Admixtures for concrete, mortar and grout - Test methods - Part 15: Reference concrete and method for testing viscosity modifying admixtures



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 480-15:2023 sisaldab Euroopa standardi EN 480-15:2023 ingliskeelset teksti.

This Estonian standard EVS-EN 480-15:2023 consists of the English text of the European standard EN 480-15:2023.

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 05.07.2023.

Date of Availability of the European standard is 05.07.2023.

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 <u>standardiosakond@evs.ee</u>.

ICS 91.100.30

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EUROPEAN STANDARD

EN 480-15

NORME EUROPÉENNE EUROPÄISCHE NORM

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Supersedes EN 480-15:2013

English Version

Admixtures for concrete, mortar and grout - Test methods - Part 15: Reference concrete and method for testing viscosity modifying admixtures

Adjuvants pour béton, mortier et coulis - Méthodes d'essai - Partie 15 : Béton de référence et méthode d'essai des adjuvants modificateurs de viscosité

Zusatzmittel für Beton, Mörtel und Einpressmörtel Prüfverfahren - Teil 15: Referenzbeton und
Prüfverfahren zur Prüfung von
viskositätsmodifizierenden Zusatzmitteln

This European Standard was approved by CEN on 28 May 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.

CEN members are the national standards bodies of 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 United Kingdom.



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

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

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European foreword

This document (EN 480-15:2023) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by SN.

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 January 2024, and conflicting national standards shall be withdrawn at the latest by January 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 480-15:2013.

This document has been drafted by Subcommittee 3 (SC 3) of CEN/TC 104 "Admixtures for concrete, mortar and grout".

This document is part of the EN 480 series, with the title *Admixtures for concrete, mortar and grout* — *Test methods,* which comprises the following parts:

- Part 1: Reference concrete and reference mortar for testing
- Part 2: Determination of setting time
- Part 4: Determination of bleeding of concrete
- Part 5: Determination of capillary absorption
- Part 6: Infrared analysis
- Part 8: Determination of the conventional dry material content
- Part 10: Determination of water soluble chloride content
- Part 11: Determination of air void characteristics in hardened concrete
- Part 12: Determination of the alkali content of admixtures
- Part 13: Reference masonry mortar for testing mortar admixtures
- Part 14: Determination of the effect on corrosion susceptibility of reinforcing steel by potentiostatic electro-chemical test
- Part 15: Reference concrete and method for testing viscosity modifying admixtures (the present document)

This document is intended to be used together with the other standards of the EN 480 series and for testing admixtures in accordance with the EN 934 series of standards.

The main changes compared with the previous edition are listed below:

- a) identification of the relevant test method standard for the determination of the density of fresh concrete in Table 2;
- b) editorial changes.

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, mt a Slov. 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 the constituent materials, the composition and the mix procedure to produce a reference concrete with a prescribed consistency and segregated portion for testing viscosity modifying admixtures as defined in EN 934-2. It also describes how to determine the requirements for the test mix in comparison with the control mix.

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 196-2, Method of testing cement - Part 2: Chemical analysis of cement

EN 196-6, Methods of testing cement - Part 6: Determination of fineness

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

EN 934-2, Admixtures for concrete, mortar and grout - Part 2: Concrete admixtures - Definitions, requirements, conformity, marking and labelling

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 12350-6, Testing fresh concrete - Part 6: Density

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

EN 12350-8, Testing fresh concrete - Part 8: Self-compacting concrete - Slump-flow test

EN 12350-11, Testing fresh concrete - Part 11: Self-compacting concrete - Sieve segregation test

EN 12390-1, Testing hardened concrete - Part 1: Shape, dimensions and other requirements for specimens and moulds

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

EN 12620, Aggregates for concrete

3 Terms and definitions

No terms and definitions are listed in this document.

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/