

Product category rules Part B – for doors and gates

General product category rules for environmental product declarations according to EN ISO 14025 and EN 15804

according to the program operation for the preparation of
environmental product declarations (EPD) of the
ift Rosenheim

Key words: Environmental Product Declaration, Doors, Gates, Life Cycle Assessment,
Product Category Rules



Note

The present document is only a rough translation. In case of doubt, the German version applies.

PCR Doors and gates

Product group: Doors and gates
Declaration code: PCR-TT-2.3 : 2018
Date of release: 25.01.2018
Next revision: 25.01.2023



Content

1	Preliminary remark.....	3
2	Product category rules.....	3
2.1	Content.....	3
2.2	Verification, validation and release of the PCR.....	3
3	General product information.....	4
3.1	Product description / Product definition.....	4
3.2	Scope.....	5
3.3	Application.....	5
3.4	Quality assurance and management systems (optional).....	5
3.5	Technical data / performance of the product.....	6
4	Raw materials.....	6
4.1	Information on SVHC according to PCR Part A.....	6
4.2	Additional information.....	7
5	Life cycle assessment.....	7
5.1	Functional unit.....	7
5.2	Declared unit.....	7
5.3	Geographical and time-related system boundaries.....	8
5.4	Scope / System boundaries.....	8
5.5	Reference service life (RSL).....	9
5.6	Information on the product life cycle.....	9
6	Bibliography.....	10

1 Preliminary remark

The product category rules of the ift Rosenheim are divided into two parts and marked accordingly. Part A contains general product category rules, while this part B contains product group-specific rules. The valid versions can be obtained from ift Rosenheim.

The European Standards EN 15804, EN 17213, EN 16485 and prEN 17662 provide basic Product Category Rules for building products, services of all kinds and building processes and in particular for doors and gates. They form the basis to secure that Environmental Product Declarations for building products, services of all kinds and building processes and in particular for doors and gates are derived, verified and displayed in a standardized way.

This PCR provides additional Product Category Rules for Type III Environmental Product Declarations (EPD) in particular for doors and gates. This PCR is therefore supplementing the requirements according to EN 15804, EN 17213, EN 16485 and prEN 17662 and do not replace them.

Note

In EN 17213, EN 16485 and prEN 17662, precise specifications are made for the life cycle assessment and EPD preparation of doors and gates within the various phases of the life cycle; these must be observed.

2 Product category rules

2.1 Content

This PCR defines for specific product groups:

- Rules for the preparation of environmental product declarations (EPD) for interior and exterior doors according to EN 14351-1 and prEN 14351-2 as well as smoke and fire protection doors according to EN 16034 and automatic doors according to DIN 18650-1 and DIN 18650-2 (former prEN 12650) and gates according to 13241-1.

2.2 Verification, validation and release of the PCR

The committee of experts “ift-EPD and PCR” performs the validation and thus vouches for its correctness.

Interested Parties involved in the PCR assessment:

- Ift Rosenheim

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This PCR document with the document number PCR-TT-2.3 was validated and released by the committee of experts (CE) of the ift Rosenheim GmbH. The PCR document is valid according to ISO 14025, EN 15804 and the ift guideline NA-01, five years.

Tracking of the editing / revisions:

Serial No.	Date	Editing comment	CE	Declaration code
1	11/2010	Initial verification and release	released	PCR-TT-0.1 : 2010
2	09/2011	Editorial changes	released	PCR-TT-1.0 : 2011
3	03/2012	Editorial changes	released	PCR-TT-1.1 : 2011
4	01/2013	Revision of the PCR	released	PCR-TT-1.1 : 2013
5	01/2018	Revision of the PCR	released	PCR-TT-2.1 : 2018
6	09/2019	Editorial changes	released	PCR-TT-2.1 : 2018
7	04/2020	Editorial changes	released	PCR-TT-2.1 : 2018
8	10/2021	Content changes	released	PCR-TT-2.3 : 2018

3 General product information

3.1 Product description / Product definition

The declared products must be described.

In doing so, the trade name of the products / product groups (including any product codes) to which the EPD applies must be stated in addition to a general product description. If it is not reasonably possible to name the products / product groups, e.g. in the context of association EPDs, the product description must clearly delimit the products / product groups to which the EPD applies.

Exemplary information:

- Glare frame / sash frame (type of building material)
- Surface (Treatment/coating)
- Fillings/glasses
- Non-transparent fillings: (Material and structure have to be specified)
- Gaskets (Material and structure have to be specified)
- Hardware (Specifications of ribbons, closures and functional hardware according to PCR locks and hardware)

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3.2 Scope

These product category rules (PCR-TT-2.3) can be applied to doors (interior and exterior) according to DIN 14351-1 and prEN 14351-2 (all kinds of frame materials). The following system components are included: profiles, coatings, fillings (transparent and opaque), gaskets, integrated ventilation components, drives and hardware.

Furthermore, the EPD is also valid for smoke and fire protection doors according to EN 16034 and automatic doors according to DIN 18650-1 and DIN 18650-2 and gates according to EN 13241-1

Furthermore, these Product Category Rules are also valid for: access panels and inspection doors, consisting of frame, door and hardware.

3.3 Application

Brief description of the scope of the declared products.

Example:

- Exterior door for the use in residential and non-residential buildings
- Gates for the use in residential, non-residential as well as in industrial buildings
- Access panels for opening and closing inspection openings.

3.4 Quality assurance and management systems (optional)

In order to guarantee the quality assurance of the product, certification systems can be used. Within the framework of the EPD, information can optionally be provided on quality assurance or QMS and EMS.

Exemplary information:

Inspection

- RAL-GZ 695 RAL-Gütegemeinschaft: Windows, front doors, facades and conservatories

ift product certification

- QM 301 Attack-resistant components: Doors, windows, curtain walls, lattice elements and closures
- QM 302 smoke protection barriers
- QM 317 Gates
- QM 326 Interior doors
- QM 356 Automatic doors
- QM 359 VOC emissions from construction products

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Management systems

- Quality management DIN EN ISO 9001
- Environmental management DIN EN ISO 14001
- Energy management DIN EN ISO 50001
- Occupational health and safety management BS OHSAS 18001
- Integrated Management system (IMS)

Note

Existing data, e.g. from EMSs (environmental balances), can facilitate data collection in life cycle assessments.

3.5 Technical data / performance of the product

The technical data of the products have to be named in the EPD. Die technischen Daten der Produkte sind in der EPD zu nennen. A reference to relevant standards shall be provided.

Table 1 Characteristics and performance in the product category

	Characteristics and performance*	Unit
Obligation	Grammage	kg/m ²
Obligation	Weight per unit	kg/unit
Obligation	Gross density (EN 16485)	kg/m ³
Obligation	Moisture content (EN 16485)	%
Optional	Door / gate panel thickness	m
Optional	U-value	W/(m ² K)
Optional	Driving rain resistance	-
Optional	Fire resistance class	-
	If applicable, further	

* The reference product is described in the EPD with the mandatory information. The product characteristics can be given in a range to describe the reference product.

4 Raw materials

4.1 Information on SVHC according to PCR Part A

If products to which this PCR applies contain substances of very high concern (SVHC), these must be indicated in the EPD.

4.2 Additional information

The essential technical information on the product(s) or a reference to it shall be provided for the architect.

When considering the entire life cycle (cradle to grave), the product characteristics must be stated on the basis of the physical properties of the building or a reference to them.

Within the framework of the EPD, further information on building certification systems can be provided.

Example:

The physical properties of the door / gate can be found in the CE label or in the accompanying documentation.

5 Life cycle assessment

For the preparation of an EPD, a life cycle assessment according to ISO 14040 and ISO 14044 is prepared as a basis. The data on which the life cycle assessment is based should be precise, complete and consistent. This life cycle assessment must be representative of the products presented in the declaration. The scope and limits of the life cycle assessment must be specified.

5.1 Functional unit

It applies EN 17213:2020.

The functional unit indicates the quantified benefit of a product system used as a comparison unit (see EN 15804).

5.2 Declared unit

Declared products must be described and optionally represented graphically (e.g. CAD drawing). A functional or declared unit to which the EPD data refer must be specified.

The following declared unit must be specified:

- Area in m², e.g. 1 m² exterior door

For doors, the following standardized size has to be specified:

Defined standard size according to EN 17213:2020: 1,23 m x 2,18 m,
optional 2,00 m x 2,18 m

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For sliding and folding elements, the following standardized size has to be specified:
Defined standardized size according to 17213:2020: 3,00 m x 2,18 m,
Optional 6,00 m x 2,18 m

For gates, a representative reference size has to be chosen. If another unit is chosen, this has to be justified. For access panels and access doors, a representative reference size has to be chosen.

For deviations of this, EN 17213:2020 applies.
If there is no optional indication, another unit can be chosen and has to be justified.

Example:

The functional unit for interior doors is given as an area in m², with a grammage and weight per unit in kg.

5.3 Geographical and time-related system boundaries

General information according to PCR Part A.

Example:

Reference period Year 2009-2010
Reference area Europe

5.4 Scope / System boundaries

Example door:

Cradle to Gate according to EN 15804+A1:

The system boundaries include the extraction of raw materials, the manufacture of the door and the assembly of the individual components to the finished packaged door at the factory gate.

Cradle to Gate according to EN 15804+A2:

The system boundaries include the extraction of raw materials, the manufacture of the door and the assembly of the individual components to the finished packaged door at the factory gate as well the ablation, deposition and material and thermal recycling of the products.

Note:

In the case of construction products and materials that are permitted as exceptions according to EN 15804+A2, the information on disposal may be omitted.

Cradle to Grave according to EN 15804+A1:

The system boundaries also include the use, deconstruction, disposal and material and energy recovery of the door and its individual parts.

Cradle to Grave according to EN 15804+A2:

The system boundaries also include the stage-of-life-phases application and use.

5.5 Reference service life (RSL)

It applies EN 15804.

5.6 Information on the product life cycle

Regulations to be observed during the life cycle:

Exemplary information:

Product manufacture:

- Product standard
- Applicable certification programs

Construction stage:

- Assembly guideline / instruction

Use stage:

- Information on the useful life
- Information on VOC emissions (certification programmes)
- Information on use

End-of-Life stage:

- Recycling initiatives or normal recovery and disposal systems
- Recycling rates in line with the industry standard
- Legal requirements for recovery

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Publication

PCR Doors and gates PCR-TT-2.3
Product Category Rules according to EN ISO 14025 und EN 15804

Bibliographic information of the German Library. The German Library lists this publication in the German national bibliography; detailed bibliographic data can be found on the Internet:
<http://dnb.ddb.de>

Layout

ift Rosenheim GmbH

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