

საქართველოს სტანდარტი

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ბეტონის მსუბუქი შემავსებლებით

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საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 შემუშავებულია საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

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აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

English Version

Prefabricated reinforced components of lightweight aggregate concrete with open structure with structural or non-structural reinforcement

Composants préfabriqués en béton de granulats légers à structure ouverte avec des armatures structurales et non-structurales

Vorgefertigte Bauteile aus haufwerksporigem Leichtbeton und mit statisch anrechenbarer oder nicht anrechenbarer Bewehrung

This European Standard was approved by CEN on 5 February 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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 1520:2011) has been prepared by Technical Committee CEN/TC 177 “Prefabricated reinforced components of autoclaved aerated concrete or lightweight aggregate concrete with open structure”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by December 2012.

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 1520:2002.

Among others, the following changes have been made compared to EN 1520:2002:

- terms and definitions have been updated;
- the order of clauses has been changed;
- lightweight aggregate concrete parameters have been adapted;
- normative references for reinforcement steel have been updated;
- properties and requirements of components have been adapted, e.g. acoustic properties, thermal resistance;
- evaluation of conformity has been adapted;
- Annex A and Annex ZA have been adapted;
- the standard has been editorially edited.

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 89/106/EEC.

For relationship with EU Directives, see informative Annex ZA, which is an integral part of this document.

This document uses the methods given in the Guidance Paper L, clause 3.3, of the European Commission.

This European Standard is used together with a national application document. The national application document may only contain information on those parameters which are left open in this European Standard for national choice, known as Nationally Determined Parameters, to be used for the design of the construction products and civil engineering works to be constructed in the country concerned, i.e.:

- values and/or classes where alternatives are given in this European Standard;
- values to be used where a symbol only is given in this European Standard;
- country specific data (geographical, climatic, etc.), e.g. snow map;
- the procedure to be used where alternative procedures are given in this European Standard.

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It may contain

- decisions on the application of informative annexes;
- references to non-contradictory complementary information to assist the user to apply this European Standard.

There is a need for consistency between this document for construction products and the technical rules for works. That means all the information accompanying the CE Marking of the construction products should clearly mention which Nationally Determined Parameters have been taken into account.

EN 1520 describes the design principles and requirements for safety, serviceability and durability of prefabricated components of lightweight aggregate concrete with open structure and with structural or non-structural reinforcement. The design of the components is based on the limit state concept used in conjunction with partial safety factors.

EN 1520 is intended to be used together with Eurocodes EN 1990, EN 1991 and EN 1998.

Numerical values for partial safety factors and other reliability parameters are recommended as basic values that provide an acceptable level of reliability. They have been selected assuming that an appropriate level of workmanship and of quality management applies.

This European Standard gives values with notes indicating where national choices may be made. Therefore, the National Standard implementing EN 1520 should be used with a national application document containing all Nationally Determined Parameters to be used for the design of prefabricated components of lightweight aggregate concrete with open structure and with structural or non-structural reinforcement to be constructed in the relevant country.

National choice is allowed in EN 1520 through the following clauses:

4.3	A.5.2
5.1.1.1	A.6
5.3.5	A.6.1
5.3.7	A.6.2
5.4.3	A.6.3.3.3
5.5.1	A.8.1.4
5.6.2	A.8.2.1.2
5.6.4.2	A.8.2.2.2
7.3	A.9
A.3	B.3.2
A.4.1	B.3.3
A.4.2	B.4.3.1
A.4.3	B.4.3.3
A.5.1	Annex C

Regulatory classes are only given for "Reaction to fire" and "Resistance to fire". All other classes used in this European Standard, i.e. density classes and strength classes, are technical classes.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.