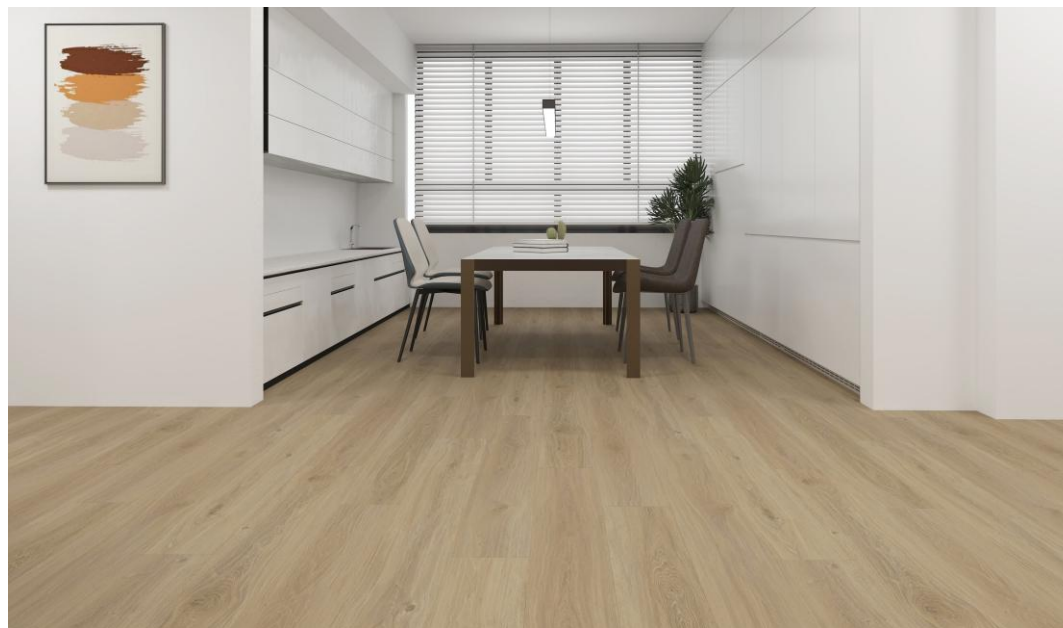




# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Aspecta Glue Down  
Aspecta BV



**EPD HUB, HUB-6486**

Published on 28.05.2026, last updated on 28.05.2026, valid until 27.05.2031

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.



Created with One Click LCA



## GENERAL INFORMATION

### MANUFACTURER

|                 |                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------|
| Manufacturer    | Aspecta BV                                                                              |
| Address         | Argon 37 4751 XC Oud Gastel The Netherlands                                             |
| Contact details | grocha@hmyx.global                                                                      |
| Website         | <a href="https://global.aspecta flooring.com/">https://global.aspecta flooring.com/</a> |

### EPD STANDARDS, SCOPE AND VERIFICATION

|                    |                                                                                                                                                                                    |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Program operator   | EPD Hub, hub@epdhub.com                                                                                                                                                            |
| Reference standard | EN 15804:2012+A2:2019/AC:2021 and ISO 14025                                                                                                                                        |
| PCR                | EPD Hub Core PCR Version 1.2, 24 Mar 2025<br>EN 16810 Product category rules for resilient, textile and laminate floor coverings                                                   |
| Sector             | Construction product                                                                                                                                                               |
| Category of EPD    | Third party verified EPD                                                                                                                                                           |
| Scope of the EPD   | Cradle to gate with modules B2, C1-C4, D                                                                                                                                           |
| EPD author         | Ricardo Mateus, Cláudia Jacinto - Greenlab                                                                                                                                         |
| EPD verification   | Independent verification of this EPD and data, according to ISO 14025:<br><input type="checkbox"/> Internal verification <input checked="" type="checkbox"/> External verification |
| EPD verifier       | Sarah Curpen as an authorized verifier for EPD Hub                                                                                                                                 |

This EPD is intended for business-to-business and/or business-to-consumer communication. The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products

may not be comparable if they do not comply with EN 15804 and if they are not compared in a building context.

### PRODUCT

|                                       |                                                                                                                |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Product name                          | Aspecta Glue Down                                                                                              |
| Additional labels                     | Aspecta Essentials GD30 2.0mm 0.30 mm wear layer; Aspecta Excellence and Contours GD55 2.5mm 0.55mm wear layer |
| Place(s) of raw material origin       | Asia                                                                                                           |
| Place of production                   | Zhangjiagang, China                                                                                            |
| Place(s) of installation and use      | Europe                                                                                                         |
| Period for data                       | Calendar year 2024                                                                                             |
| Averaging in EPD                      | Multiple products                                                                                              |
| Variation in GWP-fossil for A1-A3 (%) | -10 to 1                                                                                                       |
| A1-A3 Specific data (%)               | 17,4                                                                                                           |

## ENVIRONMENTAL DATA SUMMARY

|                                             |                                      |
|---------------------------------------------|--------------------------------------|
| Declared unit                               | 1m <sup>2</sup> of Aspecta Glue Down |
| Declared unit mass                          | 4,02 kg                              |
| Mass of packaging                           | 0,15 kg                              |
| GWP-fossil, A1-A3 (kgCO <sub>2</sub> e)     | 10,4                                 |
| GWP-total, A1-A3 (kgCO <sub>2</sub> e)      | 10,4                                 |
| Secondary material, inputs (%)              | 0,78                                 |
| Secondary material, outputs (%)             | 100                                  |
| Total energy use, A1-A3 (kWh)               | 30,3                                 |
| Net freshwater use, A1-A3 (m <sup>3</sup> ) | 0,07                                 |

## PRODUCT AND MANUFACTURER

### ABOUT THE MANUFACTURER

The ASPECTA brand is more than flooring—it's a tradition of innovation, expert craftsmanship, and care. With over 100 years of heritage from its parent company and decades of Luxury vinyl flooring expertise, it offers truly exceptional flooring solutions.

### PRODUCT DESCRIPTION

Aspecta™ Glue Down is a heterogeneous poly (vinyl chloride) floor covering (LVT), available in two different product construction; a 2,0mm product including a wear layer of 0.3mm (Aspecta™ ESSENTIALS GD30) and a 2.5mm product with a 0.55mm wear layer (Aspecta™ EXCELLENCE & CONTOURS GD55).

Aspecta™ Glue Down are finished with a high wear and scratch resistant coating (Duraspect™) that contributes to the products classification according to EN ISO 10582:2018 as class 31 (commercial moderate) for Aspecta™ ESSENTIALS GD30 and class 33 (commercial heavy) and class 42 (industrial general) for the Aspecta™ EXCELLENCE & CONTOURS GD55. Aspecta™ products deliver high-performance flooring solutions that combine durability with enhanced interior design, products are available in many different decors and textures, and it is offered as tiles, planks and special formats herringbone and chevron.

The performance of the product complies with the Declaration of Performance (DoP) for the essential characteristics established under EN 14041 for resilient, textile, laminate and modular multilayer floor coverings. The product is classified as B<sub>fl</sub>-s1 for reaction to fire according to EN 13501-1.

Aspecta™ Glue Down composition:

| Components           | Mass %                                     |                                                 |
|----------------------|--------------------------------------------|-------------------------------------------------|
|                      | Essentials GD30 2.0mm / 0.30 mm wear layer | Excellence & Contours 2.5mm / 0.55mm wear layer |
| PVC                  | 30,5%                                      | 27,9%                                           |
| Calcium Carbonate    | 56,2%                                      | 57,6%                                           |
| Plasticizer          | 9,2%                                       | 9,7%                                            |
| Additives and others | 4,1%                                       | 4,8%                                            |

Further information can be found at:  
<https://global.aspecta flooring.com/>

### PRODUCT RAW MATERIAL MAIN COMPOSITION

| Raw material category | Amount, mass % | Material origin |
|-----------------------|----------------|-----------------|
| Metals                | -              | -               |
| Minerals              | 62             | Asia            |
| Fossil materials      | 38             | Asia            |
| Bio-based materials   | -              | -               |

### BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

|                                            |       |
|--------------------------------------------|-------|
| Biogenic carbon content in product, kg C   | -     |
| Biogenic carbon content in packaging, kg C | 0,065 |

## FUNCTIONAL UNIT AND SERVICE LIFE

|                        |                                                                                                                       |
|------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Declared unit          | 1m <sup>2</sup> of Aspecta Glue Down                                                                                  |
| Mass per declared unit | 4,02 kg                                                                                                               |
| Functional unit        | 1 m <sup>2</sup> of Aspecta Glue Down (average product) for floor covering with a reference service life of 25 years. |
| Reference service life | 25                                                                                                                    |

## SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

## PRODUCT LIFE-CYCLE

### SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

| Product stage |           |               | Assembly stage |          | Use stage |             |        |             |               |                        |                       | End of life stage          |           |                  |          | Beyond the system boundaries |           |
|---------------|-----------|---------------|----------------|----------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|----------------------------|-----------|------------------|----------|------------------------------|-----------|
| A1            | A2        | A3            | A4             | A5       | B1        | B2          | B3     | B4          | B5            | B6                     | B7                    | C1                         | C2        | C3               | C4       | D                            |           |
| x             | x         | x             | ND             | ND       | ND        | x           | ND     | ND          | ND            | ND                     | ND                    | x                          | x         | x                | x        | x                            |           |
| Raw materials | Transport | Manufacturing | Transport      | Assembly | Use       | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | Deconstruction/ demolition | Transport | Waste processing | Disposal | Reuse                        | Recycling |

Not declared = ND; Modules not relevant = MNR

### MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

A market-based approach is used in modelling the electricity mix utilized in the factory, with 10% coming from photovoltaic sources.

The production of Aspecta Glue Down flooring begins with the preparation of the main layers, consisting of the base material and the wear layer, which provides durability and abrasion resistance. These layers, and the printed film, are bonded together through a hot-press process, where heat and pressure ensure uniform adhesion and structural stability. After lamination, a UV coating is applied to the surface to enhance protection against scratches, stains, and fading, while also improving ease of maintenance. The material then undergoes an annealing stage, allowing internal stresses to be relieved and dimensional stability to be achieved. Once stabilized, the product is cut (punching) into the required commercial sizes and shapes. Finally, the planks go through a bevelling process, which refines the edges and provides a more natural appearance, followed by packaging for storage and distribution.

The transport of raw materials and packaging considers the distance from the extraction or manufacturing site to the production plant, as well as the modelling of the relevant type of transport (e.g. lorry, sea freight, etc.) for each material. These materials originate in Asia. For production waste, the distance between the production plant and the waste treatment site was considered, as well as the type of transport. The company provided all the data necessary for transport, production losses, and energy sources modelling.

### TRANSPORT AND INSTALLATION (A4-A5)

The A4-A5 modules are not declared in the present EPD.

### PRODUCT USE AND MAINTENANCE (B1-B7)

Module B2 includes the supply of a cleaning agent, energy consumption and water consumption for cleaning the floor covering. The LCA results in this EPD are reported for the service life (25 years). For the other modules of the

use stage, it is considered that the environmental impacts resulting from these can be neglected.

Air, soil, and water impacts during the use phase have not been studied.

### PRODUCT END OF LIFE (C1-C4, D)

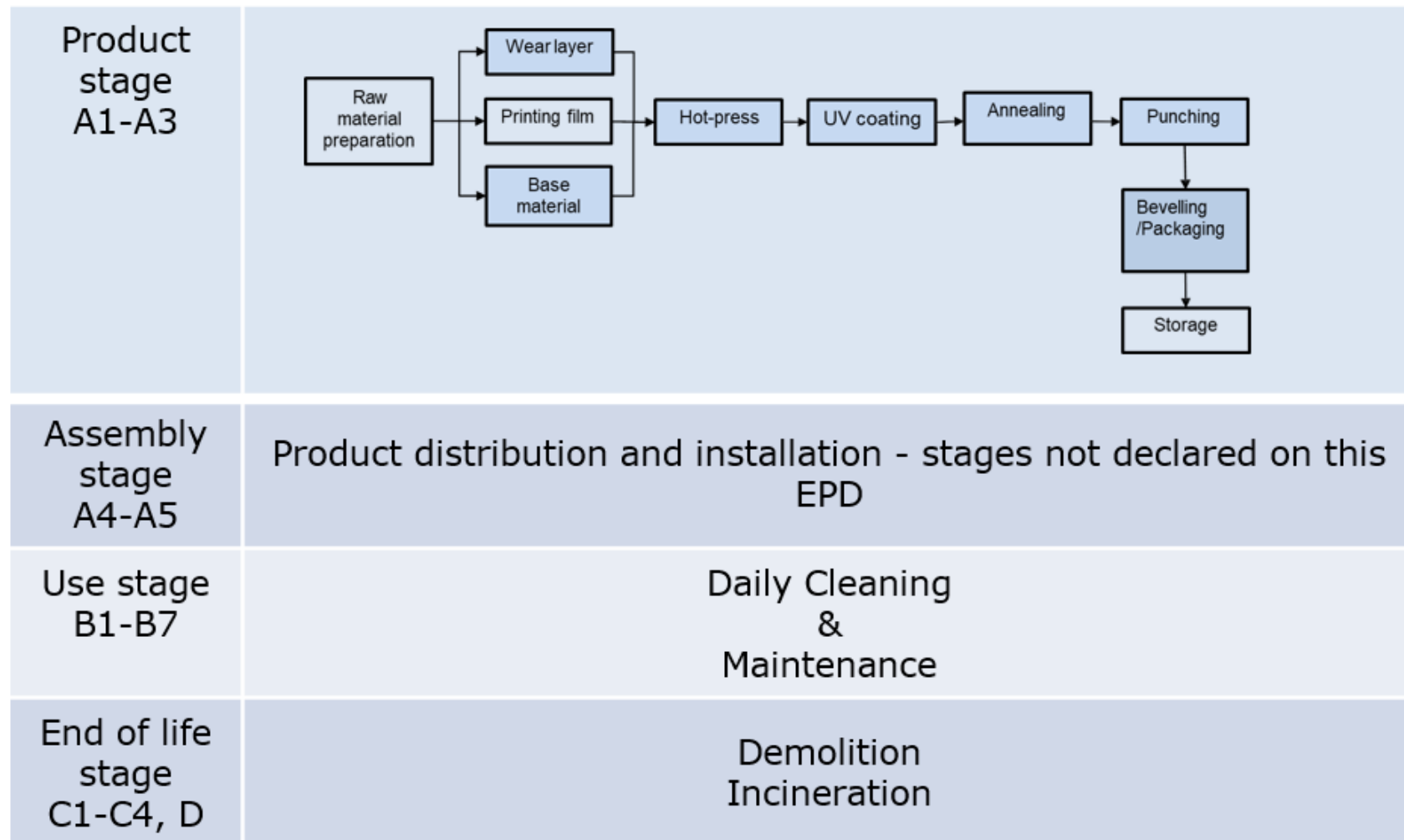
At the end of its useful life, it is assumed that 100% of the waste will be collected as separate construction waste, since the coating material is not adhered to the floors. Thus, during the demolition process, it is possible to separate all the waste generated from the remaining construction waste. It is estimated that there is no loss of mass during the use of the product, so it is assumed that the product at the end of its useful life has the same weight as the declared product.

Module C1 considers manual deconstruction/dismantling. In module C2, it is considered that, at the end of its useful life, the product studied is transported by road an average distance of 50 km to the nearest waste management point, using trucks.

For the module C3, it is considered that 100% of the waste will be incinerated in a waste incineration plant in the EU. Thus, module C4 is declared without any environmental impact.

In module D, potential benefits from recycling and incineration processes from packaging, A3 and C3 are declared.

## SYSTEM DIAGRAM



# LIFE-CYCLE ASSESSMENT

## CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

All known flows were included, since the company provided all the information. However, the following processes were not considered in this study:

- Environmental loads from the construction of industrial infrastructures, manufacturing and replacement of equipment and machinery;
- Environmental loads from infrastructures (vehicle manufacturing, road maintenance) associated with the transportation of pre-products and raw materials;
- Environmental loads related to consumables or waste produced in administrative areas and laboratories, since they are not directly associated with the production process.

## VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on

generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

## ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

| Data type                      | Allocation                  |
|--------------------------------|-----------------------------|
| Raw materials                  | No allocation               |
| Packaging material             | No allocation               |
| Ancillary materials            | No allocation               |
| Manufacturing energy and waste | Allocated by mass or volume |

## PRODUCT & MANUFACTURING SITES GROUPING

|                                      |                                                           |
|--------------------------------------|-----------------------------------------------------------|
| Type of grouping                     | Multiple products                                         |
| Grouping method                      | Based on average results of product group - by total mass |
| Variation in GWP-fossil for A1-A3, % | -10 to 1                                                  |

This EPD represents the average of two similar products manufactured at the same site: Aspecta Essentials GD30 2.0mm 0.30 mm wear layer; Aspecta Excellence and Contours GD55 2.5mm 0.55mm wear layer.

## LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.4. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology 'allocation, Cut-off, EN 15804+A2'.

The end-of-life scenarios for packaging materials were based on European statistical data.

The following standards were used:

- EN ISO 10582:2018 - Resilient floor coverings - Heterogeneous poly(vinyl chloride) floor covering - Specifications
- EN 14041:2004/AC2006 - Resilient, textile, laminate and modular multilayer floor coverings – Essential characteristics
- EN 13501-1 - Fire classification of construction products and building elements
- EN 16810:2017 - Resilient, textile and laminate floor coverings - Environmental product declarations - Product category rules

# ENVIRONMENTAL IMPACT DATA

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.

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

| Impact category                     | Unit                   | A1        | A2       | A3        | A1-A3     | A4 | A5 | B1 | B2       | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|-------------------------------------|------------------------|-----------|----------|-----------|-----------|----|----|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| GWP – total <sup>1)</sup>           | kg CO <sub>2</sub> e   | 8,50E+00  | 2,50E-01 | 1,62E+00  | 1,04E+01  | ND | ND | ND | 5,67E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 4,21E-02 | 8,31E+00 | 6,38E-04 | -1,60E+01 |
| GWP – fossil                        | kg CO <sub>2</sub> e   | 8,49E+00  | 2,49E-01 | 1,62E+00  | 1,04E+01  | ND | ND | ND | 5,34E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 4,21E-02 | 8,31E+00 | 6,37E-04 | -1,59E+01 |
| GWP – biogenic                      | kg CO <sub>2</sub> e   | -1,73E-03 | 0,00E+00 | -1,37E-03 | -3,10E-03 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 1,73E-03 | 0,00E+00 | 0,00E+00  |
| GWP – LULUC                         | kg CO <sub>2</sub> e   | 5,18E-03  | 1,10E-04 | 6,27E-04  | 5,92E-03  | ND | ND | ND | 3,27E-01 | ND | ND | ND | ND | ND | 0,00E+00 | 1,85E-05 | 2,80E-05 | 3,52E-07 | -3,26E-02 |
| Ozone depletion pot.                | kg CFC <sub>11</sub> e | 4,19E-06  | 3,41E-09 | 1,94E-08  | 4,21E-06  | ND | ND | ND | 2,42E-07 | ND | ND | ND | ND | ND | 0,00E+00 | 5,75E-10 | 1,62E-09 | 1,57E-11 | -2,33E-07 |
| Acidification potential             | mol H <sup>+</sup> e   | 2,61E-02  | 8,50E-04 | 5,74E-03  | 3,27E-02  | ND | ND | ND | 3,45E-02 | ND | ND | ND | ND | ND | 0,00E+00 | 1,43E-04 | 1,62E-03 | 4,09E-06 | -1,54E-01 |
| EP-freshwater <sup>2)</sup>         | kg Pe                  | 1,74E-03  | 2,73E-05 | 1,84E-04  | 1,95E-03  | ND | ND | ND | 2,04E-03 | ND | ND | ND | ND | ND | 0,00E+00 | 4,60E-06 | 1,50E-05 | 4,58E-07 | -4,24E-03 |
| EP-marine                           | kg Ne                  | 5,43E-03  | 2,77E-04 | 9,31E-04  | 6,64E-03  | ND | ND | ND | 1,04E-02 | ND | ND | ND | ND | ND | 0,00E+00 | 4,67E-05 | 1,08E-03 | 1,97E-05 | -1,93E-02 |
| EP-terrestrial                      | mol Ne                 | 5,52E-02  | 2,99E-03 | 9,69E-03  | 6,79E-02  | ND | ND | ND | 7,38E-02 | ND | ND | ND | ND | ND | 0,00E+00 | 5,04E-04 | 8,60E-03 | 1,72E-05 | -2,00E-01 |
| POCP (“smog”) <sup>3)</sup>         | kg NMVOCe              | 2,63E-02  | 1,18E-03 | 4,19E-03  | 3,16E-02  | ND | ND | ND | 2,18E-02 | ND | ND | ND | ND | ND | 0,00E+00 | 1,98E-04 | 2,12E-03 | 7,47E-06 | -1,02E-01 |
| ADP-minerals & metals <sup>4)</sup> | kg Sbe                 | 7,69E-05  | 8,45E-07 | 7,40E-07  | 7,85E-05  | ND | ND | ND | 5,94E-05 | ND | ND | ND | ND | ND | 0,00E+00 | 1,43E-07 | 2,54E-07 | 1,13E-09 | -8,56E-05 |
| ADP-fossil resources                | MJ                     | 1,25E+02  | 3,44E+00 | 2,08E+01  | 1,49E+02  | ND | ND | ND | 8,41E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 5,80E-01 | 1,17E+00 | 1,29E-02 | -2,59E+02 |
| Water use <sup>5)</sup>             | m <sup>3</sup> e depr. | 2,41E+00  | 1,80E-02 | 1,23E-01  | 2,55E+00  | ND | ND | ND | 5,35E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 3,04E-03 | 1,56E-01 | 5,68E-04 | -9,62E+00 |

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO<sub>4</sub>e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

## ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

| Impact category                  | Unit          | A1       | A2       | A3       | A1-A3    | A4 | A5 | B1 | B2       | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|----------------------------------|---------------|----------|----------|----------|----------|----|----|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Particulate matter               | Incidence     | 2,75E-07 | 1,93E-08 | 8,03E-08 | 3,75E-07 | ND | ND | ND | 3,76E-07 | ND | ND | ND | ND | ND | 0,00E+00 | 3,26E-09 | 2,30E-08 | 9,45E-11 | -3,33E-06 |
| Ionizing radiation <sup>6)</sup> | kBq<br>I1235e | 2,76E-01 | 2,70E-03 | 1,57E-02 | 2,95E-01 | ND | ND | ND | 3,79E-01 | ND | ND | ND | ND | ND | 0,00E+00 | 4,55E-04 | 1,13E-03 | 1,03E-05 | -7,73E-01 |
| Ecotoxicity (freshwater)         | CTUe          | 5,55E+01 | 7,90E-01 | 3,26E+00 | 5,95E+01 | ND | ND | ND | 5,87E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 1,33E-01 | 4,44E+00 | 1,77E-02 | -1,13E+02 |
| Human toxicity, cancer           | CTUh          | 5,13E-09 | 4,02E-11 | 5,68E-10 | 5,74E-09 | ND | ND | ND | 5,23E-09 | ND | ND | ND | ND | ND | 0,00E+00 | 6,79E-12 | 2,98E-10 | 1,54E-13 | -1,80E-07 |
| Human tox. non-cancer            | CTUh          | 1,07E-07 | 2,09E-09 | 5,62E-09 | 1,14E-07 | ND | ND | ND | 5,88E-08 | ND | ND | ND | ND | ND | 0,00E+00 | 3,52E-10 | 2,47E-08 | 1,50E-11 | -1,31E-07 |
| SQP <sup>7)</sup>                | -             | 1,27E+03 | 2,04E+00 | 3,12E+01 | 1,30E+03 | ND | ND | ND | 7,02E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 3,44E-01 | 2,80E-01 | 3,07E-02 | -7,87E+02 |

6) EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

## USE OF NATURAL RESOURCES

| Impact category                    | Unit           | A1       | A2       | A3       | A1-A3    | A4 | A5 | B1 | B2       | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3        | C4        | D         |
|------------------------------------|----------------|----------|----------|----------|----------|----|----|----|----------|----|----|----|----|----|----------|----------|-----------|-----------|-----------|
| Renew. PER as energy <sup>8)</sup> | MJ             | 4,04E+00 | 4,80E-02 | 2,28E+00 | 6,37E+00 | ND | ND | ND | 1,85E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 8,10E-03 | -1,25E+00 | -7,37E-01 | -1,40E+03 |
| Renew. PER as material             | MJ             | 1,14E+00 | 0,00E+00 | 2,11E+00 | 3,25E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | -2,47E+00 | -7,81E-01 | 0,00E+00  |
| Total use of renew. PER            | MJ             | 5,19E+00 | 4,80E-02 | 4,39E+00 | 9,62E+00 | ND | ND | ND | 1,85E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 8,10E-03 | -3,72E+00 | -1,52E+00 | -1,40E+03 |
| Non-re. PER as energy              | MJ             | 7,85E+01 | 3,44E+00 | 2,05E+01 | 1,02E+02 | ND | ND | ND | 7,70E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 5,80E-01 | -9,11E+01 | -5,95E-03 | -2,21E+02 |
| Non-re. PER as material            | MJ             | 4,66E+01 | 0,00E+00 | 2,19E-01 | 4,68E+01 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | -4,67E+01 | -7,09E-02 | 0,00E+00  |
| Total use of non-re. PER           | MJ             | 1,25E+02 | 3,44E+00 | 2,08E+01 | 1,49E+02 | ND | ND | ND | 7,70E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 5,80E-01 | -1,38E+02 | -7,69E-02 | -2,21E+02 |
| Secondary materials                | kg             | 3,14E-02 | 1,52E-03 | 8,47E-03 | 4,14E-02 | ND | ND | ND | 2,14E-02 | ND | ND | ND | ND | ND | 0,00E+00 | 2,56E-04 | 1,67E-03  | 4,44E-06  | -2,37E-01 |
| Renew. secondary fuels             | MJ             | 3,62E-04 | 1,97E-05 | 5,58E-02 | 5,62E-02 | ND | ND | ND | 5,72E-04 | ND | ND | ND | ND | ND | 0,00E+00 | 3,32E-06 | 8,17E-06  | 8,95E-08  | -1,95E-03 |
| Non-ren. secondary fuels           | MJ             | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00  | 0,00E+00  | 0,00E+00  |
| Use of net fresh water             | m <sup>3</sup> | 7,19E-02 | 4,46E-04 | 2,06E-03 | 7,44E-02 | ND | ND | ND | 2,95E-01 | ND | ND | ND | ND | ND | 0,00E+00 | 7,52E-05 | 1,52E-03  | -1,97E-04 | -2,07E-01 |

8) PER = Primary energy resources.

## END OF LIFE – WASTE

| Impact category     | Unit | A1       | A2       | A3       | A1-A3    | A4 | A5 | B1 | B2       | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|---------------------|------|----------|----------|----------|----------|----|----|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| Hazardous waste     | kg   | 2,20E+00 | 2,39E-02 | 8,62E-02 | 2,31E+00 | ND | ND | ND | 1,75E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 4,03E-03 | 7,28E-02 | 6,57E-05 | -3,29E+00 |
| Non-hazardous waste | kg   | 1,31E+01 | 3,13E-01 | 4,38E+00 | 1,78E+01 | ND | ND | ND | 2,06E+01 | ND | ND | ND | ND | ND | 0,00E+00 | 5,28E-02 | 4,33E+00 | 1,41E-01 | -2,72E+01 |
| Radioactive waste   | kg   | 6,81E-05 | 6,46E-07 | 3,74E-06 | 7,24E-05 | ND | ND | ND | 9,34E-05 | ND | ND | ND | ND | ND | 0,00E+00 | 1,09E-07 | 2,77E-07 | 2,46E-09 | -1,87E-04 |

## END OF LIFE – OUTPUT FLOWS

| Impact category               | Unit | A1       | A2       | A3       | A1-A3    | A4 | A5 | B1 | B2       | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D        |
|-------------------------------|------|----------|----------|----------|----------|----|----|----|----------|----|----|----|----|----|----------|----------|----------|----------|----------|
| Components for re-use         | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Materials for recycling       | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 5,01E-02 | 0,00E+00 | 0,00E+00 |
| Materials for energy rec      | kg   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 4,06E+00 | 0,00E+00 | 0,00E+00 |
| Exported energy               | MJ   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Exported energy – Electricity | MJ   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |
| Exported energy – Heat        | MJ   | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | ND | ND | ND | 0,00E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 | 0,00E+00 |

## ADDITIONAL INDICATOR – GWP-GHG

| Impact category       | Unit                 | A1       | A2       | A3       | A1-A3    | A4 | A5 | B1 | B2       | B3 | B4 | B5 | B6 | B7 | C1       | C2       | C3       | C4       | D         |
|-----------------------|----------------------|----------|----------|----------|----------|----|----|----|----------|----|----|----|----|----|----------|----------|----------|----------|-----------|
| GWP-GHG <sup>9)</sup> | kg CO <sub>2</sub> e | 8,50E+00 | 2,50E-01 | 1,62E+00 | 1,04E+01 | ND | ND | ND | 5,67E+00 | ND | ND | ND | ND | ND | 0,00E+00 | 4,21E-02 | 8,31E+00 | 6,38E-04 | -1,60E+01 |

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH<sub>4</sub> fossil, CH<sub>4</sub> biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO<sub>2</sub> is set to zero.

## SCENARIO DOCUMENTATION

### DATA SOURCES

#### Manufacturing energy scenario documentation

1. Electricity, consumption mix w/o renewables, China, 2023, China, One Click LCA, 1.15 kgCO<sub>2</sub>e/kWh
2. Electricity production, photovoltaic, 570kWp open ground installation, multi-Si, World, Ecoinvent, 0.0802 kgCO<sub>2</sub>e/kWh
3. Market for steam, in chemical industry, World, Ecoinvent, 0.35 kgCO<sub>2</sub>e/kg
4. Market for natural gas, high pressure, China, Ecoinvent, 0.62 kgCO<sub>2</sub>e/m<sup>3</sup>

#### Use stages scenario documentation - B2 (Maintenance data source)

1. Tap water production, conventional treatment, Ecoinvent, 170.0 kg
2. Cleaning consumables, without water, in 13.6% solution state, Ecoinvent, 1.275 kg
3. Market group for electricity, low voltage, Ecoinvent, 1.8475 kWh

#### Use stages scenario documentation - B2 Maintenance

| Scenario information                                                                  | Value                                                                                                                        |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Maintenance process / Description or source where description can be found            | Module B2 includes the supply of a cleaning agent, energy consumption and water consumption for cleaning the floor covering. |
| Maintenance cycle / Number per RSL or year<br>(Not applicable if only B2 is declared) | The LCA results in this EPD are reported for the service life (25 years).                                                    |

#### End-of-life scenario documentation - C1-C4 (Data source)

1. Treatment of waste polyethylene terephthalate, municipal incineration, Ecoinvent, Materials for energy recovery, 4.02 kg

2. Market group for waste packaging paper, Ecoinvent, Materials for recycling, 0.003304108 kg
3. Treatment of waste packaging paper, sanitary landfill, Ecoinvent, 0.001095503 kg
4. Treatment of waste wood, untreated, sanitary landfill, Ecoinvent, 0.051600943 kg
5. Market for waste wood, untreated, Ecoinvent, Materials for recycling, 0.046022463 kg
6. Treatment of waste wood, untreated, municipal incineration, Ecoinvent, Materials for energy recovery, 0.041838603 kg
7. Market for waste polyethylene, low density, packaging, for recycling, unsorted, Ecoinvent, Materials for recycling, 8.10872E-4 kg
8. Treatment of waste polyethylene, municipal incineration, Ecoinvent, Materials for energy recovery, 6.9731E-4 kg
9. Treatment of waste polyethylene, sanitary landfill, Ecoinvent, 4.84132E-4 kg

| Scenario information                        | Value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Scenario assumptions<br>e.g. transportation | At the end of its useful life, it is assumed that 100% of the waste will be collected as separate construction waste, since the coating material is not adhered to the floors. Thus, during the demolition process, it is possible to separate all the waste generated from the remaining construction waste. It is estimated that there is no loss of mass during the use of the product, so it is assumed that the product at the end of its useful life has the same weight as the declared product. Module C1 considers manual deconstruction/dismantling. In module C2, it is considered that, at the end of its useful life, the product studied is transported by road an average distance of 50 km to the nearest waste management point, using trucks. For the module C3, it is considered that 100% of the waste will be incinerated in a waste incineration plant in the EU. Thus, module C4 is declared without any environmental impact. |

## THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

### Verified tools

Tool verifier: Magaly Gonzalez Vazquez

Tool verification validity: 27 March 2025 - 26 March 2028

Sarah Curpen as an authorized verifier for EPD Hub Limited 28.05.2026

