ETOONISEGU KATSETAMINE. OSA 2: V,

Testing fresh concrete Part 2: Slump-test



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 12350-2:2019 sisaldab Euroopa standardi EN 12350-2:2019 ingliskeelset teksti.

This Estonian standard EVS-EN 12350-2:2019 consists of the English text of the European standard EN 12350-2:2019.

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 12350-2

# NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

June 2019

ICS 91.100.30

Supersedes EN 12350-2:2009

**English Version** 

## Testing fresh concrete - Part 2: Slump test

Essais pour béton frais - Partie 2 : Essai d'affaissement

Prüfung von Frischbeton - Teil 2: Setzmaß

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 12350-2:2019) 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 12350-2:2009.

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) reference to common apparatus and specifications given in EN 12350-1;
- c) reference and procedure for slump retention testing;
- d) option to include specified slump class or slump target value in the report.

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 a method for determining the consistence of fresh concrete by the slump test.

The slump test is sensitive to changes in the consistence of concrete, which correspond to slumps between 10 mm and 210 mm. Beyond these extremes the measurement of slump can be unsuitable and other methods of determining the consistence should be considered.

If the slump continues to change over a period of 1 min after withdrawing of the cone, the slump test is not suitable as a measure of consistence.

The test is not suitable when the declared value of *D* of the coarsest fraction of aggregates actually used in the concrete  $(D_{\text{max}})$  is greater than 40 mm.

#### 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.

1: Sampling and common apparatus EN 12350-1, Testing fresh concrete -

#### Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

### **Principle**

The fresh concrete is compacted into a cone. When the cone is withdrawn upwards, the distance the concrete has slumped provides a measure of the consistence of the concrete.

## **Apparatus**

#### Common apparatus for fresh concrete testing

The apparatus listed below for the execution of this test method shall be in accordance with the 30 O

- 5.1.1 Hollow cone.
- 5.1.2 Compacting rod.
- 5.1.3 **Funnel** (optional).
- 5.1.4 Rule.
- Base plate/surface. 5.1.5
- Remixing container or tray. 5.1.6
- Shovel. 5.1.7