

**Raudteealased rakendused. Rööbastee. Puitliiprid ja -  
prussid KONSOLIDEERITUD TEKST**

Railway applications - Track - Wood sleepers and bearers  
CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13145:2005+A1:2011 sisaldab Euroopa standardi EN 13145:2001+A1:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.10.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.10.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 13145:2005+A1:2011 consists of the English text of the European standard EN 13145:2001+A1:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.10.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 12.10.2011.

The standard is available from Estonian standardisation organisation.

ICS 79.040, 93.100

### Standardite reprodutseerimis- ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:  
Aru 10 Tallinn 10317 Eesti; [www.evs.ee](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

### Right to reproduce and distribute 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 permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation:  
Aru str 10 Tallinn 10317 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 - Wood sleepers and bearers**

Applications ferroviaires - Voie - Traverses et supports en  
bois

Bahnanwendungen - Oberbau - Gleis- und  
Weichenschwellen aus Holz

This European Standard was approved by CEN on 1 December 2000 and includes Amendment 1 approved by CEN on 6 September 2011.

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 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
4 Species .....	9
5 Forms, dimensions and tolerances .....	9
5.1 Forms .....	9
5.1.1 Sleepers .....	9
5.1.2 Bearers.....	10
5.2 Dimensions.....	10
5.3 Tolerances .....	10
6 Defects and quality features.....	11
6.1 Raw materials.....	11
6.2 Untreated sleepers and bearers .....	11
7 Durability and preservation .....	14
7.1 Durability .....	14
7.2 Preservation .....	15
7.2.1 Sleepers and bearers .....	15
7.2.2 Wood preservative.....	15
7.2.3 Penetration .....	15
7.2.4 Retention .....	15
8 Factory production control.....	16
9 Marking .....	16
Annex A (informative) Most commonly used dimensions for sleepers and bearers .....	17
Annex ZA (informative)  Relationship between this European Standard and the Essential Requirements of EU Directive 2008/57/EC  .....	19

## Foreword

This document (EN 13145:2001+A1:2011) 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 April 2012, and conflicting national standards shall be withdrawn at the latest by April 2012.

**A1** This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document. **A1**

This document includes Amendment 1, approved by CEN on 2011-09-06.

This document supersedes EN 13145:2001.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**.

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.

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 and United Kingdom.

## 1 Scope

This European Standard defines wood species, quality requirements, origin, manufacturing conditions, forms, dimensions and tolerances as well as the durability and preservation of wood sleepers and bearers for use in railway tracks. It does not cover specific finishing processes that may be required by the customer. It does not apply to other track timbers.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 252	Field test method for determining the relative protective effectiveness of a wood preservative in ground contact
EN 335-1	Durability of wood and wood-based products - Definition of hazard classes of biological attack - Part 1: General
EN 350-2	Durability of wood and wood-based products - Natural durability of solid wood - Part 2: Guide to natural durability and treatability of selected wood species of importance in Europe
EN 351-1	Durability of wood and wood-based products - Preservative-treated solid wood - Part 1: Classification of preservative penetration and retention
EN 599-1	Durability of wood and wood-based products - Performance of wood preservatives as determined by biological tests - Part 1: Specification according to hazard class
EN 844-3:1995	Round and sawn timber - Terminology - Part 3: General terms relating to sawn timber
EN 844-7:1997	Round and sawn timber - Terminology - Part 7: Terms relating to the anatomical structure of timber
EN 844-9:1997	Round and sawn timber - Terminology - Part 9: Terms relating to features of sawn timber
EN 844-10:1998	Round and sawn timber - Terminology - Part 10: Terms relating to stain and fungal attack
EN 844-11:1998	Round and sawn timber - Terminology - Part 11: Terms relating to degrade by insects

## 3 Terms and definitions

For the purposes of this standard, the following terms and definitions apply:

### 3.1

#### **wood sleeper**

wood beam which supports running rails, check rails and where appropriate conductor rails at right angles to its axis. Usually the beam supports two running rails to form one track

### 3.2

#### **wood bearer**

wood beam, similar to a sleeper but generally longer, used to support running rails, check rails and where appropriate conductor rails, crossings and operating mechanisms in switches and crossings