

Swimming pool equipment - Part 10: Additional specific safety requirements and test methods for diving platforms, diving springboards and associated equipment

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13451-10:2014 sisaldab Euroopa standardi EN 13451-10:2014 inglisekeelset teksti.	This Estonian standard EVS-EN 13451-10:2014 consists of the English text of the European standard EN 13451-10:2014.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 29.01.2014.	Date of Availability of the European standard is 29.01.2014.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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

English Version

Swimming pool equipment - Part 10: Additional specific safety requirements and test methods for diving platforms, diving springboards and associated equipment

Équipement de piscine - Partie 10: Exigences de sécurité et méthodes d'essai complémentaires propres aux plates-formes de plongeon, plongeurs et à l'équipement associé

Schwimmbadgeräte - Teil 10: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Sprungplattformen, Sprungbretter und zugehörige Geräte

This European Standard was approved by CEN on 6 December 2013.

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

Page

Foreword.....	3
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Safety requirements	7
4.1 Tolerances	7
4.2 Diving platforms.....	7
4.2.1 General.....	7
4.2.2 Dimensions.....	7
4.2.3 Structural integrity.....	12
4.2.4 Clearance zones.....	12
4.3 Diving springboards.....	13
4.3.1 General.....	13
4.3.2 Dimensions.....	13
4.3.3 Structural integrity.....	17
4.3.4 Adjustable fulcrum	17
4.3.5 Clearance zones.....	18
4.4 Means of access	18
4.4.1 General.....	18
4.4.2 Stepladders for diving facilities	18
4.5 Safety barriers.....	19
4.6 Slip resistance.....	20
4.7 Water diving zones	21
4.8 Agitation of water surface.....	21
4.9 Air cushion equipment.....	21
4.9.1 Air inlets.....	21
4.9.2 Operating console	21
5 Test methods.....	22
5.1 General.....	22
5.2 Structural integrity of diving springboards	22
5.2.1 Diving springboards Type 1	22
5.2.2 Diving springboards Type 2	22
5.3 Structural integrity of stepladders	23
5.3.1 Treads	23
5.3.2 Handle bends	23
5.3.3 Stepladder complete structure.....	23
5.4 Structural integrity of safety barriers	24
5.4.1 Test procedure.....	24
5.4.2 Compliance.....	24
5.4.3 Failure	24
Bibliography	25

Foreword

This document (EN 13451-10:2014) 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 July 2014, and conflicting national standards shall be withdrawn at the latest by July 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 document supersedes EN 13451-10:2004.

In relation to EN 13451-10:2004, the following significant changes have been made:

- a) an introduction has been added;
- b) the scope has been amended by referring to EN 15288-1 and EN 15288-2;
- c) normative references have been updated;
- d) dimensions of diving platform facilities have been revised;
- e) dimensions of diving springboard facilities have been revised;
- f) figures have been updated and revised;
- g) Annex A "Dimensional requirements of FINA, abstract from FINA 2003-2005 Handbook" has been deleted;
- h) a bibliography has been added.

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;*
- *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.

Introduction

Diving is a voluntary movement into water with arms and head entering the water first or a voluntary movement into water with feet entering the water first while performing acrobatics.

There can be additional requirements for purposes such as competition swimming, and advice should be sought from the governing body of the sport in question (see [1] and [2]).

This document is a preview generated by EVS

1 Scope

This part of EN 13451 specifies safety requirements for diving platforms, diving springboards and associated equipment in addition to the general safety requirements of EN 13451-1 and should be read in conjunction with it.

The requirements of this part of EN 13451 take priority over those in EN 13451-1.

This part of EN 13451 is applicable to platforms and springboards, and associated equipment 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 13451-1:2011, *Swimming pool equipment - Part 1: General safety requirements and test methods*

EN 13451-3, *Swimming pool equipment - Part 3: Additional specific safety requirements and test methods for inlets and outlets and water/air based water leisure features*

EN 22768-1, *General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications (ISO 2768-1)*

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**
diving facility
installation designed to provide the opportunity of diving
- 3.2**
diving platform
raised rigid horizontal platform, protruding over the water, intended for diving
- 3.3**
diving springboard type 1
raised flexible board, installed at a height $1,0\text{ m} \leq h \leq 3,05\text{ m}$ above water level and protruding over the water, intended for diving
- 3.4**
diving springboard type 2
raised flexible board, which can be permanently installed or portable, with a height $< 1,0\text{ m}$ from water level and protruding over the water, intended for recreational diving
- 3.5**
plummet line
vertical line extending through the centre of the front edge of a platform or springboard