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# DECORA SPC FLOOR WITH ACULAY ACOUSTIC LAYER



#### **EPD PROGRAM OPERATOR:**

Instytut Techniki Budowlanej (ITB)

Address: Filtrowa 1, 00-611 Warsaw, Poland

Website: www.itb.pl

Contact: Michał Piasecki, PhD. D.Sc. Eng. m.piasecki@itb.pl, energia@itb.pl

#### OWNER OF THE EPD:

Decora S.A.

ul. Prądzyńskiego 24a

63-000 Środa Wielkopolska, Poland

Contact: +48 612 864 200

office@decora.pl

ITB is the verified member of The European Platform for EPD program operators and LCA practitioner <a href="www.eco-platform.org">www.eco-platform.org</a>

#### **BASIC INFORMATION**

This declaration is the Type III Environmental Product Declaration (EPD) based on EN 15804 and verified according to ISO 14025 by an external auditor. It contains the information on the impacts of the declared construction materials on the environment. Their aspects were verified by the independent body according to ISO 14025. Basically, a comparison or evaluation of EPD data is possible only if all the compared data were created according to EN 15804 (see point 5.3 of the standard).

Life cycle analysis (LCA): A1-A3, C1-C4 and D modules, in accordance with EN 15804

(Cradle to Gate with options)

The year of preparing the EPD: 2023

Product standard: EN 14041, EN 16354:2018

Service Life: 50 years, SL shall vary depending on a specific scenario of application

PCR: ITB-PCR A (PCR based on EN 15804)

Declared unit: 1 m<sup>2</sup>, from 4 mm and 5 mm thickness

Reasons for performing LCA: B2B

Representativeness: manufactured in Poland, year 2022

#### **BASIC INFORMATION**

**Decora S.A.** is an international production company with a manufacturing plant located in Środa Wielkopolska (Poland). Decora was one of the first companies in Europe to introduce a new flooring category SPC – vinyl flooring, with a high-density mineral core developed by the company. The product is 100 % waterproof, ideal for underfloor heating. In 2022, Decora started flooring production plant in Poland. Now, as the only manufacturer in Europe, it offers underlays, skirting boards and floor profiles from own



local production. The company sells its products on 5 continents, although it focuses on EU markets. The company has implemented a zero-waste policy.

#### PRODUCTS DESCRIPTION

This Type III Environmental Declaration covers products from the DECORA SPC FLOOR WITH ACULAY ACOUSTIC LAYER group. The SPC floor coverings covered by this environmental declaration are waterproof floors representing a new generation of SPC (stone-plastic composite) with an integrated underlay, guaranteeing elegance and exceptional acoustic comfort thanks to Aculay technology, for use in residential and commercial spaces. The core of SPC floor coverings is made of PVC, chalk and recycled materials, combined with an acoustic underlay made of XPS, finished with a decorative layer and covered with high-quality UV varnish. The products are manufactured in two thicknesses (Table 1). All products are fully tested in accordance with EN standards.

Table 1. Products covered by EPD no 564/2023

Decora SPC floor 4.0 mm (8.08-8.29 kg/m $^2$ ) + XPS underlay 1.3mm (80 g/m $^2$ )	L: 610~2018 mm W: 180~600 mm
Decora SPC floor 5.0 mm (10.24 kg/m²) + XPS underlay 1.3mm (80 g/m²)	L: 1220~2018 mm W: 180~600 mm

All specific product technical data is available at manufacturer <u>website.(https://decora.pl/)</u> Products manufactured by Decora.



# LIFE CYCLE ASSESSMENT (LCA) - GENERAL RULES APPLIED

#### **Declared Unit**

1 m<sup>2</sup>, vinyl flooring with a acoustic underlay made of XPS, 5.3 mm and 6.3 mm thickness.

#### System boundary

The life cycle analysis of the declared product covers "Product Stage" A1-A3, C1-C4+D modules in accordance with EN 15804 and ITB PCR A (cradle to gate with options).

#### Allocation

The allocation rules used for this EPD are based on general ITB PCR A. The EPD is representative for all SPC products (production impacts are allocated the same way, mass based). Allocation covers 100% of production. In collaborative processes (all products), e.g. energy consumption for a production hall or offices, impacts were allocated on the basis of total mass allocation.

#### System limits

Minimum 99.5% input materials and 100% energy consumption (electricity, gas) were inventoried in manufacturing plant and were included in the calculation. In the assessment, all significant parameters from gathered production data are considered, i.e. all material used per formulation, utilized thermal energy, and electric power consumption, direct production waste and available emission measurements. Tires consumption for transport was not taken into account. Limited number of substances with a percentage share of less than 0.1% of total mass might be excluded from the calculations. It is assumed that the total sum of omitted processes does not exceed 1% of all impact categories. Wooden packaging products are excluded in the analysis (considered as closed loop products). In accordance with EN 15804 machines and facilities required for and during production are excluded, as is transportation of employees.

# A1 and A2 Modules: Raw materials supply and transport

All resource products (used for a production) were inventoried. A vast majority of components necessary for chemical reactions are sourced from foreign chemical production suppliers (not providing specific impacts) so the general data for these product was used in LCA. The transport to the factory has been fully inventoried (LCI questionnaire) considering the number of deliveries: type of vehicles, the size of the delivery and the distance from the manufacturer to the factory for all input sources and raw materials. Packing (e.g. wooden pallets) circulates almost in a closed cycle (therefore it is not included in LCA). For A2 calculation purposes, manufactured inventory data is analyzed and European averages for fuel data are applied.

#### A3: Production

The production of Decora SPC floor with Aculay acoustic layer involves connecting the ready-made SPC panel with the XPS underlay using PSA glue. The finished acoustic panels are cut and then the closing systems are milled on both sides of the panel. The prepared boards are then packed into boxes and placed on pallets. Finally, the products are loaded onto trucks and delivered to the customer.

#### End of life scenarios (C and D modules)

The end-of-life scenario for all products has been generalized based on actual state of the art. It is assumed that in the end of life stage (C1), some electric/mechanical energy is needed to remove products from installation place, the transport distance for waste to waste processing (C2) is 100 km on > 10t loaded lorry with 75% capacity utilization and fuel consumption of 20 l per 100 km. At the end of life, the floors are dismantled and the materials recycled according to the national treatment practice of waste what is presented in Table 1. It is assumed that 20% of the product can be recovered in the recycling process. The remaining 40% may be designated for incineration and the remaining 40% for landfill. The reuse, recovery

and recycling stage are considered beyond the system boundaries (D) (reuse potential and incineration – gained heat). The end of life scenario for SPC Floor is provided in Table 2.

Table 2. End-of-life scenario (C modules) for SPC Floors

Parameter	Contribution
Collection rate	100%
Recycling	20%
Incineration	40%
Landfilling	40%

Electricity at end-of-life (module C) has been modelled using an average Polish electricity mix as the location where the product reaches end-of-life is unknown.

#### Data collection period

The data for manufacture of the declared products refer to period between 01.01.2022 – 31.12.2022 (1 year). The life cycle assessments were done for Poland as reference area.

#### Calculation rules

LCA was done in accordance with ITB PCR a document. Characterization factors are CML ver. 4.2 based.

ITB-LCA algorithms were used for impact calculations. A1 was calculated based on data from the database, A2 and A3 are calculated based on the LCI questionnaire provided by the manufacturer. Emission of greenhouse gases was calculated using the IPCC 2013 GWP method with a 100-year horizon. Emission of acidifying substances, Emission of substances to water contributing to oxygen depletion, Emission of gases that contribute to the creation of ground-level ozone, Abiotic depletion, and ozone depletion emissions where all calculated with the CML-IA baseline method.

#### Data quality - production

The values determined to calculate A1-A3 originate from verified process LCI inventory data form production plant. A1 values for inputs (PVC, Chalk, were prepared considering input products characteristics based on Eco invent data. The energy consumption of production and its impact on the production lines were separately inventoried and calculated. In accordance with Annex E of the EN 15804 + A2, a data quality assessment was performed with a quality level of "good".

#### Assumptions and estimates

According to the data adopted from the Ecoinvent 3.9.1 database, the post-consumer scrap/recycled content is not burdened with the environmental impacts.

## **Databases**

The data selected for LCA originate from ITB-LCI questionnaire completed by producer and verified via data audit. No data collected is older than five years and no generic datasets used are older than ten years. The representativeness, completeness, reliability, and consistency are judged as good. The background data for the processes come from the following resources database Ecoinvent v.3.9.1 (energy carriers, PVC, calcium carbonate, additives, waste treatment, incineration, and packaging). The background data for energy is national based on KOBiZE reports (Polish electricity mix and combustion factors for fuels). Specific (LCI) data quality analysis was a part of the input data verification. Where no background data was available, data gaps were complemented by literature research the time related quality of the data used is valid (5 years).

#### Additional information

Polish electricity mix used is  $0.698 \text{ kg CO}_2/\text{kWh}$  (KOBiZE, 2021). No damage to health or impairment is expected under normal use corresponding to the intended use of the product. The product contains up to 25% of recycled material.

# LIFE CYCLE ASSESSMENT (LCA) - RESULTS

# Declared unit

The declaration refers to the declared unit DU  $-1~\text{m}^2$  of SPC Floor with the ACULAY acoustic layer. The following life cycle modules are included in the declaration (Table 3). Tables 4 - 11 provide the environmental impacts of 1 m<sup>2</sup> of product with specific thickness (5.3 mm and 6.3 mm).

Table 3. System boundaries (life stage modules included) in a product environmental assessment

		(MA –	Module							mation NA – Ir		or Not	Asses	sed)		
Р	roduct stag	e	Construction	on process		Use stage End of life								Benefits and loads beyond the system boundary		
Raw material supply	Transport	Manufacturing	Transport to construction site	Construction- installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste	Disposal	Reuse-recovery- recycling potential
A1	A2	А3	A4	A5	B1	B2	В3	В4	В5	В6	В7	C1	C2	С3	C4	D
MA	MA	MA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MNA	MA	MA	MA	MA	MA

Table 4. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental impacts (DU: 1 m²; 5.3 mm)

Indicator	Unit	A1	A2	А3	C1	C2	СЗ	C4	D
Global Warming Potential	eq. kg CO <sub>2</sub>	7.61E+00	3.06E+00	3.25E+00	4.57E-01	1.54E-01	8.95E+00	3.48E-02	-4.96E+00
Greenhouse gas potential - fossil	eq. kg CO <sub>2</sub>	7.91E+00	3.05E+00	3.16E+00	4.48E-01	1.53E-01	8.94E+00	3.45E-02	-4.94E+00
Greenhouse gas potential - biogenic	eq. kg CO <sub>2</sub>	-3.07E-01	1.55E-02	8.86E-02	1.31E-02	5.23E-04	4.77E-03	3.48E-04	-1.66E-02
Global warming potential - land use and land use change	eq. kg CO₂	1.31E-02	1.82E-03	1.07E-03	1.57E-04	6.01E-05	1.28E-04	3.49E-05	-4.02E-03
Stratospheric ozone depletion potential	eq. kg CFC 11	1.46E-06	6.65E-07	7.53E-08	9.17E-09	3.54E-08	1.30E-06	1.05E-08	-1.80E-06
Soil and water acidification potential	eq. mol H+	4.11E-02	1.19E-02	3.36E-02	4.98E-03	6.21E-04	1.83E-01	2.91E-04	-1.97E-02
Eutrophication potential - freshwater	eq. kg P	2.33E-03	2.97E-04	5.74E-03	8.51E-04	1.03E-05	2.31E-05	1.00E-05	-1.19E-03
Eutrophication potential - seawater	eq. kg N	7.37E-03	3.27E-03	4.89E-03	7.20E-04	1.88E-04	9.85E-02	1.00E-04	-4.05E-03
Eutrophication potential - terrestrial	eq. mol N	7.51E-02	3.43E-03	4.13E-02	6.09E-03	2.05E-03	1.05E+00	1.09E-03	-4.04E-02
Potential for photochemical ozone synthesis	eq. kg NMVOC	3.05E-02	1.12E-02	1.16E-02	1.70E-03	6.27E-04	2.60E-01	3.16E-04	-1.46E-02
Potential for depletion of abiotic resources - non- fossil resources	eq. kg Sb	3.42E-04	1.92E-05	1.48E-05	2.19E-06	5.43E-07	1.64E-06	1.17E-07	-4.91E-05
Abiotic depletion potential - fossil fuels	MJ	1.79E+02	4.46E+01	5.30E+01	7.60E+00	2.27E+00	8.60E-01	7.96E-01	-1.02E+02
Water deprivation potential	eq. m³	4.70E+00	2.76E-01	1.06E+00	1.57E-01	1.05E-02	1.68E-01	4.62E-03	-1.96E+00

<sup>\*</sup> The value of the carbon footprint of the product in the product stage A1 A3 is 13.92 kg CO2 /m2

Table 5. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental aspects (DU: 1 m²; 5.3 mm)

Indicator	Unit	A1	A2	А3	C1	C2	C3	C4	D
Consumption of renewable primary energy - excluding renewable primary energy sources used as raw materials	MJ	1.14E+01	9.61E-01	3.80E+00	5.63E-01	3.26E-02	2.77E-01	1.40E-02	-3.50E+00
Consumption of renewable primary energy resources used as raw materials	MJ	2.83E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total consumption of renewable primary energy resources	MJ	1.43E+01	9.61E-01	3.80E+00	5.63E-01	3.26E-02	2.77E-01	1.40E-02	-3.53E+00
Consumption of non-renewable primary energy - excluding renewable primary energy sources used as raw materials	MJ	1.13E+02	4.46E+01	5.13E+01	7.62E+00	2.27E+00	-1.74E+02	8.61E-01	-5.51E+01
Consumption of non-renewable primary energy resources used as raw materials	MΊ	6.26E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.75E+02	0.00E+00	-3.52E+01
Total consumption of non-renewable primary energy resources	MJ	1.79E+02	4.46E+01	5.34E+01	7.62E+00	2.27E+00	8.60E-01	8.61E-01	-1.03E+02
Consumption of secondary materials	kg	1.96E+00	2.35E-02	4.99E-03	6.94E-04	7.62E-04	4.12E-03	0.00E+00	-1.64E-02
Consumption of renewable secondary fuels	MJ	1.21E-01	2.81E-04	2.65E-05	3.87E-06	8.40E-06	5.35E-05	0.00E+00	-1.62E-04
Consumption of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	4.14E-02	6.15E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net consumption of freshwater resources	m³	3.05E-02	7.35E-03	2.23E-02	2.06E-03	2.86E-04	1.49E-03	1.24E-04	-3.53E-02

Table 6. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental impacts relate to waste management (DU: 1 m²; 5.3 mm)

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Indicator	Unit	A1	A2	А3	C1	C2	С3	C4	D		
Hazardous waste, neutralized	kg	2.03E-01	7.06E-02	9.98E-03	7.86E-05	2.55E-03	1.56E-02	1.25E-06	-1.27E-01		
Non-hazardous waste, neutralised	kg	8.98E+00	1.30E+00	6.62E-02	4.09E-03	4.53E-02	2.50E-01	3.28E+00	-5.01E+00		
Radioactive waste	kg	1.47E-04	1.51E-04	3.90E-05	5.70E-06	1.70E-07	5.67E-06	4.84E-06	-6.94E-05		
Materials for recycling	kg	2.39E-03	1.79E-04	8.40E-01	7.86E-06	7.04E-06	1.48E+00	0.00E+00	-1.30E-03		
Materials for energy recovery	kg	2.93E-05	2.07E-06	1.25E-03	6.88E-08	5.69E-08	4.21E-07	0.00E+00	-3.82E-06		
Exported energy	MJ	1.49E-01	4.91E-09	1.52E-01	2.27E-02	0.00E+00	1.91E+00	0.00E+00	-5.31E-02		

Table7. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental additional information (DU: 1 m2; 5.3 mm)

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Indicator	Unit	A1	A2	А3	<b>C1</b>	C2	C3	C4	D
Particulate matter	disease incidence	INA	INA	INA	INA	INA	INA	INA	INA
Potential human exposure efficiency relative to U235	eg. kBq U235	INA	INA	INA	INA	INA	INA	INA	INA
Potential comparative toxic unit for ecosystems	CTUe	INA	INA	INA	INA	INA	INA	INA	INA
Potential comparative toxic unit for humans (cancer effects)	CTUh	INA	INA	INA	INA	INA	INA	INA	INA
Potential comparative toxic unit for humans (non-cancer effects)	CTUh	INA	INA	INA	INA	INA	INA	INA	INA
Potential soil quality index	dimensionless	INA	INA	INA	INA	INA	INA	INA	INA

Table 8. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer—the environmental impacts (DU: 1 m²; 6.3 mm)

Indicator	Unit	A1	A2	А3	C1	C2	С3	C4	D
Global Warming Potential	eq. kg CO₂	9.40E+00	3.83E+00	4.05E+00	5.72E-01	1.92E-01	1.12E+01	4.36E-02	-6.21E+00
Greenhouse gas potential - fossil	eq. kg CO₂	9.76E+00	3.81E+00	3.94E+00	5.61E-01	1.92E-01	1.12E+01	4.31E-02	-6.18E+00
Greenhouse gas potential - biogenic	eq. kg CO₂	-3.84E-01	1.94E-02	1.11E-01	1.64E-02	6.55E-04	5.97E-03	4.35E-04	-2.08E-02
Global warming potential - land use and land use change	eq. kg CO <sub>2</sub>	1.63E-02	2.28E-03	1.33E-03	1.97E-04	7.52E-05	1.60E-04	4.37E-05	-5.03E-03
Stratospheric ozone depletion potential	eq. kg CFC 11	1.82E-06	8.31E-07	9.40E-08	1.15E-08	4.43E-08	1.63E-06	1.31E-08	-2.25E-06
Soil and water acidification potential	eq. mol H+	5.09E-02	1.49E-02	4.20E-02	6.23E-03	7.77E-04	2.29E-01	3.64E-04	-2.47E-02
Eutrophication potential - freshwater	eq. kg P	2.90E-03	3.71E-04	7.16E-03	1.06E-03	1.29E-05	2.89E-05	1.25E-05	-1.49E-03
Eutrophication potential - seawater	eq. kg N	9.13E-03	4.09E-03	6.11E-03	9.01E-04	2.35E-04	1.23E-01	1.25E-04	-5.07E-03
Eutrophication potential - terrestrial	eq. mol N	9.31E-02	4.25E-03	5.16E-02	7.62E-03	2.56E-03	1.32E+00	1.36E-03	-5.06E-02
Potential for photochemical ozone synthesis	eq. kg NMVOC	3.78E-02	1.39E-02	1.45E-02	2.13E-03	7.84E-04	3.25E-01	3.95E-04	-1.83E-02
Potential for depletion of abiotic resources - non-fossil resources	eq. kg Sb	4.27E-04	2.40E-05	1.85E-05	2.74E-06	6.79E-07	2.05E-06	1.46E-07	-6.15E-05
Abiotic depletion potential - fossil fuels	MJ	2.21E+02	5.57E+01	6.62E+01	9.50E+00	2.84E+00	1.08E+00	9.96E-01	-1.27E+02
Water deprivation potential	eq. m³	5.80E+00	3.45E-01	1.33E+00	1.97E-01	1.31E-02	2.10E-01	5.79E-03	-2.46E+00

<sup>\*</sup> The value of the carbon footprint of the product in the product stage A1 A3 is 17.28 kg CO2 /m2

Table 9. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental aspects (DU: 1 m²; 6.3 mm)

		-			-				
Indicator	Unit	A1	A2	А3	C1	C2	С3	C4	D
Consumption of renewable primary energy - excluding renewable primary energy sources used as raw materials	MJ	1.42E+01	1.20E+00	4.74E+00	7.05E-01	4.08E-02	3.47E-01	1.75E-02	-4.38E+00
Consumption of renewable primary energy resources used as raw materials	MJ	3.54E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total consumption of renewable primary energy resources	MJ	1.79E+01	1.20E+00	4.75E+00	7.05E-01	4.08E-02	3.47E-01	1.75E-02	-4.41E+00
Consumption of non-renewable primary energy - excluding renewable primary energy sources used as raw materials	MJ	1.38E+02	5.57E+01	6.41E+01	9.53E+00	2.84E+00	-2.18E+02	1.08E+00	-6.89E+01
Consumption of non-renewable primary energy resources used as raw materials	MJ	7.83E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.19E+02	0.00E+00	-4.40E+01
Total consumption of non-renewable primary energy resources	MJ	2.21E+02	5.57E+01	6.67E+01	9.53E+00	2.84E+00	1.08E+00	1.08E+00	-1.29E+02
Consumption of secondary materials	kg	2.46E+00	2.94E-02	6.23E-03	8.68E-04	9.53E-04	5.16E-03	0.00E+00	-2.06E-02
Consumption of renewable secondary fuels	MJ	1.51E-01	3.51E-04	3.31E-05	4.84E-06	1.05E-05	6.69E-05	0.00E+00	-2.02E-04
Consumption of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	5.16E-02	7.69E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net consumption of freshwater resources	m³	3.61E-02	9.18E-03	2.79E-02	2.58E-03	3.58E-04	1.86E-03	1.55E-04	-4.41E-02

Table 10. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental impacts relate to waste management (DU: 1 m²; 6.3 mm)

Indicator	Unit	A1	A2	А3	C1	C2	СЗ	C4	D
Hazardous waste. neutralized	kg	2.51E-01	8.83E-02	1.25E-02	9.83E-05	3.19E-03	1.95E-02	1.57E-06	-1.59E-01
Non-hazardous waste. neutralised	kg	1.12E+01	1.62E+00	8.16E-02	5.11E-03	5.66E-02	3.13E-01	4.11E+00	-6.27E+00
Radioactive waste	kg	1.84E-04	1.52E-04	4.87E-05	7.13E-06	2.12E-07	7.09E-06	6.06E-06	-8.68E-05
Materials for recycling	kg	2.98E-03	2.24E-04	1.05E+00	9.83E-06	8.80E-06	1.85E+00	0.00E+00	-1.63E-03
Materials for energy recovery	kg	3.18E-05	2.41E-06	1.44E-03	8.60E-08	7.12E-08	5.27E-07	0.00E+00	-4.78E-06
Exported energy	MJ	1.86E-01	4.91E-09	1.91E-01	2.83E-02	0.00E+00	2.38E+00	0.00E+00	-6.64E-02

Table 11. Life cycle assessment (LCA) results for SPC Floor with the ACULAY acoustic layer – the environmental additional information (DU: 1 m²; 6.3 mm)

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Indicator	Unit	A1	A2	A3	C1	C2	СЗ	C4	D
Particulate matter	disease incidence	INA	INA	INA	INA	INA	INA	INA	INA
Potential human exposure efficiency relative to U235	eg. kBq U235	INA	INA	INA	INA	INA	INA	INA	INA
Potential comparative toxic unit for ecosystems	CTUe	INA	INA	INA	INA	INA	INA	INA	INA
Potential comparative toxic unit for humans (cancer effects)	CTUh	INA	INA	INA	INA	INA	INA	INA	INA
Potential comparative toxic unit for humans (non-cancer effects)	CTUh	INA	INA	INA	INA	INA	INA	INA	INA
Potential soil quality index	dimensionless	INA	INA	INA	INA	INA	INA	INA	INA

#### **VERIFICATION**

The process of verification of this EPD was in accordance with ISO 14025 and ISO 21930. After verification. this EPD is valid for a 5-year-period. EPD does not have to be recalculated after 5 years if the data have not changed significantly.

THE BASIS FOR LCA ANALYSIS WAS EN 15804 AND ITB PCR A
Independent verification corresponding to ISO 14025 (sub clause 8.1.3.)
EXTERNAL INTERNAL
External verification of EPD: Ph.D. Eng. Halina Prejzner
LCA. LCI audit and input data verification: Ph.D. D.Sc.Eng. Michał Piasecki. m.piasecki@itb.pl

The declaration owner has the sole ownership. liability. and responsibility for the declaration. Declarations of construction products may not be comparable if they do not comply with EN 15804+A2. For further information about comparability. see EN 15804 and ISO 14025

#### Normative references

- ITB PCR A v 1.6. General Product Category Rules for Construction Products
- EN 14041 Resilient. textile and laminate floor coverings Essential characteristics SO 14025:2006.
   Environmental labels and declarations Type III environmental declarations Principles and procedures
- ISO 21930:2017 Sustainability in buildings and civil engineering works Core rules for environmental product declarations of construction products and services
- ISO 14044:2006 Environmental management Life cycle assessment Requirements
- and guidelines
- EN 15804+A2 Sustainability of construction works Environmental product declarations Core rules for the product category of construction products
- CRU Group. Carbon footprint by cold metal by country https://www.crugroup.com/about-cru/
- European Life Cycle Database. ELCD 3.2.
   http://eplca.jrc.ec.europa.eu/ELCD3/index.xhtml?stock=default
- Ecoinvent Database. http://www.ecoinvent.org/database/.
- KOBiZE Wskaźniki emisyjności CO<sub>2</sub>. SO<sub>2</sub>. NO<sub>x</sub>. CO i pyłu całkowitego dla energii elektrycznej. 2021





Thermal Physics, Acoustics and Environment Department 02-656 Warsaw, Ksawerów 21

# CERTIFICATE No 564/2023 of TYPE III ENVIRONMENTAL DECLARATION

Products:

#### DECORA SPC FLOOR WITH ACULAY ACOUSTIC LAYER

Manufacturer:

# Decora S.A.

ul. Prądzyńskiego 24, 63-000 Środa-Wielkopolska, Poland

confirms the correctness of the data included in the development of Type III Environmental Declaration and accordance with the requirements of the standard

#### EN 15804+A2

Sustainability of construction works.

Environmental product declarations.

Core rules for the product category of construction products.

This certificate, issued on 24th November 2023 is valid for 5 years or until amendment of mentioned Environmental Declaration

Head of the Thermal Physic, Acoustics and Environment Department

Agnieszka Winkler-Skalna, PhD

TOT Y CHNIK! & CHNIK!

Deputy Director for Research and Innovation

Krzysztof Kuczyński, PhD

Warsaw, November 2023