

BS EN 12276:2013



BSI Standards Publication

Mountaineering equipment — Frictional anchors — Safety requirements and test methods

bsi.

...making excellence a habit.
AVA Documents™
Document Sharing Hub

National foreword

This British Standard is the UK implementation of EN 12276:2013. It supersedes BS EN 12276:1999 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee SW/136/5, Sports, Playground and other Recreational Equipment - Mountaineering Equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 73209 6

ICS 97.220.40

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2013.

Amendments issued since publication

Date	Text affected
------	---------------

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 12276

November 2013

ICS 97.220.40

Supersedes EN 12276:1998

English Version

Mountaineering equipment - Frictional anchors - Safety requirements and test methods

Équipement d'alpinisme et d'escalade - Coinceurs
mécaniques - Exigences de sécurité et méthodes d'essai

Bergsteigerausrüstung - Klemmgeräte -
Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 28 September 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

© 2013 CEN All rights of exploitation in any form and by any means reserved
worldwide for CEN national Members.

Ref. No. EN 12276:2013 E

Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Requirements	5
4.1 Design	5
4.2 Strength	5
5 Test methods.....	5
5.1 Test samples	5
5.2 Apparatus for strength test	5
5.3 Conditioning and test conditions.....	7
5.4 Procedure	8
6 Marking	9
7 Information supplied by the manufacturer	10
Annex A (informative) Protection provided by Frictional Anchors	12
Annex B (informative) Standards on mountaineering equipment.....	13
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC.....	14
Bibliography	15

Foreword

This document (EN 12276:2013) 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 May 2014, and conflicting national standards shall be withdrawn at the latest by May 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 12276:1998.

This document has been prepared under a mandate 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 relation to EN 12276:1998 the following main amendments have been made:

- a) the passive strength has been added;
- b) addition of test procedure for testing holding force and passive strength;
- c) addition of pictograms for holding force and passive strength for the marking;
- d) addition of a pictogram for reading the manufacturers information.

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 and test methods for frictional anchors for use in mountaineering including climbing.

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

EN ISO 139, *Textiles - Standard atmospheres for conditioning and testing (ISO 139)*

ISO 7000, *Graphical symbols for use on equipment - Registered symbols*

3 Terms and definitions

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

3.1

frictional anchor

device, capable of self-expansion, which can be placed in a parallel-sided crack in the rock, and which, due to friction between the device and the rock, can withstand a load

Note 1 to entry: See Annex A for protection provided by frictional anchors.

3.2

means of attachment

part of the frictional anchor which allows the attachment of a connector

Note 1 to entry: Applies to connectors in accordance with EN 12275.

3.3

holding force

force necessary to cause the frictional anchor, or its means of attachment, to break or to be pulled through the test apparatus and determined in the strength test in accordance with 5.4.2.2

3.4

passive strength

force necessary to cause the frictional anchor, or its means of attachment, to break or to be pulled through the test apparatus and determined in the strength test in accordance with 5.4.2.3

3.5

operational range

range of the widths within which the manufacturer ensures the holding force will be at least the minimum holding force marked on the frictional anchor