ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804

Owner of the Declaration

Programme holder Institut Bauen und Umwelt e.V. (IBU

Publisher Institut Bauen und Umwelt e.V. (IBU)

Declaration number EPD-GUT-20130205-CBC1-EN

Issue date 17.01.2014 Valid to 16.01.2019

Tufted carpet tiles

Pile material 700-800 g/m² polyamide 6, aqueous dyeing process, heavy-duty polyolefin layer with recycled material fleece fabric backing from 100% recycled material

Vorwerk Teppichwerke

Institut Bauen und Umwelt e.V.

www.bau-umwelt.com / https://epd-online.com





General Information

Vorwerk

Programme holder

IBU - Institut Bauen und Umwelt e.V. Panoramastr. 1 D-10178 Berlin

Declaration number

EPD-GUT-20130205-CBC1-EN

This Declaration is based on the Product Category Rules:

Floor coverings, 07-2012

(PCR tested and approved by the independent expert committee)

mennanes

Issue date

17.01.2014

Valid to

16.01.2019

Prof. Dr.-Ing. Horst J. Bossenmayer (President of Institut Bauen und Umwelt e.V.)

Dr. Burkhart Lehmann (Chairman of SVA)

Tufted carpet tiles

Pile material 700-800 g/m² PA 6, aqueous dyeing process, heavy-duty polyolefin layer, fleece fabric backing

Owner of the Declaration

Vorwerk und Co GmbH & Co.KG Kuhlmannstraße 11 D-31785 Hameln Germany

Declared product / Declared unit

1 m² tufted carpet tiles having a surface pile of polyamide 6, dyed with aqueous processes and covered with a heavy backing with a covering fleece out of recycled polyester

Scope:

The declaration applies for a group of similar products with a total pile material input of 700-800 g/m².

It is only valid in conjunction with a valid PRODIS licence.

The carpet is produced in the Vorwerk manufacturing site Hameln, Germany.

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.

Verification

The CEN Norm EN 15804 serves as the core PCR Independent verification of the declaration and data according to ISO 14025

internally

(Independent tester appointed by SVA)

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externally

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Product

Product description

Tufted carpet tiles having a surface pile of polyamide 6, dyed with aqueous processes.

The tiles are covered with a CoaTex heavy duty polyolefin layer with recycled material. It includes a multi-axial glass fabric reinforcement and it is covered with a fleece fabric backing from 100% recycled polyester.

The declaration applies for a group of products with a total pile-material input of 700-800 g/m2.

The calculations refer to the average pile-material input of 750 g.

Recycled content out of total weight: 50,2%.

Application

Dr. Eva Schmincke

According to the use class as defined in EN 1307 the products can be used in all professional area which require class 33 or less.



Technical Data

of the average product according to EN 1307

Name	Value	Unit
Product Form	Tiles	-
Type of manufacture	Tufted, aqueous dyeing	-
Yarn type	100% PA 6	-
Secondary backing	CoaTex heavy duty backing	-
Total pile weight	700-800	g/m²
Total carpet weight	3735 - 3835	g/m²



Additional product properties and performance ratings according to 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 technical information of the declared product by the manufacturer Vorwerk (www.vorwerk-teppich.com)

Base materials / Ancillary materials

Name	Value	Unit
Polyamide 6	19,8	%
Polyester	16,4	%
Aluminiumhydroxide	6,9	%
SBR-latex	3,4	%
Ferric oxide (FeO)	37,0	%
Ethyl vinyl acetate (EVA)	15,8	%
Glass fibre	0,4	%
Additives	0.3	

Reference service life

The service life of textile floorcoverings strongly depends on the correct installation taking into account the declared use classification and the adherence of cleaning and maintenance instructions.

A minimum service life of 10 years could be assumed, technical service life can be considerably longer.

LCA: Calculation rules

Declared Unit

Declared unit

Name	Value	Unit
Declared unit	1	m ²
Conversion factor to 1 kg	0.26	-
Mass reference	3,785	kg/m²

System boundary

Type of the EPD: Cradle to grave

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

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 of residual waste (except radioactive waste). Credits for electricity and steam from the incineration of production waste are aggregated.

A4 Transport:

Transport of the packed textile floorcovering from manufacturing gate to the place of installation.

A5 Installation:

Installation of the textile floorcovering, production and transport of auxiliary material, waste processing up to the landfill of residual waste (except radioactive waste), the production of the amount of carpet that occurs as installation waste incl. its transport to the place of installation.

Credits for electricity and steam from the incineration of packaging and installation waste leave the product system.

<u>B1 Use:</u>

Indoor emissions during the use stage. Due to known VOC-decay curves of the product after the first year no product related VOC-emissions are relevant.

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 with the assumed service life of the floor covering in the building considered.

B3 - B7:

The modules are not relevant and therefore not declared.

C1 De-construction:

De-construction of the floorcovering is made by handcraft and causes no additional impacts.

C2 Transport:

Transport of the carpet waste to landfill, to the municipal waste incineration (MWI) or to the waste collection for recycling.

C3 Waste processing:

C3-0, C3-1: Landfill and waste incineration need no waste processing.

C3-2: Collection of the carpet waste, waste processing (granulating).

C4 Disposal

C4-0, C4-1: Impacts from landfill or from waste incineration (credits leave the system boundaries), C4-2: The processed carpet waste leaves the system and need no disposal.

D Recycling potential:

D-0, D-1: Energy credits from landfill and from waste incineration (processing with < 60% efficiency), D-2: Transport from the reprocessing plant to the cement plant, substitution of material and fuel input in the cement kiln (substantial and energetic credits).



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

The following information refer to the declared modules and are the basis for calculations or can be used for further calculations. All indicated values refer to the declared functional unit.

Transport to the construction site (A4)

Transport to the concuraction one	\· · · /	
Name	Value	Unit
Litres of fuel (truck, EURO 0-5 mix)	29.4	l/100km
Transport distance	700	km
Capacity utilisation (including empty runs)	85	%
Gross density of products transported	525	kg/m³

Installation in the building (A5)

Name	Value	Unit
Auxiliary	0.2	kg
Material loss	0.11	kg

Cardboard waste (packaging material) leaves the system for recycling. PE-foil (packaging material) and installation waste are considered to be incinerated in a municipal waste incineration plant.

Maintenance (B2)

Name	Value	Unit
Maintenance cycle (wet cleaning)	1,5	1/year
Maintenance cycle (vacuum cleaning)	208	1/year
Water consumption (wet cleaning)	0.003	m ³
Cleaning agent (wet cleaning)	0,06	kg
Electricity consumption	0.314	kWh

Further information on cleaning and maintenance see www.vorwerk-teppich.com

End of Life (C1-C4)

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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 0: 100% landfill

Scenario 1: 100% municipal waste incineration (MWI) Scenario 2: 100% recycling 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 0)

+ y% impact (Scenario 1)

+ z% impact (Scenario 2)

Name	Value	Unit
Collected as mixed construction waste (scenario 0 and 1)	3.8	kg
Collected separately (scenario 2)	3.8	kg
Landfilling (scenario 0)	3.8	kg
Energy recovery (scenario 1)	3.8	kg
Energy recovery (scenario 2)	2,1	kg
Recycling (scenario 2)	17	ka

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

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

Recycling in the cement industry (scenario 2) NDZ e.V./_

The organic material of the carpet is used as secondary fuel in a cement kiln. It substitutes mainly lignite (62,7%), hard coal (27,3%) and petrol coke (10,0%).

The inorganic material is substantially integrated in the cement clinker and substitutes original material input.



LCA: Results

Information on not declared modules:

The modules B3 - B7 are not relevant during the service life of the carpet and are therefore not declared. Module C1 causes no additional impact (see "LCA: Calculation rules", "C1 De-construction") and is therefore not declared.

Module C2 represents the transport for scenario 0, 1 and 2.

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Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement ¹⁾	Refurbishment ¹⁾	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse- Recovery-	Recycling- potential
A1	A2	А3	A4	A5	B1	B2	В3	B4	B5	В6	B7	C1	C2	СЗ	C4	[)
Х	Χ	Х	Х	Х	Х	Х	MND	MND	MND	MND	MND	MND	Х	Х	Х	>	<
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GWP		O ₂ -Eq.]	14	0.158	0.773	0.003	0.29	0.009	0	0	0.025	8.45	7.14	0	-0.214	-2.2	-2.39
ODP [I		C11-Eq.] O ₂ -Eq.]	5.3E-8 3.11E-2			0.0E+0			0.0E+0 0.0E+0		2.3E-11 1.2E-4	1.0E-10 1.04E-3	6.2E-10 4.7E-3		-1.9E-10 -1.01E-3		
		<u>J₂-⊑q.]</u>)₄)³- Eq.]	4.57E-3			1 0.0E+0						4.86E-3			-5.33E-5		
		nen Eg.]	4.18E-3			1 1.11E-4			5 0.0E+0		7.06E-6		3.36E-4		-5.96E-5		
ADPE		b Eq.]	4.06E-4	5.9E-9	1.26E-5		5.44E-		0.0E+0		3.49E-9				-2.94E-8		-4.37E-6
ADPF	[N	/J]	279	2.19	12.3	0	6.55	0.122	0	0	0.446	2.89	6.13	0	-3.76	-36.6	-93.6
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Paramet PERE PERM PERT PENRE PENRI PENRI SM RSF NRSF FW Caption RESUL 1 m² fl. Paramet	Frenew renew of see	Unit A MJ MJ MJ MJ MJ MJ MJ EMJ EMJ	A1 - A3 14.7 0 14.7 14.7 0 14.7 51.063 279 1.55 8.88E-3 10.29E-2 10.05E+1 Use of rerimary elewable portimary elevable portimary elewable portimary elevable portimar	0.086 0 0.086 0 0.086 0 1.086 0 1.086 0 1.086 0 1.086 0 1.086 0 1.39E-5 0 1.39E-5 0 1.45E-4 0 1.39E-5 0 1.45E-4 0 1.45E	A5 1.95 0 1.95 1.95 12.3 0 12.3 0.042 3.2E-4 3.34E-3 .08E+0 e primar sources energy en	B1 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 y energy used as xcluding a used as r enewal	BE: 1 r B2 0.5 0 0.5 6.55 0 6.55 0 2.03E-4 2.13E-3 8.49E-1 / exclud raw ma non rers raw ma ble seco	0.005 0 0.005 0 0.005 0 0.122 0 0.122 0 7.73E-7 8.09E-6 4.77E-4 ing renewable paterials; Fewable paterials; Fondary fu	C3	C3/1 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 Total use	C3/2 0.074 0 0.074 0.447 0 0.447 0 9.12E-6 9.55E-5 9.67E-2 ergy results of renew sources see of nor of non r	C4 0.14 0 0.14 2.9 0 2.9 0 2.32E-3 5.53E-3 1.07E-1 Durrees us wable pring used as a renewal enewable	C4/1 0.276 0 0.276 6.13 0 6.13 0 1.67E-4 1.74E-3 2.92E-1 sed as ramary eneraw mathele prime e second	0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resterials; F ary enerdary fuel	-0.627 0 -0.627 -3.77 0 -3.77 0 -3.77 0 -3.05E-4 -8.16E-1 rials; PE ources; F ENRM = gy resou s; FW =	-1.47 0 -1.47 -36.6 0 -36.6 0 -36.6 0 -4.24E-4 -4.45E-3 -1.91E+0 RM = Us PENRE = Use of n	-3.83 0 -3.83 -93.6 0 -93.6 0 -3.06E-2 -3.21E-1 -3.55E+0 se of = Use of non I = Use
Paramet PERE PERM PERT PENRE PENRI SM RSF NRSF FW Caption RESULT 1 m² fl Paramet HWD	Prenew renew of see	Unit A [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ	14.7 0 14.7 14.7 14.7 151.063 279 1.55 3.88E-3 10.29E-2 10.05E+1 Use of recrimary equivalent portionary equiva	A4 0.086 0 0.086 2.19 0 2.19 0 1.39E-5 1.45E-4 3.57E-3 1enewable nergy residency resi	A5 1.95 0 1.95 1.95 1.95 12.3 0 12.3 0.042 3.2E-4 3.34E-3 .08E+0 e primars sources energy existences = Use of	B1 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 y energy used as xcluding s used as renewal	BE: 1 r B2 0.5 0 0.5 6.55 0 6.55 0 2.03E-4 2.13E-3 8.49E-1 y excludd raw ma non rer s raw ma ble seco	0.005 0.005 0.005 0.122 0.122 0.7.73E-7 8.09E-6 4.77E-4 ing renew iterials; Feewable paterials; Fondary fu	C3 0 0 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 FERT = Torimary e PENRT = els; NRS wate STE C.	C3/1 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 F = Use r ATEG(C3/1 0	C3/2 0.074 0 0.074 0.447 0 0.447 0 9.12E-6 9.55E-5 9.67E-2 ergy rese of renew sources se of nor of non r	C4 0.14 0 0.14 2.9 0 2.9 0 2.32E-3 5.53E-3 1.07E-1 byurces uswable prin used as a renewale enewable C4 0	C4/1 0.276 0 0.276 6.13 0 6.13 0 1.67E-4 1.74E-3 2.92E-1 seed as ramary en- raw mat ble prime a second	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resterials; F ary enerdary fuel	-0.627 0 -0.627 -3.77 0 -3.77 0 -7.69E-5 -8.05E-4 -8.16E-1 rials; PE ources; F PENRM = gy resou s; FW =	-1.47 0 -1.47 -36.6 0 -36.6 0 -4.24E-4 4.45E-3 -1.91E+0 RM = Use of Irces; SM Use of n	-3.83 0 -3.83 -93.6 0 -93.6 0 -3.06E-2 -3.21E-1 -3.55E+0 se of = Use of non M = Use et fresh
Paramet PERE PERM PERT PENRE PENRI SM RSF NRSF FW Caption RESULT 1 m² fl Paramet HWD NHWD	F Preneur reneworks Supported the support of second contests and support of second contests are supported contests and support of second contests and second contests are supported contests and second contests and second contests are supported contests.	Unit A [MJ] [MJ] [MJ] [MJ] [Kg] [Kg] [Kg] [Kg] [Kg] [Kg] [Kg] [Kg	A1 - A3 14.7 0 14.7 14.7 151.063 279 1.55 3.88E-3 1.05E+1 8.05E+1 8.0	A4 0.086 0 0.086 2.19 0 2.19 0 1.39E-5 1.45E-4 3.57E-3 11 energy real; RSF =	A5 1.95 0 1.95 0 1.95 12.3 0 12.3 0.042 3.2E-4 3.34E-3 0.08E+0 e primar sources sources = Use of	B1 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 y energy used as renewal FLOV B1 0 0.0E+0	BE: 1 r B2 0.5 0 0.5 6.55 0 6.55 0 2.03E-4 2.13E-3 8.49E-1 / excludd raw ma non rer s raw ma ble seconds VS AN B2 0 6.2E-1	0.005 0.005 0.005 0.122 0 0.122 0 7.73E-7 8.09E-6 4.77E-4 ing reneviterials; Fewable paterials; Fendary fu	C3 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 FERT = Torimary e PENRT = els; NRS wate STE C. C3 0 0.0E+0	C3/1 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 Total use F = Use r ATEG(C3/1 0 0.0E+0	C3/2 0.074 0 0.074 0.447 0 0.447 0 9.12E-6 9.55E-5 9.67E-2 ergy resources see of nor of renew.	C4 0.14 0 0.14 2.9 0 2.9 0 2.32E-3 5.53E-3 1.07E-1 ourrees us wable prii used as n renewa enewable : C4 0 2.88E+0	C4/1 0.276 0 0.276 6.13 0 6.13 0 1.67E-4 1.74E-3 2.92E-1 seed as ramary enraw marble prime a second	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy res terials; F ary ener dary fuel	-0.627 0 -0.627 -3.77 0 -3.77 0 -7.69E-5 -8.05E-4 -8.16E-1 rials; PE ources; F PENRM = gy resou s; FW =	-1.47 0 -1.47 -36.6 0 -36.6 0 -4.24E-4 -4.45E-3 -1.91E+0 RM = Us PENRE : = Use of n D/1 0 -2.0E+0	-3.83 0 -3.83 -93.6 0 -3.06E-2 -3.21E-1 -3.55E+0 se of = Use of non // = Use et fresh
Paramete PERE PERM PERT PENRE PENRI PENRI SM RSF NRSF FW Caption RESUL 1 m² fl Paramete HWD NHWD RWD	FP renew of second control of	Unit A [M.] [M.] [M.] [M.] [M.] [M.] [M.] [M.	14.7 0 14.7 14.7 15.05 1.05 15.063 15.065 15.065 16	A4 0.086 0 0.086 2.19 0 2.19 0 1.39E-5 1.45E-4 3.57E-3 11 energy real; RSF =	A5 1.95 0 1.95 0 1.95 12.3 0 12.3 0.042 3.2E-4 3.34E-3 .08E+0 e primar sources esources esources = Use of JTPUT A5 0.016 0.052E-1 3.58E-4	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BE: 1 r B2 0.5 0 0.5 6.55 0 6.55 0 2.03E-4 2.13E-3 8.49E-1 / exclud raw ma non rer s raw ma ble seconds VS AN B2 0 6.2E-1 3.95E-4	0.005 0.005 0.005 0.122 0 0.122 0 7.73E-7 8.09E-6 4.77E-4 ing renewable paterials; Fundary fu	C3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C3/1 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 Total use F = Use r ATEG(C3/1 0 0.0E+0 0.0E+0	C3/2 0.074 0 0.074 0.447 0 0.447 0 9.12E-6 9.55E-5 9.67E-2 ergy resources see of nor of renex sources se of nor of non r	C4 0.14 0 0.14 2.9 0 2.9 0 2.32E-3 5.53E-3 1.07E-1 0urces used as an renewalenewable C4 0 2.88E+0 5.31E-5	C4/1 0.276 0 0.276 6.13 0 6.13 0 1.67E-4 1.74E-3 2.92E-1 sed as ramary enrary marble prime esecond	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resterials; F terials; F terials terials teria	-0.627 0 -0.627 -3.77 0 -7.69E-5 -8.05E-4 -8.16E-1 rials; PE ources; F PENRM = gy resou s; FW =	-1.47 0 -1.47 -36.6 0 -36.6 0 -4.24E-4 -4.45E-3 -1.91E+0 RM = Us PENRE : = Use of lirces; SM Use of n D/1 0 -2.0E+0 -1.29E-3	-3.83 0 -3.83 -93.6 0 -3.06E-2 -3.21E-1 -3.55E+0 se of = Use of non the Use et fresh D/2 0 -5.3E+1 -2.22E-3
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Paramet PERE PERM PENTI PENRE PENRI PENRI SM RSF FW Caption RESUL 1 m² fl Paramet HWD NHWD RWD CRU MFR	Prenew renew of see	Unit / MJ MJ MJ MJ MJ MJ MJ MJ	A1 - A3 14.7 0 14.7 14.7 151.063 279 1.55 1.55 2.025-2 1.055E+1 2.025E+1 0.05E+1 0.07 0.015 0.015 0.015 0.015 0.015 0.015 0.0109	0.086 0 0.086 0 0.086 2.19 0 2.19 0 1.39E-5 1.45E-4 3.57E-3 11 enewable nergy rearrimary e energy rearrima	A5 1.95 0 1.95 0 1.95 1.2.3 0 12.3 0.042 3.2E-4 3.34E-3 .08E+0 e primar sources e Use of UTPUT A5 0.016 0.052E-1 3.58E-4 0 0.091	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	BE: 1 r B2 0.5 0 0.5 6.55 0 6.55 0 2.03E-4 2.13E-3 8.49E-1 7 exclud raw ma non rer s raw ma ble second VS AN B2 0 6.2E-1 3.95E-4 0 0	0.005 0 0.005 0 0.005 0 0.122 0 0.122 0 7.73E-7 8.09E-6 4.77E-4 ing renevable paterials; Frewable paterials; Fundary fu	C3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C3/1 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0 otal use energy restricted use energy restricted use energy restricted to the control of the control	C3/2 0.074 0 0.074 0.447 0 0.447 0 9.12E-6 9.67E-2 ergy resurressources se of nor of non r C3/2 0 1.01E-1 6.57E-5 0 0	C4 0.14 0 0.14 0 0.14 2.9 0 2.9 0 2.9 0 2.32E-3 5.53E-3 1.07E-1 Durces us wable prinused as a renewale	C4/1 0.276 0 0.276 6.13 0 6.13 0 1.67E-4 1.74E-3 2.92E-1 sed as ramary eneraw marble prime a second	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resterials; P ary ener dary fuel	-0.627 0 -0.627 -3.77 0 -3.77 0 -7.69E-5 -8.05E-4 -8.16E-1 rials; PE ources; F PENRM = gy resous; FW =	-1.47 0 -1.47 -36.6 0 -36.6 0 4.24E-4 -4.45E-3 -1.91E+0 RM = Us PENRE = Use of in D/1 0 -2.0E+0 -1.29E-3 0	-3.83 0 -3.83 -93.6 0 -93.6 0 -3.06E-2 -3.21E-1 -3.55E+0 se of = Use of non M = Use et fresh D/2 0 -5.3E+1 -2.22E-3 0
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Paramet PERE PERM PENRI PENRI PENRI PENRI SM RSF NRSF FW Caption RESUL 1 m² fl Paramet HWD NHWD RWD CRU MFR MER	Preneur rene of see	Unit / MI MI MI MI MI MI MI MI	A1 - A3 14.7 0 14.7 14.7 14.7 151.063 279 1.55 1.88E-3 10.29E-2 10.05E+1 Use of recrimary equal	A4 0.086 0 0.086 0 2.19 0 2.19 0 1.39E-5 1.45E-4 3.57E-3 1enewable nergy restrimary energy restrimation energy restriction energial energial energial energial energial energial energial energi	A5 1.95 0 1.95 0 1.95 12.3 0 12.3 0.042 3.2E-4 3.34E-3 .08E+0 e primare sources energy expources expources = Use of UTPUT A5 0.016 .052E-1 3.58E-4 0 0.091 0 0.127 0.766	CE US	BE: 1 r B2 0.5 0 0.5 6.55 0 6.55 0 2.03E-4 2.13E-3 8.49E-1 / excludd raw manon rers raw mable seconds VS AN B2 0 6.2E-1 3.95E-4 0 0 0 0	0.005 0.005 0.005 0.122 0.122 0.122 0.7.73E-7 8.09E-6 4.77E-4 ing renewable paterials; Findary fu D WA C2 0 4.35E-4 1.7E-7 0 0 0 0	C3 0 0 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C3/1 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 Total use energy restricted uses en	C3/2 0.074 0 0.074 0.447 0 0.447 0 9.12E-6 9.55E-5 9.67E-2 ergy rese of renew sources se of nor of non r	C4 0.14 0 0.14 2.9 0 2.9 0 2.32E-3 5.53E-3 1.07E-1 ources uswable print used as a renewale enewable C4 0 2.88E+0 5.31E-5 0 0 1.6 0	C4/1 0.276 0 0.276 6.13 0 6.13 0 1.67E-4 1.74E-3 2.92E-1 sed as ramary en- raw mat ble prime a second C4/1 0.505 6.92E-1 1.84E-4 0 0 0 3.39 23.1	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resterials; F ary enerdary fuel	-0.627 0 -0.627 -3.77 0 -3.77 0 -7.69E-5 -8.05E-4 -8.16E-1 rials; PE ources; F PENRM = gy resou s; FW = D 0 -8.52E-1 -5.54E-4 0 0 0 0	-1.47 0 -1.47 -36.6 0 -36.6 0 -4.24E-4 -4.45E-3 -1.91E+0 RM = Us PENRE : = Use of n D/1 0 -2.0E+0 -1.29E-3 0 0 0	-3.83 -3.83 -93.6 0 -3.06E-2 -3.21E-1 -3.55E+0 se of = Use of non A = Use et fresh D/2 0 -5.3E+1 -2.22E-3 0 0 0

The declared values in module B2 have to be multiplied with the assumed service time (in years) of the floor covering in the building considered.

thermal energy



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Umweltdaten der deutschen Zementindustrie 2010

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