TSEMENT JA EHITUSLUBI. TOOTE KESKKONNADEKLARATSIOONID. STANDARDIT EN 15804 TÄIENDAVAD TOOTEKATEGOORIA REEGLID

Cement and building lime - Environmental product declarations - Product category rules complementary to EN 15804

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

See Eesti standard EVS-EN 16908:2017 sisaldab Euroopa standardi EN 16908:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 16908:2017 consists of the English text of the European standard EN 16908:2017.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.02.2017.	Date of Availability of the European standard is 01.02.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 91.010.99, 91.100.10

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16908

February 2017

ICS 91.010.99; 91.100.10

English Version

Cement and building lime - Environmental product declarations - Product category rules complementary to EN 15804

Ciment et chaux de construction - Déclarations environnementales sur les produits - Règles de catégorie de produits complémentaires de l'EN 15804

Zement und Baukalk - Umweltproduktdeklarationen - Produktkategorieregeln in Ergänzung zu EN 15804

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Ref. No. EN 16908:2017 E

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European foreword

This document (EN 16908:2017) has been prepared by Technical Committee CEN/TC 51 “Cement and building limes”, 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of an identical text or by endorsement, at the latest by August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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Introduction

How to use this document

This document provides product category rules (PCR) for Type III environmental declarations (EPDs) according to EN 15804 [14] for cement and building lime, in particular to products according to the standards developed in CEN/TC 51 “Cement and building limes”.

The European standard EN 15804, “Core rules for the product category of construction products”, is intended as the core PCR to be followed. This PCR document supplements EN 15804 by giving more detail for specific items relevant to cement and building lime. In all cases where no specific rules are given in this document, EN 15804 should be followed. Therefore, this document should be read in parallel with EN 15804. EN 15804 is normatively referenced in this document and is indispensable for its application.

The structure of this document follows that of EN 15804, with all headings and section numbers kept the same. Where a section of EN 15804 applies without modification, this is indicated. Where a section of EN 15804 is not relevant for EPDs covered by this PCR, this is also indicated.

The purpose of an EPD is given in the Introduction to EN 15804.

Definition of the covered products

Cement

Cement is defined in standards published by CEN/TC 51 as “a hydraulic binder, i.e. a finely ground inorganic material which, when mixed with water, forms a paste which sets and hardens by means of hydration reactions and processes and which, after hardening, retains its strength and stability even under water”.

Building Lime

Building lime is defined in EN 459-1 as a “group of lime products, exclusively consisting of two families: air lime and lime with hydraulic properties, used in applications or materials for construction, building and civil engineering.” Air lime refers to the product which combines and hardens with carbon dioxide present in air.

Air lime refers to the product which combines and hardens with carbon dioxide present in air. Air lime has no hydraulic properties. Air lime is divided into two sub-families, calcium lime (CL) and dolomitic lime (DL). Calcium lime is an air lime consisting mainly of calcium oxide (quicklime) and/or calcium hydroxide (hydrated lime). Dolomitic lime is an air lime consisting mainly of calcium magnesium oxide and/or calcium magnesium hydroxide.

Lime with hydraulic properties is a building lime consisting mainly of calcium hydroxide, calcium silicates and calcium aluminates. It has the property of setting and hardening when mixed with water and/or under water. Reaction with atmospheric carbon dioxide is part of the hardening process. Lime with hydraulic properties is divided into three subfamilies, natural hydraulic lime (NHL), formulated lime (FL) and hydraulic lime (HL).

1 Scope

The general scope of the core product category rules (PCR) is given in EN 15804:2012+A1:2013, Clause 1.

This PCR is primarily intended for the creation of cradle-to-gate EPDs of cement and building lime.

In other respects, the scope is as in EN 15804.

2 Normative references

As in EN 15804.

3 Terms and definitions

For the purposes of this document the terms and definitions of EN 15804 apply.

4 Abbreviations

As in EN 15804.

5 General aspects

5.1 Objective of the Core PCR

As in EN 15804.

5.2 Types of EPD with respect to life cycle stages covered

As in EN 15804.

Cement and building lime are intermediate products with many different final uses. Cement may for example be used in ready-mix concrete, precast concrete, mortar, screed, base treatment for various types of infrastructures, etc. Building lime may for example be used in plasters, renders, masonry mortars, calcium silica bricks, autoclave aerated concrete, soil treatment, asphalt mixtures etc. Therefore, it is generally not possible to provide information about the environmental impacts of the products during the construction process, use, and end of life stages, as this will greatly depend on how the cement or building lime is used.

For this reason, this PCR is primarily intended to support the creation of cradle-to-gate EPDs, i.e. it focuses on the life cycle stages A1 – A3: raw material supply, transport, and manufacturing, although other stages may also be included.

Information on other life cycle modules may be provided in an EPD if relevant. Particularly information on carbonation of building limes in the life cycle modules A5 and B1 may be provided in EPDs.

If additional stages are included, the modularity principle shall be observed (see 6.3.4.1 of EN 15804:2012+A1:2013) in order to produce consistent EPDs.

5.3 Comparability of EPD for construction products

As in EN 15804.

As cement and building lime are intermediate products, no functional unit can be defined in EPDs for cement and building lime (see 6.3) and therefore no comparisons with other construction products can be made based on EPDs according to this PCR. As stated in EN 15804, "*EPD that are not in a building context are not tools to compare construction products and construction services*".