ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025:2006 AND EN 15804:2012+A2:2019/AC:2021 FOR

interfloor

FLAT SPONGE UNDERLAY (5-7MM THICK)

EPD registration number: S-P-07906

Publication date: 2023-03-06 Valid until 2028-03-02

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

Programme: The International EPD® System
www.environdec.com
Programme operator: EPD International AB

EPD®

ECO PLATFORM EPD VERIFIED

This Environmental Product Declaration has been verified by an independent third party
The EPD owner has the sole ownership, liability, and responsibility for the EPD

Introduction

This EPD provides environmental performance indicators for flat sponge underlay (5 - 7mm thick) manufactured by Interfloor Limited. This is a cradle-to-gate with options EPD in accordance with the requirements of EN 15804 covering modules A1 - A3, A4, A5, B2, C and D defined in that standard.

The EPD is based on a life cycle assessment (LCA) study which used production data for 2021/04/04 to 2022/04/02 from Interfloor's manufacturing facilities in Haslingden, Lancashire, UK. Background data were taken from the ecoinvent database (v3.6). The EPD presents details of the LCA, a description of the product life cycle it covers, values for the environmental indicators specified by EN 15804 and a brief explanation of those results.

The declared unit is 1 square metre ($1m^2$) of flat sponge underlay in 5-7mm thickness.

Flat sponge underlay 5-7mm EPD	**Programme Information**
EPD programme	The International EPD® System
EPD programme operator	EPD International AB -Box 21060 - SE-10031 Stockholm - Sweden www.environdec.com; info@environdec.com
EPD owner	Interfloor Limited Broadway - Haslingden - Rossendale - Lancashire BB4 4LS - UK https://www.interfloor.com/
Declaration No	S-P-07906
Date of publication	2023-03-06
EPD valid until	2028-03-02
EPD based on Product Category Rules	The CEN standard EN 15804 serves as the core PCR
	PCR 2019:14 Construction products, v1.2,5 2022-11-01 (The International EPD® System)
	c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810) (2019-12-20) (The International EPD® System)
PCR review conducted by	The Technical Committee of the International EPD® System Chair: Claudia Peña; contact via info@environdec.com
LCA conducted by	EuGeos Limited, UK - www.eugeos.co.uk
Third-party verification	Independent verification of this EPD and data, according to ISO 14025/2006: ■ EPD verification by individual verifier
Third party verifier	Ugo Pretato, Studio Fieschi & Soci S.r.l., Italy Recognized Individual Verifier, approved by The International EPD® System
Procedure for data follow-up during EPD validity	involves third party Verifier: yes ☐ no ■

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company profile

Interfloor, part of the Victoria plc group of companies, was created by the merger of Tredaire and Duralay in 2002 but our heritage dates back to the 1940s when Duralay began manufacturing the first carpet underlays in the UK.

We are Europe's largest manufacturer of carpet underlay and flooring accessories and we supply our products to flooring retailers, distributors and flooring contractors in the UK and around the world.

We manufacture a diverse range of products including the three most popular forms of underlay – polyurethane foam, sponge rubber and crumb rubber. We also produce carpet gripper, floor edgings, flooring adhesives, tapes and tools.

The facilities that manufacture the products covered by this EPD operate a management system that is registered as meeting the requirements of ISO 14001:2015.

Our products hold the Carpet and Rug Institute (CRI) Green Label Plus accreditation, meaning our products conform to the CRI's high standards for indoor air quality and low VOC emissions.

In 2008 we invested £3.5m in regenerative thermal oxidisers (RTOs) to eliminate odour, oil particles and VOCs. Although our emissions were already below the legal requirements we have further reduced emissions by over 90% as a result of this

In 2012 we launched our Ethical Trading Policy. We are committed to implementing the principles of the Ethical Trading Initiative (ETI) Base Code.

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Product information

This EPD applies to Interfloor's flat sponge underlay in 5-7mm thickness, a textured sponge rubber underlay with a tightly-stitched kraft paper backing. which gives a high level of underfoot comfort and excellent levels of recovery under heavy domestic and contract installations, like the heavier carpets used in hotel guest rooms.

Interfloor's underlay products are classified CPC 3691 under the UN CPC classification system v2.1.

SOME EXAMPLES OF FLAT SPONGE UNDERLAY

TA ROYALE 550

TA ROYALE 600

MANUFACTURING & USE

MANUFACTURING

Manufacturing of underlay products takes place at Interfloor's manufacturing facilities in Haslingden, Lancashire, UK, and involves the following steps:

- batching and mixing of facing compound
- application of this facing compound, at uniform thickness, to the backing material
- oven curing
- trimming and packing

Emissions to air from the curing ovens are abated in a thermal oxidiser. Final emissions are monitored to ensure compliance with the site's environmental permit.

Trim is reused in the process to reduce waste.

PACKAGING & TRANSPORTATION

Underlay products are supplied to customers as rolls protected by polythene bags; for some products, the rolls are formed on cardboard cores. Products are transported to end users by road or road and sea.

INSTALLATION

Underlay products are laid manually onto the floor. Underlay may be fixed in place using adhesive tape, carpet gripper strips or adhesive. The most common installation method used for these particular underlay products is described in more detail in the “Assumptions and Estimates” section and included in the LCA.

No special tools are required for installation.

The cardboard core and/or polythene film which comprise the product packaging should be recycled wherever facilities exist.

PRODUCT USE AND MAINTENANCE

Underlay products are passive in use and require no maintenance or repair during the 50-year lifetime of building assumed in EN 15804 and EN 15978.

END-OF-LIFE

At the end of the building's life, it is anticipated that the product will be removed from the building, separated from other wastes, and incinerated as waste with energy content being recovered.

When removed from buildings as waste, Interfloor’s underlay products fall under European Waste Catalogue (EWC) code 17 09 04.

REFERENCE SERVICE LIFE

No reference service life is specified in this EPD.

RESIDUAL RISKS AND EMERGENCIES

There are no residual risks associated with the normal day-to-day use of Interfloor’s underlay products. Care must be taken to both select the materials and install them in accordance with Interfloor's guidance.

FURTHER PRODUCT INFORMATION

Interfloor’s underlay products comply with BS 5808:1991 and BS EN14499: 2015; consult the relevant product Technical Data Sheet for a comprehensive specification. Detailed product information and datasheets can be found

- on our website: https://www.interfloor.com/
- or by contacting:+441706 238825
- or by email international@interfloor.com

LCA information

This section of the EPD records key features of the LCA on which it is based.

The LCA was carried out by EuGeos using openLCA software and production data for 2021/04/04 to 2022/04/02 from Interfloor's manufacturing facilities in Haslingden, UK; background data were taken from the ecoinvent database (v3.6).

Declared modules and geographical scope

This EPD covers the production stage (modules A1-A3), on-site installation (modules A4 & A5) and end-of-life management (modules C & module D); module B2 is included within the scope, as required by c-PCR-004. However, underlay is not accessible for maintenance during its lifetime, therefore it is assumed that no maintenance activities can be carried out and all indicator values for module B2 are reported as zero. As permitted by EN 15804, modules A1-A3 are declared in aggregated form.

Product stage			Construction process stage		Use stage							End of life stage				Benefits & loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste treatment	Disposal	Reuse- recovery- recycling-potential
Modules declared X: included in LCA; ND: module not declared; NR: module not relevant																
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	**X**	**X**	**X**	**X**	ND	**X**	ND	ND	ND	ND	ND	**X**	**X**	**X**	**X**	**X**
Geography																
GLO	**GB**	**GB**	**GLO**	**-**	-	**GLO**	-	-	-	-	-	**GLO**				
Specific data used																
>90%					-	-	-	-	-	-	-	-	-	-	-	-
Variation in products																
<10%					-	-	-	-	-	-	-	-	-	-	-	-
Variation in sites																
n/a					-	-	-	-	-	-	-	-	-	-	-	-

Declared unit

The declared unit is 1 square metre ($1m^2$) of underlay.
Results are declared for an average product of this underlay type manufactured by Interfloor.

CONTENTS DECLARATION

The material composition of Interfloor's flat sponge underlay (5 - 7mm), including the product packaging, is shown below. This contents declaration is provided for guidance only and does not form part of the product specification.

Product components	Weight kg	Post-consumer material weight %	Biogenic material weight kg C / kg	Biogenic material weight %
Synthetic rubber	0.8 – 0.7	0	-	< 5
Inert materials	2.1 – 2.2	0	-	< 5
Polyester textiles	<0.1	0	-	< 5
Organic pigments	<0.05	0	-	< 5
Other polymers	<0.05	0	-	< 5
TOTAL	**3.0 - 3.1**	**n/a**	**n/a**	**<5**

Packaging materials	Weight kg	Weight % (vs product)	Biogenic carbon weight kg C / kg
Cardboard	< 0.03	0.8	0.44
PE	< 0.01	0.1	0
TOTAL	**< 0.04**	**0.9**	**n/a**

No substance included in the Candidate List of Substances of Very High Concern for authorisation under the REACH Regulations is present in the protection materials, either above the threshold for registration with the European Chemicals Agency or above 0.1% (wt/wt).

SYSTEM BOUNDARIES

The system boundary of the EPD is defined using the modular approach set out in EN 15804.

As well as the core processes which cover manufacture of the underlay at Interfloor's Haslingden site, the system includes production of all raw materials and components from basic resources; transport of those materials; product transport to the port of loading for exported products or the first delivery point in the UK; subsequent installation and end-of-life management; the production of fuels and energy carriers and their delivery to manufacturing sites; the treatment of all wastes. The first delivery point for products destined for UK use may be the place of installation or a retail or wholesale intermediary.

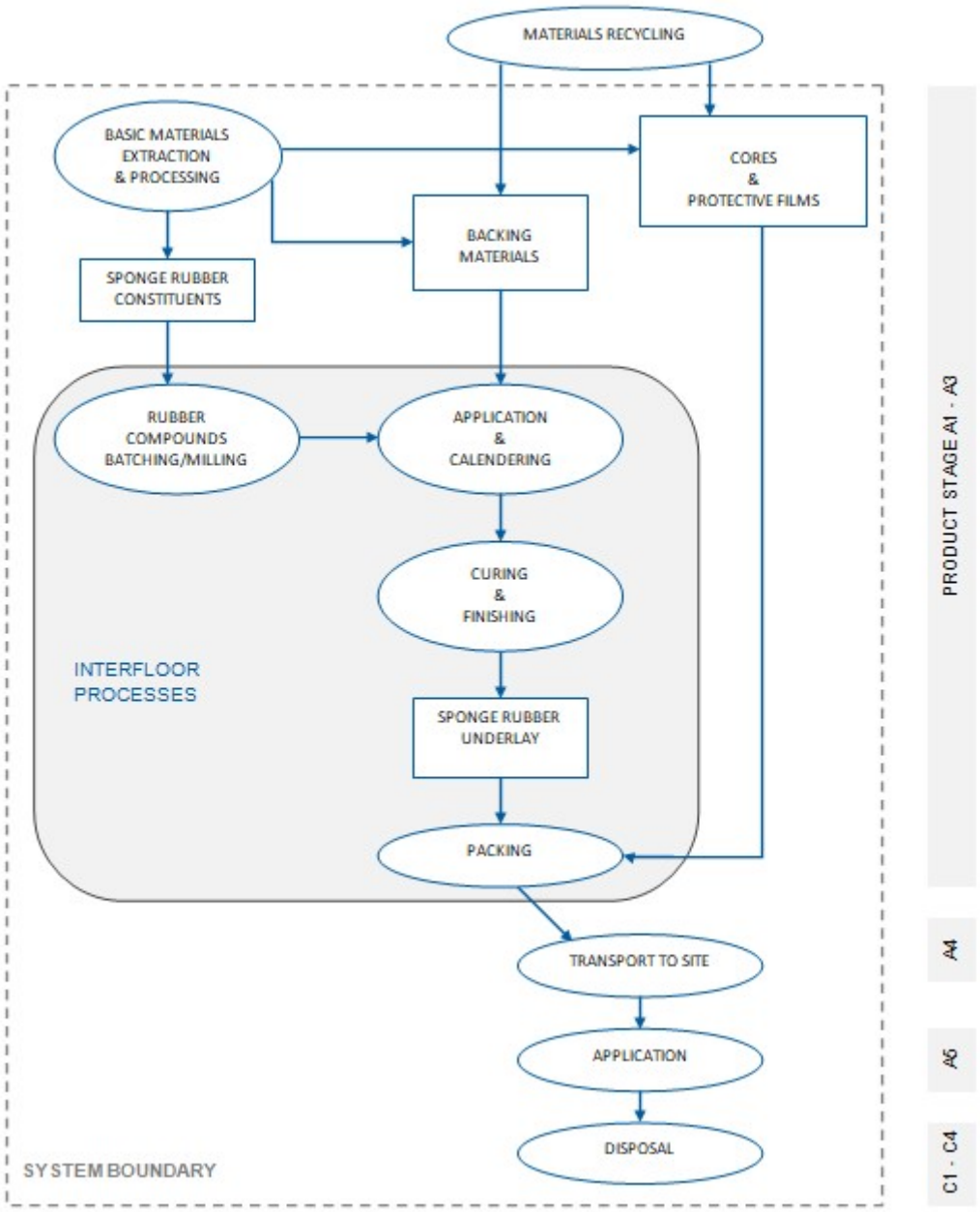
The upstream processing of recycled material inputs that have passed the end-of-waste state is outside the system boundary.

The product life cycle covered by this EPD is illustrated on the following page.

CUT-OFF CRITERIA

The collected data covered all raw materials, consumables and packaging materials; associated transport to the manufacturing site; process energy and water use; direct production wastes; emissions to air and water.

According to EN 15804 and the PCR, flows can be omitted (cut off) from a core process in the LCA up to a maximum of 1% of the total mass of material inputs or 1% of the total energy content of fuels and energy carriers; some ancillary materials used in small quantities within the process and amounting, in combination, to <0.1% of total input materials were omitted from the LCA underpinning this EPD.



DATA SOURCES AND DATA QUALITY

Data characterising Interfloor's core processes (see above figure) were collected for a contiguous 12-month period between 2021/04/04 and 2022/04/02. The data have therefore been updated within the last 5 years. These data were checked to ensure that sufficient materials and water are included within the inputs to account for all products, wastes and emissions.

BACKGROUND DATA

Background (generic) data were taken from the ecoinvent database (v3.6); this fulfils the EN 15804 requirement that generic data used in the LCA have been updated within the last 10 years. The quality of generic data has been reviewed to ensure representativeness.

ALLOCATION

In the background data, the ecoinvent default allocation is applied to all processes except those in which secondary materials are used, where the "cut-off" allocation is applied. This ensures that secondary materials are free of upstream burdens that arise prior to their reaching the "end of waste" state, in accordance with Section 6.3.4.2 of EN 15804.

Mass was the basis for the allocation of primary data between products made at the same facility, where this was unavoidable.

ASSUMPTIONS AND ESTIMATES

Inputs to and outputs from the system are accounted for over a 100-year time period; long-term emissions are therefore omitted from the impact assessment part of the LCA.

The "primary energy used as material" indicators (PERM; PENRM) are calculated using - as characterisation factors - published values for constituent materials which can yield energy on combustion, where available, and from published calorific values where PE(N)RM values are not available.

Calculations of PE(N)RM in this study are based on a NCV of

- 24MJ/kg for sponge rubber underlay
- 48MJ/kg for polyethylene
- 31MJ/kg for polymers
- 16MJ/kg for cardboard

"Primary energy as fuel" indicators (PENRE, PERE) are calculated as the total primary energy demand minus primary energy used as material.

Delivery of the product to users' sites, transport to waste processing and final disposal are modelled using scenarios. The relevant parameters for the transport scenarios are shown in the table below.

Scenario	**A4 (transport to site)**	**C2 (transport to waste treatment)**
Parameters	**Quantity & unit**	
Vehicle type	lorry	
Vehicle load capacity and utilisation	16t - average load over outward & return journeys implied in dataset	33% (3.6t t average load over outward & return journeys implied in dataset)
Fuel type and consumption	diesel; 0.2 l/km	diesel; 0.1 l/km
Distance to site	n/a: company fuel data used	50 km road
Bulk density of transported product	.510 kg/m^3	
Volume capacity utilisation factor	1	

The installation scenario – Module A5 - is modelled as a manual operation without use of power tools. A loss of 1% of product is included to allow for damage and any trimming. Scenario parameters are shown in the table below. Transport of ancillary materials to site is included within module A5.

Scenario Parameters – A5 installation	
Parameter	**Quantity & unit**
Ancillary materials for installation	adhesive tape, 2.5m
Water, energy & other resource use	0
Direct emissions to air	0
Waste arising and treatment	1% of declared unit mass + all packaging, to incineration

Final disposal (module C4) is modelled as 100% incineration with energy recovery. For the products covered by this EPD, the relevant amounts of exported energy are:

- heat recovered (MJ): 10.9
- electrical energy recovered (MJ): 14.7

Any potential benefits and loads beyond the system boundary reported in Module D are those associated with this recovered energy, therefore the values above are the parameters for Module D. The potential benefits and loads are calculated on the basis of conservative assumptions that heat generated substitutes for gas-fired heat generation, while electricity generated substitutes for global average medium voltage electricity.

Module D calculations exclude any third-party recycling of packaging or process wastes arising in Modules A1-A5.

INTERPRETATION OF THE LCA

Indicator values obtained for resource depletion (ADPMM, ADPFF), stratospheric ozone depletion (ODP) and water deprivation (WDP) potential should be used with caution; all are subject to uncertainties in data or method which limit the scope for their use as the basis for comparisons.

No untreated wastes leave the modelled system, which includes waste treatment activities as required by EN 15804. The waste indicators HWD, NHWD and TRWD presented in this EPD therefore represent waste flows *within* the modelled system.

The manufacture of the product and its ingredients represents the most significant part of the life cycle. For GWP (carbon footprint) the product's end-of-life is also significant if the product is incinerated, at which point fossil hydrocarbons in the product itself are released as CO_2. Energy recovered in this waste management process is reported as Exported Energy (EE) in Module C4. The use of this energy (as heat and power) may avoid other environmental burdens associated with heat and power production from primary fuels in other product systems; such potential benefits are reported in Module D.

Environmental indicators

This EPD contains environmental information about Interfloor's flat sponge underlay (5-7mm thick) in the form of quantitative indicator values for a number of parameters: calculated environmental impact potentials, resource and energy use, waste generation and material and energy outputs from the product system that may be reused, recycled or recovered into other, unspecified product life cycles. The parameters are listed below along with the abbreviations used for them in the tables of indicator values that follow.

Parameter	Abbreviation	Unit
Potential environmental impact indicators (EN 15804+A2)		
Climate change – GWP fossil	GWP-fossil	kg CO_2 eq
Climate change – GWP biogenic	GWP-biogenic	kg CO_2 eq
Climate change – GWP land transformation	GWP-luluc	kg CO_2 eq
Climate change – GWP total	GWP-total	kg CO_2 eq
Climate change - GWP biogenic-excluded [1]	GWP-GHG	kg CO_2 eq
Acidification potential	AP	mol H^+ eq
Eutrophication – freshwater	EP-freshwater	kg P eq
Eutrophication – marine	EP-marine	kg N eq
Eutrophication – terrestrial	EP-terrestrial	mol N eq
Photochemical ozone formation potential	POFP	kg NMVOC eq
Ozone depletion potential	ODP	kg CFC-11 eq
Depletion of abiotic resources – minerals & metals [2]	ADPMM	kg Sb eq
Depletion of abiotic resources – fossil fuels [2]	ADPFF	MJ, ncv
Water (user) deprivation potential [2]	WDP	m^3 world-eq deprived
Resource use indicators		
Renewable primary energy as energy carrier	PERE	MJ
Renewable primary energy resources as material utilisation	PERM	MJ
Total renewable primary energy use (sum of the two parameters above)	PERT	MJ
Non-renewable primary energy as energy carrier	PENRE	MJ
Non-renewable primary energy resources as material utilisation	PENRM	MJ
Total non-renewable primary energy use (sum of the two parameters above)	PENRT	MJ
Use of secondary material	SM	kg
Use of renewable secondary fuels	RSF	MJ
Use of non-renewable secondary fuels	NRSF	MJ
Net use of fresh water	FW	m^3
Waste indicators		
Hazardous waste disposed	HWD	kg
Non-hazardous waste disposed	NHWD	kg
Radioactive waste disposed	TRWD	kg
Output flow indicators		
Components for re-use	CFR	kg
Materials for recycling	MFR	kg
Materials for energy recovery	MER	kg
Exported energy - electricity	EEE	MJ
Exported energy - thermal	EET	MJ

1 - GWP-GHG includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product.

2 - The results of this environmental impact indicator shall be used with care because either the uncertainties associated with the results are high or there is limited experience with the indicator

FLAT SPONGE UNDERLAY (5-7MM THICK)

Environmental indicator results for all declared modules are shown in the following tables for the declared unit of 1m^2 of flat sponge underlay (5-7mm thick) the A1 - A3 modules are shown on an aggregated basis.

ENVIRONMENTAL IMPACTS (EN 15804+A2) (CORE)	Unit	A1 - A3	A4	A5	B2	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq	3.02E+00	1.74E-01	1.37E-01	0.00E+00	0.00E+00	1.69E-03	0.00E+00	2.25E+00	-3.42E+00
GWP-biogenic	kg CO_2 eq	-9.93E-03	1.32E-05	5.59E-03	0.00E+00	0.00E+00	-3.83E-07	0.00E+00	5.19E-03	-4.90E-04
GWP-luluc	kg CO_2 eq	1.35E-03	5.45E-05	2.04E-05	0.00E+00	0.00E+00	9.81E-07	0.00E+00	2.83E-05	-5.87E-03
GWP-total	kg CO_2 eq	3.01E+00	1.74E-01	1.43E-01	0.00E+00	0.00E+00	1.69E-03	0.00E+00	2.26E+00	-3.42E+00
AP	mol H^+ eq	2.14E-02	6.50E-04	1.50E-04	0.00E+00	0.00E+00	4.76E-06	0.00E+00	6.80E-04	-1.50E-02
EP-freshwater	kg P^-eq	1.11E-04	1.65E-06	8.83E-07	0.00E+00	0.00E+00	2.19E-08	0.00E+00	1.24E-06	-1.70E-04
EP-marine	kg N eq	2.12E-03	1.80E-04	2.92E-05	0.00E+00	0.00E+00	7.65E-07	0.00E+00	2.80E-04	-2.53E-03
EP-terrestrial	mol N eq	2.01E-02	1.97E-03	3.20E-04	0.00E+00	0.00E+00	8.54E-06	0.00E+00	2.91E-03	-2.82E-02
POFP	kg NMVOC eq	1.07E-02	6.50E-04	1.10E-04	0.00E+00	0.00E+00	3.33E-06	0.00E+00	7.50E-04	-7.72E-03
ODP	kg CFC-11 eq	7.70E-07	3.95E-08	1.61E-09	0.00E+00	0.00E+00	3.39E-10	0.00E+00	1.48E-08	-1.79E-07
ADPMM	kg Sb eq	2.73E-04	2.93E-06	4.14E-07	0.00E+00	0.00E+00	7.89E-08	0.00E+00	1.51E-06	-5.31E-06
ADPFF	MJ, ncv	8.37E+01	2.71E+00	8.93E-01	0.00E+00	0.00E+00	2.51E-02	0.00E+00	1.25E+00	-5.82E+01
WDP	m^3 world-eq deprvd	5.44E+01	9.44E-01	5.10E-01	0.00E+00	0.00E+00	9.13E-03	0.00E+00	6.13E-01	-1.35E+02
ENVIRONMENTAL IMPACT (EN 15804+A2) (ADDITIONAL)	**Unit**	**A1 - A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG	kg CO_2 eq	3.03E+00	1.74E-01	1.38E-01	0.00E+00	0.00E+00	1.69E-03	0.00E+00	2.25E+00	-3.43E+00

RESOURCE USE	Unit	A1 - A3	A4	A5	B2	C1	C2	C3	C4	D
PERE	MJ	1.84E+00	2.88E-02	2.87E-02	0.00E+00	0.00E+00	3.80E-04	0.00E+00	2.74E-02	-4.24E+00
PERM	MJ	3.93E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	2.23E+00	2.88E-02	2.87E-02	0.00E+00	0.00E+00	3.80E-04	0.00E+00	2.74E-02	-4.24E+00
PENRE	MJ	1.01E+01	2.71E+00	5.72E-01	0.00E+00	0.00E+00	2.51E-02	0.00E+00	1.25E+00	-5.82E+01
PENRM	MJ	7.35E+01	0.00E+00	3.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	8.37E+01	2.71E+00	8.93E-01	0.00E+00	0.00E+00	2.51E-02	0.00E+00	1.25E+00	-5.82E+01
SM	kg	3.88E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-9.81E-03
RSF	MJ	4.48E-02	6.70E-04	5.10E-04	0.00E+00	0.00E+00	6.54E-06	0.00E+00	5.40E-04	-1.10E-01
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	m^3	1.42E-02	2.00E-04	5.60E-04	0.00E+00	0.00E+00	1.15E-06	0.00E+00	2.92E-03	1.54E-02
WASTES	**Unit**	**A1 - A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
HWD	kg	8.49E-02	3.23E-03	3.62E-03	0.00E+00	0.00E+00	4.36E-05	0.00E+00	3.58E-02	-2.47E-01
NHWD	kg	2.48E+00	2.92E-01	7.65E-02	0.00E+00	0.00E+00	1.59E-03	0.00E+00	5.70E+00	-7.09E+00
TRWD	kg	3.34E-04	1.78E-05	7.83E-07	0.00E+00	0.00E+00	1.53E-07	0.00E+00	5.38E-06	-1.20E-04
OUTPUT FLOWS	**Unit**	**A1 - A3**	**A4**	**A5**	**B2**	**C1**	**C2**	**C3**	**C4**	**D**
CFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	5.91E-03	7.80E-04	8.02E-05	0.00E+00	0.00E+00	1.19E-05	0.00E+00	1.34E-03	-3.63E-03
MER	kg	6.07E-04	8.06E-06	5.60E-06	0.00E+00	0.00E+00	9.06E-08	0.00E+00	6.09E-06	-1.11E-03
EEE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.47E+01	0.00E+00
EET	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.09E+01	0.00E+00

Indicator values calculated using the methods prescribed in the earlier version of EN 15804 (EN 15804+A1:2013) are provided, for information, in the table below for the declared unit of 1m^2 of flat sponge underlay (5-7mm thick); modules A1 - A3 are shown on an aggregated basis.

ENVIRONMENTAL IMPACTS (EN 15804+A1)		Unit	A1 - A3	A4	A5	B2	C1	C2	C3	C4	D
Global warming potential	GWP	kg CO_2-eq	2.94E+00	1.73E-01	1.36E-01	0.00E+00	0.00E+00	1.67E-03	0.00E+00	2.25E+00	-3.30E+00
Depletion potential of the stratospheric ozone layer	ODP	kg CFC11-eq	7.00E-07	3.14E-08	1.47E-09	0.00E+00	0.00E+00	2.70E-10	0.00E+00	1.33E-08	-1.62E-07
Acidification potential of land and water	AP	kg SO_2-eq	1.92E-02	5.20E-04	1.30E-04	0.00E+00	0.00E+00	4.10E-06	0.00E+00	5.10E-04	-1.30E-02
Eutrophication potential	EP	kg PO_4^{3-} eq	1.20E-03	7.72E-05	1.41E-05	0.00E+00	0.00E+00	4.32E-07	0.00E+00	1.20E-04	-1.39E-03
Formation potential of tropospheric ozone photochemical oxidants	POCP	kg ethene-eq	1.10E-03	2.24E-05	7.62E-06	0.00E+00	0.00E+00	2.23E-07	0.00E+00	1.94E-05	-5.20E-04
Abiotic depletion potential for non-fossil resources	ADPE	kg Sb-eq	2.73E-04	2.93E-06	4.14E-07	0.00E+00	0.00E+00	7.89E-08	0.00E+00	1.51E-06	-5.31E-06
Abiotic depletion potential for fossil resources	ADPF	MJ	7.81E+01	2.68E+00	8.54E-01	0.00E+00	0.00E+00	2.47E-02	0.00E+00	1.22E+00	-5.15E+01

References

BS 5808: 1991 Specification for underlays for textile floor covering. British Standards Institution

BS EN 14499: 2015 Textile floor coverings. Minimum requirements for carpet underlays. British Standards Institution

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EN 15804:2012 + A2:2019 - Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products

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PCR 2019:14 Construction products V1.2.5, 2022-11-01 - The International EPD® System - EPD International AB

PCR 2019:14 c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810) (2019-12-20)

Underlay LCA (2023) - Report for Interfloor Limited - EuGeos Limited

Glossary

The International EPD® System: a programme for Type III environmental declarations, maintaining a system to verify and register EPDs as well as keeping a library of EPDs and PCRs in accordance with ISO 14025. (www.environdec.com)

Life cycle assessment (LCA): LCA studies the environmental aspects and quantifies the potential impacts (positive or negative) of a product (or service) throughout its entire life. ISO standards ISO 14040 and ISO 14044 set out conventions for conducting LCA.

REACH Regulation: REACH is the European Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals. It entered into force in 2007, replacing the former legislative framework for chemicals in the EU.