# Products and systems for the protection and repair of concrete structures - Test methods - Determination of watertightness of injected cracks without movement in concrete

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**EESTI STANDARDI EESSÕNA** **NATIONAL FOREWORD**

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| Käesolev Eesti standard EVS-EN 14068:2004 sisaldab Euroopa standardi EN 14068:2003 ingliskeelset teksti.<br><br>Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.<br><br>Standard on kättesaadav Eesti standardiorganisatsioonist. | This Estonian standard EVS-EN 14068:2004 consists of the English text of the European standard EN 14068:2003.<br><br>This document is endorsed on 18.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.<br><br>The standard is available from Estonian standardisation organisation. |

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| **Käsitlusala:**<br>This European Standard describes a test method to determine the watertightness of injected cracks in concrete, with defined crack width. | **Scope:**<br>This European Standard describes a test method to determine the watertightness of injected cracks in concrete, with defined crack width. |

**ICS** 91.080.40, 91.100.30

**Võtmesõnad:**

EUROPEAN STANDARD

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# EN 14068

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English version

# Products and systems for the protection and repair of concrete structures - Test methods - Determination of watertightness of injected cracks without movement in concrete

Produits et systèmes pour la protection et la réparation des structures en béton - Méthodes d'essai - Détermination de l'étanchéité à l'eau des fissures injectées sans mouvement dans le béton

Produkte und Systeme für den Schutz und die Instandsetzung von Betontragwerken - Prüfverfahren - Bestimmung der Wasserdichtheit von injizierten Rissen ohne Bewegung in Beton

This European Standard was approved by CEN on 1 September 2003.

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 Management Centre 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 Management Centre has the same status as the official versions.

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

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

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# Foreword

This document EN 14068:2003 has been prepared by Technical Committee CEN/TC 104 “Concrete and related products”, the secretariat of which is held by DIN.

It has been prepared by Sub-Committee 8 "Products and systems for the protection and repair of concrete structures" (Secretariat 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 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## 1 Scope

This European Standard describes a test method to determine the watertightness of injected cracks in concrete, with defined crack width.

## 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 (including amendments).

EN 1504-1, *Products and systems for the protection and repair of concrete structures — Definitions, requirements, quality control and evaluation of conformity — Part 1: Definitions.*

prEN 1504-5:2001, *Products and systems for the protection and repair of concrete structures — Definitions, requirements, quality control and evaluation of conformity — Part 5: Concrete injection.*

EN 1766, *Products and systems for the protection and repair of concrete structures — Test methods — Reference concretes for testing.*

EN 12390-6, *Testing hardened concrete — Part 6: Tensile splitting strength of test specimens.*

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 1504-1 and prEN 1504-5:2001 apply.

## 4 Test principle

The injection product is injected into a crack of 1 mm width, the moisture condition of which is controlled (dry, damp, wet or with water counter pressure).

After hardening, the watertightness of the injected crack is tested by applying a hydraulic direct pressure, which is increased in a specified number of steps.

NOTE For specific applications, the use of test parameters different from those specified in prEN 1504-5:2001 can be appropriate.

## 5 Apparatus

**5.1** Apparatus which allows the application of water under pressure to one surface of the test piece whilst allowing observation of the opposite face, as shown in Figure 1.