

**Betoonvalmistrooted. Klaaskiudbetooni  
teimimismeetod. Osa 1: Konsistentsi  
määramine koonuse vajumise meetodil**

Precast concrete products - Test method for glass-fibre reinforced cement - Part 1: Measuring the consistency of the matrix "Slump test" method

## EESTI STANDARDI EESSÖNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1170-1:2000 sisaldb Euroopa standardi EN 1170-1:1997 ingliskeelset teksti.	This Estonian standard EVS-EN 1170-1:2000 consists of the English text of the European standard EN 1170-1:1997.
Käesolev dokument on jõustatud 19.07.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 19.07.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kätesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

<b>Käsitlusala:</b> See Euroopa standard esitab teimimismeetodi, mis võimaldab kontrollida klaaskiuga betoonisegu töödeldavust ning vesi-tsementteguri vastavust (sobivust pumpamiseks ja tihendamiseks).	<b>Scope:</b>
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**ICS** 91.100.40

**Võtmesõnad:** betoontooted, doseerimine, klaas, komposiitmaterjalid, kvaliteedi kontroll, materjal, mõõtmned, mördid, plastsusomadused, tarielementid, tsemendid, vastavusteimid, vesi-tsementtegur

ICS 91.100.30

Descriptors: Glass fibre reinforced cement, consistency, slump test.

**English version**

Precast concrete products

**Test method for glass fibre reinforced cement**

Part 1: Measuring the consistency of the matrix  
'Slump test' method

Produits préfabriqués en béton –  
Méthode d'essai des composites  
ciment-verre – Partie 1: Mesure de la  
consistance de la matrice – Méthode  
dite 'Par étalement'

Vorgefertigte Betonerzeugnisse –  
Prüfverfahren für Glasfaserbeton –  
Teil 1: Bestimmung der Konsistenz  
der Matrix – Setzversuch

This European Standard was approved by CEN on 1997-10-29.

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.

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

**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 229 "Precast concrete products", the secretariat of which is held by AFNOR.

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 May 1998, and conflicting national standards shall be withdrawn at the latest by May 1998.

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.

## 1 Scope

This European Standard specifies a method of test making it possible to check the workability of the mixture and the conformity of the water/cement ratio (suitability for pumping and compaction) in glass fibre reinforced cement.

## 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.

EN 1170-2	Precast concrete products - Test method for glass fibre reinforced cement - Part 2: Measuring the fibre content in fresh GRC - "Wash out test" method
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## 3 Definition and abbreviation

### 3.1 Definition

For the purposes of this standard the following definition applies :

**matrix** : Composition of the glass fibre reinforced cement without the fibres. It is made up of the mixture of sand, cement, water and any admixtures and additives.

### 3.2 Abbreviation

**GRC** : Glass fibre reinforced cement.

## 4 Apparatus

The apparatus comprises :

- a plastic or metallic tube with a smooth internal surface,  $(55 \pm 0,5)$  mm high with an internal diameter of  $(57 \pm 0,5)$  mm and an external diameter of not less than 65 mm ;
- a flat plate of smooth, easily-cleaned material approximately  $(300 \times 300)$  mm on which are engraved, with a tolerance of  $\pm 0,5$  mm, nine numbered concentric circles, the diameters of which are given in table 1 ;
- a trowel.

**Table 1 : Diameters and numbering of the circles**

Number of circle	0	1	2	3	4	5	6	7	8
Diameter of circle (mm)	65	85	105	125	145	165	185	205	225