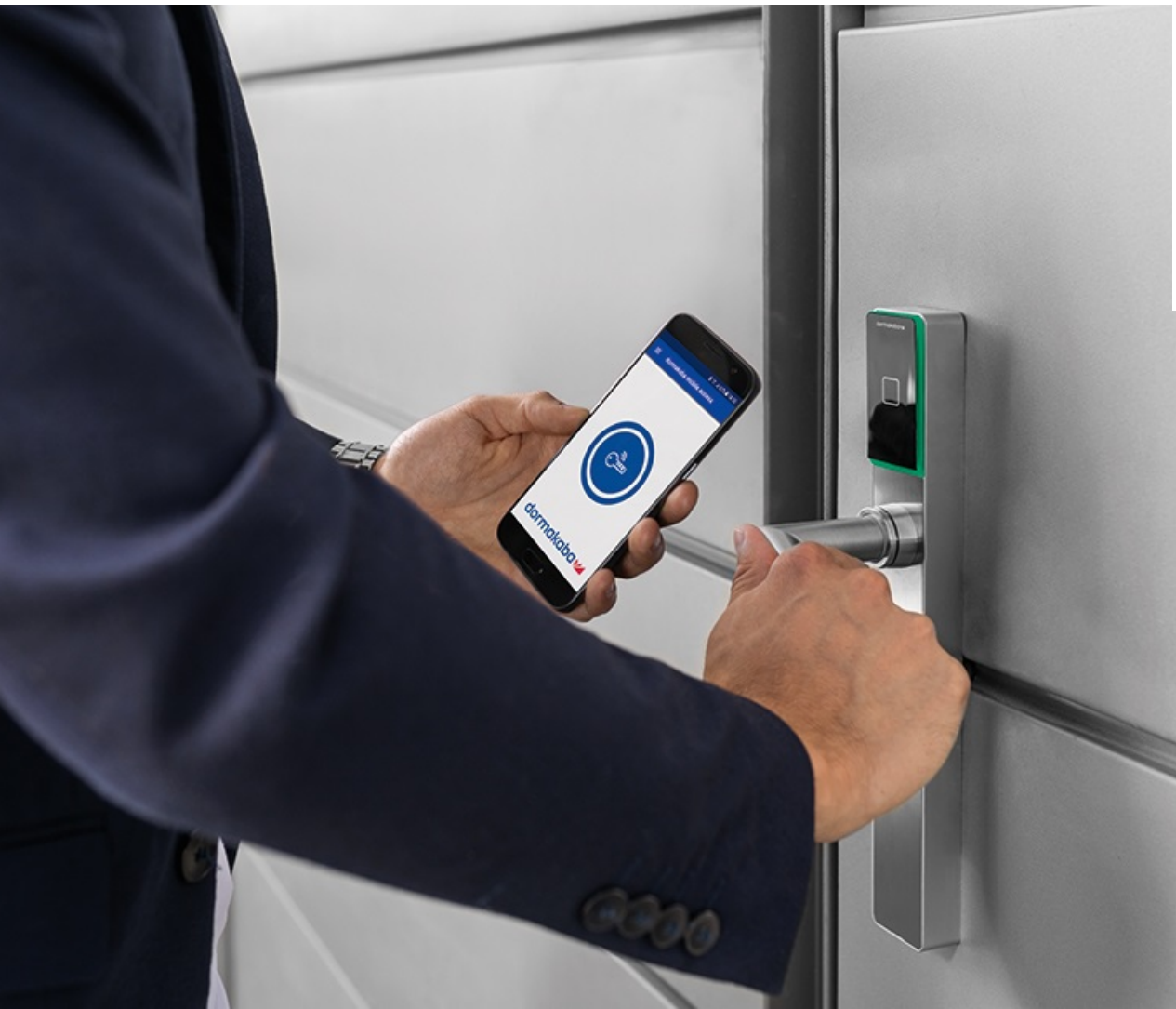
ENVIRONMENTAL-PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	dormakaba International Holding GmbH
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-DOR-20210011-CCA3-EN
Issue date	11.05.2021
Valid to	10.05.2028

c-lever pro
dormakaba

www.ibu-epd.com | https://epd-online.com



General Information

dormakaba

Programme holder

IBU – Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

Declaration number

EPD-DOR-20210011-CCA3-EN

This declaration is based on the product category rules:

Building Hardware products, 01.08.2021
(PCR checked and approved by the SVR)

Issue date

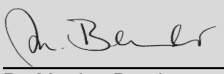
11.05.2021

Valid to

10.05.2028



Dipl.-Ing Hans Peters
(chairman of Institut Bauen und Umwelt e.V.)



Dr. Martina Bender
(Managing Director Institut Bauen und Umwelt e.V.)

c-lever pro

Owner of the declaration

dormakaba International Holding GmbH
DORMA Platz 1
58256 Ennepetal
Germany

Declared product / declared unit

1 piece of the product: c-lever pro

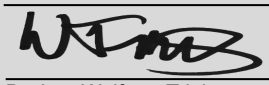
Scope:

This
EPD refers to a specific product manufactured by dormakaba. The production site is located in Wetzikon (Switzerland).
The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804 bezeichnet*.

Verification

The standard EN 15804 serves as the core PCR
Independent verification of the declaration and data according to ISO 14025:2011
☐ internally ☒ externally



Dr.-Ing. Wolfram Trinius,
(Independent verifier)

Product

Product description/Product definition

The c-lever pro is an electronic door fitting. The external fitting contains an antenna and a mechatronics unit (coupling unit). Following identification of an authorised medium, the door can be opened manually. The access authorisation is signaled visually but also acoustically if this option is required. The c-lever pro is part of our comprehensive standalone portfolio dormakaba evolo. It supports the latest radio-frequency identification (RFID) technologies and is available with the wireless function: access rights are transmitted from your PC to the door components wirelessly and in real time. This offers enormous advantages in terms of security, convenience, programming and maintenance.

Supported credential / communication technologies:

- LEGIC (advant & prime)
- MIFARE (DESFire & Classic)
- NFC (Near Field Communication)
- Bluetooth Low Energy

This EPD covers the European and Scandinavian / Australian versions of c-lever pro. The only difference between these versions is where the lever handle is placed. On European fittings it is placed above the cylinder, on Scandinavian/Australian fittings below the cylinder. For the placing on the market in the European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland) the following legal provisions apply:

- *EN 301489-1:2017-03, EN 301489-3:2017-03*
- *EN 300330-1:2017-02, EN 300330-2:2017-02*
- *Radio Equipment Directive (RED)*
- *Restriction of Hazardous Substances (RoHS)*

The CE-marking considers the proof of conformity with the respective harmonized standards based on the legal provisions above. For the application and use the respective national provisions apply.

Application

The c-lever pro is a mechatronical door fitting which does not require any additional cabling (optionally available for power supply) and offer a fully wireless, network-compatible electronic locking solution with a range of functions.

The c-lever pro range has been specially designed to fit most standard doors and works with most European, Scandinavian and Australian mortise locks on full leaf and narrow style doors.

Possible fields of application are:

- Exterior doors
- Interior doors

Technical Data

The c-lever pro has the following technical properties: Please list the Technical Data according to the
List in the chapter “Product group specific calculation rules”

Example:

Technical

Data for Locking Cylinders acc. to the classification in EN 1303:

Name	Value	Unit
Dimensions (W X H x D) Narrow plate	39,8 x 298 x 21	mm
Wide plate	53,6 x 298 x 21	mm
Minimum bockset (with offset lever handles)	35, 25	mm
Temperature	-25 to +70	°C
Protection class	IP55	
Humidity non-corresponding	0 to 95	%
Battery life at 20 °C	up to 150.000 cylces	or up to 3 years
Weight	1.9030	kg
Power consumption "on mode"	400	mW
Power consumption "idle mode"	0.08	mW

Power supply

- 2 batteries 1.5 V AA L91, FR6 or via the S module
- via the S-module: 12–24 V AC or 12–24 V DC,
≥ 0.4
A

The products are not harmonised in accordance with the Construction Product Regulations (CPR) but in accordance with other provisions for harmonisation of the EU. Compliance with the European Union Directive and technical specifications:

- *EN 300328 V2.1.1:2016-11*
- *EN 300330 V2.1.1: 2017-02*
- *EN 301489-1 V2.2:2017-03*
- *EN 301489-3 V2.2:2017-03*
- *EN 301489-17 V3.1.1:2017-07*
- *EN 50364:2010*
- *EN 60529:2014-09*

The provisions of the *Radio Equipment Directive, RED* are met. The products are subject to CE marking according to the relevant harmonization legislation.

Base materials/Ancillary materials

The composition of the product is the following:

Name	Value	Unit
Zinc	43	%
Stainless Steel	28	%
Steel	21	%
Electronics	3	%
Brass	2	%
Plastics	2	%
Cable	<0.5	%
Paper	<0.5	%

The product includes partial articles which contain substances listed in the Candidate List of REACH Regulation 1907/2006/EC (date: 15.01.2019) exceeding 0.1 percentage by mass in the alloy:

- Lead (Pb): 7439-290-1 (CAS-No.)

The main constituents of the product or its components shall be indicated as mass percentages to enable the user of the EPD to understand the composition of the product in delivery status. This information should support safety and efficiency during

installation, use, and disposal of the product.

When substances from the “Candidate List of Substances of Very High Concern for Authorisation” (SVHC) are part of the formulation with a mass percentage of > 0,1 of the mass of the construction product, i.e. when they were added to the formulation on purpose, then the substances shall be declared including CAS-number.

If the construction product is a substance or mixture under the chemical law (*REACH*), the concentration limit value refers to the entire product; if it is an article, the partial product or component applies as a unit of reference.

The Candidate list can be found on the ECHA website address: echa.europa.eu/de/home

This declaration is mandatory for all EPDs and must be formulated as follows:

1) “This product/article/at least one partial article contains substances listed in the candidate list (date: dd.mm.yyyy) exceeding 0.1 percentage by mass: yes/no”.

[if yes: List of respective SVHC and their CAS-number]

Statements like “…free of ….” and/or “…does not contain…” may not be used.

Environment and health during use

Reference service life

The product is certified according to *EN 1906* and *EN 16867* for 250.000 cycles. Under normal conditions and depending on cycle frequency, door weight etc., it means an approximate duration of 10 years.

LCA: Calculation rules

Declared Unit

The declared unit is 1 piece of the product: c-lever pro.

Declared unit

Name	Value	Unit
Declared unit	1	piece/product
Conversion factor to 1 kg (kg per declared unit)	2.143	-

For IBU core EPDs (where clause 3.6 is part of the EPD): for average EPDs, an estimate of the robustness of the LCA values must be made, e.g. concerning variability of the production process, geographical representativeness and the influence of background data and preliminary products compared to the environmental impacts caused by actual production.

System boundary

The type of EPD is according to *EN 15804*: *"cradle to gate with options, modules C1–C4, and module D"*.
The following modules are declared: A1-A3, C, D and additional modules: A4 + A5 + B6

Production - Module A1-A3

The product stage includes:

— A1, raw material extraction, processing of secondary material input (e.g. recycling processes),

— A2, transport to the manufacturer,

— A3, manufacturing and assembly, processing and mechanical treatments,including provision of all materials, products and energy, as well as waste processing up to the end-of waste state.

Construction stage - Modules A4-A5

The construction process stage includes:

— A4, transport to the building site;
— A5, treatment of waste packaging materials arising during installation into the building.

Use stage - Module B6

The use stage related to the operation of the building includes:
— B6, operational energy use

End-of-life stage– Modules C1-C4 and D

The end-of-life stage includes:
— C1, de-construction, demolition:

— C2, transport to waste processing;

— C3, waste processing for reuse, recovery and/or recycling;

— C4, disposal;

including provision and all transport, provision of all materials, products and related energy and water use.

Module D (Benefits and loads beyond the system boundary) includes:

— D, recycling potentials, expressed as net impacts and benefits.

Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Germany

Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account. Background database: *GaBi*, SP40.

LCA: Scenarios and additional technical information

Characteristic product properties
Information on biogenic carbon

The biogenic carbon content quantifies the amount of biogenic carbon in a construction product leaving the factory gate, and it shall be separately declared for the product and for any accompanying packaging.
If the total mass of biogenic carbon containing materials is less than 5 % of the total mass of the product and accompanying packaging, the declaration of biogenic carbon content may be

omitted. The mass of packaging containing biogenic carbon shall always be declared.

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO2.

Information on describing the biogenic Carbon Content at factory gate

Name	Value	Unit
Biogenic carbon content in product	0.003024	kg C
Biogenic carbon content in accompanying packaging	0.08256	kg C

The following technical scenario information is required for the declared modules.

Transport to the building site (A4)

Name	Value	Unit
Litres of fuel	0.005925	l/100km
Transport distance	100	km
Capacity utilisation (including empty runs)	51	%

Installation into the building (A5)

Name	Value	Unit
Waste packaging (Paper)	0.192	kg

In case a **reference service life** according to applicable ISO standards is declared then the assumptions and in-use conditions underlying the determined RSL shall be declared. In addition, it shall be stated that the RSL applies for the reference conditions only.

The same holds for a service life declared by the manufacturer. Corresponding information related to in-use conditions needs not be provided if a service life taken from the list on service life by BNB is declared.

Reference service life

Name	Value	Unit
Life Span according to the manufacturer	10	a

Operational energy use (B6) and Operational water use (B7)

The use stage is declared for 10 years.

Name	Value	Unit
Electricity consumption for 1 years	0,00001	kWh
Days per year in use	365	days
Stand by mode per day	23,3	h
On mode per day	0,7	h
Stand by power	1.96E-06	W
On mode power	8.40E-07	W

End of life (C1-C4)

C1: The product dismantling from the building is done manually without environmental burden.

Name	Value	Unit
Recycling	1.8366	kg
Energy recovery	0.05733	kg
Landfilling	0.057	kg
Transportation to Waste Processing Site	50	km

The product is disassembled in a recycling process. Material recycling is then assumed for the metals, electronic and electromechanics. The plastic components are assumed to be incinerated with energy recovery. Minor proportions of residues arising from the recycling process are landfilled (1%). Region for the End of Life is: Global.

Reuse, recovery and/or recycling potentials (D), relevant scenario information

Collection rate is 100%

LCA: Results

Disclaimer EP-freshwater: This indicator has been calculated as “kg P eq” as required in the characterization model (EUTREND model, Struijs et al., 2009b, as implemented in ReCiPe; http://eplca.jrc.ec.europa.eu/LCDN/developerEF.xhtml).

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; ND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARIES
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	MND	MNR	MNR	MNR	X	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 piece c-lever pro

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq	1.34E+01	1.87E-02	2.72E-01	3.76E-05	0	8.44E-03	9.66E-02	8.7E-04	-6.32E+00
GWP-fossil	kg CO_2 eq	1.36E+01	1.79E-02	6.82E-03	3.74E-05	0	8.07E-03	9.66E-02	8.65E-04	-6.32E+00
GWP-biogenic	kg CO_2 eq	-1.63E-01	8.28E-04	2.65E-01	1.25E-07	0	3.73E-04	2.25E-06	2.95E-06	2.79E-03
GWP-luluc	kg CO_2 eq	1.45E-02	4.26E-07	4.48E-06	5.43E-08	0	1.92E-07	5.46E-06	2.49E-06	-6.86E-03
ODP	kg CFC11 eq	1.52E-10	1.89E-18	4.91E-17	8.24E-19	0	8.52E-19	4.87E-17	3.21E-18	-2.17E-14
AP	mol H^+ eq	7.86E-02	1.79E-05	7.62E-05	8.26E-08	0	8.08E-06	1.72E-05	6.2E-06	-4.4E-02
EP-freshwater	kg P eq	3.73E-05	3.83E-09	9.6E-09	1E-10	0	1.73E-09	7.77E-09	1.49E-09	-1.03E-05
EP-marine	kg N eq	1.09E-02	5.71E-06	2.75E-05	1.84E-08	0	2.57E-06	3.88E-06	1.6E-06	-5.73E-03
EP-terrestrial	mol N eq	1.17E-01	6.34E-05	3.43E-04	1.93E-07	0	2.86E-05	7.83E-05	1.75E-05	-6.2E-02
POCP	kg NMVOC eq	3.28E-02	1.61E-05	7.3E-05	5.03E-08	0	7.27E-06	1.07E-05	4.83E-06	-1.84E-02
ADPE	kg Sb eq	4.03E-03	5.37E-10	7.75E-10	1.08E-11	0	2.42E-10	6.68E-10	7.77E-11	-2.08E-03
ADPF	MJ	1.82E+02	2.54E-01	8.59E-02	6.58E-04	0	1.14E-01	4.48E-02	1.13E-02	-7.7E+01
WDP	m^3 world eq deprived	3.79E+00	3.51E-05	3.38E-02	8.16E-06	0	1.58E-05	9.88E-03	9.06E-05	-1.72E+00

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential)

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 piece c-lever pro

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
PERE	MJ	5.02E+01	8.01E-04	2.32E+00	2.92E-04	0	3.61E-04	9.56E-02	1.49E-03	-1.47E+01
PERM	MJ	2.38E+00	0	-2.3E+00	0	0	0	-8.4E-02	0	0
PERT	MJ	5.26E+01	8.01E-04	1.56E-02	2.92E-04	0	3.61E-04	1.16E-02	1.49E-03	-1.47E+01
PENRE	MJ	1.81E+02	2.54E-01	8.6E-02	6.58E-04	0	1.15E-01	1.49E+00	1.13E-02	-7.71E+01
PENRM	MJ	1.45E+00	0	0	0	0	0	-1.45E+00	0	0
PENRT	MJ	1.83E+02	2.54E-01	8.6E-02	6.58E-04	0	1.15E-01	4.48E-02	1.13E-02	-7.71E+01
SM	kg	7.64E-01	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m^3	1.15E-01	1.44E-06	7.95E-04	3.37E-07	0	6.47E-07	2.36E-04	2.86E-06	-6.22E-02

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 piece c-lever pro

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
HWD	kg	1.57E-06	2.47E-11	1.27E-10	2.72E-13	0	1.11E-11	1.71E-10	1.73E-10	-1.06E-06
NHWD	kg	9.31E-01	2.6E-05	8.53E-03	4.67E-07	0	1.17E-05	1E-02	5.71E-02	-1.8E-01
RWD	kg	8.68E-03	2.73E-07	4.52E-06	9.99E-08	0	1.23E-07	1.66E-06	1.29E-07	-2.23E-03
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	1.86E+00	0	0

MER	kg	0	0	0	0	0	0	0	0	0
EEE	MJ	2.14E-01	0	4.12E-01	0	0	0	0	0	0
EET	MJ	3.89E-01	0	7.47E-01	0	0	0	0	0	0

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:
1 piece c-lever pro

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
PM	Disease incidence	9.04E-07	9.43E-11	4.22E-10	6.93E-13	0	4.25E-11	2.19E-10	7.68E-11	-5.54E-07
IR	kBq U235 eq	8.57E-01	3.9E-05	6.99E-04	1.64E-05	0	1.76E-05	1.5E-04	1.33E-05	-2.49E-01
ETP-fw	CTUe	1.19E+02	1.8E-01	4.08E-02	2.82E-04	0	8.11E-02	1.68E-02	6.48E-03	-3.36E+01
HTP-c	CTUh	8.06E-07	3.39E-12	2.16E-12	7.78E-15	0	1.53E-12	1.45E-12	9.6E-13	5.51E-09
HTP-nc	CTUh	5.68E-07	1.45E-10	9.35E-11	2.86E-13	0	6.53E-11	1.47E-10	1.06E-10	1.24E-06
SQP	SQP	7.97E+01	6.53E-04	2.28E-02	2.1E-04	0	2.94E-04	1.34E-02	2.37E-03	-6.98E+00

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator IRP
This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators ADPE, ADPF, WDP, ETP-fw, HTP-c, HTP-nc, SQP

The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

References

Standards

EN 1906:2012
Building hardware - Lever handles and knob furniture - Requirements and test methods; German version EN 1906:2012.

EN 16867:2020
Building hardware - Mechatronic door furniture - Requirements and test methods; German version EN 16867:2020.

EN 15804:2019+A2

EN 15804:2019+A2 (in press), Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

EN 300328 V2.1.1:2016-11
Wideband transmission systems - Data transmission equipment operating in the 2,4 GHz ISM band and using wide band modulation techniques - Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU.

EN 300330 V2.1.1:2017-02
Short Range Devices (SRD) - Radio equipment in the frequency range 9 kHz to 25 MHz and inductive loop systems in the frequency range 9 kHz to 30 MHz - Harmonised Standard covering the essential requirements of article 3.2 of the Directive 2014/53/EU (Endorsement of the English version EN 300 330 V2.1.1 (2017-02) as German standard).

EN 301489-1 V2.2:2017-03
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Part 1: Common technical requirements - Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU.

EN 301489-3 V2.2:2017-03
Electromagnetic compatibility and Radio spectrum Matters (ERM) - ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Part 3:
Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz - Harmonised Standard covering the essential requirements ofarticle 3.1(b) of Directive 2014/53/EU.

EN 301489-17 V3.1.1:2017-07
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services - Part 17: Specific conditions for Broadband Data Transmission Systems - Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU.

EN 50364:2010
Limitation of human exposure to electromagnetic fields from devices operating in the frequency range 0 Hz to 300 GHz, used in Electronic Article Surveillance (EAS), Radio Frequency Identification (RFID) and similar applications.

EN 60529:2014-09
Degrees of protection provided by enclosures (IP Code, IEC 60529:1989 + A1:1999 + A2:2013).

ISO 14025:2011-10

DIN EN ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

Radio Equipment Directive (RED)
Directive 2014/53/EU of the European Parliament and of the Council of 16 April 2014 on the harmonisation of the laws of the Member States relating to the making available on the market of radio equipment and repealing Directive 1999/5/EC.

Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).
Restriction of Hazardous Substances (RoHS)
Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS), Directive (EU) No 2011/65.

Further References

IBU
Institut Bauen und Umwelt e.V.: General Programme Instructions for the Preparation of EPDs at the Institut Bauen und Umwelt e.V. Version 1., Berlin: Institut Bauen und Umwelt e.V., 2016. www.ibu-epd.com **GaBi ts software**
Sphera Solutions GmbH
Gabi Software System and Database for Life Cycle Engineering 1992-2020 Version 10.0.0.71 University of Stuttgart Leinfelden-Echterdingen

GaBi ts documentation
GaBi life cycle inventory data documentation (https://www.gabi-software.com/support/gabi/gabi-database-2020-lci-documentation/).

LCA-tool dormakaba
LCA tool, version 1.0.
Developed by Sphera Solutions GmbH.

PCR Part A
PCR – Part A: Calculation Rules for the Life Cycle As-sessment and Requirements on the Project Re-port according to EN 15804+A2:2019, Version 1.0, Institut Bauen und Umwelt e.V., www.ibu-epd.com.

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