

ENVIRONMENTAL-PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	Interface
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-INT-20220227-CBB1-EN
Issue date	17.02.2023
Valid to	16.02.2028

Continuously dyed tufted tiles, 100% rec PA 6, a CQuest Bio Sone backing
Interface

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General Information

Interface

Programme holder

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

Declaration number

EPD-INT-20220227-CBB1-EN

This declaration is based on the product category rules:

Floor coverings, 08.03.2023
(PCR checked and approved by the SVR)

Issue date

17.02.2023

Valid to

16.02.2028



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Continuously dyed tufted tiles, 100% rec PA 6, a CQuest Bio Sone backing

Owner of the declaration

Interface Europe Manufacturing BV
Industrielaan 15
3925ZG Scherpenzeel
Netherlands

Declared product / declared unit

1 m² continuous-dyed modular carpet tiles with Sone acoustic felt covered CQuest Bio (CQB) heavy backing and a pile material of PA 6 with 100% recycled content

Scope:

The manufacturer declaration applies to tufted, continuous-dyed carpet tiles with a Sone polyester felt covered CQuest Bio backing, a pile material of 100% recycled PA 6 with a maximum total pile weight of 1215 g/m². The products are tufted in Hasselt, the Netherlands. Dyeing of the surface is performed externally. The dyed carpets are back coated in Scherpenzeel. LCA results for products with a maximum total pile weight of 580 g/m² can be taken from the corresponding tables of the annexe. Specific data for every product within the declared group of products in relation to its total pile weight can be calculated by using equation 1 given in the annexe (see annexe chapter: 'General Information on the annexe'). The declaration is only valid in conjunction with a valid GUT-*PRODIS* license of the product. 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	
<input type="checkbox"/>	internally
<input checked="" type="checkbox"/>	externally



Prof. Dr. Birgit Grahl,
(Independent verifier)

Product

Product description/Product definition

The declaration applies to tufted carpet tiles having a surface pile of 100% recycled polyamide 6 with a maximum total pile weight of 1215 g/m². Colouring of the surface is performed using continuous dyeing. The backing of the carpet consists of a CQuest Bio heavy backing covered by a Sone acoustic polyester felt with a recycled content of 98%. The total recycled content of the carpet is 82%.

CQuest Bio backing system Sone:

Backing compound based on renewable wood resin, containing a recycled filler, glass-fleece reinforcement and polyester covering fleece. For the placing on the market of the specific product in the European

Union/European Free Trade Association (EU/EFTA) (with the exception of

Switzerland) Regulation (EU) No. 305/2011 Construction Product Regulation (CPR) applies. The product needs a Declaration of Performance (DoP) taking into consideration EN 14041:2018-05, Resilient, textile and laminate floor coverings - Essential characteristics, and the CE-marking.

The DoP of the product can be found on the manufacturer's technical information section. For the application and

use of the product the respective national provisions apply.

Application

The use class of the specific product as defined in EN 1307 can be found in the Product Information System (PRODIS) using the PRODIS registration number of the product.

Technical Data

The performance data listed in the Declaration of Performance (DoP) apply.

Constructional data according to EN 1307

Name	Value	Unit
Product Form	Modular carpet tiles, 50 cm x 50 cm	-
Type of manufacture	Continuous-dyed, tufted carpet	-
Yarn type	Polyamide 6 from 100% recycled material	-
Total carpet weight	4356	g/m ²
Secondary backing	CQuest Bio backing with acoustic textile bottom Sone	-

Performance data of the product in accordance with the declaration of performance with respect to its essential characteristics according to EN 14041: 2018-05, Resilient, textile and laminate

floor coverings - Essential characteristics.

Additional product properties in accordance with EN 1307 can be found on the Product Information System PRODIS using the PRODIS

registration number of the product (www.pro-dis.info) or on the manufacturer's technical information section.

Base materials/Ancillary materials

Name	Value	Unit
Polyamide 6	28.4	%
Polyester	12.1	%
Ethylene vinyl acetate (EVA)	4.5	%
Wood resin	6.5	%
Additives	1.6	%
Limestone	42.6	%
Aluminiumhydroxide	3.8	%
Glass fiber	0.5	%

The specific product covered by the EPD contains substances listed in the ECHA candidate list (08.07.2021) exceeding 0.1

percentage by mass: no

This product contains other CMR substances in categories 1A or 1B which are not on the candidate list exceeding 0.1

percentage by mass: no

Biocide products were added to this construction product or it has been treated with biocide products (this

then concerns a treated product as defined by the (EU) Ordinance on

Biocide Products No. 528/2012): no

Aluminium hydroxide is used as fire retardant.

Environment and health during use

Reference service life

The

service life of textile floor coverings strongly depends on the correct installation taking into account the declared use classification and

the adherence to cleaning and maintenance instructions. A calculation of the reference service life according to ISO 15686 is not possible.

Alternatively, a reference service life of 15 years can be assumed,

during which the functional and visual quality is guaranteed (In accordance with the warranty of the manufacturer). The technical service life can be significantly longer.

LCA: Calculation rules

Declared Unit

The declared unit and the mass reference must be indicated in the appropriate table as declared. If there are several units to choose from, a suitable one must be selected. If averages are declared across various products, the average breakdown must be explained.

1m² of floor covering with specified construction/composition parameters. The mass reference should be indicated.

Name	Value	Unit
Declared unit	1	m ²
Grammage	4.356	kg/m ²
Total thickness	8.6	mm
Gross density	507	kg/m ³

The declared unit refers to 1 m² produced textile floor covering. The output of module A5 'Assembly' is 1 m² installed textile floor covering.

The thickness of specific products is independent from its total

weight. The layer thickness of the specific product covered by the EPD can be found on the Product Information System *PRODIS* using the *PRODIS* registration number of the product (www.pro-dis.info) or on the manufacturer's technical information section.

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

Type of EPD: Cradle-to-gate with options

System boundaries of modules A, B, C, D:

Modules C3, C4 and D are indicated separately for three end-of-life scenarios:

1 - landfill disposal

2 - municipal waste incineration

3 - recovery in a cement plant

A1-A3 Production:

Energy

supply and production of the basic material, processing of secondary

material, auxiliary material, transport of the material to the manufacturing site, emissions, waste water treatment, packaging material

and waste processing up to the landfill disposal of residual waste

(except radioactive waste). Benefits for generated electricity and steam

due to the incineration of production waste are aggregated.

Biogenic carbon that is stored in renewable material (wood resin, renewable additives, packaging paper) is taken into account as well as the associated carbon dioxide uptake from the air from which this biogenic carbon comes.

A4 Transport:

Transport of the packed textile floor covering from factory gate to the place of installation.

A5 Installation:

Installation

of the textile floor covering, processing of installation waste and packaging waste up to the landfill disposal of residual waste

(except radioactive waste), the production of the amount of carpet that occurs

as installation waste including its transport to the place of installation.

Generated electricity and steam due to the incineration of waste are listed in the result table as exported energy.

Biogenic carbon that is stored in renewable materials in installation waste and packaging paper is released as carbon dioxide emissions into the air at the end of life in

module A5.

Preparation

of the floor and auxiliary materials (adhesives, fixing agents, PET

connectors) are beyond the system boundaries and not taken into account.

B1 Use:

Indoor

emissions during the use stage. After the first year, no product-related Volatile Organic Compound (VOC) emissions are

relevant due to known VOC decay curves of the product.

B2 Maintenance:

Cleaning of the textile floor covering for a period of 1 year:

Vacuum cleaning – electricity supply

Wet cleaning – electricity, water consumption, production of the cleaning agent, waste water treatment

The

declared values in this module have to be multiplied by the assumed

service life of the floor covering in the building in question.

B3 - B5:

The modules are not relevant within the assumed reference service life of 15 years.

B6 - B7:

No energy and water input are required for the operation of the carpet in the use stage. The modules do not cause any environmental impact.

C1 De-construction:

The floor covering is de-constructed manually and no additional environmental impact is caused.

C2 Transport:

Transport

of the carpet waste to a landfill, to the municipal waste incineration

plant (MWI) or to the waste collection facility for recycling.

C3 Waste processing:

C3-1: Landfill disposal needs no waste processing.

C3-2: Impact from waste incineration (plant with R1 > 0.6), generated electricity and steam are listed in the result table as exported energy.

C3-3:

Collection of the carpet waste for recovery in the cement industry, waste processing (granulating), transport to the cement plant, emissions from the incineration.

C4 Disposal

C4-1: Impact from landfill disposal,

C4-2: The carpet waste leaves the system in module C3-2,

C4-3: The pre-processed carpet waste leaves the system in module C3-3.

D Recycling potential:

Calculated benefits result from materials exclusive secondary materials (net materials).

D-A5: Benefits for generated energy due to incineration of packaging and installation waste (incineration plant with R1 > 0.6),

D-1: Assuming that the chemically bound renewable materials in a landfill gas do not release landfill gas within 100 years, no benefits due to landfill disposal of carpet waste at the end-of-life are taken into account,

D-2: Benefits for generated energy due to incineration of carpet waste at the end-of-life (incineration plant with R1 > 0.6),

D-3: Benefits for saved fossil energy and saved inorganic material due to recovery of the carpet in a cement plant.

Geographic Representativeness

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

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.

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.

Name	Value	Unit
Biogenic carbon content in product at factory gate	0.26	kg C
Biogenic carbon content in accompanying packaging at factory gate	0.05	kg C

1 kg biogenic Carbon is equivalent to 44/12 kg of CO₂

The following technical scenario information is required for the declared modules and optional for non-declared modules. Modules for which no information is declared can be deleted; additional information can also be listed if necessary.

The following technical information is a basis for the declared modules or can be used for developing specific scenarios in the context of a building assessment if modules are not declared (MND).

A5 is not declared including the disposal of the packaging material on the construction site, the amounts of packaging materials included in the LCA calculations must be declared as technical scenario information for Module A5.

Transport to the construction site (A4)

Name	Value	Unit
Litres of fuel (truck, EURO 0-6 mix)	0.0102	l/100km
Transport distance	700	km
Capacity utilisation (including empty runs)	55	%

Installation in the building (A5)

Name	Value	Unit
Material loss	0.131	kg

Polyethylene packaging waste and installation waste are considered to be incinerated in a municipal waste incineration plant. Cardboard packaging waste is going to be recycled. Preparation of the floor and auxiliaries (adhesives, fixing agents, PET connectors etc.) are not taken into account.

Maintenance (B2)

The values for cleaning refer to 1 m² floor covering per year. Depending on the application based on *ISO 10874*, the technical service

life recommended by the manufacturer and the anticipated strain on the floor by customers, the case-specific useful life can be established. Based on this useful life the effects of module B2 need to be calculated in order to obtain the overall environmental impacts.

Name	Value	Unit
Maintenance cycle (vacuum cleaning)	208	Number /year
Maintenance cycle (wet cleaning)	1,5	Number /year
Water consumption (wet cleaning)	0.004	m ³
Cleaning agent (wet cleaning)	0.09	kg
Electricity consumption	0.314	kWh

For further information on cleaning and maintenance see www.interface.com

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.

Service life

Name	Value	Unit
Life Span (according to manufacturer's warranty)	15	a
Declared product properties (at the gate) and finishes	Corresponds to the specifications of EN 1307	-
An assumed quality of work, when installed in accordance with the manufacturer's instructions	Conforms to the manufacturer's instructions	-
Usage conditions, e.g. frequency of use, mechanical exposure	Use in areas defined by the use class according to EN 1307	-
Maintenance e.g. required frequency, type and quality and replacement of components	According to the manufacturers instructions	-

End of Life (C1-C4)

Three different end-of-life scenarios are declared and the results are indicated separately in module C. Each scenario is calculated as a 100% scenario.
 Scenario 1: 100 % landfill disposal
 Scenario 2: 100 % municipal waste incineration (MWI) with R1 > 0.6
 Scenario 3: 100 % recovery in the cement industry

If combinations of these scenarios have to be calculated this should be done according to the following scheme:
 EOL-impact = x % impact (Scenario 1)
 + y % impact (Scenario 2)

+ z % impact (Scenario 3)
with x % + y % + z % = 100 %

Name	Value	Unit
Collected as mixed construction waste (scenario 1 and 2)	4.356	kg
Collected separately (scenario 3)	4.356	kg
Landfilling (scenario 1)	4.356	kg
Energy recovery (scenario 2)	4.356	kg
Energy recovery (scenario 3)	2.314	kg
Recycling (scenario 3)	2.042	kg

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

scenario information

Recovery or recycling potentials due to the three end-of-life scenarios (module C) are indicated separately.

Recycling in the cement industry (scenario 3)

The

organic material of the carpet is used as an alternative fuel in a cement

kiln. It mainly substitutes for lignite (68.8%), hard coal (23.6%) and

petrol coke (7.6%). The inorganic material is substantially integrated into the cement clinker and substitutes for original material input. VDZ e.V.

LCA: Results

The LCA results refer to all declared products with a maximum total pile weight of 1215 g/m². LCA results for products with a maximum total pile weight of 580 g/m² can be taken from the corresponding tables of the annexe. Results for specific products with any other total pile weight can be calculated by using equation 1 given in the annexe (see annexe chapter: 'General Information on the annexe'). The declared result figures in module B2 have to be multiplied by the assumed service life (in years) of the floor covering in the building under consideration. Information on non-relevant modules: Modules B3 - B7 are not relevant during the service life of the carpet. Modules C1, C3/1, C4/2 and C4/3 cause no additional impact (see chapter "LCA: Calculation rules" in this document). All these modules are declared and marked as 'modules not relevant/declared'. Module C2 represents the transport for scenarios 1, 2 and 3. Column D represents benefits from module A5 assembly.

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	X	X	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m² floor covering

Parameter	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
GWP-total	kg CO ₂ -Äq.	3.97E+00	2.67E-01	3.81E-01	0	4.16E-01	0	1.48E-02	5.65E+00	5.7E+00	1.25E+00	-2.12E-02	0	-2.53E-01	-1.63E-01
GWP-fossil	kg CO ₂ -Äq.	5.23E+00	2.62E-01	3.64E-01	0	2.15E-01	0	1.45E-02	4.7E+00	4.75E+00	3.05E-01	-2.11E-02	0	-2.52E-01	-1.63E-01
GWP-biogenic	kg CO ₂ -Äq.	-1.27E+00	3.39E-03	1.74E-02	0	4.16E-03	0	1.88E-04	9.49E-01	9.49E-01	9.48E-01	-1.08E-04	0	-1.27E-03	-2.78E-04
GWP-luluc	kg CO ₂ -Äq.	9.55E-03	1.48E-03	3.41E-04	0	1.96E-01	0	8.22E-05	2.13E-04	4.23E-04	1.5E-04	-2.31E-06	0	-2.71E-05	-7.89E-05
ODP	kg CFC11-Äq.	2.54E-08	1.59E-14	7.62E-10	0	3.42E-08	0	8.83E-16	4.76E-13	8.05E-13	4.15E-13	-1.42E-13	0	-1.66E-12	-2.06E-13
AP	mol H ⁺ -Äq.	2.14E-02	1.58E-03	8.73E-04	0	8.32E-04	0	8.78E-05	5.89E-03	6.16E-03	9.15E-04	-2.77E-05	0	-3.26E-04	-6.26E-04
EP-freshwater	kg PO ₄ -Äq.	1.5E-04	7.93E-07	4.53E-06	0	5.19E-06	0	4.4E-08	7.79E-07	9.55E-07	5.76E-05	-2.89E-08	0	-3.38E-07	-1.76E-07
EP-marine	kg N-Äq.	7.21E-03	7.77E-04	3.29E-04	0	1.97E-04	0	4.31E-05	2.91E-03	3.03E-03	2.02E-04	-7.53E-06	0	-8.9E-05	-1.88E-04
EP-terrestrial	mol N-Äq.	6.55E-02	8.6E-03	3.23E-03	0	2.83E-03	0	4.77E-04	3.24E-02	3.37E-02	2.22E-03	-8.07E-05	0	-9.54E-04	-2.06E-03
POCP	kg NMVOC-Äq.	1.76E-02	1.47E-03	8.01E-04	4.18E-04	9.83E-04	0	8.15E-05	7.46E-03	7.69E-03	6.51E-04	-2.11E-05	0	-2.5E-04	-5.61E-04
ADPE	kg Sb-Äq.	2.67E-06	2.22E-08	8.17E-08	0	2.3E-07	0	1.23E-09	2.64E-08	3.56E-08	2.14E-08	-3.18E-09	0	-3.73E-08	-1.57E-08
ADPF	MJ	8.17E+01	3.55E+00	2.66E+00	0	5.9E+00	0	1.97E-01	3.19E+00	4.08E+00	4.38E+00	-3.59E-01	0	-4.27E+00	-1.86E+01
WDP	m ³ world-Aq. deprived	1.88E+01	2.38E-03	5.9E-01	0	9.99E-02	0	1.32E-04	7.28E-01	7.34E-01	-3.28E-03	-2.22E-03	0	-2.59E-02	-2.35E-02

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 m² floor covering

Parameter	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
PERE	MJ	7.51E+01	2.02E-01	2.95E+00	0	3.69E+00	0	1.12E-02	1.4E+01	1.42E+01	3.6E-01	-9.82E-02	0	-1.15E+00	-2.34E-01
PERM	MJ	1.37E+01	0	-2.6E-01	0	0	0	0	-1.34E+01	-1.34E+01	0	0	0	0	0
PERT	MJ	8.88E+01	2.02E-01	2.69E+00	0	3.69E+00	0	1.12E-02	5.19E-01	7.72E-01	3.6E-01	-9.82E-02	0	-1.15E+00	-2.34E-01
PENRE	MJ	7.45E+01	3.56E+00	3.06E+00	0	5.9E+00	0	1.98E-01	1E+01	1.09E+01	4.38E+00	-3.59E-01	0	-4.27E+00	-1.86E+01
PENRM	MJ	7.25E+00	0	-3.96E-01	0	0	0	0	-6.86E+00	-6.86E+00	0	0	0	0	0
PENRT	MJ	8.18E+01	3.56E+00	2.67E+00	0	5.9E+00	0	1.98E-01	3.19E+00	4.09E+00	4.38E+00	-3.59E-01	0	-4.27E	-1.86E+01

															+00	
SM	kg	3.71E+00	0	1.11E-01	0	0	0	0	0	0	0	0	0	0	0	1.3E-01
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FW	m ³	4.5E-01	2.28E-04	1.41E-02	0	3.34E-03	0	1.27E-05	1.72E-02	1.75E-02	5.13E-05	-9.39E-05	0	-1.1E-03	-1.75E-03	

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 m² floor covering

Parameter	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
HWD	kg	3.42E-03	1.7E-11	1.03E-04	0	4.19E-05	0	9.46E-13	4.88E-10	5.25E-10	6.76E-10	-4.87E-11	0	-5.83E-10	-1.36E-10
NHWD	kg	6.03E-01	5.1E-04	4.93E-02	0	7.3E-03	0	2.83E-05	1.03E+00	1.03E+00	4.34E+00	-1.81E-04	0	-2.13E-03	-7.94E-02
RWD	kg	2.87E-03	4.38E-06	8.98E-05	0	3.76E-04	0	2.43E-07	1.13E-04	1.78E-04	5.38E-05	-2.82E-05	0	-3.29E-04	-5.15E-05
CRU	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	1.21E-01	0	0	0	0	0	1.17E+00	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	2.91E-01	0	0	0	0	7.65E+00	0	0	0	0	0	0
EET	MJ	0	0	5.34E-01	0	0	0	0	1.41E+01	6.92E+01	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 m² floor covering

Parameter	Unit	A1-A3	A4	A5	B1	B2	C1	C2	C3/2	C3/3	C4/1	D	D/1	D/2	D/3
PM	Disease incidence	1.63E-07	9.14E-09	5.92E-09	0	6.84E-08	0	5.07E-10	2.4E-08	2.57E-08	8.79E-09	-2.3E-10	0	0	-8.73E-09
IR	kBq U235-Äq.	4.66E-01	6.42E-04	1.45E-02	0	6.78E-02	0	3.56E-05	1.71E-02	2.82E-02	7.95E-03	-4.77E-03	0	0	-6.16E-03
ETP-fw	CTUe	8.3E+01	2.47E+00	2.62E+00	3.6E-03	2.69E+00	0	1.37E-01	1.51E+00	2.03E+00	4.29E+00	-7.85E-02	0	0	-3.38E+00
HTP-c	CTUh	2.66E-09	4.98E-11	8.39E-11	0	6.21E-10	0	2.76E-12	7.51E-11	8.72E-11	1.93E-10	-3.62E-12	0	0	-4.42E-11
HTP-nc	CTUh	7.67E-08	2.96E-09	2.55E-09	2.6E-11	9.46E-09	0	1.64E-10	4.94E-09	5.54E-09	1.61E-08	-1.39E-10	0	0	-2.75E-09
SQP	SQP	ND	ND	ND	ND	ND	0	6.11E-02	6.49E-01	9.33E-01	2.84E-01	ND	ND	ND	ND

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

No substantiated values can be given for the SQP indicator with the existing database.

The result

figures given in module B2 refer to a period of 1 year because a reference service life is not declared. They have to be multiplied by the assumed service life (in years) of the floor covering in the building under consideration.

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”.

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 “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”.

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.

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The current version of PCR Part A and PCR Part B of the PCR
document on which they are based must be referenced.



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