THE INTERNATIONAL EPD® SYSTEM

# Environmental Product Declaration

ECO PLATFORM EPD VERIFIED

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

## Drainage Board P35 - 110 kPa

from

## Pordrän AB

| | |
|---|---|
| Programme | The International EPD® System |
| Programme operator | EPD International AB |
| EPD registration number | EPD-IES-0022431 |
| Version date | 2025-05-24 |
| Valid until | 2030-05-23 |

*This EPD covers multiple products and is based on the representative composition of 1 m3. An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com.*

# General Information

| Programme information | |
|---|---|
| Programme | The International EPD® System |
| Address: | EPD International AB<br>Box 210 60<br>SE-100 31 Stockholm<br>Sweden |
| Website | www.environdec.com |
| E-mail | info@environdec.com |

| 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)<br><br>PCR 2019:14 Construction products (EN 15804:A2) (1.3.4) |
| Life Cycle Assessment (LCA) | Carbonzero AB |
| Third-party verification: | Independent third-party verification of the declaration and data, according to ISO 14025:2006:<br><br>☒ EPD verification by individual verifier<br><br>Vladimir Koci, LCA studio<br><br>Approved by: The International EPD® System |
| 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 | Pordrän Sverige AB |
| Contact | Henrik Rauge, info@pordran.se |
| Description of the organisation | Pordrän is a company with a lot of experience in moisture problems in houses and land. Our business concept is to offer a complete system that heats, protects against moisture, dries out and drains in an economical, simple and functional way. The products are manufactured in our own facility in Tullinge, south of Stockholm, and the Pordrän boards are sold and distributed to resellers within the Nordics. |
| Product-related or management system-related certifications: | Not relevant |
| Name and location of production site(s): | **Name of plant:** Tullinge<br>**Location:** Sweden |

| Product information | |
|---|---|
| Product name(s) | P35 |
| Product description: | Pordrän boards are used as an effective moisture protection with a draining, capillary-breaking, heat-insulating and drying function for basement walls, basement floors, slabs on the ground, crawl spaces and courtyard floor structures. The products come in different compressive strength, depending on the purpose from 60 kPa up to 200 kPa. |
| RSL | Not applicable |
| UN CPC code | 369 - Other plastics products |

| LCA information | |
|---|---|
| Functional unit / declared unit | 1 m3 (with a density of 35 kg/m3) |
| Time representative-ness | Data obtained refers to the year 2024 |
| System Boundary | The system boundaries are set to be “cradle-to-gate with modules C1-C4 + D for end of life. |
| Database(s) and LCA software used | Eando X version 1.01 & The characterization factors used in this study refer to PCR 2019:14 and EN 15804+A2 (based on EF 3.1). |

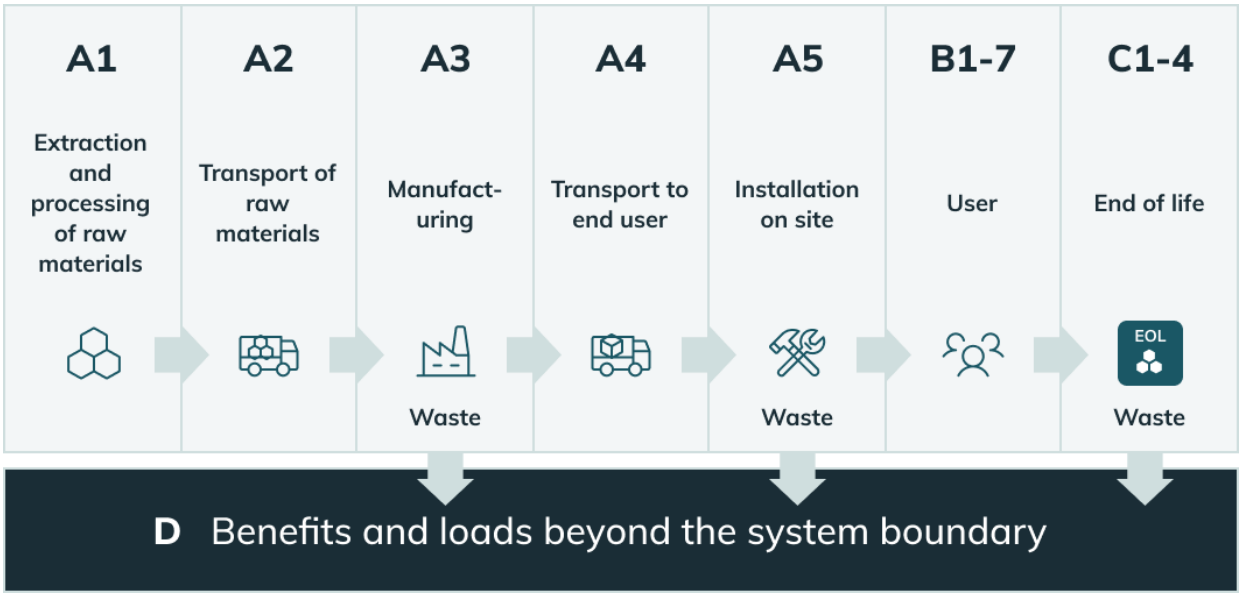
**Cut-off criteria**
The following procedures were followed for the exclusion of inputs and outputs:

All input and output flows in a unit process were considered i.e., taking into account the value of all flows in the unit process and the corresponding LCI where data was available

Processes of infrastructure or capital goods are excluded from this study

The use of cut-off criterion on mass inputs and primary energy at the unit process level (1%) and at the information module level (5%) was applied

System diagram




| | | |
|---|---|---|
| A1 | Raw material supply | This module considers the extraction and processing of all raw materials, energy, and transportation which occur upstream to the studied manufacturing process, including packaging material. |
| A2 | Transport to the manufacturer | The raw materials are transported to the manufacturing site. |
| A3 | Manufacturing* | This module includes all resources used to produce and waste produced. This also includes additives and packaging material. |
| A4 | Transport | Transportation from the manufacturing site to distribution centre and then from the distribution centre to the building site is included. |
| | Transport Scenario | truck: 262km boat: 16km representing distribution within Nordic countries |
| A5 | Construction installation | Installation is manual. Waste treatment of packaging is included. |
| B1-B7 | Use stage | This stage is not declared. |
| C1 | Deconstruction/Demolition | This stage includes deconstructing the product when it is no longer in use. In this study the deconstruction is manual and the impact is considered negligible. |
| C2 | Transport | This stage represents the transport distance to the waste processing facility, 50 km. |
| C3 | Waste processing | This stage includes any waste treatment needed. |
| | EOL Scenario | Landfill 0%. Incineration 100%. Recycling 0%. |
| C4 | Final disposal | This includes any material that is landfilled. |
| D | Benefits | Emission credits obtained from energy recovery and/or recycling materials |

** If purchased electricity used in the manufacturing process of module A3 accounts for more than 30% of the GWP-GHG results of modules A1-A3, the EPD shall declare the energy source behind the purchased electricity and its climate impact as kg CO2 eq./kWh. This information can be found in the end of the EPD.*

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

| | Product stage | | | Assembly stage | | Use stage | | | | | | | End of life stage | | | | Benefits & loads beoyond system boundary |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Raw Materials | Transport | Manufacturing | Transport | Assembly | Use | Maintenance | Repair | Replacement | Refurbishment | Operational energy use | Operational water use | De-construction demolition | Transport | Waste processing | Disposal | Reuse-Recovery - Recycling-potential |
| | A1 | A2 | A3 | A4 | A5 | B1 | B2 | B3 | B4 | B5 | B6 | B7 | C1 | C2 | C3 | C4 | D |
| Declared | X | X | X | X | X | ND | ND | ND | ND | ND | ND | ND | X | X | X | X | X |
| Geography | EU | EU | SE | NC | NC | - | - | - | - | - | - | - | NC | NC | NC | NC | NC |
| Specific data used | 4 % | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Variation-Products | 0%* | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Variation-Sites | 0% | | | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

NC refers to the Nordic countries: Sweden, Norway, Finland and Denmark
* there is no variation within the product range since the material composition is the same per m3 and the included products are only in different dimensions

# Content Information

| Product Components | Weight, kg | Post-consumer material, weight-% | Biogenic material, weight-% and kg C/kg |
|---|---|---|---|
| Polystyrene | 21.700 | 0.000 | 0.000 |
| Bitumen based adhesive | 13.300 | 0.000 | 0.000 |
| Total | 35.000 | 0.000 | 0.000 |

| Packaging Materials | Weight, kg | Weight-% (versus the product) | Weight biogenic carbon, kg C/kg |
|---|---|---|---|
| Low density polyethylene | 0.344 | 0.983 | 0.000 |
| Total | 0.344 | 0.983 | 0.000 |

| Dangerous substances from the candidate list of SVHC for Authorisation | EC No. | CAS No. | Weight-% per functional or declared unit |
|---|---|---|---|
| - | - | - | 0.000 |

At the date of issue of this declaration, there is no “Substance of Very High Concern” (SVHC) in concentration above 0.1% by weight, and neither does the packaging, following the European REACH regulation (Registration, Evaluation, Authorization and Restriction of Chemicals)

# Environmental Information

Potential environmental impact – indicators according to EN 15804+A2

| Results per functional unit: 1 m3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indicator | Unit | A1 - A3 | A4 | A5 | C1 | C2 | C3 | C4 | D |
| GWP-total | kg CO2 eq | 6.71E+1 | 8.33E-1 | 5.41E-1 | 0.00E+0 | 1.58E-1 | 0.00E+0 | 8.83E+1 | -2.62E+1 |
| GWP-fossil | kg CO2 eq | 6.68E+1 | 8.22E-1 | 5.38E-1 | 0.00E+0 | 1.56E-1 | 0.00E+0 | 8.83E+1 | -2.61E+1 |
| GWP-biogenic | kg CO2 eq | 2.26E-1 | 2.03E-3 | 3.50E-3 | 0.00E+0 | 3.87E-4 | 0.00E+0 | 4.02E-3 | 0.00E+0 |
| GWP-luluc | kg CO2 eq | 3.91E-2 | 8.70E-3 | 5.34E-5 | 0.00E+0 | 1.66E-3 | 0.00E+0 | 6.59E-4 | -1.17E-3 |
| ODP | kg CFC-11 eq | 2.45E-8 | 1.41E-13 | 5.41E-10 | 0.00E+0 | 2.68E-14 | 0.00E+0 | 6.36E-12 | -1.16E-12 |
| AP | mole H+ eq | 1.74E-1 | 5.39E-3 | 2.62E-4 | 0.00E+0 | 1.01E-3 | 0.00E+0 | 1.26E-2 | -2.12E-2 |
| EP-freshwater* | kg P eq | 7.55E-4 | 2.28E-6 | 9.56E-6 | 0.00E+0 | 4.36E-7 | 0.00E+0 | 1.72E-6 | -2.01E-6 |
| EP-marine | kg N eq | 4.88E-2 | 2.67E-3 | 1.03E-4 | 0.00E+0 | 5.02E-4 | 0.00E+0 | 3.67E-3 | -5.63E-3 |
| EP-terrestrial | mole N eq | 5.18E-1 | 2.90E-2 | 9.14E-4 | 0.00E+0 | 5.46E-3 | 0.00E+0 | 6.08E-2 | -6.07E-2 |
| POCP | kg NMVOC eq | 1.74E-1 | 5.12E-3 | 2.81E-4 | 0.00E+0 | 9.59E-4 | 0.00E+0 | 1.01E-2 | -1.65E-2 |
| ADP-minerals & metals** | kg Sb eq | 1.50E-5 | 5.65E-8 | 2.52E-7 | 0.00E+0 | 1.07E-8 | 0.00E+0 | 4.79E-8 | -9.16E-8 |
| ADP-fossil** | MJ | 2.28E+3 | 1.09E+1 | 8.20E-1 | 0.00E+0 | 2.06E+0 | 0.00E+0 | 1.43E+1 | -8.24E+2 |
| WDP** | m3 | 1.60E+1 | 3.88E-3 | 5.42E-2 | 0.00E+0 | 7.39E-4 | 0.00E+0 | 8.47E+0 | -5.65E-1 |
| 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 | | | | | | | | |

** The results in kg PO4 eq. can be obtained by multiplying the results in kg P eq. by a factor of 3,07.*

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

# Use of resources

| Results per functional unit: 1 m3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indicator | Unit | A1 - A3 | A4 | A5 | C1 | C2 | C3 | C4 | D |
| PERE | MJ | 6.25E+1 | 8.16E-1 | 4.92E-2 | 0.00E+0 | 1.56E-1 | 0.00E+0 | 2.17E+1 | -1.50E+0 |
| PERM | MJ | 1.78E+1 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | -1.78E+1 | 0.00E+0 |
| PERT | MJ | 8.02E+1 | 8.16E-1 | 4.92E-2 | 0.00E+0 | 1.56E-1 | 0.00E+0 | 3.90E+0 | -1.50E+0 |
| PENRE | MJ | 2.20E+3 | 1.09E+1 | 1.60E+1 | 0.00E+0 | 2.06E+0 | 0.00E+0 | 1.19E+3 | -3.22E+2 |
| PENRM | MJ | 1.19E+3 | 0.00E+0 | -1.52E+1 | 0.00E+0 | 0.00E+0 | 0.00E+0 | -1.18E+3 | 0.00E+0 |
| PENRT | MJ | 3.39E+3 | 1.09E+1 | 8.20E-1 | 0.00E+0 | 2.06E+0 | 0.00E+0 | 1.43E+1 | -3.22E+2 |
| SM | kg | 1.03E-1 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 |
| RSF | MJ | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 |
| NRSF | MJ | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 |
| FW | m3 | 4.73E-1 | 4.04E-4 | 1.27E-3 | 0.00E+0 | 7.70E-5 | 0.00E+0 | 1.99E-1 | -1.17E-1 |
| 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 | | | | | | | | |

Option A is used for balancing energy indicators

# Additional mandatory indicators

| Results per functional unit: 1 m3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indicator | Unit | A1 - A3 | A4 | A5 | C1 | C2 | C3 | C4 | D |
| GWP-GHG | kg CO2 eq | 6.71E+1 | 8.33E-1 | 5.41E-1 | 0.00E+0 | 1.58E-1 | 0.00E+0 | 8.83E+1 | -2.62E+1 |
| Acronyms | GWP-GHG global warming potential - greenhouse gases | | | | | | | | |

*The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO2 is set to zero. This means that the uptake and emissions of biogenic CO2 are "balanced out" already in modules A1-A3, instead of in modules A1-A5 (for packaging) or modules A-C (for product). In the context of Norwegian public procurement legislation, GWP-GHG is also referred to as GWP-IOBC.*

# Waste flows

| Results per functional unit: 1 m3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indicator | Unit | A1 - A3 | A4 | A5 | C1 | C2 | C3 | C4 | D |
| HWD | kg | 1.45E-7 | 4.38E-10 | 3.37E-11 | 0.00E+0 | 8.29E-11 | 0.00E+0 | 8.22E-9 | -2.74E-8 |
| NHWD | kg | 4.65E-1 | 1.52E-3 | 1.92E-3 | 0.00E+0 | 2.89E-4 | 0.00E+0 | 1.45E+0 | -9.42E-2 |
| RWD | kg | 7.28E-3 | 2.05E-5 | 3.22E-6 | 0.00E+0 | 3.90E-6 | 0.00E+0 | 7.48E-4 | -1.54E-1 |
| Acronyms | HW Hazardous waste disposed; NHW Non-hazardous waste disposed; RW Radioactive waste disposed | | | | | | | | |

# Output flows

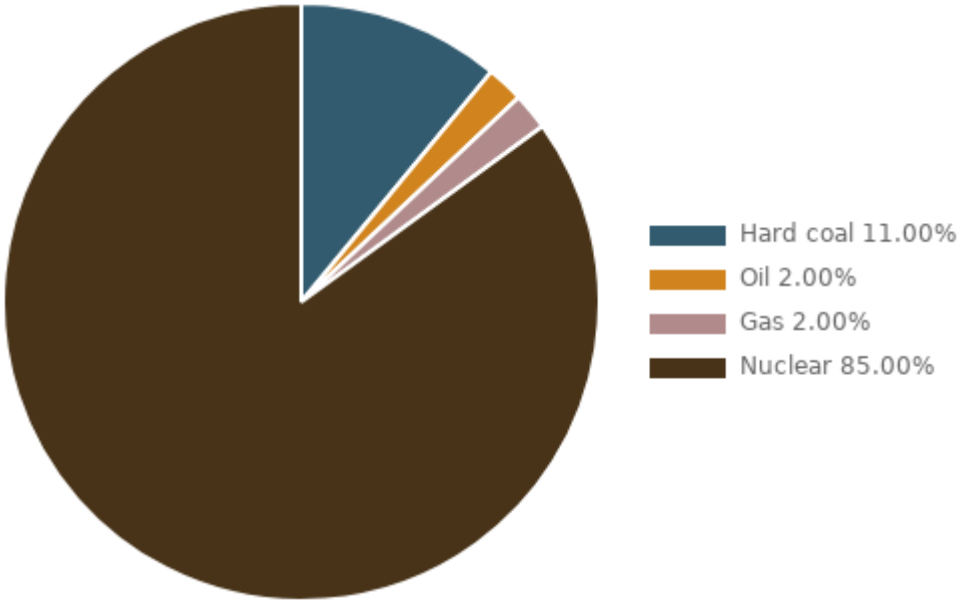
| Results per functional unit: 1 m3 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Indicator | Unit | A1 - A3 | A4 | A5 | C1 | C2 | C3 | C4 | D |
| CRU | kg | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 |
| MFR | kg | 1.24E-3 | 0.00E+0 | 1.89E-1 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 |
| MER | kg | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 |
| EEE | MJ | 6.68E+0 | 0.00E+0 | 1.03E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 1.67E+2 | 0.00E+0 |
| EET | MJ | 1.21E+1 | 0.00E+0 | 1.84E+0 | 0.00E+0 | 0.00E+0 | 0.00E+0 | 3.03E+2 | 0.00E+0 |
| Acronyms | CRU Components for reuse; MFR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy | | | | | | | | |

# Energy Breakdown

Electricity used in the manufacturing

| Name | Data source | GWP excl. biogenic [kg CO2-eq/kWh] |
|---|---|---|
| Electricity Residual Mix - Sweden (2023) | AIB | 1.51E-1 |

Breakdown of electricity usage



# Product Table

| Name | Article number | Dimensions (length * width * thickness) | Conversion factor to one piece |
|---|---|---|---|
| P35 | 10010 | 1200*750*70 | 0.063 |
| P35 | 10011 | 1000*750*100 | 0.075 |
| P35 | 10012 | 1250*750*100 | 0.094 |

# Disclaimers

| ILCD classification | Indicator | Disclaimer |
|---|---|---|
| ILCD Type 1 | Global warming potential (GWP) | None |
| | Depletion potential of the stratospheric ozone layer (ODP) | None |
| ILCD Type 2 | Acidification potential, Accumulated Exceedance (AP) | None |
| | Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater) | None |
| | Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine) | None |
| | Eutrophication potential, Accumulated Exceedance (EP-terrestrial) | None |
| | Formation potential of tropospheric ozone (POCP) | None |
| ILCD Type 3 | Abiotic depletion potential for non-fossil resources (ADP-minerals & metals) | 1 |
| | Abiotic depletion potential for fossil resources (ADP-fossil) | 1 |
| | Water (user) deprivation potential, deprivation-weighted water consumption (WDP) | 1 |
| Disclaimer 1 – The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator. | | |
| Note 1: 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. | | |
| Note 2: The results presented for modules A1-A3 alone shall not be used for comparisons unless all relevant life cycle stages, particularly end-of-life (C1-C4), are included. This ensures a more accurate and representative environmental impact assessment over the full product life cycle. | | |

## Abbreviations

| | |
|---|---|
| CPC | Central Product Classification |
| CPR | Construction Product Regulation |
| EPD | Environmental Product Declaration |
| EU | European Union |
| GHG | Greenhouse gases |
| GPI | General Programme Instructions |
| GWP | Global Warming Potential |
| ISO | International Organization for Standardization |
| LCA | Life Cycle Assessment |
| LCI | Life Cycle Inventory |
| ND | Not Declared |
| PCR | Product Category Rules |
| PEF | Product Environmental Footprint |
| REACH | Restriction of Chemicals |
| RSL | Reference Service Life |
| SI | The International System of Units |
| SVHC | Substance of Very High Concern |
| UN | United Nations |

# References


| | |
|---|---|
| EN15804:2012 A2 | Sustainability of construction works: Environmental product declaration – Core rules for the product category of construction products |
| GPI 5.0 | General Programme Instructions of the International EPD® System, version 4.0 |
| ISO 14020:2022 | International Standard ISO 14020 – Environmental statements and programmes for products – Principles and general requirements |
| ISO 14025:2006 | International Standard ISO 14025 – Environmental labels and declarations — Type III environmental declarations — Principles and procedures |
| ISO 14040:2006 | International Standard ISO 14040: Environmental Management – Life cycle assessment – Principles and framework. Second edition 2006-07-01. |
| ISO 14044:2006 | International Standard ISO 14044: Environmental Management – Life cycle assessment – Requirements and Guidelines. |
| PCR 2019:14 | Construction products v1.3.4 |
| LCA report | LCA report for Pordrän drainage boards (Carbonzero), May 2025 |

# Contact Info

| | |
|---|---|
| EPD owner: | Pordrän Sverige AB<br>Email: info@pordran.se<br>Telephone: +46 8 607 32 60<br>Address: Alfred Nobels Allé 105 146 48 Tullinge |
| LCA author: | Carbonzero AB<br>Email: info@eando.se<br>Telephone: +46 4 317 07 07<br>Address: Tåstrupsgatan 2, SE-262 63 Ängelholm, Sweden |
| Third party verifier: | Vladimír Koci<br>Email: Vlad.Koci@vscht.cz<br>Telephone: +420 608 055 972<br>Address: LCA Studio, Šárecká 1962/5, 160 00 Praha 6 |
| Program operator: | EPD International AB<br>Email: info@environdec.com<br>Telephone: +46 (0)73 311 30 20<br>Address: SE-11427 Stockholm, Sweden |