

**Betooni, mördi ja süstmördi lisandid.
Teimimismeetodid. Osa 2: Tardumisaja
määramine**

Admixtures for concrete, mortar and grout - Test
methods - Part 2: Determination of setting time

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 480-2:2006 sisaldab Euroopa standardi EN 480-2:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 20.09.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 480-2:2006 consists of the English text of the European standard EN 480-2:2006.</p> <p>This document is endorsed on 20.09.2006 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard describes a method for determining setting time of mortar with and without admixtures. It is an adaptation of the setting time test described in EN 196-3.</p>	<p>Scope: This European Standard describes a method for determining setting time of mortar with and without admixtures. It is an adaptation of the setting time test described in EN 196-3.</p>
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Võtmesõnad: betoon, betooni lisandid, ehitusmaterjalid, materjal, määramine, mördid, tardumisaeg, teimid, tsementeerimine

English Version

Admixtures for concrete, mortar and grout - Test methods - Part 2: Determination of setting time

Adjuvants pour béton, mortier et coulis - Méthodes d'essai -
Partie 2: Détermination du temps de prise

Zusatzmittel für Beton, Mörtel und Einpressmörtel -
Prüfverfahren - Teil 2: Bestimmung der Erstarrungszeit

This European Standard was approved by CEN on 19 June 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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Contents

Page

Foreword.....	3
1 Scope	5
2 Normative references	5
3 Test principle.....	5
4 General requirements for testing	5
4.1 Laboratory	5
4.2 Apparatus	5
4.3 Materials	6
5 Setting time test	6
5.1 Apparatus	6
5.2 Preparation of the mortar.....	8
5.3 Filling the mould	8
5.4 Test procedure	8
5.4.1 Determination of initial setting time.....	8
5.4.2 Determination of final setting time.....	8
5.4.3 Manual Vicat.....	9
6 Test report	9
Bibliography.....	10

Foreword

This document (EN 480-2:2006) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by DIN.

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 February 2007, and conflicting national standards shall be withdrawn at the latest by February 2007.

This document supersedes EN 480-2:1996.

This draft European Standard is part of the series EN 480 *Admixtures for concrete, mortar and grout – Test methods* which comprises the following:

Part 1 *Reference concrete and reference mortar for testing*

Part 2 *Determination of setting time*

Part 4 *Determination of bleeding of concrete*

Part 5 *Determination of capillary absorption*

Part 6 *Infrared analysis*

Part 8 *Determination of the conventional dry material content*

Part 10 *Determination of water soluble chloride content*

Part 11 *Determination of air void characteristics in hardened concrete*

Part 12 *Determination of the alkali content of admixtures*

Part 13 *Reference masonry mortar for testing mortar admixtures*

Part 14 *Determination of the effect on corrosion susceptibility of reinforcing steel by potentiostatic electrochemical test¹⁾*

This standard is applicable together with the other standards of the series EN 934 *Admixtures for concrete, mortar and grout*.

Notification of revisions:

The previous edition EN 480-2:1996 has been revised as follows:

- provision for using a manual Vicat;
- general editorial revision.

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,

1) This part is under preparation.

Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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1 Scope

This European Standard describes a method for determining setting time of mortar with and without admixtures. It is an adaptation of the setting time test described in EN 196-3.

This European Standard describes the reference method; it allows the use of alternative apparatus as indicated in notes provided that they do not affect the results.

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 413-2, *Masonry cement — Part 2: Test methods*

EN 480-1, *Admixtures for concrete, mortar and grout — Test methods — Part 1: Reference concrete and reference mortar for testing*

EN 1008, *Mixing water for concrete — Specification for sampling, testing and assessing the suitability of water, including water recovered from processes in the concrete industry, as mixing water for concrete*

3 Test principle

The setting time is determined by observing the penetration of a needle into a reference mortar until it reaches a specified value.

The reference mortar with admixture (test mix) shall have the same consistence as the reference mortar without admixture (control mix) that conforms to EN 480-1.

For this purpose the mixing water required shall be determined in advance according to EN 413-2.

4 General requirements for testing

4.1 Laboratory

The laboratory in which specimens are prepared and tested shall be maintained at a temperature of (20 ± 2) °C and a relative humidity no less than 65 %.

After preparation and between tests, the specimen shall be stored in a room or cabinet having a relative humidity of no less than 90 % and a temperature of (5 ± 1) °C or (20 ± 2) °C as appropriate to the test requirements.

4.2 Apparatus

- a) balance, accurate to 1 g;
- b) graduated cylinder or burette, accurate to 1 % of the volume measured;
- c) mixer, complying with EN 196-1.