BETOONISEGU KATSETAMINE. OSA 1: PROOVIDE VÕTMINE JA KATSESEADMED

Testing fresh concrete - Part 1: Sampling and common apparatus



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN 12350-1:2019 sisaldab Euroopa standardi EN 12350-1:2019 ingliskeelset teksti.

This Estonian standard EVS-EN 12350-1:2019 consists of the English text of the European standard EN 12350-1:2019.

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.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.06.2019. Date of Availability of the European standard is 19.06.2019.

Standard on kättesaadav Eesti Standardikeskusest. The standard is available from the Estonian Centre for Standardisation.

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 12350-1

# NORME EUROPÉENNE

# **EUROPÄISCHE NORM**

June 2019

ICS 91.100.30

Supersedes EN 12350-1:2009

**English Version** 

# Testing fresh concrete - Part 1: Sampling and common apparatus

Essais pour béton frais - Partie 1 : Prélèvement et appareillage commun

Prüfung von Frischbeton - Teil 1: Probenahme und Prüfgeräte

This European Standard was approved by CEN on 29 April 2019.

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

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

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### **European foreword**

This document (EN 12350-1:2019) 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 December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.

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 12350-1:2009.

This standard is one of a series on testing concrete.

EN 12350, *Testing fresh concrete*, consists of the following parts:

- Part 1: Sampling and common apparatus
- Part 2: Slump test
- Part 3: Vebe test
- Part 4: Degree of compactability
- Part 5: Flow table test
- Part 6: Density
- Part 7: Air content Pressure methods
- Part 8: Self-compacting concrete Slump-flow test
- Part 9: Self-compacting concrete V-funnel test
- Part 10: Self-compacting concrete L-box test
- Part 11: Self-compacting concrete Sieve segregation test
- Part 12: Self-compacting concrete J-ring test

The following amendments have been made to the 2009 edition of this standard:

- a) editorial revisions;
- b) consolidation of common apparatus for fresh concrete testing (EN 12350 series) and for making specimens for strength tests (in EN 12390-2);
- c) guidance on sampling for consistence retention testing.

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, Turkey and the United Kingdom.

#### 1 Scope

This document specifies two procedures for sampling fresh concrete, by composite sampling and by spot sampling.

NOTE 1 The requirement for remixing the sample before tests on the fresh concrete, or before making test specimens, is included in the relevant standards.

When mixing and sampling concrete is done in a laboratory, different procedures may be required.

NOTE 2 In this case Clause 6, item g) applies.

Additionally, this standard lists common apparatus mentioned in two or more standards of EN 12350 series and EN 12390-2.

#### 2 Normative references

There are no normative references in this document.

#### 3 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 <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>
- ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>

#### 3.1

#### batch

quantity of fresh concrete which is:

- mixed in one cycle of operation of a batch mixer;
- discharged during 1 min from a continuous mixer; or
- conveyed ready-mixed in a truck mixer when the load requires more than one cycle of a batch mixer or more than one minute of operation of a continuous mixer

#### 3.2

#### composite sample

quantity of concrete consisting of a number of increments distributed through a batch or mass of concrete thoroughly mixed together

#### 3.3

#### spot sample

quantity of concrete taken from part of a batch or mass of concrete, consisting of one or more increments thoroughly mixed together

#### 3.4

#### increment

quantity of concrete taken by the single operation of a scoop or similar sampling device