Concrete pavements - Part 2: Functional requirements for concrete pavements

EESTI STANDARDIMIS- JA AKREDITEERIMISKESKUS
ESTONIAN CENTRE FOR STANDARDISATION AND ACCREDITATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13877-2:2023 sisaldab Euroopa standardi EN 13877-2:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 13877-2:2023 consists of the English text of the European standard EN 13877-2:2023.
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 and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.11.2023.	Date of Availability of the European standard is 01.11.2023.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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English Version

Concrete pavements - Part 2: Functional requirements for concrete pavements

Chaussées en béton - Partie 2 : Exigences fonctionnelles pour les chaussées en béton

Fahrbahnbefestigungen aus Beton - Teil 2: Funktionale Anforderungen an Fahrbahnbefestigungen aus Beton

This European Standard was approved by CEN on 25 September 2023.

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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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European foreword

This document (EN 13877-2:2023) has been prepared by Technical Committee CEN/TC 227 “Road materials”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.

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 13877-2:2013.

EN 13877-2:2023 includes the following significant technical changes with respect to EN 13877-2:2013:

— the normative references have been updated;

— alternative evaluation methods for the strength of concrete pavements have been added;

— default conditions have been specified for the determination of the strength classes;

— the tensile strength of concrete on cylindrical discs has been introduced;

— the table on tolerances of thickness has been replaced by a text with new specifications;

— the clauses on the density of concrete pavements have been deleted;

— the categories for freeze–thaw resistance have been deleted;

— the specifications for dowels and tie-bars have been updated;

— the Bibliography has been updated.

EN 13877, *Concrete pavements,* is currently composed with the following parts:

— *Part 1: Materials*

— *Part 2: Functional requirements for concrete pavements*

— *Part 3: Specifications for dowels to be used in concrete pavements*

This document refers to EN 206. In accordance with the scope of EN 206, some additional or different requirements are necessary for pavements, particularly to comply with safety of users, durability, environment and health.

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.

1 Scope

This document specifies requirements for concrete pavements cast *in situ*. Concrete compacted by rollers is not covered by this document.

This document covers concrete pavements for roads and other traffic-bearing structures.

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.

CEN/TS 12390-9, *Testing hardened concrete — Part 9: Freeze-thaw resistance with de-icing salts — Scaling*

EN 12390-2, *Testing hardened concrete — Part 2: Making and curing specimens for strength tests*

EN 12390-3, *Testing hardened concrete — Part 3: Compressive strength of test specimens*

EN 12390-8, *Testing hardened concrete — Part 8: Depth of penetration of water under pressure*

EN 12504-1, *Testing concrete in structures — Part 1: Cored specimens — Taking, examining and testing in compression*

EN 13863-2, *Concrete pavements — Part 2: Test method for the determination of the bond between two layers*

EN 13863-3, *Concrete pavements — Part 3: Test methods for the determination of the thickness of a concrete pavement from cores*

EN 13863-4, *Concrete pavements — Part 4: Test methods for the determination of wear resistance of concrete pavements to studded tyres*

EN 13863-6, *Concrete pavements — Part 6: Test method for the determination of the tensile strength of concrete on cylindrical discs*

EN 13877-1:2023, *Concrete pavements — Part 1: Materials*

EN 13877-3, *Concrete pavements — Part 3: Specifications for dowels to be used in concrete pavements*

3 Terms, definitions, symbols and abbreviated terms

3.1 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 https://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp