
Irish Standard
I.S. EN 16757:2017

# Sustainability of construction works - Environmental product declarations - Product Category Rules for concrete and concrete elements

**I.S. EN 16757:2017**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 16757:2017 is the adopted Irish version of the European Document EN 16757:2017, Sustainability of construction works - Environmental product declarations - Product Category Rules for concrete and concrete elements

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 16757

June 2017

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English Version

# Sustainability of construction works - Environmental product declarations - Product Category Rules for concrete and concrete elements

Contribution des ouvrages de construction au développement durable - Déclarations environnementales sur les produits - Règles régissant la catégorie de produits pour le béton et les éléments en béton

Nachhaltigkeit von Bauwerken - Umweltproduktdeklarationen - Produktkategorieregeln für Beton und Betonelemente

This European Standard was approved by CEN on 11 May 2017.



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

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Ref. No. EN 16757:2017 E

# Contents

Page

# European foreword

This document (EN 16757:2017) has been prepared by Technical Committee CEN/TC 229 “Precast Concrete Products”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by December 2017, and conflicting national standards shall be withdrawn at the latest by December 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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 core 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, verified and presented in a harmonized way.

This European Standard provides additional rules for Environmental Product Declarations (EPD) specifically for concrete and concrete elements. It complements the core 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 for market-driven continuous environmental improvement.

The standardization process has taken place in accordance with ISO 14025. All common issues are covered horizontally for all product types in order to minimize vertical (branch specific) deviations. All common issues are covered horizontally for all concrete and concrete elements in order to minimize intra-sectorial deviations.

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

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

The standard deals with a limited number of quantifiable parameters as predefined in EN 15804:2012+A1:2013. Future revisions of EN 15804 may lead to the incorporation in this standard of additional predetermined parameters. This European Standard provides the means for developing a Type III environmental declaration of concrete and concrete elements 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 methods*

— 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*

— CEN/TR 16970:2016, *Sustainability of construction works - Guidance for the implementation of* EN 15804

# 1 Scope

This European Standard complements the core rules for the product category of construction products as defined in EN 15804:2012+A1:2013 and is intended to be used in conjunction with that standard.

This European Standard applies to concrete and concrete elements for building and civil engineering, excluded autoclaved aerated concrete.

This document defines the parameters to be reported, what EPD types (and life cycle stages) to be covered, what rules to be followed in order to generate Life Cycle Inventories (LCI) and conduct Life Cycle Impact Assessment (LCIA) and the data quality to be used in the development of EPDs.

In addition to the common parts of EN 15804:2012+A1:2013, this European Standard for concrete and concrete elements:

— defines the system boundaries;

— defines the modelling and assessment of material-specific characteristics;

— defines allocation procedures for multi-output processes along the production chain;

— defines allocation procedures for reuse and recycling;

— includes the rules for calculating the LCI and the LCIA underlying the EPD;

— provides guidance/specific rules for the determination of the reference service life (RSL);

— gives guidance on the establishment of default scenarios;

— gives guidance on default functional units for concrete elements.

This document is intended to be used either for cradle to gate, cradle to gate with options or cradle to grave assessment, provided the intentions are properly stated in the system boundary description.

Within the construction works context, a cradle to grave declaration delivers a more comprehensive understanding of the environmental impact associated with concrete and concrete elements.

# 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 206:2013+A1:2016, *Concrete - Specification, performance, production and conformity*

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