RAUDTEEALASED RAKENDUSED. VEEREMI KÜLGMISED SISSEPÄÄSUSÜSTEEMID

Railway applications - Bodyside entrance systems for rolling stock

EESTI STANDARDIKESKUS
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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14752:2019 sisaldab Euroopa standardi EN 14752:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 14752:2019 consists of the English text of the European standard EN 14752:2019.
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 13.11.2019.	Date of Availability of the European standard is 13.11.2019.
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.

ICS 45.140

EUROPEAN STANDARD

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EN 14752

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English Version

Railway applications - Bodyside entrance systems for rolling stock

Applications ferroviaires - Systèmes d'accès latéraux pour matériel roulant

Bahnanwendungen - Seiteneinstiegssysteme für Schienenfahrzeuge

This European Standard was approved by CEN on 12 May 2019.

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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.

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

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Contents

Page

European foreword

This document (EN 14752:2019) 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 May 2020, and conflicting national standards shall be withdrawn at the latest by May 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14752:2015.

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 2016/797.

For relationship with EU Directive 2016/797, see informative Annex ZA, which is an integral part of this document.

EN 14752:2019 includes the following significant technical changes with respect to EN 14752:2015:

Subclause/paragraph/ table/figure	Change
General	Figures renumbered due to adding a figure to 4.1.6
Clause 2 Normative References	Some references updated and dated
3.2 Bridging plate	Reference to PRM standard
3.12 First step	Reference to PRM standard
3.19 Palm operated	Reference to PRM standard
3.25 Slip resistant	Reference to PRM standard
3.27 Technical Specification	Reworded
4.1.1.1 Minimum width	Reference to manual or semi-automatic ramps added
4.1.5 Train surfing	Reference to crew access needs added
4.1.6 Door windows	Details for step downwards added, Fig. enhanced
4.2.1.5 Vibration and shock	Design and testing separated
4.2.2 Step mechanical strength	Fig. improved
5.1.6.1 Door out of service	Operation from inside no more mandatory, defined in specification
5.2.1.3.1 Closing and opening signal - general	Amended to read: …under the supervision of the train crew **or** in the case of:
5.2.1.3.2.3 Release/Opening door signal	Reference to obsolete TSI RST deleted
5.2.1.3.3.1 General	Provisions for LED strps added
5.2.1.3.3.2 Visual signal	Duration becomes mandatory (…shall…)

5.2.1.3.4 Visual signals of door buttons	Moved from 4.3.1.7.1 in former edition
5.2.1.4.1 Sensitivity of obstacle detection	Mode of inserting test bar modified
5.2.1.4.3 Obstacle removal force	Mode of inserting test bar modified
5.2.1.4.2.2 Closing force	Reference to “traffic regularity” added, peak force definition modified, see also Annex D
5.2.1.5 Anti drag	Figure 16, Diameter corrected to 20 mm Table 1 test 2 dynamic –pulling from outside added
5.2.2.2 Stepand traction interlock system	In case of no interlock need for gauge infringement definition added
5.3.2 Limitationof opening	Disabling of opening in case of central closing added
5.5.1.8 Protection against accidential operation	Signal to train system after first action added
6.2 Type tests	Additional test at a cant of 3°
B.2 and B.3 Watertesting	Testing arrangement and procedure amended
D.2.4 Force graph and D.3.3 Measuring Method	Peak force definition amended
D.3.1 Condition of measurement	Reference to non contact detection added
D.3.3 Measuring Method	Reference to further attempts added
Annex F Load requirements	Order and wording changed due to TSi requirements
Annex K Migration Rule	Deleted
Annex ZA Relationship with TSI	Updated
Bibliography	Some references updated
NOTE The technical changes referred to include the significant technical changes from the EN revised but are not an exhaustive list of all modifications from the previous edition.	

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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document specifies the minimum requirements for construction and operation of railway passenger access systems to ensure:

— safe access and egress from passenger trains through body side doors and steps;

— usability for persons with reduced mobility;

— a minimum risk of injury to persons as a result of door and step operation;

— that the doors and moveable steps, ramps, bridging plates remain closed when the vehicle is in motion; and

— safe maintenance of the entrance systems.

1 Scope

This document applies to passenger body side entrance systems of all newly designed railway vehicles such as tram, metro, suburban, mainline and high-speed trains that carry passengers. The requirements of this document also apply to existing vehicles undergoing refurbishment of the door equipment, as far as it is reasonably practicable.

This document also specifies the requirements for testing of entrance systems.

This document makes reference to manual and power operated entrance systems. For manual doors, clauses referring to power operation are not applicable.

This document does not apply to the following:

— entrance systems for equipment access, inspection or maintenance purposes and for crew only use;

— doors on freight wagons; and

— doors or hatches specifically provided for escape under emergency conditions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 12663-1:2010+A1:2014, *Railway applications — Structural requirements of railway vehicle bodies — Part 1: Locomotives and passenger rolling stock (and alternative method for freight wagons)*

EN 13032-1:2004+A1:2012, *Light and lighting — Measurement and presentation of photometric data of lamps and luminaires — Part 1: Measurement and file format*

EN 13272:2012, *Railway applications — Electrical lighting for rolling stock in public transport systems*

EN 14067 (all parts), *Railway applications — Aerodynamics*

EN 16116-1:2013, *Railway applications — Design requirements for steps, handrails and associated access for staff — Part 1: Passenger vehicles, luggage vans and locomotives*

EN 45545-2:2013+A1:2015, *Railway applications — Fire protection on railway vehicles — Part 2: Requirements for fire behaviour of materials and components*

EN 50121-3-2:2016, *Railway applications — Electromagnetic compatibility — Part 3-2: Rolling stock — Apparatus*

EN 50125-1:2014, *Railway applications — Environmental conditions for equipment — Part 1: Rolling stock and on-board equipment*

EN 50126 (all parts), *Railway applications — The specification and demonstration of Reliability, Availability, Maintainability and Safety (RAMS)*

EN 50153:2014, *Railway applications — Rolling stock — Protective provisions relating to electrical hazards*

EN 50155:2017, *Railway applications — Rolling stock — Electronic equipment*

EN 50215:2009, *Railway applications — Rolling stock — Testing of rolling stock on completion of construction and before entry into service*

EN 50657:2017, *Railways Applications — Rolling stock applications — Software on Board Rolling Stock*

EN 60077-1:2002, *Railway applications — Electric equipment for rolling stock — Part 1: General service conditions and general rules (IEC 60077-1:1999, modified)*

EN 61373:2010, *Railway applications — Rolling stock equipment — Shock and vibration tests (IEC 61373:2010)*

EN ISO 4762:2004, *Hexagon socket head cap screws (ISO 4762:2004)*

EN ISO 10140-2:2010, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 2: Measurement of airborne sound insulation (ISO 10140-2:2010)*

EN ISO 12567-1:2010, *Thermal performance of windows and doors — Determination of thermal transmittance by the hot-box method — Part 1: Complete windows and doors (ISO 12567-1:2010)*

DIN 5032-7:2017, *Photometry — Part 7: Classification of illuminance meters and luminance meters*

DIN 7340:2011, *Tubular rivets cut from the tube*

UIC 566:1990, *Loadings of coach bodies and their components*

UIC 660:2002, *Measures to ensure the technical compatibility of high-speed trains*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1
access device
operating element used to unlock a locked door in order to allow for door opening from outside when the door is not available for normal operation