

Teepiirdesüsteemid. Osa 5: Sõiduki piirdesüsteemidele esitatavad tootenõuded ja vastavushindamine

Road restraint systems - Part 5: Product requirements and evaluation of conformity for vehicle restraint systems

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1317-5:2007+A2:2012 sisaldab Euroopa standardi EN 1317-5:2007+A2:2012+AC:2012 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2012 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 21.03.2012.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 1317-5:2007+A2:2012 consists of the English text of the European standard EN 1317-5:2007+A2:2012+AC:2012.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2012 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 21.03.2012.

The standard is available from Estonian standardisation organisation.

ICS 13.200, 93.080.30

jõud, järelevalve, katsetamine, koormused, liikluskorraldusvahend, ohutus, sertifitseerimine, vastavushindamine

Standardite reprodutseerimis- ja levitamiseõigus 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; Telefon: 605 5050; E-post: 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; Phone: 605 5050; E-mail: info@evs.ee

English Version

Road restraint systems - Part 5: Product requirements and evaluation of conformity for vehicle restraint systems

Dispositifs de retenue routiers - Partie 5: Exigences relatives aux produits et évaluation de la conformité pour les dispositifs de retenue pour véhicules

Rückhaltesysteme an Straßen - Teil 5: Anforderungen an die Produkte, Konformitätsverfahren und -bewertung für Fahrzeurückhaltesysteme

This European Standard was approved by CEN on 28 September 2006 and includes Amendment 1 approved by CEN on 30 May 2008 and Amendment 2 approved by CEN on 23 January 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
Introduction.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Requirements	6
4.1 Performance under impact	6
4.2 Height of combined vehicle/ pedestrian parapets.....	7
4.3 Durability	7
5 Technical description of the vehicle restraint system (VRS).....	8
5.1 General.....	8
5.2 Product description.....	8
5.3 Details of system modifications.....	8
5.4 Installation requirements	8
6 Evaluation of conformity.....	9
6.1 General.....	9
6.2 Type testing.....	9
6.3 Factory Production Control (FPC)	11
6.4 Prototype products.....	13
7 Cases of technical specification non-compliance	13
8 Installation of road restraint systems.....	13
Annex A (normative) Modification of VRS tested in accordance with EN 1317-1, A2 EN 1317-2 A2 , EN 1317-3 or ENV 1317-4	14
Annex B (informative) Example list of cases of possible modifications to the requirements of Clauses 4, 5 and 6.....	17
Annex C (normative) A2 Resistance to snow removal A2	19
Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive.....	22
Bibliography	41

Foreword

This document (EN 1317-5:2007+A2:2012) has been prepared by Technical Committee CEN/TC 226 "Road equipment", 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 September 2012 and conflicting national standards shall be withdrawn at the latest by September 2012.

This document includes Amendment 1, approved by CEN on 2008-05-30 and Amendment 2, approved by CEN on 2012-01-23.

This document supersedes ^{A2} EN 1317-5:2007+A1:2008 ^{A2}.

The start and finish of text introduced or altered by amendment is indicated in the text by tags ^{A1} ^{A1} and ^{A2} ^{A2}.

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 European Standard consists of this document and the following parts under the general title: *Road restraint systems*.

- *Part 1: Terminology and general criteria for test methods*
- *Part 2: Performance classes, impact test acceptance criteria and test methods for safety barriers*
- *Part 3: Performance classes, impact test acceptance criteria and test methods for crash cushions*
- *Part 4: Performance classes, impact test acceptance criteria and test methods for terminals and transitions of safety barriers*
- *Part 6: Pedestrian restraint system*

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 United Kingdom.

Introduction

A2 This document is a product standard for vehicle restraint systems placed on the market.

This document is designed for use in conjunction with Parts 1, 2, 3, ENV 1317 part 4 (to be replaced with prEN 1317 part 4 and 7).

To ensure the full performance of road restraint systems in use, their production and installation is intended to be controlled in accordance with this document. **A2**

1 Scope

This European Standard specifies requirements for evaluation of conformity of the following vehicle restraint systems:

- a) safety barriers;
- b) crash cushions;
- c) terminals (will be effective when ENV 1317-4 becomes an EN);
- d) transitions (will be effective when ENV 1317-4 becomes an EN);
- e) vehicle / pedestrian parapets (only for the vehicle restraint function).

Pedestrian parapet requirements are not covered in this document.

Requirements for the evaluation of durability with respect to weathering are included in this document.

Requirements for other forms of durability (e.g. marine environment, sand abrasion) are not included.

Temporary barriers are not within the scope of this document.

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 206-1, *Concrete – Part 1: Specification, performance, production and conformity*

^[A1] EN 335-1, *Durability of wood and wood-based products – Definition of use classes – Part 1: General*

EN 335-2, *Durability of wood and wood-based products – Definition of use classes – Part 2: Application to solid wood* ^[A1]

EN 1317-1, *Road restraint systems – Part 1: Terminology and general criteria for test methods*

^[A2] EN 1317-2:2010, *Road restraint systems – Part 2: Performance classes, impact test acceptance criteria and test methods for safety barriers including vehicle parapets* ^[A2]

^[A2] EN 1317-3:2010 ^[A2], *Road restraint systems – Part 3: Performance classes, impact test acceptance criteria and test methods for crash cushions*

^[A2] ENV 1317-4:2001 ^[A2], *Road restraint systems – Part 4: Performance classes, impact test acceptance criteria and test methods for terminals and transitions of safety barriers*

prEN 1317-6, *Road restraint systems – Pedestrian restraint systems, pedestrian parapet*

^[A2] EN 10346, *Continuously hot-dip coated steel flat products – Technical delivery conditions* ^[A2]

EN 13369, *Common rules for precast concrete products*

EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods (ISO 1461:1999)*

^[A2] EN ISO 9001:2008, *Quality management systems – Requirements (ISO 9001:2008)* ^[A2]