Betoonvalmistooted. Klaaskiudbetooni teimimismeetod. Osa 5: Paindetugevuse määramise tervikmeetod

Precast concrete products - Test method for glass-fibre reinforced cement - Part 5: Measuring bending strength, "Complete bending test" method

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 1170-5:2000 sisaldab Euroopa standardi EN 1170-5:1997 ingliskeelset teksti. Käesolev dokument on jõustatud 19.07.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 1170-5:2000 consists of the English text of the European standard EN 1170-5:1997. This document is endorsed on 19.07.2000 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: See Euroopa standard esitab teimimismeetodi klaaskiudbetooni paindeteimil pinge ja deformatsiooni määramiseks proportsionaalsuspiiril ja purunemisel.	**Scope:**

ICS 91.100.40

Võtmesõnad: betoontooted, klaas, komposiitmaterjalid, kontroll, mõõtmed, paindeteimid, paindetugevus, tarielemendid, tsemendid, vastavusteimid

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Descriptors: Glass fibre reinforced cement, bending strength, testing.

English version

Precast concrete products

Test method for glass fibre reinforced cement

Part 5: Measuring bending strength
'Complete bending test' method

Produits préfabriqués en béton – Méthode d'essai des composites ciment-verre – Partie 5: Mesure de la résistance en flexion – Méthode dite 'Essai complet de flexion'

Vorgefertigte Betonerzeugnisse – Prüfverfahren für Glasfaserbeton – Teil 5: Bestimmung der Biegezugfestigkeit – Vollständige Biegezugprüfung

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

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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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Contents

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 test method for identifying the stress and deformation performance, at the limit of proportionality and on failure, of a GRC composition subjected to bending.

It is also used to establish, for a given composition of GRC, the relationship between the conventional strength at 28 days and the strength at 7 days (see EN 1170-4).

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.

ISO 7500-1	Metallic materials - verification of static uniaxial testing machines - Part 1 : Tensile testing machines
EN 1170-4	Precast concrete products - Test method for glassfibre reinforced cement - Part 4 : Measuring bending strength - "Simplified bending test" method

3 Symbols and abbreviation

3.1 Symbols

b : width of test piece, in millimetres ;

d : thickness of test piece in millimetres ;

F_{LOP} : load at limit of proportionality, in newtons ;

F_{MOR} : failure load, in Newtons ;

l : length of test piece, in millimetres ;

L : span, in millimetres ;

M_d : mass of test piece after drying, "dry mass", in grammes ;

M_W : mass of test piece before drying, "wet mass", in grammes ;

W : water content, in percentage by mass ;

Δ_{LOP} : deflection at limit of proportionality, in millimetres ;

Δ_{MOR} : deflection at failure in millimetres ;

ε_{LOP} : stress at limit of proportionality ;