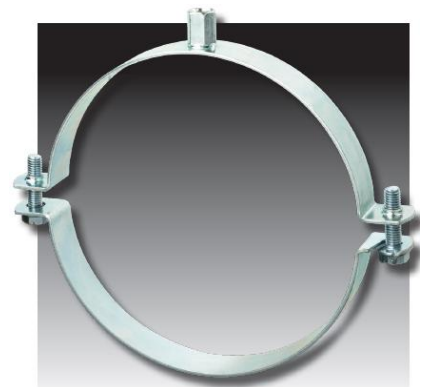
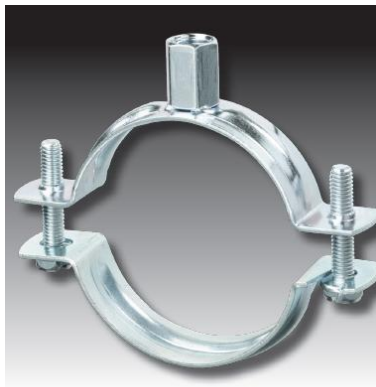


Owner: Beck A/S
No.: MD-26061-EN
Issued: 02-10-2026
Valid to: 02-10-2031

3rd PARTY VERIFIED

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804



Owner of declaration

Beck A/S
Vassingerødvej 88, 3540 Lynge
DK 20087978
<https://beck.as/da>


Issued:

02-10-2026

Valid to:

02-10-2031

Programme

EPD Danmark
www.epddanmark.dk



- ☐ Industry EPD
☒ Product EPD

- ☐ Product specific
☒ Average
☐ Worst Case

Declared product(s)

Scanclamp pipe clamps in electrogalvanized steel.

Number of declared datasets/product variations: 1

Production site

ZhongShan, China

Use of Guarantees of Origin

- ☒ No certificates used
☐ Electricity covered by GoO
☐ Biogas covered by GoO

Declared/ functional unit

1 kg Scanclamp pipe clamp in electrogalvanized steel.

Year of production site data (A3)

2025

EPD version

1

Basis of calculation

This EPD is developed and verified in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

Validity

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

- ☐ Cradle-to-gate with modules C1-C4 and D
☒ Cradle-to-gate with options, modules C1-C4 and D
☐ Cradle-to-grave and module D
☐ Cradle-to-gate
☐ Cradle-to-gate with options

CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

☐ internal ☒ external

Third party verifier:

Nanalin R

[Nana Lin Rasmussen, Lin Consulting ApS]

Martha Katrine Sørensen

Martha Katrine Sørensen
EPD Danmark

Life cycle stages and modules (ND = module not declared)

Product			Construction process		Use							End of life				Beyond the system boundary
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

Product information

Product description

The main product components are shown in the table below.

All products

Material	Weight-% of declared product
Electrogalvanized steel	98,63%
Zinc	1,37%

Product packaging:

The composition of the sales- and transport packaging of the product is shown in the table below. The weight is pr. kg and can be normalized to 1 item using the stated conversion factors.

All products

Material	Weight of packaging material (kg)	Weight-% of packaging
Cardboard	0,03	100%

Representativity

This declaration, including data collection and the modeled foreground system including results, represents the production of 1 kg Scanclamp pipe clamp in electrogalvanized steel on the production site located in ZhongShan, China. Product specific data are based on average values collected in the period 2025. Background data are based on datasets from the ecoinvent v.3.11. database and are less than 10 years old. The datasets used in this study are assessed to achieve an overall score of fair. The most significant datasets used in this study are the ones representing steel production by converter,

cardboard packaging, and zinc sourcing. Here, only steel is deemed fair in technological representation as cardboard and zinc are both very good in technological representation but fair in geographical representation. The data quality was assessed according to EN-15804+A2 table E.1.

Hazardous substances

The product does not contain substances listed on the "Candidate List of Substances of Very High Concern for authorization"

(<http://echa.europa.eu/candidate-list-table>)

Product(s) use

Scanclamp pipe clamps without rubber are used for supporting heating, plumbing, and wastewater pipes on ceilings, walls, and floors. The quick-lock mechanism ensures easy and secure installation.

Essential characteristics

The base consists of electrogalvanized steel. The ventilation pipe clamp has a net cross section area of minimum 30 mm² and is in compliance with the demands for channel suspension of type A, in accordance to DS 428.2019.

Further technical information can be obtained by contacting the manufacturer or on the manufacturers website:

[Beck A/S | Rør, fittings og montageløsninger til professionelle](#)

Reference Service Life (RSL)

The reference service life for these products are set to 60 years subject to correct installation.

Picture of product(s)

The products shown below are all represented by the results presented in this study via average-based grouping approach.



Figure 1 - Pipe clamp without rubber lining.

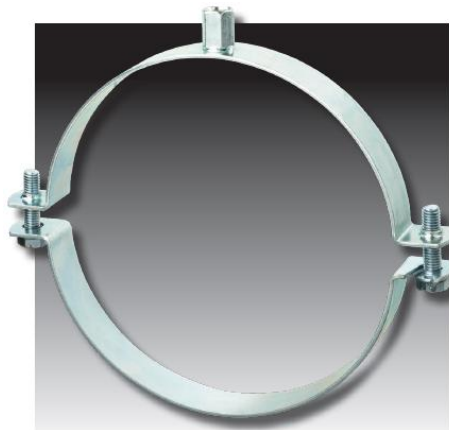


Figure 2 – Ventilation pipe clamp.



Figure 3 - Robust pipe clamp without rubber lining.

LCA background

Declared unit

The LCI and LCIA results in this EPD relates to production of 1 kg Scanclamp pipe clamp in electrogalvanized steel.

Name	Value	Unit
Declared unit	1	kg

Functional unit

Not defined

Material properties

The results presented in this study are applicable for the products shown in the table below. This table also shown the factor that should be used to normalize results from one kg to a given item as it states how many items makes up for one kg of product.

Name	Mass factor (kg/DU)	Product normalization (items/kg)
Pipe clamp without rubber lining	1	5,6915
Ventilation pipe clamp	1	3,0266
Robust pipe clamp without rubber lining	1	1,6700

These normalization factors are calculated based on the weighted average of all sold products belonging to the product family. In that sense, all sold products belonging to the product family "Pipe clamp without rubber lining" were used to calculate the weighted average of the number of items to one kg.

PCR

This EPD is developed according to the core rules for the product category of construction products in EN 15804:2012+A2:2019, and additional product category rules stated in NPCR 013:2021 Part B for steel and aluminium construction products.

Conversion factors

The names presented in the table above states names of product families. Multiple products with individual measurements belongs to a given product family. The table below therefore stated all products under their respective product family. The conversion factor should here be used to normalize result to a specific product instead of a product family.

Name	Conversion factor (items/kg)
Pipe clamp without rubber lining	
Rørbojle U/G - M8/M10 - 180-189 mm.	3,5714
Rørbojle U/G - M8/M10 - 199-212 mm.	3,3003
Rørbojle U/G - M8/M10 - 215-220 mm.	3,1056
Rørbojle U/G - M8/M10 - 224-235 mm.	2,9674
Rørbojle U/G - M8/M10 - 12-14 mm.	24,3902
Rørbojle U/G - M8/M10 - 15-19 mm.	22,7273
Rørbojle U/G - M8/M10 - 21-23 mm.	21,2766
Rørbojle U/G - M8/M10 - 26-28 mm.	19,6078
Rørbojle U/G - M8/M10 - 32-35 mm.	18,5185
Rørbojle U/G - M8/M10 - 40-43 mm.	16,1290
Rørbojle U/G - M8/M10 - 48-56 mm.	14,4928
Rørbojle U/G - M8/M10 - 74-80 mm.	11,4943
Rørbojle U/G - M8/M10 - 83-91 mm.	10,5263
Rørbojle U/G - M8/M10 - 91-99 mm.	7,6923
Rørbojle U/G - M8/M10 - 108-114 mm.	6,0241
Rørbojle U/G - M8/M10 - 116-122 mm.	5,7143
Rørbojle U/G - M8/M10 - 123-133 mm.	5,4054
Rørbojle U/G - M8/M10 - 159-169 mm.	4,4643
Rørbojle U/G - M8/M10 - 167-178 mm.	4,2017
Rørbojle U/G - M8/M10 - 41-48 mm.	14,2857
Rørbojle U/G - M8/M10 - 50-56 mm.	12,9870
Rørbojle U/G - M8/M10 - 57-62 mm.	12,5000
Rørbojle U/G - M8/M10 - 63-67 mm.	11,9048
Rørbojle U/G - M8/M10 - 68-73 mm.	10,9890
Rørbojle U/G - M8/M10 - 74-80 mm.	10,5263
Rørbojle U/G - M8/M10 - 82-91 mm.	8,3333
Rørbojle U/G - M8/M10 - 92-99 mm.	7,6923
Rørbojle U/G - M8/M10 - 100-106 mm.	5,5249
Rørbojle U/G - M8/M10 - 108-114 mm.	5,4645
Rørbojle U/G - M8/M10 - 115-125 mm.	5,1282
Rørbojle U/G - M8/M10 - 125-130 mm.	4,7847
Rørbojle U/G - M8/M10 - 131-135 mm.	4,6512
Rørbojle U/G - M8/M10 - 136-146 mm.	4,5249
Rørbojle U/G - M8/M10 - 140-144 mm.	4,3668
Rørbojle U/G - M8/M10 - 148-156 mm.	4,2194
Rørbojle U/G - M8/M10 - 158-163 mm.	4,0486
Rørbojle U/G - M8/M10 - 164-169 mm.	3,9216
Rørbojle U/G - M8/M10 - 168-177 mm.	3,5211
Rørbojle U/G - M8/M10 - 180-190 mm.	3,3670
Rørbojle U/G - M8/M10 - 192-197 mm.	3,2362
Rørbojle U/G - M8/M10 - 199-212 mm.	3,0960
Rørbojle U/G - M8/M10 - 214-220 mm.	2,9586
Ventilation pipe clamp	
Vent. Rørbojle U/G - M8/M10 - Ø100 mm.	4,9505
Vent. Rørbojle U/G - M8/M10 - Ø125 mm.	4,6083
Vent. Rørbojle U/G - M8/M10 - Ø160 mm.	3,8462
Vent. Rørbojle U/G - M8/M10 - Ø200 mm.	3,2468
Vent. Rørbojler U/G - Ø200 - med Ø9mm. hul	3,2468
Vent. Rørbojle U/G - M8/M10 - Ø250 mm.	2,8409
Vent. Rørbojle U/G - M8/M10 - Ø315 mm.	2,5316
Vent. Rørbojle U/G - M8/M10 - Ø400 mm.	2,3810
Vent. Rørbojle U/G - M8/M10 - Ø500 mm.	1,9531

Robust pipe clamp without rubber lining	
Scanclamp Robust 3T U/G 3/8" 15-19	12,0482
Scanclamp Robust 3T U/G 1/2" 20-24	11,4943
Scanclamp Robust 3T U/G 25-30	10,9890
Scanclamp Robust 3T U/G 1" 31-35	7,8125
Scanclamp Robust 3T U/G 37-41	7,0922
Scanclamp Robust 3T U/G 1 1/4" 40-45	6,8966
Scanclamp Robust 3T U/G 1 1/2" 48-53	6,3291
Scanclamp Robust 3T U/G 54-59	5,8824
Scanclamp Robust 3T U/G 2" 60-65	5,6497
Scanclamp Robust 3T U/G 67-72	5,1546
Scanclamp Robust 3T U/G 2 1/2" 76-81	3,5842
Scanclamp Robust 3T U/G 82-87	3,4483
Scanclamp Robust 3T U/G 3" 88-93	3,1847
Scanclamp Robust 3T U/G 96-101	3,1153
Scanclamp Robust 3T U/G 102-108	3,0675
Scanclamp Robust 3T U/G 4" 110-116	2,9070
Scanclamp Robust 3T U/G 116-123	2,7473
Scanclamp Robust 3T U/G 124-129	2,6316
Scanclamp Robust 3T U/G 133-140	1,2690
Scanclamp Robust 3T U/G 5" 140-148	1,2240
Scanclamp Robust 3T U/G 149-155	1,1765
Scanclamp Robust 3T U/G 159-165	1,1249
Scanclamp Robust 3T U/G 6" 167-173	1,0881
Scanclamp Robust 3T U/G 176-184	1,0482
Scanclamp Robust 3T U/G 188-194	0,9980
Scanclamp Robust 3T U/G 199-205	0,9569
Scanclamp Robust 3T U/G 207-216	0,9346
Scanclamp Robust 3T U/G 8" 219-225	0,9009
Scanclamp Robust 3T U/G 230-236	0,8562
Scanclamp Robust 3T U/G 244-250	0,8177
Scanclamp Robust 3T U/G 255-261	0,7899
Scanclamp Robust 3T U/G 10" 267-273	0,7616
Scanclamp Robust 3T U/G 278-284	0,7391

Energy modelling principles

Foreground system:

The product is produced using the distribution grid mix in Southern China. The manufacturing process only uses electricity wherefore no remaining energy processes are modelled.

Information about the energy mix in the foreground system:

Energy mix	EF	Unit
Distribution grid mix, CSG ref. year 2024	0,606	kg CO ₂ e/kWh

This dataset was used as it yielded the highest geographical repetitiveness. Electricity production varies greatly from location to location so obtaining a high geographical representation here secures the best reflection of the actual system.

Background system:

Upstream processes (A1-A5), including raw material extraction, material processing, and transport, are modelled using background datasets from the ecoinvent database V3.11. The energy input in these processes is based on respective dataset-specific energy mixes and geographical assumptions. Moreover, the transport distance in module A2 is based on steel and packaging material originating from China where EMPD is imported from Saudi Arabia.

Moreover, transport in module A4 is modelled based on the approach suggested in nPCR 013 2021 Part B for Steel and Aluminium Construction products section 6.3.8.1, point 2.

Downstream processes (C1-C4 and module D) are modelled using standard end-of-life and energy recovery datasets in accordance with EN 15804+A2. The modelling approach is attributional, and no system expansion or consequential modelling has been applied.

Flowdiagram

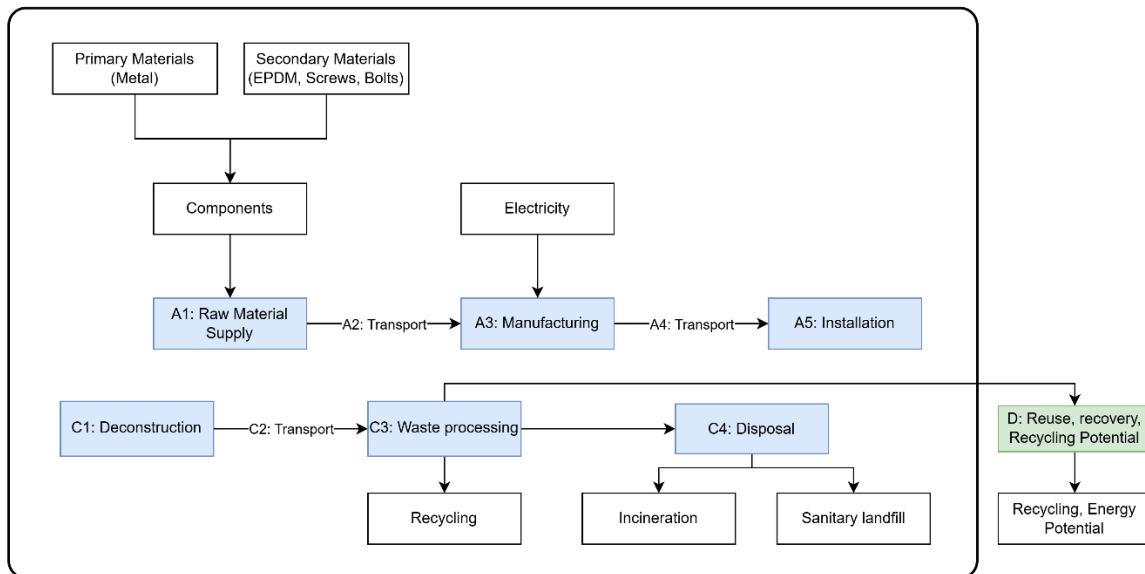


Figure 4 - Overall lifecycle flow.

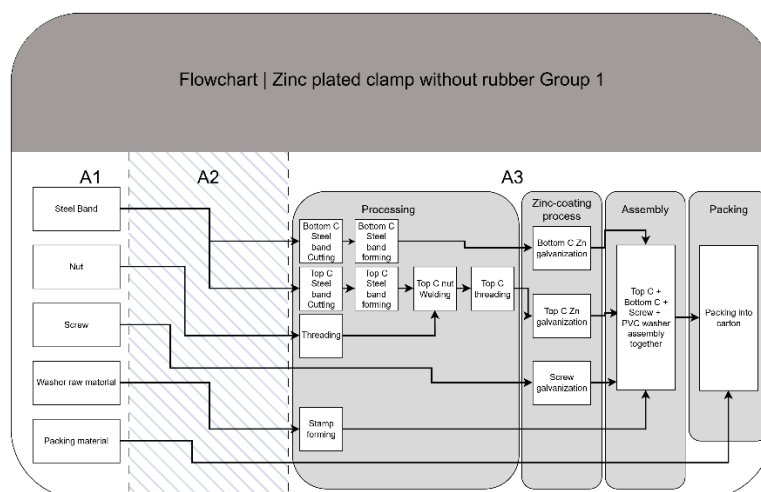


Figure 5 - Manufacturing-specific process flow.

Though figure 6 does not specify any activity in A2, this does not mean that this is omitted. This figure merely specifies manufacturing-related processes.

System boundary

This EPD is based on a cradle-to-gate with modules C1-C4 + D LCA, in which 100 weight-% has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

Product stage (A1-A3) includes:

A1 – Extraction and processing of raw materials

A2 – Transport to the production site

A3 – Manufacturing processes

The product stage comprises the acquisition of all raw materials, products and energy, transport to the production site, packaging and waste processing up to the “end-of-waste” state or final disposal. The LCA results are declared in aggregated form for the product stage, which means that the sub-modules A1, A2 and A3 are declared as one module A1-A3.

In A1, all raw materials and sub-components are manufactured by upstream suppliers. Steel is sourced from China and arrives in coils.

In A2, materials and sub-components are transported from suppliers to the manufacturing site in Haitang Street 12 in China. Materials originating outside of China are assumed to be transported by lorry to nearest port (Rebigh to Jeddah), then by ship to China (Jeddah to Shuidong), and finally by lorry to the manufacturing site.

In A3, the steel coils are cut into size, whereafter they are formed into shape. The nut on the top is then welded onto the product and threaded. For galvanized steel products, the product is then zinc-coated. The final product is then assembled by hand and packaged into cartons. Cardboard are sourced from China.

Allocation was mostly needed when calculating the energy consumption related to producing a given product. Here, manufacturer data and statements were used to determine the production for Beck A/S. From here, generic data for energy consumption on production equipment was used to estimate the consumption for each piece of equipment. The final energy consumption was thereby calculated based on the processes undergone by the product.

Construction process stage (A4-A5) includes:

A4 – transport to the construction site

A5 – Installation

In A4, the products are transported from the manufacturing site in China to the storage facility in Vassingerødvej 88, 3540 Lynge, Denmark, and then from the storage facility to the construction site. This modelling of this module is based on nPCR 013 2021 Part B for Steel and Aluminium Construction Products, section 6.3.8.1, point 2, stating that the transport distance for imported products is allowed to be estimated by measuring the distance from the manufacturing site to the specific storage location, plus a transport distance from the storage location to the building site of 300 km. The total transported distance from China to Denmark adds up to 6.175 km.

In A5, the product is assumed to be installed using only small handheld electric tools. The impacts this module carries are therefore assumed to be negligible. Here, packaging is transported 10km to nearest recycling station where it is then transported 50 km to nearest incineration plant. Here, packaging is incinerated for energy recovery. The energy production is credited in module D.

Use stage (B1-B7) includes:

There are no activities in this module.

End of Life (C1-C4) includes:

As this product is assumed to be used mainly in the Danish market, disposal-related processes and the end-of-life scenario are modelled with reference to this market.

Although the products are also sold in other European markets, the end-of-life scenario has been modelled using Danish waste treatment conditions as a representative reference scenario.

In C1, dismantling of the product is undertaken. This process is assumed to be a manual process requiring small, electric hand tools. The electricity consumption related to this process is therefore assumed to be negligible and no activities therefore take place.

In C2, the entire product will be transported 10 km to the recycling station. After sorting at the recycling station all materials are transported 50 km to respectively incineration and recycling.

In C3 waste processing, handling of metal is modelled based on nPCR 013 2021 Part B for Steel and Aluminium Construction Products, section 6.3.8.4, table 3. Here, all steel products are assumed to fall within the product type category "Stainless steel", stating that 92% of the steel will be recycled. 92% of metal components will therefore be separated, sorted, and recycled according to current law at a local waste facility/recycling station.

In module C4 the remaining 8% of the steel will not or cannot be separated and will end up in

sanitary landfill, as stated in nPCR 013 2021 Part B for Steel and Aluminium Construction Products.

Re-use, recovery and recycling potential (D) includes:

For the incineration scenario, module D includes impacts and benefits from avoided Danish average electricity production and thermal energy recovery. For the recycling scenario, module D includes impacts and benefits from avoided production of heat and electricity and virgin steel production. Here, 10% of the steel is provided as secondary material, meaning that 10% of the steel cannot be credited. A use factor of 1,13 is also applied to model that 1kg recycled steel takes 1,13kg virgin steel.

LCA results

ENVIRONMENTAL IMPACTS PER kg									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	[kg CO ₂ eq.]	3,53E+00	1,85E-01	1,27E-03	0,00E+00	1,14E-02	2,40E-02	5,00E-04	-3,95E-01
GWP-fossil	[kg CO ₂ eq.]	3,52E+00	1,85E-01	1,27E-03	0,00E+00	1,14E-02	2,39E-02	5,00E-04	-3,94E-01
GWP-biogenic	[kg CO ₂ eq.]	6,49E-03	3,90E-05	2,28E-06	0,00E+00	2,40E-06	5,00E-05	1,72E-07	-6,39E-04
GWP-luluc	[kg CO ₂ eq.]	2,53E-03	8,06E-05	3,94E-07	0,00E+00	3,78E-06	3,51E-05	2,84E-07	-5,52E-04
ODP	[kg CFC 11 eq.]	1,98E-08	3,02E-09	2,01E-11	0,00E+00	2,49E-10	3,24E-10	1,39E-11	-4,61E-09
AP	[mol H ⁺ eq.]	1,53E-02	2,13E-03	8,77E-06	0,00E+00	3,66E-05	2,64E-04	3,50E-06	-1,77E-03
EP-freshwater	[kg P eq.]	1,62E-04	1,47E-06	1,32E-08	0,00E+00	8,36E-08	1,05E-06	4,89E-09	-1,97E-05
EP-marine	[kg N eq.]	3,28E-03	5,61E-04	3,69E-06	0,00E+00	1,22E-05	6,00E-05	1,34E-06	-3,47E-04
EP-terrestrial	[mol N eq.]	3,66E-02	6,23E-03	3,85E-05	0,00E+00	1,34E-04	6,90E-04	1,47E-05	-3,97E-03
POCP	[kg NMVOC eq.]	1,23E-02	1,89E-03	1,04E-05	0,00E+00	5,55E-05	2,07E-04	5,29E-06	-1,26E-03
ADPm ¹	[kg Sb eq.]	3,61E-05	2,21E-07	1,47E-09	0,00E+00	1,80E-08	4,56E-07	3,17E-10	-1,03E-06
ADPf ¹	[MJ]	3,86E+01	2,49E+00	1,16E-02	0,00E+00	1,62E-01	3,25E-01	1,22E-02	-5,64E+00
WDP ¹	[m ³ world eq. deprived]	1,31E+00	1,14E-02	2,08E-03	0,00E+00	8,48E-04	5,74E-03	5,38E-04	-2,22E-01
Caption	GWP-total = Global Warming Potential - total; 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 = Ozone Depletion; AP = Acidification; EP-freshwater = Eutrophication – aquatic freshwater; EP-marine = Eutrophication – aquatic marine; EP-terrestrial = Eutrophication – terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential – minerals and metals; ADPf = Abiotic Depletion Potential – fossil fuels; WDP = water depletion potential The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.								
Disclaimer	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.								

ADDITIONAL ENVIRONMENTAL IMPACTS PER kg									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	[Disease incidence]	3,10E-07	9,82E-09	8,62E-11	0,00E+00	7,41E-10	3,56E-09	7,85E-11	-3,96E-08
IRP ²	[kBq U235 eq.]	4,47E-02	7,87E-04	6,84E-06	0,00E+00	6,99E-05	8,07E-04	2,84E-06	-3,24E-02
ETP-fw ¹	[CTUe]	2,71E+01	3,27E-01	4,85E-02	0,00E+00	2,11E-02	1,68E-01	8,76E-04	-1,50E+00
HTP-c ¹	[CTUh]	3,31E-09	3,09E-11	2,29E-12	0,00E+00	1,75E-12	1,47E-11	8,43E-14	-1,91E-09
HTP-nc ¹	[CTUh]	3,97E-08	1,09E-09	9,27E-11	0,00E+00	8,64E-11	9,97E-10	1,76E-12	-5,78E-09
SQP ¹	-	1,55E+01	1,10E+00	4,90E-03	0,00E+00	9,57E-02	5,70E-01	2,40E-02	-1,86E+00
Caption	PM = Particulate Matter emissions; IRP = Ionizing radiation – human health; ETP-fw = Eco toxicity – freshwater; HTP-c = Human toxicity – cancer effects; HTP-nc = Human toxicity – non cancer effects; SQP = Soil Quality (dimensionless) The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10² or 195, while 1,12E-11 is the same as 1,12*10⁻¹¹ or 0,0000000000112.								
Disclaimers	¹ The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator. ² 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.								

RESOURCE USE PER kg									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	[MJ]	4,07E+00	3,23E-02	3,52E-04	0,00E+00	2,63E-03	5,20E-02	1,15E-04	-9,22E-01
PERM	[MJ]	4,41E-01	0,00E+00	-4,41E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	4,51E+00	3,23E-02	-4,41E-01	0,00E+00	2,63E-03	5,20E-02	1,15E-04	-9,22E-01
PENRE	[MJ]	3,87E+01	2,49E+00	1,16E-02	0,00E+00	1,62E-01	3,25E-01	1,22E-02	-5,64E+00
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]	3,87E+01	2,49E+00	1,16E-02	0,00E+00	1,62E-01	3,25E-01	1,22E-02	-5,64E+00
SM	[kg]	1,16E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
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	[m³]	2,45E-02	2,73E-04	3,26E-05	0,00E+00	1,96E-05	1,32E-04	1,27E-05	-6,11E-03
Caption	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 resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Net use of fresh water								
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

WASTE CATEGORIES AND OUTPUT FLOWS PER kg									
Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	[kg]	1,02E+00	3,15E-03	4,65E-04	0,00E+00	1,63E-04	1,55E-03	9,81E-06	-2,86E-01
NHWD	[kg]	4,31E+00	2,37E-02	2,88E-02	0,00E+00	1,76E-03	1,91E-02	1,33E-04	-1,07E-01
RWD	[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
CRU	[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
MFR	[kg]	1,71E-01	0,00E+00	2,77E-02	0,00E+00	0,00E+00	9,20E-01	0,00E+00	0,00E+00
MER	[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
EEE	[MJ]	0,00E+00	0,00E+00	6,61E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	0,00E+00	0,00E+00	1,98E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy								
	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 ² or 195, while 1,12E-11 is the same as 1,12*10 ⁻¹¹ or 0,0000000000112.								

BIOGENIC CARBON CONTENT PER kg		
Parameter	Unit	At the factory gate
Biogenic carbon content in product	[kg C]	0
Biogenic carbon content in accompanying packaging	[kg C]	3,13E-03
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO ₂	

Additional information

LCA interpretation

Of all processes in the product system, A1 – Raw material supply has the highest impact, making up for around 97% of the upstream total. The supply of steel is by far the largest contributor to this process, making up for over 95% of the emissions related to this process. In module D, the avoided steel production is the largest contributor in terms of credits, relieving the final global warming potential of around 0,5 kg CO₂.

Technical information on scenarios

Transport to the building site (A4)

Scenario information	Value	Unit
Fuel type	Diesel	-
Vehicle type	Lorry and ship	-
Transport distance	6174,7398	km

Installation of the product in the building (A5)

Scenario information	Value	Unit
Ancillary materials	0	kg
Water use	0	m ³
Other resource use	0	kg
Energy type and consumption	0	kWh
Waste materials	0	kg
Output materials (Cardboard for incineration)	0,0272	kg
Direct emissions to air, soil or water	0	kg

Reference service life

RSL information		Unit
Reference service Life	60	Years

End of life (C1-C4)

The scenario used to model the end-of-life processes encompasses transportation, sorting, and treatment of dismantled materials. Here, the entire product is transported 10 km to nearest sorting/recycling station. At this station, the product is dismantled and sorted into appropriate waste fractions. These waste fractions are then transported 50 km to either incineration or recycling.

Scenario information	Value	Unit
Metal for recycling (92%)	0,9200	kg
Metal for landfill (8%)	0,0800	kg

Scenario information	Value	Unit
Transport by truck to sorting facility	10	km
Transport by truck to recycling or incineration facility	50	km
Amount of material in total	1,0272	kg

Re-use, recovery and recycling potential (D)

Scenario information/Material	Value	Unit
Displaced material	0,7327	kg
Energy recovery from waste incineration	0,2646	MJ

Indoor air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.1.

Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.

References

Publisher	 www.epddanmark.dk Template version 2025.1
Programme operator	Danish Technological Institute Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	 Nordic Green Solutions A/S Energirådgivning til erhverv Nordic Green Solutions Randersvej 2A, 8600 Silkeborg Magnus Johansen Maj@ngs.dk Phone.: +45 4010 2396
LCA software / background data	 <i>OpenLCA v.2.6.0</i> <i>Ecoinvent v3.11</i> <i>EN 15804 reference package 3.1</i>
3rd party verifier	<i>Nana Lin Rasmussen, Lin Consulting ApS</i> Verified according to Verification Checklist 1 v. 2.9.1

General programme instructions

General Programme Instructions, version 3.0, spring 2025

www.epddanmark.dk

Technical Rules and Guidelines

Technical Rules and Guidelines, version 1.0, spring 2025

www.epddanmark.dk

EN 15804

DS/EN 15804 + A2:2019 - "Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products"

nPCR 013 2013

Part B for Steel and Aluminium Construction Products

EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"