



# ENVIRONMENTAL PRODUCT DECLARATION

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

## RhinoBoard® FireStop® dB 15mm



INTERNATIONAL EPD SYSTEM

The International EPD® System  
Programme operator: EPD international AB  
Registration number:  
**EPD-IES-0025781**



**Version date:** 2026/02/11

**Validity:** 5 years

**Validity date:** 2031/02/10



An EPD may be updated or depublished if conditions change. To be find the latest version of the EPD and to confirm its validity, see [www.environdec.com](http://www.environdec.com)

**EPD Owner:** Saint-Gobain Gyproc SA

## General information

### Programme information

<b>PROGRAMME:</b>	The International EPD® System
<b>ADDRESS:</b>	EPD International AB - Box 210 60 - SE-100 31 Stockholm - Sweden
<b>WEBSITE:</b>	<a href="http://www.environdec.com">www.environdec.com</a>
<b>E-MAIL:</b>	<a href="mailto:support@environdec.com">support@environdec.com</a>

### PCR information

#### Product Category rules (PCR)

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), 2024-08-06. c-PCR Gypsum-based construction products

**PCR review was conducted by:** The Technical Committee of the International EPD® System  
See [www.environdec.com](http://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 verification by individual verifier

**Third party verifier:** Andrew Norton (Renueables Ltd)  
[a.norton@renueables.co.uk](mailto:a.norton@renueables.co.uk)

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.

## Information about EPD owner

**Address and contact information of the EPD owner:** 10 Garret Street, Parow Industrial, Cape Town

**Description of the organization of the EPD owner:** Saint-Gobain Gyproc SA

**Management system-related certification:** ISO45001, ISO14001, ISO9001

**LCA practitioner:** Kirsten Dreyer, kirsten.dreyer@saint-gobain.com

**Communication:** The intended use of this EPD is for B2B communication.

## Product information

**Product name:** RhinoBoard® FireStop® dB 15mm

**Visual representation of the product:**



**UN CPC CODE:** 37530 Articles of plaster or of composition based on plaster

**Manufacturing site(s):** Saint-Gobain Gyproc Cape Town

## Product description

This Environmental Product Declaration (EPD®) describes the environmental impacts of 1m<sup>2</sup> of installed RhinoBoard® FireStop® dB 15mm with a useful life of 50 years.

RhinoBoard® FireStop® dB 15mm consists of a high-density gypsum core with glass fibre and other additives encased in, and firmly bonded to strong paper liners. RhinoBoard® FireStop® dB is a plasterboard that is suitable for drylining internal surfaces.

For more information: <https://www.gyproc.co.za/products/board-products/rhinoboard-firestop-db>

## Technical data/physical characteristics:

Parameter	Value / Description
EN Classification	A-12,5 (EN 520:2004+A1:2009)
Reaction to fire	> 60 minutes
Thermal conductivity	0.21 W/m.0K

Application	Value / Description
Intended use and key functionalities	Designed for use in Gyproc wall and partitions systems where greater levels of fire protection and acoustic performance are required. Board linings provide good fire protection owing to the unique behaviour of the high-density gypsum core when subjected to high temperatures.
Expected influence on the operational aspects and impact of the building or other construction work	RhinoBoard® FireStop® dB is unsuitable for use in areas subject to continuously damp or humid conditions and must not be used to isolate dampness.
Restrictions to a type of construction or building	Internal
Lifespan	50 years

## Content declaration

Description of the main components and/or materials:

Quantity for 1 functional unit 13.258 kg/m<sup>2</sup> of finished product

Product components	Mass (kg)	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/product or declared unit
Core (gypsum and additives)	12.938	93.9%	0.4%	0.02
Liner & facing	0.320	2.4%	2.4%	0.15
<b>Sum</b>	<b>13.258</b>	<b>96%</b>	<b>3%</b>	<b>0.17</b>
Packaging materials	Mass (kg)	Mass-% (versus the product)	Biogenic material <sup>104</sup> , kg C/product or declared unit	
Cardboard	1.71E-05	0.000129	7.37E-06	
Paper label	1.23E-08	0.00000009	5.29E-09	
Polyethylene film (LDPE)	5.42E-07	0.000004		
Bangalala	6.70E-02	0.505342	2.75E-02	

## 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 in the product or packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).

## LCA information

<b>TYPE OF EPD</b>	Cradle to grave and module D
<b>FUNCTIONAL UNIT</b>	1 m <sup>2</sup> of installed board
<b>CONVERSION FACTOR TO MASS</b>	Density = 13.258 kg/m <sup>2</sup> Thickness = 15 mm
<b>SYSTEM BOUNDARIES</b>	Cradle to grave and module D
<b>REFERENCE SERVICE LIFE (RSL)</b>	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.
<b>CUT-OFF RULES</b>	<p>All data is available, no cut-off rules has been applied.</p> <p>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.</p> <p>Flows related to human activities such as employee transport are excluded.</p> <p>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.</p>
<b>ALLOCATIONS</b>	<p>Allocation has been avoided when possible and when not possible a mass allocation has been applied.</p> <p>The polluter pays and the modularity principles as well have been followed.</p>
<b>DATA QUALITY ASSESSMENT</b>	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).
<b>GEOGRAPHICAL COVERAGE AND TIME PERIOD</b>	<p>Scope: Sub-Saharan Africa</p> <p>Data is collected from one production site Cape Town located in South Africa</p> <p>Data collected for the year 2024</p>
<b>BACKGROUND DATA SOURCE</b>	Databases from Sphera CUP2024.2 and ecoinvent v.3.10 EF Package 3.1
<b>SOFTWARE</b>	Sphera LCA for experts 10

## Data quality declaration

Data quality information according to EN 15941	
<b>Data collection</b>	Data collection period 2024-01-12 to 2024-12-15
<b>Sites used</b>	Gyproc Cape Town
<b>Geography</b>	Produced in Cape Town, South Africa Sold in Sub-Saharan Africa Use and disposal in Sub-Saharan Africa
<b>Technology</b>	Manufacturing technology
<b>Averaging</b>	100% of production
<b>LCI/LCA database</b>	Sphera CUP2024.2 and ecoinvent v.3.10
<b>EPD used</b>	N/A
<b>Data Quality Scheme</b>	EN 15804 :2012+A2:2019, Annex E, Table E.2
<b>Use of fair data with more than 30% of a core impact</b>	None
<b>Use of Poor relevant data</b>	None
<b>Use of very poor relevant data</b>	No very poor data used

Process	Source type	Source	Reference year	Data category	A1-A3 GWP-GHG [kg CO <sub>2</sub> eq.]
<b>Manufacturing process</b>					
Thermal energy	Database	Sphera 2024.2	<5 years old	Primary data	0.4%
Electricity	Database	Sphera 2024.2 /ecoinvent 3.10	<5 years old	Primary data	0.1%
<b>RMs from EPD</b>					
EPD specific RM1	EPD	EPD number	EPD publication year	Primary data, secondary data	79%
EPD specific RM2	EPD	EPD number	EPD publication year	Primary data, secondary data	0%
<b>Background datasets in A1-A3</b>					
Other processes	Database	Sphera 2024.2 /ecoinvent 3.10	<5 years old	Secondary data	0%
<b>Total share of primary data</b>					<b>80%</b>

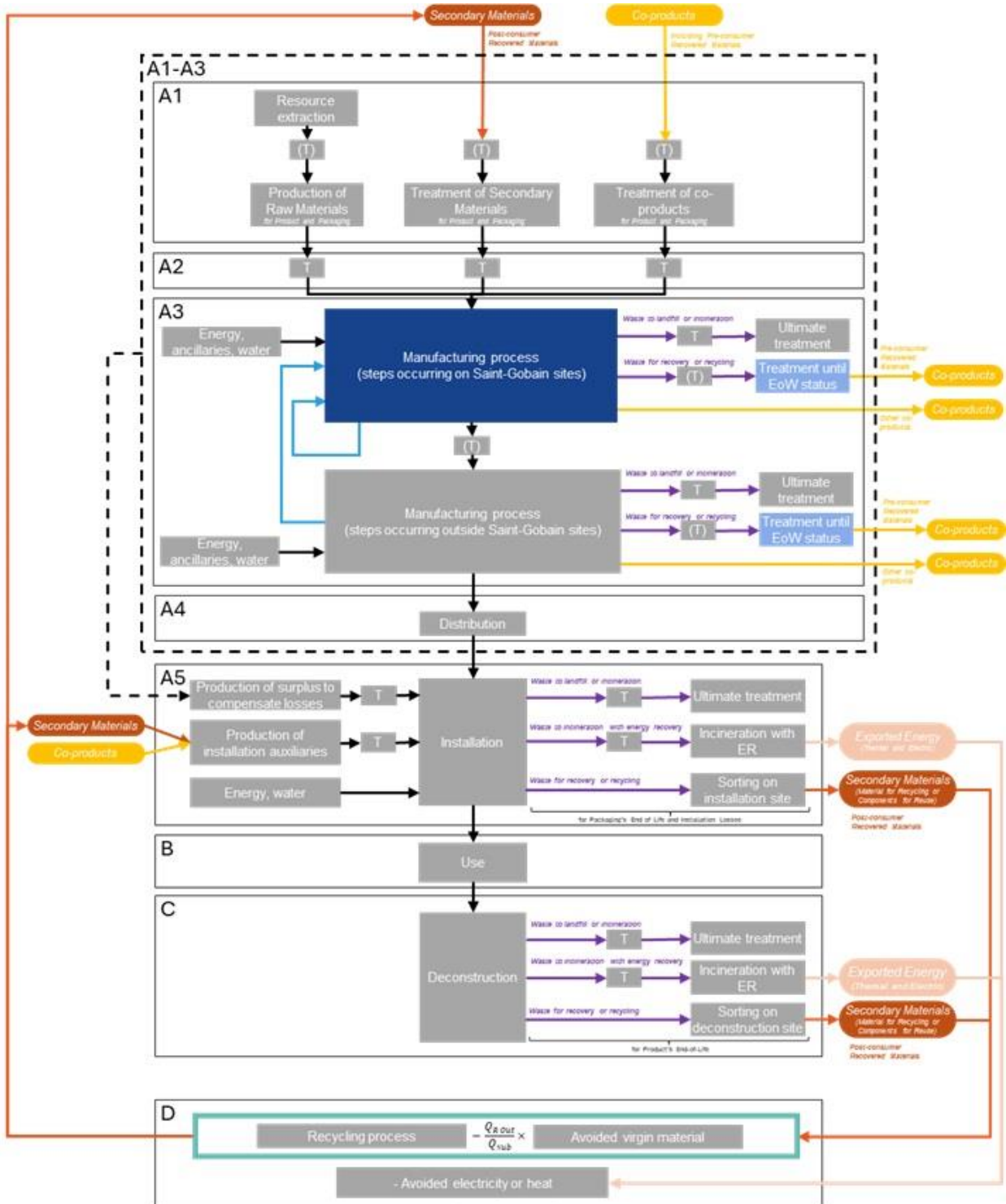
A1-A3 GWP-GHG	6.11E+02
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## Description of system boundaries

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	X
Geography	Glo	Glo	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	ZA	

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



**caption**

Type of flows		Location of life Cycle Step	
	Internal recycling (not leaving the system)		Saint-Gobain site
	Recovered Material (recycled or reused). Treated with waste allocation(*)		Saint-Gobain site or External
	Exported Energy		External/Other
	Co-product Treated with co-product allocation(*)		T Transport
	Waste (*)		
	Other		

(\*)As defined by EN15804+A2

## Life cycle stages

### A1-A3. Product stage

The product stage of plaster 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.

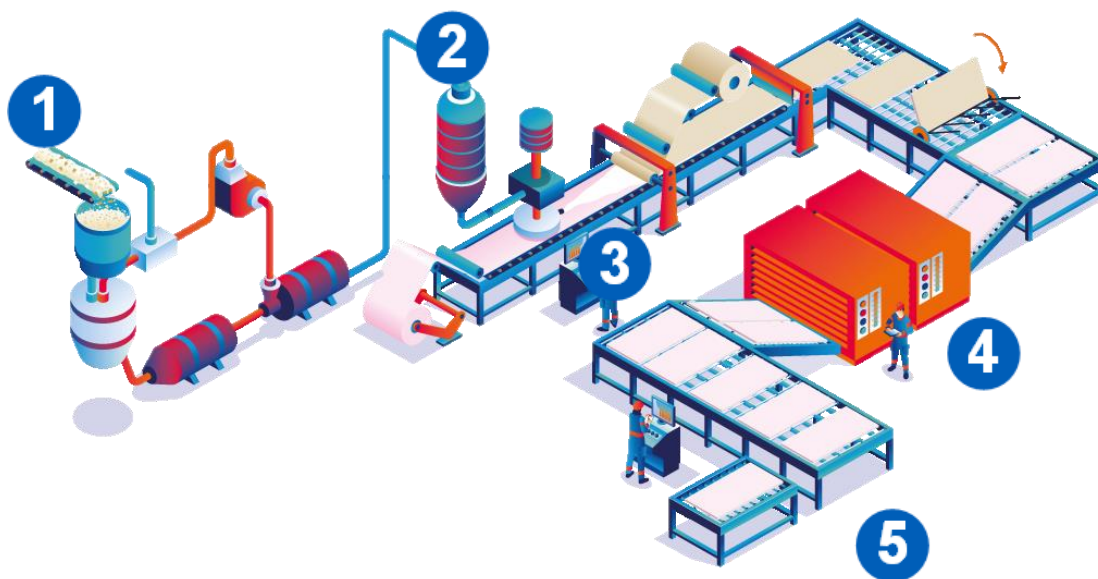
#### A2. Transport to the manufacturer

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 and the manufacture of packaging. The production of packaging material is considered at this stage. The processing of any waste arising from this stage is also included.

### Manufacturing process flow diagram



1. **Calcination.** Gypsum is ground then **heated to 157°C to be dehydrated**. The powder obtained (stucco), stored in silos, feeds the production of plasterboard.
2. **Mixing.** The stucco powder is mixed with **water and additives** to **obtain a slurry**. The dosages are adjusted according to the desired properties of the finished product, such as fire resist.
3. **Forming.** The slurry is **spread on a paper liner** as a support, then a second paper liner is placed on the top. After a quick setting, the boards are **precut**.
4. **Drying.** The boards pass through a dryer where the temperature can reach up to **300°C**. The evaporation of excess water **strengthens the cohesion of the gypsum** to the paper liner.
5. **Finishing and packaging.** The plasterboards are **resized, inspected then packed** before being stored by FLT's.

## 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 / Description
<b>Fuel type and consumption of vehicle or vehicle type used for transport e.g., long-distance truck, boat, etc.</b>	Freight truck, maximum load weight of 34 t, real load is 33.5 t and consumption of 0.38 liters per km
<b>Distance</b>	708 km
<b>Capacity utilisation (including empty returns)</b>	76% (30% empty returns)
<b>Bulk density of transported products*</b>	884 kg/m <sup>3</sup>
<b>Volume capacity utilisation factor</b>	1

### A5. Installation in the building

This module includes: the installation of the product, the surplus of raw materials and packaging (cradle to gate) to compensate for the loss of product during the installation, the transport and management of packaging and product waste.

Parameter	Value / Description
<b>Ancillary materials for installation (specified by materials)</b>	Jointing compound: 0.330 kg/m <sup>2</sup> Jointing tape: 1.23 m/m <sup>2</sup> board (0.0042 kg/m <sup>2</sup> ) Screws: 8 units/m <sup>2</sup> board (0.010 kg/m <sup>2</sup> )
<b>Water for on-site mixing of jointing compound</b>	0.158 liters/m <sup>2</sup>
<b>Other resource use</b>	None
<b>Electricity for on-site mixing of jointing compound</b>	0.001 MJ/m <sup>2</sup>
<b>Scrap rate at installation</b>	5% for plasterboard and for ancillary materials 100% for packaging
<b>Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)</b>	Plasterboard: 0.6629 kg/m <sup>2</sup> Jointing Compound: 0.00021 kg/m <sup>2</sup> Jointing Tape: 0.0165 kg/m <sup>2</sup> Packaging: 0.067 kg/m <sup>2</sup>
<b>Transport of packaging waste</b>	Landfill: 50 km Recycling: 50 km
<b>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)</b>	Plasterboard: 0.6629 kg/m <sup>2</sup> to landfill Jointing Compound: 0.00021 kg/m <sup>2</sup> to landfill Jointing Tape: 0.0165 kg/m <sup>2</sup> to landfill Packaging: 0.067 kg/m <sup>2</sup> to landfill Recycling: 0 kg/m <sup>2</sup>
<b>Direct emissions to ambient air, soil, and water</b>	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 entire building. The energy considered for demolition is 0.045 MJ/m<sup>2</sup>.
- **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
<b>Collection process specified by type</b>	13.258 kg/m <sup>2</sup> of plasterboard including paper liner is collected with mixed deconstruction and demolition waste 13.258 kg/m <sup>2</sup> landfill 0 kg/m <sup>2</sup> recycling Other deconstruction waste, such as ancillaries used for installation, is 100% collected with mixed deconstruction and demolition waste for landfill
<b>Recovery system specified by type</b>	0 kg recycled
<b>Disposal specified by type</b>	0 kg to landfill
<b>Assumptions for scenario development (e.g. transportation)</b>	The waste will be transported by truck with 24 t payload, using diesel as a fuel consuming 38 liters per 100 km Transport distance to landfill: 80 km Transport distance to recycling: 80 km

## D. Reuse/recovery/recycling potential

In the module D is declared the environmental benefits and loads from reusable products, recyclable materials, or energy recovery. Module D considers:

- Inputs of secondary materials: recycled raw materials for product and packaging (pre- and post-consumer),
- Outputs of secondary materials: product and/or packaging sent to recycling,
- Exported energy (electric or thermal): product and/or packaging sent to incineration with energy recovery.

## 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 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 following indicators:

- Resource use, mineral and metals [kg Sb eq.]
- Resource use, energy carriers [MJ]
- Water deprivation potential [m<sup>3</sup> 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].











Results refer to a declared unit of 1m<sup>2</sup> of installed RhinoBoard® FireStop® dB 15mm with a weight of 13.258 kg/m<sup>2</sup>. The following results refer to a single product manufactured in a single plant: Cape Town

# 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 CO <sub>2</sub> eq.]	3.89E+00	5.38E-01	3.61E-01	0	0	0	0	0	0	6.13E-02	8.55E-02	0	9.41E-01	-4.54E-02
	Climate Change (fossil) [kg CO <sub>2</sub> eq.]	4.50E+00	5.28E-01	2.53E-01	0	0	0	0	0	0	6.13E-02	8.39E-02	0	1.13E-01	-4.78E-02
	Climate Change (biogenic) [kg CO <sub>2</sub> eq.]	-6.14E-01	1.46E-03	1.07E-01	0	0	0	0	0	0	4.95E-06	2.31E-04	0	8.28E-01	1.80E-03
	Climate Change (land use change) [kg CO <sub>2</sub> eq.]	9.88E-03	8.74E-03	7.13E-04	0	0	0	0	0	0	5.32E-06	1.39E-03	0	1.49E-04	5.62E-04
	Ozone depletion [kg CFC-11 eq.]	1.78E-09	5.24E-14	2.46E-10	0	0	0	0	0	0	9.38E-10	8.32E-15	0	2.25E-09	3.65E-09
	Acidification terrestrial and freshwater [Mole of H+ eq.]	2.17E-02	5.74E-04	1.18E-03	0	0	0	0	0	0	5.53E-04	9.42E-05	0	7.52E-04	4.81E-04
	Eutrophication freshwater [kg P eq.]	8.75E-05	2.22E-06	6.33E-06	0	0	0	0	0	0	2.16E-07	3.53E-07	0	3.35E-06	1.16E-05
	Eutrophication marine [kg N eq.]	5.06E-03	1.88E-04	2.91E-04	0	0	0	0	0	0	2.57E-04	3.13E-05	0	3.00E-04	1.01E-04
	Eutrophication terrestrial [Mole of N eq.]	5.45E-02	2.29E-03	3.06E-03	0	0	0	0	0	0	2.81E-03	3.82E-04	0	2.95E-03	9.18E-04
	Photochemical ozone formation - human health [kg NMVOC eq.]	1.43E-02	5.36E-04	8.21E-04	0	0	0	0	0	0	8.38E-04	8.81E-05	0	1.14E-03	6.11E-04
	Resource use, mineral and metals [kg Sb eq.] <sup>1</sup>	1.63E-06	4.43E-08	1.01E-07	0	0	0	0	0	0	2.19E-08	7.03E-09	0	1.23E-07	6.70E-07
	Resource use, energy carriers [MJ] <sup>1</sup>	6.47E+01	6.79E+00	3.72E+00	0	0	0	0	0	0	7.94E-01	1.08E+00	0	2.40E+00	-2.27E-01
	Water deprivation potential [m <sup>3</sup> world equiv.] <sup>1</sup>	4.93E-01	7.75E-03	6.17E-02	0	0	0	0	0	0	2.46E-03	1.23E-03	0	8.84E-02	1.04E-01









<sup>1</sup> 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] <sup>2</sup>	8.25E+00	5.74E-01	1.50E+00	0	0	0	0	0	0	0	4.93E-03	9.12E-02	0	7.98E-02	3.42E+00
 Primary energy resources used as raw materials (PERM) [MJ] <sup>2</sup>	6.48E+00	0	-5.80E-01	0	0	0	0	0	0	0	0	0	0	0	0
 Total use of renewable primary energy resources (PERT) [MJ] <sup>2</sup>	1.47E+01	5.74E-01	9.22E-01	0	0	0	0	0	0	0	4.93E-03	9.12E-02	0	7.98E-02	3.42E+00
 Use of non-renewable primary energy (PENRE) [MJ] <sup>2</sup>	6.43E+01	6.79E+00	3.69E+00	0	0	0	0	0	0	0	7.94E-01	1.08E+00	0	2.40E+00	-4.53E-01
 Non-renewable primary energy resources used as raw materials (PENRM) [MJ] <sup>2</sup>	3.80E-01	0	3.32E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Total use of non-renewable primary energy resources (PENRT) [MJ] <sup>2</sup>	6.47E+01	6.79E+00	3.72E+00	0	0	0	0	0	0	0	7.94E-01	1.08E+00	0	2.40E+00	-4.53E-01
 Use of secondary material (SM) [kg]	3.20E-01	0	1.60E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Use of renewable secondary fuels (RSF) [MJ]	1.10E-24	0	5.48E-26	0	0	0	0	0	0	0	0	0	0	0	0
 Use of non-renewable secondary fuels (NRSF) [MJ]	1.29E-23	0	6.434E-25	0	0	0	0	0	0	0	0	0	0	0	0
 Use of net fresh water (FW) [m3]	1.38E-02	6.45E-04	1.57E-03	0	0	0	0	0	0	0	5.73E-05	1.02E-04	0	2.08E-03	1.70E-03

<sup>2</sup> From EPD International Construction Product PCR 2.0 (Annex 3). The option B was retained to calculate the primary energy use indicators.



## Waste Category & Output flows

Waste Category & Output Flows	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
 Hazardous waste disposed (HWD) [kg]	1.07E-01	2.20E-10	5.48E-03	0	0	0	0	0	0	0	6.94E-04	3.49E-11	0	1.42E-03	1.90E-02
 Non-hazardous waste disposed (NHWD) [kg]	4.25E-01	1.06E-03	6.92E-01	0	0	0	0	0	0	0	5.36E-03	1.68E-04	0	1.35E+01	1.99E-01
 Radioactive waste disposed (RWD) [kg]	3.44E-04	8.78E-06	1.97E-05	0	0	0	0	0	0	0	8.81E-08	1.39E-06	0	6.03E-06	-1.35E-04
 Components for re-use (CRU) [kg]	0	0	6.16E-02	0	0	0	0	0	0	0	0	0	0	0	0
 Materials for Recycling (MFR) [kg]	0	0	0	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

	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 CO <sub>2</sub> eq.] <sup>3</sup>	6.11E+02	5.38E-01	3.07E+01	0	0	0	0	0	0	0	6.13E-02	8.55E-02	0	9.41E-01	-9.18E-02

### Information on biogenic carbon content

		PRODUCT STAGE
<b>Biogenic Carbon Content</b>		A1 / A2 / A3
	Biogenic carbon content in product [kg]	1.43E-01
	Biogenic carbon content in packaging [kg]	2.64E-02

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO<sub>2</sub>. The product contains biogenic carbon due to the additives and paper liner used. Regarding packaging, biogenic carbon is quantified due to cardboard, bangalalas and paper label.

<sup>3</sup> 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 factory based in Cape Town uses the following electricity description.

Parameter	Information
<b>Location</b>	Representative of Electricity residual market in country where Saint-Gobain plant is located.
<b>Geographical &amp; technical representativeness</b>	Share of energy sources Biogas 0.1% Biomass 0% Coal gases 0% Geothermal 0% Hard coal 85.7% Heavy fuel oil (HFO) 0.1% Hydro 2.8% Lignite 0% Natural gas 0% Nuclear 5.1% Peat 0% Photovoltaic 2% Solar thermal 0.7% Waste 0% Wind 3.4% 2% transmission losses
<b>Dataset version</b>	Sphera CUP2024.2 ecoinvent 3.10 (medium voltage)
<b>Source of electricity mix</b>	Sphera/ecoinvent/ AIB report 2024/ IEA
<b>GHG-GWP CO<sub>2</sub> eq.</b>	1.096 kg of CO <sub>2</sub> eq/kWh

## Other additional environmental information

No additional information.

## Abbreviations

AIB	Association of issuing bodies
DU	Declared unit
EF	Environmental footprint
EPD	Environmental Product Declaration
eq.	equivalents
FU	Functional unit
g	gram
GJ	Giga Joules (as Net Calorific Value)
GWP	Global warming potential
GWP-GHG	Global warming potential - Greenhouse gas
GHG	Greenhouse gas
GO	Guaranty of origin
IOBC	Instantaneous Oxidation of Biogenic Carbon
kg	kilogram
kWh	kilowatt-hour
L	liter
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory
LCIA	Life Cycle Impact Assessment
MJ	Mega Joules (as Net Calorific Value)
m <sup>2</sup> ·K/W	kilowatt per square meter
PCR	Product Category Rules
RM	Raw Materials
RSL	Reference Service Life (in years)
ton	metric ton
W/(m.K)	Watts per meter-Kelvin

## References

1. ISO 14040:2006 Environmental Management-Life Cycle Assessment-Principles and framework.
2. ISO 14044:2006 Environmental Management-Life Cycle Assessment-Requirements and guidelines.
3. EN 15804:2012+A1:2013 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
4. EN 15804:2012+A2:2019/AC:2021 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
5. EPD International. General Program Instructions (GPI) for the International EPD® System (version 5.0.1) [www.environdec.com](http://www.environdec.com).
6. The International EPD System PCR 2019:14 Construction products and Construction services. Version 2.0.1
7. EN 15941 Sustainability of construction works - Data quality for environmental assessment of products and construction work - Selection and use of data
8. c-PCR Gypsum-based construction products (EN 17328) (c-PCR-031 version: 2024-08-06)
9. European Chemical Agency, Candidate List of substances of very high concern for Authorization. <https://echa.europa.eu/candidate-list-table>
10. LCA report name: 2025.1.4 Gypsum\_LCA report (PCR 2.0.1 EPD Int. System)

## Version history

Original version of the EPD - **2026/02/11**