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Product category rules for ceramic tiles

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPEAN STANDARD**EN 17160****NORME EUROPÉENNE****EUROPÄISCHE NORM**

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Product category rules for ceramic tilesRègles de définition des catégories de produits pour les
carreaux céramiquesProduktkategorieregeln für keramische Fliesen und
Platten

This European Standard was approved by CEN on 23 December 2018.

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 CEN-CENELEC Management Centre or to any CEN member.

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EN 17160:2019 (E)**European foreword**

This document (EN 17160:2019) has been prepared by Technical Committee CEN/TC 67 “Ceramic tiles”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The European Standard EN 15804:2012+A1:2013 provides the core product category rules for all construction products and services. It provides a structure to ensure that all Environmental Product Declarations (EPD) of construction products, construction services and construction processes are derived and presented in a harmonized way.

These Product Category Rules (PCR) provide rules for the creation of EPD for ceramic tiles. It complements the core product category rules for all construction products and services as established in EN 15804:2012+A1:2013.

An EPD communicates verifiable, accurate, non-misleading environmental information for products and their applications, thereby supporting scientifically based, fair choices and stimulating the potential market-driven continuous environmental improvement.

The standardization process has taken place in accordance with EN ISO 14025:2010. All common issues are covered horizontally for all product types in order to minimize vertical (branch specific) deviations.

As defined in EN 15804:2012+A1:2013, the EPD information is expressed in information modules, allowing easy organization and expression of data packages throughout the life cycle of ceramic tiles. The approach requires that underlying data should be consistent, reproducible and comparable.

In order to comply with EN 15804:2012+A1:2013, the EPD is expressed in a form that allows aggregation (addition) to provide complete information for buildings. EN 15804:2012+A1:2013 does not deal with aggregation at the building level nor does this standard describe the rules for applying EPD in a building assessment.

EN 15804:2012+A1:2013 deals with a limited number of quantifiable predetermined parameters. Future revisions of EN 15804:2012+A1:2013 may lead to the incorporation of additional predetermined parameters.

EN 15804:2012+A1:2013 provides the means of developing a Type III environmental declaration of construction products in the context of the suite of standards that are intended to assess the sustainability of construction works.

This suite of standards includes:

- EN 15643-1, *Sustainability of construction works – Sustainability assessment of buildings – Part 1: General framework*;
- EN 15643-2, *Sustainability of construction works – Assessment of buildings – Part 2: Framework for the assessment of environmental performance*;
- EN 15978, *Sustainability of construction works – Assessment of environmental performance of buildings – Calculation method*;
- EN 15804:2012+A1:2013, *Sustainability of construction works – Environmental product declaration – Core rules for the product category of construction products*;
- CEN/TR 15941, *Sustainability of construction works – Environmental product declarations – Methodology for selection and use of generic data*;
- EN 15942, *Sustainability of construction works – Environmental product declarations – Communication format business-to-business*.

EN 17160:2019 (E)**1 Scope**

This document defines Product Category Rules (PCR) providing guidelines and rules for developing a type III environmental declaration (EPD) for ceramic tiles produced by extrusion and dry-pressing techniques, mainly used for internal and/or external floorings and walls coverings and façade cladding.

These PCR specify the calculation rules in accordance with EN 15804:2012+A1:2013 for the Life Cycle Assessment (LCA) of ceramic tiles for developing an EPD, as well as the requirements on the background of the LCA.

These PCR:

- define the parameters to be declared and the way in which they are collated and reported;
- describe which stages of ceramic tiles's life cycle are considered in the EPD and which processes are to be included in the life cycle stages;
- defines rule for the development of scenarios;
- include the rules for calculating the Life Cycle Inventory and the Life Cycle Impact Assessment underlying the EPD, including the specification of the data quality to be applied;
- include the rules for reporting predetermined, environmental and health information, that is not covered by LCA for a ceramic tile, construction process and construction service where necessary;
- define the conditions under which ceramic tiles can be compared based on the information provided by EPD.

The EPD developed using these PCR will contain data from the product stages (A1 to A3). Optionally, the manufacturer can include all modules of the product's life cycle stages (construction process, use, and end of life) (A4 to C4), using the scenarios described in 7.3 when primary data are not available. The results of these stages shall be shown individually (without being added together).

Therefore, these PCR cover:

- EPD cradle-to-gate (only the product stage is considered);
- EPD cradle-to-grave (the whole life cycle of ceramic tiles is considered). In these type of EPD module D may be included.

After verification an EPD is valid for a 5 year period from the date of issue, after which it shall be reviewed and verified.

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 14411:2016, *Ceramic tiles - Definition, classification, characteristics, assessment and verification of constancy of performance and marking*

EN 15804:2012+A1:2013, *Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products*

CEN/TR 15941, *Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data*

EN 15942, *Sustainability of construction works - Environmental product declarations - Communication format business-to-business*

EN ISO 14025:2010, *Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2006)*

EN ISO 14044:2006, *Environmental management - Life cycle assessment - Requirements and guidelines (ISO 14044:2006)*

ISO 15686-1, *Buildings and constructed assets — Service life planning — Part 1: General principles and framework*

ISO 15686-2, *Buildings and constructed assets — Service life planning — Part 2: Service life prediction procedures*

ISO 15686-7, *Buildings and constructed assets — Service life planning — Part 7: Performance evaluation for feedback of service life data from practice*

ISO 15686-8:2008, *Buildings and constructed assets — Service-life planning — Part 8: Reference service life and service-life estimation*

ISO/TS 15686-9, *Buildings and constructed assets — Service-life planning — Part 9: Guidance on assessment of service-life data*

ISO 21930:2017, *Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services*

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