

# Environmental Product Declaration



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

## ***SINIAT TE / Gylv plasterboard***

EPD of a product recently on the market  
from

**PLADUR® | ALGISS®**

|                          |                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------|
| Programme:               | The International EPD® System, <a href="http://www.environdec.com">www.environdec.com</a> |
| Programme operator:      | EPD International AB                                                                      |
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| Publication date:        | 2025-08-05                                                                                |
| Revision date:           | 2025-09-26                                                                                |
| Valid until:             | 2030-08-01                                                                                |

*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](http://www.environdec.com).*

**Product recently on the market** – Results of this EPD shall be used with care as the LCI data is not yet based on 1 year of production which may result in increased uncertainty.



## General information

### Programme information

|                   |                                                                     |
|-------------------|---------------------------------------------------------------------|
| <b>Programme:</b> | The International EPD® System                                       |
| <b>Address:</b>   | EPD International AB<br>Box 210 60<br>SE-100 31 Stockholm<br>Sweden |
| <b>Website:</b>   | <a href="http://www.environdec.com">www.environdec.com</a>          |
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### Accountabilities for PCR, LCA and independent, third-party verification

#### Product Category Rules (PCR)

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR): *PCR 2019:14 Construction products, version 2.0.1, published on 2025-06-05, valid until 2030-04-07.*

Complementary Product Category Rules (C-PCR) to PCR 2019:14: *C-PCR-031 (TO PCR 2019:14) Gypsum-based construction products (EN 17328:2024), version 1.0.0, published on 2025-04-24, valid until 2030-04-07.*

PCR review was conducted by: *The Technical Committee of the International EPD System. A full list of members is available on [www.environdec.com](http://www.environdec.com). The review panel may be contacted via [support@environdec.com](mailto:support@environdec.com). Chairs of the PCR Review: Rob Rouwette (chair) and Noa Meron (co-chair).*

*C-PCR-031 was developed within CEN standardization and adopted as a c-PCR by the International EPD® System. There was thus no additional open consultation period and no additional review in addition to those within standardization.*

#### Life Cycle Assessment (LCA)

LCA accountability: *Anthesis Group*

#### Third-party 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.

Third-party verifier: *Cristina Gazulla Santos, CERTINALIA, S.L.U. Anardi Area Aldea, 5, 20730 Azpeitia, Guipuzkoa (Spain) is an approved certification body accountable for the third-party verification.*

Procedure for follow-up of data during EPD validity involves third party verifier:

☒ Yes ☐ No

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

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same 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 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 characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

## Company information

Owner of the EPD: PLADUR GYPSUM, S.A.U.

Contact: David Sáenz de Villaverde, [david.saenz@pladur.com](mailto:david.saenz@pladur.com)

Description of the organisation PLADUR GYPSUM, S.A.U. is a leading company in the manufacture of laminated gypsum boards and sustainable construction systems. With over 45 years of experience, belongs to the Etex group.

Product-related or management system-related certifications: ISO 14001 Environmental Management System and ISO 9001 Quality Management System.

Name and location of production site(s): P.I. La Atalaya, Ctra. A 1105, km 12, 50786 Gelsa, Zaragoza (Spain).

## Product information

Product name: Gulpplank TE 12.5 SE 0600.

Product identification: This EPD covers a product named Gulpplank TE 12.5 SE 0600 produced at Gelsa, Zaragoza (Spain) manufactured by PLADUR GYPSUM, S.A.U.

The following table include the product that covers this EPD:

| Product                   | Weight (kg/m <sup>2</sup> ) | Thickness (mm) | Width (mm) | Length (mm) |
|---------------------------|-----------------------------|----------------|------------|-------------|
| Gulpplank TE 12.5 SE 0600 | 11.7                        | 12.5           | 600        | 2400        |

**Product recently on the market** – Results of this EPD shall be used with care as the LCI data is not yet based on 1 year of production which may result in increased uncertainty.

Product description: The Gulpplank TE 12.5 SE 0600 is a gypsum plasterboard with a thickness of 12.5 mm. It is used on construction and refurbishment of buildings as a lining for walls and ceilings and as a partition on building structures. It is suitable for general indoor building work and all type of jobs depending on its characteristics: ceilings, insulation, refurbishments and decoration, etc. Its surface allows any finishing with the appropriate treatment. Gypsum boards are produced in a continuous rolling process and finished with polish longitudinal edges and straight transversal edges. They are manufactured according to the specification EN-520, which defines its characteristics.

UN CPC code: 37530.

Geographical scope: Raw materials are provided by Spanish, German, Belgian and French suppliers but the products under study can be sell at a global scale. This EPD report considers sales of 7% in Denmark and 93% in Norway.

## Content declaration

The following content declaration corresponds to the product Gylvplank TE 12.5 SE 0600.

| Product components                  | Weight, kg   | Post-consumer material, weight-% | Biogenic material, weight-%       | Biogenic material, weight-kg C/unit                      |
|-------------------------------------|--------------|----------------------------------|-----------------------------------|----------------------------------------------------------|
| Gypsum                              | 10           | 0                                | 0                                 | 0                                                        |
| Cardboard                           | 0.41         | 100                              | 100                               | 0.21                                                     |
| Additives                           | 0.1          | 0                                | 0                                 | 0                                                        |
| Water                               | 1.20         | 0                                | 0                                 | 0                                                        |
| <b>TOTAL</b>                        | <b>11.7</b>  | <b>3.5</b>                       | <b>3.5</b>                        | <b>0.21</b>                                              |
| Packaging materials                 | Weight, kg   | Weight-% (versus the product)    | Weight biogenic carbon, kg C/unit | Weight biogenic carbon dioxide, kg CO <sub>2</sub> /unit |
| Wood                                | 0.125        | 1.07                             | 0.062                             | 0.227                                                    |
| Cardboard                           | 0.006        | 0.05                             | 0.003                             | 0.011                                                    |
| Plastic film (30% recycled content) | 0.002        | 0.01                             | 0                                 | 0                                                        |
| Plastic film (70% recycled content) | 0.010        | 0.09                             | 0                                 | 0                                                        |
| <b>TOTAL</b>                        | <b>0.143</b> | <b>1.22</b>                      | <b>0.065</b>                      | <b>0.238</b>                                             |

1 kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO<sub>2</sub>.

No substances contained in the product declared within this EPD exceed the limits for registration with the candidate list of Substances of Very High Concern (SVHCs) of the European Chemicals Agency.

The EPD of UNIPLAC plasterboard liner from WEIG (S-P-08304) is being used as a raw material data source.

## LCA information

Declared unit: Covering 1 square meter (1 m<sup>2</sup>) of wall with plasterboard over a life reference time of 50 years, using plasterboard with a weight of 11.7 kg/m<sup>2</sup> and a thickness of 12.5 mm.

Product lifespan: 50 years.

Time representativeness: All specific data related to the consumption of raw materials, electricity, and natural gas corresponds to the cumulative production in 2025. The data related to waste production and sales refer to the year 2023 for similar products for which EPDs have been developed.

Database(s) and LCA software used: The primary inventory data has been obtained from PLADUR GYPSUM, S.A.U. corresponding to the gypsum plasterboard produced at Gelsa (Spain).

The secondary data has been extracted from the Ecoinvent v3.11 database, included in the SimaPro v10.2.0 software and internationally recognized. Wherever possible, inventory data relating to the specific study countries, or in its absence from Europe in general, has been selected. These have been



used for the stage of production and transport of raw materials, as well as for electricity generation or waste management processes, over which the manufacturer has no direct influence.

Description of system boundaries:

This EPD report considers the scope cradle to gate with options, modules C1–C4, module D and optional modules A4–A5 (A1–A3 + A4–A5 + C + D), covering the modules of extraction and processing of raw materials (A1), their transportation to the production plant (A2), the plasterboards manufacturing (A3), the distribution to the final client (A4) and installation (A5), end of life (C1–C4) and potential benefits and loads from the reuse and recycling of the plasterboards at its end of life (D).

As indicated in c-PCR-031 (EN 17328), no actions or technical operations are typically required during the use stage once installation is complete, until the end-of-life stage (B2 to B5). Therefore, gypsum-based products generally do not have a quantifiable impact in these modules. Additionally, gypsum-based products typically do not require energy or water (B6–B7) during the building's operation phase, and thus, no environmental impact is attributable to this stage.

Applicable lifecycle stages with the system boundaries and processes are described below.

**Product stage (A1–A3):**

- Raw material supply (A1): This module considers the extraction and processing of raw materials used for the manufacture of the gypsum plasterboard. Likewise, the production of the energy necessary for the manufacturing process (electricity and natural gas) is also taken into account. Plaster losses during the manufacturing process are reintroduced into the production process, thus they are not considered an input of secondary material. Regarding electricity consumption, a model has been created with a 25% of renewable energy generated by solar panels and a 75% electrical mix of 100% solar origin corresponding to the energy consumed at the PLADUR GYPSUM, S.A.U plant. The production of 1 kWh of electricity consumed by the PLADUR GYPSUM, S.A.U. manufacturing plant in Gelsa (Zaragoza) in 2023 generates 0.0541 kg CO<sub>2</sub> eq.
- Transport of the raw materials (A2): This module consists of the transportation of all raw materials covered by module A1, from the extraction, production, and treatment site to the factory, considering the specific distances of each material supplier.
- Manufacturing of plasterboards (A3): This module refers to the production process of the gypsum plasterboard in the production plant. It includes the combustion of natural gas, and the water consumed during the manufacturing process. It also considers the waste generated from the production process: the treatment and transport from the production plant to the waste manager. Finally, it considers the packaging used for distribution: the production of the primary and secondary packaging of the product (plastic film, plastic sheet and corner pieces), and the transport of this packaging from suppliers to the PLADUR GYPSUM, S.A.U. factory.

**Installation stage (A4–A5):**

- Transport to the installation site (A4): The plasterboard is transported to the installation point by truck and ship that goes to Denmark and Norway. The distance included corresponds to the weighted average between sales and the distance to each installation site.

| Scenario information                                                                                         | Unit (expressed per declared unit)                                                            |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Fuel type and consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat, etc. | Road transport by >32 metric tonne lorry (Euro VI)<br>Sea freight transport by container ship |
| Distance (weighted average)                                                                                  | 397 km by road (Bermeo) and 1408 km (Denmark) / 2396 km (Norway) by sea                       |
| Capacity utilisation (including empty returns)                                                               | 61% load factor including empty returns                                                       |
| Bulk density of transported products                                                                         | 2403 kg/m <sup>3</sup>                                                                        |
| Volume capacity utilisation factor (factor: =1 or <1 or ≥ 1 for compressed or nested packaged products)      | Factor <1                                                                                     |

- Installation (A5): For this stage is necessary to consume joint compound, water, joint tape and screws. The waste treatment of the product packaging is also included in this phase. A 5% product loss during installation is considered, in accordance with c-PCR-031.

| Scenario information                                                                                                                                                         | Unit (expressed per declared unit)                                                                                                                                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ancillary materials for installation (specified by material)                                                                                                                 | Joint paste, joint tape, screws                                                                                                                                                                                                                                                                                                                                                                                                                |
| Water use                                                                                                                                                                    | 0.17 kg/m <sup>2</sup>                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Other resource use                                                                                                                                                           | No applicable                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Quantitative description of energy type (regional mix) and consumption during the installation process                                                                       | No applicable                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Waste materials on the building site before waste processing, generated by the product's installation (specified by type)                                                    | Wood waste: 0.125 kg<br>Plastic waste: 0.012 kg<br>Paper waste: 0.006 kg                                                                                                                                                                                                                                                                                                                                                                       |
| Output materials (specified by type) as result of waste processing at the building site e.g. of collection for recycling, for energy recovery, disposal (specified by route) | Wood for incineration: 0.0273 kg<br>Wood for recycling: 0.0209 kg<br>Wood for landfill: 0.0275 kg<br>Wood for energy recovery: 0.0497 kg<br>Plastic for incineration: 0.001 kg<br>Plastic for recycling: 0.0071 kg<br>Plastic for landfill: 0.0007 kg<br>Plastic for energy recovery: 0.0032 kg<br>Paper for incineration: 0.0001 kg<br>Paper for recycling: 0.005 kg<br>Paper for landfill: 0.0003 kg<br>Paper for energy recovery: 0.0002 kg |
| Direct emissions to ambient air, soil and water                                                                                                                              | 0 kg                                                                                                                                                                                                                                                                                                                                                                                                                                           |

The following table presents the end-of-life scenario that has been considered for those wastes generated during the installation of the products at the construction site.

| End of life             | Wood  | Plastic | Paper |
|-------------------------|-------|---------|-------|
| Disposal – incineration | 21.8% | 8.4%    | 1.4%  |
| Recycling               | 16.7% | 58.8%   | 90.7% |
| Disposal – landfill     | 21.9% | 5.8%    | 4.8%  |
| Energy recovery         | 39.6% | 27.0%   | 3.1%  |

#### End of life stage (C1-C4):

- Deinstallation (C1): This includes the weight of plasterboard use in the installation stage. Energy consumption and particle emissions to air due to the plasterboard's demolition are included considering the assumptions made by Ecoinvent 3.11.
- Transport to the waste processing site (C2): This module considers a default distance of 80 km between the building site and the waste manager facility.
- Waste processing (C3): Only the gypsum fraction of the product is considered recyclable. This module includes the process of treating gypsum waste (including energy consumption) that is recycled in the construction sector, including energy consumption, based on data from Ecoinvent 3.11. This module includes an additional transport of 80 km to represent the transport from the collection point to the location where the recycling of the material takes place.
- Disposal (C4): This module includes the final discharge of waste that has not been destined for recovery or treatment processes.

For modules C3 and C4, the percentage of mineral waste from construction and demolition recycled in Denmark and Norway depending on the material has been considered based on data of EUROSTAT (2024).

|                                                                  | Units for declared unit (m <sup>2</sup> )                                                                                                      | kg   | %    |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------|------|
| <b>Collection process specified by type</b>                      | Collected separately                                                                                                                           | 11.7 | 100% |
|                                                                  | Collected with mixed construction waste                                                                                                        | 0    | 0%   |
| <b>Waste recovery process</b>                                    | Reuse                                                                                                                                          | 0    | 0%   |
|                                                                  | Recycling                                                                                                                                      | 6.90 | 59%  |
|                                                                  | Energy recovery                                                                                                                                | 0    | 0%   |
| <b>Waste disposal</b>                                            | Landfill                                                                                                                                       | 4.77 | 39%  |
|                                                                  | Incineration without energy recovery                                                                                                           | 0    | 0%   |
| <b>Assumptions for scenario development, e.g. transportation</b> | Waste is transported 80 km to final disposal by lorry 16-32 t (Euro V)<br>Waste is transported 50 km to recycling site by lorry >32 t (Euro V) |      |      |

### Benefits and loads beyond the system boundary (D):

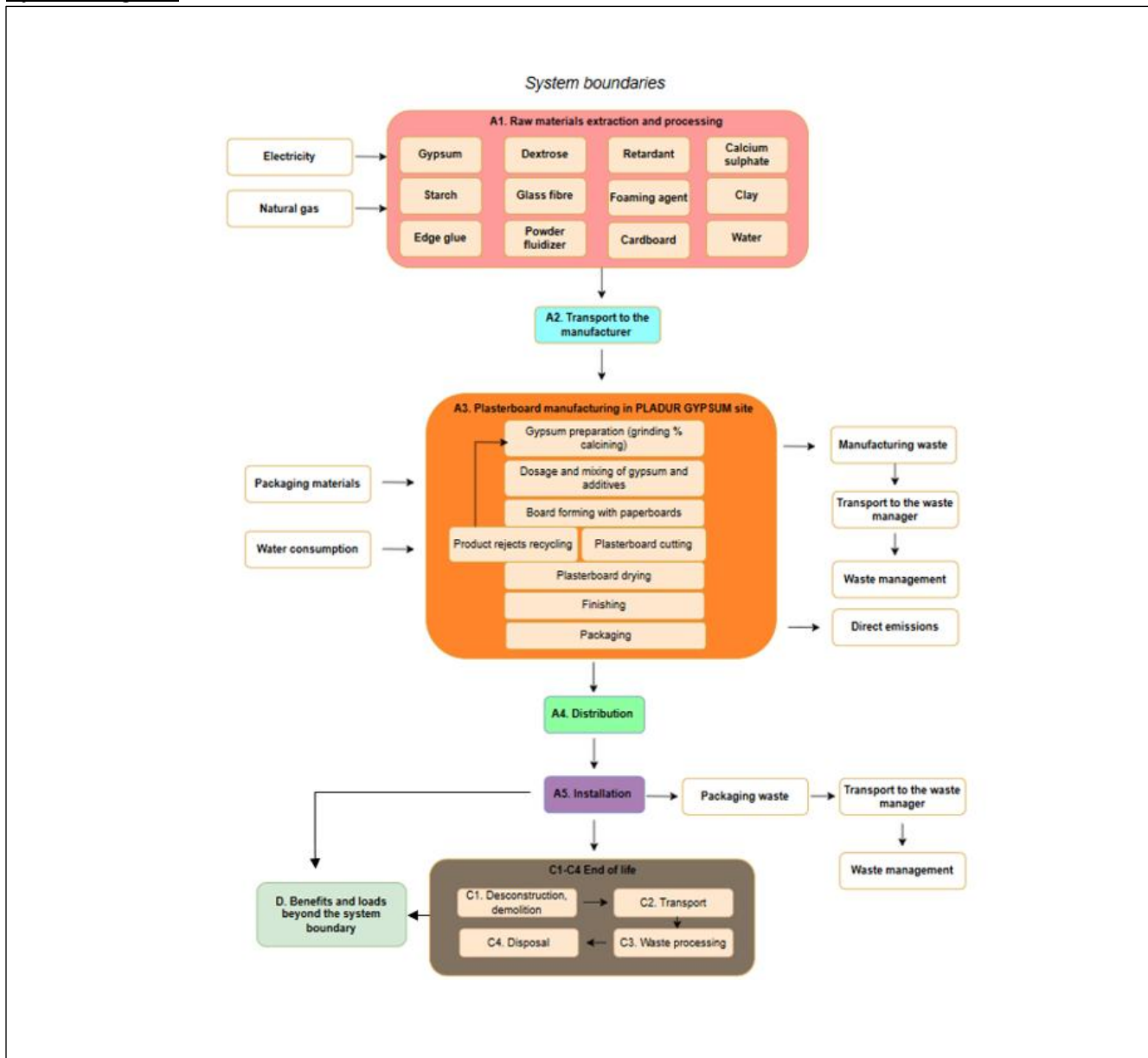
This module analyses the benefits and burdens related to the processes of recovery, reuse or recycling of waste from the product under study at their end of life, which could form part of the life cycle of a new product. Moreover, the recycling potential of the packaging of the product (i.e. wood, plastic and paper) has been considered. It has been assumed that only the gypsum fraction of the product is recyclable, and the substituted primary material is gypsum mineral. Module D has been calculated using the protocols/formulae stated in UNE-EN 15804+A2 Annex D, section D.3.4.

|                                                                 | Product                                | Packaging         |                           |                            |
|-----------------------------------------------------------------|----------------------------------------|-------------------|---------------------------|----------------------------|
| <b>Materials recovered outside the boundaries of the system</b> | Gypsum                                 | Wood              | Plastic                   | Paper                      |
| <b>Recycling process beyond the system boundaries</b>           | Treatment of waste gypsum plasterboard | Recycling of wood | Recycling of Polyethylene | Recycling of paper         |
| <b>Materials saved</b>                                          | Gypsum mineral                         | Wood              | Polyethylene              | Containerboard, linerboard |
| <b>Associated quantities per declared unit (m<sup>2</sup>)</b>  | 6.69 kg                                | 0.0209 kg         | 0.0071 kg                 | 0.005 kg                   |
| <b><math>M_{MR\ out}</math> (%)</b>                             | 59                                     | 16.7              | 58.8                      | 90.7                       |
| <b><math>M_{MR\ in}</math> (%)</b>                              | 3                                      | 25                | 62                        | 100                        |
| <b>Quality factor</b>                                           | 1                                      | 0.75              | 0.75                      | 1                          |

The scenarios for modules C1-C4 and D are realistic and representative of one of the most probable alternatives. The scenarios do not include processes or procedures that are not in current use or whose feasibility have not been demonstrated.



System diagram:



More information:

Company website for more information: <https://corporativo.pladur.com/es-ES/>

Name and contact information of LCA practitioner:

Anthesis Group  
Rambla de Catalunya, 6, principal, 08007 Barcelona  
+34 938 515 055  
[www.thesisgroup.com](http://www.thesisgroup.com)

Cut-off rules: In accordance with the provisions of the PCR 2019:14 construction products, version 2.0.1 and the standard UNE-EN 15804:2012+A2:2020, 100% of total inflows (raw materials and energy) and outflows (including wastes) per module have been considered.

The following processes have not been included in the scope of the study:

- Manufacture of equipment used in production, buildings or any other assets.

- Business trips.
- Maintenance activities at the production plants and research and development.
- Transportation of personnel to and within the plants.
- Diffuse particle emissions during the transport and storage of raw materials.

Infrastructure and capital goods for upstream, core and downstream processes has been excluded.

Allocation procedures:

- The electricity consumption of the product for been calculated using a mass allocation, by dividing the total electricity consumption of the production plant by the total m<sup>2</sup> of plasterboard produced.
- For the rest of the production plant energy consumption as well as for waste produced a mass allocation were used.
- For module C3 and C4, the end-of-life treatment of each material has been assigned according to the most common treatment of the materials in the selling countries.

Data quality requirements: This EPD is based on data collected by PLADUR GYPSUM, S.A.U. from the Gelsa plant (Zaragoza, Spain). The EPD covers the product named Gylvplank TE 12.5 SE 0600, produced at this facility during 2025 (the data related to waste production and sales refer to the year 2023). The end-of-life stage of the EPD covers both Denmark and Norway.

Data quality requirements established by ISO 14025 standard, PCR 2019:14 Construction products, version 2.0.1 and UNE-EN 15804:2012+A2:2020 have been applied. The technological, geographical, and temporal coverage of the primary data has been evaluated through a data quality assessment of generic and specific data defined by the PEF on LCA database development as described in Annex E.2 of the UNE-EN 15804:2012+A2:2020 standard. As a result of the data quality matrix, it is quantified that the gathered data achieves a medium level of quality (3.72 out of 5) in a range of very poor (1), poor (2), medium (3), good (4) and very good (5).

The quality of the data used to calculate this LCA meets the following requirements:

- Used background data are of recognised prestige and acceptance in the technical and scientific fields. In particular, the Ecoinvent v3.11 database, the most recent version existing at the time of the study, is considered to be of preferential use.
- Regionally specific datasets were used to model the energy consumption (electricity or natural gas). For the processes of transport, production of raw materials or end-of-life, datasets were chosen according to their technological and geographical representation of the actual process.

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results):

|                                 | Product stage       |           |               | Construction process stage |                           | Use stage |             |        |             |               |                        |                       | End of life stage          |           |                  |          | Resource recovery stage            |
|---------------------------------|---------------------|-----------|---------------|----------------------------|---------------------------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|----------------------------|-----------|------------------|----------|------------------------------------|
|                                 | Raw material supply | Transport | Manufacturing | Transport                  | Construction installation | Use       | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction demolition | Transport | 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             | x                          | x                         | ND        | ND          | ND     | ND          | ND            | ND                     | ND                    | x                          | x         | x                | x        | x                                  |
| Geography                       | RER                 | RER       | ES            | RER                        | DK/NO                     | ND        | ND          | ND     | ND          | ND            | ND                     | ND                    | DK/NO                      | DK/NO     | DK/NO            | DK/NO    | RER                                |
| Specific data used <sup>1</sup> | 49.9%               |           |               | -                          | -                         | -         | -           | -      | -           | -             | -                      | -                     | -                          | -         | -                | -        | -                                  |
| Variation – products            | 0%                  |           |               | -                          | -                         | -         | -           | -      | -           | -             | -                      | -                     | -                          | -         | -                | -        | -                                  |
| Variation – sites               | 0%                  |           |               | -                          | -                         | -         | -           | -      | -           | -             | -                      | -                     | -                          | -         | -                | -        | -                                  |

| Process                                                   | Source type         | Source          | Reference year | Data category | Share of primary data, of GWP-GHG results for A1-A3 (%) |
|-----------------------------------------------------------|---------------------|-----------------|----------------|---------------|---------------------------------------------------------|
| Raw materials (A1)                                        | Collected data, EPD | Ecoinvent v3.11 | 2024           | Generic data  | 37.4                                                    |
| Fluidizer (A1)                                            | Database            | Ecoinvent v3.11 | 2024           | Generic data  | 16.0                                                    |
| Consumption (A1)                                          | Collected data      | PLADUR GYPSUM   | 2025           | Primary data  | 13.6                                                    |
| Transport raw materials (A2)                              | Collected data      | PLADUR GYPSUM   | 2025           | Primary data  | 10.9                                                    |
| Packaging transportation (A3)                             | Collected data      | PLADUR GYPSUM   | 2025           | Primary data  | 12.3                                                    |
| Packaging production (A3)                                 | Database            | Ecoinvent v3.11 | 2024           | Generic data  | 3.7                                                     |
| Waste (A3)                                                | Collected data      | PLADUR GYPSUM   | 2023           | Generic data  | 0.4                                                     |
| Consumption (A3)                                          | Collected data      | PLADUR GYPSUM   | 2025           | Primary data  | 21.7                                                    |
| Total share of primary data, of GWP-GHG results for A1-A3 |                     |                 |                |               | 49.9                                                    |

<sup>1</sup> 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.

## Results of the environmental performance indicators

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/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).

The characterization methods of version EF 3.1 of the EN 15804 reference package (2023) adapted for SimaPro substances has been used.

The biogenic carbon contained in the cardboard used as raw material and the wood and paper used for packaging was estimated and balanced between modules A1-A3, A5 and C.

### Mandatory impact category indicators according to EN 15804

| Results per declared unit |                        |           |          |          |          |          |          |          |           |
|---------------------------|------------------------|-----------|----------|----------|----------|----------|----------|----------|-----------|
| Indicator                 | Unit                   | A1-A3     | A4       | A5       | C1       | C2       | C3       | C4       | D         |
| GWP-fossil                | kg CO <sub>2</sub> eq. | 8.73E-01  | 6.13E-01 | 1.72E-01 | 3.40E-03 | 5.86E-02 | 4.70E-02 | 9.89E-02 | 2.94E-03  |
| GWP-biogenic              | kg CO <sub>2</sub> eq. | -1.59E+00 | 2.14E-05 | 2.47E-01 | 1.54E-07 | 1.84E-06 | 1.51E-01 | 1.19E+00 | 0.00E+00  |
| GWP-luluc                 | kg CO <sub>2</sub> eq. | 1.80E-03  | 1.47E-05 | 2.00E-04 | 1.40E-07 | 9.25E-07 | 5.14E-06 | 4.34E-05 | -3.96E-06 |
| GWP-total                 | kg CO <sub>2</sub> eq. | -7.11E-01 | 6.13E-01 | 4.20E-01 | 3.40E-03 | 5.86E-02 | 1.98E-01 | 1.29E+00 | 2.93E-03  |
| ODP                       | kg CFC 11 eq.          | 3.34E-08  | 1.20E-08 | 3.74E-09 | 5.17E-11 | 1.33E-09 | 1.01E-09 | 2.15E-09 | 7.53E-11  |
| AP                        | mol H <sup>+</sup> eq. | 3.13E-03  | 8.55E-03 | 1.39E-02 | 3.14E-05 | 1.51E-04 | 1.27E-04 | 1.08E-01 | -8.44E-05 |
| EP-freshwater             | kg P eq.               | 3.76E-05  | 4.35E-07 | 7.74E-06 | 3.20E-09 | 3.62E-08 | 1.61E-07 | 1.31E-06 | -1.33E-07 |
| EP-marine                 | kg N eq.               | 9.72E-04  | 2.12E-03 | 2.19E-04 | 1.48E-05 | 5.76E-05 | 4.61E-05 | 3.70E-04 | -1.49E-05 |
| EP-terrestrial            | mol N eq.              | 1.00E-02  | 2.35E-02 | 2.08E-03 | 1.62E-04 | 6.30E-04 | 5.04E-04 | 2.29E-03 | -3.88E-04 |
| POCP                      | kg NMVOC eq.           | 3.24E-03  | 6.87E-03 | 1.53E-03 | 4.84E-05 | 2.50E-04 | 1.97E-04 | 7.29E-03 | -3.34E-05 |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |          |          |          |          |          |          |           |           |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|----------|----------|-----------|-----------|
| ADP-minerals&metals* | kg Sb eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 6.47E-06 | 1.17E-08 | 3.65E-07 | 1.19E-10 | 1.53E-09 | 1.22E-09 | 1.99E-08  | -1.10E-09 |
| ADP-fossil*          | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.06E+01 | 8.06E+00 | 2.40E+00 | 4.44E-02 | 7.78E-01 | 6.17E-01 | 1.61E+00  | 4.74E-02  |
| WDP*                 | m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.45E+00 | 2.70E-03 | 3.88E-02 | 3.32E-05 | 2.54E-04 | 5.14E-04 | -3.57E-01 | -8.12E-04 |
| Acronyms             | GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption |          |          |          |          |          |          |           |           |

\* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

## Additional mandatory and voluntary impact category indicators

| Results per declared unit |                                                       |          |          |          |          |          |          |          |          |
|---------------------------|-------------------------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|
| Indicator                 | Unit                                                  | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D        |
| GWP-GHG <sup>1</sup>      | kg CO <sub>2</sub> eq.                                | 2.87E-01 | 6.13E-01 | 1.73E-01 | 3.40E-03 | 5.86E-02 | 4.70E-02 | 9.91E-02 | 2.92E-03 |
| Acronyms                  | GWP-GHG = Potential global warming - Greenhouse gases |          |          |          |          |          |          |          |          |

<sup>1</sup>This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO<sub>2</sub> is set to zero.



## Resource use indicators\*

| Results per declared unit |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |          |           |          |          |          |           |           |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-----------|----------|----------|----------|-----------|-----------|
| Indicator                 | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | A1-A3    | A4       | A5        | C1       | C2       | C3       | C4        | D         |
| PERE                      | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4.31E+00 | 1.82E-02 | 1.93E+00  | 9.68E-05 | 1.94E-03 | 6.36E-03 | 7.11E+00  | -6.35E-02 |
| PERM                      | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 7.17E+00 | 0.00E+00 | -1.06E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | -7.07E+00 | 0.00E+00  |
| PERT                      | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.08E+01 | 1.82E-02 | 1.83E+00  | 9.68E-05 | 1.94E-03 | 6.36E-03 | 4.89E-02  | 6.35E-02  |
| PENRE                     | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4.53E+00 | 6.43E-02 | 8.63E-01  | 4.47E-04 | 5.33E-03 | 2.81E-02 | 2.42E-01  | -2.38E-02 |
| PENRM                     | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 6.44E-01 | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00  |
| PENRT                     | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 2.42E+00 | 6.43E-02 | 8.63E-01  | 4.47E-04 | 5.33E-03 | 2.81E-02 | 2.42E-01  | -2.38E-02 |
| SM                        | kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4.62E-01 | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00  |
| RSF                       | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00  |
| NRSF                      | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00  | 0.00E+00  |
| FW                        | m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 3.01E-02 | 1.53E-04 | 1.30E-03  | 1.34E-06 | 1.50E-05 | 2.45E-05 | -8.15E-03 | -2.96E-05 |
| Acronyms                  | PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water |          |          |           |          |          |          |           |           |

\* Disclaimer: The results presented are subject to limitations due to data availability. Specifically, the EPD used as the data source for the cardboard does not declare certain indicators. As such, this omission may affect the completeness and comparability of the results.

## Waste indicators\*

| Results per declared unit    |      |          |          |          |          |          |          |          |           |
|------------------------------|------|----------|----------|----------|----------|----------|----------|----------|-----------|
| Indicator                    | Unit | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D         |
| Hazardous waste disposed     | kg   | 4.21E-05 | 4.79E-05 | 1.43E-05 | 3.05E-07 | 5.18E-06 | 3.96E-06 | 1.36E-05 | 6.27E-07  |
| Non-hazardous waste disposed | kg   | 5.96E-02 | 2.21E-04 | 6.11E-01 | 1.59E-06 | 2.62E-05 | 3.64E-05 | 4.82E+00 | -3.33E-05 |
| Radioactive waste disposed   | kg   | 1.59E-05 | 4.24E-07 | 4.22E-06 | 2.07E-09 | 4.70E-08 | 1.23E-07 | 1.39E-06 | -7.97E-08 |

\* Disclaimer: The results presented are subject to limitations due to data availability. Specifically, the EPD used as the data source for the cardboard does not declare certain indicators. As such, this omission may affect the completeness and comparability of the results.

## Output flow indicators

| Results per declared unit     |      |          |          |          |          |          |          |          |          |
|-------------------------------|------|----------|----------|----------|----------|----------|----------|----------|----------|
| Indicator                     | Unit | A1-A3    | A4       | A5       | C1       | C2       | C3       | C4       | D        |
| Components for re-use         | kg   | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Material for recycling        | kg   | 1.00E-02 | 0.00E+00 | 3.47E-02 | 0.00E+00 | 0.00E+00 | 6.93E+00 | 0.00E+00 | 0.00E+00 |
| Materials for energy recovery | kg   | 0.00E+00 | 0.00E+00 | 5.39E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.70E-01 | 0.00E+00 |
| Exported energy, electricity  | MJ   | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |
| Exported energy, thermal      | MJ   | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 |

## Mandatory impact category indicators according to EN 15804

Since the declared end-of-life scenario is a combination of recycling and landfill. The corresponding 100% results scenarios are reported for modules C1-C4 and D.

| Results for modules per declared unit |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |           |                        |          |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------|------------------------|----------|
| Indicator                             | Unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 100% RECYCLING SCENARIO |           | 100% LANDFILL SCENARIO |          |
|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | MODULES C1-C4           | MODULE D  | MODULES C1-C4          | MODULE D |
| GWP-fossil                            | kg CO <sub>2</sub> eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1.09E-01                | 1.05E-02  | 3.52E-01               | 5.42E-03 |
| GWP-biogenic                          | kg CO <sub>2</sub> eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6.18E-06                | 4.31E-05  | 1.92E-04               | 5.28E-05 |
| GWP-luluc                             | kg CO <sub>2</sub> eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 6.21E-06                | 3.18E-05  | 1.13E-04               | 4.14E-05 |
| GWP-total                             | kg CO <sub>2</sub> eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1.09E-01                | 1.05E-02  | 3.52E-01               | 5.51E-03 |
| ODP                                   | kg CFC 11 eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 2.39E-09                | 2.65E-10  | 7.67E-09               | 1.39E-10 |
| AP                                    | mol H <sup>+</sup> eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 3.10E-04                | -1.06E-04 | 2.66E-01               | 3.02E-05 |
| EP-freshwater                         | kg P eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1.77E-06                | 2.46E-06  | 3.10E-05               | 4.19E-06 |
| EP-marine                             | kg N eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1.19E-04                | -1.32E-05 | 1.04E-03               | 1.13E-05 |
| EP-terrestrial                        | mol N eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1.30E-03                | -5.34E-04 | 6.92E-03               | 9.94E-05 |
| POCP                                  | kg NMVOC eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 4.97E-04                | -2.37E-05 | 1.84E-02               | 3.34E-05 |
| ADP-minerals&metals*                  | kg Sb eq.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 2.87E-09                | -7.49E-10 | 5.18E-08               | 8.52E-10 |
| ADP-fossil*                           | MJ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.44E+00                | 1.72E-01  | 5.40E+00               | 9.89E-02 |
| WDP*                                  | m <sup>3</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 8.02E-04                | 1.47E-03  | -8.74E-01              | 2.55E-03 |
| Acronyms                              | GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption |                         |           |                        |          |

## Additional Environmental Information

The products covered by this EPD have been tested for emissions of volatile organic compounds (VOCs) according to recognized indoor air quality schemes. The products have successfully passed the Indoor Air Comfort GOLD and M1 tests based on testing of the most unfavourable boards. These test reports demonstrate that the products meet stringent criteria for low emissions of hazardous substances into indoor air. The reference to these test results and certifications is included in this EPD as evidence of compliance with the indoor air quality requirements specified in the PCR.

## Abbreviations

| Abbreviation | Definition                                                              |
|--------------|-------------------------------------------------------------------------|
| EN           | European Norm (Standard)                                                |
| GPI          | General Programme Instructions                                          |
| ISO          | International Organization for Standardization                          |
| CEN          | European Committee for Standardization                                  |
| CLC          | Co-location centre                                                      |
| CPC          | Central product classification                                          |
| GHS          | Globally harmonized system of classification and labelling of chemicals |
| GRI          | Global Reporting Initiative                                             |
| SVHC         | Substances of Very High Concern                                         |
| ND           | Not Declared                                                            |
| PCR          | Product Category Rules                                                  |
| C-PCR        | Complementary Product Category Rules                                    |
| LCI          | Life Cycle Inventory                                                    |
| LCA          | Life Cycle Assessment                                                   |
| UN           | United nations                                                          |
| UNE          | Asociación Española de Normalización                                    |

## Version history

**Original Version of the EPD, 2025-08-05**

**Revision 1, 2025-09-26**

Differences versus the previously published version: editorial changes only, no changes in data or results.

## References

- General Programme Instructions (GPI) of the International EPD system. Version 5.0.
- Complementary Product Category Rules (C-PCR) to PCR 2019:14: *C-PCR-031 (TO PCR 2019:14) Gypsum-based construction products (EN 17328:2024), version 1.0.0, published on 2025-04-24, valid until 2030-04-07.*
- Complementary Product Category Rules (C-PCR) to PCR 2019:14: *C-PCR-031 (TO PCR 2019:14) Gypsum-based construction products (EN 17328:2024), version 1.0.0, published on 2025-04-24, valid until 2030-04-07.*
- Environdec Programme: The International EPD System <https://www.environdec.com/home>
- ISO/TR 14047: 2003 – Environmental management – Life Cycle Assessment – LCI application examples.
- ISO/TS 14048: 2003 – Environmental management – Life Cycle Assessment – Data inventory.
- ISO/TR 14049: 2000 – Environmental management – Life Cycle Assessment – Examples of application of objectives and scope and inventory analysis.
- UNE-EN ISO 14040:2006 – Environmental management – Life Cycle Assessment – Principles and framework.
- UNE-EN ISO 14044:2006 – Environmental management – Life Cycle Assessment – Requirements.
- UNE-EN 15804:2012+A2:2020 – Sustainability in construction. Product environmental statements. Commodity category rules for construction products.
- UNIPLAC® - Plasterboard Liner Environmental Product Declaration from Moritz J. Weig GmbH & Co. KG, published on 2023-02-21, reviewed on 2025-02-25 and valid until 2028-02-09.

## VERIFICATION STATEMENT CERTIFICATE CERTIFICADO DE DECLARACIÓN DE VERIFICACIÓN

*Certificate No. / Certificado nº: EPD12803*

CERTINALIA, S.L.U., confirms that independent third-party verification has been conducted of the Environmental Product Declaration (EPD) on behalf of:

*CERTINALIA, S.L.U., confirma que se ha realizado verificación de tercera parte independiente de la Declaración Ambiental de Producto (DAP) en nombre de:*

**PLADUR GYPSUM, S.A.U**  
**Ctra Andalucía Km 30,2**  
**28343 VALDEMORO (Madrid) SPAIN**

for the following product(s):  
*para el siguiente(s) producto(s):*

**SINIAT TE / Gylv plasterboard**  
**Placa de yeso SINIAT TE / Gylv**

with registration number **EPD-IES-0024788** in the International EPD® System ([www.environdec.com](http://www.environdec.com))  
*con número de registro **EPD-IES-0024788** en el Sistema Internacional EPD® ([www.environdec.com](http://www.environdec.com))*

it's in conformity with:  
*es conforme con:*

- **ISO 14025:2010 Environmental labels and declarations. Type III environmental declarations.**
- **General Programme Instructions for the International EPD® System v.5**
- **PCR 2019:14 Construction products (EN 15804:A2) v.2.0.**
- **c-PCR-031 Gypsum-based construction products (EN 17328:2024) v1.0.**
- **UN CPC 37530 Articles of plaster or of compositions based on plaster.**

Issued date / Fecha de emisión: 04/08/2025  
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Valid until / Válido hasta: 01/08/2030  
Serial Nº / Nº Serie: EPD1280300-E



Carlos Nazabal Alsua  
Manager



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