Products and systems for the protection and repair of concrete structures - Test methods - Volume and weight changes of injection products after air drying and water storage cycles

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14498:2004 sisaldab Euroopa standardi EN 14498:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 21.12.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 14498:2004 consists of the English text of the European standard EN 14498:2004. This document is endorsed on 21.12.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This document describes a test method to determine the volume and weight changes of injection products used for swelling fitted filling of cracks, voids and interstices after air drying and water storage cycles.	**Scope:** This document describes a test method to determine the volume and weight changes of injection products used for swelling fitted filling of cracks, voids and interstices after air drying and water storage cycles.

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English version

Products and systems for the protection and repair of concrete structures - Test methods - Volume and weight changes of injection products after air drying and water storage cycles

Produits et systèmes de protection et de réparation des structures en béton - Méthodes d'essai - Variations de volume et de poids à l'issue de cycles de séchage à l'air et de conditionnement dans l'eau

Produkte und Systeme für den Schutz und die Instandsetzung von Betontragwerken - Prüfverfahren - Änderungen von Volumen und Gewicht nach Wechsel-Beanspruchung durch Trocknung an der Luft und Lagerung in Wasser

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 14498:2004) has been prepared by Technical Committee CEN/TC 104 “Concrete and related products”, the secretariat of which is held by DIN.

It has been drafted 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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This document describes a test method to determine the volume and weight changes of injection products used for swelling fitted filling of cracks, voids and interstices after air drying and water storage cycles.

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 196-1:1994, *Methods of testing cement – Part 1: Determination of strength.*

EN 1504-1:1998, *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.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1504-1:1998 and prEN 1504-5:2001 apply.

4 Test principle

The volume and weight changes which occur during air drying and water storage, from 24 h after casting and onwards, are measured on prismatic specimens having dimensions of 5 mm x 40 mm x 160 mm.

5 Apparatus

5.1 Moulds complying with the requirements of 4.5 of EN 196-1:1994.

5.2 Apparatus for measuring the dimensions of the test specimens to an accuracy of 0,1 mm.

5.3 Balance capable of weighing 500 g to an accuracy of 0,01 g.

5.4 Water bath containing potable water for completely immersing the test specimens at a temperature of (21 ± 2) °C. The volume of the water bath is chosen to comply with requirements in 7.3.4.

5.5 Storage room for conditioning the test specimens, at a temperature of (21 ± 2) °C and a relative humidity of (60 ± 10) %.

5.6 Support grid for supporting the specimens with a minimum of 5 mm clearance in a water bath or in air.

5.7 Air oven capable of maintaining the specified temperature to ± 2 °C. The oven shall be fitted with forced-ventilation equipment.