



# ENVIRONMENTAL PRODUCT DECLARATION

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

## Gyproc Habito® Forte Hydro



THE INTERNATIONAL EPD® SYSTEM

The International EPD®  
Programme operator: EPD international AB  
Registration number:  
EPD-IES-0019551:001



An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at [www.environdec.com](http://www.environdec.com)

**Version: 01**

**Date of publication: 2025/02/13**

**Validity: 5 years**

**Valid until: 2030/02/12**

**Scope of the EPD®: Italy**



## 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>	www.environdec.com
<b>E-MAIL:</b>	info@environdec.com

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 1.3.2

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

**President:** Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact - Contact via info@environdec.com

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

EPD process certification     EPD verification

**Third party verifier:** Certiquality Srl | Via G. Giardino, 4 – 20123 Milano – IT  
info@certiquality.it | certiquality.it

Approved by: Accredia 003H REV.17

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

EPDs within the same product category but registered in different EPD programs may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same version number up to the first two digits) or be based on fully aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical DU/FU); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterization factors); have equivalent content declarations; and be valid at the time of Comparison. For further information about comparability, see EN 15804:2012+A2:2019/AC:2021 and ISO 14025:2006.

# Product information

## Company information

**Manufacturer:** Saint-Gobain Italia S.p.A.

**Production plant(s):** Strada Provinciale Traversa della Termolese Z.I. Pantano Basso, 86039 Termoli - Italia

**Management system-related certification:** ISO 9001 - ISO 14001 - ISO 45001

**Programme used:** EN 15804:2012+A2:2019/AC:2021 Sustainability of construction works – Environmental product declaration - core rules for the product category of construction product and The International EPD® System

**PCR identification:** PCR 2019:14 version 1.3.4 for Construction products

**c-PCR identification:** c-PCR version:2024-08-06 for Gypsum-based construction products (EN 17328)

**Prepared by:** IVL Swedish Environmental Research Institute, EPD International Secretariat

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

**Owner of the declaration:** Saint-Gobain Italia S.p.A. -Via Giovanni Bensi 8, 20152 Milano – Italia

**Product name and manufacturer represented:** Gyproc Habito® Forte Hydro

**EPD® prepared by:** Luca Cappellini ([Luca.Cappellini@saint-gobain.com](mailto:Luca.Cappellini@saint-gobain.com)) , Martina Di Felice ([Martina.Difelice@saint-gobain.com](mailto:Martina.Difelice@saint-gobain.com)), Salma Jaawani ([Salma.Jaawani@saint-gobain.com](mailto:Salma.Jaawani@saint-gobain.com)), Paola Bonfiglio ([Paola.Bonfiglio@saint-gobain.com](mailto:Paola.Bonfiglio@saint-gobain.com)), and Sandra Perez-Jimenez ([Sandra.Perez-Jimenez@saint-gobain.com](mailto:Sandra.Perez-Jimenez@saint-gobain.com))

The intended use of this EPD is for B2B communication.

**Geographical scope of the EPD®:** Italy

**EPD® registration number:** EPD-IES-0019551:001

**Declaration issued:** 2025/02/13 **valid until:** 2030/02/12

**Demonstration of verification:** An independent verification of the declaration was made, according to ISO 14025:2010. This verification was external and conducted by the following third party based on the PCR mentioned above.

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



## Product description

### Product description and description of use

This Environmental Product Declaration (EPD®) describes the environmental impacts of 1m<sup>2</sup> of installed gypsum board 12.5 mm with a weight of 12.3 kg/m<sup>2</sup> with a useful life of 50 years.

Gyproc Habito® Forte Hydro consists of a special board (type D F I R according to EN 520:2009), with an increased density core, where gypsum is mixed with a high quantity of glass fibres; these characteristics give the product a very high level of surface hardness, mechanical resistance and load bearing capacity, even using simple screws for chipboard. It also helps to increase the fire resistance and sound insulation in systems where it is installed. Type H1 plasterboard with reduced water absorption, which gives it excellent sealing in the presence of high levels of humidity. The special paper with a particularly white colour facilitates the finishing operations.

The board can be used for the implementation of systems where high mechanical strength is required, as well as load bearing capacity and impact resistance. It is suitable for all building sectors (residential, commercial, etc.).

### Technical data

Parameter	Value / Description
EN Classification	D E F H1 I R (EN 520)
Reaction to fire	A2-s1,d0 (EN 13501-1)
Water vapour resistance factor, $\mu$	10/4 (EN 10456)
Thermal conductivity	0.25 W/mK (EN 10456)

### Declaration of the main product components and/or materials

Description of the main components and/or materials:

Product components	Weight (kg)	Post-consumer recycled material weight (%)	Biogenic material, weight-% and kg C/kg product
Core	85 – 90%	0 – 5 %	0%
Additives	1 – 15%	0 %	0%
Facing	1 –3%	0 %	0%
<b>Sum</b>	<b>100%</b>	<b>0 - 5%</b>	<b>0%</b>
Packaging materials	Weight (kg)	Weight versus the product (%)	Weight biogenic carbon, kg C/kg product
Wooden Pallet	0,0145	0,12 %	0,0073

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).

The verifier and the program operator do not make any claim nor have any responsibility of the legality of the product.

## LCA calculation information

<b>TYPE OF EPD</b>	Cradle to gate with options and optional modules (A1–A3 + A4-A5 + C + D).
<b>DECLARED UNIT</b>	1 m <sup>2</sup> of installed board with a weight of 12.3 kg/m <sup>2</sup>
<b>SYSTEM BOUNDARIES</b>	Mandatory stages = A1-A3; C1-C4 and D; Optional stages = A4-A5; B1-B7
<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>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.</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> <p>Allocation has been avoided when possible and when not possible a mass allocation has been applied.</p>
<b>ALLOCATIONS</b>	The polluter pays and the modularity principles as well have been followed.
<b>GEOGRAPHICAL COVERAGE AND TIME PERIOD</b>	<p>Scope: Italy</p> <p>Data is collected from one production site Termoli located in Italy</p> <p>Data collected for the year 2023</p>
<b>BACKGROUND DATA SOURCE</b>	The databases Sphera 2023.2 and ecoinvent v.3.9.1
<b>SOFTWARE</b>	Sphera LCA for experts (GaBi) 10

## LCA scope

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	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X
Geography	EU	IT	IT	IT	IT	-	-	-	-	-	-	-	IT	IT	IT	IT	IT
Specific data used	>81% GWP- GHG																
Variation products	Only one product is reported in this EPD																
Variation sites	Only one site is reported for this product																

## 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

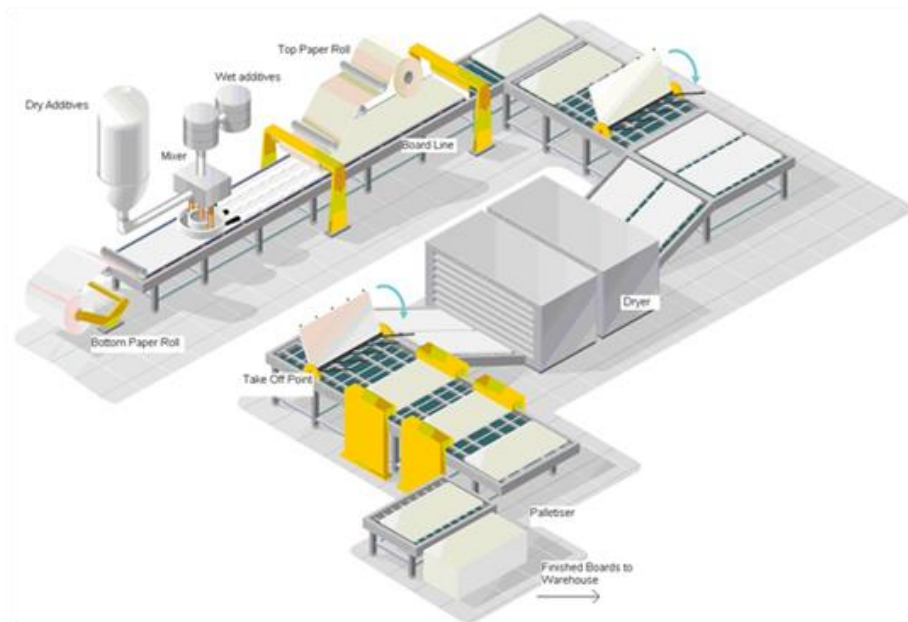
This module includes the transportation of raw materials and packaging to the manufacturing site. The modelling includes road, boat and/or train transportations.

### 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

System diagram:



### Manufacturing in detail:

The initial materials are homogeneously mixed to form a gypsum slurry that is spread via multiple hose outlets onto a paper liner on a moving conveyor belt. A second paper liner is fed onto the production line from above to form the plasterboard. The plasterboard continues along the production line where it is finished, dried, and cut to size.

## 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
<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 27 t, real load is 24 t and consumption of 0.38 liters per km
<b>Distance</b>	460 km
<b>Capacity utilisation (including empty returns)</b>	68% (30% empty returns)
<b>Bulk density of transported products*</b>	984 kg/m <sup>3</sup>
<b>Volume capacity utilisation factor</b>	< 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
<b>Ancillary materials for installation (specified by materials)</b>	Jointing compound 0.33 kg/m <sup>2</sup> board, jointing tape 1.23 m/m <sup>2</sup> board, screws 8 units /m <sup>2</sup> board
<b>Water use</b>	0.158 liters/m <sup>2</sup>
<b>Other resource use</b>	None
<b>Quantitative description of energy type (regional mix) and consumption during the installation process</b>	None
<b>Wastage of materials on the building site before waste processing, generated by the product's installation (specified by type)</b>	Plasterboard: 0.615 kg/m <sup>2</sup> Jointing Compound: 0.0165 kg/m <sup>2</sup> Jointing Tape: 0.00021 kg/m <sup>2</sup> Screws: 0.00052 kg/m <sup>2</sup> Pallet: 0.00073 kg/m <sup>2</sup> All packaging: 0.0152 kg/m <sup>2</sup>
<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: 100% landfilled Ancillaries: 100% landfilled Packaging : Pallet: 100% landfilled
<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 the entire building. In our case, the energy is considered is 0.05 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>	100% collected with mixed deconstruction and demolition waste sent to landfill (including board, screws and jointing tape/compound)
<b>Recovery system specified by type</b>	0 kg recycled
<b>Disposal specified by type</b>	12.3 kg/m <sup>2</sup> to landfill
<b>Assumptions for scenario development (e.g. transportation)</b>	Gypsum waste is transported 50 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.

## LCA results

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 are from the ILCD. Raw materials and energy consumption, as well as transport distances have been taken directly from the manufacturing plant. Characterisation factors EN15804 based on EF 3.1.

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.








All emissions to air, water, and soil, and all materials and energy used have been included.

The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, noncancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological, and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.

This EPD including module C, we strongly advise against using the results of modules A1-A3 without considering the results of module C.











Results refer to a declared unit of 1m<sup>2</sup> of installed gypsum board 12.5 mm with a weight of 12.3 kg/m<sup>2</sup>. The following results refer to a single product manufactured in a single plant:

# Environmental Impacts

Environmental indicators		PRODUCT STAGE	CONSTRUCTION STAGE		END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
		A1 / A2 / A3	A4 Transport	A5 Installation	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	Climate Change [kg CO2 eq.]	3,29E+00	4,17E-01	5,57E-01	5,65E-02	4,85E-02	0,00E+00	1,32E+00	-3,16E-03
	Climate Change (fossil) [kg CO2 eq.]	4,14E+00	4,12E-01	2,72E-01	5,65E-02	4,79E-02	0,00E+00	2,18E-01	-3,16E-03
	Climate Change (biogenic) [kg CO2 eq.]	-8,62E-01	1,07E-03	2,85E-01	7,13E-06	1,25E-04	0,00E+00	1,10E+00	-1,51E-06
	Climate Change (land use change) [kg CO2 eq.]	9,10E-03	3,70E-03	5,73E-04	6,35E-06	4,43E-04	0,00E+00	9,21E-05	4,11E-07
	Ozone depletion [kg CFC-11 eq.]	5,95E-08	7,88E-14	3,13E-09	8,98E-10	4,19E-15	0,00E+00	2,35E-09	-5,18E-14
	Acidification terrestrial and freshwater [Mole of H+ eq.]	1,04E-02	8,08E-04	7,00E-04	5,23E-04	5,50E-05	0,00E+00	7,49E-04	-1,10E-05
	Eutrophication freshwater [kg P eq.]	5,04E-04	1,47E-06	2,86E-05	1,73E-06	1,74E-07	0,00E+00	6,71E-06	-2,89E-09
	Eutrophication marine [kg N eq.]	3,00E-03	2,40E-04	2,72E-04	2,43E-04	1,90E-05	0,00E+00	1,37E-03	-2,98E-06
	Eutrophication terrestrial [Mole of N eq.]	2,78E-02	2,76E-03	1,95E-03	2,64E-03	2,24E-04	0,00E+00	2,84E-03	-3,05E-05
	Photochemical ozone formation - human health [kg NMVOC eq.]	9,65E-03	6,37E-04	6,59E-04	7,81E-04	4,79E-05	0,00E+00	1,22E-03	-8,96E-06
	Resource use, mineral and metals [kg Sb eq.] <sup>1</sup>	8,56E-06	2,64E-08	1,11E-06	1,97E-08	3,11E-09	0,00E+00	1,39E-07	-8,66E-10
	Resource use, energy carriers [MJ] <sup>1</sup>	9,61E+01	5,60E+00	5,60E+00	7,37E-01	6,50E-01	0,00E+00	2,22E+00	-5,26E-02
	Water deprivation potential [m³ world equiv.] <sup>1</sup>	1,72E+00	5,14E-03	1,24E-01	2,49E-03	5,51E-04	0,00E+00	9,67E-02	-4,93E-04









<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		END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
 Use of renewable primary energy (PERE) [MJ] <sup>2</sup>	6,50E+00	4,14E-01	2,99E+00	4,21E-03	4,60E-02	0,00E+00	7,58E-02	-9,79E-03
 Primary energy resources used as raw materials (PERM) [MJ] <sup>2</sup>	8,09E+00	0,00E+00	-1,99E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
 Total use of renewable primary energy resources (PERT) [MJ] <sup>2</sup>	1,45E+01	4,14E-01	9,91E-01	4,21E-03	4,60E-02	0,00E+00	7,58E-02	-9,79E-03
 Use of non-renewable primary energy (PENRE) [MJ] <sup>2</sup>	7,31E+01	5,61E+00	4,45E+00	7,37E-01	6,52E-01	0,00E+00	2,22E+00	-5,27E-02
 Non-renewable primary energy resources used as raw materials (PENRM) [MJ] <sup>2</sup>	2,35E+01	0	1,19E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
 Total use of non-renewable primary energy resources (PENRT) [MJ] <sup>2</sup>	9,61E+01	5,609	5,62E+00	7,37E-01	6,52E-01	0,00E+00	2,22E+00	-5,27E-02
 Input of secondary material (SM) [kg]	5,32E-01	0	2,66E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
 Use of renewable secondary fuels (RSF) [MJ]	0,00E+00	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
 Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
 Use of net fresh water (FW) [m3]	4,04E-02	4,48E-04	2,97E-03	5,81E-05	5,07E-05	0,00E+00	2,26E-03	-1,93E-05

<sup>2</sup> From EPD International Construction Product PCR 1.3.4 (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		END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
 Hazardous waste disposed (HWD) [kg]	4,45E-04	1,67E-11	2,29E-05	4,98E-06	2,41E-12	0,00E+00	1,04E-05	-2,55E-11
 Non-hazardous waste disposed (NHWD) [kg]	6,05E-01	8,31E-04	7,25E-01	4,56E-03	9,39E-05	0,00E+00	1,36E+01	-2,32E-05
 Radioactive waste disposed (RWD) [kg]	1,67E-04	1,50E-05	1,82E-05	8,10E-08	8,43E-07	0,00E+00	2,98E-06	-6,43E-06
 Components for re-use (CRU) [kg]	0,00E+00	0,00E+00	1,61E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
 Materials for Recycling (MFR) [kg]	3,75E-01	0	1,88E-02	0	0	0,00E+00	0	0
 Material for Energy Recovery (MER) [kg]	0,00E+00	0	0,00E+00	0	0	0,00E+00	0	0
 Exported electrical energy (EEE) [MJ]	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0
 Exported thermal energy (EET) [MJ]	0,00E+00	0	0,00E+00	0	0	0,00E+00	0,00E+00	0

# Additional voluntary indicators from EN 15804

		PRODUCT STAGE	CONSTRUCTION STAGE		END OF LIFE STAGE				REUSE, RECOVERY RECYCLING
Environmental indicators		A1 / A2 / A3	A4 Transport	A5 Installation	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
	GWP-GHG [kg CO2 eq.] <sup>3</sup>	4,11E+00	4,16E-01	2,70E-01	5,65E-02	4,83E-02	0,00E+00	2,18E-01	-3,16E-03

<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.

### Information on biogenic carbon content

		PRODUCT STAGE
<b>Biogenic Carbon Content</b>		A1 / A2 / A3
	Biogenic carbon content in product [kg]	1,70E-01
	Biogenic carbon content in packaging [kg]	7,32E-02

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 wooden pallets production.

# Additional information:

## Electricity information

The production factory based in Termoli uses the following electricity description.

Parameter	Information
<b>Location</b>	Representative of Electricity purchased by Saint-Gobain
<b>Geographical &amp; technical representativeness</b>	Share of energy sources Biomass 0.63% Hard coal 26.29% HFO 3.76% Lignite 0.05% Natural gas 58.22% Nuclear 4.40% Solar thermal 6.21% Wind 0.43%
<b>Reference year</b>	<b>2023</b>
<b>Type of dataset</b>	Cradle to gate from Sphera and ecoinvent databases
<b>Source</b>	AIB report 2024
<b>CO2 emission kg CO2 eq. / kWh</b>	0.568 kg of CO <sub>2</sub> eq/kWh Climate Change - fossil indicator

## 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 and reporting documents the production site of Termoli, Italy. After evaluating the inventory, according to the defined ranking in the LCA report, the assessment reflects 2023 inventory data quality.

## Recycled, recovered, by-product material content and Indoor Air Quality

### Minimum content of recycled, recovered, by-product materials

MINIMUM CONTENT OF RECYCLED, RECOVERED, BY-PRODUCT MATERIALS									
PRODUCT NAME <sup>1</sup>		RECYCLED MATERIAL			RECOVERED MATERIAL	BY-PRODUCT MATERIAL			TOTAL CONTENT OF RECYCLED, RECOVERED, BY-PRODUCT MATERIAL <sup>2</sup>
		Pre-consumer	Post-consumer	Total		Internal	External		
		[%]	[%]	[%]		[%]	[%]		
Gyproc Habito® Forte Hydro 13	≥	0	4,7	4,7	0	0,5	0	≥	5,2
<p><b>Notes:</b></p> <p><sup>1</sup> Products of any size</p> <p><sup>2</sup> The value of the total minimum content of recycled, recovered and by-product material does not imply that recycled, recovered and by-product content are all present.</p>									
<p><b>Production plants:</b> Strada Provinciale Traversa della Termolese Z.I. Pantano Basso, 86039 Termoli – Italy</p>									
<p><b>Method for determining the recycled/recovered/by-product content:</b> product certification based on the mass balance determined by a calculation method based on the traceability of physical flows of matter for the specific product.</p>									
<p><b>Reference year of the data used:</b> 2024</p>									

### VOC Emissions test

Gyproc Habito® Forte Hydro boards are certified Indoor Air Comfort Gold by Eurofins as per certificate IACG-400-15-01. Gyproc plasterboards are not classified as hazardous under the EU CLP Regulation (European Regulation EC/1272/2008) and do not contain any substances of very high concern (SVHC) at a concentration of more than 0.1% by weight.



## Environmental impacts according to EN 15804:2012 + A1

The following tables presents results for 1m<sup>2</sup> of installed gypsum board 12.5 mm with a weight of 12.3 kg/m<sup>2</sup>.

	PRODUCT STAGE	CONSTRUCTION STAGE		END OF LIFE STAGE				BENEFITS AND LOADS BEYOND THE LIFE CYCLE
	A1 / A2 / A3	A4 Transport	A5 Installation	C1 Deconstruction / demolition	C2 Transport	C3 Waste processing	C4 Disposal	D Reuse, recovery, recycling
<b>Environmental impacts</b>								
Global Warming Potential (GWP) [kg CO <sub>2</sub> eq.]	4,1397	0,4118	0,2716	0,05646	0,0479	0	0,2181	-0,003158
Ozone depletion (ODP) [kg CFC 11eq.]	-0,8620761	0,00107	0,2851	0,000007125	0,0001247	0	1,097	-0,000001506
Acidification potential (AP) [kg SO <sub>2</sub> eq.]	0,00909858	0,003696	0,0005731	0,000006354	0,0004427	0	0,00009213	0,000000411
Eutrophication potential (EP) [kg (PO <sub>4</sub> ) <sub>3</sub> -eq.]	5,95003E-08	7,878E-14	3,126E-09	8,979E-10	4,185E-15	0	2,353E-09	-5,18E-14
Photochemical ozone creation (POCP) - [kg Ethylene eq.]	0,0103545	0,0008079	0,0007003	0,0005233	0,00005504	0	0,0007489	-0,00001101
Abiotic depletion potential for non-fossil resources (ADP-elements) [kg Sb eq.]	0,000504343	0,000001466	0,00002857	0,000001733	1,743E-07	0	0,000006708	-2,89E-09
Abiotic depletion potential for fossil resources (ADP-fossil fuels) [MJ]	0,00300095	0,0002404	0,0002715	0,0002428	0,00001897	0	0,001368	-0,00000298

## References

1. EN 15804:2012+A1:2013 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
2. EN 15804:2012+A2:2019/AC:2021 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
3. EPD International. General Program Instructions (GPI) for the International EPD® System (version 4.0) [www.environdec.com](http://www.environdec.com).
4. The International EPD System PCR 2019:14 Construction products and Construction services. Version 1.3.4
5. c-PCR-031 Gypsum-based construction products (EN 17328) (PCR 2019:14-c-PCR-031 version: 2024-08-06)
6. European Chemical Agency, Candidate List of substances of very high concern for Authorization. <https://echa.europa.eu/candidate-list-table>
7. LCA Report - Gyproc Habito® Forte Hydro - 2023