

## **Autoklaavse mullbetooni survetugevuse määramine**

Determination of the compressive strength of  
autoclaved aerated concrete

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 679:2005 sisaldab Euroopa standardi EN 679:2005 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.08.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 679:2005 consists of the English text of the European standard EN 679:2005.</p> <p>This document is endorsed on 29.08.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b> See standard piiritleb autoklaavse mullbetooni survetugevuse määramise mooduse.</p>	<p><b>Scope:</b> This European Standard specifies the procedure for the determination of the compressive strength of autoclaved aerated concrete.</p>
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English version

## Determination of the compressive strength of autoclaved aerated concrete

Détermination de la résistance à la compression du béton cellulaire autoclavé

Bestimmung der Druckfestigkeit von dampfgehärtetem Porenbeton

This European Standard was approved by CEN on 3 June 2005.

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.

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 Central Secretariat has the same status as the official versions.

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



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## Foreword

This European Standard (EN 679:2005) has been prepared by Technical Committee CEN/TC 177 "Prefabricated reinforced components of autoclaved aerated concrete or light-weight 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 January 2006, and conflicting national standards shall be withdrawn at the latest by January 2006.

This document supersedes EN 679:1993.

In order to meet the performance requirements as laid down in the product standard for prefabricated components of autoclaved aerated concrete, a number of standardized test methods are necessary.

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

## 1 Scope

This European Standard specifies the procedure for the determination of the compressive strength of autoclaved aerated concrete.

## 2 Normative references

The following referenced documents are indispensable for the application 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 678, *Determination of the dry density of autoclaved aerated concrete*

EN 1353, *Determination of moisture content of autoclaved aerated concrete*

EN 12390-4, *Testing hardened concrete — Part 4: Compressive strength — Specification for testing machines*

## 3 Principle

The compressive strength is determined on test specimens as the ratio between the rupture load in axial compression and the cross-sectional area of the test specimen perpendicular to the loading direction.

## 4 Apparatus

- a) saw for cutting test specimens;
- b) compression testing machine, which meets the requirements of EN 12390-4, machine class 1 or 2;
- c) calipers, capable of reading the dimensions of the test specimens to an accuracy of 0,1 mm;
- d) ventilated drying oven, capable of maintaining a temperature of  $(105 \pm 5) ^\circ\text{C}$ ;
- e) straight edge, at least 200 mm long, a 0,1 mm-feeler gauge, a 1 mm-feeler gauge, and a square;
- f) balance, capable of determining the mass of the test specimens to an accuracy of 0,1 %.

## 5 Test specimens

### 5.1 Sample

The sample for the preparation of the test specimens shall be taken in such a manner that it is representative of the product to be investigated.

NOTE The test specimens may be prepared from prefabricated reinforced components. Alternatively, they may be taken from prefabricated unreinforced components of the same mould.

### 5.2 Shape and size of test specimens

The test specimens shall be cubes with an edge length of 100 mm. Test specimens of other shapes or sizes may be used, provided that the compressive strength determined on such test specimens can be directly related to the compressive strength determined on 100 mm cubes.