

Environmental Product Declaration



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

Galvanized steel profiles

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

from



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-0026158
Version date:	2025-10-07
Revision date	2025-10-13
Validity date:	2030-10-07

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, PCR 2019:14 Version 2.0.1</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, co-chair - Noa Meron</i>

Third-party Verification	
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via:	
☒ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: <i>Elisabet Amat Guasch, GREENIZE</i> Approved by: International EPD System	
Procedure for follow-up of data during EPD validity involves third party verifier: ☐ Yes ☒ No	

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but 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:

KNAUF SIA

Address:

Institūta iela 108, Saurieši, Stopiņu pag., Ropažu nov., Latvija, LV-2118

Contact:

Arturs Prieditis, Quality manager

+371 29164434, Arturs.Prieditis@knauf.com

Address and contact information of the LCA practitioner commissioned by the EPD owner, if applicable:

Aleksandrs Šiškins, Bureau Veritas Latvia SIA, riga@bureauveritas.com

Description of the organisation:

Knauf is one of the world's leading manufacturers of building materials, operating in more than 60 countries with over 300 production facilities and employing more than 23000 people. In 2023, the company's turnover reached €15.4 billion.

Knauf offers a wide range of products, including gypsum boards, plasters, insulation materials, and other construction materials that meet the highest quality standards. The company actively engages in sustainable construction, providing eco-friendly materials with "Green Certificates" and supporting the BREEAM sustainable construction assessment method.

The Knauf Latvia plant in Saurieši, opened in 1997. 1997 opened profile production, 1998 gypsum plasters, 2000 gypsum plasters. 2006 Cement base powder products, 2011 perlite production, now plant produces high-quality perlite, significantly reducing production costs and offering customers competitive prices. 2017 company invest in gypsum recycling equipment. And 2018 build ready mix line. The company has been recognized for its excellent reputation, ranking first in the Latvian Company Reputation Top for the mining and manufacturing industry in 2007. In 2024 company win "Export champion" award.

Product-related or management system-related certifications:

Company has following Management systems and Product certificates:

- Quality management system, according to ISO 9001:2015
- Environmental management system, according to ISO 14001:2015
- Energy management system, according to ISO 50001:2018
- Occupational health and safety management system, according to ISO 45001:2018
- EN 14195 - Metal framing components for gypsum board systems - Definitions, requirements and test methods
- DIN 18182-1 - Accessories for use with gypsum plasterboards - Part 1: Steel plate sections.

PRODUCT INFORMATION

Product name:

Galvanized Steel Profiles

This EPD covers the galvanized steel profile products. The EPD is based on the average results of the product group. The weight and shape of the profiles per unit length may vary, but product content and manufacturing steps are the same for all considered types.

Product identification:

All included products are galvanized steel profiles of different design and dimensions:

- UD 28/27
- CW 42/35
- CW 50/50
- CW 66/40
- CW 75/50
- CW 95/40
- CW 100/50
- CD 60/27
- UW 42/30
- UW 50/40
- UW 66/30
- UW 75/40
- UW 95/30
- UW 100/40

UN CPC code:

4219 - Other structures (except prefabricated buildings) and parts of structures, of iron, steel or aluminium; plates, rods, angles, shapes, sections, profiles, tubes and the like, prepared for use in structures, of iron, steel or aluminium; props and similar equipment for scaffolding, shuttering or pitpropping

Product description:

Internal metal partition components are made from galvanized lightweight steel sections, for use in non-loadbearing partitions and ceiling systems.

These are essential components for creating partition systems to achieve a wide range of performance criteria and varying partition heights when designed as part of a full system with Knauf plasterboard, Knauf accessories and insulation products.

Technical parameters

Profile		UD 28/27	CW 42/35	CW 50/50	CW 66/40	CW 75/50	CW 95/40	CW 100/50	CD 60/27	UW 42/30	UW 50/40	UW 66/30	UW 75/40	UW 95/30	UW 100/40
Weight	kg/m	0.377	0.588	0.718	0.720	0.830	0.855	0.950	0.570	0.480	0.600	0.608	0.710	0.664	0.377
Width	mm	28	42	50	66	75	95	100	60	42	50	66	75	95	100
Height	mm	27	35	50	40	50	40	50	27	30	40	30	40	30	40
Thickness	mm	0.6													
Length of profiles	mm	2000-6000													
Steel grade		DX51D/S220GD + AZ100 MA-C													
Density	kg/m ³	7750													
Yield strength	N/mm ²	> 300													
Tensile strength	N/mm ²	350-450													

Name and location of production site(s):

Institūta iela 108, Saurieši, Stopiņu pag., Ropažu nov., Latvija, LV-2118

References to any relevant websites for more information or explanatory materials:

<https://knauf.com/lv-LV>

CONTENT DECLARATION

Product content and packaging materials in the Tables below are displayed per Declared unit (1 kg):

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material	
			mass-% of product	kg C/DU
Steel	0,98	0%	0,0%	0 kg C
Zn-Al alloy	0,02	0%	0,0%	0 kg C
Other	<0,01	0%	0,0%	0 kg C
TOTAL	1,00	0%	0,0%	0 kg C

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/DU
Wooden spacers	<0,01	0,98%	<0,01
PET straps	<0,01	0,02%	0
PP straps	<0,01	0,01%	0
TOTAL	0,01	1,01%	<0,01

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

During the life cycle of the product any hazardous substance listed in the “Candidate List of Substances of Very High Concern (SVHC) for authorization” has not been used in a percentage higher than 0,1% of the weight of the product.

LCA INFORMATION

Declared unit:

1 kg of installed galvanized steel profile

Reference service life:

RSL of the product considered in this EPD has not been defined, as it depends on the service life of the building or structure it has been applied to.

Time representativeness:

Data represents the manufacturing of the product in 2024. The database used for proxy data is Ecoinvent v3.11. This database data is compiled in March 2025, i.e., no data is older than ten years.

Geographical scope:

This EPD has a Global scope, with modules A3, A4-A5 and C1-C4 representing European scope.

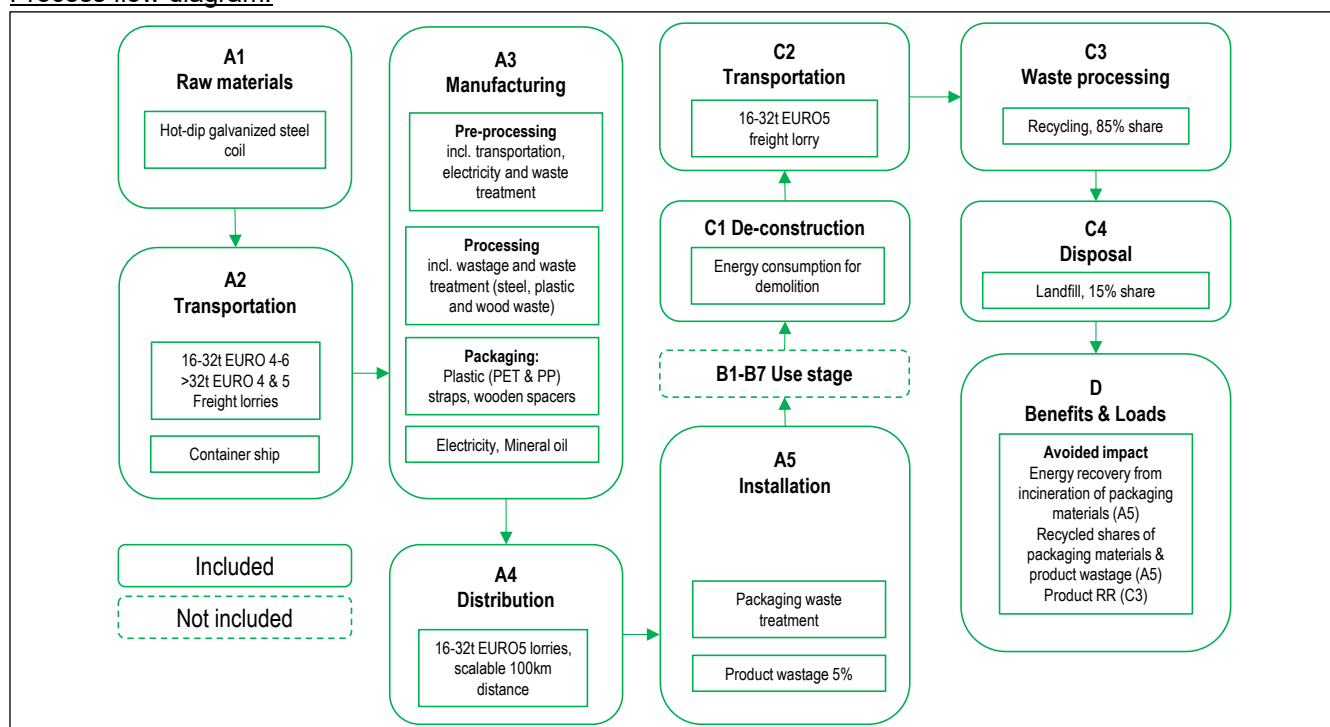
Database(s) and LCA software used:

Ecoinvent v3.11 has been used to conduct the quantitative evaluation in this study. This database provided the background system's life cycle inventory data for raw and processed materials. The LCA software used - SimaPro Craft 10.2.

Description of system boundaries:

This LCA study has been performed as “Cradle to gate with options, modules C1–C4, module D and with optional modules”, also considering Transportation module A4 and Installation module A5.

Process flow diagram:



Data quality:

The foreground data has been collected internally, considering the latest available average production amounts and measurements during the time period of 2024. Data regarding waste processing has been taken from waste scenarios for closest locations in Ecoinvent v3.11. The quality level in this study is qualified as Very good. Data quality rating procedure has been performed using a rating system where “1” means Excellent quality, and “5” means Poor quality.

Technological Representativeness, TeR	Geographic representativeness, GeR	Time Representativeness, TiR	Precision, P	Average DQR
1,6	1,7	2,0	2,6	2,0

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Transport of raw materials and packaging to the production site	Collected data	EPD owner, Ecoinvent v3.11	2024	Primary data, secondary data	13,7%
Prime hot dip galvanized steel sheet (GI) from HOA SEN GROUP ¹	EPD	EPD-IES-0022360	2023	Primary data, secondary data	16,8%
Manufacturing of product	Collected data	EPD owner	2024	Primary data	0,6%
Generation of electricity used in manufacturing of product	Database	Ecoinvent v3.11	2024	Primary data	
Production of packaging	Database	Ecoinvent v3.11	2024	Primary data, secondary data	
Other processes	Database	Ecoinvent v3.11	2024	Secondary data	0%
Total share of primary data, of GWP-GHG results for A1-A3					31,1%

Cut-off criteria:

To LCA practitioner knowledge there is no missing data for processes within the system boundaries. All the materials and processes which have been accounted for by the manufacturing company for the relevant manufacturing process are included in the LCI. The cut-off in LCA is according to PCR:” General cut-off criteria are given in standard EN 15804:2012+A2, clause 6.3.6.

The processes related to infrastructure, construction, and production of equipment, as well as tools that are not directly consumed in the production process, have been excluded. Personnel-related activities, such as transportation to and from work, have also been excluded.

Allocation:

General allocation principles have been applied according to ISO 14044:2006 4.3.4 and in line with the provisions of EN 15804:2012+A2. Inputs and outputs are allocated equally among all products using production volumes. The methodological choices for allocation for reuse, recycling and recovery have been set according to the polluter pays principle (PPP).

¹ EPD that has been used as a data source is based on an old EF 3.0 reference package. It has been examined in terms of plausibility and consistency, and it is assumed that it can be used even if it is not fully compatible with the current EF 3.1 version.

Stages and Production description

Product Stage

In **module A1** extraction and processing of raw materials and generation of electricity and heat from primary energy resources, which are used to produce these raw materials, are included. Raw material used in production is hot-dip galvanized steel coil that is represented by an EPD. As per data in the EPD of supplied hot-dip galvanized steel coils, share of post-consumer material in the product content is 0%.

For **module A2**, the transportation of raw materials and product's packaging materials to the production plant has been considered. As per data provided by the manufacturing company, EURO4 and EURO6 16-32t lorries have been used for the supply of raw material to production site. Following conservative approach, EURO5 16-32t freight lorry has been assumed for transportation of packaging materials, since no data is available. Considering the location of hot-dip galvanized steel coil manufacturer, Container ship has been used to represent transportation of raw material to Europe. Prior to arrival to the production site in Latvia, hot-dip galvanized steel coils are pre-processed, i.e., cut to width. This processing step is organized using outsourced services at various locations in Europe. Transportation from the European port to the service providers has been considered to be carried out by >32t EURO5 freight lorries.

Manufacturing (**module A3**) considers production process done at Knauf SIA site in Latvia and pre-production process, carried out using outsourced services at various locations in Europe. Therefore, residual mixes of these countries have been considered for pre-processing activities. Initially, hot-dip galvanized steel coils are supplied as wide coils. Therefore, prior to the main production steps, pre-processing takes place, and coils are cut to width to acquire coils with specific width. The finished steel profiles are then cut to length and packaged, using wooden spacers and two types of plastic straps.

Electricity consumed during manufacturing is modelled as National residual grid mix of Latvia. GWP-GHG of this particular dataset is 0.665 kg CO₂eq/kWh. Waste treatment of the packaging of raw materials is also considered in module A3, following manufacturer declared scenarios and national waste scenarios per each waste type. Off-cuts of the raw material have been considered for recycling.

Construction process Stage

Product is intended for Baltic states and, therefore, a distance of 100 km has been assumed. This allows the user of EPD to extrapolate results of module A4 to the distance from the production site to any construction site. Table below describes considered scenario for **module A4** transportation of the final product with its respective packaging.

Vehicle	kg per DU	Distance, km	Fuel consumption, l/tkm	Value, l/t
Lorry 16-32t, EURO5	1,01E+02	100	0,0441	4,41

Module A5 in this type of LCA study is optional but for the purpose of declaring product wastage and waste treatment of product's packaging, it has been declared as well. Since no estimates are available due to the lack of data, product wastage has been assumed as a conservative value of 5%. This assumption is also aligned with EN 17328:2024.

Product wastage is considered for the recycling and landfill using the same approach as described in End-of-Life stage, while packaging materials have been modelled in accordance with EU-27 municipal waste treatment. Waste treatment scenarios considered in the Installation module A5 are as follows:

Material	Recycling	Incineration	Disposal
Plastics	41.0%	31.2%	27.8%
Steel*	85.0%	0.0%	15.0%
Wood	n/a	100%	n/a

*In accordance with default application-specific and material-specific values for the parameters to be used in the application of the Circular Footprint Formula, i.e., Annex C v2.1. Landfill has been considered for disposal share as a conservative scenario.

Use Stage:

Modules B1-B7, that define use stage of the product, are not declared for this study – these are not mandatory for LCA “Cradle-to-gate with options” form.

End of Life Stage:

Modules C1-C4 and Module D are mandatory for considered EPD type, therefore, have also been considered for the purpose of this study. Additionally, since no data is available for End-of-Life stage for the intended market, default data for modelling modules C1-C4 has been considered in accordance with PCR 2019:14 v.2.0.1. Environmental performance results for additional scenarios of End-of-Life stage, i.e., 100% recycling and 100% landfill, are declared in separate subsections “Additional LCA results”.

For the purpose of declaring **module C1**, consumption of energy (1.1 kWh/t) for demolition and/or deconstruction of steel has been considered.

Galvanized steel profiles are assumed to be sent (**module C2**) to the closest waste treatment facilities, assuming 80km distance, i.e., for products/materials not to be incinerated, covered by 16-32t EURO5 Freight lorry.

Waste processing, **module C3**, considers Steel sorting activities, represented by consumed Electricity and Diesel. 85% recycling rate has been considered in accordance with the default application-specific and material-specific values for the parameters to be used in the application of the Circular Footprint Formula, i.e., Annex C v2.1.

Disposal of the remaining share, i.e., 15%, has been assumed to be conducted via landfilling in **module C4**. Energy, that is necessary for the compacting of the waste, has been considered using default value of 1.6 kWh/t.

Benefits and loads beyond the system boundaries:

According to the default application-specific and material-specific values for the parameters to be used in the application of the Circular Footprint Formula, i.e., Annex C v2.1, recycling rate in module C3 for Steel has been considered at 85% level, with 15% assumed to be disposed of via Landfill. Therefore, module D accounts for the net benefit from the Steel recycling activities considered in module C3.

Module D also considers the benefit of recovered energy from the recycling of plastic, product wastage and from incineration of plastic straps and wooden spacers, i.e., respective shares of the product packaging waste flows declared in Installation module A5. Energy generated from Incineration activities has been as follows:

- Electric energy - 3.93 MJ/kg for plastic and 1.74 MJ/kg for wood
- Natural gas as thermal energy - 7.67 MJ/kg for plastic and 3.50 MJ/kg for wood.

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

	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle
	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	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	GLO	GLO	LV*	EU	EU	ND	ND	ND	ND	ND	ND	ND	EU	EU	EU	EU	EU
Share of primary data	31.3%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	<10%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Some outsourced processing activities are carried out in other countries of European Union

ENVIRONMENTAL PERFORMANCE

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).

Mandatory impact category indicators according to EN 15804 (EF 3.1 reference package)

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	3,14E+00	1,55E-02	1,59E-01	3,75E-04	1,23E-02	6,45E-04	4,91E-04	-1,06E+00
GWP-fossil	kg CO ₂ eq.	3,13E+00	1,55E-02	1,58E-01	3,75E-04	1,23E-02	6,42E-04	4,91E-04	-1,06E+00
GWP-biogenic	kg CO ₂ eq.	8,64E-04	5,38E-07	4,35E-05	1,88E-08	4,26E-07	1,33E-06	4,21E-08	3,55E-04
GWP-luluc	kg CO ₂ eq.	6,84E-04	2,46E-07	3,43E-05	1,57E-08	1,94E-07	1,76E-06	2,45E-08	2,61E-04
ODP	kg CFC 11 eq.	2,82E-08	3,52E-10	1,45E-09	5,70E-12	2,79E-10	1,02E-11	7,13E-12	-7,88E-12
AP	mol H ⁺ eq.	1,75E-02	4,00E-05	8,80E-04	3,46E-06	3,17E-05	3,40E-06	4,44E-06	-3,17E-03
EP-freshwater	kg P eq.	8,31E-05	9,56E-09	4,16E-06	3,53E-10	7,57E-09	5,79E-08	1,42E-09	-4,65E-05
EP-marine	kg N eq.	4,02E-03	1,52E-05	2,03E-04	1,63E-06	1,21E-05	6,45E-07	2,04E-06	-7,18E-04
EP-terrestrial	mol N eq.	4,22E-02	1,67E-04	2,13E-03	1,79E-05	1,32E-04	7,17E-06	2,23E-05	-8,57E-03
POCP	kg NMVO C eq.	1,27E-02	6,62E-05	6,45E-04	5,34E-06	5,24E-05	2,24E-06	6,75E-06	-3,13E-03
ADP-minerals&metals*	kg Sb eq.	2,90E-05	4,04E-10	1,45E-06	1,31E-11	3,20E-10	4,05E-11	1,65E-11	8,37E-08
ADP-fossil*	MJ	3,58E+01	2,06E-01	1,81E+00	4,90E-03	1,63E-01	1,46E-02	6,30E-03	-8,85E+00
WDP*	m ³	5,78E-01	6,74E-05	2,89E-02	3,66E-06	5,34E-05	1,25E-04	5,38E-06	-9,27E-02
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption								

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

Biogenic carbon leaving the product system in module A5 has been balanced out already in modules A1-A3.

Additional mandatory and voluntary impact category indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG ²	kg CO ₂ eq.	3,14E+00	1,55E-02	1,59E-01	3,75E-04	1,23E-02	6,44E-04	4,91E-04	-1,06E+00
PM	Disease inc.	2,07E-08	1,03E-09	1,14E-09	9,97E-11	8,16E-10	2,32E-11	1,26E-10	-6,44E-08
IRP	kBq U-235 eq.	9,21E-04	1,98E-05	5,44E-05	4,07E-07	1,57E-05	1,24E-04	6,07E-07	2,46E-02
ETP-fw	CTUe	2,20E-01	7,36E-03	1,32E-02	1,40E-04	5,83E-03	1,13E-03	2,31E-04	-2,25E+00
HTP-c	CTUh	4,94E-11	1,04E-12	2,78E-12	2,00E-14	8,27E-13	6,56E-14	3,26E-14	1,65E-10
HTP-nc	CTUh	2,00E-09	1,03E-10	1,25E-10	3,68E-13	8,13E-11	3,07E-12	6,21E-13	1,95E-09
SQP	dimensionless	1,06E+00	2,62E-04	5,35E-02	8,32E-06	2,07E-04	1,57E-03	6,18E-03	-6,76E-01
Acronyms	PM = Particulate matter emissions; IRP = Ionising radiation, human health; ETP-fw = Ecotoxicity, freshwater; HTP-c = Human toxicity, cancer effects; HTP-nc = Human toxicity, non-cancer effects; SQP = Potential Soil quality index								

Resource use indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	6,82E-01	4,64E-04	3,43E-02	9,55E-06	3,67E-04	3,33E-03	1,53E-05	5,18E-01
PERM	MJ	1,87E-01	4,20E-05	9,38E-03	9,62E-07	3,32E-05	3,12E-04	9,90E-06	6,02E-02
PERT	MJ	8,70E-01	5,06E-04	4,37E-02	1,05E-05	4,01E-04	3,64E-03	2,52E-05	5,78E-01
PENRE	MJ	9,08E+00	2,06E-01	4,74E-01	4,90E-03	1,63E-01	1,46E-02	6,30E-03	-8,85E+00
PENRM	MJ	1,01E-02	2,42E-08	5,04E-04	1,16E-08	1,92E-08	2,97E-08	1,87E-08	-1,73E-04
PENRT	MJ	9,09E+00	2,06E-01	4,74E-01	4,90E-03	1,63E-01	1,46E-02	6,30E-03	-8,85E+00
SM	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
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	2,57E-03	3,99E-06	1,31E-04	1,48E-07	3,16E-06	8,27E-06	2,10E-07	-1,33E-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								

² 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.

Waste indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,86E-02	1,37E-06	9,32E-04	3,36E-08	1,08E-06	3,13E-08	4,20E-08	-1,40E-04
Non-hazardous waste disposed	kg	5,91E-01	6,81E-06	3,71E-02	1,72E-07	5,39E-06	8,57E-06	1,50E-01	1,84E-03
Radioactive waste disposed	kg	8,55E-06	1,24E-08	4,34E-07	2,29E-10	9,84E-09	1,01E-07	3,46E-10	2,06E-05

Output flow indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	2,07E-08	1,03E-09	1,14E-09	9,97E-11	8,16E-10	2,32E-11	1,26E-10	-6,44E-08
Material for recycling	kg	9,21E-04	1,98E-05	5,44E-05	4,07E-07	1,57E-05	1,24E-04	6,07E-07	2,46E-02
Materials for energy recovery	kg	2,20E-01	7,36E-03	1,32E-02	1,40E-04	5,83E-03	1,13E-03	2,31E-04	-2,25E+00
Exported energy, electricity	MJ	4,94E-11	1,04E-12	2,78E-12	2,00E-14	8,27E-13	6,56E-14	3,26E-14	1,65E-10
Exported energy, thermal	MJ	2,00E-09	1,03E-10	1,25E-10	3,68E-13	8,13E-11	3,07E-12	6,21E-13	1,95E-09

Biogenic carbon content

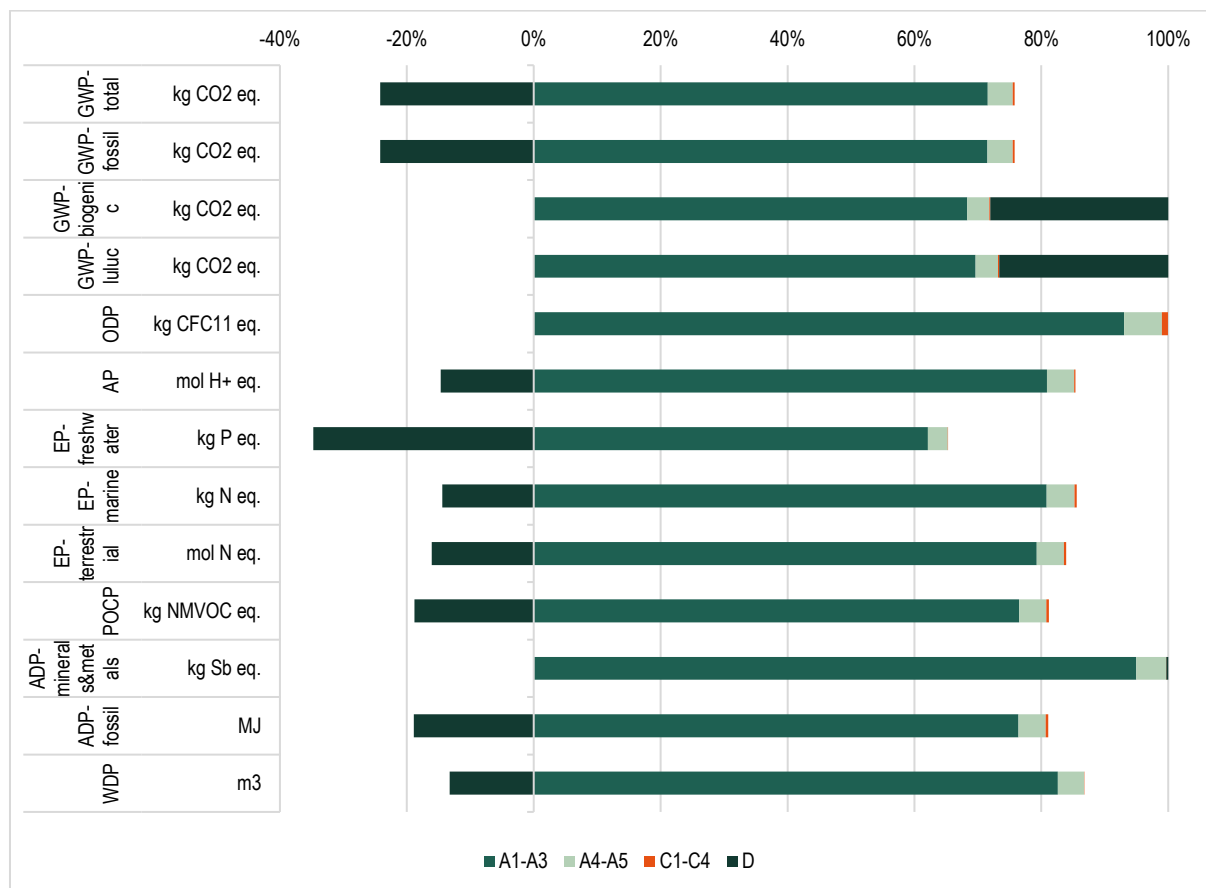
Results per declared unit – 1 kg of installed galvanized steel profile	
Biogenic carbon content	Quantity
Carbon content in product, kg C	0,00E+00
Carbon content in accompanying packaging, kg C	4,47E-03

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg CO₂

LCA Interpretation

The estimated impact assessment results are only relative statements that do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins, or risks.

Contribution to environmental impact per each module for the declared unit of **1 kg of installed galvanized steel profile** is displayed in following Figure:



Contribution to the environmental impact, per Stage, for 1 kg of installed galvanized steel profile

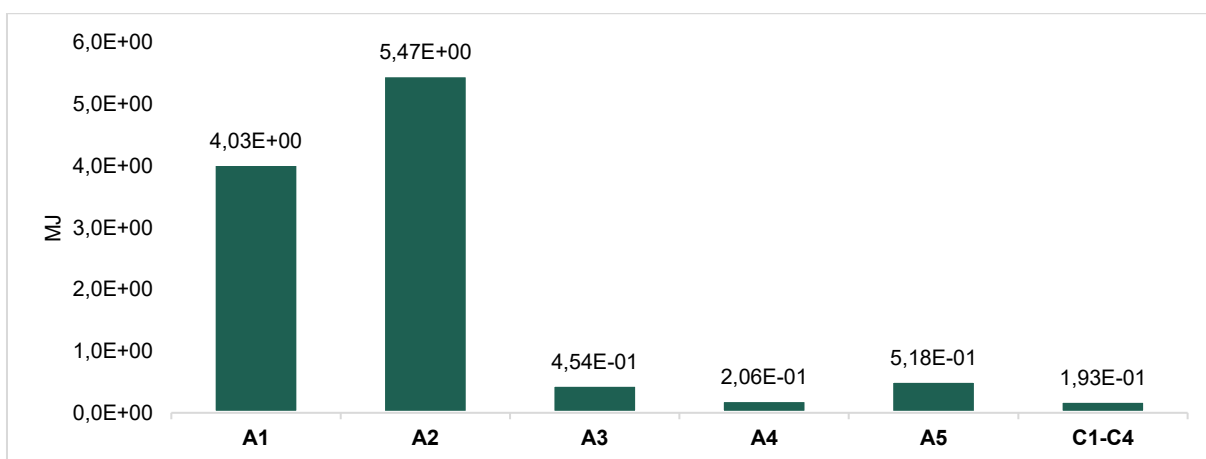
Regarding Climate change, the highest impact is generated in Raw material module A1 and Transport module A2, resulting in respective 81% and 13% shares of the total impact, while the whole **Product stage A1-A3 is generating 94%**. Since considered product is intended for Baltic states, module A4 of Distribution and installation stage is generating insignificant share, with all impact concentrated in Installation module A5 (5%). End-of-Life stage C1-C4 in terms of GWP is insignificant, generating impact only in Transport module C2. Without any exclusions **Product stage A1-A3 is the main driver** for all considered impact categories.

Nevertheless, it is necessary to note that there is a positive impact of module D, especially in such impact categories as Global warming potential, Abiotic depletion potential (fossil) and Eutrophication potential (freshwater). Module D accounts for avoided impact of generated energy, both Electric and Thermal, from incineration of packaging materials (A5) and recycling of the steel itself.

Considering total demand of primary energy per declared unit, that has been calculated using Cumulative Energy Demand (LHV) V1.01 impact assessment method, demand of primary energy is

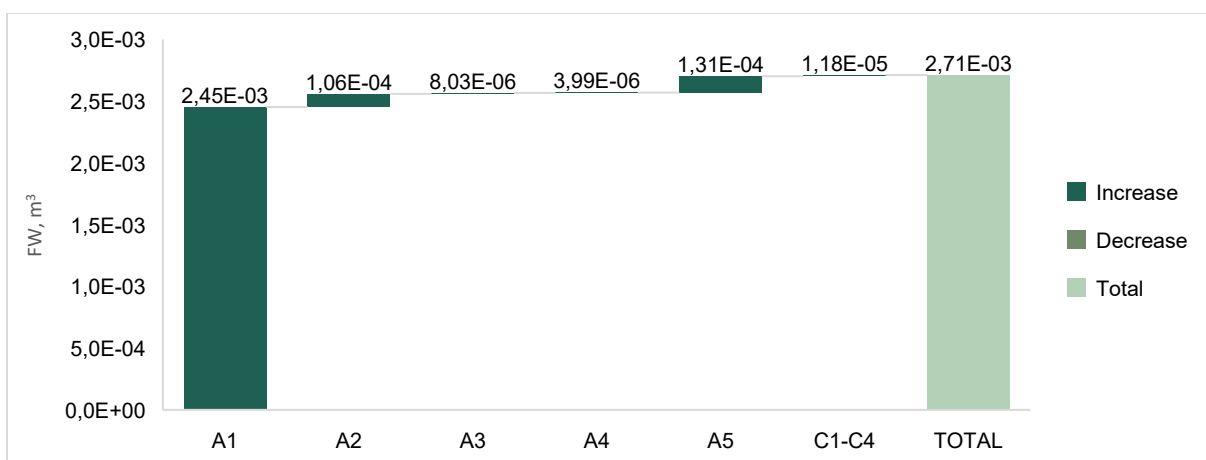
displayed in following Figure. With 91.6% resulting in Product stage (A1-A3), demand of primary energy for **1 kg of installed galvanized steel profile** is distributed as follows:

- 37.1% for Raw material (A1)
- 50.3% for Transport (A2)
- 4.2% for Manufacturing (A3)
- 1.9% for Transport (A4)
- 4.8% for Installation module (A5)
- 1.8% for End-of-Life stage (C1-C4)



Primary energy demand per 1 kg of installed galvanized steel profile

Other key effect factor is Freshwater consumption, that is displayed in following Figure as a Waterfall chart. A waterfall chart shows a running total as values are added or subtracted. It's useful for understanding how an initial value of net Freshwater use is affected by a series of positive and negative values. In case of **1 kg of installed galvanized steel profile**, no decrease has been observed in any of considered stages. Similarly to Primary energy demand, in terms of freshwater use level Product stage (A1-A3) is also responsible for most of its demand. The second biggest contributor is Installation module A5, with Manufacturing module A3 and other declared modules generating less insignificant impact.



Net freshwater use for 1 kg of installed galvanized steel profile

ADDITIONAL ENVIRONMENTAL, SOCIAL AND ECONOMIC INFORMATION

The Knauf factory in Saurieši, Latvia, manufactures metal profiles for drywall systems using hot-dip galvanized steel coils primarily sourced from certified international suppliers, such as HOA SEN GROUP. These coils are transported via intercontinental container shipping to Europe and further processed by European service centers before delivery to the Knauf plant. Despite global sourcing, the supply chain is optimized through consolidated shipments and reliable European logistics partners, helping to reduce overall environmental impact.

Steel is a fully recyclable material, and the production of profiles generates scrap that is completely returned into the recycling process. This ensures efficient use of resources and supports the circular economy. The durability and long service life of steel profiles contribute to sustainable construction practices, particularly in lightweight building systems where material efficiency and recyclability are key benefits.

The factory is certified under ISO 14001:2015, demonstrating the company's commitment to reducing environmental impact and efficiently managing resources and energy. Additionally, Knauf actively participates in the CO₂ emissions trading system, supporting global efforts to combat climate change.

The Knauf factory in Saurieši employs 200 staff members, providing stable employment in the local region. The company's annual turnover amounts to 100 million euros, underscoring its significant contribution to the Latvian economy.

Knauf invests actively in employee education and development, offering training programs and workplace safety initiatives that comply with ISO 45001:2018 standard. As part of its corporate social responsibility, Knauf supports local community projects, including educational initiatives and environmental protection activities.

The company's core values include sustainability, innovation, and collaboration, ensuring the delivery of high-quality building materials with added value for both local and international customers.

Additional LCA results - 100% recycling scenario

Mandatory impact category indicators according to EN 15804 (EF 3.1 reference package)

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	3,14E+00	1,55E-02	1,59E-01	3,75E-04	1,23E-02	7,58E-04	0,00E+00	-1,24E+00
GWP-fossil	kg CO ₂ eq.	3,13E+00	1,55E-02	1,58E-01	3,75E-04	1,23E-02	7,55E-04	0,00E+00	-1,24E+00
GWP-biogenic	kg CO ₂ eq.	8,64E-04	5,38E-07	4,35E-05	1,88E-08	4,26E-07	1,57E-06	0,00E+00	4,15E-04
GWP-luluc	kg CO ₂ eq.	6,84E-04	2,46E-07	3,43E-05	1,57E-08	1,94E-07	2,07E-06	0,00E+00	3,06E-04
ODP	kg CFC 11 eq.	2,82E-08	3,52E-10	1,45E-09	5,70E-12	2,79E-10	1,20E-11	0,00E+00	-3,03E-10
AP	mol H ⁺ eq.	1,75E-02	4,00E-05	8,80E-04	3,46E-06	3,17E-05	4,00E-06	0,00E+00	-3,70E-03
EP-freshwater	kg P eq.	8,31E-05	9,56E-09	4,16E-06	3,53E-10	7,57E-09	6,81E-08	0,00E+00	-5,43E-05
EP-marine	kg N eq.	4,02E-03	1,52E-05	2,03E-04	1,63E-06	1,21E-05	7,59E-07	0,00E+00	-8,38E-04
EP-terrestrial	mol N eq.	4,22E-02	1,67E-04	2,13E-03	1,79E-05	1,32E-04	8,43E-06	0,00E+00	-1,00E-02
POCP	kg NMVO C eq.	1,27E-02	6,62E-05	6,45E-04	5,34E-06	5,24E-05	2,64E-06	0,00E+00	-3,66E-03
ADP-minerals&metals*	kg Sb eq.	2,90E-05	4,04E-10	1,45E-06	1,31E-11	3,20E-10	4,76E-11	0,00E+00	9,77E-08
ADP-fossil*	MJ	3,58E+01	2,06E-01	1,81E+00	4,90E-03	1,63E-01	1,72E-02	0,00E+00	-1,03E+01
WDP*	m ³	5,78E-01	6,74E-05	2,89E-02	3,66E-06	5,34E-05	1,47E-04	0,00E+00	-1,08E-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 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.

Biogenic carbon leaving the product system in module A5 has been balanced out already in modules A1-A3.

Additional mandatory and voluntary impact category indicators

Results per declared unit – 1 kg of installed galvanized steel profile

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG ³	kg CO ₂ eq.	3,14E+00	1,55E-02	1,59E-01	3,75E-04	1,23E-02	7,58E-04	0,00E+00	-1,24E+00
PM	Disease inc.	2,07E-08	1,03E-09	1,14E-09	9,97E-11	8,16E-10	2,73E-11	0,00E+00	-7,52E-08
IRP	kBq U-235 eq.	9,21E-04	1,98E-05	5,44E-05	4,07E-07	1,57E-05	1,45E-04	0,00E+00	2,88E-02
ETP-fw	CTUe	2,20E-01	7,36E-03	1,32E-02	1,40E-04	5,83E-03	1,33E-03	0,00E+00	-2,62E+00
HTP-c	CTUh	4,94E-11	1,04E-12	2,78E-12	2,00E-14	8,27E-13	7,71E-14	0,00E+00	1,93E-10
HTP-nc	CTUh	2,00E-09	1,03E-10	1,25E-10	3,68E-13	8,13E-11	3,62E-12	0,00E+00	2,28E-09
SQP	dimensionless	1,06E+00	2,62E-04	5,35E-02	8,32E-06	2,07E-04	1,85E-03	0,00E+00	-7,89E-01
Acronyms	PM = Particulate matter emissions; IRP = Ionising radiation, human health; ETP-fw = Ecotoxicity, freshwater; HTP-c = Human toxicity, cancer effects; HTP-nc = Human toxicity, non-cancer effects; SQP = Potential Soil quality index								

Resource use indicators

Results per declared unit – 1 kg of installed galvanized steel profile

Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	6,82E-01	4,64E-04	3,43E-02	9,55E-06	3,67E-04	3,91E-03	0,00E+00	6,06E-01
PERM	MJ	1,87E-01	4,20E-05	9,38E-03	9,62E-07	3,32E-05	3,68E-04	0,00E+00	7,05E-02
PERT	MJ	8,70E-01	5,06E-04	4,37E-02	1,05E-05	4,01E-04	4,28E-03	0,00E+00	6,77E-01
PENRE	MJ	9,08E+00	2,06E-01	4,74E-01	4,90E-03	1,63E-01	1,72E-02	0,00E+00	-1,03E+01
PENRM	MJ	1,01E-02	2,42E-08	5,04E-04	1,16E-08	1,92E-08	3,50E-08	0,00E+00	-2,02E-04
PENRT	MJ	9,09E+00	2,06E-01	4,74E-01	4,90E-03	1,63E-01	1,72E-02	0,00E+00	-1,03E+01
SM	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
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	2,57E-03	3,99E-06	1,31E-04	1,48E-07	3,16E-06	9,73E-06	0,00E+00	-1,55E-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								

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.

Waste indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,86E-02	1,37E-06	9,32E-04	3,36E-08	1,08E-06	3,69E-08	0,00E+00	-1,63E-04
Non-hazardous waste disposed	kg	5,91E-01	6,81E-06	3,71E-02	1,72E-07	5,39E-06	1,01E-05	0,00E+00	2,15E-03
Radioactive waste disposed	kg	8,55E-06	1,24E-08	4,34E-07	2,29E-10	9,84E-09	1,19E-07	0,00E+00	2,41E-05

Output flow indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	1,41E-03	0,00E+00	4,26E-02	0,00E+00	0,00E+00	1,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	2,79E-06	0,00E+00	1,83E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	5,45E-06	0,00E+00	3,67E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Additional LCA results - 100% landfill scenario

Mandatory impact category indicators according to EN 15804 (EF 3.1 reference package)

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	3,14E+00	1,55E-02	1,59E-01	3,75E-04	1,23E-02	0,00E+00	3,28E-03	-5,39E-02
GWP-fossil	kg CO ₂ eq.	3,13E+00	1,55E-02	1,58E-01	3,75E-04	1,23E-02	0,00E+00	3,27E-03	-5,39E-02
GWP-biogenic	kg CO ₂ eq.	8,64E-04	5,38E-07	4,35E-05	1,88E-08	4,26E-07	0,00E+00	2,81E-07	1,31E-05
GWP-luluc	kg CO ₂ eq.	6,84E-04	2,46E-07	3,43E-05	1,57E-08	1,94E-07	0,00E+00	1,64E-07	7,66E-06
ODP	kg CFC 11 eq.	2,82E-08	3,52E-10	1,45E-09	5,70E-12	2,79E-10	0,00E+00	4,75E-11	1,67E-09
AP	mol H ⁺ eq.	1,75E-02	4,00E-05	8,80E-04	3,46E-06	3,17E-05	0,00E+00	2,96E-05	-1,60E-04
EP-freshwater	kg P eq.	8,31E-05	9,56E-09	4,16E-06	3,53E-10	7,57E-09	0,00E+00	9,48E-09	-2,37E-06
EP-marine	kg N eq.	4,02E-03	1,52E-05	2,03E-04	1,63E-06	1,21E-05	0,00E+00	1,36E-05	-3,57E-05
EP-terrestrial	mol N eq.	4,22E-02	1,67E-04	2,13E-03	1,79E-05	1,32E-04	0,00E+00	1,49E-04	-4,25E-04
POCP	kg NMVO C eq.	1,27E-02	6,62E-05	6,45E-04	5,34E-06	5,24E-05	0,00E+00	4,50E-05	-1,56E-04
ADP-minerals&metals*	kg Sb eq.	2,90E-05	4,04E-10	1,45E-06	1,31E-11	3,20E-10	0,00E+00	1,10E-10	4,17E-09
ADP-fossil*	MJ	3,58E+01	2,06E-01	1,81E+00	4,90E-03	1,63E-01	0,00E+00	4,20E-02	-4,90E-01
WDP*	m ³	5,78E-01	6,74E-05	2,89E-02	3,66E-06	5,34E-05	0,00E+00	3,58E-05	-4,93E-03
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption								

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

Biogenic carbon leaving the product system in module A5 has been balanced out already in modules A1-A3.

Additional mandatory and voluntary impact category indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-GHG ⁴	kg CO ₂ eq.	3,14E+00	1,55E-02	1,59E-01	3,75E-04	1,23E-02	0,00E+00	3,28E-03	-5,39E-02
PM	Disease inc.	2,07E-08	1,03E-09	1,14E-09	9,97E-11	8,16E-10	0,00E+00	8,41E-10	-3,09E-09
IRP	kBq U-235 eq.	9,21E-04	1,98E-05	5,44E-05	4,07E-07	1,57E-05	0,00E+00	4,05E-06	8,36E-04
ETP-fw	CTUe	2,20E-01	7,36E-03	1,32E-02	1,40E-04	5,83E-03	0,00E+00	1,54E-03	-1,12E-01
HTP-c	CTUh	4,94E-11	1,04E-12	2,78E-12	2,00E-14	8,27E-13	0,00E+00	2,17E-13	7,51E-12
HTP-nc	CTUh	2,00E-09	1,03E-10	1,25E-10	3,68E-13	8,13E-11	0,00E+00	4,14E-12	8,41E-11
SQP	dimensionless	1,06E+00	2,62E-04	5,35E-02	8,32E-06	2,07E-04	0,00E+00	4,12E-02	-3,70E-02
Acronyms	PM = Particulate matter emissions; IRP = Ionising radiation, human health; ETP-fw = Ecotoxicity, freshwater; HTP-c = Human toxicity, cancer effects; HTP-nc = Human toxicity, non-cancer effects; SQP = Potential Soil quality index								

Resource use indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	6,82E-01	4,64E-04	3,43E-02	9,55E-06	3,67E-04	0,00E+00	1,02E-04	1,72E-02
PERM	MJ	1,87E-01	4,20E-05	9,38E-03	9,62E-07	3,32E-05	0,00E+00	6,60E-05	1,94E-03
PERT	MJ	8,70E-01	5,06E-04	4,37E-02	1,05E-05	4,01E-04	0,00E+00	1,68E-04	1,91E-02
PENRE	MJ	9,08E+00	2,06E-01	4,74E-01	4,90E-03	1,63E-01	0,00E+00	4,20E-02	-4,90E-01
PENRM	MJ	1,01E-02	2,42E-08	5,04E-04	1,16E-08	1,92E-08	0,00E+00	1,25E-07	-8,37E-06
PENRT	MJ	9,09E+00	2,06E-01	4,74E-01	4,90E-03	1,63E-01	0,00E+00	4,20E-02	-4,90E-01
SM	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
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	2,57E-03	3,99E-06	1,31E-04	1,48E-07	3,16E-06	0,00E+00	1,40E-06	-8,97E-05
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								

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.

Waste indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Hazardous waste disposed	kg	1,86E-02	1,37E-06	9,32E-04	3,36E-08	1,08E-06	0,00E+00	2,80E-07	-6,96E-06
Non-hazardous waste disposed	kg	5,91E-01	6,81E-06	3,71E-02	1,72E-07	5,39E-06	0,00E+00	9,99E-01	6,60E-05
Radioactive waste disposed	kg	8,55E-06	1,24E-08	4,34E-07	2,29E-10	9,84E-09	0,00E+00	2,31E-09	7,09E-07

Output flow indicators

Results per declared unit – 1 kg of installed galvanized steel profile									
Indicator	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	1,41E-03	0,00E+00	4,26E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	2,79E-06	0,00E+00	1,83E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	5,45E-06	0,00E+00	3,67E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

ABBREVIATIONS

Abbreviation	Definition
C	Carbon
CO ₂	Carbon dioxide
CPA	Statistical classification of products by activity
CPC	Central product classification
c-PCR	Complementary Product Category Rules
CPV	Common Procurement Vocabulary code
DIN	Deutsche Industrie Norm
DQR	Data quality ratio
DU	Declared unit
EF	Environmental footprint
EN	European Norm
EPD	Environmental Product Declaration
EU	European Union
GHG	Greenhouse gas
GLO	Global
GPI	General Programme Instructions
GWP	Global warming potential
ISO	International Organization for Standardization
LCA	Life Cycle Assessment
LCI	Life cycle inventory
LHV	Lower heating value
LV	Latvia
ND	Module not declared
PCR	Product Category Rules
PP	Polypropylene
PPP	Polluter pays principle
REACH	Regulation on the registration, evaluation, authorization and restriction of chemicals
SVHC	Substances of Very High Concern
UN	United Nations
UNSPSC	United Nations Standard Products and Services Code
VOC	Volatile organic compounds

REFERENCES

EN 15804+A2:2019/AC:2021. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products

EPD International (2025) General Programme Instructions of the International EPD System. Version 5.0.1 dated 2025-02-27. www.environdec.com

EPD International (2025) PCR 2019:14 Construction products, version 2.0.1. www.environdec.com

Prime hot dip galvanized steel sheet (GI) from HOA SEN GROUP, EPD-IES-0022360

PEF Annex C v2.1

LCA software SimaPro Craft 10.2

Ecoinvent v3.11

ISO 14040:2006. Environmental management – Life cycle assessment – Principles and framework

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

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

Šiškins A., (2025) LCA background report for Galvanized steel profiles by Knauf SIA

VERSION HISTORY

Original Version of the EPD, 2025-10-07

Revised Version of the EPD, 2025-10-13

Editorial update of sections Product description and Technical parameters. Initially declared dimensions contained an error – height of the profile CW 95/35 is 40mm and, therefore, the name of the profile has been changed from CW 95/35 to CW 95/40 and height of the profile in the table with technical parameters has been changed from 35mm to 40mm. Error in the steel grade corrected.

