

**Ohutusnõuded inimeste  
transportimiseks mõeldud  
kõistepaigaldistele. Elektriseadmed,  
v.a. Ajamisüsteemid**

Safety requirements for cableway installations  
designed to carry persons - Electrical equipment  
other than for drive systems

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13243:2004 sisaldab Euroopa standardi EN 13243:2004 + AC:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13243:2004 consists of the English text of the European standard EN 13243:2004 + AC:2005.</p> <p>This document is endorsed on 21.12.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This document specifies safety requirements for electrical devices, apart for those in drive systems, for cableway installations designed to carry persons. This standard is applicable to the various types of installations and takes into account their environment. Electromagnetic compatibility (EMC) is not covered in this document; cableways and their components should comply with general requirements for EMC.</p>	<p><b>Scope:</b></p> <p>This document specifies safety requirements for electrical devices, apart for those in drive systems, for cableway installations designed to carry persons. This standard is applicable to the various types of installations and takes into account their environment. Electromagnetic compatibility (EMC) is not covered in this document; cableways and their components should comply with general requirements for EMC.</p>
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ICS 45.100

Võtmesõnad:

ICS 45.100

English version

## Safety requirements for cableway installations designed to carry persons - Electrical equipment other than for drive systems

Prescriptions de sécurité pour les installations à câbles transportant des personnes - Dispositifs électriques autres que les entraînements

Sicherheitsanforderungen für Seilbahnen für den Personenverkehr - Elektrische Einrichtungen, ohne Antriebe

This European Standard was approved by CEN on 23 August 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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## Foreword

This document (EN 13243:2004) has been prepared by Technical Committee CEN/TC 242 "Safety requirements for passenger transportation by rope", the secretariat of which is held by AFNOR.

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 April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

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.

This document contains a bibliography.

This document forms part of the standards programme approved by the CEN Technical Board on safety requirements for cableway installations designed to carry persons.

- 1) Safety requirements for cableway installations designed to carry persons — Terminology
- 2) Safety requirements for cableway installations designed to carry persons — General requirements
- 3) Safety requirements for cableway installations designed to carry persons — Calculations
- 4) Safety requirements for cableway installations designed to carry persons — Ropes
- 5) Safety requirements for cableway installations designed to carry persons — Tension devices
- 6) Safety requirements for cableway installations designed to carry persons — Drive systems and other mechanical equipment
- 7) Safety requirements for cableway installations designed to carry persons — Carriers
- 8) Safety requirements for cableway installations designed to carry persons — Electrical equipment other than for drive systems
- 9) Safety requirements for cableway installations designed to carry persons — Civil engineering works
- 10) Safety requirements for cableway installations designed to carry persons — Pre-commissioning inspection, maintenance and operational checks
- 11) Safety requirements for cableway installations designed to carry persons — Evacuation and rescue
- 12) Safety requirements for cableway installations designed to carry persons — Operation
- 13) Safety requirements for cableway installations designed to carry persons — Quality assurance

This series of standards forms a complete set with regard to the design, production, installation, maintenance and operation of any cableway installation designed to carry persons.

With regard to ski-tows, the text of this document is based on the work of the International Ropeway Organization (OITAF).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This document specifies safety requirements for electrical devices, apart for those in drive systems, for cableway installations designed to carry persons. This standard is applicable to the various types of installations and takes into account their environment.

Electromagnetic compatibility (EMC) is not covered in this document; cableways and their components should comply with general requirements for EMC.

For electrical devices which are parts of drive systems, the requirements of those sections of EN 13223 listed in its scope as relating to drive systems should be observed.

This standard contains requirements for prevention of accidents and protection of workers.

This standard does not apply to cableways for transportation of goods or to inclined lifts.

## 2 Normative references

The following referenced documents are indispensable for the application 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 418, *Safety of machinery — Emergency stop equipment, functional aspects — Principles for design.*

EN 954-1, *Safety of machinery — Safety related parts of control systems — Part 1: General principles for design.*

EN 1709, *Safety requirements for cableway installations designed to carry persons — Pre-commissioning inspection, maintenance and operational inspection and checks*

prEN 1907:2004, *Safety requirements for cableway installations designed to carry persons — Terminology.*

EN 1908, *Safety requirements for cableway installations designed to carry persons — Tensioning devices.*

EN 1909, *Safety requirements for cableway installations designed to carry persons — Recovery and evacuation.*

EN 12397, *Safety requirements for cableway installations designed to carry persons — Operation.*

EN 12408, *Safety requirements for cableway installations designed to carry persons — Quality assurance.*

EN 12927-1, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 1: Selection criteria for ropes and their end fixings.*

EN 12927-2, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 2: Safety factors.*

EN 12927-3, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 3: Long splicing of 6-strand hauling, carrying-hauling and towing ropes.*

EN 12927-4, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 4: End fixings.*

EN 12927-5, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 5: Storage, transportation, installation and tensioning.*

EN 12927-6, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 6: Discard criteria.*

EN 12927-7, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 7: Inspection, repair and maintenance.*

EN 12927-8, *Safety requirements for cableway installations designed to carry persons — Ropes — Part 8: Magnetic rope testing (MRT).*

EN 12929-1, *Safety requirements for cableway installations designed to carry persons — General requirements — Part 1: Requirements for all installations.*

EN 12929-2, *Safety requirements for cableway installations designed to carry persons — General requirements — Part 2: Requirements for bicable aerial ropeways without carrier truck brake.*

EN 12930, *Safety requirements for cableway installations designed to carry persons — Calculations.*

EN 13107, *Safety requirements for cableway installations designed to carry persons — Civil engineering works.*

EN 13223, *Safety requirements for cableway installations designed to carry persons — Drive systems and other mechanical equipment.*

prEN 13796-1, *Safety requirements for cableway installations designed to carry persons — Carriers — Part 1: Grips, carrier trucks, on-board brakes, cabins, chairs, carriages, maintenance carriers, tow-hangers.*

prEN 13796-2, *Safety requirements for cableway installations designed to carry persons — Carriers — Part 2: Slipping resistance tests for grips.*

prEN 13796-3, *Safety requirements for cableway installations designed to carry persons — Carriers — Part 3: Fatigue testing.*

EN 50110-1, *Operation of electrical installations.*

EN 50110-2, *Operation of electrical installations (national annexes).*

EN 50272-2, *Safety requirements for secondary batteries and battery installations - Part 2: Stationary batteries.*

EN 60204-1, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:1997)..*

EN ISO 12100-2, *Safety of machinery — Basic concepts, general principles for design - Part 2: Technical principles (ISO 12100-2:2003).*

EN ISO 13849-2, *Safety of machinery — Safety-related parts of control systems - Part 2: Validation (ISO 13849-2:2003).*