

## SLOVENSKI STANDARD

kSIST FprEN 480-1:2014

01-maj-2014

---

**Kemijski dodatki za beton, malto in injekcijsko maso - Metode preskušanja - 1. del:  
Referenčni beton in referenčna malta za preskušanje**

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

Zusatzmittel für Beton, Mörtel und Einpressmörtel — Prüfverfahren — Teil 1:  
Referenzbeton und Referenzmörtel für Prüfungen

Adjuvants pour béton, mortier et coulis — Méthodes d'essais — Partie 1 : Béton et mortier de référence pour essais

**Ta slovenski standard je istoveten z:** FprEN 480-1

<https://standards.itsai.si/catalog/standards/sist/e36cb06-9287-47e7-803c-cdc0f7ac2189/sist-en-480-1-2015>

**ICS:**

91.100.10	Cement. Mavec. Apno. Malta	Cement. Gypsum. Lime. Mortar
91.100.30	Beton in betonski izdelki	Concrete and concrete products

**kSIST FprEN 480-1:2014****en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**FprEN 480-1**

March 2014

ICS 91.100.10; 91.100.30

Will supersede EN 480-1:2006+A1:2011

English Version

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

Adjuvants pour béton, mortier et coulis - Méthodes d'essais  
- Partie 1 : Béton et mortier de référence pour essais

Zusatzmittel für Beton, Mörtel und Einpressmörtel -  
Prüfverfahren - Teil 1: Referenzbeton und Referenzmörtel  
für Prüfungen

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 104.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

**Warning :** This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

<https://standards.iteh.ai/catalog/standards/sist/e36ebc06-9287-47e7-893c-cdc9f7ae2189/sist-en-480-1-2015>



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

## Contents

	Page
<b>Foreword.....</b>	<b>3</b>
<b>1 Scope .....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Constituent materials .....</b>	<b>4</b>
<b>3.1 Cement.....</b>	<b>4</b>
<b>3.2 Aggregate .....</b>	<b>5</b>
<b>3.2.1 Aggregate for reference concrete .....</b>	<b>5</b>
<b>3.2.2 Aggregate for reference mortar.....</b>	<b>5</b>
<b>3.3 Mixing water .....</b>	<b>5</b>
<b>4 Reference concrete .....</b>	<b>5</b>
<b>5 Reference mortar .....</b>	<b>6</b>
<b>6 Production of reference concrete .....</b>	<b>6</b>
<b>6.1 Mix proportion.....</b>	<b>6</b>
<b>6.2 Mixing and testing .....</b>	<b>6</b>
<b>7 Production of reference mortar.....</b>	<b>7</b>
<b>7.1 Mix proportions.....</b>	<b>7</b>
<b>7.2 Mixing and testing .....</b>	<b>7</b>
<b>8 Test report .....</b>	<b>8</b>
<b>Bibliography .....</b>	<b>10</b>

iTeh Standards  
(<https://standards.iteh.ai>)

## Document Preview

[SIST EN 480-1:2015](#)

<https://standards.iteh.ai/catalog/standards/sist/e36ebc06-9287-47e7-893c-cdc9f7ae2189/sist-en-480-1-2015>

## Foreword

This document (FprEN 480-1:2014) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by DIN.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 480-1:2011.

The main changes with respect to the previous edition are listed below:

- a) amendment of the cement range;
- b) editorial revision according to CEN Internal Regulations.

This 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 electro-chemical test

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

## FprEN 480-1:2014 (E)

### 1 Scope

This European Standard specifies the constituent materials, the composition and the mixing method to produce reference concrete and reference mortar for testing the efficacy and the compatibility of admixtures in accordance with the series EN 934.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 196-6, *Methods of testing cement — Part 6: Determination of fineness*

EN 197-1, *Cement — Part 1: Composition, specifications and conformity criteria for common cements*

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

EN 934 (all parts), *Admixtures for concrete, mortar and grout*

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*

EN 12350-6, *Testing fresh concrete — Part 6: Density*

EN 12350-7, *Testing fresh concrete — Part 7: Air content — Pressure methods*

EN 12390-1, *Testing hardened concrete — Part 1: Shape, dimensions and other requirements for specimens and moulds*

<https://standards.iteh.ai/catalog/standards/sist/en-480-1-2015>

EN 12390-2, *Testing hardened concrete — Part 2: Making and curing specimens for strength tests*

EN 12620, *Aggregates for concrete*

### 3 Constituent materials

#### 3.1 Cement

The reference concrete and mortar shall be made with a CEM I cement of strength class 42,5 or 52,5 conforming to EN 197-1.

The cement used shall have a C<sub>3</sub>A content of 7 % to 11 % by mass calculated from chemical analysis according to EN 196-2 and a specific surface of (3 200 to 4 600) cm<sup>2</sup>/g determined according to EN 196-6.