ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804

Owner of the Declaration Interface Europe

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

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

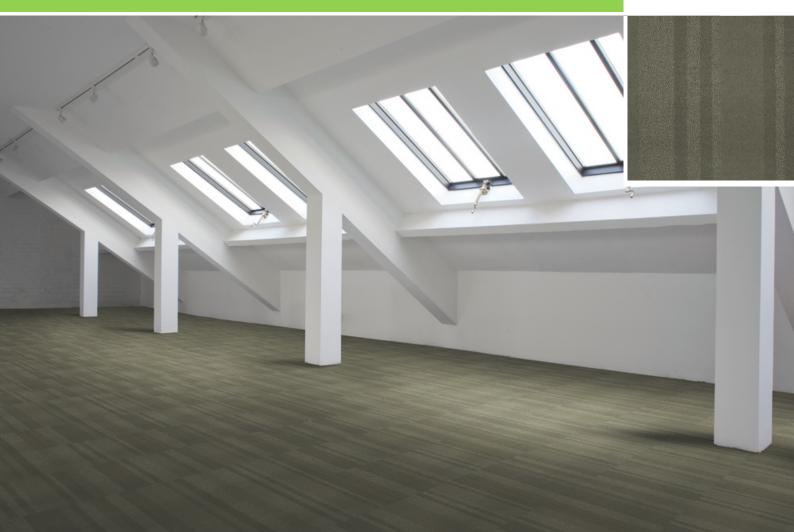
Declaration number EPD-IFF-20130007-CBC1-EN

Issue date 18/02/2013 Valid to 18/02/2018

Modular carpet tiles tufted, 1300-1400 g/m² polyamide 6, continuous-dyed, Graphlex® backing system Interface®



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



General Information

Interface®

Programme holder

IBU - Institut Bauen und Umwelt e.V.

Rheinufer 108

D-53639 Königswinter

Declaration number

EPD-IFF-20130007-CBC1-EN

This Declaration is based on the Product Category Rules:

Floor coverings, 07-2012

(PCR tested and approved by the independent expert committee)

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Issue date

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Valid to

18/02/2018

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

Prof. Dr.-Ing. Hans-Wolf Reinhardt

(Chairman of SVA)

Modular carpet tiles tufted, 1300-1400 g/m² polyamide 6, continuous-dyed, Graphlex® backing system

Owner of the Declaration

Interface Europe Industrielaan 15 3925ZG Scherpenzeel

Declared product / Declared unit

1m² tufted modular carpet tiles having a surface pile of polyamide 6 and a Graphlex® backing system

Scope:

The declaration applies for a group of tufted modular carpet tiles with a total pile material input of 1300-1400 g/m² and a Graphlex® backing system. It is only valid in conjunction with a valid PRODIS licence.

The product is manufactured in Scherpenzeel, Netherlands.

The owner of the declaration shall be liable for the underlying information and evidence.

Verification

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

internally

externally

Edrole

Dr. Eva Schmincke

(Independent tester appointed by SVA)

Product

Product description

Tufted modular carpet tiles having a surface pile of polyamide 6, a primary backing with recycled content and a Graphlex® backing system with recycled content. The carpet tiles are continuous dyed.

Graphlex® backing system:

Bitumen backing compound (containing recycled materials), glass-fleece reinforcement and polypropylene covering fleece.

The declaration applies for a group of products with a total pile-material input of $1300-1400 \text{ g/m}^2$. The calculations refer to the average pile-material input of 1350 g.

Recycled content (post and pre-consumer) out of total weight: 39,4%

Application

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

Constructional data

Name	Value	Unit
Product Form	Tiles	-
Type of manufacture	Tufted	-
Yarn type	PA6	-
Secondary backing	Heavy backing bitumen	
Secondary backing	based with textile bottom	-
Total carpet weight	5056	g/m ²
Total pile weight	1350	g/m²

Additional product properties 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



Base materials / Ancillary materials

Name	Value	Unit
Polyamide 6	27,3	%
Polyester	1,4	%
Polypropylene	1,0	%
Limestone	42,8	%
Bitumen	15,0	%
Aluminium hydroxide	4,8	%
SBR-latex	6,3	%
Glass fibre	0,7	%
Additives	0,7	%

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 (average product)	0.2	-
Mass reference (average product)	5,056	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 installation waste leave the product system.

B1 Use:

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 floorcovering 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 time 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)

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	495	kg/m³

Installation in the building (A5)

Name	Value	Unit
Auxiliary (PET-connectors)	0.004	kg
Material loss	0.15	kg

Cardboard waste (packaging material) leaves the system for recycling. Installation waste is considered to be incinerated in a municipal waste incineration plant.

Maintenance (B2)

Indication per m² and year

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.interface.com

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 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	5.06	kg
waste (scenario 0 and 1)	0.00	N9
Collected separately (scenario 2)	5.06	kg
Landfilling (scenario 0)	5.06	kg
Energy recovery (scenario 1)	5.06	kg
Energy recovery (scenario 2)	2,58	kg
Recycling (scenario 2)	2.48	kg

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) 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 time 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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		STAGE	CONST ON PR	TRUCTI				SE STA			END OF LIFE S				BENEFITS LOADS TAGE BEYOND T SYSTEM BOUNDAF		TS AND ADS ND THE TEM
Raw material supply	Transport	Manufacturing	Transport	Construction- installation process	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	В4	В5	В6	В7	C1	C2	С3	C4	ı	ס
Х	Х	Х	Х	Х	Х	Х	MND	MND	MND	MND	MND	MND	Х	Х	Х)	X
RESL	JLTS	OF TH	IE LC	A - EN	VIRON	MENT	AL IN	IPACT	: 1 m²	floorc	overir	ng					
Param eter	U	Init	A1 - A3	A4	A5	B1	B2	C2	СЗ	C3/1	C3/2	C4	C4/1	C4/2	D	D/1	D/2
GWP		O ₂ -Eq.]	18.8	0.213	0.844	0.003	0.292	0.012	0	0	0.034	6.42	9.54	0	-0.289	-3.1	-0.583
ODP		C11-Eq.]	1.28E-7		3.49E-9				0.0E+0			9.1E-10					
AP EP		O ₂ -Eq.] O ₄) ³ - Eq.]	3.77E-2 6.12E-3					5.38E-5	0.0E+0			1.38E-3 6.49E-3			-1.23E-3 -6.62E-5		-3.78E-3
POCP		nen Eq.]	5.68E-3						0.0E+0				4.49E-4			-5.05E-4	
ADPE		Sb Eq.]	7.05E-4				5.36E-7		0.0E+0		2.81E-9		1.8E-6	0.0E+0			-9.36E-8
ADPF			377	2.94	11.4	0	5.41	0.163	0	0	0.391	3.78	7.59	0	-3.3	-47.3	-96.1
· ·	n Eut	rophication	ADPF [MJ] 377 2.94 11.4 0 5.41 0.163 0 0 0.391 3.78 7.59 0 -3.3 47.3 -96.1														
IRESU	JLTS	OF TH	IE LC <i>i</i>	4 - RE	SOUR	CE US	E: 1 n	n² floo	rcover		orition for						
									rcover	ing				C4/2	D	D/1	D/2
Parame	eter	Unit A	A1 - A3	A4	A5	B1	B2	C2	СЗ	C3/1	C3/2	C4	C4/1	C4/2	D 0.739	D/1	D/2
Param	eter E	Unit A	17 .6	A4 0.115	A5 0.566	B1 0	B2 0.447	C2 0.006	C3	C3/1	C3/2 0.088	C4 0.183	C4/1 0.368	0	-0.738	-1.74	-0.223
Parame PER PERI	eter E M	Unit A [MJ] [MJ]	17.6 0	A4 0.115 0	A5 0.566 0	B1 0 0	B2 0.447 0	C2 0.006 0	C3 0 0	C3/1 0 0	C3/2 0.088 0	C4 0.183 0	C4/1 0.368 0	0	-0.738 0	-1.74 0	-0.223 0
Param	eter E M T	Unit A [MJ] [MJ] [MJ]	17.6 0 17.6	0.115 0 0.115	A5 0.566	B1 0	B2 0.447	C2 0.006	C3	C3/1	C3/2 0.088	C4 0.183	C4/1 0.368	0	-0.738 0 -0.738	-1.74 0 -1.74	-0.223
Parame PER PERI PER	eter E M T RE	Unit A [MJ] [MJ] [MJ]	17.6 0 17.6	A4 0.115 0	A5 0.566 0 0.566	B1 0 0 0 0	B2 0.447 0 0.447	0.006 0 0.006	0 0 0	C3/1 0 0 0 0	C3/2 0.088 0 0.088	C4 0.183 0 0.183	C4/1 0.368 0 0.368	0 0 0	-0.738 0	-1.74 0	-0.223 0 -0.223
Paramo PER PERI PENF PENF PENF	E M T RE RM RT	Unit A [MJ] [MJ] [MJ] [MJ]	17.6 0 17.6 303.62 87.4 391	A4 0.115 0 0.115 2.95 0 2.95	A5 0.566 0 0.566 11.9 0 11.9	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 6.56 0 6.56	0.006 0 0.006 0.163 0 0.163	0 0 0 0 0 0	C3/1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C3/2 0.088 0 0.088 0.599 0	C4 0.183 0 0.183 3.96 0 3.96	C4/1 0.368 0 0.368 8.19 0 8.19	0 0 0 0 0	-0.738 0 -0.738 -5.05 0 -5.05	-1.74 0 -1.74 -51.4 0 -51.4	-0.223 0 -0.223 -96.7
PER PER PENF PENF SM	E M T RE RM RT	Unit A [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ] [MJ]	17.6 0 17.6 0 17.6 803.62 87.4 391 2.24	A4 0.115 0 0.115 2.95 0 2.95 0	A5 0.566 0 0.566 11.9 0 11.9 0.06	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 6.56 0 6.56 0	0.006 0 0.006 0.163 0 0.163 0	0 0 0 0 0 0 0	C3/1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C3/2 0.088 0 0.088 0.599 0 0.599 0	C4 0.183 0 0.183 3.96 0 3.96 0	C4/1 0.368 0 0.368 8.19 0 8.19 0	0 0 0 0 0 0	-0.738 0 -0.738 -5.05 0 -5.05	-1.74 0 -1.74 -51.4 0 -51.4 0	-0.223 0 -0.223 -96.7 0 -96.7
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Parame PER PERI PENF PENF SM RSF NRS FW Captio	E M T RE	Unit A [M.] [M.] [M.] [M.] [M.] [M.] [M.] [M.	A1 - A3 17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 391 2.24 392 2.26E-2 2.98E+1 Use of rerimary erewable primary erewable prima	A4 0.115 0 0.115 0 0.115 0 2.95 0 2.95 0 2.1E-5 2.2E-4 111E-2 12enewabl nergy rerimary energy rerimary energy re	A5 0.566 0 0.566 11.9 0 11.9 0.06 1.53E-4 1.6E-3 9.43E-1 9 e primar sources energy	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 raw manon ren raw manon ren raw manole seco	0.006 0 0.006 0.163 0 0.163 0 0.166-6 1.22E-5 6.14E-4 ng renew terials; I ewable p terials; I ndary fu	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 T = Use	C3/2 0.088 0 0.088 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy res of renevisources se of noi of non r	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 ourrees used as a renewale print used as	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary en raw marble prime e second	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 rials; PE ources; I PENRM = gy resou s; FW =	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.27E-3 -2.48E+0 RM = Use of rrces; SI Use of r	-0.223 0 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 -4.33E-1 se of = Use of non vi = Use pet fresh
Paramo PER PERI PENF PENF SM RSF NRS FW Captio	E M T T RE RM RT Frene of se	Unit A [M.] [M.] [M.] [M.] [M.] [M.] [M.] [M.	A1 - A3 17.6 0 17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 391 2.24 391 2.24 398E+1 1 Use of rewable perimary ender wable perimary ender a perima	A4 0.115 0 0.115 0 0.115 0 2.95 0 2.95 0 2.1E-5 2.2E-4 .11E-2 11E-2 11E-2 11E-3 11E	0.566 0 0.566 11.9 0 11.9 0.06 1.53E-4 1.6E-3 9.43E-1 e primare sources energy e.esources = Use of U	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 raw manon ren raw manole seco VS AN B2 0 5.9E-1	0.006 0 0.006 0.163 0 0.163 0 0.168-6 1.22E-5 6.14E-4 ng renew terials; Fewable paterials; Fewable paterials; Formula (1) 10 WA	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 0.0E+0 0.0E+0 mary en rotal use energy re: Total u: F = Use r ATEG	C3/2 0.088 0 0.088 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy resort frence sources see of nor of non record from the control of the contr	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 0 wable pri used as an renewal enewable C4 0 3.85E+0	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary enraw marble prime e 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	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 PENRM = gy resou s; FW =	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.02E-4 -5.27E-3 -2.48E+0 RM = U: PENRE: = Use of r Use of r	-0.223 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 4.33E-1 se of = Use of non M = Use let fresh
Parame PER PERI PENF PENF PENF SM RSF NRS FW Captio	E M T RE REM RT Frence of set	Unit A [M.] [M.] [M.] [M.] [M.] [M.] [M.] [M.	A1 - A3 17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 .02E-3 2 .26E-2 2 .98E+1 1 Use of regularity equivalent of regularity eq	A4 0.115 0 0.115 0 0.115 0 2.95 0 2.95 0 2.1E-5 2.2E-4 .11E-2 !!! energy real; RSF:	0.566 0 0.566 11.9 0 11.9 0.06 1.53E-4 1.6E-3 9.43E-1 e primar sources energy e. esources = Use of U	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 excludir raw manon ren raw manole seco VS AN B2 0 5.9E-1 3.86E-4	0.006 0 0.006 0.163 0 0.163 0 0.168-6 1.22E-5 6.14E-4 Indary fu D WA	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 0.0E+0 0.0E+0 0.0E+0 Total use results of the second use of th	C3/2 0.088 0 0.088 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy res of renew sources se of nor of renew sources.	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 owable pri used as a renewal enewable C4 0 3.85E+0 7.06E-5	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary enraw marble prime e second C4/1 0.674 9.25E-1 2.45E-4	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resetrals; F early enerdary fuel	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 ources; f PENRM = gy resoo. s; FW =	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.02E-4 -5.27E-3 -2.48E+0 RM = U: PENRE: = Use of irrces; SI Use of r D/1 0 -2.56E+0 -1.7E-3	-0.223 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 (4.33E-1) se of = Use of non vi = Use tet fresh
Paramo PER PENF PENF PENF SM RSF NRS FW Captio	E M T RE RM RT Frene of se	Unit A [M.] [M.]	17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 2.26=2 2.26=2 2.26=2 2.26=2 2.298E+1 1 Use of rerimary er wable p rimary er y material to the control of the control	A4 0.115 0 0.115 2.95 0 2.95 0 2.95 0 2.2E-4 .11E-2 enewable ergy real; RSF = A — OL	A5 0.566 0 11.9 0.566 11.9 0.066 11.9 0.06 11.9 0.06 11.53E-4 1.6E-3 9.43E-1 e primar sources energy e esources el Use of	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 6.56 0 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 excludiraw manon ren raw maole seco VS AN B2 0 5.9E-1 3.86E-4 0	C2 0.006 0 0.006 0.163 0 0.163 0 1.16E-6 1.22E-5 6.14E-4 ng renevaterials; Fewable parterials; Indary fu D WA C2 0 5.75E-4 2.27E-7 0	C3 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 nergy re Total use re ATEG C3/1 0 0.0E+0 0.0E+0	C3/2 0.088 0 0.088 0 0.599 0 0.599 0 7.98E-6 1.25E-1 ergy res of renevisources sources of non r ORIES C3/2 0 1.28E-1 0 1.28E-1 0	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 ources uswable pri used as an renewable C4 0 3.85E+0 7.06E-5 0	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary en raw marble prime e second C4/1 0.674 9.25E-1 2.45E-4 0	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy reseterials; F ary enerdary fuel	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 orials; PE ources; F PENRM = g gy reso. s; FW =	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.02E-4 -5.27E-3 -2.48E+0 RM = U: PENRE: Use of r D/1 0 -2.56E+0 -1.7E-3 0	-0.223 0 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 -4.33E-1 se of = Use of non vi = Use let fresh D/2 0 -7.5E+1 -1.55E-4 0
Paramo PER PENF PENF PENF SM RSS FW Captio	E M T RE RM RT Frene of set	Unit A [M.] [M.]	17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 2.02E-3 2.26E-2 2.298E+1 1 Use of rerimary er exwable primary er y material expension of the control	0.115 0 0.115 2.95 0 2.95 0 2.1E-5 2.2E-4 .11E-2 9 enewable ergy reals; RSF = A — OL	A5 0.566 0 0.566 11.9 0 11.9 0.06 11.53E-4 1.6E-3 9.43E-1 e primar sources energy e esources = Use of JTPUT A5 0.021 2.874E-1 1.42E-4 0 0.167	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 0 0.447 6.56 0 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 7 excludi raw ma non ren raw ma ole seco VS AN B2 0 5.9E-1 3.86E-4 0 0	C2 0.006 0 0.006 0.163 0 0.163 0 1.16E-6 1.22E-5 6.14E-4 ng renevaterials; Fewable pterials; Indary fu D WA C2 0 5.75E-4 2.27E-7 0 0	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 nergy re C3/1 0 0.0E+0 0.0E+0 0.0E+0	C3/2 0.088 0 0.088 0 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy res of renevasources se of nor of non r	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 ources uswable pricused as a renewalenewable C4 0 3.85E+0 7.06E-5 0 0	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary en raw marble prime e second C4/1 0.674 9.25E-1 2.45E-4 0 0	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	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 orials; PE ources; F DENRM = gy resous; FW =	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.02E-4 -5.27E-3 -2.48E+0 RM = Us PENRE = Use of r Use of r	-0.223 0 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 -4.33E-1 se of = Use of non M = Use let fresh D/2 0 -7.5E+1 -1.55E-4 0
Parame PER PENF PENF PENF SM RSF FW Captio	E M T RE RM RT Frene of se	Unit A [M.] [M.]	17.6 0 17.6 0 17.6 0 17.6 0 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6	A4 0.115 0 0.115 0 0.115 0 2.95 0 2.95 0 2.1E-5 enewable tergy reality	A5 0.566 0 0.566 11.9 0 11.9 0.06 1.53E-3 9.43E-1 e primar sources energy e sources = Use of Use of 1.53E-4 0.021 1.874E-1 1.42E-4 0 0.167	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 0 0.447 0 0.447 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 7 excludir raw manon ren raw mable seco VS AN B2 0 5.9E-1 3.86E-4 0 0 0	0.006 0 0.006 0.163 0 0.163 0 1.16E-6 1.22E-5 6.14E-4 ng renevterials; Indary fu D WA C2 0 5.75E-4 2.27E-7 0 0	C3 0 0 0 0 0 0 0 0 0 0 0 0 0.0E+0	C3/1 0 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 0 Total use nergy re Total use r ATEG C3/1 0 0.0E+0 0 0.0E+0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C3/2 0.088 0 0.088 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy res of renevisources se of noi of non r ORIES C3/2 0 1.28E-1 8.57E-5 0 0	C4 0.183 0 0.183 3.96 0 3.96 0 3.99E-3 7.38E-3 1.42E-1 ources uswable pricused as a renewalenewable C4 0 3.85E+0 7.06E-5 0 0 0	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary enraw marble prime e second C4/1 0.674 9.25E-1 2.45E-4 0 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	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 rials; PE ources; I ENRM = rigy resous; FW = D 0 -1.08E+0 -7.22E-4 0 0	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.02E-4 -5.27E-3 -2.48E+0 RM = Use of irrces; SN Use of r D/1 0 -2.56E+0 -1.7E-3 0 0	-0.223 0 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 4.33E-1 se of = Use of non M = Use let fresh D/2 0 -7.5E+1 -1.55E-4 0 0
Paramo PER PENF PENF PENF SM RSS FW Captio	E M T T RE REMAINS TO SERVICE TO	Unit A [M.] [M.]	17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 2.02E-3 2.26E-2 2.298E+1 1 Use of rerimary er exwable primary er y material expension of the control	0.115 0 0.115 2.95 0 2.95 0 2.1E-5 2.2E-4 .11E-2 9 enewable ergy reals; RSF = A — OL	A5 0.566 0 0.566 11.9 0 11.9 0.06 11.53E-4 1.6E-3 9.43E-1 e primar sources energy e esources = Use of JTPUT A5 0.021 2.874E-1 1.42E-4 0 0.167	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 0 0.447 6.56 0 6.56 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 7 excludi raw ma non ren raw ma ole seco VS AN B2 0 5.9E-1 3.86E-4 0 0	C2 0.006 0 0.006 0.163 0 0.163 0 1.16E-6 1.22E-5 6.14E-4 ng renevaterials; Fewable pterials; Indary fu D WA C2 0 5.75E-4 2.27E-7 0 0	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 nergy re C3/1 0 0.0E+0 0.0E+0 0.0E+0	C3/2 0.088 0 0.088 0 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy res of renevasources se of nor of non r	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 ources uswable pricused as a renewalenewable C4 0 3.85E+0 7.06E-5 0 0	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary en raw marble prime e second C4/1 0.674 9.25E-1 2.45E-4 0 0	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	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 orials; PE ources; F DENRM = gy resous; FW =	-1.74 0 -1.74 -51.4 0 -51.4 0 -5.02E-4 -5.27E-3 -2.48E+0 RM = Us PENRE = Use of r Use of r	-0.223 0 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 -4.33E-1 se of = Use of non M = Use let fresh D/2 0 -7.5E+1 -1.55E-4 0
Parame PER PENF PENF PENF SM RSF NRS FW Captio	E M T T RE REMAINS TO SERVICE TO	Unit A [M.] [M.] [M.] [M.] [M.] [M.] [M.] [M.	A1 - A3 17.6 0 17.6 0 17.6 303.62 87.4 391 2.24 391 2.24 392 2.26 2.26 2.98 2.1 1 2.26 2.2 2.98 2.26 2.2 3.26 2.2 3.26 2.2 3.26 3.26 3.	0.115 0 0.115 0 0.115 0 0.115 0 2.95 0 2.95 0 2.1E-5 2.2E-4 .11E-2 enewable nergy re rimary e nergy re rimary e 0 0.04E-2 2.11E-6 0 0 0 0 0	A5 0.566 0 0.566 11.9 0 11.9 0.06 1.53E-4 1.6E-3 9.43E-1 e primar sources energy e sources = Use of JTPUT A5 0.021 2.874E-1 1.42E-4 0 0.167 0 0.136 0.931	B1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B2 0.447 0 0.447 0 0.447 0 0.447 0 0.47 0 6.56 0 1.84E-4 1.93E-3 8.3E-1 raw manon ren raw manon ren raw manole seco VS AN B2 0 5.9E-1 3.86E-4 0 0 0 0	0.006 0 0.006 0.163 0 0.163 0 1.16E-6 1.22E-5 6.14E-4 Ing renew terials; Fewable peterials; Indary fu	C3 0 0 0 0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 0.0E+0 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 0.0E+0 0.0E+0 0.0E+0 Total use nergy re Total use	C3/2 0.088 0 0.088 0.599 0 0.599 0 7.98E-6 8.36E-5 1.25E-1 ergy res of renee sources se of nor of non r ORIES C3/2 0 1.28E-1 8.57E-5 0 0 0 0	C4 0.183 0 0.183 3.96 0 3.96 0 3.09E-3 7.38E-3 1.42E-1 0 used as a renewable pri used as a renewable pri used as 7.06E-5 0 0 0 2.13	C4/1 0.368 0 0.368 8.19 0 8.19 0 2.24E-4 2.32E-3 3.9E-1 sed as ramary en raw marble prime e second C4/1 0.674 9.25E-1 2.45E-4 0 0 4.52 30.9	0 0 0 0 0 0 0 0.0E+0 0.0E+0 0.0E+0 aw mate ergy resterials; F ary enerdary fuel	-0.738 0 -0.738 -5.05 0 -5.05 0 -6.73E-5 -7.05E-4 -1.05E+0 rials; PE our ces; I PERNRM = gy resou s; FW = 0 -1.08E+0 -7.22E-4 0 0 0	-1.74 -1.74	-0.223 -0.223 -96.7 0 -96.7 0 -2.67E-5 -2.75E-4 (4.33E-1) se of = Use of non vf = Use let fresh -7.5E+1 -1.55E-4 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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