



✓ Third party verified  
Environmental Product Declaration

In conformance with  
ISO14025 | ISO14040 | ISO14044

## ALTRO DOLCE



| <u>Registration number</u>                 | <u>Verification date</u>   | <u>Publication date</u> | <u>Expiration date</u> | <u>EPD type</u>       |
|--|--|-------------------------|------------------------|-----------------------|
| SuMPO-EPD-2601-20-1                        | 2026/1/23  | 2026/3/2                | 2031/1/22              | Multiple Products EPD |
| <u>Additional standards in conformance</u> | EPD can be updated or withdrawn during the validity period. To confirm the validity of this EPD, check the following website:<br><a href="https://ecoleaf-label.jp/epd/search">https://ecoleaf-label.jp/epd/search</a> |                         |                        |                       |
| ISO21930:2007                              |  |                         |                        |                       |

## ● General Information

### > Programme

|                    |   |
|--------------------|---|
| Programme name     | SuMPO EPD Japan   |
| Programme operator | Sustainable Management Promotion Organization (SuMPO)                             |
| Address            | KANDA SQUARE GATE 4F, 14-8, Uchikanda 1-chome, Chiyoda-ku, Tokyo, 101-0047, Japan |
| Website            | <a href="https://ecoleaf-label.jp">https://ecoleaf-label.jp</a>                   |

### > GPI and PCR

|                         |  |
|-------------------------|--|
| GPI                     | SuMPO EPD Japan General Program Instructions v.2.1.1             |
| PCR name                | PVC Floor Covering   |
| PCR registration number | PA-242200-CC-01  |
| PCR publication date    | 2023/7/21  |
| PCR review panel chair  | Masayuki Kanzaki (Sustainable Management Promotion Organization) |
| PCR valid until         | 2028/7/20  |
| PCR issuer              | Sustainable Management Promotion Organization (SuMPO)            |

### > Verification

|                   |  |   |   |
|-------------------|--|---|---|
| Verification Type | Third-party verification in conformance with ISO14025:2006 and ISO21930:2007 |   |   |
|                   | <input type="checkbox"/> Internal  | <input checked="" type="checkbox"/> External                                      |   |
|                   | <input type="checkbox"/> Third-party verification by individual verifier     | <input checked="" type="checkbox"/> Third-party verification by verification body | <input type="checkbox"/> Third-party verification by system certification |
| Verification body | General Incorporated Foundation Kaken Test Center, Shohei Ui                 |   |   |

### > Standards

|                                |   |   |  |
|--------------------------------|---|---|--|
| Standards in conformance with; | <input checked="" type="checkbox"/> ISO14040:2006 | <input checked="" type="checkbox"/> ISO14044:2006 | <input type="checkbox"/> ISO14067:2018     |
|                                | <input checked="" type="checkbox"/> ISO14025:2006 | <input checked="" type="checkbox"/> ISO21930:2007 | <input type="checkbox"/> ISO21930:2017     |
|                                | <input type="checkbox"/> EN15804+A2               | <input type="checkbox"/> EN50693:2019             | <input type="checkbox"/> ISO/IEC63366:2025 |

EPD owner is responsible for the information contained in the EPD and for environmental claims related to the information. For any inquiries or requests regarding the content of the EPD, please contact the EPD owner.

EPDs are comparable only if they comply with the same standards, use the same sub-PCR where applicable, include all relevant information modules and are based on equivalent scenarios with respect to the context of construction works. Comparability of EPDs is limited to those applying a functional unit.

The LCIA results are relative expressions and do not predict impacts on category endpoints, the exceedance of thresholds, safety margins or risks.

When using weighted averages for calculation, the life cycle impact assessment results, life cycle inventory analysis-related information, waste-related information, and environmental information on output flows do not correspond to information about a

## ● EPD Owner's Information

|                           |  |
|---------------------------|--|
| Name of company and dept. | Tajima Roofing Inc,  |
| Address                   | 3-11-13 Iwamoto-cho, Chiyoda-Ku, Tokyo 101-8575 Japan  |
| Contact                   | +81-3-6632-477   |
| LCA practitioner          | Flooring Material Department International Division  |
| Company description       | Manufacturing and sales of flooring materials and auxiliary materials required for their installation. |

## ● Product Information

|                       |                   |   |   |
|-----------------------|-------------------|---|---|
| Product name          |                   | ALTRO DOLCE   |   |
| Product /model number |                   | AD501 / AD502 / AD503 / AD504 / AD505 / AD507 / AD508 / AD509 / AD511 / AD514 / AD515 / AD523 / AD524 / AD526 / AD527 / AD532 / AD605 / AD609 / AD611 / AD915 / AD933 / AD934 / AD939 / AD941 / AD950 / AD952 / AD1101 / AD1105 / AD1110 / AD1113 |   |
| Product specification | Function          | High-performance flooring that combines sophisticated design with superior durability to suit any space.  |   |
|                       | Mass              | 6.54kg  | Conversion factor 6.54kg/m <sup>2</sup> |
|                       | Applications      | Used as floor finishing material for commercial facilities etc.   |   |
|                       | TS*               | Complies with the performance standards for vinyl composition floor tiles under JIS A 5705:2022.  |   |
| Service life          | Service life      | 15years   |   |
|                       | In-use conditions | Floor finishing materials for commercial facilities, etc.   |   |
|                       | reference         | The service life shall be equivalent to that of buildings made of synthetic resin; this does not refer to the actual service life or warranty period.   |   |
| Manufacturing site(s) |                   | 1438 Suneori, Tsurugashima-shi, Saitama, Japan 350-2213   |   |
| Product description   |                   | Product Weight: 6.54 kg<br>Manufacturing Site: Saitama Second Factory<br>Thickness: 3.0 mm<br>Size: 457.2 mm × 457.2 mm<br>Materials: PVC, Calcium Carbonate, Plasticizer, Binder, Stabilizer, UV-curable Resin, Pigment                          |   |
| Website               |                   | <a href="https://www.altro.com/us/products/altro-dolce-tile">https://www.altro.com/us/products/altro-dolce-tile</a>   |   |

\* TS: technical specifications,

## ● Product Content

| Product components  | Proportion (%) | Mass (unit)            |
|---------------------|----------------|------------------------|
| PVC                 | 15.7           | 0.98 kg/m <sup>2</sup> |
| Calcium Carbonate   | 73.7           | 4.58 kg/m <sup>2</sup> |
| Plasticizer         | 5.2            | 0.32 kg/m <sup>2</sup> |
| Stabilizer          | 0.7            | 0.04 kg/m <sup>2</sup> |
| Binder              | 1.9            | 0.12 kg/m <sup>2</sup> |
| UV-curable Resin    | 0.2            | 0.01 kg/m <sup>2</sup> |
| Pigment             | 2.6            | 0.16 kg/m <sup>2</sup> |
| Packaging materials | Proportion (%) | Mass (unit)            |
| Carton Box          | 30.8           | 0.10 kg/m <sup>2</sup> |
| Hard Board          | 69.2           | 0.23 kg/m <sup>2</sup> |

## ● Biogenic Carbon Content

| Item                                 | Content (kg-C) | Content (kg-CO <sub>2</sub> eq) |
|--------------------------------------|----------------|---------------------------------|
| Biogenic carbon content per product  | -              | -                               |
| Biogenic carbon content in packaging | 0.13           | 0.49                            |

## ● LCA-related Information

### > EPD Type Information

|   |              |  |   |   |
|---|--------------|--|---|---|
| EPD type  | Product type | <input type="checkbox"/> Single product EPD  | <input checked="" type="checkbox"/> Multiple products EPD | <input type="checkbox"/> Industry-wide EPD                                  |
|   | Site type    | <input checked="" type="checkbox"/> Single site  |   | <input type="checkbox"/> Multiple sites                                     |
|   | Value        | <input type="checkbox"/> Specific  | <input checked="" type="checkbox"/> Average               | <input type="checkbox"/> Representative <input type="checkbox"/> Worst case |
| Geographical coverage   |              | Global   |   |   |
| Description of representativeness for multiple-products/sites EPD |              | There are 30 product codes for this range; while the types of pigments used are identical, their blending amounts vary. The calculation was conducted using a weighted average based on the production volume of each product code.  |   |   |
| Description of variation for multiple-products/sites EPD          |              | This product range consists of 30 product codes that utilize identical pigment types with varying blending amounts. An assessment of the environmental impact was conducted on items with the minimum and maximum pigment concentrations, confirming that the variance falls within $\pm 10\%$ . |   |   |
| Description of products covered in the multiple products EPD      |              | The products share identical specifications, with the exception of the pigment blending amounts.   |   |   |

### > LCA Information

|   |   |   |  |
|---|---|---|--|
| Declared unit   | Per 1 m <sup>2</sup>  |   |  |
| Mass per declared unit (Conversion factor to mass)                  | 6.54 kg/m <sup>2</sup>  |   |  |
| Reference flow (number of products required to fulfil the function) | -   |   |  |
| System boundary   | <input type="checkbox"/> Cradle-to-Gate   | <input checked="" type="checkbox"/> Cradle-to-Gate with options | <input type="checkbox"/> Cradle-to-Grave |
| LCA software  | MiLCA version 1.2.1.9   |   |  |
| LCI database  | AIST-IDEA ver.3.4   |   |  |
| Characterization model  | Climate Change: IPCC Sixth Assessment Report (IPCC, 2021); Other impact categories: LIME2   |   |  |
| Use of other background data  | -   |   |  |
| Secondary data quality  | The calculation was conducted using data that satisfies the secondary data quality requirements specified in the GPI. Furthermore, data quality assessment was performed in accordance with Section 4.2.3.6 of ISO 14044:2006 (Environmental management — Life cycle assessment — Requirements and guidelines). |   |  |
| Primary data collection sites                                       | Saitama Second Factory  |   |  |
| Primary data collection period                                      | 2023/12/21~2024/12/20   |   |  |
| Biogenic carbon   | <input type="checkbox"/> 0/0 approach   | <input checked="" type="checkbox"/> -1/+1 approach              |  |
| Information about electricity                                       | Use   | <input checked="" type="checkbox"/> Average consumption mix     | <input type="checkbox"/> Others          |
|   | Type  | -   |  |
|   | Purchase date   | -   |  |
|   | Issuing body  | -   |  |

### > Modules

| Production stage                   |                      |               | Construction stage |              | Use stage |             |        |             |               |                        |                       | End-of-life stage            |   |                  |                   | Suppl. info            |
|------------------------------------|----------------------|---------------|--------------------|--------------|-----------|-------------|--------|-------------|---------------|------------------------|-----------------------|------------------------------|---|------------------|-------------------|------------------------|
| A1                                 | A2                   | A3            | A4                 | A5           | Use       |             |        | Operation   |               |                        |                       | End-of-life stage            |   |                  |                   |                        |
|                                    |                      |               |                    |              | B1        | B2          | B3     | B4          | B5            | B6                     | B7                    | C1                           | C2  | C3               | C4                | D                      |
| Extraction and upstream production | Transport to factory | Manufacturing | Transport to site  | Installation | Use       | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction / Demolition | Transport to waste processing or disposal | Waste processing | Disposal of waste | Potential net benefits |
| ■                                  | ■                    | ■             | -                  | -            | -         | -           | -      | -           | -             | -                      | -                     | -                            | ■   | ■                | ■                 | -                      |

■ : declared module    - : module not declared

### > Allocation

Water is utilized within the product manufacturing process. Since water is consumed across multiple stages at the Saitama Second Factory, and tracking specific consumption for the relevant process and product is difficult, physical allocation was applied.

### > Cut-off rules

Water used in the process is treated in on-site facilities before being discharged into rivers. Oils and pollutants resulting from the treatment process have been cut off from the assessment, as their impact on both mass and environmental load is negligible.

### > System Boundary

In accordance with the PCR, the assessment covers modules A1–A4 and C2–C4. All items defined as out-of-boundary processes by the GPI and PCR have been excluded from the system boundary. The time-dependent system boundary is set at 100 years.

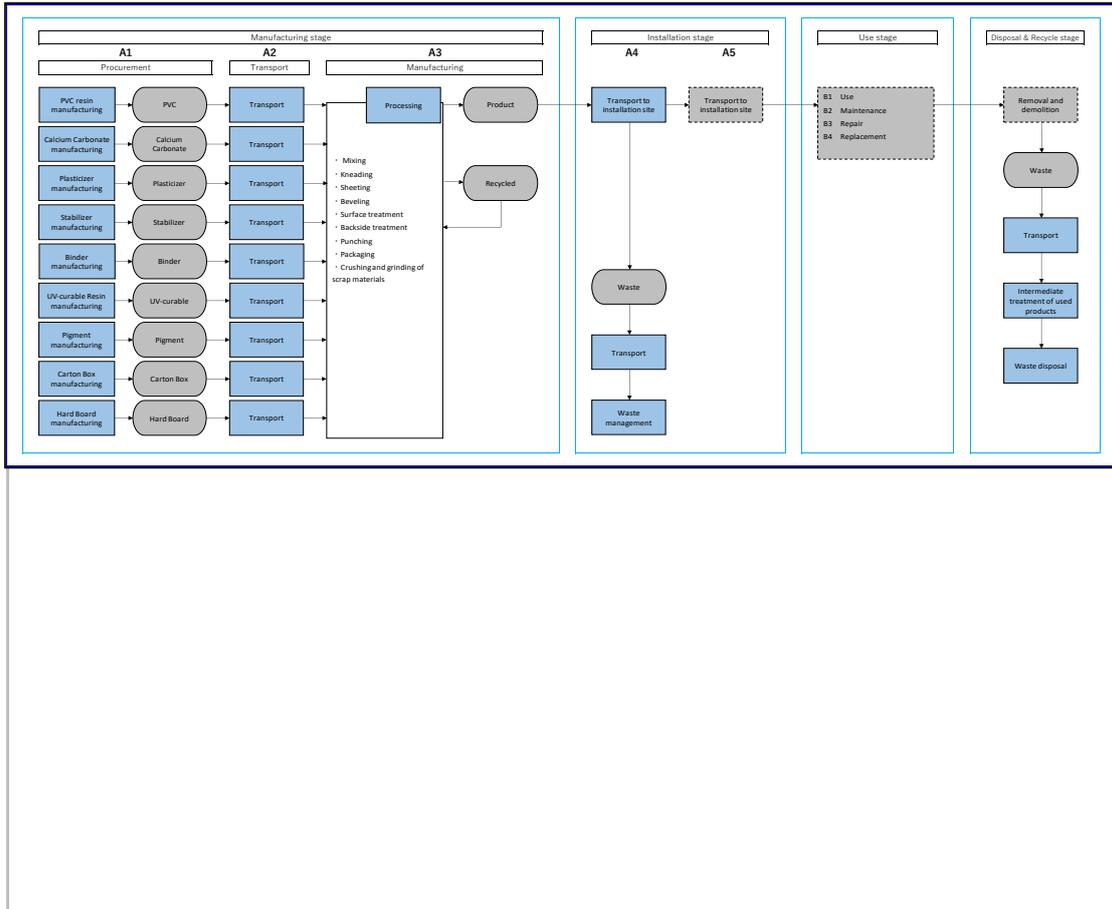
### > Scenario

| Modules | Description   |
|---------|---|
| A2      | For the processes related to transport to the factory, the "transportation mode" and "load factor" were determined based on the PCR scenarios.  |
| A4      | For the processes related to transport to the construction site, the "transport distance," "transportation mode," and "load factor" were determined based on the PCR scenarios. However, for certain segments where the "transport distance" could be collected as primary data, the PCR scenarios were applied only to the "transportation mode" and "load factor." Regarding the processes for waste transport, the PCR scenarios were utilized throughout. |
| C2      | For the processes related to transport in the end-of-life and recycling stages, the "transport distance," "transportation mode," and "load factor" were determined based on the PCR scenarios.  |
| C3,C4   | In accordance with the PCR, the end-of-life and recycling stage was modeled on the scenario that 100% of the product undergoes crushing followed by landfill disposal.  |

### > Electricity Modelling

The calculation was conducted using the 2021 average grid power data for Japan across all targeted life cycle stages.

> Life Cycle System Diagram



Environmental Product Declaration for **ALTRO DOLCE**● **LCA Result**> **LCIA Indicators**

|  |                                     | Production stage |          |          |           |          |    | Construction stage |    | Use stage |    |    |           |    |    |    | End-of-life stage |          |          |   | Supple. info<br>D |
|--|-------------------------------------|------------------|----------|----------|-----------|----------|----|--------------------|----|-----------|----|----|-----------|----|----|----|-------------------|----------|----------|---|-------------------|
|  |                                     | A1               | A2       | A3       | A1-A3     | A4       | A5 | Use                |    |           |    |    | Operation |    | C1 | C2 | C3                | C4       |          |   |                   |
|  |                                     |                  |          |          |           |          |    | B1                 | B2 | B3        | B4 | B5 | B6        | B7 |    |    |                   |          |          |   |                   |
| GWP - total                                    | kg-CO <sub>2</sub> eq               | 8.04E+00         | 4.15E-01 | 7.65E+00 | 1.61E+01  | 3.00E+00 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 2.32E+00          | 1.27E+00 | 4.20E-02 | - |                   |
| GWP - fossil                                   | kg-CO <sub>2</sub> eq               | 8.52E+00         | 4.14E-01 | 7.64E+00 | 1.66E+01  | 2.50E+00 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 2.31E+00          | 1.26E+00 | 4.19E-02 | - |                   |
| GWP - biogenic                                 | kg-CO <sub>2</sub> eq               | -4.84E-01        | 7.62E-05 | 2.71E-04 | -4.83E-01 | 4.98E-01 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 1.30E-04          | 7.31E-04 | 2.45E-05 | - |                   |
| GWP - land use and land use change             | kg-CO <sub>2</sub> eq               | 6.05E-03         | 4.10E-04 | 7.95E-03 | 1.44E-02  | 1.12E-03 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 4.64E-03          | 3.37E-03 | 9.26E-05 | - |                   |
| ODP: Ozone depletion potential                 | kg-CFC-11eq                         | 1.44E-06         | 1.73E-11 | 3.27E-07 | 1.77E-06  | 3.67E-10 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 1.74E-11          | 2.08E-09 | 3.78E-10 | - |                   |
| EP: Eutrophication potential                   | kg-PO <sub>4</sub> <sup>3-</sup> eq | 8.08E-04         | 1.95E-09 | 6.68E-07 | 8.08E-04  | 4.55E-08 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 9.92E-09          | 1.21E-07 | 2.40E-08 | - |                   |
| AP: Acidification potential                    | kg-SO <sub>2</sub> eq               | 9.53E-03         | 5.67E-04 | 7.49E-03 | 1.76E-02  | 2.37E-03 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 3.27E-03          | 9.20E-03 | 2.72E-04 | - |                   |
| POCP: Photochemical oxidant creation potential | kg-C <sub>2</sub> H <sub>4</sub> eq | 2.03E-04         | 3.79E-06 | 2.46E-04 | 4.53E-04  | 1.17E-05 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 6.01E-05          | 6.29E-07 | 3.44E-08 | - |                   |

## Optional indicators

|                |                       |          |          |          |          |          |   |   |   |   |   |   |   |   |   |   |          |          |          |   |
|----------------|-----------------------|----------|----------|----------|----------|----------|---|---|---|---|---|---|---|---|---|---|----------|----------|----------|---|
| ADP - elements | kg-Sbeq               | 1.00E-03 | 1.67E-09 | 2.85E-05 | 1.03E-03 | 1.65E-07 | - | - | - | - | - | - | - | - | - | - | 5.15E-09 | 5.12E-06 | 1.23E-07 | - |
| GWP - aircraft | kg-CO <sub>2</sub> eq | -        | -        | -        | -        | -        | - | - | - | - | - | - | - | - | - | - | -        | -        | -        | - |

> **LCI - Primary Resource Use**

|                     |    | Production stage |          |          |          |          |    | Construction stage |    | Use stage |    |    |           |    |    |    | End-of-life stage |          |          |   | Supple. info<br>D |
|---------------------|----|------------------|----------|----------|----------|----------|----|--------------------|----|-----------|----|----|-----------|----|----|----|-------------------|----------|----------|---|-------------------|
|                     |    | A1               | A2       | A3       | A1-A3    | A4       | A5 | Use                |    |           |    |    | Operation |    | C1 | C2 | C3                | C4       |          |   |                   |
|                     |    |                  |          |          |          |          |    | B1                 | B2 | B3        | B4 | B5 | B6        | B7 |    |    |                   |          |          |   |                   |
| RPR <sub>E</sub> *  | MJ | 1.23E+01         | 2.30E-03 | 5.45E+01 | 6.68E+01 | 3.51E-01 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 5.46E-03          | 1.17E+01 | 2.80E-01 | - |                   |
| RPR <sub>M</sub> *  | MJ | 1.80E+00         | 3.89E-06 | 9.83E-04 | 1.80E+00 | 1.07E-04 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 2.13E-05          | 2.01E-04 | 4.91E-05 | - |                   |
| NRPR <sub>E</sub> * | MJ | 9.51E+01         | 4.55E+00 | 1.96E+02 | 2.96E+02 | 2.87E+01 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 2.55E+01          | 4.64E+01 | 1.23E+00 | - |                   |
| NRPR <sub>M</sub> * | MJ | 3.72E+01         | 1.49E-05 | 6.69E-02 | 3.73E+01 | 2.70E-03 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 5.67E-05          | 1.49E-02 | 7.09E-04 | - |                   |

\*RPRE: Renewable primary resources used as an energy carrier, RPRM: Renewable primary resources with energy content used as material, NRPRE: Non-renewable primary resources used as an energy carrier, NRPRM: Non-renewable primary resources with energy content used as material.

> **LCI - Secondary Resources Use**

|                                      |    | Production stage |          |          |          |          |    | Construction stage |    | Use stage |    |    |           |    |    |    | End-of-life stage |          |          |   | Supple. info<br>D |
|--------------------------------------|----|------------------|----------|----------|----------|----------|----|--------------------|----|-----------|----|----|-----------|----|----|----|-------------------|----------|----------|---|-------------------|
|                                      |    | A1               | A2       | A3       | A1-A3    | A4       | A5 | Use                |    |           |    |    | Operation |    | C1 | C2 | C3                | C4       |          |   |                   |
|                                      |    |                  |          |          |          |          |    | B1                 | B2 | B3        | B4 | B5 | B6        | B7 |    |    |                   |          |          |   |                   |
| SM : Use of secondary material       | kg | 1.57E-01         | 1.68E-06 | 7.07E-03 | 1.64E-01 | 6.76E-05 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 8.49E-06          | 1.70E-03 | 4.49E-05 | - |                   |
| RSF : Renewable secondary fuels      | MJ | 7.25E-02         | 1.20E-06 | 6.77E-04 | 7.32E-02 | 1.18E-03 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 1.25E-05          | 2.00E-03 | 1.16E-04 | - |                   |
| NRSF : Non-renewable secondary fuels | MJ | 1.57E-01         | 6.36E-06 | 1.57E-03 | 1.58E-01 | 5.40E-06 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 0.00E+00          | 0.00E+00 | 0.00E+00 | - |                   |
| RE : Use of recovered energy         | MJ | 6.07E-02         | 1.07E-05 | 2.84E-01 | 3.45E-01 | 8.30E-06 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 1.30E-10          | 2.22E-10 | 1.89E-11 | - |                   |

> **LCI - ADP-fossil and Consumption of freshwater**

|                                     |                | Production stage |          |          |          |          |    | Construction stage |    | Use stage |    |    |           |    |    |    | End-of-life stage |          |          |   | Supple. info<br>D |
|-------------------------------------|----------------|------------------|----------|----------|----------|----------|----|--------------------|----|-----------|----|----|-----------|----|----|----|-------------------|----------|----------|---|-------------------|
|                                     |                | A1               | A2       | A3       | A1-A3    | A4       | A5 | Use                |    |           |    |    | Operation |    | C1 | C2 | C3                | C4       |          |   |                   |
|                                     |                |                  |          |          |          |          |    | B1                 | B2 | B3        | B4 | B5 | B6        | B7 |    |    |                   |          |          |   |                   |
| ADP - fossil                        | MJ             | 1.34E+02         | 5.63E+00 | 1.18E+02 | 2.57E+02 | 3.43E+01 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 3.16E+01          | 1.60E+01 | 5.42E-01 | - |                   |
| Consumption of freshwater resources | m <sup>3</sup> | 3.53E-01         | 1.16E-05 | 2.31E-03 | 3.56E-01 | 1.28E-04 | -  | -                  | -  | -         | -  | -  | -         | -  | -  | -  | 6.53E-05          | 8.96E-04 | 2.70E-04 | - |                   |

Environmental Product Declaration for **ALTRO DOLCE**

## &gt; Waste Indicators

|  |                | Production stage |          |          |          | Construction stage |    | Use stage |    |    |    |    |           |    | End-of-life stage |    |          |          | Supple. info<br>D |   |
|--|----------------|------------------|----------|----------|----------|--------------------|----|-----------|----|----|----|----|-----------|----|-------------------|----|----------|----------|-------------------|---|
|  |                | A1               | A2       | A3       | A1-A3    | A4                 | A5 | Use       |    |    |    |    | Operation |    | C1                | C2 | C3       | C4       |                   |   |
|  |                |                  |          |          |          |                    |    | B1        | B2 | B3 | B4 | B5 | B6        | B7 |                   |    |          |          |                   |   |
| hazardous waste disposed               | 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          | - |
| non-hazardous waste disposed           | kg             | 1.82E-01         | 3.61E-04 | 1.79E-02 | 2.00E-01 | 2.07E-03           | -  | -         | -  | -  | -  | -  | -         | -  | -                 | -  | 1.05E-03 | 1.21E+00 | 6.21E+00          | - |
| high-level radioactive waste           | m <sup>3</sup> | 7.16E-11         | 1.48E-14 | 3.34E-10 | 4.05E-10 | 3.10E-12           | -  | -         | -  | -  | -  | -  | -         | -  | -                 | -  | 4.82E-14 | 1.04E-10 | 2.47E-12          | - |
| intmd. and low-level radioactive waste | m <sup>3</sup> | 2.99E-08         | 6.18E-12 | 1.40E-07 | 1.69E-07 | 1.30E-09           | -  | -         | -  | -  | -  | -  | -         | -  | -                 | -  | 2.02E-11 | 4.34E-08 | 1.03E-09          | - |

## &gt; Output Flow Indicators

|  |                  | Production stage |          |          |          | Construction stage |          | Use stage |    |    |    |    |           |    | End-of-life stage |    |          |          | Supple. info<br>D |   |
|--|------------------|------------------|----------|----------|----------|--------------------|----------|-----------|----|----|----|----|-----------|----|-------------------|----|----------|----------|-------------------|---|
|  |                  | A1               | A2       | A3       | A1-A3    | A4                 | A5       | Use       |    |    |    |    | Operation |    | C1                | C2 | C3       | C4       |                   |   |
|  |                  |                  |          |          |          |                    |          | B1        | B2 | B3 | B4 | B5 | B6        | B7 |                   |    |          |          |                   |   |
| Components for reuse   | 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          | - |
| Materials for recycling  | kg               | 0.00E+00         | 0.00E+00 | 1.10E+01 | 1.10E+01 | 0.00E+00           | -        | -         | -  | -  | -  | -  | -         | -  | -                 | -  | 0.00E+00 | 0.00E+00 | 0.00E+00          | - |
| Material for energy recovery                                       | 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          | - |
| Exported energy from waste (energy recovery efficiency $\geq$ 60%) | 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          | - |
| Incineration of waste (energy recovery efficiency < 60%)           | Waste disposed   | kg               | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00           | 3.30E-01 | -         | -  | -  | -  | -  | -         | -  | -                 | -  | 0.00E+00 | 0.00E+00 | 0.00E+00          | - |
|  | Recovered energy | 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          | - |
| Waste disposed in landfill and energy recovered from landfill gas  | Waste disposed   | kg               | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00           | 0.00E+00 | -         | -  | -  | -  | -  | -         | -  | -                 | -  | 0.00E+00 | 0.00E+00 | 6.21E+00          | - |
|  | Recovered energy | 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          | - |

### > Description of LCA Results

- The transport scenarios were calculated in accordance with the PCR.
- The use stage is not included in the calculation.
- The disposal of packaging materials used for transport to the construction site is accounted for in Module A4.

## ● Additional Environmental Information

### > Additional Environmental Information not related to LCA

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### > Information on Hazardous Substances

| Hazardous materials name | CAS No. | Standards or regulations |
|--------------------------|---------|--------------------------|
| -                        | -       | -                        |
| -                        | -       | -                        |
| -                        | -       | -                        |

### Release of dangerous substances from construction products

|   |
|---|
| - |
|---|

## ● Definitions of Terms

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|---|
| - |
|---|

## ● References

- ISO14025:2006 Environmental labels and declarations — Type III environmental declarations — Principles and procedures
- ISO14040:2006 Environmental management - Life Cycle Assessment - Principles and framework
- ISO14044:2006 Environmental management - Life Cycle Assessment - Requirements and guidelines
- ISO21930:2007 Sustainability in building construction — Environmental declaration of building products

## ● Version History

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