



BSI Standards Publication

Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

National foreword

This British Standard is the UK implementation of EN 15804:2012+A2:2019. It supersedes BS EN 15804:2012+A1:2013, which will be withdrawn on 31 October 2022.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee B/558, Sustainability of construction works.

A list of organizations represented on this committee can be obtained on request to its committee manager.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2020
Published by BSI Standards Limited 2020

ISBN 978 0 539 14636 3

ICS 91.010.99

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 29 February 2012.

Amendments/corrigenda issued since publication

Date	Text affected
28 February 2014	Implementation of CEN correction notice 29 January 2014: Table C.5 and A1 amendment text
30 November 2019	Implementation of CEN amendment A2:2019
31 July 2020	Correction to supersession details in national foreword

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 15804:2012+A2

October 2019

ICS 91.010.99

Supersedes EN 15804:2012+A1:2013

English Version

**Sustainability of construction works - Environmental
product declarations - Core rules for the product category
of construction products**

Contribution des ouvrages de construction au
développement durable - Déclarations
environnementales sur les produits - Règles régissant
les catégories de produits de construction

Nachhaltigkeit von Bauwerken -
Umweltproduktdeklarationen - Grundregeln für die
Produktkategorie Bauprodukte

This European Standard was approved by CEN on 10 September 2013 and includes Amendment 2 approved by CEN on 21 July 2019.

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.

This European Standard exists 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	5
Introduction	6
1 Scope	7
2 Normative references.....	7
3 Terms and definitions	8
4 Abbreviations	13
5 General aspects.....	14
5.1 Objective of the Core PCR.....	14
5.2 Types of EPD with respect to life cycle stages covered.....	15
5.3 Comparability of EPD for construction products	19
5.4 A2 Additional environmental information.....	19
5.4.1 General.....	19
5.4.2 Additional impact indicators	20
5.4.3 Additional information on carbon offset, carbon storage and delayed emissions.....	20
5.4.4 Additional Information not derived from LCA	20
5.5 Ownership, responsibility and liability for the EPD.....	20
5.6 Communication formats	20
6 Product Category Rules for LCA.....	20
6.1 Product category	20
6.2 Life cycle stages and their information modules to be included	21
6.2.1 General.....	21
6.2.2 A1-A3, Product stage, information modules	21
6.2.3 A4-A5, Construction process stage, information modules	21
6.2.4 B1-B5, Use stage, information modules related to the building fabric.....	21
6.2.5 B6-B7, use stage, information modules related to the operation of the building.....	22
6.2.6 C1-C4 End-of-life stage, information modules	22
6.2.7 D, Benefits and loads beyond the system boundary, information module	22
6.3 Calculation rules for the LCA.....	22
6.3.1 A2 Functional or declared unit	22
6.3.2 Functional unit	23
6.3.3 Declared unit	24
6.3.4 Reference service life (RSL).....	24
6.3.5 System boundaries	25
6.3.6 Criteria for the exclusion of inputs and outputs	32
6.3.7 Selection of data.....	32
6.3.8 A2 Data quality A2	33
6.3.9 Developing product level scenarios	35
6.3.10 Units	35
6.4 Inventory analysis	36
6.4.1 Collecting data.....	36
6.4.2 Calculation procedures	36
6.4.3 Allocation of input flows and output emissions.....	36
6.4.4 A2 Information on biogenic carbon content	38

6.5	Impact assessment	38
6.5.1	A₂ General.....	38
6.5.2	Core environmental impact indicators.....	38
6.5.3	Additional environmental impact indicators.....	39
7	Content of the EPD.....	39
7.1	Declaration of general information	39
7.2	Declaration of environmental A₂ indicators A₂ derived from LCA	40
7.2.1	General	40
7.2.2	Rules for declaring LCA information per module	40
7.2.3	A₂ Indicators describing environmental impacts based on Life Cycle Impact Assessment (LCIA) A₂	41
7.2.4	A₂ Indicators describing resource use and environmental information based on Life Cycle Inventory (LCI) A₂	44
7.2.5	A₂ Information on biogenic carbon content.....	46
7.3	Scenarios and additional technical information	46
7.3.1	General	46
7.3.2	Construction process stage	47
7.3.3	B1-B7 use stage	48
7.3.4	End-of-life	51
7.4	Additional information on release of dangerous substances to indoor air, soil and water during the use stage	52
7.4.1	Indoor air.....	52
7.4.2	Soil and water	52
7.5	Aggregation of information modules	52
8	Project report.....	52
8.1	General	52
8.2	LCA-related elements of the project report	53
8.3	Documentation on additional information	55
8.4	Data availability for verification	55
9	Verification and validity of an EPD.....	55
	Annex A (normative) Requirements and guidance on the reference service life	56
	Annex B (informative) Waste	59
B.1	End-of-waste.....	59
B.2	Properties of hazardous waste for Table A₂ 8 A₂	59
	Annex C (normative) Impact categories and related indicators, methodologies and characterization factors (CF).....	60
C.1	Core environmental impact categories and indicators.....	60
C.2	Calculation rules for the climate change impact category.....	61
C.2.1	General	61
C.2.2	Total global warming potential (GWP-total)	61
C.2.3	Fossil global warming potential (GWP-fossil).....	61
C.2.4	Biogenic global warming potential (GWP-biogenic).....	61
C.2.5	Land use and land use change global warming potential (GWP-luluc).....	62
C.3	Additional impact categories and indicators	63
C.4	Characterization factors.....	63

Annex D (informative) End of life formulae.....	64
D.1 Introduction	64
D.2 Terms and definitions	64
D.2.1 Value correction factor	64
D.2.2 Quantities.....	64
D.2.3 Specific emissions and resources per unit of analysis.....	65
D.2.4 Specific emissions and resources per unit of analysis of outputs	66
D.2.5 Efficiency	66
D.2.6 Lower heating value.....	67
D.3 Formulae	67
D.3.1 General.....	67
D.3.2 Modules A1–A3.....	67
D.3.3 Module C	68
D.3.4 Module D.....	68
Annex E (informative) Schemes to be applied for data quality assessment of generic and specific data.....	69
Bibliography.....	71

European foreword

This document (EN 15804:2012+A2:2019) has been prepared by Technical Committee CEN/TC 350 “Sustainability of construction works”, 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 April 2020, and conflicting national standards shall be withdrawn at the latest by October 2022.

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.

This document supersedes A2 EN 15804:2012+A1:2013 A2.

This document includes Amendment 1 approved by CEN on 2013-09-10 and Amendment 2 approved by CEN on 2019-07-21.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1 and A2 A2.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European standard provides 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, verified and presented in a harmonised way.

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

EPD information is expressed in information modules, which allow easy organisation and expression of data packages throughout the life cycle of the product. The approach requires that the underlying data should be consistent, reproducible and comparable.

The EPD is expressed in a form that allows aggregation (addition) to provide complete $\langle A_2 \rangle$ information for buildings and other construction works $\langle A_2 \rangle$. 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.

$\langle A_2 \rangle$ The standard deals with a set of quantifiable, predetermined environmental impact indicators. This standard has been adapted to address the amendment of the standardization Mandate M/350. $\langle A_2 \rangle$

This European Standard provides the means for developing a Type III environmental declaration of construction products and is part of a suite of standards that are intended to assess the sustainability of construction works.

$\langle A_2 \rangle$ deleted text $\langle A_2 \rangle$

- 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*;
- 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 formats: business to business*.