

BETOONISEGU KATSETAMINE. OSA 4:
TIHENDATAVUSASTE

Testing fresh concrete - Part 4: Degree of compactability

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12350-4:2019 sisaldab Euroopa standardi EN 12350-4:2019 ingliskeelset teksti.	This Estonian standard EVS-EN 12350-4:2019 consists of the English text of the European standard EN 12350-4:2019.
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English Version

Testing fresh concrete - Part 4: Degree of compactability

Essais pour béton frais - Partie 4 : Indice de serrage

Prüfung von Frischbeton - Teil 4: Verdichtungsmaß

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

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European foreword

This document (EN 12350-4:2019) 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of an identical text or by endorsement, at the latest by December 2019, and conflicting national standards shall be withdrawn at the latest by December 2019.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 12350-4:2009.

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 specification given in EN 12350-1.

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1 Scope

This document specifies a method for determining the consistence of fresh concrete by determining the degree of compactability.

The test is suitable for specimens having a declared value of D of the coarsest fraction of aggregates actually used in the concrete (D_{\max}) not greater than 63 mm.

If the degree of compactability is less than 1,04 or more than 1,46, the concrete has a consistence for which the degree of compactability test is not suitable.

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 12350-1, *Testing fresh concrete — Part 1: Sampling and common apparatus*

3 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>

4 Principle

Carefully place the fresh concrete in a compaction container using a trowel, avoiding any compaction of the concrete. When the compaction container is full, the top surface is struck off level with the top of the compaction container. The concrete is compacted by vibration and the distance from the surface of the compacted concrete to the upper edge of the compaction container is used to determine the degree of compactability.

5 Apparatus

5.1 Common apparatus for fresh concrete testing

The apparatus listed below for the execution of this test method shall be in accordance with the specification given EN 12350-1 and as specified below;

5.1.1 Compaction container, made of metal not readily attacked by cement paste. The internal dimensions of the compaction container shall be:

- base: (200 ± 2) mm \times (200 ± 2) mm;
- height: (400 ± 2) mm.

The thickness of the base and walls shall be at least 1,5 mm.

The bottom of the compaction container may be perforated to facilitate emptying. A suitable plastic plate to cover the bottom has then to be placed inside the compaction container.

5.1.2 Trowel, with a flat blade (see Figure 1).