EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

DRAFT prEN 206-1

August 2024

ICS 91.100.30

Will supersede EN 206:2013+A2:2021

English Version

Concrete - Specification, performance, production and conformity - Part 1: Performance, requirements, factory production control and assessment criteria for individual values

Béton - Spécification, performances, production et conformité - Partie 1 : Performances, exigences, contrôle de la production en usine et critères d'évaluation des valeurs individuelles

Beton - Festlegung, Eigenschaften, Herstellung und Konformität - Teil 1: Eigenschaften, Anforderungen, werkseigene Produktionskontrolle und Bewertungskriterien für einzelne Werte

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 104.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (prEN 206-1:2024) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by SN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 206:2013+A2:2021.

In particular, the following main items had been subject to revision when preparing prEN 206-1:2024:

- a) Moving all aspects concerning conformity assessment and certification into a separate part EN 206-2;
- b) Annex D on concrete for geotechnical purposes has been moved to a separate part EN 206-3;
- c) Opening for national provisions on exposure resistance classes;
- d) Included new terminology for binder;
- e) Annex M "Guidance on provisions valid in the place of use" moved to Introduction;
- f) Annex L "Additional information for specific clauses" included in main text where appropriate;
- g) Informative content in Clause 5.1 "Exposure classes" moved to informative Annex C;
- h) New Clause 5.4 "Classes regarding CO₂ emissions";
- i) General updates to align with revised EN 1992-1-1:2023;
- j) General editorial changes.

This document forms part of three European Standards, written by CEN/TC 104 and covering specification, performance, production and conformity of concrete.

- Concrete Specification, performance, production and conformity Part 1: Performance, requirements, factory production control and assessment criteria for individual values.
- Concrete Specification, performance, production and conformity Part 2: Conformity assessment and certification.
- Concrete Specification, performance, production and conformity Part 3: Additional requirements for specification and conformity of concrete for special geotechnical works

0 Introduction

0.1 Introduction to EN 206-1

- (1) This document defines tasks for the specifier, producer and user.
- (2) If the concrete is in conformity with this document, the concrete in the structure is deemed to satisfy the durability requirements for the intended use in the specific environmental condition, provided:
- the appropriate exposure classes were selected;
- the concrete has the minimum cover to reinforcement in accordance with the relevant design standard required for the specific environmental condition, e.g. EN 1992-1-1;
- the concrete is properly placed, compacted and cured, e.g. in accordance with EN 13670 or other relevant standards;
- the appropriate maintenance is applied during the service life.
- (3) Concrete conforming to this document may be assumed to satisfy the basic requirements for materials to be used in all three Execution Classes as defined in EN 13670.
- (4) This document also covers the necessary exchange of information between the different parties. Contractual matters are not addressed. Where responsibilities are given for parties involved, these are technical responsibilities.
- (5) Further explanations and guidance on the application of this document are given in other documents, such as CEN Technical Reports.
- (6) This standard is written in accordance with CEN policy based on the neutrality principle, which requires that all documents to be written in a way such that conformity with the specified requirements can be assessed by a manufacturer or supplier (first party), a user or purchaser (second party), or an independent body (third party). In particular the CEN philosophy of writing 'Product Standards' is adopted in that the standard gives normative requirements on the product, and not on any party involved in the manufacturing, testing or distribution of the product.
- (7) Figure 1 illustrates the relationships between EN 206 and standards for design and execution, standards for constituents and test standards.

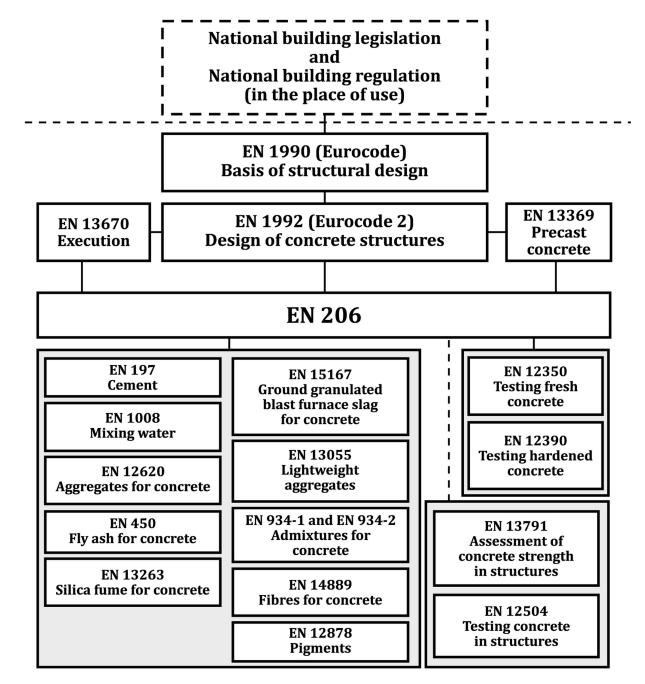


Figure 1 — Relationships between EN 206 and standards for design and execution, standards for constituents and test standards

(8) Figure 2 illustrates the procedure for assessment of concrete in EN 206.

Assessments in EN 206

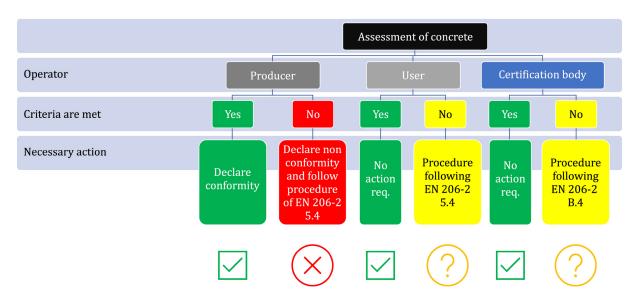


Figure 2 Assessment of concrete in EN 206

- (9) Provisions for specific products e.g. precast products are given in other European standards for specific products.
- (10) Provisions for specific applications are given in other European Standards, for example:
- concrete to be used in roads and other trafficked areas (e.g. concrete pavements according to EN 13877-1);
- special technologies (e.g. sprayed concrete according to EN 14487).
- (11) Supplementing requirements or different testing procedures are given in some member states for specific types of concrete and applications, for example:
- concrete for massive structures (e.g. dams);
- dry mixed concrete;
- concrete with a D_{max} of 4 mm or less (mortar);
- self-compacting concretes (SCC) containing lightweight or heavy-weight aggregates or fibres;
- concrete with open structure (e.g. pervious concrete for drainage).

0.2 Provisions valid in the place of use for EN 206-1

- (1) This document will be applied under different climatic and geographical conditions, different levels of protection and under different, well established, regional traditions and experience. Classes for concrete properties have been introduced to cover these situations. Where such general solutions were not possible, the relevant clauses contain permission for the application of provisions valid in the place of use of the concrete.
- (2) National choice is allowed in this document where explicitly stated that provisions valid in the place of use may be given.