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Betooni täitematerjalid

Aggregates for concrete

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12620:2005 sisaldab Euroopa standardi EN 12620:2002+AC:2004 ingliskeelset teksti.</p>	<p>This Estonian standard EVS-EN 12620:2005 consists of the English text of the European standard EN 12620:2002+AC:2004.</p>
<p>Standard on kinnitatud Eesti Standardikeskuse 18.02.2003 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p>	<p>This standard is ratified with the order of Estonian Centre for Standardisation dated 18.02.2003 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p>
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<p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>The standard is available from Estonian standardisation organisation.</p>

ICS 91.100.15, 91.100.30

Võtmesõnad: aggregates, aggregates for concrete, apparent particle density, concretes, construction, construction materials, definitions, inspection, marking, mineral aggregates, road construction, roads, specification (approval), specifications, surface layers, testing

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ICS 91.100.15; 91.100.30

English version

Aggregates for concrete

Granulats pour bétons

Gesteinskörnungen für Beton

This European Standard was approved by CEN on 1 August 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document EN 12620:2002 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 March 2003, and conflicting national standards shall be withdrawn at the latest by June 2004.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

Annexes A, B, E, F and G are informative. Annexes C, D and H are normative.

This standard includes a Bibliography.

Requirements for other end uses of aggregates will be specified in the following European Standards:

EN 13043	Aggregates for bituminous mixtures and surface treatments for roads, airfields and other trafficked areas
EN 13055-1	Lightweight aggregates - Part 1 : Lightweight aggregates for concrete, mortar and grout
prEN 13055-2	Lightweight aggregates - Part 2 : Lightweight aggregates for unbound and bound applications
EN 13139	Aggregates for mortar
prEN 13242	Aggregates for unbound and hydraulically bound materials for use in civil engineering work and road construction
EN 13383-1	Armourstone - Part 1: Specification
prEN 13450	Aggregates for railway ballast

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the properties of aggregates and filler aggregates obtained by processing natural, manufactured or recycled materials and mixtures of these aggregates for use in concrete. It covers aggregates having an oven dried particle density greater than $2,00 \text{ Mg/m}^3$ ($2\,000 \text{ kg/m}^3$) for all concrete, including concrete in conformity with EN 206-1 and concrete used in roads and other pavements and for use in precast concrete products.

It also specifies that a quality control system is in place for use in factory production control and it provides for the evaluation of conformity of the products to this European Standard.

This standard does not cover filler aggregates to be used as a constituent in cement or as other than inert filler aggregates for concrete.

NOTE 1 The requirements in this European Standard are based upon experience with aggregate types with an established pattern of use. Care should be taken when considering the use of aggregates from sources with no such pattern of use, e.g., recycled aggregates and aggregates arising from certain industrial by-products. Such aggregates, which should comply with all the requirements of this European Standard, could have other characteristics not included in Mandate M 125 that do not apply to the generality of aggregates types with an established pattern of use and when required, provisions valid at the place of use can be used to assess their suitability.

NOTE 2 Properties for lightweight aggregates are specified in prEN 13055-1:1997.

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 196-21:1989, *Methods of testing cement — Part 21: Determination of the chloride, carbon dioxide and alkali content of cement.*

EN 932-3, *Tests for general properties of aggregates — Part 3: Procedure and terminology for simplified petrographic description.*

EN 932-5, *Tests for general properties of aggregates — Part 5: Common equipment and calibration.*

EN 933-1, *Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution - Sieving method.*

EN 933-3, *Tests for geometrical properties of aggregates — Part 3: Determination of particle shape — Flakiness index.*

EN 933-4, *Tests for geometrical properties of aggregates — Part 4: Determination of particle shape — Shape index.*

EN 933-7, *Tests for geometrical properties of aggregates — Part 7: Determination of shell content — Percentage of shells in coarse aggregates.*

EN 933-8, *Tests for geometrical properties of aggregates — Part 8: Assessment of fines — Sand equivalent test.*

EN 933-9, *Tests for geometrical properties of aggregates — Part 9: Assessment of fines — Methylene blue test.*

EN 933-10, *Tests for geometrical properties of aggregates — Part 10: Assessment of fines — Grading of fillers (air jet sieving).*

EN 1097-1, *Tests for mechanical and physical properties of aggregates — Part 1: Determination of the resistance to wear (micro-Deval).*

EN 1097-2:1998, *Tests for mechanical and physical properties of aggregates — Part 2: Methods for the determination of resistance to fragmentation.*

EN 1097-3, *Tests for mechanical and physical properties of aggregates — Part 3: Determination of loose bulk density and voids.*

EN 1097-6, *Tests for mechanical and physical properties of aggregates — Part 6: Determination of particle density and water absorption.*

EN 1097-8:1999, *Tests for mechanical and physical properties of aggregates — Part 8: Determination of the polished stone value.*

EN 1097-9, *Tests for mechanical and physical properties of aggregates — Part 9: Determination of the resistance to wear by abrasion from studded tyres — Nordic test.*

EN 1367-1:1999, *Tests for thermal and weathering properties of aggregates — Part 1: Determination of resistance to freezing and thawing.*

EN 1367-2, *Tests for thermal and weathering properties of aggregates — Part 2: Magnesium sulfate test.*

EN 1367-4, *Tests for thermal and weathering properties of aggregates — Part 4: Determination of drying shrinkage.*

EN 1744-1:1998, *Tests for chemical properties of aggregates — Part 1: Chemical analysis.*

ISO 565:1990, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings.*