



BSI Standards Publication

Railway applications — Bodyside entrance systems for rolling stock

National foreword

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Railway applications - Bodyside entrance systems for rolling stock

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Bahnanwendungen - Seiteneinstiegssysteme für Schienenfahrzeuge

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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of an identical text or by endorsement, at the latest by May 2020, and conflicting national standards shall be withdrawn at the latest by May 2020.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 accidental 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.	

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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*