

texdecor

ENVIRONMENTAL AND HEALTH PRODUCT DECLARATION SHEET Vinacoustic Wall Covering

In compliance with NF EN 15804+A2:2019 and NF EN 15804+A2/CN:2022



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WARNINGS

The information contained in this declaration is provided under the responsibility of Texdecor (FDES producer) according to NF EN 15804+A2 and the national addition to standard NF EN 15804+A2/CN.

Any use, total or partial, of the information provided in this document must at least be accompanied by a complete reference to the FDES of origin and to its producer, who may provide a complete copy.

CEN standard EN 15804+A2, national addition to standard NF EN15804+A2/CN serve as product category rules (PCR).

NOTE: The literal translation in French of “EPD (Environmental Product Declaration)” is “DEP” (*Déclaration Environnementale de Produit*). However, in France, the term FDES (Environmental and Health Declaration Sheet) is commonly used, which includes both the Environmental Declaration and Health Information for the product covered by this FDES. The FDES is therefore an "EPD" supplemented by health information

We remind you that the results of the study are based solely on the facts, circumstances and hypotheses that were submitted to us during the study. Should these facts, circumstances or hypotheses differ, the results are also liable to differ. Furthermore, the results of the study should be considered in their entirety, with reference to the hypotheses, and not individually.

INTERPRETATION GUIDE

The display of inventory data complies with the requirements of the NF EN 15804+A2 standard. In the following tables 2.53E-06 should be read: 2.53×10^{-6} (scientific writing). When the inventory calculation result is zero, then the value zero is displayed.

The units used are specified before each flow. These units are:

- the kilogram (kg),
- the cubic meter (m³),
- the kilowatt-hour (kWh),
- the megajoule (MJ),
- the square meter (m²).

Abbreviations:

- LCA: Life Cycle Assessment
- RSL: Reference Service Life
- EPD: Environmental Product Declaration
- FU: Functional unit
- N/A: Not applicable
- VOC: Volatile organic compounds
- SVHC: Substances of very high concern

USAGE PRECAUTION FOR PRODUCT COMPARISON

The EPD for construction products may not be comparable if they do not comply with NF EN 15804+A2.

The EN 15804+A2 standard defines in § 5.3 *Comparability of EPDs for construction products*, the conditions under which construction materials can be compared, based on information provided by the EPD:

"In principle the comparison of products on the basis of their EPD is defined by the contribution they make to the environmental performance of the building. Consequently, comparison of the environmental performance of construction products using the EPD information shall be based on the product's use in and its impacts on the building, and shall consider the complete life cycle (all information modules).

NOTE 1: *EPD that are not in a building context are not tools to compare construction products and construction services.*

NOTE 2: *For the sustainability assessment of buildings comparisons of the environmental aspects and impacts need to be undertaken in conjunction with the social and economic aspects and impacts related to the building.*

NOTE 3: *For the interpretation of a comparison, benchmarks or reference values are needed. The standard does not set benchmarks or reference values."*

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1 INTRODUCTION

The framework used for the presentation of the environmental product declaration is based on the national addition to NF EN 15804+A2/CN and the INIES verification program.

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2 GENERAL INFORMATIONS

1. Name and address of the declarant:

TEXDECOR
2, rue d'Hem
59780 Willems
France

2. The site for which the FDES is representative:

The FDES is representative of the only production site, which is located in France.

3. FDES type:

“Cradle-to-grave” and module D.

4. FDES type:

Individual and mono-site

5. Product name:

Vinacoustic Wall Covering (*Revêtement mural Vinacoustic*)

6. Validity framework:

This FDES covers one product without any variability.

7. Verification:

CEN standard EN 15804 serves as PCR a).	
Independent verification of the declaration in accordance with EN ISO 14025:2010 <input type="radio"/> Internal verification <input checked="" type="radio"/> External verification	
(As applicable b)) Third-party verification:	
	Audit program: FDES-INIES (December 2023)
	http://www.inies.fr/
	HQE Association
	4, avenue du Recteur Poincaré 75016 Paris, France
	Authorized verifier: Estelle Vial (FCBA)
<i>This is the English version of the EPD, only the French version has been verified</i>	
INIES Registration number: 20250142096	
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Update date: N/A	
Verification date: 11/10/2024	
Valid until: 31/12/2029	
a) <i>Product category rules</i> b) <i>Optional for business-to-business communication, mandatory for business-to-customer communication (see EN ISO 14025:2010, 9.4).</i>	

8. Production location:

France

3 FUNCTIONAL UNIT AND PRODUCT DESCRIPTION

1. Functional unit:

« Cover one square meter of wall with an acoustic PVC wall covering on a thick non-woven backing, ensuring the performance described in standards NF EN 15102+A1* and NF EN 233**, as well as acoustic performance $aw=0.2$ on concrete and $aw=0.25$ (class E) on BA13 board. »

*NF EN 15102+A1: Decorative wall coverings - Roll and panel form

**NF EN 233: Wallcoverings in roll form. Specification for finished wallpapers, wall vinyls and plastics wallcoverings

Any preparation of the substrate (cleaning, levelling, primer, or hardener) is not considered; only the adhesive is considered.

2. Main performance of the functional unit:

Cover 1 m²

3. Product and packaging description:

The product studied in this EPD is an acoustic PVC wall covering on a thick non-woven backing, marketed by the company TEXDECOR. The product is supplied in the form of a 1.30 m wide roll of wall covering.

The product is rolled around a cardboard core, packaged in a cardboard box, and then placed on a pallet. The pallet is then wrapped and strapped.

4. Description of product use (scope of application):

This product is used in a building for wall cladding to meet acoustic correction needs.

5. Other technical specifications not included in the functional unit:

In accordance with regulations, this product is fire-rated M1 and C s3 d0 (Standard EN 13 501-1).

6. Description of the main components and/or materials of the product:

Parameter	Unit	Value
Product quantity	kg/FU	8.90E-01
Main components	-	This product is a blend of phthalate-free PVC, plasticizer, mineral fillers, additives, and a 90% recycled thick non-woven backing.
Quantity of complementary products	kg/FU	Vinyl glue: 2.00E-01
Distribution packaging	kg/FU	Cardboard: 1.96E-01 Wood: 1.16E-01

7. Content declaration:

The product does not contain substances classified as extremely hazardous (SVHC) listed in the candidate list of Annex XIV of the REACH regulation at more than 0.1% by mass.

8. Proof of Fitness for Use:

The products comply with standards NF EN 15102+A1 and NF EN 233.

9. Distribution channel:

BtoB

10. Description of the reference service life under reference conditions of use

The manufacturer's experience allows the reference service life to be evaluated at 15 years under the maintenance and usage conditions recommended by the manufacturer. This service life is based on the product's characteristics and feedback from Texdecor.

Parameter	Unit	Value
Reference service life	Years	15
Declared properties of the product (at Factory Exit)	-	The products comply with standards NF EN 15102+A1 and NF EN 233. The declared properties are: Tensile strength WA/WE ≥ 35 daN ≥ 30 daN ISO 1421 Elongation at break WA/WE $\geq 90\%$ $\geq 140\%$ ISO 1421 Tear resistance WA/WE ≥ 7 daN ≥ 5 daN EN 4674-1 method A Acoustic properties as described in the UF.
Theoretical application parameters (if imposed by the manufacturer), including references to appropriate requirements and application codes	-	Compliant with the installation instructions available on the TEXDECOR website
Presumed quality of work	-	The quality of work is presumed to comply with DTU 59.4 - Building Work - Installation of Wallpapers and Wall Coverings.
Indoor environment (for indoor products)	-	Conditions corresponding to all types of buildings and rooms in metropolitan France.
Outdoor environment (for outdoor products)	-	The products are not in contact with the outdoor environment.
Conditions of use	-	The conditions of use are presumed to comply with DTU 59.4 - Building Work - Installation of Wallpapers and Wall Coverings.
Maintenance scenario	-	A maintenance scenario has been defined in accordance with the declarant's recommendations.

11. Information on biogenic carbon content

The raw materials and packaging are biosourced. The uptake of CO₂ related to photosynthesis during plant growth is considered as input. This CO₂ is found in the form of carbon in the material.

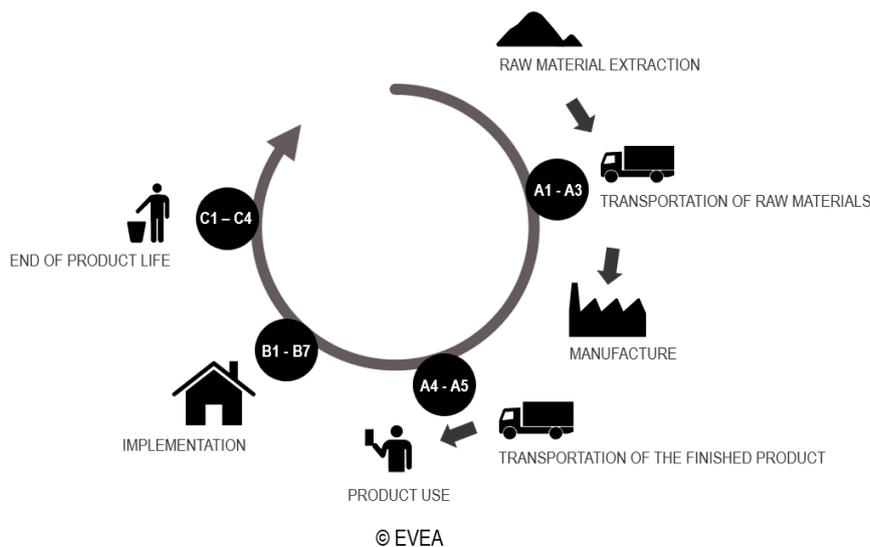
The biogenic carbon content declared in the FDES is the sum, for each raw material and packaging component, of the amount of carbon C/kg of material*amount of material/functional unit.

Re-emission in the form of carbon is considered in the end of life of materials.

Biogenic carbon content	Unit	Value
Biogenic carbon content of the product (at the factory exit)	kg C/FU	0
Biogenic carbon content of the associated packaging (at the factory exit).	kg C/FU	1.36E-01

4 LIFE CYCLE PHASES

Product life-cycle diagram:



DESCRIPTION OF SYSTEM BOUNDARIES (X = INCLUDED IN THE LCA; MND = MODULE NOT DECLARED)																	BENEFITS AND IMPACTS BEYOND THE SYSTEM BOUNDARIES
PRODUCTION PHASE			CONSTRUCTION PHASE		USE PHASE							END-OF-LIFE PHASE					
A1-A3			A4-A5		B1-B7							C1-C4				D	
Raw material supply	Transport	Manufacturing	Transport	Construction / Installation process	Use	Maintenance	Repair	Replacement	Rehabilitation	Energy demand during the operational phase	Water demand during the operational phase	Demolition/ Deconstruction	Transport	Waste treatment	Disposal	Reuse, recovery, recycling potential	
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

4.1 Production phase, A1-A3

Stages A1 to A3 include all processes from raw material extraction to their transformation in the factory. The French electricity mix is considered.

The manufacturing process is divided into several stages, namely grinding and mixing of powders and pigments for paste preparation followed by coating on the substrate, mixing for varnish preparation, and finally finishing including varnishing, texturing, and micro-perforation.

4.2 Construction phase, A4-A5

The construction stage includes the transport of the product from the manufacturing plant to the site, as well as the implementation, using a vinyl adhesive.

Transport to construction site:

Parameter	Unit	Value
Scenario description	-	The product is transported from the manufacturing plant to the TEXDECOR logistics centre before being sent to distributors and companies (an average delivery radius is considered). A final transport of 15 km by van is considered from the distributor/company to the construction site.
Type of fuel and vehicle consumption or type of vehicle	-	EURO 6 truck, 16-32 tonnes. Standard van.
Distance to the site	km	Truck: 6.34E+02 Van: 1.50E+01
Capacity utilization (including empty returns)	%	36% (generic data from the ecoinvent database)
Bulk density of the transported product(s)	kg/m ³	1.60E+01
Volume capacity utilization coefficient (coefficient: =1 or <1 or ≥1 for compressed or nested products)	-	1

Installation in the building:

Parameter	Unit	Value
Scenario description	-	<p>The products are manually adhered to the walls, with cuts made at specific points (wastage rate of 6%).</p> <p>A cleaning of the product is carried out at the end of the project to remove any residual adhesive traces (cleaning product diluted in water at 1%).</p> <p>The product waste is considered to be 100% landfilled. It is assumed that non-hazardous waste is transported 50 km for burial (according to NF EN 15804+A2).</p>
Auxiliary inputs for installation (specified by material).	kg/FU	Vinyl glue: 2.00E-01
Water consumption	L/FU	5.00E-02
Use of other resources.	kg/FU	Detergent: 5.00E-04
Energy consumption	-	-
Waste produced on the construction site before the treatment of waste generated by the installation of the product (specified by type)	kg/FU	Product wastage: 5.34E-02 Cardboard packaging: 1.96E-01 Wood packaging: 1.16E-01
Materials (specified by type) produced by the treatment of waste on the construction site, for example, collection for recycling, energy recovery, disposal (specified by method):	kg/FU	Landfilled product wastage: 5.34E-02 Recycled cardboard: 1.60E-01 Incinerated cardboard: 1.57E-02 Landfilled cardboard: 1.96E-02 Reused wood: 4.87E-02 Recycled wood: 8.12E-03 Incinerated wood: 3.60E-02 Landfilled wood: 2.32E-02
Direct emissions into the air, soil, and water.	kg/FU	No emissions could be recorded/detected.

4.3 Use phase (excluding potential savings), B1-B7

B1 Use:

No emissions could be recorded/detected. VOC emissions mainly occur during the storage of the product, although no quantified data is available.

B2 Maintenance:

Parameter	Unit	Value/description
Scenario description	-	The maintenance of PVC wall coverings consists of one cleaning every 5 years (water + cleaning product).
Maintenance frequency	years	5
Auxiliary inputs for maintenance	kg/FU	Non-aggressive cleaning product.: 5.00E-04
Waste produced during maintenance (specified by material)	-	-
Net consumption of fresh water.	L/FU	5.00E-02
Energy input during maintenance.	-	-

B3 Repair:

No input/output has been identified for this stage.

B4 Replacement:

No input/output has been identified for this stage.

B5 Rehabilitation:

No input/output has been identified for this stage.

B6 – B7 Energy and water use:

No input/output has been identified for this stage.

4.4 End of life phase, C1-C4

Parameter	Unit	Value/description
Scenario description	-	The product is manually removed using 0.5 litres/m ² of water. It is considered to be 100% landfilled. It cannot be incinerated due to its composition, and recycling is currently limited for this type of product.
End-of-life transport distance of the product	km	5.00E+01
Quantity collected separately	kg/FU	-
Quantity collected with mixed construction waste	kg/FU	1.09E+00
Quantity intended for reuse	kg/FU	-
Quantity intended for recycling	kg/FU	-
Quantity intended for energy recovery	kg/FU	-
Quantity of product disposed of	kg/FU	1.09E+00
Quantity of residual biogenic carbon dioxide emitted	kgCO ₂	-

4.5 Reuse, recovery, recycling potential, module D

No benefit or charge is considered for the burial of the product and the disposal of packaging waste (included in the cut-off criterion).

5 INFORMATION FOR LIFE CYCLE ASSESSMENT CALCULATION

PCR used	NF EN 15804+A2:2019 and NF EN 15804+A2/CN:2022.
System boundaries and cut-off criteria	<p>The system boundaries comply with the limits imposed by the PCR. The cut-off rule used in case of insufficient or missing input data for an elementary process, as defined by the NF EN 15804+A2 standard, allows for the exclusion of:</p> <ul style="list-style-type: none"> - Up to 1% of renewable and non-renewable primary energy consumption and 1% of the input mass per elementary process - Up to 5% cumulative primary energy consumption and input mass for each life cycle stage (e.g., A1-A3) <p>The national supplement NF EN 15804+A2/CN further specifies that the following can be excluded from the system boundaries without verification of compliance with the cut-off rule:</p> <ul style="list-style-type: none"> - The manufacturing, maintenance, and end-of-life of equipment or infrastructure and consumables whose total or partial renewal frequency is greater than one year. - The lighting, heating, cleaning of workshops, and administrative services - Employee transportation <p>The elementary processes excluded from the system boundaries, respecting the cut-off rule for this life cycle analysis, are:</p> <ul style="list-style-type: none"> - Modules A5 and B2: Manufacturing and end-of-life of the detergent packaging
Allocations	<p>The allocation standards for co-products imposed by the standard NF EN 15804+A2 and its national supplement to standard NF EN 15804+A2/CN were fully respected:</p> <ul style="list-style-type: none"> - Allocation avoided as much as possible - Allocation based on physical properties (e.g. mass, area) when the difference in revenue generated by co-products is small - In all other cases, allocation based on economic values. <p>The ecoinvent data used primarily employs economic allocations. A mass allocation was used for the collection at the production stage of the product.</p>
Geographical and temporal representativeness of primary and secondary data	<p>The primary data were collected by the declarant at their facilities, located in France, during the year 2023.</p> <p>The secondary data used comes from the ecoinvent database version 3.10 (cut-off) of 2023 and was selected to be representative of the geographical area of production or processing of the materials or processes.</p> <p> LCA Software: SimaPro, version 9.6.</p>
Variability of results	Not applicable

6 LIFE CYCLE ANALYSIS RESULTS

The indicator results are obtained using a calculation method that incorporates characterization factors according to the EF3.1 reference package, as published in February 2023 by the Joint Research Centre of the European Commission¹.

The results are presented in scientific format with three significant figures. Due to rounding to the third significant figure, the values for the stages and the total life cycle may not correspond to the sum of the values of the corresponding modules.

The values of the indicators "Use of (non-)renewable primary energy resources as raw materials" can be negative. This can illustrate, for example, the transition of a raw material to the status of fuel in the case of incineration.

The table below presents the classification of disclaimers for the declaration of reference and additional environmental impact indicators.:

ILCD classification	Indicator	Liability waiver
Type 1 of the ILCD	Global warming potential (GWP)	None
	Potential depletion of the stratospheric ozone layer (ODP)	None
	Potential incidence of diseases due to emissions of fine particles	None
Type 2 of the ILCD	Acidification potential, cumulative excess (AP)	None
	Eutrophication potential, fraction of nutrients reaching the final freshwater compartment (EP-freshwater)	None
	Eutrophication potential, fraction of nutrients reaching the final marine compartment (EP-marine)	None
	Acidification potential, cumulative excess (EP-terrestrial)	None
	Ground-level ozone formation potential (POCP)	None
	Potential efficacy of human exposure to the isotope U235 (PIR)	1
Type 3 of the ILCD	Depletion potential for non-fossil abiotic resources (ADP-minerals + metals)	2
	Depletion potential for non-fossil abiotic resources (ADP-fossils)	2
	Potential water deprivation (of users), water consumption weighted according to deprivation (WDP)	2
	Potential comparative toxic unit for ecosystems (ETP-fw)	2
	Potential comparative toxic unit for humans (HTP-c)	2
	Potential comparative toxic unit for humans (HTP-nc)	2
	Potential Soil Quality Index (SQP)	2

Liability waiver 1 – this category of impact mainly concerns the possible impact on human health of low dose ionizing radiation from the nuclear fuel cycle. It does not consider the consequences of possible nuclear accidents, occupational exposure or disposal of radioactive waste in underground installations. Potential ionizing radiation from soil, radon and some building materials is also not measured by this indicator.

Liability waiver 2 – the results of this environmental impact indicator should be used with caution because the uncertainties of these results are high or because experience with this indicator is limited.

¹ <https://eplca.jrc.ec.europa.eu/LCDN/EN15804.xhtml>

Environmental Impacts	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Climate change - total kg CO2 eq/FU	4.01E+00	8.43E-02	8.72E-01	1.63E-01	1.35E+00	0.00E+00	1.33E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-05	1.04E-02	0.00E+00	1.00E-01	-1.26E-01
Climate change - fossil kg CO2 eq/FU	3.98E+00	8.43E-02	1.35E+00	1.63E-01	8.49E-01	0.00E+00	1.09E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.72E-05	1.04E-02	0.00E+00	1.00E-01	-1.25E-01
Climate change - biogenic kg CO2 eq/FU	2.95E-02	1.53E-05	-4.80E-01	3.68E-05	5.02E-01	0.00E+00	3.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.28E-07	1.88E-06	0.00E+00	4.92E-06	-5.74E-04
Climate change - land use and change kg CO2 eq/FU	5.41E-03	2.81E-05	2.21E-03	5.86E-05	9.51E-04	0.00E+00	2.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.31E-08	3.45E-06	0.00E+00	2.19E-06	-2.43E-04
Ozone depletion kg CFC 11 eq/FU	6.78E-07	1.68E-09	7.40E-08	3.22E-09	5.75E-08	0.00E+00	2.53E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.07E-13	2.06E-10	0.00E+00	3.66E-10	-4.16E-09
Acidification mole de H+ eq/FU	3.16E-02	1.76E-04	3.45E-03	4.06E-04	4.22E-03	0.00E+00	5.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.49E-07	2.16E-05	0.00E+00	7.52E-05	-2.87E-04
Eutrophication, freshwater kg P eq/FU	2.11E-03	6.58E-07	1.27E-04	1.39E-06	1.50E-04	0.00E+00	1.34E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-09	8.08E-08	0.00E+00	8.79E-08	-3.53E-06
Eutrophication, marine kg de N eq/FU	7.30E-03	4.11E-05	1.06E-03	1.07E-04	8.91E-04	0.00E+00	4.58E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.39E-08	5.05E-06	0.00E+00	1.13E-04	-7.54E-05
Eutrophication, terrestrial mole de N eq/FU	9.45E-02	4.55E-04	1.10E-02	1.18E-03	1.04E-02	0.00E+00	1.49E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.98E-07	5.59E-05	0.00E+00	3.33E-04	-7.21E-04
Photochemical ozone formation kg NMCOV eq/FU	2.58E-02	2.92E-04	4.02E-03	6.51E-04	4.03E-03	0.00E+00	3.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.63E-07	3.58E-05	0.00E+00	1.50E-04	-3.36E-04
Resource use, minerals and metals kg Sb eq/FU	4.69E-02	2.81E-07	2.35E-03	6.75E-07	2.96E-03	0.00E+00	1.60E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.08E-10	3.46E-08	0.00E+00	2.51E-08	-2.68E-07
Resource use, fossils MJ/FU	6.64E+01	1.19E+00	2.68E+01	2.29E+00	1.62E+01	0.00E+00	1.72E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	1.46E-01	0.00E+00	2.57E-01	-3.29E+00
Water use m³ de privation eq dans le monde/FU	2.08E+00	4.99E-03	2.51E-01	1.00E-02	4.33E-01	0.00E+00	7.59E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.87E-04	6.13E-04	0.00E+00	-5.65E-03	-1.60E-02

Environmental Impacts	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Particulate matter Indice de maladies/FU	3.05E-07	6.18E-09	3.59E-08	1.26E-08	4.42E-08	0.00E+00	6.63E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.56E-12	7.59E-10	0.00E+00	1.75E-09	-2.79E-09
Ionising radiation kBq de U235 eq/FU	1.50E-01	5.47E-04	9.63E-02	1.23E-03	3.04E-02	0.00E+00	4.97E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-05	6.72E-05	0.00E+00	1.62E-04	-1.73E-02
Ecotoxicity, freshwater CTUe/FU	9.59E+01	3.23E-01	8.26E+00	6.09E-01	9.59E+00	0.00E+00	2.63E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.44E-04	3.96E-02	0.00E+00	3.20E-01	-1.65E+00
Human toxicity, cancer CTUh/FU	3.61E-08	5.98E-10	4.97E-09	1.12E-09	4.26E-09	0.00E+00	6.75E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.46E-12	7.35E-11	0.00E+00	6.79E-11	-5.35E-09
Human toxicity, non-cancer CTUh/FU	1.91E-07	7.45E-10	1.80E-08	1.43E-09	4.05E-08	0.00E+00	2.41E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.30E-12	9.15E-11	0.00E+00	6.05E-10	-6.46E-10
Land use Dimensionless/FU	2.14E+01	7.16E-01	2.33E+01	1.31E+00	4.70E+00	0.00E+00	2.18E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.45E-04	8.80E-02	0.00E+00	6.21E-01	-8.75E+00

Resource use	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Use of renewable primary energy excluding the renewable primary energy resources used as raw materials MJ/FU	5.90E+00	2.04E-02	2.85E+00	4.50E-02	1.82E+00	0.00E+00	9.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-04	2.50E-03	0.00E+00	7.92E-03	-6.39E-01
Use of renewable primary energy resources used as raw materials MJ/FU	9.82E-02	0.00E+00	4.29E+00	0.00E+00	-3.64E+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	0.00E+00	0.00E+00	0.00E+00	-6.03E-17
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials) MJ/FU	6.00E+00	2.04E-02	7.14E+00	4.50E-02	-1.81E+00	0.00E+00	9.92E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-04	2.50E-03	0.00E+00	7.92E-03	-6.39E-01
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials MJ/FU	5.21E+01	1.19E+00	2.61E+01	2.28E+00	1.52E+01	0.00E+00	-1.25E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	1.46E-01	0.00E+00	2.56E-01	-3.28E+00
Use of non-renewable primary energy resources used as raw materials MJ/FU	1.42E+01	0.00E+00	7.80E-01	0.00E+00	9.11E-01	0.00E+00	3.00E-02	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	0.00E+00
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials) MJ/FU	6.63E+01	1.19E+00	2.69E+01	2.28E+00	1.61E+01	0.00E+00	1.75E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E-03	1.46E-01	0.00E+00	2.56E-01	-3.28E+00
Use of secondary materials kg/FU	2.33E-01	0.00E+00	1.64E-01	0.00E+00	2.38E-02	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	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels MJ/FU	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels MJ/FU	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of fresh water resources m³/FU	4.16E-02	1.64E-04	8.92E-03	3.36E-04	1.02E-02	0.00E+00	2.29E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.02E-04	2.02E-05	0.00E+00	-4.90E-03	-8.75E-04

Waste categories	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Hazardous waste disposed kg/FU	1.84E-02	3.63E-05	2.44E-02	8.49E-05	3.71E-03	0.00E+00	4.83E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.78E-07	4.45E-06	0.00E+00	2.52E-05	-1.66E-04
Non-hazardous waste disposed kg/FU	5.02E+00	7.02E-02	4.83E-01	1.32E-01	7.81E-01	0.00E+00	7.93E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-05	8.62E-03	0.00E+00	1.09E+00	-3.18E-02
Radioactive waste disposed kg/FU	1.08E-04	3.82E-07	1.16E-04	8.80E-07	2.49E-05	0.00E+00	3.81E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.49E-09	4.69E-08	0.00E+00	9.96E-08	-2.19E-05

Output flows	Fabrication stage			Installation stage		Use stage							End of Life stage				D Benefits and impacts beyond the system limits
	A1 Raw material supply	A2 Transport	A3 Fabrication	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Use of energy	B7 Use of water	C1 Deconstruction/ demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Components for re-use kg/FU	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.87E-02	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	0.00E+00	0.00E+00	0.00E+00
Materials for recycling kg/FU	0.00E+00	0.00E+00	8.33E-03	0.00E+00	1.69E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery kg/FU	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy - Electricity MJ/FU	0.00E+00	0.00E+00	1.01E-01	0.00E+00	7.71E-02	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	0.00E+00	0.00E+00	0.00E+00
Exported energy - Vapor MJ/FU	0.00E+00	0.00E+00	2.06E-01	0.00E+00	1.62E-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	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy - Gas & Process MJ/FU	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	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Impact category/flow	Unit	Total Fabrication	Total Installation	Total Use	Total End of Life	Total Life Cycle	Benefits and impacts beyond the system limits
Climate change - total	kg CO2 eq/FU	4.97E+00	1.51E+00	1.33E-03	1.11E-01	6.60E+00	-1.26E-01
Climate change - fossil	kg CO2 eq/FU	5.41E+00	1.01E+00	1.09E-03	1.11E-01	6.54E+00	-1.25E-01
Climate change - biogenic	kg CO2 eq/FU	-4.51E-01	5.02E-01	3.06E-06	7.03E-06	5.16E-02	-5.74E-04
Climate change - land use and change	kg CO2 eq/FU	7.64E-03	1.01E-03	2.37E-04	5.67E-06	8.90E-03	-2.43E-04
Ozone depletion	kg CFC 11 eq/FU	7.54E-07	6.07E-08	2.53E-11	5.73E-10	8.15E-07	-4.16E-09
Acidification	mole of H+ eq/FU	3.52E-02	4.63E-03	5.85E-06	9.70E-05	3.99E-02	-2.87E-04
Eutrophication, freshwater	kg P eq/FU	2.23E-03	1.51E-04	1.34E-07	1.70E-07	2.39E-03	-3.53E-06
Eutrophication, marine	kg N eq/FU	8.40E-03	9.98E-04	4.58E-06	1.18E-04	9.52E-03	-7.54E-05
Eutrophication, terrestrial	mole of N eq/FU	1.06E-01	1.16E-02	1.49E-05	3.89E-04	1.18E-01	-7.21E-04
Photochemical ozone formation	kg NMVOC eq/FU	3.01E-02	4.68E-03	3.98E-06	1.86E-04	3.50E-02	-3.36E-04
Resource use, minerals and metals	kg Sb eq/FU	4.93E-02	2.96E-03	1.60E-08	6.02E-08	5.22E-02	-2.68E-07
Resource use, fossils	MJ/FU	9.44E+01	1.85E+01	1.72E-02	4.03E-01	1.13E+02	-3.29E+00
Water use	m³ world eq deprived/FU	2.33E+00	4.43E-01	7.59E-04	-4.35E-03	2.77E+00	-1.60E-02
Particulate matter	Disease incidence/FU	3.47E-07	5.68E-08	6.63E-11	2.52E-09	4.06E-07	-2.79E-09
Ionising radiation	kBq of U235 eq/FU	2.47E-01	3.16E-02	4.97E-05	2.45E-04	2.79E-01	-1.73E-02
Ecotoxicity, freshwater	CTUe/FU	1.04E+02	1.02E+01	2.63E-02	3.60E-01	1.15E+02	-1.65E+00
Human toxicity, cancer	CTUh/FU	4.17E-08	5.38E-09	6.75E-12	1.43E-10	4.72E-08	-5.35E-09
Human toxicity, non-cancer	CTUh/FU	2.09E-07	4.19E-08	2.41E-11	6.99E-10	2.52E-07	-6.46E-10
Land use	Dimensionless/FU	4.54E+01	6.01E+00	2.18E-02	7.10E-01	5.21E+01	-8.75E+00
Use of renewable primary energy excluding the renewable primary energy resources used as raw materials	MJ/FU	8.77E+00	1.87E+00	9.92E-03	1.12E-02	1.07E+01	-6.39E-01
Use of renewable primary energy resources used as raw materials	MJ/FU	4.39E+00	-3.64E+00	0.00E+00	0.00E+00	7.51E-01	-6.03E-17
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ/FU	1.32E+01	-1.77E+00	9.92E-03	1.12E-02	1.14E+01	-6.39E-01
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	MJ/FU	7.94E+01	1.75E+01	-1.25E-02	4.03E-01	9.73E+01	-3.28E+00
Use of non-renewable primary energy resources used as raw materials	MJ/FU	1.49E+01	9.11E-01	3.00E-02	0.00E+00	1.59E+01	0.00E+00
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ/FU	9.43E+01	1.84E+01	1.75E-02	4.03E-01	1.13E+02	-3.28E+00
Use of secondary materials	kg/FU	3.97E-01	2.38E-02	0.00E+00	0.00E+00	4.21E-01	0.00E+00
Use of renewable secondary fuels	MJ/FU	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels	MJ/FU	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of fresh water resources	m³/FU	5.07E-02	1.05E-02	2.29E-05	-4.37E-03	5.69E-02	-8.75E-04
Hazardous waste disposed	kg/FU	4.28E-02	3.80E-03	4.83E-06	3.00E-05	4.66E-02	-1.66E-04
Non-hazardous waste disposed	kg/FU	5.57E+00	9.13E-01	7.93E-04	1.10E+00	7.59E+00	-3.18E-02
Radioactive waste disposed	kg/FU	2.24E-04	2.58E-05	3.81E-08	1.56E-07	2.50E-04	-2.19E-05
Components for re-use	kg/FU	0.00E+00	4.87E-02	0.00E+00	0.00E+00	4.87E-02	0.00E+00
Materials for recycling	kg/FU	8.33E-03	1.69E-01	0.00E+00	0.00E+00	1.78E-01	0.00E+00
Materials for energy recovery	kg/FU	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Exported energy - Electricity	MJ/FU	1.01E-01	7.71E-02	0.00E+00	0.00E+00	1.78E-01	0.00E+00
Exported energy - Vapor	MJ/FU	2.06E-01	1.62E-01	0.00E+00	0.00E+00	3.68E-01	0.00E+00
Exported energy - Gas & Process	MJ/FU	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table compliant with the Order of October 20, 2022, amending the Order of December 14, 2021, regarding the environmental declaration of products intended for use in building works and the environmental declaration of products used for calculating the environmental performance of buildings.

7 Additional information on the release of hazardous substances into indoor air, soil and water during the period of use

Domain	Emissions type	Test results	Justification and/or test report
Emissions to indoor air ^{1 2}	VOC and formaldehyde emissions	VOC and formaldehyde emissions have been tested in accordance with the ISO 16000 standard. Total VOC emissions in the air: measurement at 28 days (series NF EN ISO 16000) <250 µg/m ³ Compliant with the A+ class of French regulatory labelling. Additionally, the PVC is phthalate-free.	Test report G11026
	Behavior regarding fungal and bacterial growth	<i>No fungal and bacterial growth tests have been conducted on the products. An antibacterial treatment in the mass can be carried out according to the specifications and the use of the space.</i>	
	Natural radioactive emissions from construction products	<i>Given the raw materials used, no radioactive emissions tests have been conducted on the products.</i>	
	Fiber and particle emissions	<i>No fiber and particle emissions tests have been conducted for the studied products.</i>	
Emissions to soil and water ^{1 2}	Emissions to water	<i>The products are neither in contact with drinking water, runoff water, nor soil. No tests have been conducted on the products.</i>	
	Emissions to soil		

1) Emissions in indoor air, soil and water according to horizontal standards for the measurement of emissions of regulated hazardous substances from construction products using harmonised test methods in accordance with the provisions of the respective technical committees of the European product standards, where available.

For more information, refer to the EEB Guide: <http://www.eebguide.eu/?p=1991>

2) Annex P of the INIES program regulation is used as a guide for drafting health and comfort information.

8 CONTRIBUTION OF THE PRODUCT TO THE QUALITY-OF-LIFE INSIDE BUILDINGS

Product characteristics that contribute to ensuring hygrothermal comfort in the building:

The product contributes to thermal comfort thanks to its thermal resistance due to the thickness and nature of its components: its thermal resistance of 0.08 m² K/W prevents cold walls and related condensation phenomena. It allows for faster heating of the space and a more homogeneous distribution of heat.

Source: Test report HO 05-060

Product characteristics that contribute to ensuring acoustic comfort in the building:

Thanks to its acoustic absorption performance of α_w 0.25, the Vinacoustic wall covering contributes to the acoustic compliance of public buildings (ERP) according to current regulations and standards (1), and favorably meets voluntary initiatives for acoustic comfort and performance, whether in the context of building renovations or new projects.

(1)

- Residential buildings - common areas: NRA – Orders of June 30, 1999
- Guides for acoustic measurements in residential buildings: August 2014 (Grenelle II Law / Acoustic certification – January 2013)
- Hotels - common areas: NRA – Orders of April 25, 2003
- Educational and healthcare establishments - common areas: NRA – Orders of April 25, 2003
- Educational and healthcare establishments - other rooms: Orders of April 25, 2003
- Offices and associated spaces: NF S 31-199 standard of March 2016
- Daycare centers: CNB (National Noise Council) Guide – June 2015 "Acoustic Quality of childcare facilities for children under 6 years old (Daycare centers, nurseries, kindergartens)"
- HQE approach: target No. 9 "acoustic comfort"

* Additionally, thanks to the significant mass of approximately 900g/m², the coating contributes to acoustic insulation on thin walls ($\alpha_w=0.25$)

Sources: Acoustic test report and report number A 3151-4F-RA-002 d.d. 16 march 2017

Product characteristics that contribute to ensuring visual comfort in the building:

PVC wall coverings enhance visual comfort in the building through various designs and by limiting the amount of light needed. The finishing lacquers and pearlescence in the finish, where present, help increase light reflection and thus increase the Light Reflectance Value (LRV)

The LRV is measured according to the recommendations of the BS 8493:2008 standard and varies from 85 to 6 depending on the color.

Source: Measurement of the brightness of wall coverings - Julie Boulenguez-Phippen (2014)

Product characteristics that contribute to ensuring olfactory comfort in the building:

The product does not claim an olfactory comfort feature.

9 ADDITIONAL INFORMATIONS

The manufacturing plant is ISO 14001 certified.

The wall covering is designed to withstand intensive use in public buildings (ERP) as it is resistant to impacts and scratches. Additionally, it requires very little maintenance.

It is made of phthalate-free PVC and contains 26% recycled materials to reduce environmental impacts.

Depending on the colors and the choice of the project management, it helps reduce environmental impact by decreasing the amount of light needed.

The waste rate is particularly low on the construction site due to its simple implementation protocol.

10 BIBLIOGRAPHY

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NF EN 15804+A2/CN:2022 - Contribution des ouvrages de construction au développement durable — Déclarations environnementales sur les produits — Règles régissant les catégories de produits de construction — Complément national à la NF EN 15804+A2

NF EN ISO 14040:2006 – Management environnemental – Analyse du cycle de vie – Principe et cadre

NF EN ISO 14044:2006 - Management environnemental – Analyse du cycle de vie – Exigences et lignes directrices

European Commission, PEFCR Guidance document - Guidance for the development of Product Environmental Footprint Category Rules (PEFCRs), version 6.3, December 2017.