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Precast concrete products - Classification of glassfibre reinforced concrete performance

I.S. EN 15191:2009

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English Version

Precast concrete products - Classification of glassfibre reinforced concrete performance

Produits préfabriqués en béton - Classification des performances des composites ciment-verre

Betonfertigteile - Klassifizierung der Leistungseigenschaften von Glasfaserbeton

This European Standard was approved by CEN on 1 November 2009.

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Contents	Page
Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Definitions and abbreviations	6
3.1 Terms and definitions	6
3.2 Symbols and abbreviated terms	8
4 Properties of glassfibre reinforced concrete	8
4.1 Characteristics of composite material.....	8
4.2 Composition of GRC.....	8
4.3 Performance	9
4.3.1 GRC using spray or premixing processes.....	9
4.3.2 GRC with oriented fibres.....	10
5 Classification of GRC	10
5.1 Classification according to mechanical properties	10
5.2 Application-specific values	10
5.3 Material classes	11
5.3.1 Classification parameters	11
5.3.2 Specification of the parameters	11
5.4 Application specific parameter	12
6 Special properties.....	12
7 Test methods.....	12
7.1 Application class	12
7.2 Requirements of glassfibre	13
Bibliography	14

Foreword

This document (EN 15191:2009) 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of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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Introduction

The classification covers all GRC formulation and production processes.

The properties of GRC depend on:

- a) the constituent materials used;
- b) the composition of glassfibre reinforced concrete;
- c) the production processes.

The classification of GRC is based on the material properties that can be achieved.

1 Scope

This European Standard deals with the classification of glassfibre reinforced concrete. This classification conforms to the needs of the design process of glassfibre reinforced concrete components. This European Standard applies only if EN 1169 is followed.

This standard does not deal with design methods.

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 196-1, *Methods of testing cement — Part 1: Determination of strength*

EN 196-2, *Methods of testing cement — Part 2: Chemical analysis of cement*

EN 1170-4, *Precast concrete products — Test method for glass-fibre reinforced cement — Part 4: Measuring bending strength, "Simplified bending test" method*

EN 1170-5, *Precast concrete products — Test method for glass-fibre reinforced cement — Part 5: Measuring bending strength, "Complete bending test" method*

EN 1170-6, *Precast concrete products — Test method for glass-fibre reinforced cement — Part 6: Determination of the absorption of water by immersion and determination of the dry density*

EN 1170-7, *Precast concrete products — Test method for glass-fibre reinforced cement — Part 7: Measurement of extremes dimensional variations due to moisture content*

EN 1170-8, *Test method for glass-fibre reinforced cement — Part 8: Cyclic weathering type test*

EN 1339, *Concrete paving flags — Requirements and test methods*

EN 13198, *Precast concrete products — Street furniture and garden products*

EN 13501-1, *Fire classification of construction products and building elements — Part 1 : Classification using data from reaction to fire tests*

EN 14649, *Precast concrete products — Test method for strength retention of glass fibres in cement and concrete (SIC TEST)*

EN 15422, *Precast concrete products — Specification of glassfibres for reinforcement of mortars and concretes*

EN ISO 6946, *Building components and building elements — Thermal resistance and thermal transmittance — Calculation method (ISO 6946:2007)*

ISO 12491:1997, *Statistical methods for quality control of building materials and components*

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