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**Täitematerjalide mehaaniliste ja füüsikaliste omaduste katsetamine. Osa 6: Terade tiheduse ja veeimavuse määramine KONSOLIDEERITUD TEKST**

Tests for mechanical and physical properties of aggregates - Part 6: Determination of particle density and water absorption CONSOLIDATED TEXT

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1097-6:2007 sisaldb Euroopa standardi EN 1097-6:2000+AC:2002+A1:2005 ingliskeelset teksti.	This Estonian standard EVS-EN 1097-6:2007 consists of the English text of the European standard EN 1097-6:2000+AC:2002+A1:2005.
Standard on kinnitatud Eesti Standardikeskuse 21.10.2002 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 21.10.2002 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 20.09.2000.	Date of Availability of the European standard text 20.09.2000.
Standard on kätesaadav Eesti standardiorganisatsionist.	The standard is available from Estonian standardisation organisation.

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**Võtmesõnad:** määramismeetodid, terade tihedus, täitematerjalid, veeimavus

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**English version**

**Tests for mechanical and physical properties of aggregates**

**Part 6: Determination of particle density and water absorption**

**Essais pour déterminer les caractéristiques mécaniques et physique des granulats – Partie 6: Détermination de la masse volumique réelle et du coefficient d'absorption d'eau**

**Prüfverfahren für mechanische und physikalische Eigenschaften von Gesteinskörnungen – Teil 6: Bestimmung der Rohdichte und der Wasseraufnahme**

This European Standard was approved by CEN on 2000-08-18.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 154 "Aggregates", the secretariat of which is held by BSI.

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 2003, and conflicting national standards shall be withdrawn at the latest by December 2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This European Standard forms part of a series of tests for mechanical and physical properties of aggregates. Test methods for other properties of aggregates will be covered by Parts of the following European Standards:

EN 932	Tests for general properties of aggregates
EN 933	Tests for geometrical properties of aggregates
EN 1367	Tests for thermal and weathering properties of aggregates
EN 1744	Tests for chemical properties of aggregates
EN 13179	Tests for filler aggregate used in bituminous mixtures

The other parts of EN 1097 will be:

- Part 1: Determination of the resistance to wear (micro-Deval)
- Part 2: Methods for the determination of resistance to fragmentation
- Part 3: Determination of loose bulk density and voids
- Part 4: Determination of the voids of dry compacted filler
- Part 5: Determination of water content by drying in a ventilated oven
- Part 7: Determination of the particle density of filler - Pyknometer method
- Part 8: Determination of the polished stone value
- Part 9: Determination of the resistance to wear by abrasion from studded tyres: Nordic test
- Part 10: Water suction height

## 1 Scope

This European Standard specifies methods for the determination of the particle density and water absorption of aggregates. The first five methods are applicable to normal aggregates with a sixth method for lightweight aggregates.

The principal methods specified are:

- a) a wire basket method for aggregates passing a 63 mm sieve but retained on a 31,5 mm sieve;
- b) pyknometer methods for aggregates passing a 31,5 mm sieve but retained on a 0,063 mm sieve.

NOTE 1 The wire basket method may be used as an alternative to the pyknometer method for aggregates between 4 mm and 31,5 mm. In case of dispute, the pyknometer method described in clause 8 should be used as the reference method.

NOTE 2 The wire basket method can also be used for single aggregate particles retained on a 63 mm sieve.

A method for the determination of pre-dried particle density of dense aggregates is specified in annex A.

NOTE 3 As the absorption of dense aggregates is low, pre-dried particle density can be determined directly in water. This method is different to the determination of particle density on an oven dried basis.

A modified version of the wire-basket method suitable for determining the particle density and water absorption of coarse aggregates saturated to constant mass is specified in annex B.

For lightweight aggregates, a modified version of the pyknometer test specified in annex A is specified in annex C.

## 2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 932-1	<i>Tests for general properties of aggregates - Part 1: Methods for sampling</i>
EN 932-2	<i>Tests for general properties of aggregates - Part 2: Methods for reducing laboratory samples</i>
EN 932-5	<i>Tests for general properties of aggregates - Part 5: Common equipment and calibration</i>
EN 933-2	<i>Tests for geometrical properties of aggregates - Part 2: Determination of particle size distribution - Test sieves, nominal size of apertures</i>