

TSEMENT. OSA 6: TAASKASUTATAVAID
EHITUSMATERJALE SISALDAV TSEMENT

Cement - Part 6: Cement with recycled building
materials

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>See Eesti standard EVS-EN 197-6:2023 sisaldab Euroopa standardi EN 197-6:2023 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.06.2023.</p> <p>Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN 197-6:2023 consists of the English text of the European standard EN 197-6:2023.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 21.06.2023.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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English Version

Cement - Part 6: Cement with recycled building materials

Ciment - Partie 6 : Ciment à base de matériaux de
construction recyclés

Zement - Teil 6: Zement mit rezyklierten Baustoffen

This European Standard was approved by CEN on 24 April 2023.

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European foreword

This document (EN 197-6:2023) has been prepared by Technical Committee CEN/TC 51 “Cement and building lime”, the secretariat of which is held by NBN.

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of an identical text or by endorsement, at the latest by December 2023, and conflicting national standards shall be withdrawn at the latest by December 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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Introduction

The purpose of this document is to specify the requirements for cement with recycled concrete fines.

Different cements have different properties and performance. The performance tests available at the time of publication of this document (i.e. for the determination of setting time, strength, soundness and heat of hydration) have been included in this document. In addition, work is being carried out by CEN/TC 51 to identify any additional tests which are needed to specify further performance characteristics of cement. Until further performance tests are available, it is necessary that the choice of cement, especially the type and/or strength class in relation to the requirements for durability depending on exposure class and type of construction in which it is incorporated, follows the appropriate standards and/or regulations for concrete, mortar, grout, etc. valid in the place of use.

The fitness of cement with recycled concrete fines for the intended use to produce structural concrete (reinforced or not) has been experimentally assessed by testing programs, the results of which have been included in a dossier [1] approved by CEN/TC 51.

The cement types and strength classes defined in this document allow the specifier and/or the user to contribute to objectives of sustainability for cement-based constructions and of circular economy and to minimize the use of natural resources in accordance with local conditions of production.

1 Scope

This document specifies cement with recycled concrete fines whose intended use is the preparation of concrete, mortar, grout, etc.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 196-2, *Method of testing cement — Part 2: Chemical analysis of cement*

EN 196-6, *Methods of testing cement — Part 6: Determination of fineness*

EN 196-7:2007, *Methods of testing cement — Part 7: Methods of taking and preparing samples of cement*

EN 197-1:2011, *Cement — Part 1: Composition, specifications and conformity criteria for common cements*

EN 197-2:2020, *Cement — Part 2: Assessment and verification of constancy of performance*

EN 206:2013+A2:2021, *Concrete — Specification, performance, production and conformity*

EN 933-9, *Tests for geometrical properties of aggregates — Part 9: Assessment of fines — Methylene blue test*

EN 13639, *Determination of total organic carbon in limestone*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 197-1:2011 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

4 Constituents and composition

4.1 General

Cement covered by this document contains recycled concrete fines and cement constituents covered by EN 197-1.

The requirements on constituents are specified in 4.2 and 4.3.

The composition of cement covered by this document is specified in Table 1.

Provisions valid in the place of use may specify requirements for the content and the release of dangerous substances from recycled concrete fines.