



Profiloversigt

Følgende profiler fra Knauf er omfattet af nærværende EPD-IES-0024831.

Materialenummer	Produkt navn
181947	Afslutningsprofil J13 hvid 3000 mm
479588	Hjørneprofil 50 FH 0.7 3000 mm
479592	Hjørneprofil 75/25 FH 0.7 3000 mm
182243	Indbrudsplade 1,0 900x2400
182244	Indbrudsplade 2,0 900x2400
479032	45/70 mm FLV-profil 1.0 3000 mm
823473	70 mm MR+ lyd Stolpe 2985 mm
823469	70 mm MR+ lyd Stolpe 4000 mm
823468	70 mm MR+ lyd Stolpe 5000 mm
823479	70 mm MR+ lyd Stolpe speciallængde
823467	95 mm MR+ lyd Stolpe 2985 mm
823472	95 mm MR+ lyd Stolpe 4000 mm
823471	95 mm MR+ lyd Stolpe 5000 mm
823478	95 mm MR+ lyd Stolpe speciallængde
823470	120 mm MR+ lyd Stolpe 2985 mm
823477	120 mm MR+ lyd Stolpe 4000 mm
823480	120 mm MR+ lyd Stolpe speciallængde
836285	PDP profil 25 3000 mm
478897	145 mm RY Slidset stolpe 1.0 3000 mm
478901	145 mm RY Slidset stolpe 1.0 3600 mm
478903	145 mm RY Slidset stolpe 1.0 5600 mm
478905	145 mm RY Slidset stolpe 1.5 3000 mm
478908	145 mm RY Slidset stolpe 1.5 3600 mm
478918	145 mm RY Slidset stolpe 1.5 5600 mm
478923	195 mm RY Slidset stolpe 1.0 3000 mm
478927	195 mm RY Slidset stolpe 1.0 3600 mm
478946	195 mm RY Slidset stolpe 1.0 5600 mm
478952	195 mm RY Slidset stolpe 1.5 3000 mm
478953	195 mm RY Slidset stolpe 1.5 3600 mm
478955	195 mm RY Slidset stolpe 1.5 5600 mm
491243	195 mm RY Slidset stolpe 2.0 3000 mm
226373	250 mm RY Slidset stolpe 1.0 3600 mm
226605	250 mm RY Slidset stolpe 1.0 5600 mm
226374	250 mm RY Slidset stolpe 1.5 3600 mm
226612	250 mm RY Slidset stolpe 1.5 5600 mm
237903	120/50 mm SK Flexskinne 2800 mm
182187	70/50 mm SK Flexskinne 2800 mm
182188	95/50 mm SK Flexskinne 2800 mm



182240	145 mm SKY Flex 1.0 2800 mm
182241	195 mm SKY Flex 1.0 2800 mm
478853	145 mm SKY Slidset skinne 1.0 3600 mm
478854	145 mm SKY Slidset skinne 1.5 3600 mm
478886	195 mm SKY Slidset skinne 1.0 3600 mm
478887	195 mm SKY Slidset skinne 1.5 3600 mm
226615	250 mm SKY Slidset skinne 1.0 3600 mm
226616	250 mm SKY Slidset skinne 1.5 3600 mm
479037	T-profil T 10 3000 mm
182230	120 mm TSK-2 Teleskopskinne 2500 mm
182236	95 mm TSKH-2 Teleskopskinne 2500 mm
182237	120 mm TSKH-2 Teleskopskinne 2500 mm
182242	145 mm TSKH-2 Teleskopskinne 2500 mm
214610	45 mm UZ-profil 0.7 3000 mm
214611	70 mm UZ-profil 0.7 3000 mm
214612	95 mm UZ-profil 0.7 3000 mm
214604	45 mm Z-profil 0.7 3000 mm
475874	50 mm Z-profil 1.0 3000 mm
214605	70 mm Z-profil 0.7 3000 mm
214607	95 mm Z-profil 0.7 3000 mm

Environmental Product Declaration



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

Steel Profiles

from

Europrofil AB

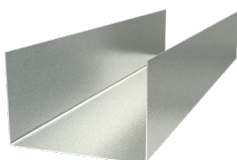
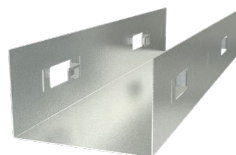
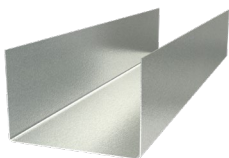
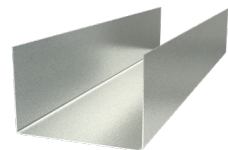
EPD of multiple products, based on a representative product C+-Regel, Plusregel

EUROPROFIL

Solutions of steel

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of multiple products from a company
EPD registration number:	EPD-IES-0024831
Version date:	2025-08-12
Validity date:	2030-08-11

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): <i>Construction products 2019:14, version 2.0.1, valid until 2030-04-07, UN CPC code: 4219</i>
PCR review was conducted by: <i>The Technical Committee of the International EPD® System. See www.environdec.com for a list of members. Review chair: Rob Rouwette (chair), Noa Meron (cochair). The review panel may be contacted via the Secretariat www.environdec.com/contact</i>

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:
<input checked="" type="checkbox"/> Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: <i>Hüdaï Kara PhD, Metsims Sustainability Consulting, Oxford, U.K.</i> Approved by: International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: Europrofil AB

Address: Pershyttans Ind.Omr., 713 91 Nora, Sweden

Contact: Adam Almgren (adam.almgren@europrofil.se)

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

Miljögiraff AB

Bläsgatan 2, 414 63 Göteborg, Sweden

Hanna Andréasson (hannaandreasson@miljogiraff.se)

Oline Haggren (oline@miljogiraff.se)

Description of the organisation: Europrofil is the leading Nordic specialist in sustainable steel building systems. From the production in Nora, in the heart of the Swedish Bergslagen region, they deliver smart steel solutions that make working days easier and contribute to a more efficient and sustainable construction industry.

The business was founded in 1982 and has been part of the Danish group Ib Andresen Industri A/S since 2006. In 2024, the group was acquired by Wegener GMBH. Together, they have a strong network that guarantees a high level of precision and safety in our deliveries.

As the leading specialists in the Nordic region, their vision is to develop the construction industry through sustainable steel building systems.

Product-related or management system-related certifications: ISO 9001- and 14001; EN 14195:2005; EN 1090-1:2009+A1:2011

PRODUCT INFORMATION

Product name: C+-Regel, Plusregel (representative product)

Product identification: All products included are steel profiles. These are: C+-Regel, Plusregel; CSP+-Regel, Ljudregel; U-Skena; UH-Skena med hög fläns; UW-Skena Wallclick; CF-Förstärkningsregel; UF-Förstärkningsregel; UY-Ytterväggsskena; CY-Ytterväggsregel; CYK-Halvslitsad karmregel; ECC-EuroCeiling Bärprofil; ECCT-EuroCeiling Tvärprofil; L-L-profil; LI-Hörnregel; LV-L-profil, vikbar; P-Primärregel; PB-Plåtband; PU Påsalningsprofil U; PZ-Påsalningsprofil Z; S-Sekundärprofil; UD-Öppningsskena; VFL Ventilerad fasadläkt ZM; VFL-ST-Skärmtegel ventilerad fasadläkt; VPB-Plåtband, vikbart; ZY-Ytterväggsregel ZY.

Visual representation of the representative product:



UN CPC code: 4219

Product description: Europrofil's Steel Profiles are metal profiles for dry walls, false ceiling and façade system construction. Products are available in different dimensions and weights.

Name and location of production site(s): All included product are produced at Europrofil AB, Industrivägen 9, 713 30 Nora, Sweden.

Multiple products: All products included in this EPD are Steel profiles without additives. 25 variations will be included in this product group, and they all consist solely out of steel. Each product has the same type of composition, where only the sheet thickness and dimensions of some products differs. The steel profiles also share the same geographical scope and production site. The steel profile "C+-Regel, Plusregel" was chosen as representative product as it is the most sold of all the products in this product group. Since the products only consist of 1 material and due to the fact that the declared unit is 1 kg of product, there will be no difference in the result for the included products of this group in the EPD.

The variation in thickness and dimensions of the 25 included products in this EPD are shown below

Product name	Sheet thickness (mm)	Dimension (mm)
C+-Regel, Plusregel (representative product)	0,46	45-200
CSP+-Regel, Ljudregel	0,46	70-120
U-Skena	0,46	45-200
UH-Skena med hög fläns	0,46	45-120
UW-Skena Wallclick	0,6	70-100
CF-Förstärkningsregel	1	45-200
UF-Förstärkningsregel	1	45-200
UY-Ytterväggsskena	1	120-250
CY-Ytterväggsregel	1 & 1,5	120-250
CYK-Halvslitsad karmregel	1,5	120-250
ECC-EuroCeiling Bärprofil	0,6	60
ECCT-EuroCeiling Tvärprofil	0,6	60
L-L-profil	0,46	20-120
LI-Hörnregel	0,46	50
LV-L-profil, vikbar	0,46	50
P-Primärregel	1	45
PB-Plåtband	0,46	100-265
PU-Påsalningsprofil U	0,7	45-95
PZ-Påsalningsprofil Z	0,7	45-95
S-Sekundärprofil	0,46-1	25-45
UD-Öppningsskena	0,46	45-200
VFL-Ventilerad fasadläkt ZM	0,7 & 1	70-120
VFL-ST-Skärmtegel ventilerad fasadläkt	0,7 & 1	70-120
VPB-Plåtband, vikbart	0,46	100-265
ZY-Ytterväggsregel ZY	1 & 1,5	120-250

Content declaration of C+-Regel, Plusregel

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

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/declared unit
Wood pallet	0,89	89%	0,4
Plastic PE straps	0,0011	0,1%	0,0
TOTAL	0,8911	89,11%	0,4

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

Hazardous substances from the candidate list of SVHC	EC No.	CAS No.	Mass-% per declared unit
-	-	-	0%

LCA INFORMATION

Declared unit:

1 kg Steel Profile. Conversion factor for the product is 1 kg per kg

Reference service life:

Not applicable

Time representativeness:

The collected data is representative of the year 2024 and was obtained directly from the supplier.

Geographical scope:

The supply of raw material A1 steel is from Europe and the transport A2 is modelled for Europe. The manufacturing in module A3 is located in Sweden. Module C and D scenarios are for Sweden.

Database(s) and LCA software used: Ecoinvent 3.10 and SimaPro Craft 10.1.

LCIA method:

The LCIA method follows the standard for Construction Products EN 15804:2012+A2:2019/AC:2021. EN 15804:2012+A2:2019/AC:2021 uses the impact categories and characterization factors of the LCIA methods used in Environmental Footprint 3.1 (EF 3.1), with the only difference that biogenic carbon dioxide uptake is calculated as -1 and biogenic carbon dioxide emissions as +1, where EF 3.1 calculates this as 0 and 0, respectively.

Cut-off criteria:

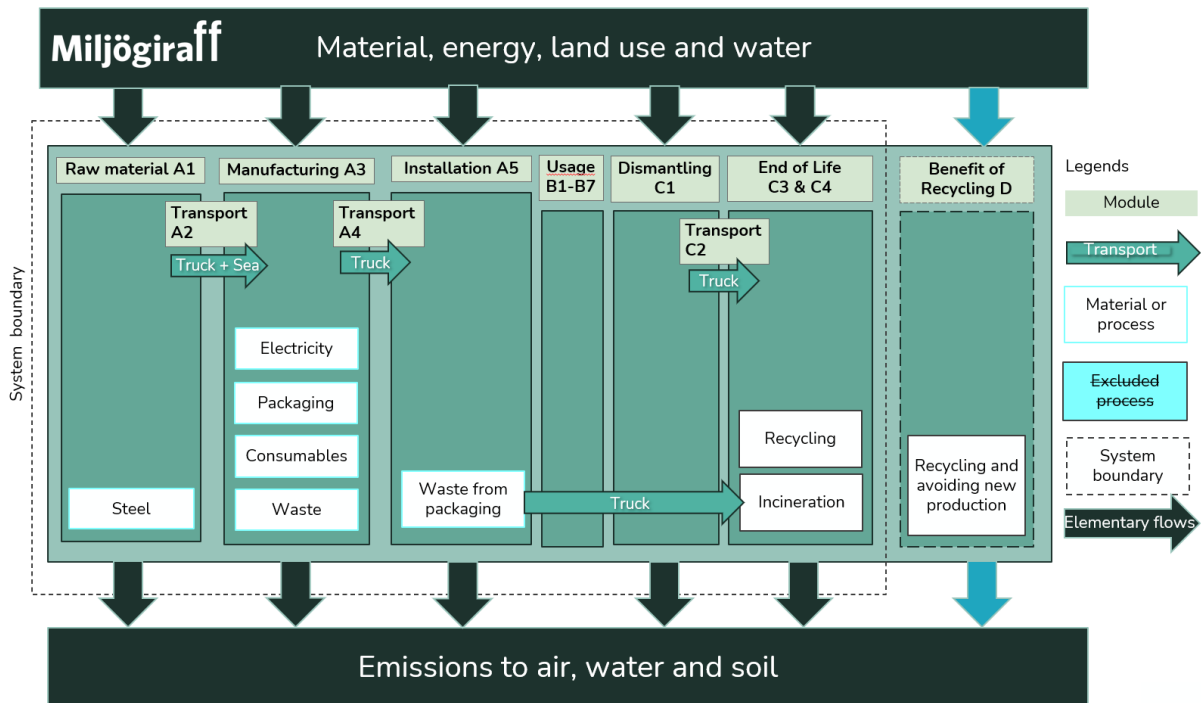
The cut-off criteria established by the PCR is 1% of all material and energy flows to a single unit process and 5% of total inflows (mass and energy) per module. No cut-offs exceeding this limit have been made.

In this study, the infrastructure and capital goods are included in the LCA analysis since it is not possible within reasonable effort to subtract the data on infrastructure/capital goods.

Description of system boundaries:

Cradle to gate with options, modules C1–C4, module D and with optional modules (A1–A3 + C + D and A4-A5 and B1-B7). However, since the product is a passive product, there will be no environmental impact during this phase.

Process flow diagram:



More information:

(A1-A2) The steel used in the Europrofil AB's steel profiles is from Europe and has an EPD. The steel is transported, by truck and sea, to a steel service centre in Sweden where it is cut before further transport by truck to Europrofil in Nora.

(A3) Europrofil AB's manufacturing takes place in Nora, Sweden, where the cut steel is folded and cut. During this process, electricity is used which also accounts for the cutting happening at the steel service centre. There is also production waste, including materials both for recycling and incineration. The finished products are packaged on wood pallets before distributed to customer.

The electricity mix for Europrofil's manufacturing has been modelled using the residual electricity mix for Sweden. This is represented using theecoinvent dataset "*Electricity, medium voltage {SE} | electricity, medium voltage, residual mix | Cut-off, U*". The climate footprint of the electricity mix is 0,0142 kg CO₂-eq per kWh.

Allocation of specific data was done for the manufacturing processes in the A3 module. All the data was obtained per year and allocated by mass of total yearly production to per kg steel profile.

(A4) The finished products are transported 126 km by diesel trucks. This is represented by the ecoinvent dataset "*Transport, freight, lorry 16-32 metric ton, EURO6 {RER}*" | *transport, freight, lorry 16-32 metric ton, EURO6* | *Cut-off, U*".

(A5) Installation of the product is assumed to occur in a way that has no environmental impact, e.g. by hand. What is considered for the installation is the waste treatment of the packaging materials that comes with the product, which follows the end-of-life treatment in module C.

(B1-B7) It is assumed that there are no significant environmental aspects during the installation or use of the product.

(C1-C4) After use the product is transported to waste processing. In the C module, default values provided by the PCR 2019:14 v.2.0.1 were used for demolition/deconstruction (C1) as no specific data was obtained. The default values for transport distances to waste treatment (C2) were also used, 80 km for materials not to be incinerated and 130 km for materials to be incinerated. The transport is modelled using the ecoinvent 3.10 dataset "*Transport, freight, lorry 16-32 metric ton, EURO5 {RER}*" | *transport, freight, lorry 16-32 metric ton, EURO5* | *Cut-off, U*".

Since the majority of customers exists in Sweden, the relevant end-of-life scenario has been represented with a Swedish case. As this scenario is a mix of recycling and incineration, a 100% scenario for each waste scenario will also be declared as per PCR rules. The results for the 100% scenarios can be found in "Additional LCA results".

For the waste treatment (C3), the steel is recycled with an 85% collection and recovery rate according to recycling rates (R2) used in the Circular footprint formula of PEF, as found in Annex C2. The environmental impact from recycling is not considered following the cut-off approach applied. The remaining waste is assumed to be incinerated, approximately 100%, according to the Swedish average scenario stated in PEF Annex C.

(D) Module D accounts for the potential environmental benefits or burdens resulting from material recycling and energy recovery during incineration.

Data quality summary according to EN 15491

The EPD is based on data collected by Europrofil AB from their site in Nora, Sweden over one year from 2024. The EPD is representative of the production of Steel Profiles without additives produced in Nora, Sweden and data are collected directly from supplier and production site. The end-of-life stage of the EPD covers Sweden. The EPD uses background data from the Ecoinvent database v3.10, 2017-2023, and EPD data for the input material steel. The quality of the relevant data used for the EPD in terms of its time, geography and technology representativeness using EN 15804:2012+A2:2019, Annex E, E.1 is very good or good. The relevant data assessed included no other poor or very poor data.

Modules declared, geographical scope, share of primary 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	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	EUR	EUR	SE	EUR	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	SE	
Share of primary data	73,4%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Declaration of data sources, reference years, data categories, and share of primary data:

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
A1 Raw material - Steel	EPD	EPD (confidential)	2021	Primary data	68%
Transport of raw materials in A2	Databases	Ecoinvent v3.10	2018-2022	Primary data	1,82%
Waste treatment in A3	Collected data	EPD Owner	2024	Primary data	3,53%
Manufacturing processes in A3 (contributing to less than 10% of GWP-GHG)	Database	Ecoinvent v3.10	2017-2023	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					73,4%

ENVIRONMENTAL PERFORMANCE

LCA results of the product – main environmental performance results

Mandatory impact category indicators according to EN 15804, per 1 kg Steel Profile

Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	2,33E+00	4,53E-02	1,03E-01	0,00E+00	3,97E-04	1,70E-02	6,16E-03	0,00E+00	-1,43E+00
GWP-fossil	kg CO ₂ eq.	2,40E+00	4,52E-02	3,75E-02	0,00E+00	3,97E-04	1,69E-02	6,15E-03	0,00E+00	-1,43E+00
GWP-biogenic	kg CO ₂ eq.	-6,48E-02	3,13E-05	6,57E-02	0,00E+00	4,34E-08	1,16E-05	5,25E-06	0,00E+00	3,22E-03
GWP-luluc	kg CO ₂ eq.	7,11E-04	1,50E-05	1,02E-05	0,00E+00	3,45E-08	5,54E-06	2,33E-06	0,00E+00	-5,71E-03
ODP	kg CFC 11 eq.	3,73E-09	9,00E-10	6,48E-10	0,00E+00	6,07E-12	3,37E-10	1,11E-10	0,00E+00	-1,06E-08
AP	mol H ⁺ eq.	5,67E-03	9,42E-05	2,28E-04	0,00E+00	3,58E-06	5,30E-05	4,58E-05	0,00E+00	-5,23E-03
EP-freshwater	kg P eq.	5,12E-06	3,53E-07	3,66E-07	0,00E+00	1,40E-09	1,30E-07	5,47E-08	0,00E+00	-7,09E-05
EP-marine	kg N eq.	1,79E-03	2,21E-05	9,99E-05	0,00E+00	1,66E-06	1,76E-05	1,97E-05	0,00E+00	-1,17E-03
EP-terrestrial	mol N eq.	1,78E-02	2,44E-04	1,07E-03	0,00E+00	1,82E-05	1,94E-04	2,17E-04	0,00E+00	-1,45E-02
POCP	kg NMVOC eq.	4,77E-03	1,57E-04	3,19E-04	0,00E+00	5,42E-06	8,30E-05	6,75E-05	0,00E+00	-4,65E-03
ADP-minerals&metals*	kg Sb eq.	6,00E-05	1,47E-07	9,29E-08	0,00E+00	1,42E-10	5,42E-08	1,01E-08	0,00E+00	-4,83E-08
ADP-fossil*	MJ	3,11E+01	6,36E-01	4,62E-01	0,00E+00	5,19E-03	2,38E-01	1,13E-01	0,00E+00	-2,07E+01
WDP*	m ³	2,56E-01	2,64E-03	3,55E-03	0,00E+00	1,12E-05	9,75E-04	1,55E-03	0,00E+00	-1,77E-01
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 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).

Note: Biogenic carbon in packaging is balanced in A1–A3.

** 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 1 kg Steel Profile

Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP-GHG¹	kg CO ₂ eq.	2,40E+00	4,53E-02	3,75E-02	0,00E+00	3,97E-04	1,69E-02	6,16E-03	0,00E+00	-1,43E+00
PM	disease inc.	1,58E-08	3,32E-09	3,80E-09	0,00E+00	1,02E-10	1,33E-09	1,35E-09	0,00E+00	-1,04E-07
IR²	kBq U-235 eq	1,94E-02	2,94E-04	1,02E-03	0,00E+00	9,04E-07	1,09E-04	9,29E-04	0,00E+00	-2,36E-01
ETP – FW*	CTUe	7,39E-01	1,73E-01	2,45E-01	0,00E+00	7,36E-04	6,38E-02	5,97E-02	0,00E+00	-1,17E+02
HTP – C*	CTUh	1,37E-09	3,21E-10	3,92E-10	0,00E+00	1,55E-12	1,18E-10	6,12E-11	0,00E+00	-4,42E-07
HTP – NC*	CTUh	2,40E-09	4,00E-10	1,63E-09	0,00E+00	6,42E-13	1,48E-10	2,97E-11	0,00E+00	-5,84E-09
Land use, SQP*	Pt	9,31E+00	3,84E-01	2,22E-01	0,00E+00	3,65E-04	1,42E-01	6,18E-02	0,00E+00	-1,32E+01
Acronyms	GWP-GHG: Global Warming Potential, Greenhouse Gases, PM: Particulate Matter, IRP: Ionizing Radiation - Human Health, ETP-FW: Ecotoxicity Potential – Freshwater, HTP-C: Human Toxicity Potential – Cancer, HTP-NC: Human Toxicity Potential – Non-Cancer, SQP: Soil Quality Potential Index									

Additional voluntary indicators e.g. the voluntary indicators from EN 15804 or the global indicators according to ISO 21930:2017

Disclaimer: The results of the impact categories land use, human toxicity (cancer), human toxicity, non-cancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.

** 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.*

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.

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 indicators

Results per 1 kg Steel Profile										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
PERE	MJ	3,26E+00	1,09E-02	1,11E-02	0,00E+00	3,19E-05	4,03E-03	3,64E-03	0,00E+00	-7,29E+00
PERM	MJ	1,70E+01	0,00E+00	-1,70E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,02E+01	1,09E-02	-1,70E+01	0,00E+00	3,19E-05	4,03E-03	3,64E-03	0,00E+00	-7,29E+00
PENRE	MJ	3,12E+01	6,77E-01	4,92E-01	0,00E+00	5,52E-03	2,53E-01	1,19E-01	0,00E+00	-2,16E+01
PENRM	MJ	3,32E-02	0,00E+00	-3,32E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,13E+01	6,77E-01	4,59E-01	0,00E+00	5,52E-03	2,53E-01	1,19E-01	0,00E+00	-2,16E+01
SM	kg	2,70E-02	0,00E+00	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	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	0,00E+00
FW	m ³	1,09E-02	9,57E-05	2,69E-04	0,00E+00	3,66E-07	3,53E-05	3,95E-05	0,00E+00	-6,64E-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									

Waste indicators

Results per 1 kg Steel Profile										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	2,42E-06	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Non-hazardous waste disposed	kg	7,55E-02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Radioactive waste disposed	kg	6,99E-04	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00

Output flow indicators

Results per 1 kg Steel Profile										
Indicator	Unit	A1-A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Material for recycling	kg	0,02	0,00	0,00	0,00	0,00	0,00	0,85	0,00	0,00
Materials for energy recovery	kg	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Exported energy, electricity	MJ	0,01	0,00	4,08	0,00	0,00	0,00	0,00	0,00	0,00
Exported energy, thermal	MJ	0,03	0,00	9,51	0,00	0,00	0,00	0,00	0,00	0,00

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

100% Recycling Scenario for modules A5, C1-C4 & D

Mandatory impact category indicators according to EN 15804, per 1 kg Steel Profile

Indicator	Unit	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	-1,22E+00	3,97E-04	1,55E-02	3,43E-03	0,00E+00	-1,43E+00
GWP-fossil	kg CO ₂ eq.	1,60E-02	3,97E-04	1,55E-02	3,43E-03	0,00E+00	-1,43E+00
GWP-biogenic	kg CO ₂ eq.	-1,24E+00	4,34E-08	1,06E-05	2,35E-06	0,00E+00	3,22E-03
GWP-luluc	kg CO ₂ eq.	5,47E-06	3,45E-08	5,06E-06	1,14E-06	0,00E+00	-5,71E-03
ODP	kg CFC 11 eq.	3,12E-10	6,07E-12	3,08E-10	5,57E-11	0,00E+00	-1,06E-08
AP	mol H ⁺ eq.	6,29E-05	3,58E-06	4,84E-05	3,07E-05	0,00E+00	-5,23E-03
EP-freshwater	kg P eq.	1,17E-07	1,40E-09	1,19E-07	1,48E-08	0,00E+00	-7,09E-05
EP-marine	kg N eq.	2,34E-05	1,66E-06	1,61E-05	1,41E-05	0,00E+00	-1,17E-03
EP-terrestrial	mol N eq.	2,57E-04	1,82E-05	1,78E-04	1,55E-04	0,00E+00	-1,45E-02
POCP	kg NMVOC eq.	9,70E-05	5,42E-06	7,59E-05	4,60E-05	0,00E+00	-4,65E-03
ADP-minerals&metals*	kg Sb eq.	4,61E-08	1,42E-10	4,95E-08	2,43E-09	0,00E+00	-4,83E-08
ADP-fossil*	MJ	2,44E-01	5,19E-03	2,17E-01	6,87E-02	0,00E+00	-2,07E+01
WDP*	m ³	1,09E-03	1,12E-05	8,91E-04	3,59E-04	0,00E+00	-1,77E-01
GWP-GHG³	kg CO ₂ eq.	1,60E-02	3,97E-04	1,55E-02	3,43E-03	0,00E+00	-1,43E+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, GWP-GHG: Global Warming Potential for Greenhouse Gases						

Disclaimer: 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

³ 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.

A1-A3).

Note: Biogenic carbon in packaging is balanced in A1–A3.)

* 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 experienced with the indicator.

100% Incineration Scenario for modules A5, C1-C4 & D

Mandatory impact category indicators according to EN 15804, per 1 kg Steel Profile

Indicator	Unit	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	1,04E-01	3,97E-04	2,52E-02	2,16E-02	0,00E+00	-1,43E+00
GWP-fossil	kg CO ₂ eq.	3,87E-02	3,97E-04	2,52E-02	2,16E-02	0,00E+00	-1,43E+00
GWP-biogenic	kg CO ₂ eq.	6,57E-02	4,34E-08	1,72E-05	2,17E-05	0,00E+00	3,22E-03
GWP-luluc	kg CO ₂ eq.	1,02E-05	3,45E-08	8,22E-06	9,09E-06	0,00E+00	-5,71E-03
ODP	kg CFC 11 eq.	6,48E-10	6,07E-12	5,00E-10	4,22E-10	0,00E+00	-1,06E-08
AP	mol H ⁺ eq.	2,28E-04	3,58E-06	7,87E-05	1,31E-04	0,00E+00	-5,23E-03
EP-freshwater	kg P eq.	3,66E-07	1,40E-09	1,94E-07	2,81E-07	0,00E+00	-7,09E-05
EP-marine	kg N eq.	1,00E-04	1,66E-06	2,62E-05	5,19E-05	0,00E+00	-1,17E-03
EP-terrestrial	mol N eq.	1,08E-03	1,82E-05	2,89E-04	5,72E-04	0,00E+00	-1,45E-02
POCP	kg NMVOC eq.	3,19E-04	5,42E-06	1,23E-04	1,90E-04	0,00E+00	-4,65E-03
ADP-minerals&metals*	kg Sb eq.	9,30E-08	1,42E-10	8,05E-08	5,33E-08	0,00E+00	-4,83E-08
ADP-fossil*	MJ	4,62E-01	5,19E-03	3,53E-01	3,63E-01	0,00E+00	-2,07E+01
WDP*	m ³	3,55E-03	1,12E-05	1,45E-03	8,32E-03	0,00E+00	-1,77E-01
GWP-GHG⁴	kg CO ₂ eq.	3,87E-02	3,97E-04	2,52E-02	2,16E-02	0,00E+00	-1,43E+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, GWP-GHG: Global Warming Potential for Greenhouse Gases						

⁴ 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.

Disclaimer: 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).

Note: Biogenic carbon in packaging is balanced in A1–A3.)

** 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 experienced with the indicator.*

ABBREVIATIONS

All abbreviations used in the EPD must be added. Please add all the abbreviations used.

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
GHG	Greenhouse Gas
PEF	Product Environmental Footprint
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-luluc	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	Renewable primary energy (excluding as raw materials) (MJ)
PERM	Renewable primary energy used as raw materials (MJ)
PERT	Total renewable primary energy (MJ)
PENRE	Non-renewable primary energy (excluding as raw materials) (MJ)
PENRM	Non-renewable primary energy used as raw materials (MJ)
PENRT	Total non-renewable primary energy (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)
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
EC No.	European Community Number
CAS No.	Chemical Abstracts Service Number
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
PE	Polyethylene

REFERENCES

General Programme Instructions of International EPD System. Version 5.0.1

PCR 2019:14. Construction products. Version 2.0.1

ISO 14025:2006, Environmental labels and declarations – Type III environmental declarations – Principles and procedures.

EN 15804:2012+A2:2019/AC:2021

Life Cycle Assessment of Steel Profiles by Europrofil AB, Miljögiraff, 2025

VERSION HISTORY

Original Version of the EPD

