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



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13451-2:2015+A1:2020 sisaldab Euroopa standardi EN 13451-2:2015+A1:2020 ingliskeelset teksti.	13451-2:2015+A1:2020 consists of the English text	
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 01.07.2020.	Date of Availability of the European standard 01.07.2020.	
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 <u>standardiosakond@evs.ee</u>.

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: Koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

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:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN 13451-2:2015+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2020

ICS 97.220.10

English Version

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

Équipement de piscine - Partie 2 : Exigences de sécurité et méthodes d'essai complémentaires spécifiques aux échelles verticales, aux échelles à inclinaison et aux mains courantes

Schwimmbadgeräte - Teil 2: Zusätzliche besondere sicherheitstechnische Anforderungen und Prüfverfahren für Leitern, Treppenleitern und Griffbögen

This European Standard was approved by CEN on 7 November 2015 and includes Amendment 1 approved by CEN on 17 May 2020.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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

Cont	tents	Page
Europ	oean foreword	3
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4 4.1 4.1.1	Safety requirements Dimensions General	5
4.1.2 4.1.3 4.1.4 4.2 4.3	Ladders Stepladders Handle bends Structural integrity Slip resistance	6
5	Test methods	
6	Additional instructions for use	11
Annex	x A (informative) Examples of easier access to the pool to address the needs of old	
D!l.l! .	persons and persons with disabilities ography	12
	ography	
2		

European foreword

This document (EN 13451-2:2015+A1:2020) 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 January 2021 and conflicting national standards shall be withdrawn at the latest by January 2021.

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 includes Amendment 1 approved by CEN on 2020-05-17.

This document supersedes (A) EN 13451-2:2015 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{\mathbb{A}}$ $\boxed{\mathbb{A}}$.

In relation to EN 13451-2:2001, the following significant modifications have been made:

- a) the scope has been updated by referring to EN 15288-1 and EN 15288-2;
- b) the normative references have been updated;
- c) the terms and definitions have been modified;
- d) dimensions for the ladder have been modified;
- e) dimensions for the step ladder have been modified;
- f) examples of easier access to the pool to address the needs of older persons and persons with disabilities has been added as an informative annex;
- g) 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 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, Je. gary. .
Portugal. .
. 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 part of EN 13451 specifies safety requirements for ladders, stepladders and handle bends in addition to the general safety requirements of EN 13451-1.

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

This part of EN 13451 is applicable to manufactured ladders, stepladders and handle bends used for pool access and egress 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

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

ladder

vertical structure with horizontal treads and two handrails used for access and egress from the water to the surrounding area

3.2

stepladder

inclined structure with horizontal treads and handrail(s) used for access and egress from the water to the surrounding area

3.3

tread

area of the step which comes into contact with the foot of the user while ascending or descending

3.4

step

horizontal component intended to bear the load of the user

3.5

handle bends

structures designed to assist access and egress from the water to the surrounding area

4 Safety requirements

4.1 Dimensions

4.1.1 General

The dimensions indicated in the Figures 1 to 3 shall be complied with. The design of the equipment does not need to comply with the examples given.

The cross section of parts designed to be gripped can be round, oval, a rounded rectangular or elliptical and shall be between 25 mm and 50 mm.