





ENVIRONMENTAL PRODUCT DECLARATION In accordance with EN 15804 and ISO 14025

Ecophon Akusto[™] Wall C Extra Bass



Programme: The International EPD® System, www.environdec.com Programme operator: EPD International AB Version: 1.0 Registration number: S-P-05115

Date of publication (issue): 09/12/2021 Date of revision: 07/03/2022 Date of validity: 09/12/2026 In accordance with ISO 14025, ISO 21930 and EN 15804





Summary Environmental product declaration

Verified by (external third-party	Martin Erlandsson, IVL Swedish Environmental Research Institute
verifier)	
Programme used	The International EPD System. For more information see www.environdec.com
Registration No	S-P-05115
Owners declaration by	Saint-Gobain Ecophon AB Box 500 265 03 Hyllinge Sweden
Declaration as construction products	The products to be verified herein are acoustic glass wool wall panels made for sound absorbing solutions.
	The present environmental product declaration complies with standard ISO 14025 and describes the environmental impact. Its purpose is to promote compatible and sustainable environmental development of related constructio methods.
	Reference PCR document: EN 15804 as the core PCR + International EPD System Product Category Rules - PCR for constructions products and construction services, Acoustical systems solutions (sub-oriented PCR; appendix to PCR 2012:01) - previously Acoustic ceilings. EPD of construction products may not be comparable if they do not comply with EN 15804.
Validity	09/12/2026
Content of the declaration	This is an environmental product declaration containing environmental information of the product in the Ecophon family Akusto Wall C Extra Bass (association of an Akusto Wall C panel and an additional absorber). The values presented in this EPD are represented for the following products: Akusto wall C Extra Bass/Texona, Akusto wall C Extra Bass/Akutext FT
1 1 1 .	Supplemental product information can be found at www.ecophon.com
Issued date	09/12/2021

Product responsible:

Human

Thomas Roul Product Engineering & Development Manager Saint-Gobain Ecophon AB

Independent third party verifier:

V HEAN PURNISSON

Martin Erlandsson LCA Business Development Manager IVL

Product description

Product description and description of use:

This Environmental Product Declaration (EPD) describes the environmental impact of 1 m^2 of acoustic wall panel with the intended use to increase sound absorption in a room to create a better indoor environment.

This Environmental Product Declaration (EPD) are valid for products produced in Ecophon production plant in Sweden with a high-quality glass wool in different densities and thicknesses. The glass wool is covered with a painted or woven surface layer and cut into panels of different sizes and edge designs. The edges are painted and the panels are packed in cardboard boxes.

The structure of glass wool gives the material excellent sound energy absorption properties. Sound absorption is the main function of acoustic glass wool panels. The panels are also light, stable, and easy to handle and cut.

Acoustic glass wool panels are commonly used in schools, offices, health care facilities and production premises where there is a need for noise reduction to improve the working environment. The decrease in reverberation time, sound pressure level and other acoustic parameters are related to the amount of panels used in the room as well as the placement of the panels. The acoustic panels need no maintenance and do not age. They can last as long as the building itself. For aesthetic reasons, normal room surface cleaning is advised.

Description of the main product components and materials for 1 m² of product:

Parameter	Value (Weight in %)	Post-consumer recycled content
Product thickness	80 mm	
Glass wool	88%-90%	70%
Waterborne paint	3%-4%	•
Glass tissue	6%-7%	
Waterborne glue	1%-2%	•
Plastic wrapping	85 g	

Total weights							
	Akusto wall C Extra	Akusto wall C Extra					
Product	Bass/Texona	Bass/Akutext FT					
Total weight [kg/m²]	5.7	5.6					

All raw materials contributing more than 5% to any environmental impact are listed in the table above. The panels are free from substances of very high concern (SVHC). The product contains no substances from the REACH Candidate list (of 13.07.2021).

If there in future occur production changes that generate an increased impact larger than 10% the EPD will be updated and re-verified.

Other environmental indicators

Regarding the indoor environment, the Akusto Wall C Extra Bass products are certified for or fulfil regulations according to the following table:

Certificate and Regulations	
Finnish M1	
Eurofins Indoor Air Comfort®	
French VOC A	

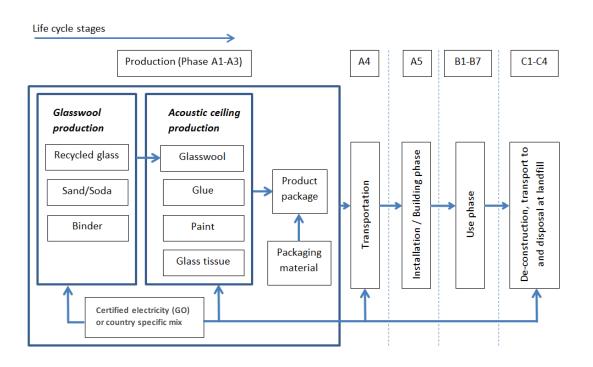
LCA calculation information

Declared unit	1 m² of acoustic wall panel.
Functional unit	1 m ² acoustic panels with sound absorption class A installed at an ODS of 200mm according to ISO 354.
System boundaries	Cradle to grave: Mandatory stages = A1-3, A4-5, B1-7, C1-4 and optional stage = D This EPD covers the environmental impact of acoustic panels without grid or suspension system.
Reference Service Life (RSL)	50 years
Cut-off rules	The use of cut-off criterion on mass inputs and primary energy at the unit process level (1%) and at the information module level (5%). Flows related to human activities such as employee transport are excluded. Biogenic carbon has not been included in calculations. The construction of plants, production of machines and transportation systems are excluded since the related flows are supposed to be negligible compared to the production of the
Allocations	building product when compared at these systems lifetime level. Allocation criteria are based on mass.
Geographical coverage and time period	For A1-A3: Global For A4 : European covering (2019)

According to EN 15804, EPD of construction products might not be comparable if they do not comply with this standard. According to ISO 21930, EPD's might not be comparable if they are from different EPD administrating schemes.

Life Cycle stages

Flow diagram of the Life Cycle





Product stage, A1-A3

Description of the stage:

The product stage of the glass wool products is divided into 3 modules: A1 "Raw material and supply", A2 "Transport to the manufacturer" and A3 "Manufacturer". The aggregation of the modules A1, A2 and A3 is a possibility considered by the EN 15 804 standard. This rule is applied in this EPD.

A1 Raw material supply

This module takes into account the extraction and processing of all raw materials and energy which occur upstream to the studied manufacturing process.

Specifically, the glass wool raw material supply covers production of the binder components and sourcing (quarry) of raw materials for fibre production, e.g. sand and borax. Besides these raw materials, recycled materials (glass cullet) are also used as input. Other major raw materials are paint, glass tissue and glue which also are included in the calculation. All electricity is taken account for in (GOs) or at least country specific mix. Production of packaging materials is also covered.

A2 Transport to the manufacturer

The raw materials are transported to the manufacturing site. In our case, the modelling includes: road, boat or train transportations (average values) of each raw material.

A3 Manufacturing

The manufacturing includes two steps; glass wool production and glass wool panel production. The glass wool panels are produced in a continuous online process starting with applying glass tissue on the glass wool baseboard. The panels are cut into correct size and the edges of the panels are painted. After drying the panels are packed in cardboard boxes.

Manufacturing covers all processes linked to production, which comprises various related operations besides on-site activities such as grinding, painting and drying, packaging and internal transportation. The manufacturing process also yields data on the combustion of refinery products, such as natural gas, diesel and gasoline, related to the production process.

The environmental profile of these energy carriers is modelled for local conditions. Packaging-related flows in the production process and all up-stream packaging are included in the manufacturing module, i.e. wooden pallets, cardboard and PE-film. Apart from production of packaging material, the supply and transport of packaging material are also considered in the LCA model. They are reported and allocated to the module where the packaging is applied. Data on packaging waste created during this step is then generated. It is assumed that packaging waste generated in the course of production and up-stream processes is 100% collected and either recycled or incinerated with energy recovery, related to material and quality, in ratios according to the local material handling companies.

The glass wool raw material is supplied from three different external locations to all four Ecophon production sites. A representative electricity mix for glass wool production in each country of origin was used.

Construction process stage, A4-A5

Description of the stage:

The construction process is divided into 2 modules: A4 "Transport to the building site" and A5 "Installation in the building.

Description of scenarios and additional technical information:

A4 Transport to the building site

This module includes transport from the production gate to the building site. Transport is calculated on the basis of a scenario with the parameters described in the following table.

Parameter	Value				
Fuel type, consumption of fuel and vehicle or vehicle type	Average truck trailer with a 24t payload, diesel consumption 31.7				
used for transport	litres for 100 km				
Distance	475 km (based on transports in 2019)				
Capacity utilisation (including empty returns)	90% of the capacity in volume				
Capacity units and including empty leitins	100% of empty returns				
Bulk density of transported products (if available)	54 - 98 kg/m³				
Volume capacity utilisation factor (if available)	0.45				

The transport distance has been calculated from a European average transport for Ecophon in 2019 from the parameters in the table above.

A5:1 Installation in the building

This module includes waste of products during the implementation, i.e. the additional production processes to compensate the loss and the waste processing which occur in this stage.

Parameter	Value
Waste of materials on the building site before waste processing, generated by the product's installation	5%
Output materials (specified by type) as results of waste processing at the building site e.g. of collection for recycling,	Packaging waste is 100% collected and modelled as material for recycling
for energy recovering, disposal	Ceiling panel losses are landfilled

Scenarios used for quantity of product wastage and waste processing are:

A5:2 Energy usage

As a general figure the time to install 1 m² ceiling is considered to be 20 minutes. During this time the installer is considered to use handheld appliances for about 5% of this time which in this case results in 1 minute. A handheld device such as a cordless screwdriver is considered to have a power of 0.7 kilowatt. Therefore, in one minute it will consume a total energy of 0.7*60 = 4.2 kilojoule = 0.0042 MJ, per m² ceiling. In this context it is a negligible contribution and will not be part of the LCA calculation (lower than 0.1% of the total energy consumption).

Use stage (excluding potential savings), B1-B7

Description of the stage:

The use stage is divided into 7 modules, B1 "Use", B2 "Maintenance", B3 "Repair", B4 "Replacement", B5 "Refurbishment", B6 "Operational energy use", B7 "Operational water use"

Description of scenarios and additional technical information:

Once installation is complete, no actions or technical operations are required during the use stages until the end of life stage. Therefore, acoustic ceiling panels have no impact (excluding potential energy savings) on this stage.

End-of-life stage C1-C4

Description of the stage:

The end-of life stage is divided into 4 modules; C1 "De-construction, demolition", C2 "Transport to waste processing", C3 "Waste processing for reuse, recovery and/or recycling", C4 "Disposal".

Description of scenarios and additional technical information:

C1, De-construction, demolition

The dismantling of acoustic ceiling panels takes part during renovation or demolition of the building. In this case, the environmental impact is assumed to be very small and can be neglected.

C2, Transport to waste processing

The model for transportation (see A4, Transportation to the building site) is applied.

C3, Waste processing for reuse, recovery and/or recycling;

The product is considered to be landfilled without reuse, recovery or recycling.

C4, Disposal;

The product is assumed to be 100% landfilled.

Parameter	Value/description					
Collection process specified by type	5600g-5700g of acoustic ceiling (collected with mixed construction waste)					
Recovery system specified by type	No reuse, recycling or energy recovery					
Disposal specified by type	5600g-5700 g of acoustic ceiling will go to landfill					
Assumptions for scenario development (e.g. transportation)	Average truck trailer with a 24t payload, diesel consumption 31.7 litres for 100 km 50 km (distance to landfill)					

Reuse/recovery/recycling potential, D

Not declared.

LCA results

LCA model, aggregation of data and environmental impact are calculated through the GaBi Professional software. Secondary data is mainly taken from Ecoinvent 3.6 with some GaBi datasets.

Raw materials and energy consumption, as well as transport distances have been taken directly from the manufacturing plants of Saint-Gobain Ecophon in 2019.

Modules declared, geographical scope, share of specific data, and variation between sites (last two percentages given in GWP indicator) are stated in the following table. For stages A1-A3 (largest contribution to total GWP), the raw materials are modelled with very low amount of generic data – over 83% of the GWP comes from specific data.

The GWP indicator does not account for the emission or uptake of biogenic carbon dioxide in the product.

	Pro	duct ph	nase	Constr process		Use phase				Use phase End of life phase			se	Resou rce recov ery phase			
Module	Z Raw material and supply	B Transport to the manufacturer	& Manufacturing	R Transport to the building site	5 Installation in the building	es B1	Raintenance	E Repair	Replacement	G Refurbishment	& Operational energy use	Z Operational water use	De-construction demolition	C Transport to waste processing	B Waste processing	Disposal	 Reuse-Recovery-Recycling-potential
Modules declared	Х	Х	Х	Х	Х	×	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	MND
Geography	SE, NR, FR, DK, PL, DE, GB, EU, GLO	SE, NR, FR, DK, PL, B, U, O FR, GB, EU, GLO	SE, DK, PL, FI	GB, EU, GLO	EU, GLO								GB, EU, GLO	GB, EU, GLO	GB, EU, GLO	GB, EU, GLO	-
Specific data		> 83%								-							-
Variation sites										-							-

Summary of the LCA results are detailed in the tables below.

All results in the EPD are written in logarithmic base of ten. Reading example: $5.2E \cdot 0.03 = 5.2 \times 10^3 = 0,0052$.

MND (module not declared), is equal to MNA (module not assessed).

Environmental impact.

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Enviro	nmental im		
eters		Akusto wall C Extra Bass/Texona	Akusto wall C Extr Bass/Akutext FT
	A1-A3 A4	9.34E+00	9.03E+00
	A4 A5	2.52E-01 6.81E-01	2.37E-01 6.51E-01
	B1-B7	0.00E+00	0.00E+00
	C1	0.00E+00	0.00E+00
	C2	2.27E-02	2.25E-02
	C3	0.00E+00	0.00E+00
Global Warming Potential	C4	4.52E-01	4.16E-01
(GWP) - kg CO ₂ equiv/FU	D	MND	MND
	Total AC	1.08E+01 The global warm	1.04E+01
		gas refers to the to	
		global warming r	esulting from the
		emission of one	
		relative to one uni gas, carbon dia	
		assigned a	
	A1-A3	1.02E-06	9.78E-07
	A4	5.74E-17	5.39E-17
	A5	5.11E-08	4.89E-08
	B1-B7 C1	0.00E+00	0.00E+00
	C2	0.00E+00 5.17E-18	0.00E+00 5.12E-18
	C3	0.00E+00	0.00E+00
Dzone Depletion (ODP) kg	C4	-1.52E-16	-1.00E-16
CFC 11 equiv/FU	D	MND	MND
	Total AC	1.07E-06	1.03E-06
		Destruction of the strat which shields the ea	irth from ultraviolet
		radiation harmful to li	fe. This destruction (
		ozone is caused by the chlorine and/or br	omine containing
		compounds (chlore halogens), which bre	ofluorocarbons or
	A1-A3	5.00E-02	4.77E-02
	A4	3.41E-04	3.20E-04
	A5	2.58E-03	2.45E-03
	B1-B7	0.00E+00	0.00E+00
	C1	0.00E+00	0.00E+00
	C2	3.07E-05	3.04E-05
Acidification potential (AP)	C3 C4	0.00E+00 5.28E-04	0.00E+00 5.19E-04
kg SO ₂ equiv/FU	D	5.28E-04 MND	5.19E-04 MND
	Total AC	5.35E-02	5.10E-02
		Acid depositions have	
		on natural ecosyst made environment	
		main sources fo	
		acidifying substant	ces are agriculture
	A1-A3	1.64E-02	1.57E-02
	A4	7.21E-05	6.77E-05
	A5	1.09E-03	1.04E-03
	B1-B7	0.00E+00	0.00E+00
	C1	0.00E+00	0.00E+00
Eutrophication potential	C2 C3	6.50E-06 0.00E+00	6.43E-06 0.00E+00
(EP) kg (PO ₄) ³ - equiv/FU	C3 C4	5.60E-04	5.12E-04
	D	MND	MND
	Total AC	1.81E-02	1.74E-02
		Excessive enrichm	
		continental surfac	
		and the assoc	
	A1-A3	biologica	
	A1-A3 A4	5.36E-03 -1.02E-04	5.19E-03
	A5		
	A5 B1-B7	3.25E-04	3.13E-04
Photochemical ozone	B1-B7	3.25E-04 0.00E+00	3.13E-04 0.00E+00
Photochemical ozone reation (POPC) kg Ethene	B1-B7 C1	3.25E-04 0.00E+00 0.00E+00 -9.19E-06 0.00E+00	3.13E-04 0.00E+00 0.00E+00 -9.09E-06 0.00E+00
Photochemical ozone reation (POPC) kg Ethene equiv/FU	B1-B7 C1 C2 C3 C4	3.25E-04 0.00E+00 0.00E+00 -9.19E-06 0.00E+00 1.56E-04	3.13E-04 0.00E+00 0.00E+00 -9.09E-06 0.00E+00 1.44E-04
reation (POPC) kg Ethene	B1-B7 C1 C2 C3 C4 D	3.25E-04 0.00E+00 0.00E+00 -9.19E-06 0.00E+00 1.56E-04 MND	3.13E-04 0.00E+00 0.00E+00 -9.09E-06 0.00E+00 1.44E-04 MND
reation (POPC) kg Ethene	B1-B7 C1 C2 C3 C4	3.25E-04 0.00E+00 0.00E+00 -9.19E-06 0.00E+00 1.56E-04 MND 5.73E-03	3.13E-04 0.00E+00 0.00E+00 -9.09E-06 0.00E+00 1.44E-04 MND 5.55E-03
reation (POPC) kg Ethene	B1-B7 C1 C2 C3 C4 D	3.25E-04 0.00E+00 0.00E+00 -9.19E-06 0.00E+00 1.56E-04 MND 5.73E-03 Chemical reactions the light energy of th	3.13E-04 0.00E+00 0.00E+00 -9.09E-06 0.00E+00 1.44E-04 MND 5.55E-03 brought about b
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reation (POPC) kg Ethene equiv/FU biotic depletion potential for non-fossil resources (ADP-element) - kg Sb	B1-B7 C1 C2 C3 C4 D Total AC A4 A5 B1-B7 C1 C2	3.25E-04 0.00E+00 0.00E+00 9.19E-06 0.00E+00 1.56E-04 MND 5.73E-03 Chemical reactions the light energy of the optimized presence of 0.27E-09 7.60E-07 0.00E+00 8.36E-10	3.13E.04 0.00E+00 0.00E+00 9.09E.06 0.00E+00 1.44E.04 MND 5.55E.03 Brough doud b te un. The readi- with hydrocarbor i sellight to form xonelle of a 1.37E.05 8.71E.09 6.82E.07 0.00E+00 0.00E+00 0.00E+00 8.27E.10
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reation (POPC) kg Ethene equiv/FU biotic depletion potential for non-fossil resources (ADP-element) - kg Sb	B1-B7 C1 C2 C3 C4 D Total AC A1-A3 A4 A5 B1-B7 C1 C1 C2 C3 C4 D	3.25E04 0.00E+00 0.00E+00 9.19E06 0.00E+00 1.56E04 MND 5.73E03 Chemical reactions the light energy of the of nitrogen oxides in the presence of 0.20DE+00 8.36E10 0.00E+00 8.36E10 0.00E+00 8.32E209 MND	3.13E.04 0.00E+00 0.00E+00 0.00E+00 1.44E.04 MND 5.55E.03 brough about b te un. The reactive will hydrocorbox surght of a 1.37E.05 8.71E.09 6.82E.07 0.00E+00 0.00E+00 3.60E.09 MND
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reation (POPC) kg Ethene equiv/FU Abiotic depletion potential for non-fossil resources (ADP-element) - kg Sb	81-87 C1 C2 C3 C4 D TotelAC C1 C1 C1 C2 C3 C4 D C1 C1 C1 C2 C3 C4 C1 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E04 0.00E+00 0.00E+00 9.19E06 0.00E+00 1.56E04 MND 5.73E03 Chemical reactions in the presence of a nitrogen oxides in the presence of 0.220E is an e 1.52E05 9.27E09 7.50E07 0.00E+00 3.22E09 MND 1.40E05 1.43E+02 3.47E+00	3.13E.04 0.00E+00 0.00E+00 0.00E+00 1.44E.04 MND 5.55E.03 brought obout b te an. The reaction suright obout b te an. The reaction suright of our suright of our suright of our suright of our 0.00E+00 0.00E+00 0.00E+00 0.00E+00 3.60E.09 MND 1.44E.05 1.37E+02 3.25E+00 7.19E+00
reation (POPC) kg Ethene equiv/FU Abiotic depletion potential for non-fossil resources (ADP-element) - kg Sb	81-87 C1 C2 C3 C4 D Totel AC A1-A3 A4 A5 B1-87 C1 C2 C3 C1 C2 C3 C1 C1 C2 C3 C1 C1 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E04 0.00E+00 0.00E+00 9.19E06 0.00E+00 1.56E04 MND 5.73E03 Chemical reactions in the presence of a nitrogen oxides in the presence of 9.27E09 7.60E07 7.60E07 0.00E+00 0.00E+00 3.32E09 MND 1.60E05 1.43E+02 3.47E+00 7.52E00 0.00E+00	3.13E.04 0.00E+00 0.00E+00 0.00E+00 1.44E.04 S.55E.03 brought about s.55E.03 brought about
reation (POPC) kg Ethene equiv/FU Lbiotic depletion potential for non-fossil resources (ADP-element)- kg Sb equiv/FU	B1-87 C1 C2 C3 C4 D Total AC A1-A3 A4 A5 C1 C3 C3 C4 C3 C3 C4 C3 C4 C4 C3 C4 C4 C3 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E04 0.00E+00 0.00E+00 0.00E+00 1.56E04 MND 5.73E03 Chemical reactions in the presence of 1.52E03 0.00E+00 0.00E+00 0.00E+00 1.60E05 1.43E+00 7.52E+00 7.52E+00 7.52E+00 0.00E+00 0.00E+00	3.13E.04 0.00E+00 0.00E+00 0.00E+00 1.44E.04 MND 5.55E.03 brough about is and the second of a month of a solid to form and photo form a solid to for
reation (POPC) kg Ethene equiv/FU Abiotic depletion potential for non-fossil resources (ADP-element) - kg Sb	81-87 C1 C2 C3 C4 D TotelAC C4 A1-A3 A4 A5 B1-87 C1 C2 C4 D C4 A1-A3 A4 A5 B1-87 C1 C4 C1 C2 C3 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E04 0.00E+00 0.00E+00 9.19E06 0.00E+00 1.55E04 MND 5.73E03 Chemical reactions the light energy of the presence of early the presence of 9.27E09 7.60E07 0.00E+00 0.00E+00 0.00E+00 1.43E+02 3.47E+00 0.00E+00	3.13E.04 0.00E+00 0.00E+00 0.00E+00 1.44E.04 MND 5.55E.03 brought door to suright of our suright of our suright of our suright of our suright of our 3.37E.05 8.27E.10 0.00E+00 3.60E.09 MND 1.44E.05 1.37E+02 3.25E+00 7.19E+00 0.00E+00 0.0
reation (POPC) kg Ethene equiv/FU Abiotic depletion potential for non-fossil resources (ADP-elements)- kg Sb equiv/FU	81-87 C1 C2 C3 C4 D TordAC A1-A3 A4 B1-87 C1 C2 C3 C4 C3 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E-04 0.00E+00 0.00E+00 9.19E-06 0.00E+00 1.56E-04 MND 5.73E-03 Chemical fractions in the presence of 0.20E+00 9.27E-09 7.60E-07 0.00E+00 0.00E+00 3.22E-09 MND 1.60E-05 1.43E+02 3.47E+00 0.00E+00	3.13E.04 0.00E+00 0.00E+00 0.00E+00 1.44E.04 MND 555E.03 Brought about with hydrocather sunlight about with hydrocather sunlight of form sunlight of form 0.00E+00 0.00E+00 3.00E00 0.00E+00
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reation (POPC) kg Ethene equiv/FU Lbiotic depletion potential for non-fossil resources (ADP-element) - kg Sb equiv/FU Lbiotic depletion potential for fassil resources (ADP-	81-87 C1 C2 C3 C4 D TotelAC A1-A3 A4 A5 B1-87 C1 C2 C3 C4 D TotelAC A1-A3 A4 B1-87 C1 C2 C3 C4 D C2 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E04 0.00E+00 0.00E+00 0.00E+00 1.56E04 MND 5.73E03 Chemical reactions in the presence of czone is an e 1.52E05 9.27E09 7.50E07 0.00E+00 0.00E+00 1.60E05 1.43E+02 7.52E+00 0.00E+00	3.13E-04 0.00E+00 0.00E+00 0.00E+00 1.44E-04 MNID 5.55E-03 brough about be evan The reached with hydrocarbon sarlight to form concelle of a 1.37E-05 8.871E-09 0.00E+00 0.00E+00 3.60E-09 MNID 0.00E+00 1.37E+02 3.25E+00 0.00E+00 7.19E+00 0.00E+00 3.00E+01 0.00E+00 0.00E+00 1.20E+00
reation (POPC) kg Ethene equiv/FU Lbiotic depletion potential for non-fossil resources (ADP-element) - kg Sb equiv/FU Lbiotic depletion potential for fassil resources (ADP-	81-87 C1 C2 C3 C4 D Total AC A1-A3 A4 A5 B1-87 C1 C2 C3 C4 A1-A3 A4 A5 B1-87 C1 C2 C3 C2 C2 C3 C4 C4 C4 C4 C4 C4 C4 C4 C4 C4	3.25E-04 0.00E+00 0.00E+00 0.00E+00 1.55E-04 MND 5.73E-03 Chemical reactions the light energy of the 5.73E-03 Chemical reactions in the presence of 1.52E-05 9.27E-09 7.50E-07 0.00E+00 0.00E+00 0.00E+00 0.00E+00 1.43E+02 3.47E+00 0.00E+00	3.13E-04 0.00E+00 0.00E+00 0.00E+00 1.44E-04 MNID 5.55E-03 brought about by te un. The reacted brought about by te un. The reacted brought about by te un. The reacted brought about by the re

Resource use

Parameters	onmental in	Akusto wall C Extra	Akusto wall C Extra Bass/Akutext FT
T AT ALLOCATION	A1 - A3	Bass/Texona 1.10E+02	Bass/Akutext FT 1.09E+02
	A4	8.44E-02	7.93E-02
Use of renewable primary energy	A5 81-87	5.43E+00 0.00E+00	5.41E+00 0.00E+00
excluding renewable	C1	0.00E+00	0.00E+00
primary energy resources used as raw	C2	7.61E-03	7.53E-03
materials	C3	0.00E+00	0.00E+00
- MJ / FU	C4 D	3.90E-03 MND	1.63E-02 MND
	D Total AC	1.15E+02	1.15E+02
	A1 - A3	1.38E+01	8.34E+00
	A4	0.00E+00	0.00E+00
Use of renewable	A5	-1.38E+01	-8.34E+00
primary energy used as	B1-87 C1	0.00E+00	0.00E+00
raw materials	0	0.00E+00 0.00E+00	0.00E+00 0.00E+00
- MJ / FU	C3	0.00E+00	0.00E+00
	C4	0.00E+00	0.00E+00
	D	MND	MND
	Total A-C A1 - A3	0.00E+00	0.00E+00
	A4	1.24E+02 8.44E-02	1.18E+02 7.93E-02
Total use of renewable primary	A5	-8.37E+00	-2.93E+00
energy resources (primary	B1-B7	0.00E+00	0.00E+00
energy and primary energy	C1	0.00E+00	0.00E+00
resources used as raw materials)	C2 C3	7.61E-03	7.53E-03
- MJ / FU	C3	0.00E+00 3.90E-03	0.00E+00 1.63E-02
	D	MND	MND
	Total A-C	1.15E+02	1.15E+02
		Akusto wall C Extra Bass/Texana	Akusto wall C Extra Bass/Akutext FT
	A1-A3	1.51E+02	1.42E+02
11	A4	3.50E+00	3.29E+00
Use of non-renewable primary energy	A5 81-87	7.85E+00 0.00E+00	7.40E+00 0.00E+00
excluding non-	61-8/ C1	0.00E+00 0.00E+00	0.00E+00 0.00E+00
renewable primary energy resources used	C2	3.16E-01	3.12E-01
as raw materials - MJ	C3	0.00E+00	0.00E+00
/FU	C4	1.13E+00 MND	1.12E+00 MND
	Total A-C	1.64E+02	1.54E+02
	A1 - A3	1.34E+01	1.40E+01
	A4	0.00E+00	0.00E+00
Use of non-renewable	A5	-2.73E+00	-2.70E+00
primary energy used as	B1-B7 C1	0.00E+00 0.00E+00	0.00E+00 0.00E+00
raw materials - MJ / FU	C2	0.00E+00	0.00E+00
- M3 / PO	C3	0.00E+00	0.00E+00
	C4	-1.06E+01	-1.13E+01
	D	MND	MND
	Total A-C A1 - A3	0.00E+00 1.64E+02	0.00E+00 1.56E+02
	A4	3.50E+00	3.29E+00
Total use of non-renewable	A5	5.12E+00	4.70E+00
primary energy resources	81-87	0.00E+00	0.00E+00
(primary energy and primary energy resources used as raw	C1 C2	0.00E+00 3.16E-01	0.00E+00 3.12E-01
materials) - MJ / FU	C2 C3	0.00E+00	0.00E+00
	C4	-9.49E+00	-1.02E+01
	D	MND	MND
	Total AC	1.64E+02	1.54E+02
		Akusto wall C Extra Bass/Texona	Akusto wall C Extra Bass/Akutext FT
	A1-A3 A4	4.16E+00 0.00E+00	4.12E+00
	AS	2.08E-01	0.00E+00 2.06E-01
Use of secondary	81-87	0.00E+00	0.00E+00
material Kg / FU	C1	0.00E+00	0.00E+00
Ng / 10	C2 C3	0.00E+00	0.00E+00
	C3 C4	0.00E+00 0.00E+00	0.00E+00 0.00E+00
	D	0.00E+00	MND
	Total AC	4.37E+00	4.33E+00
		Akusto wall CExtra Bass/Texona	Akusto wall C Extra Bass/Akutext FT
	A1-A3	0.00E+00	0.00E+00
5	A4		
Use of renewable	A5 B1-B7		
secondary fuels MJ / FU	B1-B7 C1		
,	C2		
	C3	0.00E+00	0.00E+00
	C4		
	D Total A-C	MND 0.00E+00	MND 0.00E+00
	rondi Mic	Akusto wall C Extra Bass/Texona	
	A1-A3		Bass/Akutext FT 0.00E+00
S	A1-A3 A4		
Use of non-renewable	A5	0.00E+00	0.00E+00
secondary fuels - MJ /	81-87	0.00E+00	
FU	C1	0.00E+00	
	C2 C3	0.00E+00 0.00E+00	0.00E+00 0.00E+00
	C4	0.00E+00	0.00E+00
	D		MND
	Total A-C	0.00E+00	0.00E+00
		Akusto wall CExtra Bass/Texona	Akusto wall C Extra Bass/Akutext FT
	A1-A3	1.72E-01	1.72E-01
	A4		2.01E-05
Use of net fresh water	A5 B1-B7	8.54E-03	8.54E-03
m ³ / FU	B1-B7 C1	0.00E+00 0.00E+00	0.00E+00 0.00E+00
	C2		1.91E-06
	C3	0.00E+00	0.00E+00
	C4		1.60E-04
	D Total A-C		MND
	IGIDI AC	1.80E-01	1.81E-01

Environmental impacts								
Paran	neters		Akusto wall C Extra Bass/Texona	Akusto wall C Extr Bass/Akutext FT				
		A1-A3	9.85F-08	9.87E-08				
		A4	3.73E-11	3.50E-11				
_		A5	4.92E-09	4.93E-09				
	Hazardous waste	B1-B7	0.00E+00	0.00E+00				
-	disposed	C1	0.00E+00	0.00E+00				
	kg / FU	C2	3.36F-12	3.33E-12				
	kg / ro	C3	0.00F+00	0.00F+00				
		C4	9.72F-11	9.81F-11				
		D	MND	MND				
		Total A-C	1.04F-07	1.04F-07				
			Akusto wall C Extra Bass/Texona	Akusto wall C Extr Bass/Akutext FT				
		A1-A3	1.32E+00	1.40E+00				
		A4	9.41E-05	8.83E-05				
_		A5	3.32E-01	3.19E-01				
(†	Non-hazardous	B1-B7	0.00E+00	0.00E+00				
-	waste	C1	0.00E+00	0.00E+00				
	disposed - kg / FU	C2	8.48E-06	8.39E-06				
		C3	0.00E+00	0.00E+00				
		C4	5.52E+00	5.47E+00				
		D	MND	MND				
		Total A-C	7.17E+00	7.19E+00				
			Akusto wall C Extra Bass/Texona	Akusto wall C Ext Bass/Akutext FI				
		A1-A3	1.70E-04	1.97E-04				
		A4	4.10E-06	3.85E-06				
	Radioactive waste	A5	-1.64E-05	-1.35E-05				
Ø	disposed	B1-B7	0.00E+00	0.00E+00				
	kg / FU	C1	0.00E+00	0.00E+00				
		C2	3.70E-07	3.66E-07				
		C3	0.00E+00	0.00E+00				
		C4	-3.79E-05	-3.34E-05				
		D	MND	MND				

Output flow

	Environmental impacts					
Param			Akusto wall C Extra Bass/Texona	Akusto wall C Extr Bass/Akutext FT		
	Components for re-use kg/FU	A1-A3				
		A4	-			
_		A5	-			
6		B1-B7	-	-		
-		C1	-			
		C2	-	-		
		C3	-	-		
		C4		-		
		D	MND	MND		
		Total A-C	-	-		
	Materials for recycling kg/FU		Akusto wall C Extra Bass/Texona	Akusto wall C Extr Bass/Akutext FT		
		A1-A3	0.00E+00	0.00E+00		
		A4	0.00E+00	0.00E+00		
-		A5	7.05E-01	3.65E-01		
		B1-B7	0.00E+00	0.00E+00		
-		C1	0.00E+00	0.00E+00		
		C2	0.00E+00	0.00E+00		
		C3	0.00E+00	0.00E+00		
		C4	0.00E+00	0.00E+00		
		D	MND	MND		
		Total A-C	7.05E-01	3.65E-01		
	Materials for energy reovery - kg/FU		Akusto wall C Extra Bass/Texona	Akusto wall C Extr Bass/Akutext FT		
		A1-A3	-	-		
		A4	-	-		
		A5	-	-		
67		B1-B7	•	-		
		C1	•			
		C2	-	-		
		C3	-	-		
		C4	-	-		
		D	MND	MND		
		Total A-C				
	Exported energy MJ/FU		Akusto wall C Extra Bass/Texona	Akusto wall C Ext Bass/Akutext Fl		
		A1-A3	0.00E+00	0.00E+00		
		A4	0.00E+00	0.00E+00		
		A5	0.00E+00	0.00E+00		
6		B1-B7	0.00E+00	0.00E+00		
-		C1	0.00E+00	0.00E+00		
		C2	0.00E+00	0.00E+00		
		C3	0.00E+00	0.00E+00		
		C4	0.00E+00	0.00E+00		
		D	MND	MND		
		Total A-C	-	-		

Summary

Aggregation of results from A1 to C4 in selected impact categories.

	Akusto wall C Extra Bass/Texona	Akusto wall C Extra Bass/Akutext FT
Global warming		
kg CO ₂ equiv/FU	10.75	10.36
Non-renewable resources consumption [1]		
MJ/FU	155	149
Energy consumption [2]		
MJ/FU	279	269
Water consumption [3]		
m³/FU	0.18	0.18
Waste production [4]		
kg/FU	7.17	7.19

[1] This indicator corresponds to the abiotic depletion potential of fossil resources.

[2] This indicator corresponds to the total use of primary energy.

[3] This indicator corresponds to the use of net fresh water.

[4] This indicator corresponds to the sum of hazardous, non-hazardous and radioactive waste disposed.

Reference list

ISO 354:2003: Acoustics – Measurement of sound absorption in a reverberation room

Finnish M1: Emission classification of building materials (M1 Classification): general instructions 12 November 2014

Eurofins Indoor Air Comfort: Eurofins Indoor Air Comfort GOLD and Indoor Air Comfort Version 7.0 May 2020

Reach: EU REACH Regulation (EC) No 1907/2006

LCA report: Project_report_on_SG-Ceilings_LCA_2021-11-15

EN 15804:2012+A1:2013: Sustainability of construction works - Environmental product declarations

Acoustical systems solutions (sub-oriented PCR; appendix to PCR 2012:01) - previously Acoustic ceilings.

PCR 2012:01 Construction products and construction services (version 2.33 dated 2020-09-18)

Difference from previous versions

New company logo and correction of few product weights on page 3.

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