EPD®

THE GREEN YARDSTICK

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with EN 15804 and ISO 14025

Acoustic boards for fade®

Programme: The International EPD® System, www.environdec.com
Programme operator: EPD International AB
Version: 1.0
Registration number: S-P-05319

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Date of validity: 2026-12-08
In accordance with ISO 14025, ISO 21930 and EN 15804

The environmental impacts of this product have been assessed over its whole life cycle. Its Environmental Product Declaration has been verified by an independent third party.

fade® Acoustic Ceilings

Ecophon SAINT-GOBAIN

Summary Environmental product declaration

Content summary	
Verified by (external third-party verifier)	Martin Erlandsson, IVL Swedish Environmental Research Institute
Programme used	The International EPD System. For more information see www.environdec.com
Registration No	S-P-05319
Owners declaration by	Saint-Gobain Ecophon AB Box 500 265 03 Hyllinge Sweden
Declaration as construction products	The products to be verified herein are mineral wool acoustic boards. 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 construction 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	2026-12-08
Content of the declaration	This is an environmental product declaration containing environmental information of the products in the Ecophon family Acoustic boards for fade®. The values presented in this EPD are represented for the following products: Acoustic boards for fade® 15 mm Acoustic boards for fade® 20 mm Acoustic boards for fade® 25 mm Acoustic boards for fade® 40 mm Supplemental product information can be found at www.ecophon.com
Issued date	2022-02-01

Product responsible:

Thomas Roul
Product Engineering & Development Manager
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Independent third party verifier:

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 board with the intended use to increase sound absorption in a room to create a better indoor environment when installed as a sublayer to fade® acoustic plaster.

This Environmental Product Declaration (EPD) is valid for products produced at the Ecophon production plant in Sweden with a high-quality grinded mineral wool in different densities and thicknesses. The structure of mineral wool gives the material excellent sound energy absorption properties. Sound absorption is the main function of acoustic boards. The panels are also light, stable, and easy to handle and cut.

Acoustic boards are commonly used in where there is a need for noise reduction to improve the indoor 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.

Description of the main product and materials for 1 m^2 of product:

Parameter	Value	Post-consumer recycled content
Product thickness	15-40 mm	-
Glass wool	100%	70%

Total weights				
Product	15 mm	20 mm	25 mm	40 mm
Total weight [kg]	1,7	2,2	2,8	4,4

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.

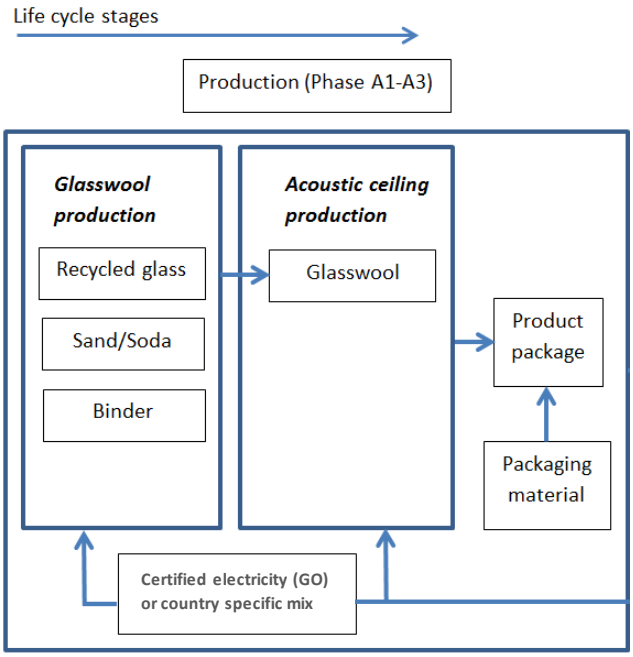
LCA calculation information

Declared unit	1 m^2 of acoustic board.
System boundaries	Cradle to gate: Mandatory stages = A1-A3 This EPD covers the environmental impact of acoustic boards without plaster and installation accessories.
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 building product when compared at these systems lifetime level.
Allocations	Allocation criteria are based on mass.
Geographical coverage and time period	For A1-A3: Global (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 fiber production, e.g. sand and borax. Besides these raw materials, recycled materials (glass cullet) are also used as input. All electricity is taken account for in (GOs) or at least country specific mix.

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

Manufacturing covers all processes linked to production, which comprises various related operations besides on-site activities such as grinding, packaging and internal transportation. Packaging-related flows in the production process and all up-stream packaging are included in the manufacturing module, i.e. wooden pallets and cardboard. 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.

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 90% of the GWP comes from specific data.

	Product phase			**Construction process phase**		**Use phase**							**End of life phase**					**Resource recovery phase**
	Raw material and supply	Transport to the manufacturer	Manufacturing	Transport to the building site	Installation in the building	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport to waste processing	Waste processing	Disposal		Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4		D
Modules declared	X	X	X															
Geography	SE, NL, FR, DK, PL, DE, FI, GB, EU, GLO	SE, NL, FR, DK, PL, DE, FI, GB, EU, GLO	SE, DK, PL, FI															-
Specific data	> 90 %			-														-
Variation sites	0 %			-														-

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 -03 = $5.2*10^{-3}$ = 0,0052.

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

Environmental impact.

Environmental impacts					
Parameters		15 mm	20 mm	25 mm	40 mm
Global Warming Potential (GWP) - kg CO_2 equiv/FU	A1-A3	2,79E+00	3,65E+00	4,51E+00	6,01E+00
		The global warming potential of a gas refers to the total contribution to global warming resulting from the emission of one unit of that gas relative to one unit of the reference gas, carbon dioxide, which is assigned a value of 1.			
Ozone Depletion (ODP) kg CFC 11 equiv/FU	A1-A3	3,38E-07	4,46E-07	5,54E-07	7,43E-07
		Destruction of the stratospheric ozone layer which shields the earth from ultraviolet radiation harmful to life. This destruction of ozone is caused by the breakdown of certain chlorine and/or bromine containing compounds (chlorofluorocarbons or halogens), which break down when they reach the stratosphere and then catalytically destroy ozone molecules.			
Acidification potential (AP) kg SO2 equiv/FU	A1-A3	1,49E-02	1,93E-02	2,39E-02	3,17E-02
		Acid depositions have negative impacts on natural ecosystems and the man-made environment incl, buildings. The main sources for emissions of acidifying substances are agriculture and fossil fuel combustion used for electricity production, heating and transport.			
Eutrophication potential (EP) kg $(PO_4)^3$- equiv/FU	A1-A3	4,41E-03	5,53E-03	6,68E-03	8,66E-03
		Excessive enrichment of waters and continental surfaces with nutrients, and the associated adverse biological effects.			
Photochemical ozone creation (POPC) kg Ethene equiv/FU	A1-A3	1,53E-03	1,96E-03	2,40E-03	3,15E-03
		Chemical reactions brought about by the light energy of the sun. The reaction of nitrogen oxides with hydrocarbons in the presence of sunlight to form ozone is an example of a photochemical reaction.			
Abiotic depletion potential for non-fossil resources (ADP-elements) - kg Sb equiv/FU	A1-A3	3,82E-06	4,94E-06	6,08E-06	8,04E-06
Abiotic depletion potential for fossil resources (ADP-fossil fuels) - MJ/FU	A1-A3	4,43E+01	5,83E+01	7,25E+01	9,69E+01
		Consumption of non-renewable resources, thereby lowering their availability for future generations.			

Resource use

Environmental impacts				
Parameters		15 mm	20 mm	25 mm
Use of renewable primary energy excluding renewable primary energy resources used as rawmaterials - MJ /FU	A1-A3	4,17E+01	5,21E+01	6,24E+01
Use of renewable primary energy used as raw materials - MJ /FU	A1-A3	2,21E+00	2,56E+00	3,24E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as rawmaterials) - MJ /FU	A1-A3	4,39E+01	5,47E+01	6,56E+01
		15 mm	20 mm	25 mm
Use of non-renewable primary energy excluding non-renewable primary energy resources used as rawmaterials - MJ /FU	A1-A3	4,66E+01	6,13E+01	7,62E+01
Use of non-renewable primary energy used as rawmaterials - MJ /FU	A1-A3	3,15E+00	4,17E+00	5,26E+00
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as rawmaterials) - MJ /FU	A1-A3	4,98E+01	6,55E+01	8,14E+01
		15 mm	20 mm	25 mm
Use of secondary material Kg /FU	A1-A3	1,54E+00	2,06E+00	2,57E+00
		15 mm	20 mm	25 mm
Use of renewable secondary fuels MJ /FU	A1-A3	0,00E+00	0,00E+00	0,00E+00
		15 mm	20 mm	25 mm
Use of non-renewable secondary fuels - MJ /FU	A1-A3	0,00E+00	0,00E+00	0,00E+00
		15 mm	20 mm	25 mm
Use of net fresh water m^3 /FU	A1-A3	5,86E-02	7,71E-02	9,54E-02

Waste categories

Parameters		15 mm	20 mm	25 mm	40 mm
Hazardous waste disposed kg /FU	A1-A3	3,92E-08	4,91E-08	5,89E-08	7,60E-08
Non-hazardous waste disposed - kg /FU	A1-A3	7,69E-01	1,01E+00	1,24E+00	9,51E-01
Radioactive waste disposed kg /FU	A1-A3	4,83E-05	6,16E-05	7,49E-05	9,66E-05

Output flow

Parameters		15 mm	20 mm	25 mm	40 mm
Components for re-use kg/FU	A1-A3	-	-	-	-
Materials for recycling kg/FU	A1-A3	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy reovery - kg/FU	A1-A3	-	-	-	-
Exported energy MJ/FU	A1-A3	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Reference list

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

LCA report: Project_report_on_Ecophon_LCA_2021-03-03 - update 2021-12-14

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.

CONTACT INFORMATION

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