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Concrete pavements - Part 1: Materials

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/23

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EUROPEAN STANDARD

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English Version

Concrete pavements - Part 1: Materials

Chaussées en béton - Partie 1 : Matériaux

Fahrbahnbefestigungen aus Beton - Teil 1: Baustoffe

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

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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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EN 13877-1:2023 (E)

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European foreword

This document (EN 13877-1:2023) 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of an identical text or by endorsement, at the latest by May 2024, and conflicting national standards shall be withdrawn at the latest by May 2024.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 13877-1:2013.

EN 13877-1:2023 includes the following significant technical changes with respect to EN 13877-1:2013:

- the normative references have been updated;
- the scope has been adapted;
- lean concrete has been removed;
- the requirements on the density of fresh concrete have been removed;
- fibres have been included in the definition of reinforcement;
- the notes in Table 1 have been updated;
- Table 3, Dimensions for tie bars, has been removed;
- EN 197-1, EN 13863-6 and EN 14889-1 have been added to the normative references;
- 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.

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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 the constituents (concrete and other materials) of 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 14754-1, *Curing compounds — Test methods — Part 1: Determination of water retention efficiency of common curing compounds*

EN 197-1, *Cement — Part 1: Composition, specifications and conformity criteria for common cements*

EN 197-5, *Cement — Part 5: Portland-composite cement CEM II/C-M and composite cement CEM VI*

EN 206, *Concrete — Specification, performance, production and conformity*

EN 1008, *Mixing water for concrete — Specification for sampling, testing and assessing the suitability of water, including water recovered from processes in the concrete industry, as mixing water for concrete*

EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10060, *Hot rolled round steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10080, *Steel for the reinforcement of concrete — Weldable reinforcing steel — General*

EN 12350-7, *Testing fresh concrete — Part 7: Air content — Pressure methods*

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

EN 12390-5, *Testing hardened concrete — Part 5: Flexural strength of test specimens*

EN 12390-6, *Testing hardened concrete — Part 6: Tensile splitting strength of test specimens*

EN 12620, *Aggregates for concrete*

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

EN 13877-2:2023, *Concrete pavements — Part 2: Functional requirements for concrete pavements*

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

EN 14188-1, *Joint fillers and sealants — Part 1: Specifications for hot applied sealants*

EN 14188-2, *Joint fillers and sealants — Part 2: Specifications for cold applied sealants*

EN 14188-3, *Joint fillers and sealants — Part 3: Specifications for preformed joint sealants*

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EN 14889-1, *Fibres for concrete — Part 1: Steel fibres — Definitions, specifications and conformity*

EN ISO 9227:2022, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2022)*

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