Additional specific safety requirements and test methods for lane lines and dividing line;
- Part 6: Additional specific safety requirements and test methods for turning boards;
- Part 7: Additional specific safety requirements and test methods for water polo goals;
- Part 10: Additional specific safety requirements and test methods for diving platforms, diving springboards and associated equipment;
- Part 11: Additional specific safety requirements and test methods for moveable pool floors and moveable bulkheads.

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.

1 Scope

This European Standard specifies safety requirements for lane lines and dividing line in addition to the general safety requirements of EN 13451-1:2011 and should be read in conjunction within it.

The requirements of this specific standard take priority over those in EN 13451-1:2011.

This part of EN 13451 is applicable to manufactured lane lines for use in competition and training and dividing line for use in classified swimming pools as specified in EN 15288-1 and EN 15288-2.

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 12385-1, Steel wire ropes — Safety — Part 1: General requirements

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

EN ISO 2307, Fibre ropes - Determination of certain physical and mechanical properties (ISO 2307)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13451-1:2011 and the following apply.

3.1

lane line

linear floating device that divides the water surface into areas to mark swimming lanes

3.2

dividing line

device located on the water surface that divides the water surface into different areas

4 Lane lines

4.1 Safety requirements

4.1.1 Design

Lane lines shall extend over the full length of the swimming lane.

Where floats are fitted, they shall extend over the full length as an unbroken series without gaps.

NOTE Dimensional requirements for competitive use, stipulated by the governing body FINA (Fédération Internationale Natation Amateur), are given in [1] for information.

4.1.2 Structural integrity

The lane line, its fixings and the tensioning device shall withstand a tensile force of 15 kN.

4.1.3 Tensioning device

A device shall be fitted to tension the lane line after mounting in such a way that it maintains a straight position.