

RAUDTEEALASED RAKENDUSED. PIIRATUD
LIIKUMISVÕIMEGA ISIKUTE KASUTATAVAD
RAKENDUSED. ÜLDNÕUDED. OSA 3: OPTILISED JA
HÕÕRDEOMADUSED

Railway applications - Design for PRM use - General
requirements - Part 3: Optical and friction
characteristics

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 16584-3:2025 sisaldab Euroopa standardi EN 16584-3:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.10.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 16584-3:2025 consists of the English text of the European standard EN 16584-3:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 01.10.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 11.180.01, 45.020

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EUROPEAN STANDARD

EN 16584-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2025

ICS 45.020; 11.180.01

Supersedes EN 16584-3:2017

English Version

Railway applications - Design for PRM use - General requirements - Part 3: Optical and friction characteristics

Applications ferroviaires - Conception destinée à l'usage par les PMR - Exigences générales - Partie 3 : Caractéristiques optiques et de friction

Bahnanwendungen - Gestaltung für die Nutzung durch PRM - Allgemeine Anforderungen - Teil 3: Optische Eigenschaften und Rutschfestigkeit

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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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 16584-3:2025) 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 16584-3:2017.

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 References to Annex A (EC Verification) and B (Summary of Testing Requirements) removed;
- 5.2.4 updated
- Annex A “EC verification - Interoperability constituents” removed;
- Annex B “Summary of testing requirements” removed;
- 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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Türkiye and the United Kingdom.

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 both infrastructure and 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 that are universally valid for obstacle-free travelling relating to lighting, optical and friction characteristics. The definitions and requirements of this document cover the infrastructure and 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 infrastructure or rolling stock is in its defined operating condition.
- Where minimum or maximum dimensions are quoted these are absolute NOT nominal requirements.

The 'General requirements' standard is written in three parts:

- Part 1 contains:
 - contrast.
- Part 2 contains:
 - spoken information;
 - written information;
 - tactile information;
 - pictograms;
 - audible signals.
- This document is Part 3 and contains:
 - lighting;
 - low reflective properties;
 - transparent obstacles;
 - slip resistance.

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 1838:2024, *Lighting applications — Emergency lighting*

EN 12464-1:2021, *Light and lighting - Lighting of work places - Part 1: Indoor work places*

EN 12464-2:2024, *Light and lighting — Lighting of work places Part 2: Outdoor work places*

EN 13272-1:2019, *Railway applications - Electrical lighting for rolling stock in public transport systems - Part 1: Heavy rail*

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

EN 16584-2:2025, *Railway applications — Design for PRM use — General Requirements — Part 2: Information (Basel)*

EN 16587:2025, *Railway applications — Design for PRM use — Requirements for Obstacle-free Routes for Infrastructure*

EN ISO 2813:2014, *Paints and varnishes - Determination of gloss value at 20°, 60° and 85° (ISO 2813:2014)*

ISO 4649:2024, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

ISO 21542:2021, *Building construction — Accessibility and usability of the built environment*

3 Terms and definitions

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

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

contrast

perception of a difference visually between one surface or element of a building/rail vehicle and another by reference to their light reflectance values (LRV) or luminance values

Note 1 to entry: See BS 8300-1 and BS 8300-2 for further information.