

Institut luxembourgeois de la normalisation de l'accréditation, de la sécurité et qualité des produits et services

ILNAS-EN 13089:2011+A2:2021

# **Mountaineering equipment - Ice-tools - Safety requirements and test methods**

Bergsteigerausrüstung - Eisgeräte -Sicherheitstechnische Anforderungen und Prüfverfahren

Équipement d'alpinisme et d'escalade - Outils à glace - Exigences de sécurité et méthodes d'essai

#### **National Foreword**

This European Standard EN 13089:2011+A2:2021 was adopted as Luxembourgish Standard ILNAS-EN 13089:2011+A2:2021.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html

#### THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

## EUROPEAN STANDARD ILNAS-EN 13089:2011+A2 EN 13089:2011+A2

## NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

December 2021

ICS 97.220.40

Supersedes EN 13089:2011+A1:2015

**English Version** 

# Mountaineering equipment - Ice-tools - Safety requirements and test methods

Équipement d'alpinisme et d'escalade - Outils à glace -Exigences de sécurité et méthodes d'essai Bergsteigerausrüstung - Eisgeräte -Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 19 March 2015 and includes Amendment 2 approved by CEN on 17 October 2021.

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	<b>ents</b>	age
European forewordIntroduction		3
		4
1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Safety requirements	6
4.1	Edges	
4.2	Shaft strength	
4.3	Strength in the load direction YY	
4.4	Strength in the load direction XX	
4.5	Pick strength	7
5	Test methods	7
5.1	Preparation of test samples	
5.2	Apparatus	7
5.3	Procedure	7
5.3.1	Test sample	7
5.3.2	Edges	8
5.3.3	Shaft strength	8
5.3.4	Strength in the load direction YY	
5.3.5	Strength in the load direction XX	
5.3.6	Pick strength	10
6	Marking	11
7	Information to be supplied by the manufacturer	12
Annex	A (informative) Standards on mountaineering equipment	13
Annex	ZA (informative) 🗗 Relationship between this European Standard and the essential	
	requirements of Regulation (EU) 2016/425 aimed to be covered	15

## **European foreword**

This document (EN 13089:2011+A2:2021) 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 June 2022, and conflicting national standards shall be withdrawn at the latest by June 2022.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes  $\triangle$  EN 13089:2011+A1:2015  $\triangle$  .

This document includes Amendment 1 approved by CEN on 2015-03-19, and Amendment 2 approved by CEN on 2021-10-17.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{\mathbb{A}_1}$   $\boxed{\mathbb{A}_2}$   $\boxed{\mathbb{A}_2}$ .

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

In comparison with the previous edition EN 13089:1999, the following significant changes have been made:

- a) an editorial revision has been carried on;
- b) the Scope is more specified to ice-tools as protection against falls;
- c) there is a new classification of ice-tools;
- d) Subclause 4.7 was deleted;
- e) the test method for shaft strength has been revised;
- f) Subclause 5.3.7 was deleted;
- g) there is an additional marking.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, 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 the United Kingdom.

## Introduction

This document is based on the former UIAA-Standard C (Union Internationale des Associations (A) d'Alpinisme), which has been prepared with international participation.

This document is one of a package of standards for mountaineering equipment, see Annex A.

#### 1 Scope

This document specifies safety requirements and test methods for ice-tools for use in mountaineering including climbing, and as a buried anchor for protection against falls.

#### 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 565, Mountaineering equipment - Tape - Safety requirements and test methods

#### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

#### ice-tool

hand held tool intended for movement on snow and/or ice and/or rock which can also be used as an anchor point or as a brake in snow and comprises at least a shaft and a pick

Note 1 to entry: See Figure 1.

#### 3.2

#### type 1 ice-tool

ice-tool with a shaft/pick connection intended for use in snow and/or ice

#### 3.3

#### type 2 ice-tool

ice-tool with a shaft/pick connection intended for use on rock, and/or snow, and/or ice

#### 3.4

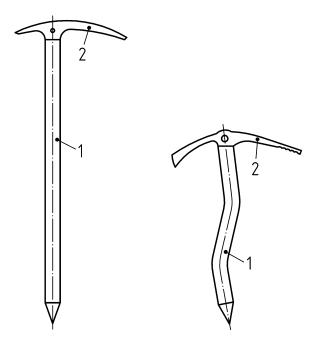
#### type 1 pick

pick intended for use in snow and/or ice

#### 3.5

#### type 2 pick

pick intended for use on rock, and/or snow, and/or ice



### Key

- 1 Shaft of the ice-tool
- 2 Pick of the ice-tool

Figure 1 — Main parts of an ice-tool

### 4 Safety requirements

#### **4.1 Edges**

All edges of the ice-tool with which the user's hands can come into contact shall be free from burrs. The shaft of the ice tool has to be free of sharp edges.

#### 4.2 Shaft strength

When tested in accordance with 5.3.3, on removal of the load from the shaft the permanent deformation at the point of application of the load shall not exceed 3 mm or the calculated  $f_K$  value.

#### 4.3 Strength in the load direction YY

When tested in the load direction YY (see Figure 2) in accordance with 5.3.4,

- a) the test sample shall not break;
- b) no component part of the test sample shall work loose.

#### 4.4 Strength in the load direction XX

When tested in the load direction XX (see Figure 2) in accordance with 5.3.5,

- a) the shaft shall not break;
- b) no component part of the test sample shall work loose;