

**Raudteealased rakendused. Rööbastee. Nõuded  
kinnitussüsteemide tööomadustele. Osa 1: Määratlused.**

**Railway applications - Track - Performance  
requirements for fastening systems - Part 1: Definitions**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 13481-1:2012 sisaldab Euroopa standardi EN 13481-1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 13481-1:2012 consists of the English text of the European standard EN 13481-1:2012.
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 23.05.2012.	Date of Availability of the European standard is 23.05.2012.
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 01.040.93, 93.100

### 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:  
Aru 10, 10317 Tallinn, Eesti; [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:  
Aru 10, 10317 Tallinn, Estonia; [www.evs.ee](http://www.evs.ee); phone 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

## Railway applications - Track - Performance requirements for fastening systems - Part 1: Definitions

Applications ferroviaires - Voie - Exigences de performance  
pour les systèmes de fixation - Partie 1: Définitions

Bahnanwendungen - Oberbau - Leistungsanforderungen für  
Schienenbefestigungssysteme - Teil 1: Definitionen

This European Standard was approved by CEN on 27 April 2012.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

**Contents**

Page

**Foreword .....3**

**1     Scope.....4**

**2     Normative references .....4**

**3     Terms and definitions.....4**

**Bibliography .....9**

## Foreword

This document (EN 13481-1:2012) has been prepared by Technical Committee CEN/TC 256 "Railway applications", 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 November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

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 13481-1:2002.

In this revision of EN 13481-1:2002 the main changes are as follows:

- a) A range of categories of fastening systems have been included in 3.1;
- b) the definition of embedded rail (3.12) has been extended;
- c) definitions of low and high frequency dynamic stiffness have been added (3.25).

This European Standard is one of the series EN 13481 "*Railway applications – Track – Performance requirements for fastening systems*" which consists of the following parts:

- *Part 1: Definitions*
- *Part 2: Fastening systems for concrete sleepers*
- *Part 3: Fastening systems for wood sleepers*
- *Part 4: Fastening systems for steel sleepers*
- *Part 5: Fastening systems for slab track with rail on the surface or rail embedded in a channel*
- *Part 7: Special fastening systems for switches and crossings and check rails*

NOTE Part 6 does not exist in this series.

These European Standards are supported by the test methods in the series EN 13146 "*Railway applications – Track – Test methods for fastening systems*".

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).

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies the definitions of the terms used in the EN 13146 series and in the EN 13481 series.

## 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 13146-1:2012, *Railway applications – Track – Test methods for fastening systems – Part 1: Determination of longitudinal rail restraint*

EN 13146-2:2012, *Railway applications – Track – Test methods for fastening systems – Part 2: Determination of torsional resistance*

EN 13146-3:2012, *Railway applications – Track – Test methods for fastening systems – Part 3: Determination of attenuation of impact loads*

EN 13146-4:2012, *Railway applications – Track – Test methods for fastening systems – Part 4: Effect of repeated loading*

EN 13146-5:2012, *Railway applications – Track – Test methods for fastening systems – Part 5: Determination of electrical resistance*

EN 13146-6:2012, *Railway applications – Track – Test methods for fastening systems – Part 6: Effect of severe environmental conditions*

EN 13146-7:2012, *Railway applications – Track – Test methods for fastening systems – Part 7: Determination of clamping force*

EN 13146-8:2012, *Railway applications – Track – Test methods for fastening systems – Part 8: In service testing*

EN 13146-9:2009+A1:2011, *Railway applications – Track – Test methods for fastening systems – Part 9: Determination of stiffness*

EN 13232-1, *Railway applications – Track – Switches and crossings – Part 1: Definitions*

EN 13481 (all parts), *Railway applications – Track – Performance requirements for fastening systems*

## 3 Terms and definitions

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

### 3.1

#### **categories of fastening system**

typical types of fastening system related to speed and axle load of trains on tracks, for which they are designed, and the rail section used