



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Rigid Core Vinyl Flooring with a pre-attached pad
CFL



EPD HUB, HUB-3361

Published on 23.05.2025, last updated on 23.05.2025, valid until 22.05.2030

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.1 (5 Dec 2023) and JRC characterization factors EF 3.1.

GENERAL INFORMATION

MANUFACTURER

Manufacturer	CFL
Address	Room 2703, 27/F, Tower 1, Admiralty Centre, No. 18 Harcourt Road, Hong Kong
Contact details	Sustainability@cflflooring.com
Website	www.cflflooring.com

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023 EN 16810 Product category rules for resilient, textile and laminate floor coverings
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, B2, and modules C1-C4, D
EPD author	Lia Yan, CFL
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification
EPD verifier	Sarah Curpen, as an authorized verifier acting for EPD Hub Limited.

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products

may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

PRODUCT

Product name	Rigid Core Vinyl Flooring with a pre-attached pad
Place(s) of raw material origin	China
Place of production	Jiaxing, China
Place(s) of installation and use	Global
Period for data	January to December 2024
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3 (%)	
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m ²
Declared unit mass	8,04 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	1,15E+01
GWP-total, A1-A3 (kgCO ₂ e)	1,09E+01
Secondary material, inputs (%)	34,7
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	39,7
Net freshwater use, A1-A3 (m ³)	0,06

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

CFL Flooring (Creative Flooring Solutions), is the largest manufacturer of rigid core vinyl and other hybrid flooring products worldwide. The company is recognized globally as an innovator – committed to developing, manufacturing, and marketing sustainable, value-added flooring products. CFL employs over 3500 associates around the world including in the USA, China, Europe, and Vietnam, leveraging years of technical flooring expertise with the common vision of being the leader in flooring innovation. CFL’s extensive patent portfolio made up of hundreds of patents, granted and filed, is a core element in fulfilling this vision.

PRODUCT DESCRIPTION

CFL's Rigid Core Vinyl with Pre-Attached Pad is flooring designed for both residential and commercial applications. This product has exceptional dimensional stability and durability, is waterproof, easy to install and maintain, and suitable for all areas of the home or office. Ultra-low VOC emission contributes to an improved indoor air environment, and the attached backing provides comfort and improves sound performance, making it the ideal product for busy households and office spaces. This EPD covers CFL's Rigid Core Vinyl with Pre-Attached Pad (Cork, EVA, IXPE).

CFL's Acoustic Rigid Core Vinyl flooring is a patented engineered vinyl flooring that truly champions the quest for a quieter high performing hard surface solution. It is ideal for busy families, crowded office spaces and all the other applications where the floor is subject to a lot of noisy impacts, being up to 6x quieter than a normal 4mm vinyl flooring with backing, while maintaining all of the benefits of traditional rigid core vinyl flooring.

Product Range Covered

This EPD applies to the following models:

4mm Rigid Core Vinyl + 1 mm IXPE backing

4mm Rigid Core Vinyl + 1 mm EVA backing

4mm Rigid Core Vinyl + 1 mm Cork backing

6.5mm Acoustic Rigid Core Vinyl + 1 mm IXPE backing

6.5mm Acoustic Rigid Core Vinyl + 1 mm Cork backing

In the Annex to this EPD, a scaling table is provided to reflect the GWP impacts for the range of products produced in the same plant.

Further information can be found at www.cflflooring.com.

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	-	-
Minerals	55-70%	China
Fossil materials	20-30%	China
Bio-based materials	-	-

BIOGENIC CARBON CONTENT

Product’s biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0,17

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ²
Mass per declared unit	8,04 kg
Functional unit	-
Reference service life	Lifetime

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
X	X	X	X	X	MND	X	MNR	MNR	MNR	MND	MND	X	X	X	X	X		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

Module A1: Raw material supply accounts for the extraction and processing of all raw materials and energy which occur upstream to the studied manufacturing process.

Module A2: Transport from the raw material suppliers to the manufacturer.

Module A3: The products are manufactured at the production facility in China. The manufacturer provided primary data for their annual production, resource use and energy consumption for manufacturing at the facility. The production process includes material mixing, extrusion, lamination of film and wear layer, surface treatment, backing and pressing, cutting and profiling, bevel painting and packaging. Packaging-related flows in the production process are included in the manufacturing module, i.e., wood pallet and corrugated board box. Apart from production of packaging material, the supply and transport of packaging material are also considered in the LCA model.

Production losses are below the cut-off criteria which is less than 1%

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

Module A4: This module includes transport from the production gate to the building site. The average transportation distance from production plant to building site is 207 km transported by lorry from facility to port and 18,232 km of port-to-port based on averaged sales in records transported by container ship.

Module A5: Installation waste includes 5% of product waste and packaging materials. The disposal is assumed same as end of life scenario in Module C1 to C3. The impacts associated with packaging disposal are included.

Of the packaging materials:

- Wooden pallet assumed 31% recycled, 31% incinerated and 38% landfill which consists with Eurostat & PSR-0014.
- Paper (carton box) assumed 82% recycled, 9% incinerated and 9% landfilled per Eurostat & PSR-0014. The distance of transportation to the sorting and recycling facilities is unknown, so a conservative distance of 50 km was assumed. Benefits from energy substitution are declared in module D.

PRODUCT USE AND MAINTENANCE (B1-B7)

Module B1-B7: The reference service life (RSL) of Rigid Core Vinyl is lifetime for residential use. Note that the service life may vary depending on the amount, type, and frequency of maintenance by the user. For rigid vinyl core flooring, only stage B2 is relevant out of B1-B7. Maintenance typically involves sweeping/vacuuming and damp mopping using water.

Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

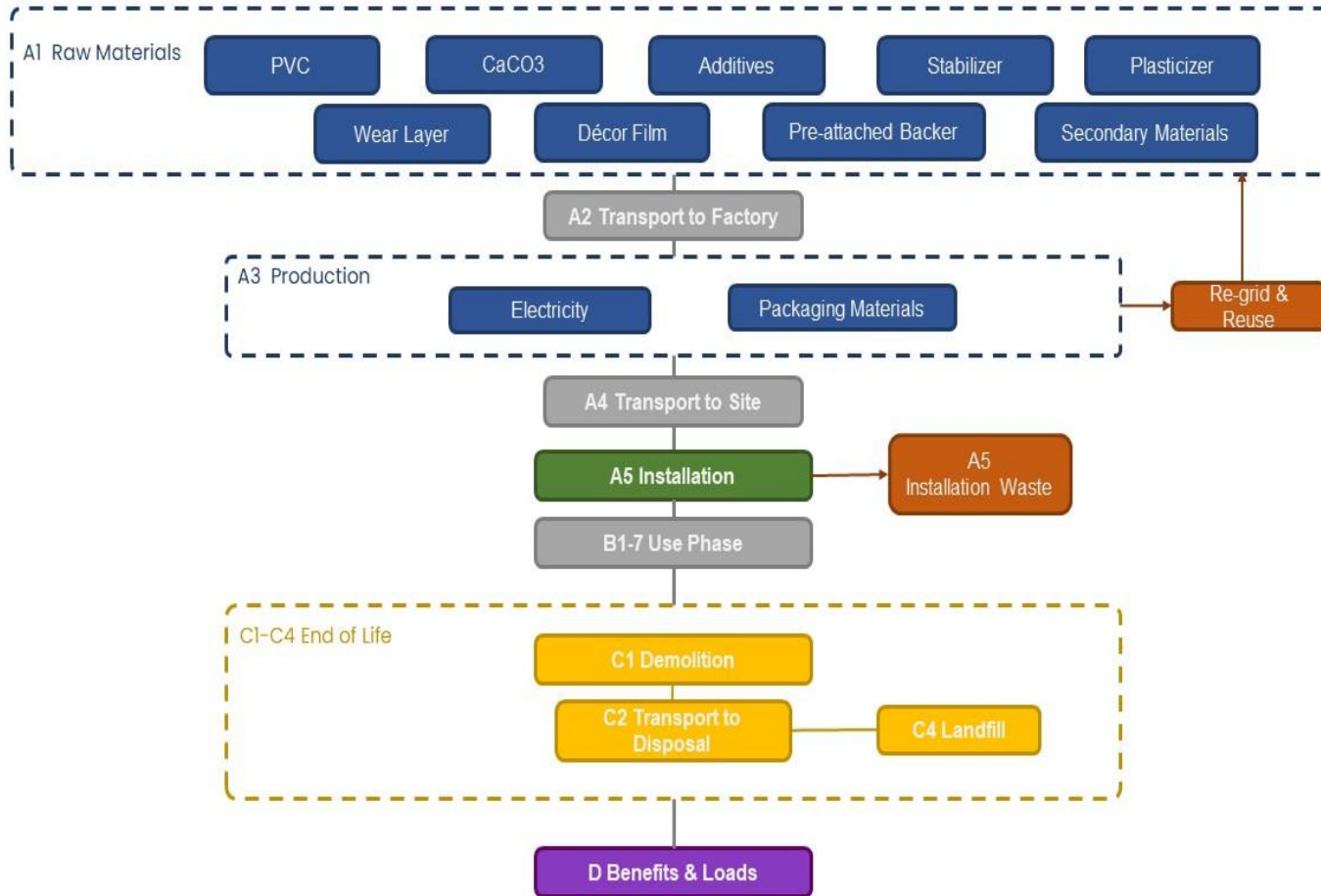
Module C1: Disassembly is done manually at use-site; therefore, no additional environmental loads are therefore assigned to module C1.

Module C2: It is assumed for 50 km* lorry transport to the site of waste treatment/disposal.

Module C3: The products are assumed to be 100% landfill.

Module D: Benefits from disposal of packaging in module A5.

MANUFACTURING PROCESS



LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC2021 and JRC EF 3.1.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging material	No allocation
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3 (%)	-

This EPD is product and factory specific and does not contain average calculations.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

ENVIRONMENTAL IMPACT DATA

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	5,95E+00	5,91E-02	4,89E+00	1,09E+01	1,20E+00	1,67E+00	MND	4,93E-01	MND	MND	MND	MND	MND	0,00E+00	4,33E-02	0,00E+00	5,02E-02	-2,42E-01
GWP – fossil	kg CO ₂ e	5,94E+00	5,91E-02	5,52E+00	1,15E+01	1,20E+00	6,56E-01	MND	4,91E-01	MND	MND	MND	MND	MND	0,00E+00	4,33E-02	0,00E+00	5,02E-02	6,71E-03
GWP – biogenic	kg CO ₂ e	1,19E-02	1,28E-05	-6,39E-01	-6,27E-01	1,99E-04	1,01E+00	MND	8,15E-04	MND	MND	MND	MND	MND	0,00E+00	9,80E-06	0,00E+00	-1,60E-05	-2,50E-01
GWP – LULUC	kg CO ₂ e	5,56E-03	2,82E-05	1,05E-02	1,61E-02	6,36E-04	8,54E-04	MND	5,95E-04	MND	MND	MND	MND	MND	0,00E+00	1,94E-05	0,00E+00	2,87E-05	1,31E-03
Ozone depletion pot.	kg CFC-11e	1,57E-06	8,68E-10	2,31E-08	1,59E-06	1,73E-08	8,08E-08	MND	1,06E-08	MND	MND	MND	MND	MND	0,00E+00	6,39E-10	0,00E+00	1,45E-09	9,20E-10
Acidification potential	mol H ⁺ e	2,47E-02	3,88E-04	2,91E-02	5,42E-02	3,12E-02	4,36E-03	MND	3,27E-03	MND	MND	MND	MND	MND	0,00E+00	1,48E-04	0,00E+00	3,56E-04	-1,18E-04
EP-freshwater ²⁾	kg Pe	1,62E-03	4,27E-06	1,06E-03	2,68E-03	4,53E-05	1,40E-04	MND	3,77E-04	MND	MND	MND	MND	MND	0,00E+00	3,37E-06	0,00E+00	4,13E-06	-1,37E-04
EP-marine	kg Ne	4,87E-03	1,06E-04	6,48E-03	1,15E-02	7,80E-03	1,06E-03	MND	2,10E-03	MND	MND	MND	MND	MND	0,00E+00	4,85E-05	0,00E+00	1,36E-04	-1,49E-04
EP-terrestrial	mol Ne	5,12E-02	1,17E-03	6,71E-02	1,20E-01	8,66E-02	1,07E-02	MND	5,19E-03	MND	MND	MND	MND	MND	0,00E+00	5,28E-04	0,00E+00	1,48E-03	-1,41E-03
POCP (“smog”) ³⁾	kg NMVOCe	2,37E-02	4,07E-04	1,80E-02	4,21E-02	2,37E-02	3,42E-03	MND	1,97E-03	MND	MND	MND	MND	MND	0,00E+00	2,17E-04	0,00E+00	5,31E-04	-3,76E-04
ADP-minerals & metals ⁴⁾	kg Sbe	7,19E-05	1,52E-07	5,42E-06	7,75E-05	1,47E-06	4,03E-06	MND	4,36E-06	MND	MND	MND	MND	MND	0,00E+00	1,21E-07	0,00E+00	7,97E-08	2,45E-07
ADP-fossil resources	MJ	1,20E+02	8,39E-01	5,50E+01	1,76E+02	1,51E+01	9,83E+00	MND	1,33E+01	MND	MND	MND	MND	MND	0,00E+00	6,28E-01	0,00E+00	1,23E+00	6,27E-01
Water use ⁵⁾	m ³ e depr.	1,77E+00	3,97E-03	2,60E+00	4,37E+00	4,72E-02	2,26E-01	MND	1,32E-01	MND	MND	MND	MND	MND	0,00E+00	3,10E-03	0,00E+00	3,55E-03	1,40E-01

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	2,51E-07	5,34E-09	4,06E-07	6,62E-07	4,70E-08	3,72E-08	MND	3,16E-08	MND	MND	MND	MND	MND	0,00E+00	4,33E-09	0,00E+00	8,10E-09	-1,53E-09
Ionizing radiation ⁶⁾	kBq 11235e	3,47E-01	6,97E-04	2,53E-01	6,01E-01	7,78E-03	3,12E-02	MND	9,07E-02	MND	MND	MND	MND	MND	0,00E+00	5,47E-04	0,00E+00	7,74E-04	2,47E-02
Ecotoxicity (freshwater)	CTUe	4,23E+01	1,13E-01	1,72E+01	5,96E+01	1,27E+00	3,32E+00	MND	4,77E+00	MND	MND	MND	MND	MND	0,00E+00	8,88E-02	0,00E+00	1,03E-01	-7,53E-02
Human toxicity, cancer	CTUh	7,38E-09	1,02E-11	6,87E-10	8,08E-09	2,48E-10	4,26E-10	MND	4,65E-10	MND	MND	MND	MND	MND	0,00E+00	7,14E-12	0,00E+00	9,25E-12	1,30E-11
Human tox. non-cancer	CTUh	6,10E-08	5,04E-10	3,07E-08	9,22E-08	4,63E-09	5,36E-09	MND	1,88E-08	MND	MND	MND	MND	MND	0,00E+00	4,07E-10	0,00E+00	2,13E-10	7,24E-10
SQP ⁷⁾	-	1,81E+01	7,52E-01	5,32E+01	7,21E+01	3,36E+00	4,08E+00	MND	1,87E+00	MND	MND	MND	MND	MND	0,00E+00	6,32E-01	0,00E+00	2,43E+00	-2,11E+01

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	5,25E+00	1,10E-02	6,57E+00	1,18E+01	1,30E-01	-5,61E+00	MND	8,57E-01	MND	MND	MND	MND	MND	0,00E+00	8,61E-03	0,00E+00	1,19E-02	-3,00E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	5,68E+00	5,68E+00	0,00E+00	-5,68E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,49E+00
Total use of renew. PER	MJ	5,25E+00	1,10E-02	1,22E+01	1,75E+01	1,30E-01	-1,13E+01	MND	8,57E-01	MND	MND	MND	MND	MND	0,00E+00	8,61E-03	0,00E+00	1,19E-02	-5,12E-01
Non-re. PER as energy	MJ	7,53E+01	8,39E-01	5,50E+01	1,31E+02	1,51E+01	7,58E+00	MND	8,17E+00	MND	MND	MND	MND	MND	0,00E+00	6,28E-01	0,00E+00	1,23E+00	5,82E-01
Non-re. PER as material	MJ	4,52E+01	0,00E+00	8,46E-03	4,52E+01	0,00E+00	-8,46E-03	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	-4,52E+01	1,15E-01
Total use of non-re. PER	MJ	1,20E+02	8,39E-01	5,50E+01	1,76E+02	1,51E+01	7,57E+00	MND	8,17E+00	MND	MND	MND	MND	MND	0,00E+00	6,28E-01	0,00E+00	-4,39E+01	6,97E-01
Secondary materials	kg	2,79E+00	3,71E-04	2,05E-01	2,99E+00	7,08E-03	1,50E-01	MND	4,03E-03	MND	MND	MND	MND	MND	0,00E+00	2,67E-04	0,00E+00	3,10E-04	1,26E-01
Renew. secondary fuels	MJ	2,75E-04	4,11E-06	2,04E-02	2,07E-02	2,59E-05	1,04E-03	MND	4,51E-05	MND	MND	MND	MND	MND	0,00E+00	3,39E-06	0,00E+00	6,41E-06	-9,30E-07
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Use of net fresh water	m ³	4,34E-02	1,17E-04	1,76E-02	6,11E-02	1,21E-03	2,86E-03	MND	3,67E-03	MND	MND	MND	MND	MND	0,00E+00	9,28E-05	0,00E+00	1,28E-03	3,49E-03

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	4,17E-01	1,41E-03	6,52E-01	1,07E+00	2,09E-02	5,65E-02	MND	3,42E-02	MND	MND	MND	MND	MND	0,00E+00	1,06E-03	0,00E+00	1,36E-03	4,89E-03
Non-hazardous waste	kg	7,28E+01	2,53E-02	4,84E+00	7,77E+01	3,01E-01	4,53E+00	MND	8,95E+01	MND	MND	MND	MND	MND	0,00E+00	1,97E-02	0,00E+00	3,11E-02	-8,85E-02
Radioactive waste	kg	8,80E-05	1,71E-07	6,39E-05	1,52E-04	1,90E-06	7,90E-06	MND	2,43E-05	MND	MND	MND	MND	MND	0,00E+00	1,34E-07	0,00E+00	1,89E-07	6,35E-06

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,41E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,47E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Electricity	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,86E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy – Heat	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,61E-01	MND	0,00E+00	MND	MND	MND	MND	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	5,90E+00	5,88E-02	5,42E+00	1,14E+01	1,20E+00	6,73E-01	MND	4,96E-01	MND	MND	MND	MND	MND	0,00E+00	4,30E-02	0,00E+00	4,97E-02	7,53E-03
Ozone depletion Pot.	kg CFC ₋₁₁ e	1,54E-06	6,92E-10	1,52E-08	1,56E-06	1,38E-08	7,89E-08	MND	9,22E-09	MND	MND	MND	MND	MND	0,00E+00	5,10E-10	0,00E+00	1,15E-09	7,49E-10
Acidification	kg SO ₂ e	2,02E-02	3,06E-04	2,35E-02	4,41E-02	2,49E-02	3,52E-03	MND	2,76E-03	MND	MND	MND	MND	MND	0,00E+00	1,13E-04	0,00E+00	2,63E-04	-2,32E-05
Eutrophication	kg PO ₄ ³ e	4,71E-02	4,99E-05	2,77E-03	4,99E-02	2,79E-03	2,69E-03	MND	1,56E-03	MND	MND	MND	MND	MND	0,00E+00	2,75E-05	0,00E+00	8,37E-05	1,66E-06
POCP (“smog”)	kg C ₂ H ₄ e	1,81E-03	2,04E-05	1,33E-03	3,16E-03	1,25E-03	2,32E-04	MND	1,67E-04	MND	MND	MND	MND	MND	0,00E+00	1,00E-05	0,00E+00	2,49E-05	-1,93E-05
ADP-elements	kg Sbe	5,97E-05	1,48E-07	4,28E-06	6,42E-05	1,44E-06	3,36E-06	MND	3,99E-06	MND	MND	MND	MND	MND	0,00E+00	1,18E-07	0,00E+00	7,82E-08	2,25E-07
ADP-fossil	MJ	1,15E+02	8,28E-01	4,94E+01	1,65E+02	1,50E+01	9,25E+00	MND	1,17E+01	MND	MND	MND	MND	MND	0,00E+00	6,19E-01	0,00E+00	1,22E+00	1,90E-01

ENVIRONMENTAL IMPACTS – GWP-GHG - THE INTERNATIONAL EPD SYSTEM

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG ⁹⁾	kg CO ₂ e	5,94E+00	5,91E-02	5,53E+00	1,15E+01	1,20E+00	6,56E-01	MND	4,92E-01	MND	MND	MND	MND	MND	0,00E+00	4,33E-02	0,00E+00	5,02E-02	8,01E-03

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013). In addition, the characterisation factors for the flows - CH₄ fossil, CH₄ biogenic and Dinitrogen monoxide - were updated in line with the guidance of IES PCR 1.2.5 Annex 1. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterization factor for biogenic CO₂ is set to zero.

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source and quality	Ecoinvent 3.10.1
Electricity CO2e / kWh	0,95

Transport scenario documentation A4

Scenario parameter	Value
Specific transport CO2e emissions, kg CO2e / tkm	0,0094
Average transport distance, km	13693

Installation scenario documentation A5

Scenario information	Value
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route) / kg	Installation waste: 0.402 kg Packaging waste: 0.425 kg

Use stages scenario documentation - B2 Maintenance

Scenario information	Value
Ancillary materials for maintenance, e.g. cleaning agent, specify materials / kg / cycle	Cleaning agent: 0.179 kg
Waste material resulting from maintenance (specify materials) / kg	Waste water: 0.0872 m ³
Net fresh water consumption during maintenance / m ³	Water use: 0.087 m ³

Scenario information	Value
Energy input during maintenance, e.g. vacuum cleaning, energy carrier type, e.g. electricity, and amount, if applicable and relevant / kWh	Vacuum cleaning/electricity: 0.33 kWh

End of life scenario documentation

Scenario information	Value
Collection process – kg collected with mixed waste	8.04 kg
Disposal (total) – kg for final deposition	8.04 kg
Scenario assumptions e.g. transportation	50 km

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? [Read more online](#)

This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Sarah Curpen, as an authorized verifier acting for EPD Hub Limited.

23.05.2025



ANNEX

Components	Rigid Vinyl Core			Acoustic Rigid Vinyl Core	
	IXPE	EVA	Cork	IXPE	Cork
Backing	4+1mm	4+1mm	4+1mm	6.5+1mm	6.5+1mm
Thickness	4+1mm	4+1mm	4+1mm	6.5+1mm	6.5+1mm
Unit	Kg/m2	Kg/m2	Kg/m2	Kg/m2	Kg/m2
PVC	1.79	1.79	1.79	2.34	2.34
CaCO3	3.27	3.27	3.27	4.90	4.90
Plasticizer	0.01	0.01	0.01	0.03	0.03
Stabilizer	0.07	0.07	0.07	0.10	0.10
Regrind	2.70	2.70	2.70	4.14	4.14
Others	0.06	0.06	0.06	0.01	0.01
Backing - Cork	-	-	0.20	-	0.20
Backing - IXPE	0.14	-	-	0.14	-
Backing - EVA	-	0.09	-	-	-
Acoustic Layer	-	-	-	0.20	0.20
Total weight	8.04	7.99	8.10	11.85	11.92
	Rigid Core Vinyl			Acoustic Rigid Core Vinyl	
	IXPE	EVA	Cork	IXPE	Cork
	4+1mm	4+1mm	4+1mm	6.5+1mm	6.5+1mm
GWP total for A1-A3 Kg CO2 eq.	10.90	10.40	10.90	16.00	15.20
GWP fossil for A1-A3 Kg CO2 eq.	11.50	11.00	11.50	17.10	16.60
Variation in GWP-fossil A1-A3 %	0.0%	-	0.0%	32.7%	30.7%