Environmental Product Declaration

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

Verti-Block concrete retaining wall system

from

Blixbo Cementvarufabrik AB

Programme:	The International EPD® System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-14284
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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

EPD of multiple products, based on the average results of the product group

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:	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)
Product Category Rules (PCR): Construction Products PCR 2019:14 version 1.3.3 and c-PCR 003 Concrete and concrete elements (EN 16757)
PCR review was conducted by: The Technical Committee of the International EPD@ System
Life Cycle Assessment (LCA)
LCA accountability: *Fanni Végvári, CarbonZero AB*
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by individual verifier Third-party verifier: Stephen Forson, Viridis Pride Ltd. 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:
Blixbo Cementvarufabrik AB
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Contact:
Peder Flygt, peder@blixbocement.se

Description of the organisation:
Blixbo Cementvarufabrik AB is a company that specialize within the concrete industry and manufacture retaining wall systems amongst other products made out of concrete.

Name and location of production site(s):
Blixbo Cementvarufabrik AB, Sundborn Sweden

Product information

Product name:
Verti-Block concrete retaining wall system

Product identification:
This EPD is valid for the Verti-Block retaining wall system, with all modules detailed in Appendix A.

Product description:
Verti-Block, produced by Blixbo Cementvarufabrik AB, presents innovative retaining wall systems with a concrete design that emulates the look of natural stone. These module-based, reinforcement-free systems are adaptable for a wide spectrum of projects, including commercial, residential, and infrastructure applications, seamlessly blending aesthetic appeal with practical functionality. Designed for low maintenance and offering an extended lifespan, Verti-Block ensures durability and long-term performance. For technical details of the products, please see Appendix A.

UN CPC code:
3755 – Prefabricated structural components for building or civil engineering, of cement, concrete or artificial stone

CPV kod 44114200-4 (Concrete products)

Geographical scope:
Sweden for all modules.

LCA information

Declared unit:
The declared unit in this LCA study is 1 ton of Verti-Block concrete retaining wall. The density is 2 247,6 kg/m^3.

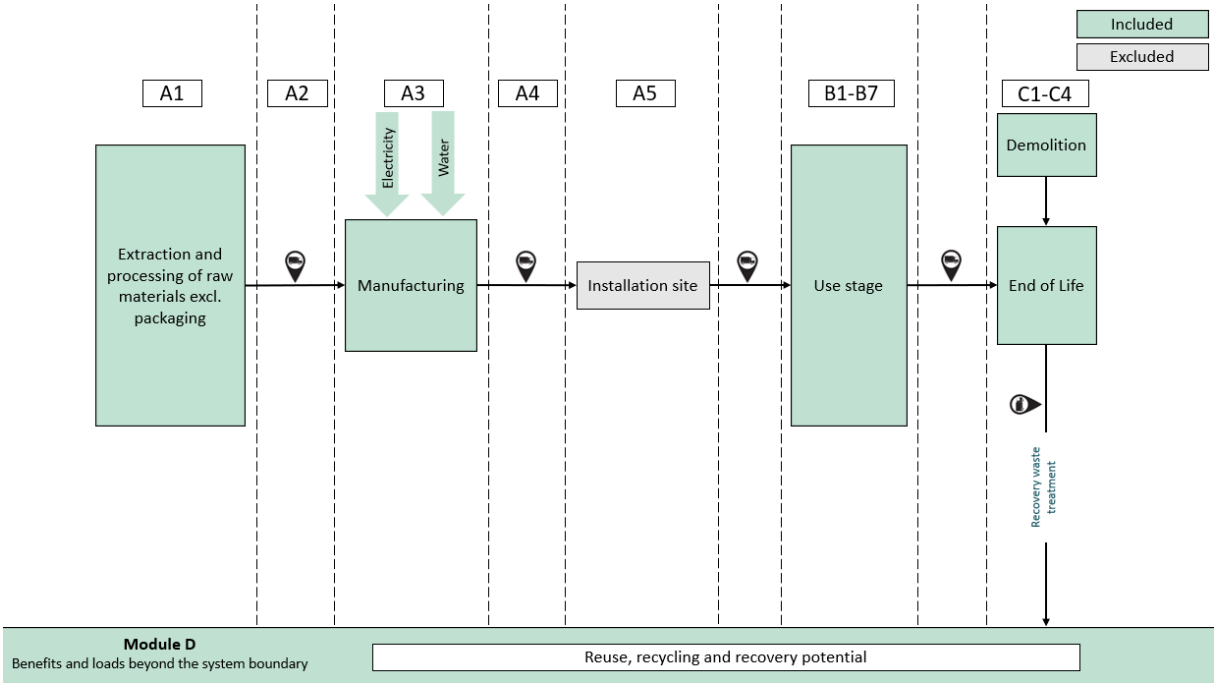
Reference service life:
The product is designed to have a lifetime of 150 years.

Time representativeness:
Year 2023. Data collection by Blixbo Cementvarufabrik AB for specific data represents the production year of 2023 (January 2023 to January 2024) and the generic data used from datasets and specific EPDs represent the last 5 years as the oldest data is from 2020.

Database(s) and LCA software used:
Experts LCA software (v.10.7.1.28). The study mostly relies on Sphera and Ecoinvent (Ecoinvent v.3.8) datasets.

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 A4 + B2).

System diagram:



More information:

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 (except for ancillary material used in product manufacturing process). The packaging material from the suppliers to the manufacturer is excluded from this study.

A2, transport to the manufacturer
The raw materials are transported to the manufacturing site. This also includes additives. All transportations are modelled single way with a 40 payload truck and high capacity utility as the trucks are fully loaded with each transport.

A3, manufacturing
This module includes manufacturing of the Verti-Block concrete retaining wall. The main production processes include mixing of the cement, sand, gravel, and additives together which then is poured into

molds to dry. The blocks are then cured by drying outside. No waste occurs during the manufacturing process. The few products that break during the curing process go back into the system and are able to be recovered.

A4, Transport
This stage includes transportation from the manufacturing site in Sweden to the installation site. An average transportation distance of 150 km was assumed.

A5, Construction installation
This stage is excluded from the study.

B Use stage
This stage is partly declared to include the uptake in carbon dioxide through carbonation during the concrete retaining walls' lifetime. To calculate the amount of carbon dioxide that the product absorbs during its lifetime, the guidance from Annex G in EN 16757:2022 was used. The equation of the carbon dioxide uptake is the following:

$$CO_2\ uptake = k * \left(\sqrt{t}/1000\right) * U_{tcc} * C * (D_c)$$, where

- $\boldsymbol{k}$ is the carbonation speed [mm/year^{0,5}]
  - Based on Table G.1 in Annex G of EN 16757:2022
- $\boldsymbol{t}$ is time (lifetime) in [years]
- $\boldsymbol{U_{tcc}}$ is the maximal theoretical CO_2-uptake in kg CO_2/kg cement. (For Portland cement it's 0,49 kg CO_2/kg)
- $\boldsymbol{C}$ is the cement content in the concrete [kg/m^3]
- $\boldsymbol{D_c}$ is the carbonation rate in [%]

The calculation is thus as follows:

$$\left(1{,}6 * \sqrt{150}/1000\right) * (0{,}49) * 373{,}7 * 0{,}85\ kg\ CO_2/m^2 = \mathbf{3{,}06\ kg\ CO_2/m^2}$$

As this is calculated per m^2 and the declared unit is per ton product, the m^2 per ton has been calculated from the average weight per m2 of the included products in this study. Each block when in a wall system structure gets more than one surface exposed to air. The exposed surface has been calculated per block and is **4,691 m^2 per block**, please see figure below. The average amount of m2 per ton is 1,3 and thus the value of carbonation has been multiplied with 1,3 in the results, resulting in 6,10 kg m^2 which accounts for **18,66 kg CO_2**. As this only accounts for the carbon dioxide and not the rest of the GHG's that are included in the indicator GWP total, this value has been added to the LCA for Experts software as negative CO_2 emissions. The total uptake results in **73,75 kg CO2-eq./ton** concrete.

C1 Deconstruction/Demolition
A generic dataset was used to calculate the demolition, as the product is a part of the construction which is deconstructed during the end-of-life of the product.

C2 Transport
Transport distance to another installation site. An average transportation distance of 150 km was assumed.

C3 Waste processing
This stage includes any waste treatment needed.

C4 Final disposal
This includes any material that is landfilled.

D Benefits and loads beyond the system boundary
Loads and benefits are obtained from energy recovery and recycling of waste materials. In energy recovery, it is assumed that heat and electricity from waste incineration substitute thermal energy from natural gas and average Swedish electricity grid mix, respectively.

Omissions of life cycle stages
The following flows were excluded from the system boundary:

- A1-A3: The plants, production of machines and transportation systems are excluded since the related flows are supposed to be negligible compared to the potential environmental impacts through the life cycle of the product
- A5: The installation is excluded from this study
- B1-B7: The use phase is excluded from this study

In addition, the following flows are excluded from the system boundaries:

- Flows related to human activities, such as employee transport

Cut-off criteria
The following procedures were followed for the exclusion of inputs and output.

- 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
- Generic national data was used for modules C1-C4 and D as no specific data was able to be collected
- 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 not applied as all inputs were included

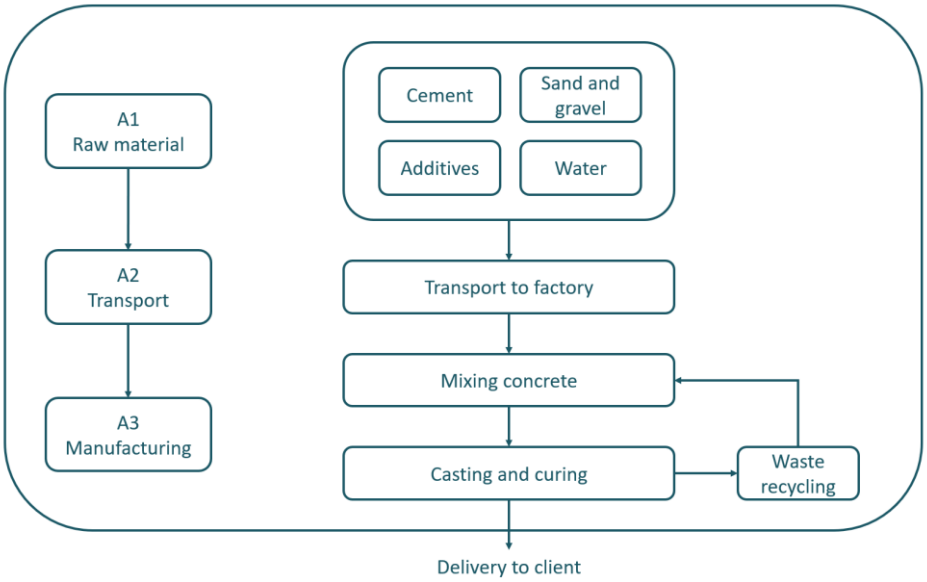
In this study, no hazardous or toxic materials or substances are included in the product.

Geographic scope
This LCA study centers around the production and manufacturing process Verti-Block concrete retaining wall in Sweden. All suppliers are located in Sweden and the customer to Blixbo Cementvarufabrik AB is also within Sweden.

Allocation
The incoming energy and water are allocated equally among all products through mass allocation. No co-products leave the product system as the product system is a closed-loop recycling and no waste occurs during the manufacturing process. The allocation of end-of-life waste follows the polluter-pays principle.

LCA: Scenarios and additional technical information

MANUFACTURING PROCESS (A1-A3)



TRANSPORT FROM THE PRODUCTION PLACE TO THE USER (A4)

Transportation model

Transportation type	Capacity utilisation (incl. return) %	Type of vehicle	Distance (km)	Fuel/Energy consumption
Truck	90%	Average truck trailer with a 40 t payload	150	0,028 l/tkm

Fuel type used

Fuel type	Database	Regional coverage	Time reference
Market group for diesel	Ecoinvent 3.8	GLO	2021

END OF LIFE (C1-C4)

Demolition (C1)

Demolition type	Database	Regional coverage	Time reference	Fuel/Energy consumption
Excavator, 100 kW, construction	Sphera	GLO	2022	0,202l/t
Diesel	Ecoinvent 3.8	GLO	2021	

Transportation model (C2)

Transportation type	Capacity utilisation (incl. return) %	Type of vehicle	Distance (km)	Fuel/Energy consumption
Truck	90%	Average truck trailer with a 40 t payload	50	0,028 l/tkm

Waste management model (C3-C4)

Material	Recycling rate	Incineration rate	Landfill rate
Concrete	100%	0%	0%
Metal	100%	0%	0%

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

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	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	ND	X	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	SE	SE	SE	SE	-	SE	-	-	-	-	-	-	SE	SE	SE	SE	SE
Specific data used	4%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	6%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Results are based on EN 15804:2012+A2:2019 EF3.1.

The specific data used represents the percentage of the impact that derives from specific data and is based on the impact category GWP-GHG.

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Sand	442	0	0
Gravel	307	0	0
Cement	158	0	0
Sikament VS-1 - addative	1,7	0	0
Addative	0,54	0	0
Water	90,6	0	0
Steel	0,16	77,8	0
TOTAL	**1000**	0,01	0

During the life cycle of the product no hazardous substance listed in the “Candidate List of Substances of Very High Concern (SVHC) for authorization” has been used in a percentage higher than 0,1% of the weight of the product.

Results of the environmental performance indicators

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. As module C is included in the EPD, it is discouraging the use of the results of modules A1-A3 (A1-A5 for services) without considering the results of module C.

Mandatory impact category indicators according to EN 15804

Results per 1 ton									
Indicator	**Unit**	**A1-A3**	**A4**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	1,55E+02	7,56E+00	-7,38E+01	6,07E-01	2,52E+00	1,99E-04	0,00E+00	-1,11E+02
GWP-fossil	kg CO_2 eq.	1,55E+02	7,56E+00	-7,38E+01	6,07E-01	2,52E+00	1,99E-04	0,00E+00	-1,11E+02
GWP-biogenic	kg CO_2 eq.	1,11E-01	6,81E-04	0,00E+00	5,36E-05	2,27E-04	2,77E-08	0,00E+00	-1,57E-01
GWP-luluc	kg CO_2 eq.	8,85E-02	4,29E-04	0,00E+00	3,37E-05	1,43E-04	2,24E-08	0,00E+00	-1,16E-01
ODP	kg CFC 11 eq.	6,42E-07	1,77E-06	0,00E+00	1,40E-07	5,91E-07	3,17E-12	0,00E+00	-2,29E-10
AP	mol H^+ eq.	2,73E-01	1,61E-02	0,00E+00	3,70E-03	5,37E-03	1,85E-06	0,00E+00	-1,57E-01
EP-freshwater	kg P eq.	9,91E-05	8,11E-05	0,00E+00	6,38E-06	2,70E-05	6,11E-09	0,00E+00	-8,96E-05
EP-marine	kg N eq.	9,52E-02	3,22E-03	0,00E+00	1,49E-03	1,07E-03	8,56E-07	0,00E+00	-4,40E-02
EP-terrestrial	mol N eq.	1,02E+00	3,61E-02	0,00E+00	1,63E-02	1,20E-02	9,30E-06	0,00E+00	-4,78E-01
POCP	kg NMVOC eq.	2,72E-01	1,05E-02	0,00E+00	4,33E-03	3,50E-03	2,75E-06	0,00E+00	-1,38E-01

ADP-minerals&metals*	kg Sb eq.	1,87E-05	1,38E-06	0,00E+00	1,08E-07	4,58E-07	6,95E-11	0,00E+00	-5,08E-06
ADP-fossil*	MJ	8,88E+02	1,08E+02	0,00E+00	8,53E+00	3,61E+01	2,60E-03	0,00E+00	-6,39E+02
WDP*	m^3	4,85E+00	1,14E-01	0,00E+00	9,00E-03	3,81E-02	8,79E-06	0,00E+00	-5,25E+00
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 of these results are high or as there is limited experience with the indicator.*

Additional mandatory and voluntary impact category indicators

Results per 1 ton									
Indicator	**Unit**	**A1-A3**	**A4**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	1,53E+02	7,57E+00	0,00E+00	6,07E-01	2,52E+00	1,99E-04	0,00E+00	-1,11E+02

[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 CO_2 is set to zero.

Resource use indicators

Results per 1 ton									
Indicator	**Unit**	**A1-A3**	**A4**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	8,91E+01	2,83E-01	0,00E+00	2,23E-02	9,44E-02	1,49E-05	0,00E+00	-1,24E+02
PERM	MJ	-1,17E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	9,11E+01	2,83E-01	0,00E+00	2,23E-02	9,44E-02	1,49E-05	0,00E+00	-1,24E+02
PENRE	MJ	8,43E+02	1,08E+02	0,00E+00	8,53E+00	3,61E+01	2,60E-03	0,00E+00	-6,39E+02
PENRM	MJ	-5,78E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	8,60E+02	1,08E+02	0,00E+00	8,53E+00	3,61E+01	2,60E-03	0,00E+00	-6,39E+02
SM	kg	1,24E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,42E-02
RSF	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
NRSF	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
FW	m^3	3,03E-01	2,66E-03	0,00E+00	2,10E-04	8,87E-04	2,05E-07	0,00E+00	-2,39E-01
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								

Waste indicators

Results per 1 ton									
Indicator	**Unit**	**A1-A3**	**A4**	**B1**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	1,98E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-2,74E-07
Non-hazardous waste disposed	kg	1,00E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,00E+03	0,00E+00	-3,51E+01
Radioactive waste disposed	kg	6,74E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	-1,05E-02

Output flow indicators

Results per 1 ton									
Indicator	**Unit**	**A1-A3**	**A4**	**B1**	**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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,00E+03	0,00E+00	0,00E+00
Materials 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, 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 environmental information

Classification of disclaimers to the declaration of core and additional environmental impact indicators

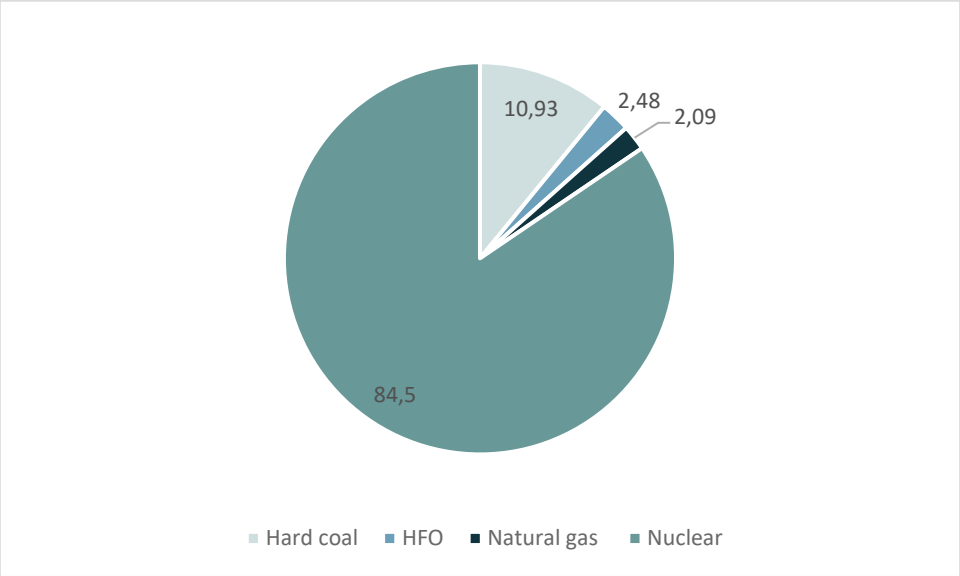
ILCD Classification	Indicator	Disclaimer
ILCD Type 1	Global warming potential (GWP)	None
	Depletion potential of stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD Type 2	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching end compartment (EP-marine)	None
	Eutrophication potential, Fraction of nutrients reaching end compartment (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
ILCD Type 3	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2
	Potential Soil quality index (SQP)	2

Disclaimer 1 – 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 factor.

Disclaimer 2 – 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.

Greenhouse gas emissions from the use of electricity in the manufacturing phase.

Residual mix	Unit	Value
Location		Sweden
Electricity mix		Hard coal: 10,93% Heavy fuel oil: 2,48% Natural gas: 2,09% Nuclear: 84,5%
Reference year		2021
Source		European Residual Mixes 2021 (AIB, 2021)
GWP excl. Biogenic	kg CO_2-eq. /kWh	0,038



References

Association of Issuing Bodies. European Residual Mixes 2022. Version 1.0. (2023) https://www.aib-net.org/sites/default/files/assets/facts/residual-mix/2022/AIB_2022_Residual_Mix_Results_inclAnnex.pdf

c-PCR 003 Concrete and concrete elements (EN 16757).

EN 15804:2012+A2:2019- Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products

EN 16757:2022 Sustainability of construction works - Environmental product declarations - Product Category Rules for concrete and concrete elements

General Programme Instructions of the International EPD® System. Version 4.

IBU. 2021. EPD-EFC-20210198-IBG1-EN. Concrete admixtures – Plasticizers and Superplasticizers. https://swe.sika.com/dam/dms/se01/w/Plasticisers%20and%20Superplasticisers_ENG_EPD_210316.pdf

ISO 21930:2017 Sustainability in building and civil engineering works

ISO 14020:2022 Environmental labels and declarations — General principles

ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures

ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines

PCR 2019:14 v1.3.3 Construction products

SCB. 2020. Treated waste by treatment category and waste category. Every second year 2010-2020. https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__MI__MI0305/MI0305T003/

Appendix A

The following table list all Verti-Block modules for which this EPD is valid.

Product name	Serial number	Dimensions (mm)	Weight (kg)	Surface (m^2)	Volym (m^3)	Strength Class	Exposure Class	VCT
STANDARD BLOCK	VBS	610x1220x914	790	0,75	0,33	C30/37	XC4/XF3	<=0,55
STANDARD TOP BLOCK	VBST	610x1220x914	590	0,75	0,25	C30/37	XC4/XF3	<=0,55
1200 MASS EXTENDER	VBMSE120	610x1220x1200	1210	0,75	0,5	C30/37	XC4/XF3	<=0,55
1500 MASS EXTENDER	VBMES150	610x1220x1500	1500	0,75	0,63	C30/37	XC4/XF3	<=0,55
HALF BLOCK	VBH	610x610x914	480	0,375	0,2	C30/37	XC4/XF3	<=0,55
HALF TOP BLOCK	VBHT	610x610x914	335	0,375	0,14	C30/37	XC4/XF3	<=0,55
CORNER BLOCK RIGHT	VBHH	610x1220x610	720	1,125	0,3	C30/37	XC4/XF3	<=0,55
CORNER BLOCK LEFT	VBHV	610x1220x610	720	1,125	0,3	C30/37	XC4/XF3	<=0,55
45° INTERLOCKING CORNER BLOCK RIGHT	VBHBH45	610x1220x614	1100	1,125	0,45	C30/37	XC4/XF3	<=0,55
45° INTERLOCKING CORNER BLOCK LEFT	VBHBV45	610x1220x614	1100	1,125	0,45	C30/37	XC4/XF3	<=0,55
CORNER TOP BLOCK RIGHT	VBHTH	610x1220x610	650	1,125	0,27	C30/37	XC4/XF3	<=0,55
CORNER TOP BLOCK LEFT	VBHTV	610x1220x610	650	1,125	0,27	C30/37	XC4/XF3	<=0,55
STANDARD HALF-STEP BLOCK	VBHS	305x1220x914	440	0,375	0,21	C30/37	XC4/XF3	<=0,55
HALF-STEP TOP BLOCK	VBHST	305x1220x914	291	0,375	0,14	C30/37	XC4/XF3	<=0,55
HALF-STEP HALF BLOCK	VBHSH	305x610x914	260	0,1875	0,1	C30/37	XC4/XF3	<=0,55
HALF-STEP HALF TOP BLOCK	VBHSHT	305x610x914	124	0,1875	0,07	C30/37	XC4/XF3	<=0,55
HALF-STEP CORNER BLOCK RIGHT	VBHSHH	305x1220x610	374	0,563	0,16	C30/37	XC4/XF3	<=0,55
HALF-STEP CORNER BLOCK LEFT	VBHSHV	305x1220x610	374	0,563	0,16	C30/37	XC4/XF3	<=0,55
CORNER TOP BLOCK RIGHT	VBHSHTH	305x1220x610	312	0,563	0,13	C30/37	XC4/XF3	<=0,55
CORNER TOP BLOCK LEFT	VBHSHTV	305x1220x610	312	0,563	0,13	C30/37	XC4/XF3	<=0,55
2-SIDED BLOCK WITH LUG	VBDSL	610x1220x610	960	1,5	0,4	C30/37	XC4/XF3	<=0,55
3-SIDED BLOCK WITH LUG	VBTSL	610x1220x610	960	1,875	0,4	C30/37	XC4/XF3	<=0,55

TOP CAPS	VBDSLOCK	150x1220x660	225	1,147	0,09	C30/37	XC4/XF3	<=0,55
TOP CAPS	VBTSLOCK	150x1244x660	225	1,243	0,09	C30/37	XC4/XF3	<=0,55
FREE STANDING COLUMN BLOCK	VBP3	610x610x610	365	1,5	0,15	C30/37	XC4/XF3	<=0,55
FREE STANDING COLUMN BLOCK	VBPH2	400x610x610	245	1	0,1	C30/37	XC4/XF3	<=0,55
FREE STANDING COLUMN CAP	VBPL	150x660x660	90	0,67	0,04	C30/37	XC4/XF3	<=0,55
45° INTERLOCKING CORNER BLOCK TOP RIGHT	VBHBTH45	610x1220x610	850	1,125	0,35	C30/37	XC4/XF3	<=0,55
45° INTERLOCKING CORNER BLOCK TOP LEFT	VBHBTV45	610x1220x610	850	1,125	0,35	C30/37	XC4/XF3	<=0,55

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