

OHUTUSNÕUDED INIMESTE TRANSPORTIMISEKS  
MÕELDUD KÖISTEPAIGALDISTELE. TAASKÄIVITUS  
HÄDAOLUKORRAS JA EVAKUEERIMINE

Safety requirements for cableway installations designed  
to carry persons - Recovery and evacuation

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 1909:2017 sisaldab Euroopa standardi EN 1909:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 1909:2017 consists of the English text of the European standard EN 1909:2017.
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 25.01.2017.	Date of Availability of the European standard is 25.01.2017.
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 [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 45.100

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 [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

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](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

## Safety requirements for cableway installations designed to carry persons - Recovery and evacuation

Prescriptions de sécurité pour les installations à câbles  
transportant des personnes - Récupération et  
évacuation

Sicherheitsanforderungen an Seilbahnen für den  
Personenverkehr - Räumung und Bergung

This European Standard was approved by CEN on 24 November 2014.

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, 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: Avenue Marnix 17, B-1000 Brussels**

## Contents

	Page
European Foreword .....	3
1 Scope .....	5
2 Normative references .....	5
3 Terms and definitions .....	6
4 Symbols and abbreviations .....	6
5 General requirements .....	6
5.1 Application of this standard .....	6
5.2 Safety principles .....	6
5.2.1 General .....	6
5.2.2 Hazard scenarios .....	6
5.2.3 Safety measures .....	6
6 General requirements for recovery and evacuation .....	7
7 Requirements for informing the passengers .....	7
7.1 Information content .....	7
8 Requirements for the recovery of the carriers .....	8
9 Requirements for evacuation of the passengers .....	9
9.1 Provisions common to the various methods .....	9
9.2 Evacuation to the ground .....	9
9.3 Evacuation along the rope .....	10
9.4 Other evacuation methods .....	11
9.5 Equipment for evacuation to the ground .....	11
9.5.1 General requirements .....	11
9.5.2 Requirements specific to equipment for access to the carriers from the ground .....	11
9.5.3 Requirements specific to equipment for access to carriers from line structures and by the rope .....	12
9.5.4 Requirements specific to equipment for descent from carriers .....	12
9.6 Evacuation plan .....	12
9.6.1 Choice of evacuation methods .....	12
9.6.2 Contents of the evacuation plan .....	13
9.6.3 Use of helicopters .....	13
10 Training and instruction of the evacuation personnel .....	13
Annex ZA (Informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2000/9/EC relating to cableway installations designed to carry persons .....	15
Bibliography .....	16

## European Foreword

This document (EN 1909:2017) has been prepared by Technical Committee CEN/TC 242 “Safety requirements for cableway installations designed to carry persons”, 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, by July 2017 at the latest, and all conflicting national standards shall be withdrawn no later than July 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights or similar rights. CEN and/or CENELEC shall not be held responsible for identifying all or some of these patent rights.

This document is intended to replace EN 1909:2004.

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 2000/9/EC.

For the relationship with EU Directive 2000/9/EC, see informative Annex ZA, which is an integral part of this document.

The most significant changes compared to the previous edition of EN 1909 are as follows:

— For Subclause 5.2.2 Danger factors: the factor “incompetence, unfitness, inattention or failure of those involved in evacuation operations” has been replaced by “human failure”.

—For Subclause 7.2 Transmission of information: addition of a requirement in the event that landline telephones are used in tunnels.

—For numbered entry 9.1.6: addition of a recommendation concerning the management of lighting and the precautions to be taken against fire.

—For Subclause 9.6.3: Use of helicopters: change of approach. The previous version of the standard defined precisely the methods and resources to be implemented (which did not always correspond to field practices). The new version of the standard only indicates the need for prior consultation between the cableway operator and the organisation responsible for the helicopter.

—For Annex ZA (informative), Relationship between this European Standard and the Essential Requirements of EU Directive 2000/9/EC relating to cableway installations designed to carry persons: addition of two essential requirements of the Directive (4.4 and 7.3.2) in view of Clause 9.

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

EN 1907, *Safety requirements for cableway installations designed to carry persons – Terminology*;

EN 12929 (all parts), *Safety requirements for cableway installations designed to carry persons – General requirements*;

EN 12930, *Safety requirements for cableway installations designed to carry persons – Calculations*;

EN 12927 (all parts), *Safety requirements for cableway installations designed to carry persons – Ropes*;

EN 1908, *Safety requirements for cableway installations designed to carry persons – Tensioning devices*;

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

EN 13796 (all parts), *Safety requirements for cableway installations designed to carry persons – Carriers;*

EN 13243, *Safety requirements for cableway installations designed to carry persons – Electrical equipment other than for drive systems;*

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

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

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*

This series of standards forms a complete set dealing with the design, manufacture, construction, maintenance and operation of all cableway installations designed to carry persons.

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

## 1 Scope

This European Standard specifies the safety requirements applicable to the recovery of carriers and the evacuation of passengers from cableway installations designed to carry persons, with the exception of ski-tows. This standard is applicable to various types of installations and takes into account their environment.

It establishes the requirements relating to the methods and equipment to be used to ensure the safety of passengers on cableways in the event of extended stoppage of the installation.

It covers only the situation resulting from immobilization of the carriers, even if the passengers are not in immediate danger.

It does not cover specific operations resulting from an accident.

It includes requirements relating to the prevention of accidents and to worker protection, without affecting the application of national requirements relating to construction law or statutory law, or to the protection of specific groups of people. It does not apply to installations for the transportation of goods by rope or to lifts.

It does not deal with design requirements for carriers.

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

EN 1907, *Safety requirements for cableway installations designed to carry persons – Terminology*

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

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 (all parts), *Safety requirements for cableway installations designed to carry persons – Ropes*

EN 12929 (all parts), *Safety requirements for cableway installations designed to carry persons – General requirements*

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*

EN 13243, *Safety requirements for cableway installations designed to carry persons – Electrical equipment other than for drive systems*

EN 13796 (series), *Safety requirements for cableway installations designed to carry persons – Carriers*

EN 60268-5, *Sound system equipment – Part 5: Loudspeakers (CEI 60268-5)*