

RAUDTEEALASED RAKENDUSED. PIIRATUD
LIIKUMISVÕIMEGA ISIKUTE KASUTATAVAD
RAKENDUSED. PÄÄS RONGILE. OSA 2: ABIVAHENDID
RONGILE MINEKUKS

Railway applications - Design for PRM use -
Accessibility of persons with reduced mobility to
rolling stock - Part 2: Boarding aids

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16586-2:2025 sisaldab Euroopa standardi EN 16586-2:2025 ingliskeelset teksti. Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.10.2025. Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	This Estonian standard EVS-EN 16586-2:2025 consists of the English text of the European standard EN 16586-2:2025. This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. Date of Availability of the European standard is 01.10.2025. The standard is available from the Estonian Centre for Standardisation and Accreditation.
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ICS 11.180.01, 45.060.20

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English Version

**Railway applications - Design for PRM use - Accessibility of
persons with reduced mobility to rolling stock - Part 2:
Boarding aids**

Applications ferroviaires - Conception destinée à
l'usage par les PMR - Accessibilité du matériel roulant
aux personnes à mobilité réduite - Partie 2 : Dispositifs
d'aide à l'embarquement et au débarquement

Bahnanwendungen - Gestaltung für die Nutzung durch
PRM - Barrierefreier Zugang in Schienenfahrzeuge -
Teil 2: Einstiegshilfen

This European Standard was approved by CEN on 30 June 2025.

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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
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European foreword

This document (EN 16586-2:2025) 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 2026, and conflicting national standards shall be withdrawn at the latest by April 2026.

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 16586-2:2017.

In comparison with the previous edition, the following technical modifications have been made:

- the document template has been updated;
- the document has been revised generally for document references and editorial issues with grammar;
- scope modified;
- normative references updated;
- terms and definitions revised;
- 5.1 removed references to annexes covering EC verification and testing requirements;
- 5.3.1 (6) assessment methodology updated;
- 5.3.1 (9) (10) ‘tapered lip’ used in place of ‘upstand’;
- 5.5 updated to align with the PRM TSI;
- Annex A “EC verification - Interoperability constituents” removed;
- Annex B “Summary of testing requirements” removed;
- Annex C “Boarding aid visual examples” is now Annex A;
- Annex ZA updated;
- Bibliography updated.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

This document is part of a suite of four 'Design for PRM use' standards that have in total nine parts:

- EN 16584 is a standard that covers both infrastructure and rolling stock — Railway applications — Design for PRM use — General requirements:
 - Part 1: Contrast (EN 16584-1);
 - Part 2: Information (EN 16584-2);
 - Part 3: Optical and friction characteristics (EN 16584-3).
- EN 16585 is a standard that covers rolling stock — Railway applications — Design for PRM use — Equipment and components on board rolling stock:
 - Part 1: Toilets (EN 16585-1);
 - Part 2: Elements for sitting, standing and moving (EN 16585-2);
 - Part 3: Clearways and internal doors (EN 16585-3).
- EN 16586 is a standard that covers Rolling stock — Railway applications — Design for PRM use — Accessibility of persons with reduced mobility to rolling stock:
 - Part 1: Steps for access and egress (EN 16586-1);
 - Part 2: Boarding aids (EN 16586-2).
- EN 16587 is a standard that covers Infrastructure — Railway applications — Design for PRM use — Requirements for obstacle-free routes for infrastructure.

These standards aim to clarify the requirements (with clear and consistent terms and definitions) and to define the associated criteria and, where appropriate, methodologies to allow a clear pass/fail assessment.

1 Scope

This document describes the specific 'Design for PRM use' requirements applying to rolling stock and the assessment of those requirements. The following applies to this document:

- The definitions and requirements describe specific aspects of 'Design for PRM use' required by persons with disabilities and persons with reduced mobility as defined in the PRM TSI.
- This document defines elements which are universally valid for obstacle-free travelling relating to boarding aids. The definitions and requirements of this document are to be used for rolling stock applications.
- This document only refers to aspects of accessibility for PRM passengers; it does not define non-PRM related requirements and definitions.
- This document assumes that the rolling stock is in its defined operating condition.
- Where minimum or maximum dimensions are quoted these are absolute NOT nominal requirements.

The 'Accessibility of persons with reduced mobility' standard is written in two parts:

- Part 1 contains:
 - steps for access and egress.
- This document is Part 2 and contains:
 - boarding aids.

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 1756-2:2004+A1:2009, *Tail lifts - Platform lifts for mounting on wheeled vehicles - Safety requirements - Part 2: Tail lifts for passengers*

EN 14752:2019+A1:2021, *Railway applications - Bodyside entrance systems for rolling stock*

EN 15663:2017+A2:2024, *Railway applications — Vehicle reference masses*

EN 16584-1:2025, *Railway applications — Design for PRM use — General requirements — Part 1: Contrast*

EN 16584-3:2025, *Railway applications — Design for PRM use — General requirements — Part 3: Optical and friction characteristics*

EN 16585-1:2025, *Railway applications — Design for PRM use — Equipment and components on board rolling stock — Part 1: Toilets*

EN 16585-3:2025, *Railway applications — Design for PRM use — Equipment and components on board rolling stock — Part 3: Clearways and internal doors*

EN 16587:2025, *Railway applications — Design for PRM use — Requirements on obstacle-free routes for infrastructure*

ISO 8100-34:2021, *Lifts for the transport of persons and goods — Part 34: Measurement of lift ride quality*

3 Terms and definitions

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

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

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

3.1

boarding aid

device (fixed or portable) that bridges the gap between rolling stock and platform to allow a PRM to board or alight from a train

Note 1 to entry: This includes manual, semi-automatic or automatic ramps, lifts and other devices.

3.2

bridging plate

retractable device integrated into the vehicle as close as possible to the door threshold level that enables access for wheelchair users, fully automatic and activated/controlled in conjunction with the door opening/closing sequences or semi-automatic on demand from passenger or staff

Note 1 to entry: It retains its strength without support on the station platform when extended.

3.3

clear width

clear usable width

unobstructed width of an open door or clearway to allow all passengers, including PRM, to pass through

3.4

doorway

opening in the vehicle body side that allows access to and egress from that vehicle

3.5

effective clear width

horizontal usable width of the surface of a boarding aid or entrance step

3.6

gap

distance between a platform and the closest point on the rolling stock at the passenger door where passengers traverse from one to the other (both vertical and horizontal)