



Profiloversigt

Følgende profiler fra Knauf er omfattet af nærværende EPD-IES-0024833.

Materialenummer	Produktnavn
835446	45 mm SKT UT4 skinne 3000 mm
835444	70 mm SKT UT4 skinne 3000 mm
835445	95 mm SKT UT4 skinne 3000 mm

Environmental Product Declaration



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

Steel Profiles with Dry Joint Sealant

from

Europrofil AB

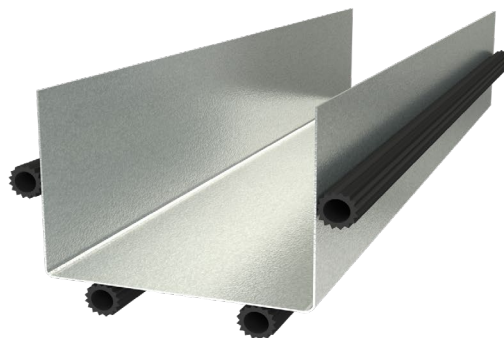
EPD of multiple products, based on a representative product UT-skena med torr fogtätning

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-0024833
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



This EPD covers multiple products: UT-skena med torr fogtätning; LIT-Hörnregel med tätning

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.

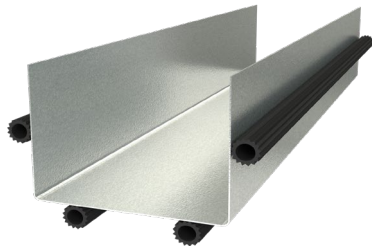
Product-related or management system-related certifications: ISO 9001- and 14001; EN 14195:2005; EN 1090-1:2009+A1:2011

PRODUCT INFORMATION

Product name: UT-skena med torr fogtätning (representative product)

Product identification: All products included are Steel Profiles with Dry Joint Sealant. These are: UT-skena med torr fogtätning & LIT-Hörnregel med tätning.

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 with Rubber additive. For this product group, two products are included. 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 "UT-skena med torr fogtätning" 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 dimension of the included products in this EPD are shown below.

Product name	Sheet thickness (mm)	Dimension (mm)
UT-skena med torr fogtätning	0,46	45–120
LIT-Hörnregel med tätning	0,46	50

Content declaration of UT-skena med torr fogtätning

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/ declared unit
Steel	0,93	2,7%	0%	0
Rubber	0,06	0%	0%	0
Glue	0,01	0%	0	0
TOTAL	1	2,5%	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 suppliers of raw material A1 are 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 modelled 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:

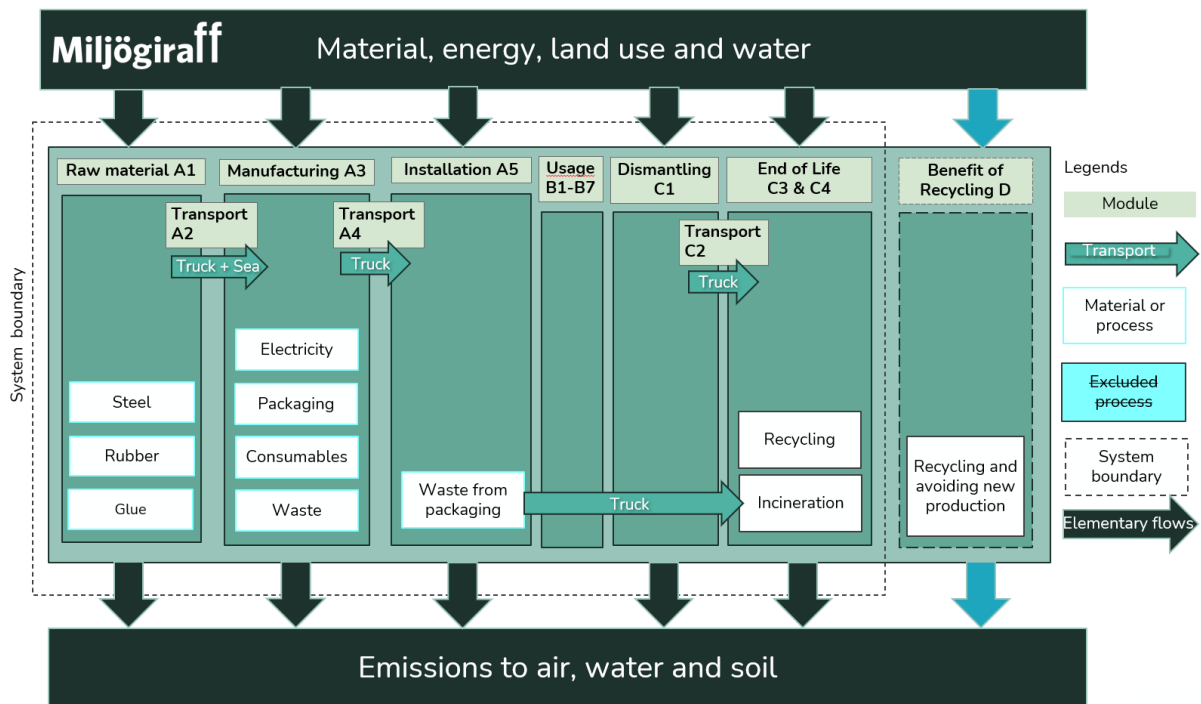
The cut-off criteria established by the PCR is 1% of all material and energy flows to a single unit process and 5% of total inflows (mass and energy) per module. No cut-offs exceeding this limit have been made.

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. The raw materials for the additives come from Swedish suppliers and are transported by truck to Europrofil in Nora.

(A3) Europrofil AB's manufacturing takes place in Nora, Sweden, where the cut steel is folded and cut, and in the same line adding the additives EPDM rubber with hot melt glue. 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 the ecoinvent 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 with Dry Joint Sealant

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		
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	66,9%			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	61,47%
Transport of raw materials in A2	Databases	Ecoinvent v3.10	2018-2022	Primary data	1,8%
Waste treatment in A3	Collected data	EPD Owner	2024	Primary data	3,64%
Manufacturing processes in A3 (contributing to less than 10% of GWP-GHG)	Database	Ecoinvent v3.10	2017-2023	Secondary data	0%
Other processes (A1-A3)	Database	Ecoinvent v3.10	2018-2023	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					66,9%

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.	2,40E+00	4,53E-02	1,03E-01	0,00E+00	3,97E-04	1,75E-02	2,27E-01	0,00E+00	-1,35E+00
GWP-fossil	kg CO ₂ eq.	2,47E+00	4,52E-02	3,75E-02	0,00E+00	3,97E-04	1,75E-02	2,27E-01	0,00E+00	-1,34E+00
GWP-biogenic	kg CO ₂ eq.	-6,42E-02	3,13E-05	6,57E-02	0,00E+00	4,34E-08	1,20E-05	3,20E-05	0,00E+00	2,74E-03
GWP-luluc	kg CO ₂ eq.	8,79E-04	1,50E-05	1,02E-05	0,00E+00	3,45E-08	5,72E-06	3,20E-06	0,00E+00	-6,32E-03
ODP	kg CFC 11 eq.	1,12E-08	9,00E-10	6,48E-10	0,00E+00	6,07E-12	3,48E-10	1,73E-10	0,00E+00	-1,08E-08
AP	mol H ⁺ eq.	6,25E-03	9,42E-05	2,28E-04	0,00E+00	3,58E-06	5,48E-05	7,53E-05	0,00E+00	-5,01E-03
EP-freshwater	kg P eq.	1,23E-05	3,53E-07	3,66E-07	0,00E+00	1,40E-09	1,35E-07	9,89E-08	0,00E+00	-6,71E-05
EP-marine	kg N eq.	1,84E-03	2,21E-05	9,99E-05	0,00E+00	1,66E-06	1,82E-05	3,13E-05	0,00E+00	-1,13E-03
EP-terrestrial	mol N eq.	1,84E-02	2,44E-04	1,07E-03	0,00E+00	1,82E-05	2,01E-04	3,45E-04	0,00E+00	-1,40E-02
POCP	kg NMVOC eq.	5,68E-03	1,57E-04	3,19E-04	0,00E+00	5,42E-06	8,58E-05	1,00E-04	0,00E+00	-4,44E-03
ADP-minerals&metals*	kg Sb eq.	5,88E-05	1,47E-07	9,29E-08	0,00E+00	1,42E-10	5,60E-08	1,82E-08	0,00E+00	-1,68E-07
ADP-fossil*	MJ	3,51E+01	6,36E-01	4,62E-01	0,00E+00	5,19E-03	2,46E-01	1,42E-01	0,00E+00	-2,06E+01
WDP*	m ³	3,72E-01	2,64E-03	3,55E-03	0,00E+00	1,12E-05	1,01E-03	8,39E-04	0,00E+00	-1,82E-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 experienced 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.	2,47E+00	4,53E-02	3,75E-02	0,00E+00	3,97E-04	1,75E-02	2,27E-01	0,00E+00	-1,35E+00
PM	disease inc.	2,87E-08	3,32E-09	3,80E-09	0,00E+00	1,02E-10	1,37E-09	1,47E-09	0,00E+00	-9,97E-08
IR²	kBq U-235 eq	2,93E-02	2,94E-04	1,02E-03	0,00E+00	9,04E-07	1,12E-04	9,68E-04	0,00E+00	-2,61E-01
ETP – FW*	CTUe	2,55E+00	1,73E-01	2,45E-01	0,00E+00	7,36E-04	6,60E-02	4,27E-01	0,00E+00	-1,09E+02
HTP – C*	CTUh	2,32E-09	3,21E-10	3,92E-10	0,00E+00	1,55E-12	1,22E-10	8,03E-11	0,00E+00	-4,12E-07
HTP – NC*	CTUh	4,60E-09	4,00E-10	1,63E-09	0,00E+00	6,42E-13	1,53E-10	9,12E-11	0,00E+00	-5,86E-09
Land use, SQP*	Pt	1,05E+01	3,84E-01	2,22E-01	0,00E+00	3,65E-04	1,46E-01	6,89E-02	0,00E+00	-1,43E+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	3,53E+00	1,09E-02	1,11E-02	0,00E+00	3,19E-05	4,17E-03	5,40E-03	0,00E+00	-8,07E+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	2,05E+01	1,09E-02	-1,70E+01	0,00E+00	3,19E-05	4,17E-03	5,40E-03	0,00E+00	-8,07E+00
PENRE	MJ	3,34E+01	6,77E-01	4,92E-01	0,00E+00	5,52E-03	2,62E-01	1,50E-01	0,00E+00	-2,14E+01
PENRM	MJ	2,28E+00	0,00E+00	-3,32E-02	0,00E+00	0,00E+00	0,00E+00	-2,24E+00	0,00E+00	0,00E+00
PENRT	MJ	3,57E+01	6,77E-01	4,59E-01	0,00E+00	5,52E-03	2,62E-01	-2,09E+00	0,00E+00	-2,14E+01
SM	kg	2,51E-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	1,13E-02	9,57E-05	2,69E-04	0,00E+00	3,66E-07	3,65E-05	3,55E-04	0,00E+00	-6,53E-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	2,25E-06	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Non-hazardous waste disposed	kg	7,02E-02	0,00	0,00	0,00	0,00	0,00	0,00	0,00	0,00
Radioactive waste disposed	kg	6,50E-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	0,79	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	0,02	0,00	4,08	0,00	0,00	0,00	0,54	0,00	0,00
Exported energy, thermal	MJ	0,04	0,00	9,51	0,00	0,00	0,00	1,26	0,00	0,00

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

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	-1,35E+00
GWP-fossil	kg CO ₂ eq.	1,60E-02	3,97E-04	1,55E-02	3,43E-03	0,00E+00	-1,34E+00
GWP-biogenic	kg CO ₂ eq.	-1,24E+00	4,34E-08	1,06E-05	2,35E-06	0,00E+00	2,74E-03
GWP-luluc	kg CO ₂ eq.	5,47E-06	3,45E-08	5,06E-06	1,14E-06	0,00E+00	-6,32E-03
ODP	kg CFC 11 eq.	3,12E-10	6,07E-12	3,08E-10	5,57E-11	0,00E+00	-1,08E-08
AP	mol H ⁺ eq.	6,29E-05	3,58E-06	4,84E-05	3,07E-05	0,00E+00	-5,01E-03
EP-freshwater	kg P eq.	1,17E-07	1,40E-09	1,19E-07	1,48E-08	0,00E+00	-6,71E-05
EP-marine	kg N eq.	2,34E-05	1,66E-06	1,61E-05	1,41E-05	0,00E+00	-1,13E-03
EP-terrestrial	mol N eq.	2,57E-04	1,82E-05	1,78E-04	1,55E-04	0,00E+00	-1,40E-02
POCP	kg NMVOC eq.	9,70E-05	5,42E-06	7,59E-05	4,60E-05	0,00E+00	-4,44E-03
ADP-minerals&metals*	kg Sb eq.	4,61E-08	1,42E-10	4,95E-08	2,43E-09	0,00E+00	-1,68E-07
ADP-fossil*	MJ	2,44E-01	5,19E-03	2,17E-01	6,87E-02	0,00E+00	-2,06E+01
WDP*	m ³	1,09E-03	1,12E-05	8,91E-04	3,59E-04	0,00E+00	-1,82E-01
GWP-GHG³	kg CO ₂ eq.	1,60E-02	3,97E-04	1,55E-02	3,43E-03	0,00E+00	-1,35E+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	2,41E-01	0,00E+00	-1,35E+00
GWP-fossil	kg CO ₂ eq.	3,87E-02	3,97E-04	2,52E-02	2,41E-01	0,00E+00	-1,34E+00
GWP-biogenic	kg CO ₂ eq.	6,57E-02	4,34E-08	1,72E-05	4,73E-05	0,00E+00	2,74E-03
GWP-luluc	kg CO ₂ eq.	1,02E-05	3,45E-08	8,22E-06	9,48E-06	0,00E+00	-6,32E-03
ODP	kg CFC 11 eq.	6,48E-10	6,07E-12	5,00E-10	4,63E-10	0,00E+00	-1,08E-08
AP	mol H ⁺ eq.	2,28E-04	3,58E-06	7,87E-05	1,55E-04	0,00E+00	-5,01E-03
EP-freshwater	kg P eq.	3,66E-07	1,40E-09	1,94E-07	3,09E-07	0,00E+00	-6,71E-05
EP-marine	kg N eq.	1,00E-04	1,66E-06	2,62E-05	6,12E-05	0,00E+00	-1,13E-03
EP-terrestrial	mol N eq.	1,08E-03	1,82E-05	2,89E-04	6,75E-04	0,00E+00	-1,40E-02
POCP	kg NMVOC eq.	3,19E-04	5,42E-06	1,23E-04	2,14E-04	0,00E+00	-4,44E-03
ADP-minerals&metals*	kg Sb eq.	9,30E-08	1,42E-10	8,05E-08	5,85E-08	0,00E+00	-1,68E-07
ADP-fossil*	MJ	4,62E-01	5,19E-03	3,53E-01	3,74E-01	0,00E+00	-2,06E+01
WDP*	m ³	3,55E-03	1,12E-05	1,45E-03	7,13E-03	0,00E+00	-1,82E-01
GWP-GHG⁴	kg CO ₂ eq.	3,87E-02	3,97E-04	2,52E-02	2,41E-01	0,00E+00	-1,35E+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.

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.

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
NMVOG	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

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

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VERSION HISTORY

Original Version of the EPD

