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BS EN 12620:2013



BSI Standards Publication

Aggregates for concrete

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This British Standard is the UK implementation of EN 12620:2013. It supersedes BS EN 12620:2002 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/502, Aggregates.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

Aggregates for concrete

Granulats pour béton

Gesteinskörnungen für Beton

This European Standard was approved by CEN on 24 August 2011.

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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Foreword

This document (EN 12620:2013) 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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by February 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12620:2002+A1:2008.

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

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

Requirements for evaluation of conformity are specified in EN 16236.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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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 in conformity with EN 206-1 and concrete used in roads and other pavements and for use in precast concrete products.

It covers aggregates having an oven dried particle density greater than $2,0 \text{ Mg/m}^3$ (2000 Kg/m^3). It also covers recycled aggregate with particle densities greater than $1,50 \text{ Mg/m}^3$ ($1\,500 \text{ kg/m}^3$) with appropriate caveats and recycled fine aggregate with appropriate caveats.

A list of the source materials that have been considered and indicating those which are within the scope of this standard is given in Annex A (normative).

Requirements for the evaluation of conformity of the products to this European Standard are given in EN 16236.

It incorporates a general requirement that aggregates shall not release any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material or permitted in the national regulations of the member state of destination.

The tables in this standard include categories which are common across the four main aggregate standards: EN 12620, EN 13043, EN 13139 and EN 13242. Not all of these categories are appropriate for aggregates for use in concrete.

Categories, notes, comments etc, which are grey shaded, should not be used in concrete.

Aggregates used in construction should comply with all the requirements of the relevant European Standards. These standards include comprehensive and specific requirements for natural aggregates, iron and steel making slag and recycled aggregates, dealing with, for example, the stability of certain basalts, the expansion of certain slags and the constitution of recycled aggregates.

For materials from some other secondary sources however, work is ongoing and the requirements are incomplete. In the meantime, such materials, when placed on the market as aggregates, should conform fully to this standard but may also be required to conform to specific relevant additional requirements at the place of use. Additional characteristics and requirements may be specified on a case by case basis depending upon experience of use of the product, and defined in specific contractual documents.

NOTE Requirements for lightweight aggregates are specified in prEN 13055.

Requirements for the declaration of the potential of aggregates to release regulated dangerous substances are currently under development. Until such time as these are finalised, attention should be paid to requirements at the place of use.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 196-2, *Methods of testing cement — Part 2: Chemical analysis of cement*

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