Mountaineering equipment - Energy absorbing systems for use in klettersteig (via ferrata) climbing - Safety requirements and test methods



EESTI STANDARDI EESSÕNA

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Standard on jõustunud selle avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsio Euroopa standardi rahvuslike kättesaadavaks 15.03.2017.	J 1
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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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English Version

Mountaineering equipment - Energy absorbing systems for use in klettersteig (via ferrata) climbing - Safety requirements and test methods

Équipement d'alpinisme et d'escalade - Absorbeurs d'énergie utilisés en Via Ferrata - Exigences de sécurité et méthodes d'essai Bergsteigerausrüstung - Fangstoßdämpfer für die Verwendung auf Klettersteigen (Via Ferrata) -Sicherheitstechnische Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 16 January 2017.

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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 958:2017) 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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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 EN 958:2006+A1:2010.

In comparison to the previous edition EN 958:2006+A1:2010, the following technical changes have been made:

- a) in the scope, energy absorbing systems (EAS) according to this document have been limited to users weighing not less than 40 kg (total weight without equipment) and no more than 120 kg (total weight including the equipment);
- b) additional design requirements for the arm and overall lengths;
- c) in 4.2, the maximum braking length was changed to 2200 mm;
- d) in Clauses 6 and 7, the requirements of 40 kg and 120 kg was added;
- e) in 4.3.3 a fatigue test was added.

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 89/686/EEC, see informative Annex ZA, which is an integral part of this document.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies safety requirements and test methods for energy absorbing systems (EAS) for use in climbing on a Via Ferrata, for users weighing not less than 40 kg (total weight without equipment) and no more than 120 kg (total weight including the equipment).

NOTE This European Standard is one of a package of standards for mountaineering equipment, see Annex A.

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 1891, Personal protective equipment for the prevention of falls from a height - Low stretch kernmantel ropes

EN 12275, Mountaineering equipment - Connectors - Safety requirements and test methods

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

ISO 6487, Road vehicles — Measurement techniques in impact tests — Instrumentation

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

Via Ferrata

route consisting of a fixed climbing installation including a safety line where the user is not always supervised

Note 1 to entry: The mere presence of a wire cable/rope on a mountain route does not constitute a Via Ferrata (e.g. Hörnli Ridge on Matterhorn).

3.2

safety line

flexible or rigid, horizontal, vertical or sloping, continuous or discontinuous installation, used as protection against fall from a height and possible progression aid

3.3

energy absorbing system (EAS)

device connecting the climber to the safety line, using an energy absorber to limit the impact forces on the climber and the fixed installation

Note 1 to entry: See Figure 1.

3.4

energy absorber

part of the EAS which limits the impact force during a climber's fall

Note 1 to entry: See Figure 1.