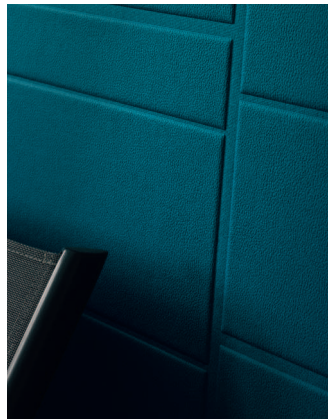


texdecor

ENVIRONMENTAL AND HEALTH PRODUCT DECLARATION

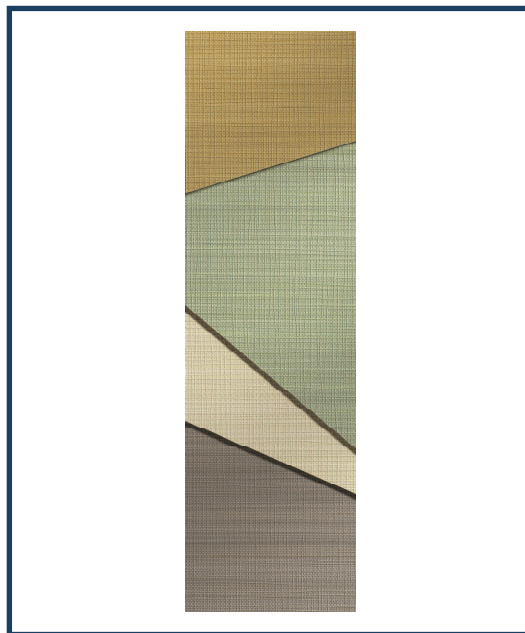
TEXDECOR VINACOUSTIC WALLCOVERING



ENVIRONMENTAL AND HEALTH PRODUCT DECLARATION

TEXDECOR VINACOUSTIC WALL COVERING

*Environmental product declaration in accordance with standards NF EN ISO 14025, NF EN 15804+A1
 And its national complement NF EN 15804/CN*



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French EPD generated with the Ev-DEC tool developed by EVEA.

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1. Reading guide

The display of inventory data complies with the requirements of NF EN 15804+A1. In the following tables 2.53E-06 should be read: 2.53x10⁻⁶ (scientific writing).

The units used are specified before each flow, they are:

- the kilogram « kg »,
- the gram « g »,
- the liter « l »,
- the kilowatt-hour « kWh »,
- the mega joule « MJ ».

Abbreviations:

- LCA: Life Cycle Analysis
- EPD: Environmental Product Declaration
- RSL: Reference Service Life
- FU: Functional Unit
- LCV: Lower Calorific Value

2. Warning notice

The information contained in this declaration is provided under the responsibility of KALÉI (producer of the French EPD) in accordance with NF EN 15804+A1, its national supplement NF EN 15804/CN.

Any use, in whole or in part, of the information provided in this document must at least be accompanied by a complete reference to the original French EPD and to its producer, who may submit a complete copy.

It is recalled that the results of the study are based only on facts, circumstances and assumptions that were submitted during the study. If these facts, circumstances and assumptions differ, the results may change.

In addition, the results of the study as a whole should be considered in the light of the hypotheses, and not in isolation.


Precautionary use of the French EPD for product comparison:

The French EPD of construction products may not be comparable if they do not comply with the NF EN 15804+A1 standard.

The standard NF EN 15804+A1 defines in § 5.3 *Comparability of EPD for construction products*, the conditions under which construction products can be compared, based on the information provided by the EPD: " *A comparison of the environmental performance of construction products using EPD information should be based on the use of the products and their impacts on the building, and should take into account the entire life cycle (all information modules).* "

This document is a framework adapted to the presentation of the environmental characteristics of building products in accordance with the requirements of the standard NF EN 15804+A1, its national complement NF EN 15804/CN and to the provision of comments and useful additional information in compliance with the spirit of this standard regarding sincerity and transparency.

3. General information

Name and address of declarant: KALÉI 3 rue de Liège 75009 Paris Contact name: Julie CHAMINADE	Commercial reference: VINACOUSTIC
Contact details: 3 rue de Liège 75009 Paris +33 (0)1 44 01 16 44 info@KALÉI-services.org	Publication date: September 2018 End of validity: September 2023
A data accompanying report of the declaration has been established and can be read, under confidentiality agreement, at the head office of KALÉI The information contained in this declaration is provided under the responsibility of KALÉI.	Type of french EPD: Individual French EPD from cradle to grave
Verification: The standard NF EN 15804+A1 of CEN is used as RCP. Independent verification of the declaration, in accordance with EN ISO 14025:2010: <input type="checkbox"/> interne <input checked="" type="checkbox"/> externe	Verification program: FDES-INIES Program http://www.inies.fr/ Association HQE 4, avenue du Recteur Poincaré 75016 PARIS FRANCE
Auditor's name: Anis GHOU MIDH, Engineeria	

4. Product Description And Functional Unit

4.1 Product description

The product considered in this French EPD is a PVC wall covering on a thick non-woven support with acoustic properties marketed by the company TEXDECOR. The product is in the form of a 1.30 m wide wall covering roll.

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

4.2 Functional unit (FU)

"To ensure the covering of a m² of wall with an acoustic wall covering in PVC on thick non-woven backing by ensuring the performances described in the standards NF EN 15102+A1 *and NF EN 233**."

*Standard NF EN 15102+A1: Decorative wall coverings - Rolls and panels

**NF EN 233: Wallcoverings in rolls - Specification of finished wallpapers, vinyl wallcoverings and plastic wallcoverings.

Product weight:

8.90 E-01 kg/FU

4.3 Product use / Application field

This product is used in a building as part of the wall cladding to meet a need for acoustic correction.

4.4 Technical characteristics

In accordance with the regulations, this product is classified M1 and C s3 d0 for fire resistance.

In accordance with the regulations, this product is classified aw 0.25 (E class).

4.5 Composition / REACH Substances

No substance in the product is included in the candidate list of substances of very high concern subject to authorization under the REACH regulation at more than 0.1%.

4.6 Manufacturing

TEXDECOR - www.texdecor.fr

2 rue de l'Hem, 59780 WILLEMS

4.7 Main components

This product is a mixture of PVC, plasticizer, mineral fillers, additives and a thick non-woven backing.

4.8 Additional products (sold with the product)

N/A

4.9 Packaging

The wall coverings are wrapped around a cardboard core. They are then placed on pallets, wrapped and strapped.

Plastic: 3.56E-03 kg/m²


Wood pallet: 1.16E-01 kg/m²

Cardboard paper: 1.96E-01 kg/m²

4.10 Reference service life

Parameter	Unit	Value
Reference service life	Years	1.00E+1
Declared properties of the product at the exit of the factory	-	The product is in conformity with the standards NF EN 15102+A1 and NF EN 233.
Theoretical application parameters	-	These data are described in the product data sheet and in the DOP.
Presumed quality of work	-	The quality of the work is presumed to be in accordance with UTD 59.4 - Building works - Implementation of wallpapers and wall coverings.
Outdoor environment	-	The product is not in contact with the outdoor environment.
Indoor environment	-	These data are described in the technical data sheets of the product.
Use conditions	-	The conditions of use are assumed to be in accordance with the manufacturer's recommendations. (See product Data Sheet)
Maintenance	-	A maintenance scenario has been defined in accordance with the manufacturer's recommendations.

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

Indoor Emissions ¹²	Air	VOC and formaldehyde emissions	<p>Test results</p> <p>VOC and formaldehyde emissions were tested in accordance with the standard ISO 16000.</p> <p>TVOC emissions in the air: measurement at 28 days (NF EN ISO 16000 series) <250 µg/m³ - Complies with class A+ of the French regulatory labeling.</p> 	<p>Justification and/or test report</p> <p>Report G11026</p>
		Behavior towards fungal and bacterial growth	No fungal or bacterial growth tests have been performed on the products. Antibacterial treatment in the mass can be done according to the specifications and the use of the space.	
		Natural radioactive emissions from building products	No radioactive emission tests have been performed on the products.	
		Fibre and particle emissions	No fiber or particle emission tests have been performed on the products studied.	
Soil and water emission ¹²	Water emissions	The products are not in contact with drinking water or runoff. No tests have been performed on the products.		

	Soil emissions	The products are not in contact with soil. No tests have been performed on the products.	
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1) Emissions to indoor air, soil and water according to horizontal standards for the measurement of regulated hazardous substances emissions, from construction products using harmonized test methods, in accordance with the provisions of the respective Technical Committees of European Product Standards, where available.

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

2) In France the technical committee INIES Base (CTIB) gives recommendations on the declaration of sanitary and comfort characteristics – Writing guide of health and comfort summaries (CTIB N94, 2009)

4.12 Contribution of the product to the life quality inside buildings

Characteristics of the product participating in the creation of hygrothermal comfort conditions in the building :

The product participates in the hygrothermal comfort thanks to its thermal resistance due to the thickness and the nature of its components: its thermal resistance of 0.08 m² K/W avoids the cold walls and the condensation phenomena related. It allows a faster temperature setting of the space and a more homogeneous distribution of the heat.

Source: report HO 05-060

Product characteristics contributing to the creation of acoustic comfort conditions in the building:

Thanks to its sound absorption performance α_w 0.25, the Vinacoustic coating contributes to the acoustic compliance of ERP according to the regulations and standards in force (1), and also responds favorably to voluntary approaches to comfort and acoustic performance, whether in the context of building renovation or new projects.

(1)

Residential buildings - common circulations: NRA - Orders of June 30, 1999

- Guides to acoustic measurements in residential buildings: August 2014
- (Grenelle II Law / Acoustic certificate - January 2013)
- Hotels - common circulations: NRA - Orders of April 25, 2003
- Educational and health establishments - common circulations: NRA - Orders of 25 April 2003
- Educational and health establishments - other premises: Orders of 25 April 2003
- Offices and associated spaces: standard NF S 31-199 of March 2016
- Day Nurseries : Guide of the National Noise Council - June 2015 "Acoustic Quality of establishments for children under 6 years of age (day nurseries, drop-in daycare centers, kindergartens)".
- HQE approach: target N°9 "acoustic comfort"

* Moreover, thanks to the high added mass of +/- 900g/m², the coating contributes to the acoustic insulation on thin walls

Source: SIM 202 G 05

Product characteristics contributing to the creation of visual comfort conditions in the building:

PVC wall coverings improve visual comfort in the building through different decors and by limiting the light needed amount of. The finishing lacquers and pearlscence of the finishing aspect on the ranges where they are present make it possible to increase the reflection of the light and thus, to increase the LRV (Light reflectance value). The LRV is measured according to the recommendations of BS 8493:2008 and varies from 85 to 6 depending on the color.

Source : Measuring the clarity of wall coverings - Julie Boulenguez-Phippen (2014)

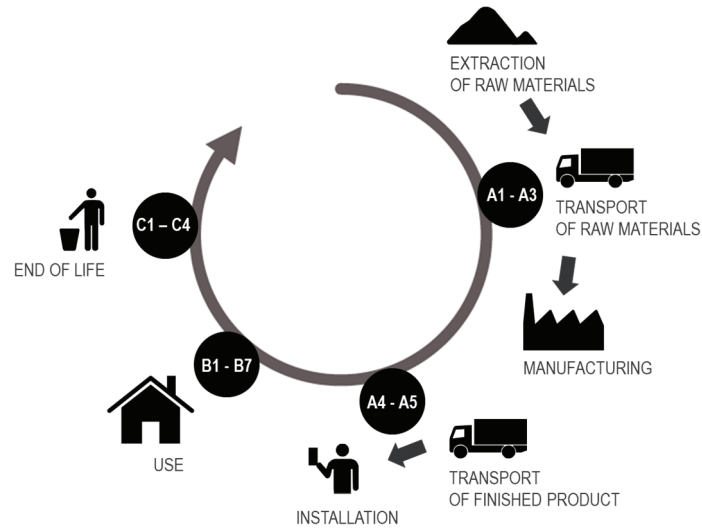
Product Characteristics involved in creating the olfactory comfort conditions in the building:

The products do not claim any olfactory comfort performance. No tests have been conducted.

5. General informations for the Life Cycle Assessment (LCA)

5.1 System boundaries



System boundaries respect the limits imposed by the standard NF EN 15804+A1 and its national complement NF EN 15804/CN.



5.2 Geographical and temporal representativeness of primary and secondary data

Generic data come from the database Ecoinvent v3.4 « Alloc Rec »

5.3 Used software

	SimaPro, life cycle assessment software (V8). (www.simapro.com/)
	Ev-DEC, (www.ev-dec.com), developed by the consulting firm EVEA (www.evea-conseil.com), which help to realize the French EPD.

5.4 Allocation

The allocation has been made by each manufacturer.

5.5 Variability of the results

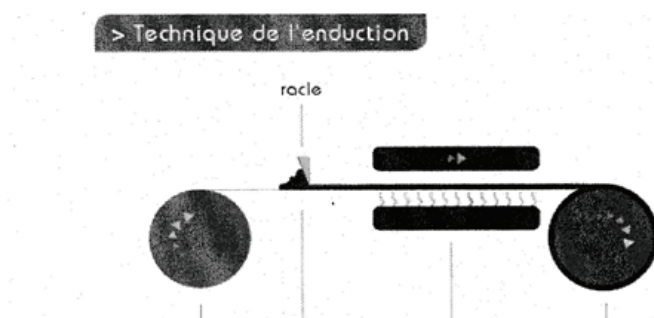
Not applicable to an individual French EPD.

6. LCA calculation: scenarios and technical information specific to the product

6.1 A1-A3 Manufacturing:

The steps from A1 to A3 include all the processes from raw material extraction to factory transformation. The process is a coating process which consists to drop off PVC on a support in successive layers.

Production diagram:



6.2 A4 Transport between factory and construction site:

The distance between the manufacturing factory and the various construction sites was averaged and weighted according to sales volumes.

Parameter	Unit	Value
Type of combustible and vehicle consumption or vehicle type	-	Considered vehicles are Euro 4 type trucks with a payload of 16-32 ton.
Distance to the construction site	km	6.00E+02
Use capacity	%	3.60E+01
Density of the transported product	kg/m ³	1.60E+01
Volume capacity utilization coefficient	%	-

6.3 A5 Product installation:

The products are glued on the walls by hand. A washing of the coating at the end of the installation is carried out to remove all traces of residual glue.

Parameter	Value
Product losses	6 %
Auxiliary inputs for the installation (specify by material)	Vinyl glue: 2 E-01 kg/m ² Water: 5 E-02 L/m ² Maintenance product: diluted in water at 1%
Water consumption	5.00 E-5 kg/m ²
Use of other resources	
Consumption and type of energy	
Waste generated at the construction site before the waste treatment generated by the product installation	Loss rate: 6% of the installed surface
Direct emissions into ambient air, soil and water	No emissions could be recorded/surveyed.

6.4 B1– B7 Product use

B1 Use:

The product does not interfere with the environment during its use

Parameter	Value/description
Emissions (air, water)	-

B2 Maintenance (if applicable):

A maintenance scenario has been defined by the manufacturer. The maintenance of the PVC wall coverings consists of 1 cleaning every 5 years (water + maintenance product).

Parameter	Value/description
Maintenance frequency	1 time/5 years
Auxiliary inputs for maintenance	Water: 5 E-02 L/m ² Maintenance product: diluted in water at 1%
Waste produced during maintenance (specify materials)	-
Net consumption of fresh water	5.00E-5
Energy input during maintenance	-

B3 Repairs (if applicable):

No repairs are required during the reference lifetime

Parameter	Value
Inspection process	-
Repair frequency	-
Auxiliary inputs (specify materials)	-
Waste generated during repair (specify materials)	-
Net consumption of fresh water	-
Consumption and type of energy	-

B4 Replacement (if applicable):

No replacement is required during the reference lifetime

Parameter	Value
Replacement frequency	-
Consumption and type of energy	-
Quantity of worn part replaced	-

B5 Rehabilitation (if applicable):

No rehabilitation is required during the reference lifetime

Parameter	Value/description
Rehabilitation frequency	-
Quantity of material required	-
Waste generated during rehabilitation	-
Consumption and type of energy	-
Other hypotheses for scenario development	-

B6 – B7 Use of energy and water (if applicable):

The product does not consume water nor energy during the reference lifetime

Parameter	Value
Auxiliary inputs specified by material	-
Net consumption of fresh water	-
Type of energy	-
Equipment power output	-
Typical performance	-

Other hypotheses for scenario development

-

C1 – C4 End of life:

The products are pulled by hand and buried.

Parameter	Unit	Value
Quantity separately collected	kg/UF	
Quantity collected with mixed construction waste	kg/UF	1.09E+00
Quantity for reuse	kg/UF	
Quantity for recycling	kg/UF	
Quantity for energy recovery	kg/UF	
Quantity of disposed product	kg/UF	1.09E+00

6.5 D Potential of recycling/reuse/recovery

7. Life Cycle Assessment results

Environmental impacts / flows	Unit	Production stage	Constructi on stage	Use stage	End of life stage	Total
Global Warming	kg CO ₂ eq/UF	6.14E+0	6.55E-1	2.28E-3	4.16E-2	6.84E+0
Ozone Depletion	kg CFC 11 eq/UF	4.79E-7	7.46E-8	2.16E-10	3.73E-9	5.57E-7
Acidification of soil and water	kg SO ₂ eq/UF	3.10E-2	3.07E-3	1.19E-5	1.15E-4	3.42E-2
Eutrophication	kg (PO ₄) ³⁻ eq/UF	2.74E-2	2.05E-3	4.70E-6	5.24E-4	3.00E-2
Photochemical ozone creation	Ethene eq/UF	8.07E-3	8.17E-4	2.22E-6	1.28E-4	9.02E-3
Depletion of abiotic resources -elements	kg Sb eq/UF	7.40E-2	4.44E-3	1.18E-8	3.46E-8	7.84E-2
Depletion of abiotic resources -fossil	MJ PCI/UF	9.73E+1	1.18E+1	4.82E-2	2.92E-1	1.09E+2
Water pollution	m ³ /UF	9.28E+0	7.45E-1	8.06E-3	7.59E-2	1.01E+1
Air pollution	m ³ /UF	2.10E+3	1.61E+2	2.97E-1	3.40E+0	2.27E+3
Renewable primary energy excl. RM	MJ PCI/UF	7.78E+1	4.86E+0	1.16E-2	2.56E-2	8.27E+1
Renewable primary energy used as RM	MJ PCI/UF	2.94E+0	1.76E-1	0.00E+0	0.00E+0	3.11E+0
Total renewable primary energy	MJ PCI/UF	8.07E+1	5.03E+0	1.16E-2	2.56E-2	8.58E+1
Non-renewable primary energy excl. RM	MJ PCI/UF	9.96E+1	1.01E+1	2.43E-2	3.52E-1	1.10E+2
Non-renewable primary energy used as RM	MJ PCI/UF	2.16E+1	3.48E+0	2.66E-2	0.00E+0	2.51E+1
Total Non-renewable primary energy	MJ PCI/UF	1.21E+2	1.36E+1	5.09E-2	3.52E-1	1.35E+2
Use of secondary material	kg/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Use of renewable secondary fuels	MJ PCI/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Use of Non-renewable secondary fuels	MJ PCI/UF	1.53E-1	9.18E-3	0.00E+0	0.00E+0	1.62E-1
Net use of fresh water	m ³ /UF	1.41E-1	1.30E-2	1.00E-4	3.37E-4	1.55E-1
Hazardous waste disposed	kg/UF	3.01E-1	2.35E-2	1.04E-4	1.09E-3	3.26E-1
Non-hazardous waste disposed	kg/UF	9.67E+0	1.06E+0	1.03E-3	8.96E-1	1.16E+1
Radioactive waste disposed	kg/UF	3.53E-4	4.68E-5	5.57E-8	2.64E-6	4.03E-4
Components for re-use	kg/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Materials for recycling	kg/UF	2.23E-3	1.34E-4	0.00E+0	0.00E+0	2.36E-3
Materials for energy recovery	kg/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Exported energy (electricity)	MJ/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Exported energy (steam)	MJ/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
Exported energy (process gas)	MJ/UF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

Environmental impacts	Production stage			Construction stage		Use stage							End of life stage				D Profits and costs beyond the system's borders	
	A1 Raw material supply	A2 Transport	A3 Manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Rehabilitation	B6 Use of energy	B7 Water consumption	C1 Deconstruction/demolition	C2 Transport	C3 Waste treatment	C4 Elimination		
Global Warming kg CO ₂ eq/FU	3.63E+0	6.50E-2	2.45E+0	1.23E-1	5.32E-1	0.00E+0	2.28E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.39E-3	0.00E+0	0.00E+0	3.62E-2	MNA
Ozone Depletion kg CFC 11 eq/FU	1.35E-7	1.22E-8	3.31E-7	2.26E-8	5.20E-8	0.00E+0	2.16E-10	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.01E-9	0.00E+0	0.00E+0	2.72E-9	MNA
Acidification of soil and water kg SO ₂ eq/FU	2.42E-2	2.53E-4	6.57E-3	4.86E-4	2.58E-3	0.00E+0	1.19E-5	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	2.10E-5	0.00E+0	0.00E+0	9.39E-5	MNA
Eutrophication kg (PO ₄) ³⁻ eq/FU	2.60E-2	4.56E-5	1.40E-3	8.58E-5	1.96E-3	0.00E+0	4.70E-6	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.78E-6	0.00E+0	0.00E+0	5.20E-4	MNA
Photochemical ozone creation Ethene eq/FU	3.48E-3	3.64E-5	4.55E-3	6.88E-5	7.49E-4	0.00E+0	2.22E-6	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	3.02E-6	0.00E+0	0.00E+0	1.25E-4	MNA
Depletion of abiotic resources -elements kg Sb eq/FU	7.35E-2	2.04E-7	4.81E-4	3.79E-7	4.44E-3	0.00E+0	1.18E-8	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.69E-8	0.00E+0	0.00E+0	1.77E-8	MNA
Depletion of abiotic resources -fossil MJ PCI/FU	5.97E+1	9.88E-1	3.65E+1	1.86E+0	9.90E+0	0.00E+0	4.82E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.19E-2	0.00E+0	0.00E+0	2.10E-1	MNA
Water pollution m ³ /FU	7.73E+0	2.33E-2	1.53E+0	4.43E-2	7.01E-1	0.00E+0	8.06E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.93E-3	0.00E+0	0.00E+0	7.40E-2	MNA
Air pollution m ³ /FU	1.78E+3	7.04E+0	3.17E+2	1.34E+1	1.47E+2	0.00E+0	2.97E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.84E-1	0.00E+0	0.00E+0	2.81E+0	MNA

Use of resources	Production stage			Construction stage		Use stage								End of life stage				D Profits and costs beyond the system's borders
	A1 Raw material supply	A2 Transport	A3 Manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Rehabilitation	B6 Use of energy	B7 Water consumption	C1 Deconstruction /demolition	C2 Transport	C3 Waste treatment	C4 Elimination		
Renewable primary energy excl. RM MJ PCI/FU	7.91E+0	1.47E-2	6.99E+1	2.40E-2	4.83E+0	0.00E+0	1.16E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.22E-3	0.00E+0	2.43E-2	MNA	
Renewable primary energy used as RM MJ PCI/FU	0.00E+0	0.00E+0	2.94E+0	0.00E+0	1.76E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA	
Total renewable primary energy MJ PCI/FU	7.91E+0	1.47E-2	7.28E+1	2.40E-2	5.01E+0	0.00E+0	1.16E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.22E-3	0.00E+0	2.43E-2	MNA	
Non-renewable primary energy excl. RM MJ PCI/FU	4.64E+1	1.01E+0	5.21E+1	1.89E+0	8.20E+0	0.00E+0	2.43E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.39E-2	0.00E+0	2.68E-1	MNA	
Non-renewable primary energy used as RM MJ PCI/FU	2.13E+1	0.00E+0	2.80E-1	0.00E+0	3.48E+0	0.00E+0	2.66E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA	
Total Non-renewable primary energy MJ PCI/FU	6.77E+1	1.01E+0	5.24E+1	1.89E+0	1.17E+1	0.00E+0	5.09E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	8.38E-2	0.00E+0	2.68E-1	MNA	
Use of secondary material kg/FU	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA	
Use of renewable secondary fuels MJ PCI/FU	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA	
Use of Non-renewable secondary fuels MJ PCI/FU	0.00E+0	0.00E+0	1.53E-1	0.00E+0	9.18E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA	
Net use of fresh water m³/FU	1.25E-1	1.90E-4	1.65E-2	3.41E-4	1.27E-2	0.00E+0	1.00E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	1.58E-5	0.00E+0	3.21E-4	MNA	

Waste category	Production stage			Construction stage		Use stage							End of life stage				D Profits and costs beyond the system's borders
	A1 Raw material supply	A2 Transport	A3 Manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Rehabilitation	B6 Use of energy	B7 Water consumption	C1 Deconstruction/demolition	C2 Transport	C3 Waste treatment	C4 Elimination	
Hazardous waste disposed kg/FU	2.40E-1	5.96E-4	6.06E-2	1.19E-3	2.23E-2	0.00E+0	1.04E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.95E-5	0.00E+0	1.04E-3	MNA
Non-hazardous waste disposed kg/FU	7.82E+0	5.26E-2	1.80E+0	9.97E-2	9.57E-1	0.00E+0	1.03E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	4.37E-3	0.00E+0	8.92E-1	MNA
Radioactive waste disposed kg/FU	8.25E-5	6.94E-6	2.64E-4	1.27E-5	3.40E-5	0.00E+0	5.57E-8	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.76E-7	0.00E+0	2.06E-6	MNA

Outflows	Production stage			Construction stage		Use stage							End of life stage				D Profits and costs beyond the system's borders
	A1 Raw material supply	A2 Transport	A3 Manufacturing	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Rehabilitation	B6 Use of energy	B7 Water consumption	C1 Destruction/demo lition	C2 Transport	C3 Waste treatment	C4 Elimination	
Components for re-use kg/FU	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA
Materials for recycling kg/FU	0.00E+0	0.00E+0	2.23E-3	0.00E+0	1.34E-4	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA
Materials for energy recovery kg/FU	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA
Exported energy – Electricity MJ/JUF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA
Exported energy – Heat MJ/JUF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA
Exported energy – Process gas MJ/JUF	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	MNA

8. Positive environmental contribution

The manufacturing plant is certified ISO 14001. Production waste are recycled internally.

The covering has the Oekotex std 100 label.

Due to its excellent strength, the acoustic cladding is designed to withstand intensive use in ERP. It lasts longer than most other comparable wall solutions and requires very little maintenance.

Depending on the colors and the choice of the contractor, it reduces the environmental impact by reducing the amount of light needed.

The rate of fall is particularly low on the building site because of its simple implementation protocol.