

Environmental Product Declaration



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

Hot-dip galvanized or powder-coated spiral staircases

from

Floby Durk AB

FLOBY DURK AB

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of multiple products, based on worst-case product
EPD registration number:	EPD-IES-0031722
Version date:	2026-05-22
Validity date:	2031-05-22

An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com



GENERAL INFORMATION

Programme Information	
Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	support@environdec.com

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): 2019:14 – Construction products v.2.0.1
PCR review was conducted by: The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com . The review panel may be contacted via support@environdec.com . Chairs of the PCR review: Rob Rouwette (chair), Noa Meron (co-chair)

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:
☒ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: Marcus Wendin, Miljögraff AB Approved by: 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 published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Floby Durk AB

Address: Ullenevägen 2, 521 52 Floby

Contact: Leif Pettersson, leif.pettersson@flobydurk.se

Address and contact information of the LCA practitioner commissioned by the EPD owner:

Felix Jansson, Sweco. Contact: felix.jansson@sweco.se

Karin Lindqvist, Sweco. Contact: karin.lindqvist@sweco.se

Annie Johansson, Sweco. Contact: annie.johansson@sweco.se

Sweco Sverige AB, Gjörwellsgatan 22, 112 60 Stockholm

Description of the organisation: Floby Durk sells, designs, and manufactures spiral staircases, straight staircases, combination staircases, custom staircases, construction staircases, steps, railings, and ramps. They are a leading manufacturer of slit plank type flooring in Sweden. The company also supplies floor grating and plank type flooring. The production facility and office are located in Floby. The manufacturing takes place in an efficient machinery park in modern premises.

PRODUCT INFORMATION

Product name: Hot-dip galvanized or powder-coated spiral staircases

Product identification: Hot-dip galvanized or powder-coated steel product

UN CPC code: 412

Product description:

The products are suitable for indoor or outdoor use in public environments, shops, offices, residential areas, and industries. The well-known slit plank type flooring is the backbone of the operations and is used in walkways, ramps, mezzanines, staircases, as well as custom-made products. All projects are customized according to client specifications and products are drawn up for approval before manufacturing. After the drawing is approved, sheet metal processing begins (cutting, bending, punching and drilling), followed by welding and surface treatment (hot-dip galvanized or powder-coated). The staircase components are then packed for further transport to the customer.

The spiral staircases are categorized into four main variations based on their component configuration, specifically the type of steps and the presence of child protection. These four variations have been analysed to capture a range of environmental impacts, from best-case to worst-case. The variations are:

- Standard spiral staircase with slotted grating steps
- Standard spiral staircase with sheet metal steps
- Child-protected spiral staircase with slotted grating steps
- Child-protected spiral staircase with sheet metal steps

For each of these four variations, two different surface treatments are considered: powder coating and hot-dip galvanization. As a result, the study includes eight distinct staircase configurations in total.



Name and location of production site: Floby Durk AB, Floby

CONTENT DECLARATION

Content declaration per 1 kg of staircase (Worst-case).

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/ declared unit
Steel	0,925	2,7	0	0
Zink	0,075	0	0	0
TOTAL	1	2,7	0	0

The majority of the product content and associated environmental impacts are based on EPDs from SSAB and Weland.

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/ declared unit
Wooden pallet	0,0026	0,26	0,001
TOTAL	0,0026	0,26	0,001

1 kg biogenic carbon in the product/packaging is equivalent to the uptake of 44/12 kg of CO₂.

The raw materials and production/disposal processes of this product contain no hazardous substances above 0,1% from the SVHC candidate list.

LCA INFORMATION

Declared unit: 1 kg of spiral steel staircase

Time representativeness: 2025

Geographical scope: Sweden

Database and LCA software used: SimaPro 10.2, Ecoinvent 3.11

Description of system boundaries: Cradle to gate with options, modules C1–C4, module D and with optional modules (A1–A3 + C + D and additional modules)". The additional modules are A4–A5.

A1: Material and components supply

Module A1 includes extraction and processing of raw materials used for the manufacturing of the materials used in the product system.

A2: Transport to manufacturing

Module A2 includes the transport of materials to sites for manufacturing of product and includes both the impact from production and combustion of fuels during the transports.

A3: Manufacturing

Module A3 includes the manufacturing process of the product at Floby Durk's facility. This includes the impact related to electricity use, water use and management of waste that is generated at the facility as well as packaging for the finished product.

A4: Transport to installation

Module A4 includes the transport from the Floby Durk's site to the final customer for installation. This includes the impact related to the transportation by lorry.

A5: Installation

Module A5 includes the installation at point of use. This includes packaging waste.

C1: Deconstruction

Module C1 includes deconstruction of the product. This includes fuel consumption from machine usage for the deconstruction of the product.

C2: Transport to waste treatment

Module C2 includes the emissions from the transport of the product to the waste treatment. The assumed transport is a EURO 5 truck of size 16-32 metric ton, and the assumed distance is 80 km.

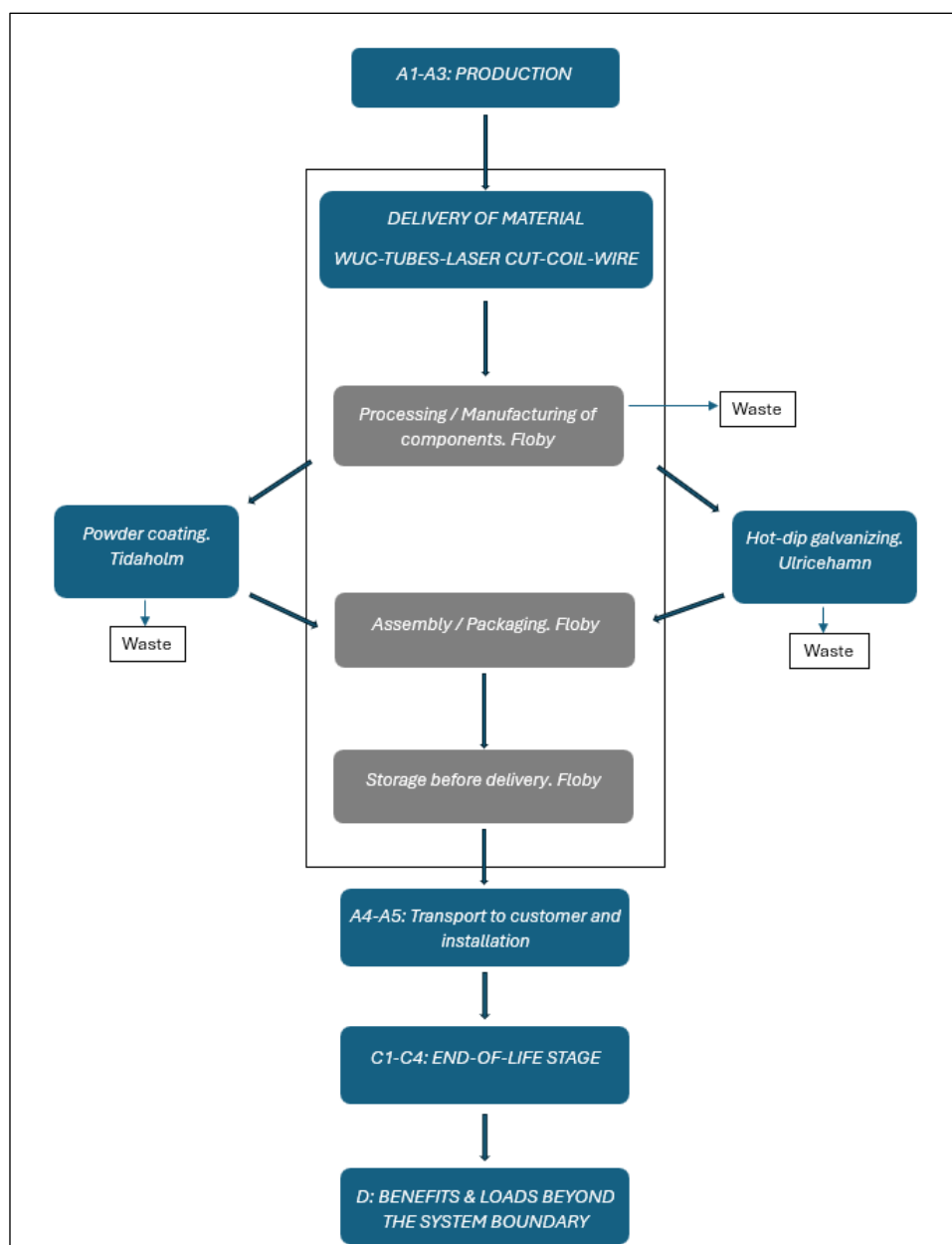
C3: Waste processing

Module C3 includes the recycling of the product.

C4: Disposal

Module C4 includes the disposal of the product to landfill.

Process flow diagram:



Impact assessment methods:

Categories, units and parameters used to describe environmental impacts were selected according to PCR (PCR 2019:14). Characterization factors used to assess material and energy flows were applied according to EN 15804:2012+A2:2019/AC:2021 based on EF 3.1

Electricity:

Floby Durk uses electricity purchased from Göteborg Energi AB in module A3. The emissions factor for the electricity is 0,465 g CO₂-eq./kWh (GWP-GHG). The origin of the energy is from fossil fuels, hydropower and nuclear power.

End-of-life:

At the end-of-life the product is deconstructed and then transported to waste management. 92% of the steel is assumed to go to recycling as the most probable scenario, the rest is assumed to go to landfill.

Benefits and burdens outside of the life cycle:

The benefits and burdens derive from the material recovery of steel. The avoided material through recycling is seen as a benefit, while the energy to treat the recycled material until it is functionally equivalent to the assumed substituted material is considered a burden. As no materials are assumed to go to incineration, there is no energy recovery.

Allocation procedure:

The amount of material in the product is based on specific data. For energy consumption, water use and waste at the manufacturing site, allocation based on mass (production volume) was used.

Ecoinvent datasets for cut-off allocation have been used following the polluter pays principle. The environmental burden from handling of the waste from the products until the waste has reached a positive market value again is allocated to the producer of the product.

Cut-off criteria:

No cut-offs have been made.

Data quality:

Specific data has been collected through relevant documentation from Floby Durk's own production and supplier production representing the production year 2025. Collected data reflects the current production and was gathered from Januari to March 2026.

Only data from the manufacturing in A3 are assumed to be primary. Input data from EPDs in A1 are conservatively classified as representative secondary data in accordance with PCR 4.6.5.1 even though they most likely are based on some primary data.

The general data quality and robustness of the results are considered to be good. Most of the input data that is important for the result is based on specific information about material and energy flows from Floby Durk. All generic datasets used come from reliable and audited sources (Ecoinvent 3.11) and have been selected based on technical, geographical, and temporal aspects to represent actual processes. In Table 1 below the share of primary data is presented for processes contributing with over 10 % of GWP-GHG in A1-A3.

Table 1: Data quality assessment.

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Electricity used in manufacturing of product	Collected data	EPD owner	2025	Primary data	6 %
Hot-dip galvanization	Collected data	Secondary data from supplier	2021	Secondary data	0 %
Production of steel	Database	Ecoinvent v3.11	2023	Secondary data	0 %
Production of steel	EPD	EPD SP-02241, version 1.1	2021	Secondary data	0 %
Other processes	Database and EPD	Ecoinvent 3.11 and EPD	2019–2025	Secondary data	0 %
Total share of primary data, of GWP-GHG results for A1-A3					6 %

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs. Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories.

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

	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	SWE	SWE	SWE	SWE	SWE	ND	ND	ND	ND	ND	ND	ND	SWE	SWE	SWE	SWE	SWE
Share of primary data	6 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	-9 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0 %					-	-	-	-	-	-	-	-	-	-	-	-

ENVIRONMENTAL PERFORMANCE

LCA results of the product(s) - main environmental performance results

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

The results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3).

Mandatory impact category indicators according to EN 15804

Results per declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	3,32E+00	2,20E-02	4,16E-03	3,99E-04	1,62E-02	3,14E-03	5,48E-04	-1,48E+00
GWP-fossil	kg CO ₂ eq.	3,30E+00	2,20E-02	9,37E-05	3,99E-04	1,62E-02	3,13E-03	5,47E-04	-1,51E+00
GWP-biogenic	kg CO ₂ eq.	1,76E-02	1,53E-05	4,07E-03	8,07E-08	5,14E-06	3,23E-06	2,54E-07	2,77E-02
GWP-luluc	kg CO ₂ eq.	3,06E-03	7,39E-06	3,47E-08	4,08E-08	7,24E-06	7,57E-06	2,89E-07	-3,20E-04
ODP	kg CFC 11 eq.	3,61E-08	4,79E-10	1,13E-12	5,92E-12	2,05E-10	4,75E-11	1,46E-11	-5,95E-09
AP	mol H ⁺ eq.	5,00E-02	4,71E-05	6,23E-07	3,56E-06	5,52E-05	2,78E-05	3,92E-06	-5,25E-03
EP-freshwater	kg P eq.	1,31E-03	1,52E-06	2,49E-08	1,28E-08	1,77E-06	1,23E-07	4,53E-08	-6,05E-04
EP-marine	kg N eq.	4,34E-03	1,14E-05	2,94E-07	1,66E-06	1,75E-05	1,29E-05	1,54E-06	-1,19E-03
EP-terrestrial	mol N eq.	1,96E-01	1,23E-04	2,89E-06	1,82E-05	1,90E-04	1,41E-04	1,68E-05	-1,34E-02
POCP	kg NMVOC eq.	1,14E-02	7,48E-05	8,11E-07	5,43E-06	7,48E-05	4,20E-05	5,94E-06	-4,63E-03
ADP-minerals & metals*	kg Sb eq.	1,58E-04	7,54E-08	2,43E-10	1,42E-10	5,30E-08	2,28E-09	7,49E-10	-3,36E-07
ADP-fossil*	MJ	3,02E+01	2,49E-02	1,80E-04	2,02E-04	2,87E-02	1,03E-02	7,68E-04	-1,35E+01
WDP*	m ³	9,29E-01	1,23E-03	2,12E-05	1,11E-05	1,04E-03	2,04E-04	5,36E-04	-9,99E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals & metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption								

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

Additional mandatory and voluntary impact category indicators

Results per declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG ¹	kg CO ₂ eq.	3,30E+00	2,20E-02	9,38E-05	3,99E-04	1,62E-02	3,14E-03	5,47E-04	-1,51E+00

Resource use indicators

Results per declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	3,93E+00	5,15E-03	4,45E-02	3,27E-05	3,11E-03	5,93E-03	1,19E-04	-3,14E-01
PERM	MJ	4,45E-02	0,00E+00	-4,45E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,97E+00	5,16E-03	1,99E-05	3,27E-05	3,12E-03	5,93E-03	1,20E-04	-3,14E-01
PENRE	MJ	3,16E+01	2,60E-02	1,88E-04	2,12E-04	3,01E-02	1,04E-02	8,06E-04	-1,41E+01
PENRM	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
PENRT	MJ	3,16E+01	2,60E-02	1,88E-04	2,12E-04	3,01E-02	1,04E-02	8,05E-04	-1,41E+01
SM	kg	4,91E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	2,59E-27	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	3,04E-26	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	5,38E-02	4,69E-05	8,32E-07	3,79E-07	3,67E-05	5,29E-06	1,28E-05	-5,56E-03
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								

¹ This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO₂ is set to zero.

Waste indicators

Results per declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,78E-02	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	1,17E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Radioactive waste disposed	kg	1,22E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Output flow indicators

Results per declared unit									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	2,50E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,20E-01	0,00E+00	0,00E+00
Materials for energy recovery	kg	2,56E-04	0,00E+00	0,00E+00	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Additional LCA results (other environmental performance results) of the product(s)

The EPD declares the worst-case results. In total 8 variations of the staircases have been assessed during the LCA. In Table 2 below, the best-case results are presented.

Table 2: Best-case results for modules A1-A3.

LCA result of one declared unit (A1-A3)	Unit	Best-case	Worst-case
GWP-fossil	kg CO2 eq.	3,03E+00	3,30E+00
GWP-biogenic	kg CO2 eq.	1,45E-03	1,76E-02
GWP-luluc	kg CO2 eq.	1,54E-03	3,06E-03
GWP-total	kg CO2 eq.	3,03E+00	3,32E+00
ODP	kg CFC 11 eq.	3,41E-08	3,61E-08
AP	mol H+ eq.	1,18E-02	5,00E-02
EP-freshwater	kg P eq.	5,26E-04	1,31E-03
EP- marine	kg N eq.	2,63E-03	4,34E-03
EP-terrestrial	mol N eq.	2,93E-02	1,96E-01
POCP	kg NMVOC eq.	9,27E-03	1,14E-02
ADP-minerals & metals*	kg Sb eq.	1,51E-05	1,58E-04
ADP-fossil*	MJ	3,26E+01	3,02E+01
WDP*	m ³	5,04E-01	9,29E-01
GWP-GHG	kg CO2 eq.	3,03E+00	3,30E+00

SCENARIOS FOR END-OF-LIFE

In accordance with the PCR, 100% scenarios should be developed. If any of the declared scenarios is a mix of end-of-life alternatives (reuse, recycling, incineration with energy recovery, landfill, etc.), also the corresponding 100% scenarios (100% reuse, 100% recycling, 100% incineration with energy recovery, 100% landfill, etc.) shall be declared. In other words, the 100% scenarios of relevance for the intended market shall be declared.

Scenarios shall be realistic and representative for the most probable end-of-life treatment alternatives considering the geographical scope of the EPD. However, also relevant 100% scenarios shall be declared, as described above, even if they are not realistic. As the products are sold on the Swedish market, the original scenario developed is estimated to be the most accurate one.

Scenarios identified, apart from the most likely one developed in the study for the market, are 100% recycling and 100% landfill. The results for modules C3, C4 and D changes when one of the alternative scenarios is used. In the table below, the original results for the mandatory impact categories for these modules are presented together with the corresponding results for each alternative scenario.

100%-scenarios

Indicator	Unit	C3	C3 – 100% recycling	C3 – 100% landfill	C4	C4 – 100% recycling	C4 – 100% landfill	D	D – 100% recycling	D – 100% landfill
GWP-total	kg CO ₂ -eq.	3,14E-03	3,41E-03	0,0E+00	5,48E-04	0,0E+00	6,84E-03	-1,48E+00	-1,62E+00	0,0E+00
GWP-fossil	kg CO ₂ -eq.	3,13E-03	3,40E-03	0,0E+00	5,47E-04	0,0E+00	6,84E-03	-1,51E+00	-1,64E+00	0,0E+00
GWP-biogenic	kg CO ₂ -eq.	3,23E-06	3,51E-06	0,0E+00	2,54E-07	0,0E+00	3,18E-06	2,77E-02	2,82E-02	0,0E+00
GWP-luluc	kg CO ₂ -eq.	7,57E-06	8,23E-06	0,0E+00	2,89E-07	0,0E+00	3,62E-06	-3,20E-04	-3,50E-04	0,0E+00
ODP	kg CFC 11 eq.	4,75E-11	5,17E-11	0,0E+00	1,46E-11	0,0E+00	1,83E-10	-5,95E-09	-6,50E-09	0,0E+00
AP	mol H ⁺ eq.	2,78E-05	3,02E-05	0,0E+00	3,92E-06	0,0E+00	4,90E-05	-5,25E-03	-5,72E-03	0,0E+00
EP-freshwater	kg P eq.	1,23E-07	1,33E-07	0,0E+00	4,53E-08	0,0E+00	5,67E-07	-6,05E-04	-6,59E-04	0,0E+00
EP-marine	kg N eq.	1,29E-05	1,40E-05	0,0E+00	1,54E-06	0,0E+00	1,92E-05	-1,19E-03	-1,30E-03	0,0E+00
EP-terrestrial	mol N eq.	1,41E-04	1,53E-04	0,0E+00	1,68E-05	0,0E+00	2,10E-04	-1,34E-02	-1,46E-02	0,0E+00
POCP	kg NMVOC eq.	4,20E-05	4,57E-05	0,0E+00	5,94E-06	0,0E+00	7,42E-05	-4,63E-03	-5,05E-03	0,0E+00
ADPm	kg Sb eq.	2,28E-09	2,48E-09	0,0E+00	7,49E-10	0,0E+00	9,37E-09	-3,36E-07	-4,02E-07	0,0E+00
ADPf	MJ	1,03E-02	1,12E-02	0,0E+00	7,68E-04	0,0E+00	9,60E-03	-1,35E+01	-1,47E+01	0,0E+00
WDP	m ³	2,04E-04	2,22E-04	0,0E+00	5,36E-04	0,0E+00	6,70E-03	-9,99E-02	-1,09E-01	0,0E+00

ABBREVIATIONS

Abbreviation	Definition
General Abbreviations	
EN	European Norm (Standard)
EPD	Environmental Product Declaration
EF	Environmental Footprint
GPI	General Programme Instructions
ISO	International Organization for Standardization
LCA	Life Cycle Assessment
PCR	Product Category Rules
c-PCR	Complementary Product Category Rules
CEN	European Committee for Standardization
CPC	Central product classification
Environmental Impact Indicators (EN 15804)	
GHG	Greenhouse gas
GWP	Global Warming Potential (kg CO ₂ eq.)
GWP-fossil	Global Warming Potential from fossil sources (kg CO ₂ eq.)
GWP-biogenic	Global Warming Potential from biogenic sources (kg CO ₂ eq.)
GWP-land use	Global Warming Potential from land use and land use change (kg CO ₂ eq.)
GWP-total	Total Global Warming Potential (kg CO ₂ eq.)
GWP-GHG	Global Warming Potential for greenhouse gases (kg CO ₂ eq.)
ODP	Ozone Depletion Potential (kg CFC-11 eq.)
AP	Acidification Potential (mol H ⁺ eq.)
EP	Eutrophication Potential
EP-freshwater	Freshwater eutrophication potential (kg P eq.)
EP-marine	Marine eutrophication potential (kg N eq.)
EP-terrestrial	Terrestrial eutrophication potential (mol N eq.)
POCP	Photochemical Ozone Creation Potential (kg NMVOC eq.)
ADP	Abiotic Depletion Potential
ADP-minerals & metals	Abiotic depletion potential for non-fossil resources (kg Sb eq.)
ADP-fossil	Abiotic depletion potential for fossil resources (MJ)
WDP	Water Deprivation Potential (m ³)
Resource Use Indicators	
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials (MJ)
PERM	Use of renewable primary energy resources used as raw materials (MJ)
PERT	Total use of renewable primary energy resources (MJ)
PENRE	Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials (MJ)
PENRM	Use of non-renewable primary energy resources used as raw materials (MJ)
PENRT	Total use of non-renewable primary energy resources (MJ)

SM	Use of secondary material (kg)
RSF	Use of renewable secondary fuels (MJ)
NRSF	Use of non-renewable secondary fuels (MJ)
FW	Use of net fresh water (m ³)
Waste Indicators	
HW	Hazardous Waste (disposed) (kg)
NHW	Non-Hazardous Waste (disposed) (kg)
RW	Radioactive Waste (disposed) (kg)
Output Flow Indicators	
CFR	Components for Reuse (kg)
MR	Material for Recycling (kg)
MER	Materials for Energy Recovery (kg)
EEE	Exported Energy, Electricity (MJ)
EET	Exported Energy, Thermal (MJ)
Lifecycle Stages / Modules	
A1	Raw material supply
A2	Transport
A3	Manufacturing
A4	Transport to site
A5	Construction/Installation
B1	Use
B2	Maintenance
B3	Repair
B4	Replacement
B5	Refurbishment
B6	Operational energy use
B7	Operational water use
C1	Deconstruction/Demolition
C2	Transport to waste processing
C3	Waste processing
C4	Disposal
D	Reuse-Recovery-Recycling potential
Other Relevant Terms	
SVHC	Substances of Very High Concern
MJ	Megajoule
kg	Kilogram
m ³	Cubic Meter
NM VOC	Non-Methane Volatile Organic Compounds
Sb eq.	Antimony Equivalents
P eq.	Phosphorus Equivalents
N eq.	Nitrogen Equivalents
CFC-11 eq.	Chlorofluorocarbon-11 Equivalents
CO ₂ eq.	Carbon Dioxide Equivalents
kg C	Kilograms of Carbon

kg CO ₂ eq.	Kilograms of Carbon Dioxide Equivalent
ND	Not Declared

REFERENCES

General Programme Instructions of the International EPD® System. Version 5.0.1

PCR 2019:14. Construction Products. Version 2.0.1

LCA report Floby Durk AB. Sweco. Jansson, Johansson, Lindqvist. 2026-05-22

VERSION HISTORY

Original Version of the EPD, 2026-05-22

