ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Concrete slabs, pavers, edge support and retaining wall blocks (Plattor, marksten, kantstöd och murblock i betong)

S:t Eriks AB

EPD HUB, EPD number HUB-4247
Published on 27.10.2025, last updated on 27.10.2025, valid until 26.10.2030

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

The image shows a selection of the product range covered by the EPD.

GENERAL INFORMATION

MANUFACTURER

Manufacturer	S:t Eriks AB
Address	Industrivägen 4, 245 34 Staffanstorp, Sweden
Contact details	therese.kvarnstrom@steriks.se
Website	https://www.steriks.se/

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 EN 16757 Product Category Rules for concrete and concrete elements
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-B1, and modules C1-C4, D
EPD author	Therese Kvarnström
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Dusan Vukovic, as an authorised verifier acting for EPD Hub Limited

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	Concrete slabs, pavers, edge support and retaining wall blocks (Plattor, marksten, kantstöd och murblock i betong)
Place of production	Sweden
Period for data	01/07/2024 - 30/06/2025
Averaging in EPD	Multiple products and multiple factories
Variation in GWP-fossil for A1-A3 (%)	-4% to +16%
A1-A3 Specific data (%)	94%

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 tonne of concrete product
Declared unit mass	1000 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	8,03E+01
GWP-total, A1-A3 ($kgCO_2e$)	7,84E+01
Secondary material, inputs (%)	0,28
Secondary material, outputs (%)	97,8
Total energy use, A1-A3 (kWh)	294
Net freshwater use, A1-A3 (m^3)	0,64

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

S:t Eriks started its first business, a tile factory, in 1888. Today, we are one of Sweden's leading suppliers of slabs, paving stones, walls, blocks and water and sewage systems made of concrete or natural stone. Over the years, we have contributed materials and knowledge to many large and small projects – from Riksdagshuset, Sergels torg and Förbifart Stockholm to garage driveways, patios and gardens all over the country. S:t Eriks are certified according to ISO 9001:2015 and ISO 14001:2015.

PRODUCT DESCRIPTION

The finished products are prefabricated concrete products used as slabs, paving stones, edge support and retaining wall blocks in both public outdoor environments and private gardens. They are available in a wide range of colours, shapes, surface textures and edge finishes.

Our paving stones and slabs have different technical properties and achieve different traffic classes. Using different shades and patterns, it is possible to highlight, delineate, or connect different areas.

Edge support in the form of plates or blocks form a strong edge that holds together but at the same time creates a separating border, they are well suited for gardens and parks.

Retaining wall blocks with associated cap stones are used to support, mark and connect separate spaces into a well-functioning outdoor environment. The blocks can be used to vary heights, radius and terracing.

This EPD does not cover white coloured products.

Concrete is recyclable and can be used to produce new concrete as aggregate or as filling material for roads etc.

Further information can be found at:
https://www.steriks.se/

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Minerals	99,96	SE
Fossil materials	0,04	SE

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

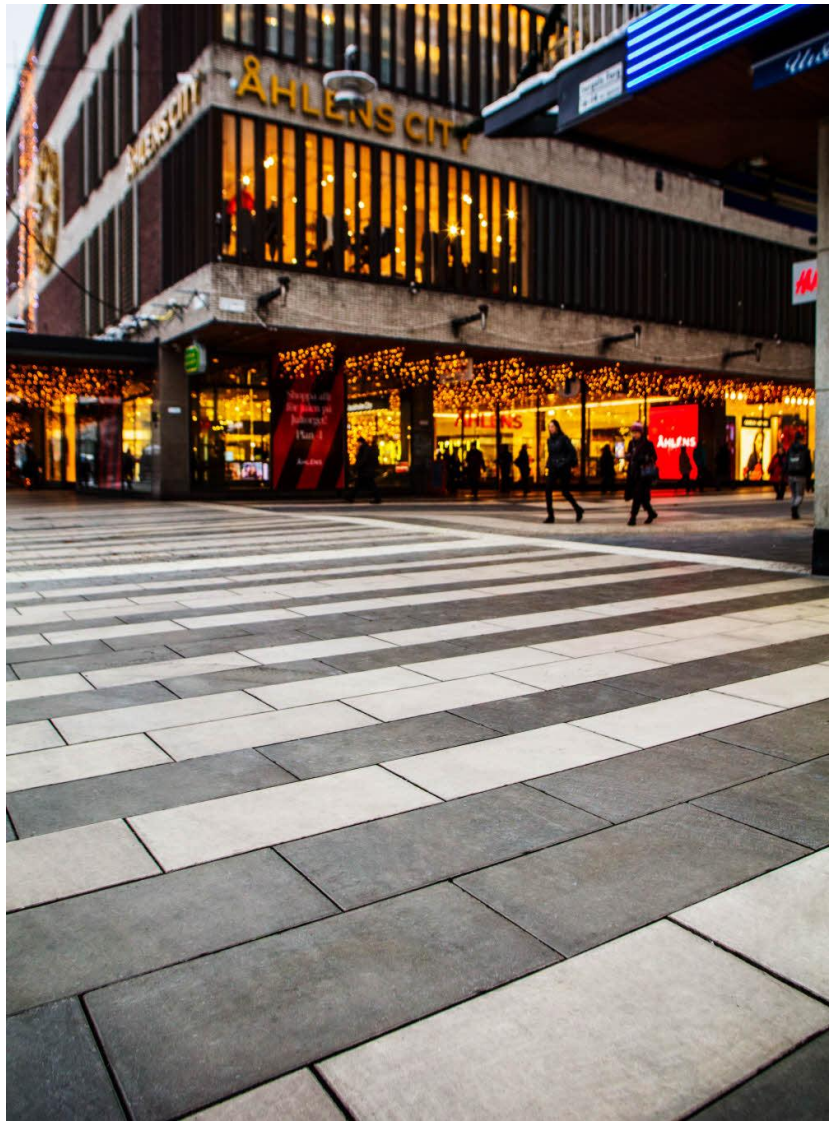
Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	1

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 tonne of concrete product
Mass per declared unit	1000 kg
Reference service life	50 years

SUBSTANCES, REACH - VERY HIGH CONCERN

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



The slab Klaraplattan outside the Åhléns department store in Stockholm city centre.

The ground slab Superplattan and other products from S:t Eriks, at the tram stop outside Skansen in Stockholm.

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		
×	×	×	×	×	×	ND	ND	ND	ND	ND	ND	×	×	×	×	×		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules 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. Both electricity and heat are used in the factory. A market-based approach is used in modelling the electricity mix utilized in the factory. The heat comes from district heating, biogas and electricity. The vast majority of wheel loaders run on HVO.

The production starts by transporting the binders, aggregates and additives to silos, from where they are dosed onto a conveyor. Cement and in some products slag are then added to the ingredients, after which the material is mixed dry. Water and additives are added to the mixture, followed by wet mixing.

The concrete mixture is then conveyed to be casted. The casting process is performed in a fully automated machine, in which the concrete mixture is poured into a material pocket and filled in casts, which are vibrating to create the right thickness and solidity.

Some of the products have a slightly different manufacturing method as they are wet pressed. This means that the excess water is pressed out of the wet concrete with very high pressure instead of vibrating.

The products are placed on pallets and delivered to hardening chambers. 24 hours later, they are controlled and delivered to storage for further hardening.

A wheel loader pours aggregate through a grid onto the conveyor belt that will take it to the silo.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

The average distance of transportation from production plant to building site is calculated on all customers and the transportation method is lorry. Vehicle capacity utilization is assumed to be 100% which means full load. In reality, it may vary but it is assumed to be negligible. Empty returns are not taken into account as the return trip is used by the transportation company to serve the needs of other clients.

Installation (A5) includes the energy use. Packaging waste is generated from pallets. Production loss at installation is assumed negligible as the products are delivered ready made from the factory. Energy consumption for installation is calculated on 0,7 tonne product per hour. Some of the work time is assumed to be done without any machinery.

Machine laying of Hexasten paving stones in Umeå speeds up the construction work.

PRODUCT USE AND MAINTENANCE (B1-B7)

Carbon dioxide uptake through carbonisation (CO2) in the use stage (B1) is considered in these calculations. Carbonisation is a natural chemical process where part of the carbon dioxide released during the calcination process during cement production is reabsorbed to the concrete when exposed to air. The calculation is made on concrete with a Reference Service Life (RSL) of 50 years and on a paver with the size 350x350x50. The calculation is based on the top side and edges of the paver. Some carbonation also occurs on the bottom side but that is not considered in this calculation.

The dimension of the paver affects the carbon dioxide uptake. The smaller the dimensions, the greater the carbon dioxide absorption per square meter because a larger surface is exposed to air. The chosen measure is based on the Klassikplattan from Staffanstorp, which was chosen as a representative product due to the quantity produced. Air, soil, and water impacts during the use phase have not been studied.

Paving stones and blocks of Rustik in various colours create ground surfaces, walls and steps.

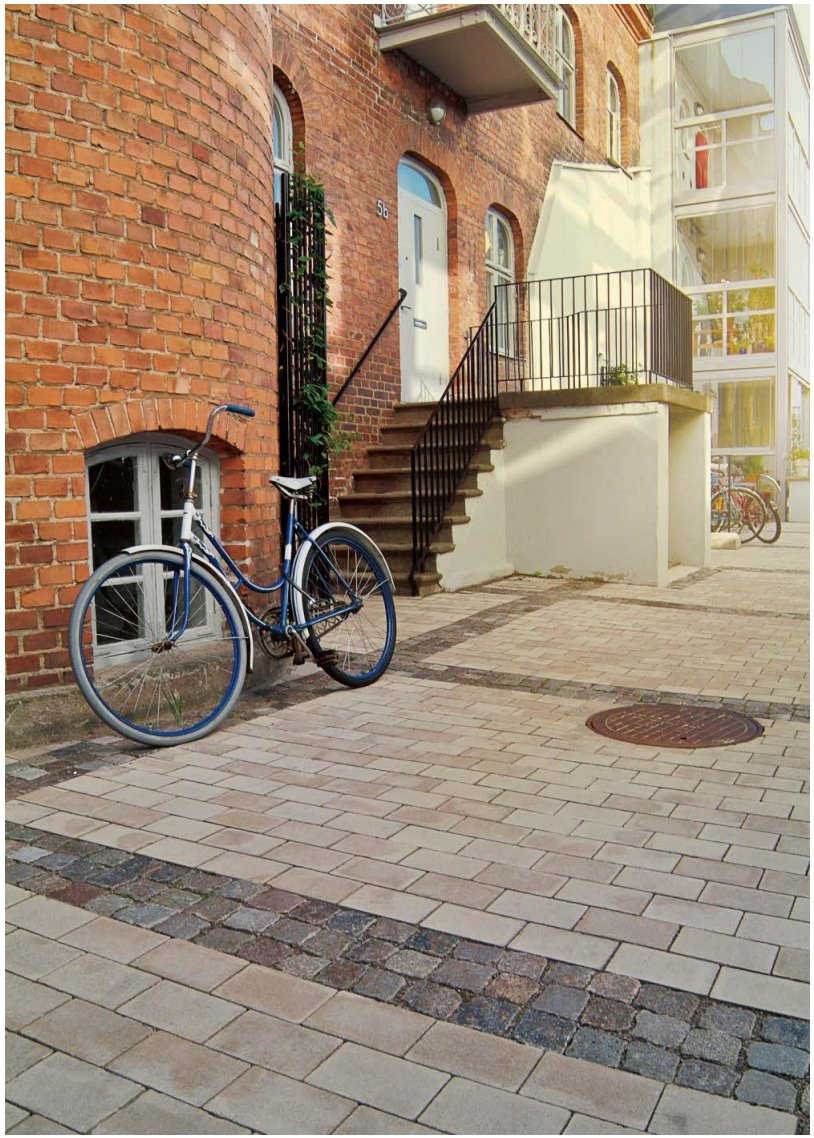
PRODUCT END OF LIFE (C1-C4, D)

At the end-of-life, in the demolition phase, 100% of the waste is assumed to be collected as separate construction waste. The demolition process consumes energy in the form of diesel fuel used by building machines (C1). Energy consumption is assumed to be the same as in the installation phase.

The dismantled concrete products are delivered to the nearest construction waste treatment plant. It is estimated that there is no mass loss during the use of the product, therefore the end-of-life product is assumed to have the same weight as the declared product. Transportation distance to the closest disposal area is estimated as 50 km and the most common transportation method is lorry (C2).

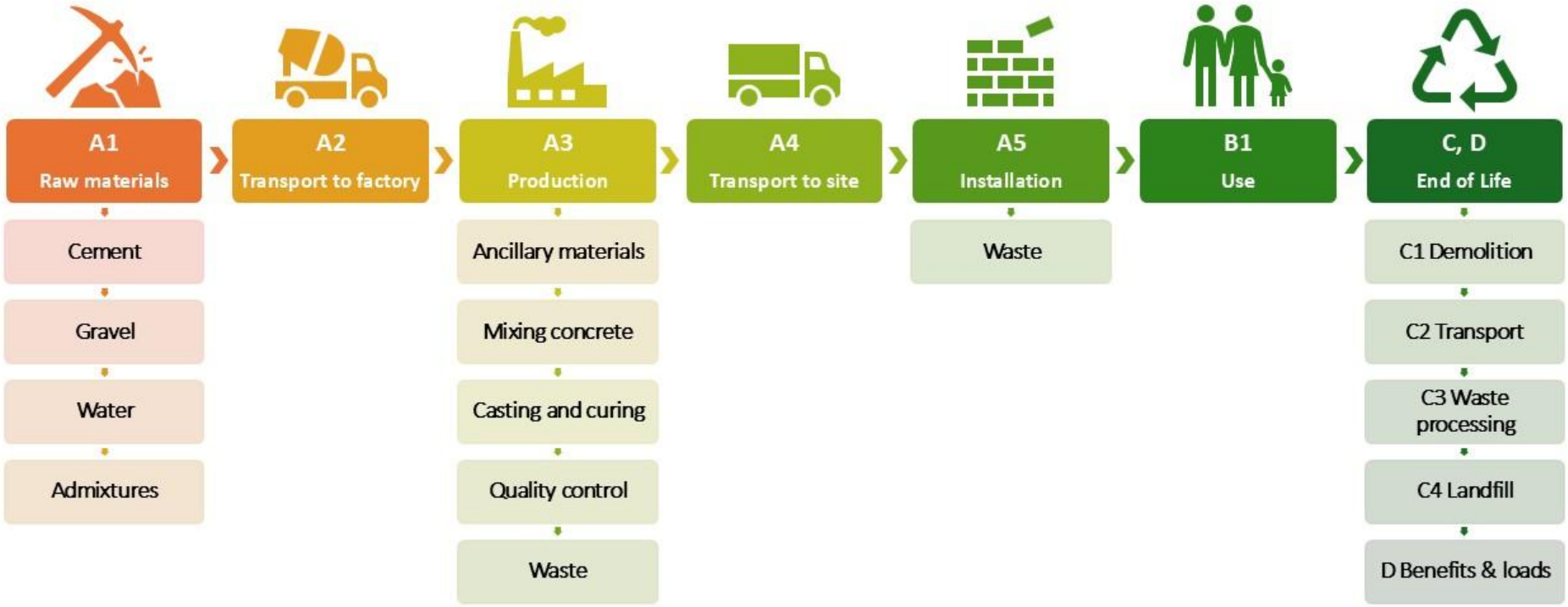
At the waste treatment plant, waste that can be reused, recycled or recovered for energy is separated and diverted for further use. It can be assumed that 100% of the concrete products are transported to a waste treatment plant, where they are crushed. 93,6% of concrete is recycled. The process losses of the waste treatment plant are assumed to be negligible (C3). The remaining 6,4% of concrete are assumed to be sent to the landfill (C4). Source: Mineral waste from construction and demolition, waste treatment, by the European Environment Agency. Published 16 Jan 2020, Modified 20 Sept 2024.

Due to the recycling potential of concrete, it can be crushed and used as secondary raw material, which avoids the use of virgin raw materials. The 93,6% of concrete going to waste processing is converted into secondary raw materials after recycling. The recycled material content in the concrete itself is assumed to be 0 - 5% (D).



Scala paving stones next to granite cobblestone.

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.

All industrial processes from raw material acquisition and pre-processing, production, product distribution and installation, and end-of-life management are included. For easier modelling and because of lack of accuracy in available modelling resources some constituents under 0,1% of product mass are excluded. Transportation and waste streams of the packaging materials used for delivering the raw materials to the factory are omitted since the quantified mass contribution is less than 0,1%.

Packaging materials (plastic) for the products are omitted since the quantified mass contribution is less than 0,1%.

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

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. 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.

Munksten paving stones nearby the Turning Torso in Malmö.

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	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

All estimations and assumptions are given below.

- Modules A2, A4 & C2: Vehicle capacity utilization volume factor is assumed to be 1 which means full load. It may vary but as the role of transportation emission in total results is small and so the variety in load is assumed to be negligible.
- Module A4: Transportation doesn't cause losses. Volume capacity utilisation factor is assumed to be 1 for the packaged products. Additionally, transportation distances and vehicle types are assumed according to the delivery in the last year.
- Module A5: Installation energy is included to account for product installation at site.
- Module C1: Consumed energy for demolition process is assumed to be the same as in A5.
- Module C2: Transportation distance to the closest disposal area is estimated as 50 km and the transportation method is assumed as lorry which is the most common.
- Modules C3, C4: 93,6% of concrete and steel are sent for recycling while the remaining materials are assumed to be landfilled. EU average.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple products and multiple factories
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	-4% to +16%

The recipe for the ground slab Klassikplattan from the site in Staffanstorp has been used as a representative product. This EPD also refers to other products with similar recipes produced on three different sites. Products from the factory in Uppsala have a climate footprint 6% higher than the reference product. Blocks from Staffanstorp have the lowest footprint and the factory in Vara, which accounts for about 6% of the production volume, has the highest climate footprint at factory level.

LCA SOFTWARE AND BIBLIOGRAPHY

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

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[1)]	kg CO_2e	7,42E+01	2,68E+00	1,46E+00	7,84E+01	1,00E+01	5,31E+00	-4,53E+01	ND	ND	ND	ND	ND	ND	1,44E+00	5,41E+00	4,28E+00	4,18E-01	-9,69E+00
GWP – fossil	kg CO_2e	7,42E+01	2,68E+00	3,40E+00	8,03E+01	1,00E+01	1,48E+00	-4,53E+01	ND	ND	ND	ND	ND	ND	1,44E+00	5,41E+00	4,28E+00	4,18E-01	-9,80E+00
GWP – biogenic	kg CO_2e	1,63E-02	5,70E-04	-2,06E+00	-2,04E+00	2,18E-03	3,83E+00	0,00E+00	ND	ND	ND	ND	ND	ND	1,47E-04	1,19E-03	-3,53E-03	-3,44E-04	1,15E-01
GWP – LULUC	kg CO_2e	1,50E-02	1,12E-03	1,27E-01	1,43E-01	3,89E-03	2,05E-04	0,00E+00	ND	ND	ND	ND	ND	ND	1,48E-04	2,13E-03	4,39E-04	2,39E-04	-8,96E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	2,11E-07	5,41E-08	1,05E-07	3,70E-07	2,09E-07	2,27E-08	0,00E+00	ND	ND	ND	ND	ND	ND	2,21E-08	1,11E-07	6,56E-08	1,21E-08	-7,70E-08
Acidification potential	mol H^+e	1,82E-01	1,30E-02	2,81E-02	2,23E-01	2,36E-02	1,32E-02	0,00E+00	ND	ND	ND	ND	ND	ND	1,30E-02	1,28E-02	3,86E-02	2,96E-03	-5,99E-02
EP-freshwater[2)]	kg Pe	4,85E-03	1,78E-04	2,21E-01	2,26E-01	6,99E-04	5,16E-05	0,00E+00	ND	ND	ND	ND	ND	ND	4,16E-05	3,81E-04	1,24E-04	3,43E-05	-3,03E-03
EP-marine	kg Ne	6,25E-02	3,16E-03	1,19E-02	7,76E-02	6,19E-03	6,26E-03	0,00E+00	ND	ND	ND	ND	ND	ND	6,04E-03	3,36E-03	1,79E-02	1,13E-03	-1,41E-02
EP-terrestrial	mol Ne	7,16E-01	3,47E-02	1,01E-01	8,51E-01	6,70E-02	6,69E-02	0,00E+00	ND	ND	ND	ND	ND	ND	6,61E-02	3,63E-02	1,96E-01	1,23E-02	-1,71E-01
POCP ("smog")[3)]	kg NMVOCe	1,97E-01	1,50E-02	1,71E-02	2,29E-01	4,10E-02	2,00E-02	0,00E+00	ND	ND	ND	ND	ND	ND	1,97E-02	2,21E-02	5,85E-02	4,42E-03	-4,72E-02
ADP-minerals & metals[4)]	kg Sbe	1,50E-02	7,21E-06	2,58E-05	1,50E-02	2,86E-05	6,18E-07	0,00E+00	ND	ND	ND	ND	ND	ND	5,17E-07	1,55E-05	1,54E-06	6,63E-07	-5,18E-05
ADP-fossil resources	MJ	6,60E+02	3,95E+01	1,77E+02	8,77E+02	1,50E+02	1,94E+01	0,00E+00	ND	ND	ND	ND	ND	ND	1,89E+01	8,12E+01	5,60E+01	1,02E+01	-1,18E+02
Water use[5)]	m^3e depr.	1,90E+01	1,96E-01	8,76E+00	2,79E+01	7,69E-01	6,15E-02	0,00E+00	ND	ND	ND	ND	ND	ND	4,71E-02	4,15E-01	1,40E-01	2,96E-02	-1,45E+01

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 PO4e; 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	2,03E-06	2,42E-07	3,62E-07	2,63E-06	9,75E-07	3,74E-07	0,00E+00	ND	ND	ND	ND	ND	ND	3,70E-07	5,27E-07	8,37E-06	6,74E-08	-9,04E-07
Ionizing radiation[6)]	kBq U235e	1,47E+01	4,53E-02	1,07E+01	2,54E+01	1,81E-01	9,74E-03	0,00E+00	ND	ND	ND	ND	ND	ND	8,36E-03	9,61E-02	2,48E-02	6,44E-03	-8,61E-01
Ecotoxicity (freshwater)	CTUe	1,90E+02	4,53E+00	2,17E+01	2,16E+02	1,77E+01	1,22E+00	0,00E+00	ND	ND	ND	ND	ND	ND	1,04E+00	9,69E+00	3,08E+00	8,60E-01	-2,79E+01
Human toxicity, cancer	CTUh	2,38E-08	4,63E-10	5,42E-09	2,97E-08	1,67E-09	1,66E-10	0,00E+00	ND	ND	ND	ND	ND	ND	1,48E-10	9,01E-10	4,40E-10	7,70E-11	-2,61E-09
Human tox. non-cancer	CTUh	1,96E-07	2,42E-08	4,63E-08	2,67E-07	9,71E-08	3,35E-09	0,00E+00	ND	ND	ND	ND	ND	ND	2,35E-09	5,25E-08	6,97E-09	1,77E-09	-7,66E-08
SQP[7)]	-	1,09E+03	3,66E+01	3,26E+02	1,45E+03	1,51E+02	1,82E+00	0,00E+00	ND	ND	ND	ND	ND	ND	1,32E+00	8,17E+01	3,92E+00	2,02E+01	-1,09E+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[8)]	MJ	3,96E+01	6,18E-01	1,19E+02	1,59E+02	2,45E+00	-1,61E+01	0,00E+00	ND	ND	ND	ND	ND	ND	1,19E-01	1,31E+00	3,55E-01	9,89E-02	-7,55E+00
Renew. PER as material	MJ	0,00E+00	0,00E+00	4,48E+00	4,48E+00	0,00E+00	-4,48E+00	0,00E+00	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,33E-01
Total use of renew. PER	MJ	3,96E+01	6,18E-01	1,24E+02	1,64E+02	2,45E+00	-2,05E+01	0,00E+00	ND	ND	ND	ND	ND	ND	1,19E-01	1,31E+00	3,55E-01	9,89E-02	-6,62E+00
Non-re. PER as energy	MJ	4,90E+02	3,95E+01	1,74E+02	7,04E+02	1,50E+02	1,94E+01	0,00E+00	ND	ND	ND	ND	ND	ND	1,89E+01	8,12E+01	5,60E+01	1,02E+01	-1,18E+02
Non-re. PER as material	MJ	1,99E+00	0,00E+00	2,38E-01	2,22E+00	0,00E+00	-2,95E-01	0,00E+00	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	-1,80E+00	-1,23E-01	3,00E-01
Total use of non-re. PER	MJ	4,92E+02	3,95E+01	1,75E+02	7,06E+02	1,50E+02	1,91E+01	0,00E+00	ND	ND	ND	ND	ND	ND	1,89E+01	8,12E+01	5,42E+01	1,01E+01	-1,18E+02
Secondary materials	kg	2,79E+00	1,76E-02	4,14E+00	6,95E+00	6,50E-02	8,19E-03	0,00E+00	ND	ND	ND	ND	ND	ND	7,83E-03	3,51E-02	2,33E-02	2,58E-03	-1,30E-01
Renew. secondary fuels	MJ	8,20E+01	2,01E-04	1,08E+00	8,31E+01	8,19E-04	2,41E-05	0,00E+00	ND	ND	ND	ND	ND	ND	2,05E-05	4,43E-04	6,08E-05	5,33E-05	-8,93E-04
Non-ren. secondary fuels	MJ	1,12E+02	0,00E+00	0,00E+00	1,12E+02	0,00E+00	0,00E+00	0,00E+00	ND	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^3	4,36E-01	5,59E-03	1,95E-01	6,37E-01	2,22E-02	-1,56E-04	0,00E+00	ND	ND	ND	ND	ND	ND	1,25E-03	1,20E-02	3,70E-03	1,07E-02	-3,45E-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	3,37E+00	5,76E-02	2,92E-01	3,72E+00	2,17E-01	2,44E-02	0,00E+00	ND	ND	ND	ND	ND	ND	2,10E-02	1,19E-01	6,23E-02	1,13E-02	-9,15E-01
Non-hazardous waste	kg	2,60E+01	1,12E+00	1,39E+01	4,11E+01	4,35E+00	2,74E+00	0,00E+00	ND	ND	ND	ND	ND	ND	2,86E-01	2,36E+00	8,50E-01	2,59E-01	-1,66E+01
Radioactive waste	kg	3,33E-03	1,12E-05	2,31E-03	5,65E-03	4,48E-05	2,39E-06	0,00E+00	ND	ND	ND	ND	ND	ND	2,05E-06	2,38E-05	6,09E-06	1,57E-06	-2,08E-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	3,00E+00	3,00E+00	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for recycling	kg	8,61E-02	0,00E+00	5,40E+01	5,41E+01	0,00E+00	3,50E-01	0,00E+00	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	9,78E+02	0,00E+00	0,00E+00
Materials for energy rec	kg	1,91E-04	0,00E+00	0,00E+00	1,91E-04	0,00E+00	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy	MJ	3,65E-03	0,00E+00	0,00E+00	3,65E-03	0,00E+00	1,75E+00	0,00E+00	ND	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	0,00E+00	7,40E-01	0,00E+00	ND	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	0,00E+00	1,01E+00	0,00E+00	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO_2e	7,97E+01	2,67E+00	3,70E+00	8,60E+01	9,94E+00	1,50E+00	-4,53E+01	ND	ND	ND	ND	ND	ND	1,43E+00	5,37E+00	4,26E+00	4,14E-01	-9,75E+00
Ozone depletion Pot.	kg CFC_{-11}e	3,38E-07	4,30E-08	8,58E-08	4,67E-07	1,66E-07	1,80E-08	0,00E+00	ND	ND	ND	ND	ND	ND	1,75E-08	8,84E-08	5,19E-08	9,61E-09	-6,49E-08
Acidification	kg SO_2e	2,03E-01	1,04E-02	1,92E-02	2,33E-01	1,87E-02	9,31E-03	0,00E+00	ND	ND	ND	ND	ND	ND	9,15E-03	1,02E-02	2,72E-02	2,19E-03	-4,66E-02
Eutrophication	kg PO_4^3e	3,10E-02	1,72E-03	3,42E-02	6,69E-02	4,67E-03	2,19E-03	0,00E+00	ND	ND	ND	ND	ND	ND	2,14E-03	2,53E-03	6,35E-03	6,97E-04	-8,97E-03
POCP (“smog”)	kg C_2H_4e	1,34E-02	7,51E-04	1,37E-03	1,55E-02	1,91E-03	7,03E-04	0,00E+00	ND	ND	ND	ND	ND	ND	6,86E-04	1,03E-03	2,04E-03	2,07E-04	-4,08E-03
ADP-elements	kg Sbe	1,55E-04	7,04E-06	2,59E-05	1,88E-04	2,79E-05	5,99E-07	0,00E+00	ND	ND	ND	ND	ND	ND	5,03E-07	1,51E-05	1,49E-06	6,50E-07	-5,10E-05
ADP-fossil	MJ	4,13E+02	3,88E+01	3,65E+01	4,89E+02	1,47E+02	1,92E+01	0,00E+00	ND	ND	ND	ND	ND	ND	1,87E+01	7,96E+01	5,56E+01	1,01E+01	-1,05E+02

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[9)]	kg CO_2e	7,42E+01	2,68E+00	3,52E+00	8,04E+01	1,00E+01	1,48E+00	-4,53E+01	ND	ND	ND	ND	ND	ND	1,44E+00	5,41E+00	4,28E+00	4,18E-01	-9,81E+00

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 – CH4 fossil, CH4 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 CO2 is set to zero.

Scala paving stones in a garden.

SCENARIO DOCUMENTATION

Manufacturing energy scenario documentation

Scenario parameter	Value
Electricity data source, quality and CO2e/kWh	Market for electricity, medium voltage (Reference product: electricity, medium voltage): 0,0295
District heating data source, quality and CO2e/kWh	District Heat, Sweden, 2022 (One Click LCA): 0,14 Heat production, light fuel oil, at industrial furnace 1MW (Reference product: heat, district or industrial, other than natural gas): 0,1 Market for biogas (Reference product: biogas): -1,82 Market for heat, district or industrial, natural gas (Reference product: heat, district or industrial, natural gas): 0,0564

Transport scenario documentation A4

Scenario parameter	Value
Fuel and vehicle type. Eg, electric truck, diesel powered truck	Market for transport, freight, lorry >32 metric ton, EURO6
Average transport distance, km	95
Capacity utilization (no empty return) %	100
Volume capacity utilization factor	1

Installation scenario documentation A5

Scenario information	Value
Quantitative description of energy type (regional mix) and consumption during the installation process	Diesel, burned in building machine (Reference product: diesel, burned in building machine 4 kWh
Waste materials on the building site before waste processing, generated by the product's installation (specified by type)	Wood pallet: 1,095 kgs
Output materials (specified by type) as result of waste processing at the building site e.g. collection for recycling, for energy recovery, disposal (specified by route)	Wood pallet: 98% recycling, 2% landfill

End of life scenario documentation

Scenario information	Value
Collection process – kg collected separately	1000
Recovery process – kg for recycling	978,4
Disposal (total) – kg for final deposition	66,9
Scenario assumptions e.g. transportation	Transported 50 km (recycling) and 50 km (landfill) by lorry

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 15802+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

Dusan Vukovic, as an authorised verifier acting for EPD Hub Limited

27.10.2025