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Precast concrete products - Test methods for glassfibre reinforced concrete

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Precast concrete products - Test methods for glassfibre
reinforced concrete

Produits préfabriqués en béton - Méthodes d'essai des
composites ciment-verre

Betonfertigteile - Prüfverfahren für Glassfaserbeton

This European Standard was approved by CEN on 1 December 2024.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document EN 1170:2024 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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2025.

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

This document supersedes EN 1170-1:1997, EN 1170-2:1997, EN 1170-3:1997, EN 1170-4:1997, EN 1170-5:1997, EN 1170-6:1997, EN 1170-7:1997 and EN 1170-8:2008.

EN 1170:2024 includes the following significant technical changes with respect to EN 1170-1:1997, EN 1170-2:1997, EN 1170-3:1997, EN 1170-4:1997, EN 1170-5:1997, EN 1170-6:1997, EN 1170-7:1997 and EN 1170-8:2008:

- removal of the tests described previously in parts 1 to 4, not referred to in EN 1169;
- modification of the dimensions of the mould for test boards;
- increase of the load speed for the flexural strength test;
- introduction of a sample volume determination by weighing in water;
- provisions to allow the cutting of test coupons directly from products.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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

EN 1170:2024 (E)

1 Scope

This document specifies test methods for identifying the performance of a glassfibre reinforced concrete (GRC) composition in terms of bending strength, water absorption, dry density and dimensional variations.

These methods can be used for type testing or for the evaluation of the uniformity of the production process. They can be used on GRC coupons prepared as described in this document, or on samples cut out of GRC products.

NOTE A test to assess the influence of time on the mechanical properties (i.e. LOP and MOR) is described for information in Annex C. Other methods can be found in scientific literature.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 ISO 7500-1, *Metallic materials — Calibration and verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Calibration and verification of the force-measuring system (ISO 7500-1)*

EN 15191, *Precast concrete products — Classification of glassfibre reinforced concrete performance*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN