plaka
SAINT-GOBAIN

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

Plaka Light

EPD
INTERNATIONAL EPD SYSTEM

The International EPD System, www.environdec.com
Programme operator: EPD international AB
Registration number: **EPD-IES-0024973**
Type of EPD: EPD of a single product from a manufacturer provider

ECO PLATFORM
EPD
VERIFIED

Version: 01
Version date: 2025/10/01
Validity: 5 years
Validity until: 2030/09/30

An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com.

EPD Owner : Saint-Gobain Plaka Mexico

SAINT-GOBAIN

Company information

Saint-Gobain: World leader in sustainable construction

Global leader in lightweight and sustainable construction, Saint-Gobain designs, manufactures, and distributes materials and services for the construction and industrial markets. Its integrated solutions for renovation, lightweight construction, and decarbonization of construction and industry are developed through a process of continuous innovation and promote sustainability and performance. The Group's commitment is guided by its purpose, "MAKING THE WORLD A BETTER HOME". With this corporate purpose, the Group took on its ambition to improve everyone’s lives by making the planet a fairer, more inclusive, more harmonious, healthier and sustainable living space.

Saint-Gobain Mexico presents a highly diversified product portfolio that meets the demands of various markets, including industry, construction, and mobility. For the construction sector, one of these brands is Plaka, which offers gypsum-based solutions, namely plasterboard systems, and it’s committed to developing solutions for so-called drywall construction.

The ongoing commitment to developing integrated solutions for building renovation, light construction, and industry decarbonization responds to current challenges and contributes to resource efficiency and the fight against climate change, reinforcing Saint-Gobain's commitment to innovation and sustainability.

Company certifications

ISO 9001 - Quality management system
ISO 14001 - Environment management system
ISO 45001 - Occupational health and safety management system

top EMPLOYER BRASIL BRAZIL 2024
CERTIFIED EXCELLENCE IN EMPLOYEE CONDITIONS

TOP EMPLOYER - Human Resource Management Best Practices

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General information

Programme information

PROGRAMME:	The International EPD® System
ADRESS:	EPD International AB - Box 210 60 - SE-100 31 Stockholm - Sweden
WEBSITE:	www.environdec.com
E-MAIL:	info@environdec.com

PCR information

CEN standard EN 15804:2012+A2:2019/AC:2021 as the Core Product Category Rules (PCR)

Product category rules (PCR): PCR 2019:14 Construction Products, version 2.0.1

Complementary PCR: c-PCR-031, version: 1.0.0 (2025-04-24). Gypsum-based construction products (EN 17328:2024)

PCR review was conducted by: The Technical Committee of the International EPD® System See www.environdec.com for a list of members.

Chairs of the PCR review: Rob Rouwette (chair), Noa Meron (co-chair).

Verification

External and independent ('third-party') verification of the declaration and data, according to ISO 14025:2006, via EPD verification through:

☒ Individual EPD verification without a pre-verified LCA/EPD tool
☐ Individual EPD verification with a pre-verified LCA/EPD tool
☐ EPD process certification without a pre-verified LCA/EPD tool
☐ EPD process certification with a pre-verified LCA/EPD tool
☐ Fully pre-verified EPD tool

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

☐ EPD process certification ☒ EPD verification

Third party verifier: Alejandro Pablo Arena (aparena@gmail.com), Universidad Tecnologica Nacional (UTN-FRM)

Approved by: The International EPD System

Procedure for follow-up of data during EPD validity involves third part verifier: ☐ Yes ☒ No

Ownership and limitations on use of EPD

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit version number) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterization factors); and be valid at the time of comparison.

EPD VERIFIED

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Information about EPD Owner

Address and contact information of the EPD owner: Saint-Gobain Plaka México
Av. La Noria No. 123, Santa Rosa Jáuregui CP. 76220, Querétaro, Querétaro. México
Owner of the declaration: Saint-Gobain Plaka México
Management system-related certification: ISO 14001 & ISO 50001
LCA practitioner: LATAM LCA Team, Saint-Gobain Research Brasil - Sartor, Lucas de Bona (lucas.sartor@saint-gobain.com); Exposito, Caio Cesar Dente (caio.exposito@saint-gobain.com); Frota, Thiago Marques da (thiago.frota@saint-gobain.com)
Communication: The intended use of this EPD is for B2B communication.

Product Information

Product name: Plaka Light
UN CPC CODE: 37530 Articles of plaster or of composition based on plaster
Manufacturing site(s): PLAKA SAINT GOBAIN, Queretaro plant: Av. La Noria 123, 76220 Parque Industrial Querétaro, Qro., México

Product description

Product description and description of use

This Environmental Product Declaration (EPD®) describes the environmental impacts of 1m^2 of installed gypsum board 12.7 mm with a weight of 6.22 kg/m^2 with a useful life of 50 years.

Plaka Light is a **gypsum-based** plasterboard with a specially formulated denser core designed for the construction of system qualified partitions, suspended ceilings and other internal structures not exposed to moisture conditions.

Technical data

Parameter	Value / Description	Test Method
Thermal conductivity (W/m.K)	0.0865	NMX-C-181-ONNCCE-2010
Water vapour permeability (ng/Pa·s·m)	0.315	NMX-C-210-ONNCCE-2013
Deflection (mm)	≤ 32	ASTM C 1396

Application	Value / Description
Intended use and key functionalities	Plaka Light is a lightweight, fire-resistant gypsum board. It's designed for indoor use on walls, ceilings, vaults, and decorative elements. It can be installed over metal framing, wood, or existing surfaces using screws, nails, or adhesives.
Expected influence on the operational aspects and impact of the building or other construction work	Its light weight simplifies handling and installation, reducing labor and time. It enhances thermal and acoustic comfort. The product complies with ASTM C1396 and NOM-018-ENER-2011 standards, ensuring safety and performance in construction.
Restrictions to a type of construction or building	Plaka Light is not suitable for outdoor or humid environments. It must be stored in dry, cool, enclosed spaces. It should not be exposed to temperatures above 54 °C or bear excessive loads during storage.
Lifespan	50 years

Content declaration

Description of the main components and/or materials: Quantity for 1 m^2 of installed plasterboard of 12.7 mm thickness with a weight of 6.22 kg/m^2 with a useful life of 50 years.

Products Components	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass - % of product	Biogenic material, kg C/product
Core (Gypsum & additives)	5.77	0	0.3	1.7E-02
Facing	0.45	7.1	3.0	1.9E-01
Sum	6.22	7.1	3.3	2.1E-01

Packaging materials	Mass, kg	Mass range (%) (versus the product)	Biogenic material, kg C/product
Paper for Label	1.2E-03	< 1	5.0E-04
Gypsum culls	5.2E-02	< 1	0
Ziper Tape	1.2E-03	< 1	0
Sum	5.5E-02	< 1	5.0E-04

Hazardous substances

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight, and neither do their packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).

LCA information

TYPE OF EPD	Cradle to gate with options and optional modules (A+B+C+D)
FUNCTIONAL UNIT	1 m² of installed board with a weight of 6.22 kg/m²
CONVERSION FACTOR TO MASS	Weight = 6.22 kg/m² Thickness = 12.7 mm
SYSTEM BOUNDARIES	Cradle to grave and module D
REFERENCE SERVICE LIFE (RSL)	The Reference Service Life (RSL) of the Gypsum product is 50 years. This 50-year value is the amount of time that we recommend our products last for without refurbishment and corresponds to standard building design life.
CUT-OFF RULES	All data is available, no cut-off rules has been applied. In the case that there is not enough information, the process energy and materials representing less than 1% of the whole energy and mass used can be excluded (if they do not cause significant impacts). The addition of all the inputs and outputs excluded cannot be bigger than the 5% of the whole mass and energy used, as well of the emissions to environment occurred. Flows related to human activities such as employee transport are excluded. 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 has been avoided when possible and when not possible a mass allocation has been applied. The polluter pays and the modularity principles as well have been followed.
DATA QUALITY ASSESSMENT	Data quality of primary and secondary data had been judged by its precision (measured, calculated, or estimated), completeness (e.g., unreported emissions), consistency (degree of uniformity of the methodology applied), and representativeness (geographical, technological, and temporal).
GEOGRAPHICAL COVERAGE AND TIME PERIOD	Scope: Latin America and United States of America Data is collected from one production site, Queretaro, located in Mexico Data collected for the year 2023
BACKGROUND DATA SOURCE	The databases Sphera 2024.1 and ecoinvent v.3.9.1
SOFTWARE	Sphera LCA for experts (GaBi) 10

Data quality declaration

Data Collection period: 01.01.2023 to 31.12.2023

Process	Source type	Source	Reference year	Data category	A1-A3 GWP-GHG [kg CO2 eq.]
Manufacturing process					
Thermal energy	Database	Sphera 2024.1	<5 years old	Primary data	63%
Electricity	Database	Sphera 2024.1 /ecoinvent 3.9.1	<5 years old	Primary data	8%
Transportation (only if specific data collected)					
Transport of RM Product	Collected data	Sphera 2024.1 /ecoinvent 3.9.1	<5 years old	Primary data	9%
Background datasets in A1-A3					
Other processes	Database	Sphera 2024.1 /ecoinvent 3.9.1	<5 years old	Secondary data	0%
				Total share of primary data, of GWP-GHG results for A1-A3	80%

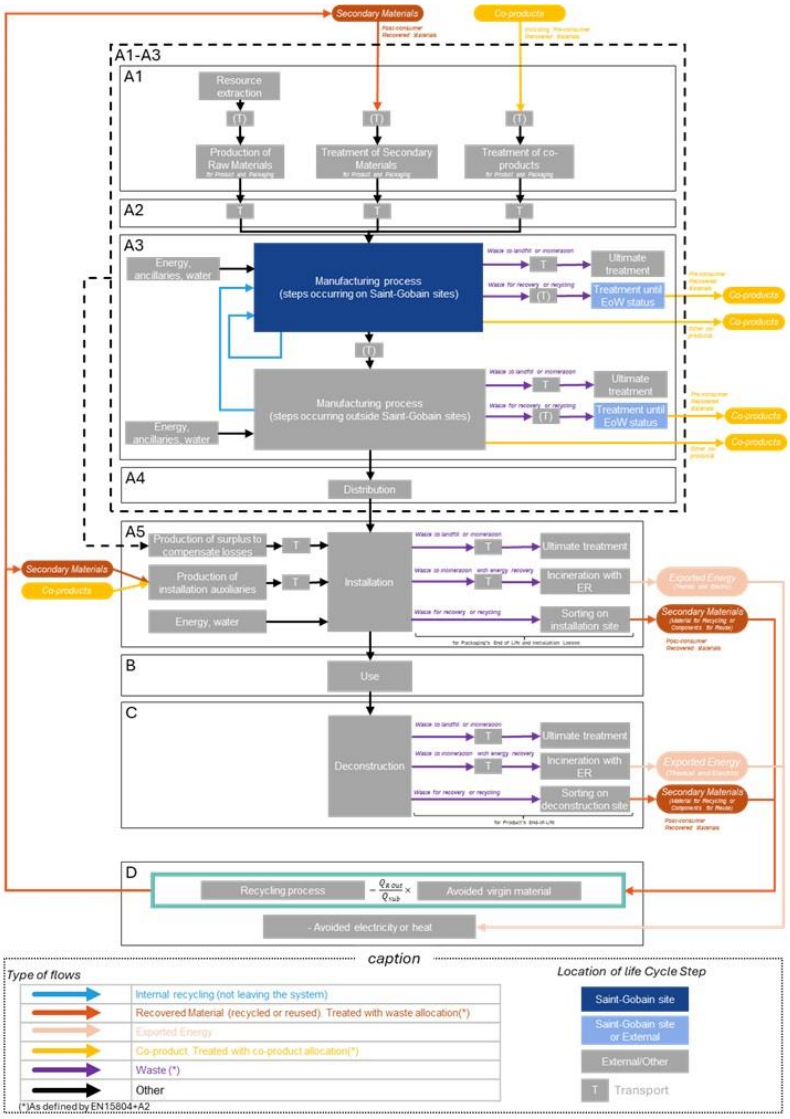
The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

Description of system boundaries

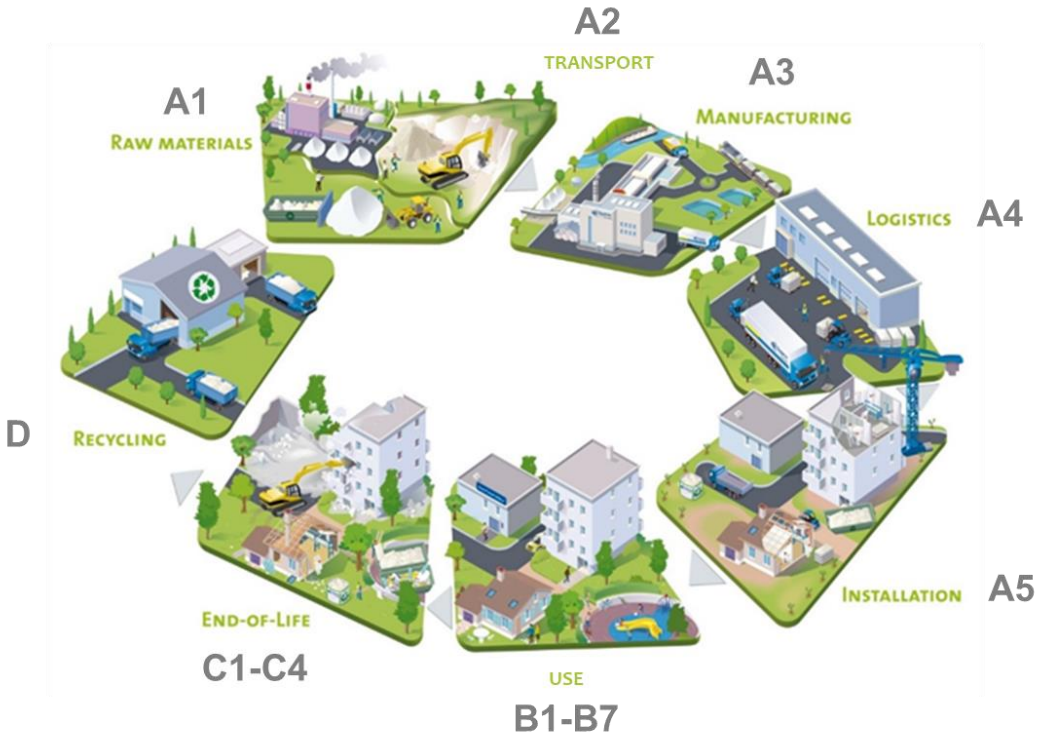
System boundaries (X=included. MND=module not declared)

	PRODUCT STAGE			CONSTRUCTION STAGE		USE STAGE						END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY
	Raw material supply	Transport	Manufacturing	Transport	Construction-Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-recovery
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	GLO	GLO	MX	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA	USA RLA

System boundaries when the end-of-waste state is reached:



Life cycle stages



A1-A3. Product stage

The product stage of plasterboard products is subdivided into 3 modules A1, A2 and A3 respectively “raw material supply”, “transport to manufacturer” and “manufacturing”.

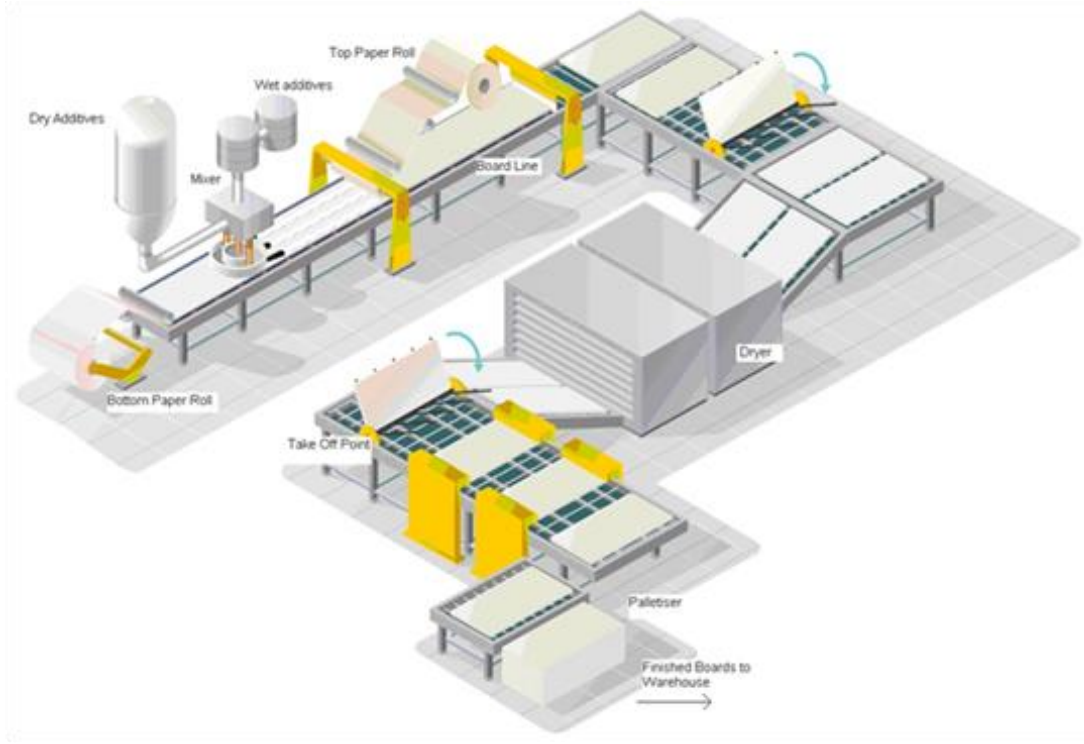
A1. Raw materials supply
This module includes the extraction and transformation of raw materials and packaging which occur upstream to the manufacturing site. In this product system, the facing paper used in the plasterboard contains post-consumer recycled content, which contributes to reducing the consumption of virgin fiber and aligns with circular economy strategies.

A2. Transport to the manufacturer
This module includes the transportation of raw materials and packaging to the manufacturing site. The modelling includes road, boat and/or train transportations.

A3. Manufacturing
This module includes the manufacture of products. The processing of any waste arising from this stage is also included.

Manufacturing process flow diagram

System diagram:



Manufacturing in detail:
The initial raw materials are thoroughly blended to form a homogeneous gypsum slurry. This slurry is evenly dispensed through multiple hose outlets onto a continuous paper liner moving along a conveyor belt. A second paper liner is simultaneously applied from above, encapsulating the slurry and forming the plasterboard core. As the composite progresses along the production line, it undergoes rapid setting, followed by drying in a kiln. This step removes excess moisture and strengthens the bond between the gypsum core and the paper liners. Once dried, the boards are precisely cut to the required dimensions. They then pass through a finishing stage where quality inspections are performed. Finally, the plasterboards are packaged and prepared for storage or dispatch.

A4-A5. Construction process stage

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

A4. Transport to the building site: This module includes transport from the production gate to the building site. Transport is calculated based on a scenario with the parameters described in the following table.

PARAMETER	VALUE
Fuel type and consumption of vehicle or vehicle type used for transport e.g., long distance truck, boat, etc.	Freight truck, maximum load weight of 30 t, real load is 27 t and consumption of 0.38 liters per km
Distance	1532 km by truck 117 km by ship 429 km by rail
Capacity utilisation (including empty returns)	69% (30% empty returns)
Bulk density of transported products*	490 kg/m^3
Volume capacity utilisation factor	1

A5. Installation in the building:
This module includes the parameters for installing the product at the building site. All installation materials and their waste processing are included.

PARAMETER	VALUE
Ancillary materials for installation (specified by materials)	Ready-mix jointing compound 0.45 kg/m^2 board, jointing tape 0.008 kg/m^2 board, screws 0.01 kg/m^2 board
Water use	None
Other resource use	None
Scrap rate at installation	5% for plasterboard and for ancillary materials 100% for packaging
Quantitative description of energy type (regional mix) and consumption during the installation process	None
Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)	Plasterboard: 0.311 kg/m² board Ancillaries: 0.023 kg/m² board Packaging: 0.114 kg/m² board
Transport of packaging waste	Landfill: 100 km
Output materials (specified by type) as results of waste processing at the building site e.g., of collection for recycling, for energy recovering, disposal (specified by route)	Plasterboard: 100% landfill by truck (40 km) Ancillaries: 100% landfill by truck (40 km) Packaging: 100% landfill by truck (40 km)
Direct emissions to ambient air, soil, and water	None

B1-B7. Use stage (excluding potential savings)

The use stage is divided into the following modules:

- **B1:** Use
- **B2:** Maintenance
- **B3:** Repair
- **B4:** Replacement
- **B5:** Refurbishment
- **B6:** Operational energy use
- **B7:** Operational water use

The product has a reference service life of 50 years. This assumes that the product will last in situ with no requirements for maintenance, repair, replacement, or refurbishment throughout this period. Therefore, it has no impact at this stage.

C1-C4. End of Life Stage

This stage includes the next modules:

C1: Deconstruction, demolition: The de-construction and/or dismantling of the product take part of the demolition of the entire building. In our case, the energy (from diesel consumption in construction machine) is considered is 0.045 MJ/m².
C2: Transport to waste processing
C3: Waste processing for reuse, recovery and/or recycling
C4: Waste disposal; including physical pre-treatment and site management.

Description of the scenarios and additional technical information for the end of life:

PARAMETER	VALUE/DESCRIPTION
Collection process specified by type	100% collected with mixed deconstruction and demolition waste sent to landfill (including board, screws and jointing tape/compound)
Recovery system specified by type	none
Disposal specified by type	6.69 kg to landfill
Assumptions for scenario development (e.g. transportation)	Gypsum waste is transported 40 km by truck from deconstruction/demolition sites to landfill

D. Reuse/recovery/recycling potential

100% of wastes are landfilled. There is no reuse, nor recycling, nor incineration with energy recovery for the for the product nor its packaging.

There is some inclusion of secondary materials in the product: 100% of the paperliner used in the board manufacturing is made from recycled content.

This contributes to benefits and loads are reported in module D.

Environmental performance

As specified in EN 15804:2012+A2:2019/AC:2021 and the Product-Category Rules, the environmental impacts are declared and reported using the baseline characterization factors based on EF 3.1. Raw materials and energy consumption, as well as transport distances have been taken directly from the manufacturing plant.

The estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks.

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

Disclaimer 1: The results of these environmental impact indicators shall be used with care, as the uncertainties on these results are high, or there is limited experience with the following indicators:

- Resource use, mineral and metals [kg Sb eq.]
- Resource use, energy carriers [MJ]
- Water deprivation potential [m^3 world equiv.]
- Land use [Pt]
- Human toxicity (cancer) [CTUh]
- Human toxicity(noncancer) [CTUh]
- Ecotoxicity (freshwater [CTUe]

Disclaimer 2: The impact category Ionizing radiation, human health [kBq U235 eq.] deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction material is also not measured by this indicator.

Disclaimer 3: The assumptions for the modules are in accordance with the project report (LCA study).

The following non-mandatory additional environmental indicators are not declared:

- Ecotoxicity freshwater [CTUe]
- Particulate Matter emissions [Disease incidence]
- Cancer human health effects [CTUh]
- Ionizing radiation - human health [kBq U235 eq.]
- Non-cancer human health effects [CTUh]
- Land Use [Pt].

Disclaimer 4: The biogenic carbon leaving the product system in module A5 has already been accounted for and balanced in modules A1–A3. No additional credit or burden is assigned in modules A5 for these flows.

Disclaimer 5: The product is considered to be 100% landfilled post useful service life.

Results refer to a functional unit of 1 m^2 of installed plasterboard with a weight of 6.22 kg/m^2. The following results refer to a single product manufactured in a single plant.

Environmental Impacts

Environmental indicators	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
Climate Change [kg CO2 eq.]	1.37E+00	7.74E-01	4.78E-01	0	0	0	0	0	0	0	2.98E-02	2.04E-02	0	1.51E+00	-4.48E-02
Climate Change (fossil) [kg CO2 eq.]	2.12E+00	7.63E-01	4.19E-01	0	0	0	0	0	0	0	2.98E-02	2.01E-02	0	4.86E-02	-5.26E-02
Climate Change (biogenic) [kg CO2 eq.]	-7.57E-01	0	5.78E-02	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0	1.46E+00	6.60E-03
Climate Change (land use change) [kg CO2 eq.]	8.69E-03	1.06E-02	1.15E-03	0	0	0	0	0	0	0	3.36E-06	3.32E-04	0	7.69E-05	1.24E-03
Ozone depletion [kg CFC-11 eq.]	1.52E-09	6.01E-13	1.31E-10	0	0	0	0	0	0	0	4.74E-10	1.99E-15	0	1.13E-09	7.46E-09
Acidification terrestrial and freshwater [Mole of H+ eq.]	2.78E-03	4.22E-03	1.08E-03	0	0	0	0	0	0	0	2.76E-04	2.29E-05	0	4.06E-04	1.11E-03
Eutrophication freshwater [kg P eq.]	3.38E-05	2.81E-06	6.83E-06	0	0	0	0	0	0	0	9.16E-07	8.43E-08	0	3.36E-06	3.44E-04
Eutrophication marine [kg N eq.]	1.13E-03	1.10E-03	3.97E-04	0	0	0	0	0	0	0	1.28E-04	7.97E-06	0	9.33E-04	3.80E-04
Eutrophication terrestrial [Mole of N eq.]	1.06E-02	1.22E-02	3.72E-03	0	0	0	0	0	0	0	1.39E-03	9.40E-05	0	1.43E-03	2.42E-03
Photochemical ozone formation - human health [kg NMVOC eq.]	2.37E-03	3.12E-03	2.55E-03	0	0	0	0	0	0	0	4.13E-04	2.19E-05	0	7.46E-04	1.15E-03
Resource use, mineral and metals [kg Sb eq.][1]	2.22E-05	6.01E-08	2.14E-06	0	0	0	0	0	0	0	1.04E-08	1.68E-09	0	7.85E-08	8.04E-07
Resource use, energy carriers [MJ][1]	3.22E+01	9.89E+00	7.24E+00	0	0	0	0	0	0	0	3.89E-01	2.58E-01	0	1.10E+00	-2.19E-01
Water deprivation potential [m³ world equiv.][1]	4.35E-01	1.60E-02	2.79E-01	0	0	0	0	0	0	0	1.32E-03	2.94E-04	0	4.78E-02	1.42E-01

[1] The results of this environmental impact indicator shall be used with care, as the uncertainties on these results are high or as there is limited experienced with the indicator

Resource Use

Resources Use indicators	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
Use of renewable primary energy (PERE) [MJ][2]	1.04E+01	1.05E+00	1.83E+00	0	0	0	0	0	0	0	2.23E-03	2.18E-02	0	4.99E-02	2.24E+00
Primary energy resources used as raw materials (PERM) [MJ] [2]	7.30E+00	0	3.65E-01	0	0	0	0	0	0	0	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ] [2]	1.76E+01	1.05E+00	2.20E+00	0	0	0	0	0	0	0	2.23E-03	2.18E-02	0	4.99E-02	2.24E+00
Use of non-renewable primary energy (PENRE) [MJ] [2]	3.18E+01	9.89E+00	7.23E+00	0	0	0	0	0	0	0	3.89E-01	2.58E-01	0	1.10E+00	-2.19E-01
Non-renewable primary energy resources used as raw materials (PENRM) [MJ] [2]	4.10E-01	0	2.05E-02	0	0	0	0	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ] [2]	3.22E+01	9.89	7.25E+00	0	0	0	0	0	0	0	3.89E-01	2.58E-01	0	1.10E+00	-2.16E-01
Input of secondary material (SM) [kg]	4.40E-01	0	2.20E-02	0	0	0	0	0	0	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of net fresh water (FW) [m3]	1.25E-02	1.06E-03	9.13E-03	0	0	0	0	0	0	0	3.07E-05	2.45E-05	0	1.12E-03	1.13E-03

[2] From EPD International Construction Product PCR 1.3.4 (Annex 3). The option B was used to calculate the primary energy use indicators.

Waste Category & Output flows

	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
Waste Category & Output Flows	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
Hazardous waste disposed (HWD) [kg]	7.77E-06	1.01E-09	6.30E-07	0	0	0	0	0	0	0	2.63E-06	8.34E-12	0	5.02E-06	1.24E-05
Non-hazardous waste disposed (NHWD) [kg]	1.19E-01	1.80E-03	4.97E-01	0	0	0	0	0	0	0	2.41E-03	4.01E-05	0	6.74E+00	1.24E-01
Radioactive waste disposed (RWD) [kg]	1.96E-04	9.04E-05	9.68E-05	0	0	0	0	0	0	0	4.28E-08	3.33E-07	0	1.69E-06	-9.36E-05
Components for re-use (CRU) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	1.12E+00	0	5.58E-02	0	0	0	0	0	0	0	0	0	0	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Additional voluntary indicators from EN 15804

Environmental indicators	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				REUSE, RECOVERY RECYCLING
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
GWP-GHG [kg CO2 eq.][3]	2.13E+00	7.73E-01	4.20E-01	0	0	0	0	0	0	0	2.98E-02	2.04E-02	0	4.87E-02	-5.14E-02

Information on biogenic carbon content

Biogenic Carbon Content	PRODUCT STAGE A1 / A2 / A3
Biogenic carbon content in product [kg]	2.06E-01
Biogenic carbon content in packaging [kg]	5.00E-04

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2. The product contains biogenic carbon due to the additives and paper liner used. Regarding packaging, biogenic carbon is quantified due to paper label production.

[3] The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

Additional environmental information:

Electricity information

The Queretaro factory based in Mexico uses the following electricity description.

Parameter	Information
Location	Representative of average production in Mexico
Geographical & technical representativeness	Split of energy sources in Mexico - Coal: 7% - Oil: 7% - Biofuel: 1% - Natural gas: 61% - Nuclear: 3% - Hydro: 5% - Photovoltaics: 5% - Wind: 6% - Geothermal: 1% - Other sources: 4%
Reference year	2023
Type of dataset	Cradle to gate from LCA for Exports (Gabi) and Ecoinvent databases
Source	International Energy Agency (IEA). Electricity Information (Accessed in 2024)
CO2 emission kg CO2 eq. / kWh	0.66 kg of CO_2 eq/kWh - GWP-GHG indicator

Version history

This document represents the first and original version of the EPD for 1 m^2 of installed plasterboard of 12.7 mm thickness with a weight of 6.22 kg/m^2 with a useful life of 50 years. It was officially issued on 18th August 2025. This version is valid for a period of five years from the version date, unless significant changes to the product or its manufacturing process occur that would warrant an earlier update. Any future revisions or updates to this EPD will be clearly documented and version-controlled to ensure transparency and traceability.

Additional information

Data quality

Inventory data quality is judged by geographical, temporal, and technological representativeness. To cover these requirements and to ensure reliable results, first-hand industry data crossed with LCA background datasets were used. The data was collected from internal records. After evaluating the inventory, according to the defined ranking in the LCA report, the assessment reflects good inventory data quality.

Environmental impacts according to EN 15804:2012 + A1

The following tables presents results for 1m^2 of installed gypsum board 12.7 mm with a weight of 6.22 kg/m^2.

Environmental impacts	PRODUCT STAGE	CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	B1 Use	B2 Maintenance	B3 Repair	B4 Replacement	B5 Refurbishment	B6 Operational energy use	B7 Operational water use	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
Global Warming Potential (GWP) [kg CO2eq.]	2.12E+00	7.63E-01	4.19E-01	0	0	0	0	0	0	0	2.98E-02	2.01E-02	0	4.86E-02	-5.26E-02
Ozone depletion (ODP) [kg CFC 11eq.]	-7.57E-01	0	5.78E-02	0	0	0	0	0	0	0	0	0	0	1.46E+00	6.60E-03
Acidification potential (AP) [kg SO2eq.]	8.69E-03	1.06E-02	1.15E-03	0	0	0	0	0	0	0	3.36E-06	3.32E-04	0	7.69E-05	1.24E-03
Eutrophication potential (EP) [kg (PO4)3-eq.]	1.52E-09	6.01E-13	1.31E-10	0	0	0	0	0	0	0	4.74E-10	1.99E-15	0	1.13E-09	7.46E-09
Photochemical ozone creation (POCP) - [kg Ethylene eq.]	2.78E-03	4.22E-03	1.08E-03	0	0	0	0	0	0	0	2.76E-04	2.29E-05	0	4.06E-04	1.11E-03
Abiotic depletion potential for non-fossil resources (ADP-elements) [kg Sb eq.]	3.38E-05	2.81E-06	6.83E-06	0	0	0	0	0	0	0	9.16E-07	8.43E-08	0	3.36E-06	3.44E-04
Abiotic depletion potential for fossil resources (ADP-fossil fuels) [MJ]	1.13E-03	1.10E-03	3.97E-04	0	0	0	0	0	0	0	1.28E-04	7.97E-06	0	9.33E-04	3.80E-04

Abbreviations

DU	Declared unit
EPD	Environmental Product Declaration
eq.	equivalents
FU	Functional unit
EF	Environmental Footprint
kg	kilogram
kWh	kilowatt-hour
L	liter
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory Analysis
LCIA	Life Cycle Impact Assessment
MJ	Mega Joules (as Net Calorific Value)
PCR	Product Category Rules
RSL	Reference Service Life (in years)

References

1. EN 15804:2012+A1:2013 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
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3. EPD International. General Program Instructions (GPI) for the International EPD® System (version 5.0.1) www.environdec.com.
4. The International EPD System PCR 2019:14 Construction products and Construction services. Version 2.0.1
5. c-PCR-031 Gypsum-based construction products (EN 17328) (PCR 2019:14-c-PCR-031 version: 2025-04-24)
6. European Chemical Agency, Candidate List of substances of very high concern for Authorization. https://echa.europa.eu/candidate-list-table
7. LCA study: Project report for the verification of the Environmental Product Declaration of Plasterboards – Plaka Saint-Gobain México (2025, Version 1)