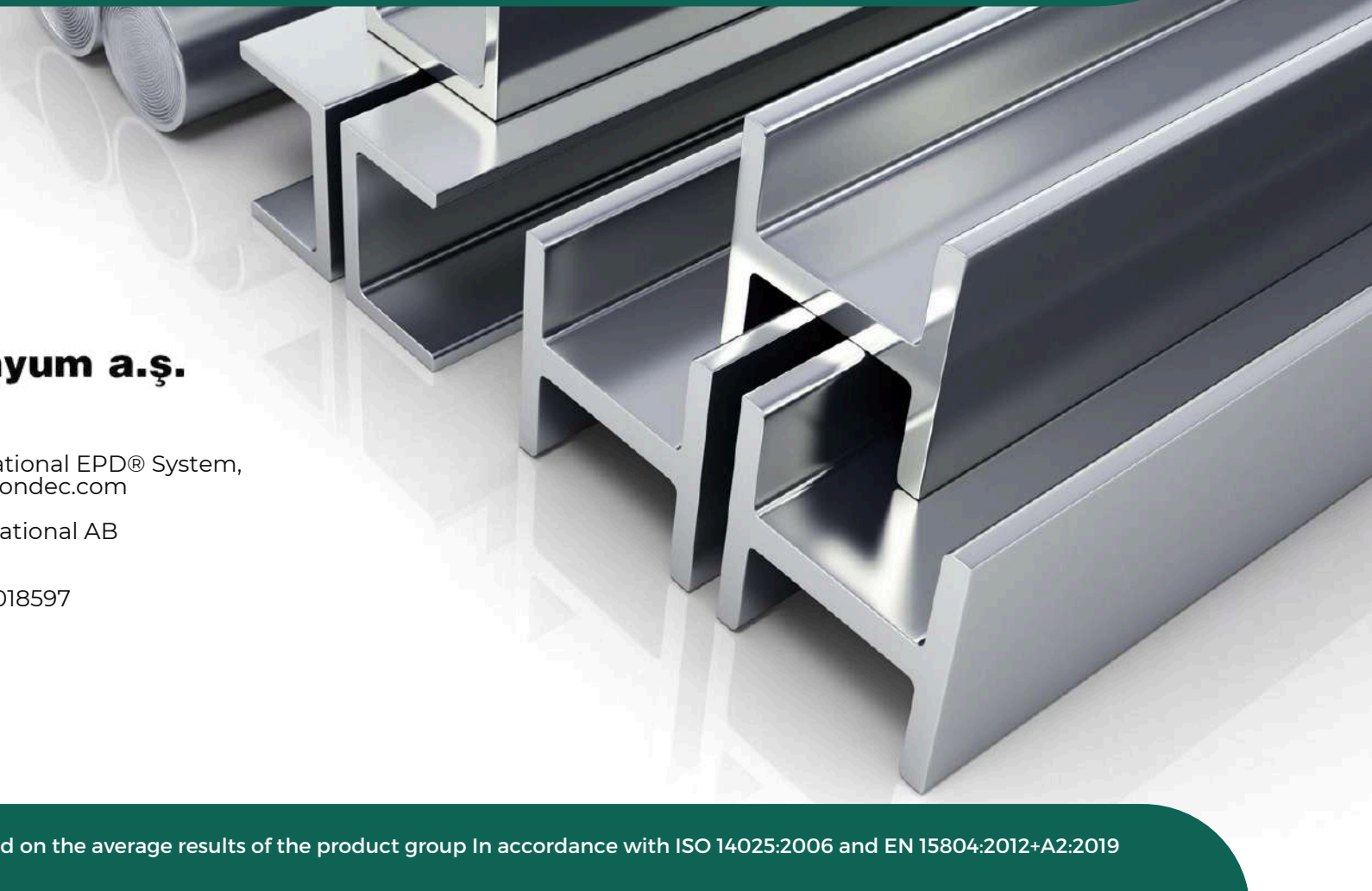
Environmental Product Declaration



In accordance with ISO 14025 for:

ANODISED ALUMINIUM PROFILE

from:

ARSLAN ALÜMİNYUM

arslan alüminyum a.ş.

Program:	The International EPD® System, www-environdec.com
Program operator:	EPD International AB
EPD registration number:	EPD-IES-0018597
Publication date:	2025-01-02
Valid until:	2030-01-01

EPD of multiple products, based on the average results of the product group In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019

Contents

Program Information

PROGRAM

The International EPD® System EPD International AB Box 210 60 SE-100 31 Stockholm, Sweden

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PRODUCT CATEGORY RULES (PCR)

CEN Standard EN 15804:2012+A2:2019, Product Category Rules (PCR): PCR 2019:14, version 1.3.4,
UN CPC code: 4153 Semi-finished products of copper, nickel, aluminium, lead, zinc and tin or their alloys
PCR review was conducted by: The Technical Committee of the International EPD System. See www.environdec.com for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.

INDEPENDENT THIRD-PARTY VERIFICATION OF THE DECLARATION AND DATA, ACCORDING TO ISO 14025:2006

☐ EPD process certification ☒ EPD verification

THIRD PARTY VERIFIER

Anni Oviir, Rangi Maja OÜ,
https://www.lcasupport.com/

In case of recognised individual verifiers
Approved by: The International EPD® System Procedure for follow-up of data during EPD validity involves third party verifier

Procedure for follow-up of data during EPD validity involves third party verifier
☐ Yes ☒ No

Program Information

The EPD owner has the sole ownership, liability, and responsibility of the EPD. EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterization factors); have equivalent content declarations; and be valid at the time of comparison.

OWNER OF THE EPD

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LCA DEVELOPED BY

LCA Study Consultant
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enexion group

Company Information

Founded in 1970 by Mehmet ARSLAN, Arslan Aluminum is one of the leading companies in the sector with its product quality, technology and environmentally friendly operations through continuous development and new investments.

Arslan Alüminyum has a capacity of 90.000 tons/year in extrusion profile production and has achieved international quality standards in surface treatment, molding, anodizing, painting, tenefer, watering and mechanical processing. With a capacity of 240,000 tons/year, recycling facility currently has a capacity of 120,000 tons/year in aluminum billet and ingot production.Arslan Alüminyum has a total of 4 factories in Bilecik 1st and 2nd Organized Industrial Zones.

1st factory located in the 1st Organized Industrial Zone, extrusion profile production is carried out. In addition, anodizing facility is also located in the 1st factory. 3rd factory located in the 2nd Organized Industrial Zone has a Recycling Facility and Casthouse, and extrusion profile production is carried out in 2nd and 4th factories.In 2nd factory, in addition to extrusion profile production, Arslan Alüminyum has powder coating painting lines and wood effect unit, die shop and design department and mechanical processing department.

Head office is located in Kağıthane/Istanbul and customs and financial affairs are carried out from head office.

Product Information

1.PRODUCT DESCRIPTION

Aluminum billets are first formed into profiles by extrusion in presses. The generated profiles ultimately go through additional processing, such as thermal break, surface treatments (anodizing and painting), and machining (which covers a variety of mechanical working procedures, including cutting, drilling, milling, shearing, threading, and bending).

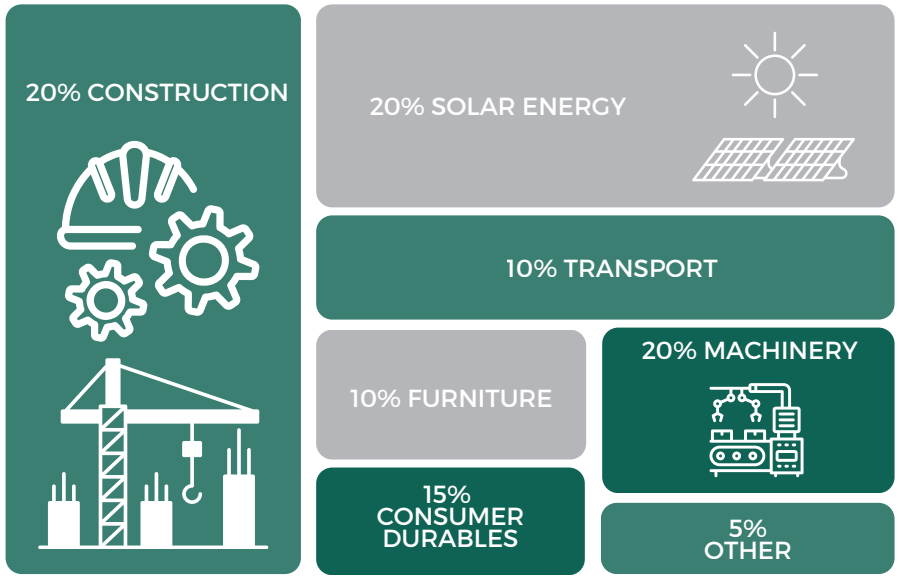
GEOGRAPHICAL SCOPE

Global

UN CPC CODE

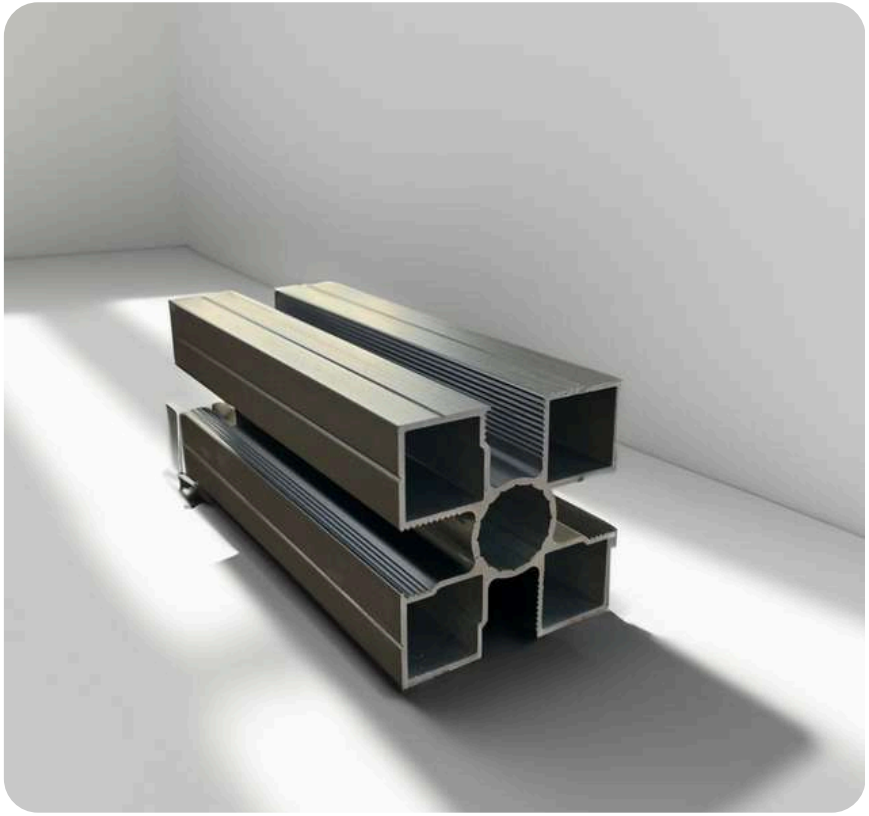
4153 - Semi-finished products of aluminium or aluminium alloys

APPLICATIONS OF ALUMINIUM WORLDWIDE



2. PRODUCT APPLICATION

Numerous markets, including the automotive, building and construction, industrial, and general engineering sectors, use the aluminum profile under study.



Content Declaration

CONTENT DECLARARTION OF ANODISED ALUMINIUM PROFILE						
Product	Primer Aluminium, Weight-%	Post-consumer Weight-%	Pre-consumer Weight-%	Additives, Weight-%	Renewable material, Weight-%	Biogenic carbon, Weight-%
Anodised Aluminium Profile	35-45	0-5	40-50	10-20	0	0

LCA Information

TIME REPRESENTATIVENESS
Data refer to the year 2022

DATABASE USED
Ecoinvent Database 3.10

LCA SOFTWARE USED
SimaPro 9.6.0.1

The project's general scope and the approach taken to accomplish the stated goals are described in the next section.

Selecting the appropriate manufacturing technologies, supporting product systems, the study's declared unit and system boundary, data collection, software & database, cut-off criteria, data quality requirements, geographical and time coverage, allocation principles, and LCIA category selection are all included.

DECLARED UNIT
The Declared Unit (DU) is 1 kg of Anodised Aluminium Profile

DESCRIPTION OF SYSTEM BOUNDARIES
Cradle to gate with modules C and D (A1-A4, C1-C4+D)

INVENTORY
The inventory for the LCA study is based on the 2022 production figures for aluminium products by Arslan Alüminyum production plant in Bilecik, Turkey. This EPD's system boundary is cradle to gate with modules C and D. (A1-A4, C1-C4+D).

ALLOCATIONS
There is no product allocation in this study.

CUT-OFF CRITERIA
All enery flows are considered in the analysis of the LCA without any cut-off criteria.

ASSUMPTIONS
Raw materials, transport, production and packaging materials data are collected from the production plant.

LCA MODELLING, CALCULATION AND DATA QUALITY
The results of the LCA with the indicators as per EPD requirement are given in the LCA result tables. According to the PCR, all energy calculations were obtained. There are no co-product allocations within the LCA study underlying this EPD.

REACH and RoHS
Arslan Alüminyum products have REACH, RoHS registration. The products do not contain any REACH and RoHS SVHC substances in amounts greater than 0.1% (1000 ppm).

LCA Information

METHODOLOGY

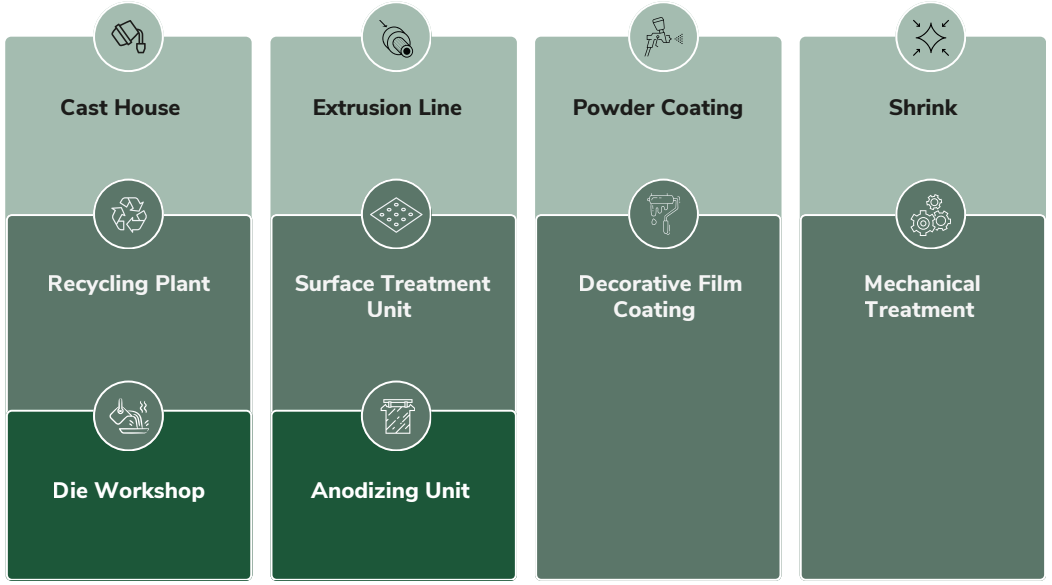
The EN 15804:2012+A2:2019 reference package is based on EF 3.1.
Allocation, cut-off, EN15804 system model used.

Average production data has been utilized to calculate the impacts for profiles of different sizes and shapes. The scenarios analyzed in this study are currently applied and represent one of the most probable alternatives.

DATA QUALITY

Data collection and quality requirements were conducted in accordance with ISO 14044. The environmental impact of raw material production was derived from the Ecoinvent database v.3.8. Arslan Alüminyum provided essential data for core processes, including the quantities of all input and output materials. Utility consumption data, such as energy and water, were sourced from invoices and measuring instruments, while waste data were obtained from the waste declaration form. Information on transport distances and methods for each input material was gathered from purchase invoices and Google Maps.
For electricity data input, Ecoinvent (versiyon 3.10) Turkey's electricity production dataset has been used, with a climate impact (GWP) of 6.3291e-1 kgCO2e/kWh for the process. Besides, for natural gas global dataset has been taken.

MANUFACTURING PROCESS



LCA Information

STANDARDS

- The production of 6000 series aluminium alloys is carried out through the casting and extrusion processes.
- Products are manufactured in accordance with the 573-3+A1 standard for Chemical Composition.
- Mechanical Properties, adherence is ensured to standards 755-1, 755-2, 755-3, 755-4,755-5,755-6,755-7, 755-8, 755-9, 12020-1, and 12020-2.
- Technical specifications for Inspection and Delivery of the produced items fall under the TS EN 15088 standard.
- Painted profiles are subject to control according to QUALICOAT specifications, while anodized profiles are checked in accordance with QUALANOD specifications.

Physical properties of aluminum in solid state	
Property	Value
State of matter	Solid
Density	2,70 g/cm³
Density in liquid state	2,375 g/cm³
Melting point	933,47 ˚k (660,32 ˚c)
Boiling point	2792 ˚k (2519 ˚c)
Heat of fusion	10,71 kj/mol
Heat of evaporation	294,0 kj/mol

Other properties of aluminum in solid state	
Property	Value
Electric resistance	26,50 NΩ•M (20˚C'DE)
Thermal conductance	237 w/(m•k)
Thermal expansion	23,1 µm/(m•k) (25˚c'de)
Velocity of sound	5000 m/s (20 ˚c'de)
Mohs hardness	2.75
Vickers hardness	167 mpa
Brinnel hardness	245 mpa

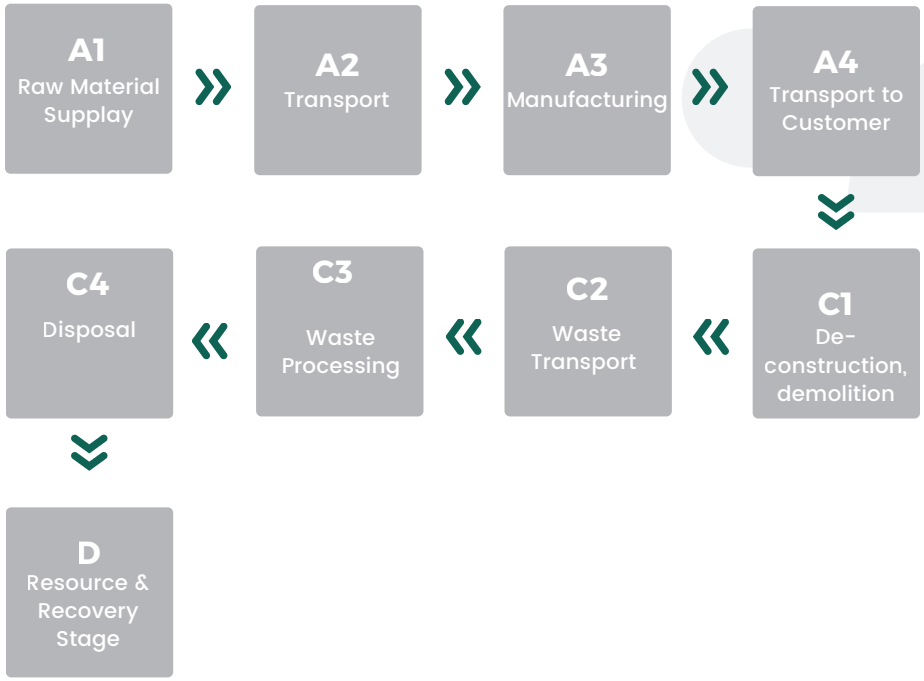
LCA Information

Arslan Alüminyum manufactures and supplies aluminum billets in a range of sizes and thicknesses, as specified in the product catalog available on its website. For the purposes of this assessment, calculations have been based on a 1 kg aluminum billet, utilizing average data collected from Arslan Alüminyum's production processes to ensure accurate representation of typical product impacts.

Table 1: Content declaration of packaging material of aluminium billet

Packaging material	Weight (kg/Mt)	Weight(%)	Biogenic carbon, weight (kg)
Cardboard	0.015	1.5	-
Plastic packaging	0.003	0.3	-
Wood packaging	0.028	2.8	0.014

SYSTEM BOUNDARIES OF PRIMARY ALUMINIUM PRODUCTION



LCA Information

More Information

A1-RAW MATERIAL SUPPLY

This module considers the extraction, processing and energy utilized in the manufacturing process of raw material.

A2-TRANSPORT

This module considers the transportation of raw materials to the factory.

A3-MANUFACTURING

This stage includes energy and water consumption during manufacturing process. Additionally, packaging materials are covered in this module. The processing of any waste arising from this stage is also included. Followed production process are as;

- Casting
- Continuous homogenizing
- Extrusion
- Packaging

A4-TRANSPORT TO CUSTOMER

This stage considers the transportation of aluminium products to the customers.

A4 Scenario Information	Unit
Fuel type and consumption of vehicle or vehicle type used for transport	Euro6 gross vehicle weight 16-32 metric ton lorry and container ship
Distance	Weighted average distance of 61 km of lorry

C1 - DE-CONSTRUCTION, DEMOLITION PROCESSES:

The majority of apps presume that deconstruction is a manual operation. Profiles are sometimes a component of a bigger structure that is being demolished when machines are involved. Impacts attributable to profiles are minimal in this instance. Consequently, no inputs were modeled in this step.

C2 - TRANSPORT FROM COLLECTION POINT TO WASTE PROCESSING AND DISPOSAL SITE:

During this phase, discarded goods are transported to the waste processing/disposal location. Trucks are assumed to travel 100 km.

C3 - SHREDDING AND SORTING FRACTIONS FOR RECYCLING:

This module includes a detailed assessment of the impacts related to the sorting and preparation steps needed for melting.

C4 - LANDFILL OF MATERIALS FRACTIONS NOT ENTERING THE RECYCLING TREATMENT:

According to the European Aluminum Association (“EAA”), 5% of aluminum waste goes to landfill.

D-RESOURCE & RECOVERY STAGE

According to European Aluminium Association (“EAA”), 95% of the aluminium wastes is recycled.

Table 2: End of life scenario table

Material exiting the system boundary	Process at the system boundary	Material/energy recovered /substituted	Related quantity
Anodised Aluminium Profile	Recycling	Aluminium	0.95 kg

LCA Information

Table 3: Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation

	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	Recycling Potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Module declared	x	x	x	x	x	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x
Geography	GLO	GLO	TR	GLO	-	-	-	-	-	-	-	-	GLO	GLO	GLO	GLO	GLO
Specific data use	>9.9%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

LCA Results

Table 4: Environmental Impact Results for 1 kg of Anodised Aluminium Profile

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
GWP-Fossil	kg CO2 eq	1.21E+01	1.77E-01	0.00E+00	1.92E-02	1.03E+00	1.07E+01	-6.54E+00
GWP-Biogenic	kg CO2 eq	-9.12E-04	0.00E+00	0.00E+00	0.00E+00	9.12E-04	0.00E+00	0.00E+00
GWP-Luluc	kg CO2 eq	1.54E-01	7.20E-05	0.00E+00	7.78E-06	8.73E-04	7.89E-04	-1.34E-01
GWP-Total	kg CO2 eq	1.45E+01	1.77E-01	0.00E+00	1.92E-02	1.04E+00	1.07E+01	-6.70E+00
ODP	kg CFC -11 eq	1.37E-07	2.63E-09	0.00E+00	2.84E-10	1.43E-08	2.55E-08	-5.31E-08
AP	mol H+ eq	8.55E-02	4.06E-04	0.00E+00	4.39E-05	1.05E-02	4.83E-03	-5.14E-02
EP-Freshwater	kg P eq	4.40E-04	1.64E-06	0.00E+00	1.78E-07	5.13E-05	8.00E-06	-1.98E-04
EP-Marine	kg N eq	1.22E-02	9.17E-05	0.00E+00	9.91E-06	9.75E-04	1.26E-03	-6.14E-03
EP-Terrestrial	mol N eq	1.33E-01	1.02E-03	0.00E+00	1.10E-04	1.22E-02	1.39E-02	-6.88E-02
POCP	kg NMVOC	4.62E-02	5.69E-04	0.00E+00	6.15E-05	3.87E-03	6.04E-03	-2.51E-02
*ADPE	kg Sb eq	1.88E-05	5.79E-07	0.00E+00	6.26E-08	1.03E-04	2.18E-06	-9.30E-06
*ADPF	MJ	1.24E+02	2.49E+00	0.00E+00	2.69E-01	1.06E+01	2.26E+01	-6.40E+01
*WDP	m3 depriv.	7.59E+00	1.13E-02	0.00E+00	1.23E-03	5.69E-01	-1.18E+00	-1.59E+00
Acronyms	GWP-total: Climate change, GWP-fossil: Climate change- fossil, GWP-biogenic: Climate change - biogenic, GWP-luluc: Climate change - land use and transformation, ODP: Ozone layer depletion, AP: Acidification terrestrial and freshwater, EP-freshwater: Eutrophication freshwater, EPmarine: Eutrophication marine, EP-terrestrial: Eutrophication terrestrial, POCP: Photochemical oxidation, ADPE: Abiotic depletion - elements, ADPF: Abiotic depletion - fossil resources, WDP: Water scarcity, PM: Respiratory inorganics - particulate matter, IR: Ionising radiation, ETP-FW: Ecotoxicity freshwater, HTP-c: Cancer human health effects, HTP-nc: Non-cancer human health effects, SQP: Land use related impacts, soil quality							
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A4: Transportation of Product C1:Demolition and Deconstruction , C2: Waste Transport, C3: Waste Processing, C4:Waste Disposal, D: Resource& Recovery Stage							

LCA Results

Table 5: Environmental Impact Results for 1 kg of Anodised Aluminium Profile

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
PM	disease inc.	1.24E-06	1.31E-08	0.00E+00	1.42E-09	6.74E-08	6.81E-08	-7.13E-07
***IR	kBq U-235 eq.	3.20E-01	8.12E-04	0.00E+00	8.78E-05	2.61E-02	4.85E-03	-2.66E-01
ETP-FW	CTUe	4.24E+01	6.69E-01	0.00E+00	7.23E-02	1.43E+01	1.33E+02	-2.18E+01
*HTP-C	CTUh	4.79E-08	9.31E-10	0.00E+00	1.01E-10	1.30E-08	1.88E-08	-2.91E-08
*HTP-NC	CTUh	1.11E-07	1.56E-09	0.00E+00	1.69E-10	8.56E-08	6.25E-08	-5.71E-08
*SQP	Pt	5.05E+01	1.51E+00	0.00E+00	1.63E-01	9.12E+00	8.51E+00	-9.20E+00
Acronyms	GWP-total: Climate change, GWP-fossil: Climate change- fossil, GWP-biogenic: Climate change - biogenic, GWP-luluc: Climate change - land use and transformation, ODP: Ozone layer depletion, AP: Acidification terrestrial and freshwater, EP-freshwater: Eutrophication freshwater, EPmarine: Eutrophication marine, EP-terrestrial: Eutrophication terrestrial, POCP: Photochemical oxidation, ADPE: Abiotic depletion - elements, ADPF: Abiotic depletion - fossil resources, WDP: Water scarcity, PM: Respiratory inorganics - particulate matter, IR: Ionising radiation, ETP-FW: Ecotoxicity freshwater, HTP-c: Cancer human health effects, HTP-nc: Non-cancer human health effects, SQP: Land use related impacts, soil quality							
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A4: Transportation of Product C1:Demolition and Deconstruction , C2: Waste Transport, C3: Waste Processing, C4:Waste Disposal, D: Resource& Recovery Stage							

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
**GHG-GWP	kg CO2 eq	3.54E+00	1.65E-01	0.00E+00	1.78E-02	9.74E-01	8.97E+00	-6.84E+00
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A4: Transportation of Product C1:Demolition and Deconstruction , C2: Waste Transport, C3: Waste Processing, C4:Waste Disposal, D: Resource& Recovery Stage							
Disclosure: Results from modules A1-A3 should not be used alone. Consider module C results for a complete and reliable interpretation. 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.								

LCA Results

Table 6: Use of Resources

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
PERE	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRE	MJ	1.29E+02	2.32E+00	0.00E+00	0.00E+00	0.00E+00	7.64E+00	-6.26E+01
PENRM	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	1.29E+02	2.32E+00	0.00E+00	0.00E+00	0.00E+00	7.64E+00	-6.26E+01
SM	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.50E-01
RSF	MJ	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
FW	m3	7.77E+00	8.13E-03	0.00E+00	0.00E+00	0.00E+00	1.99E-01	-1.68E+00
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 nonrenewable 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							
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A4: Transportation of Product C1:Demolition and Deconstruction , C2: Waste Transport, C3: Waste Processing, C4:Waste Disposal, D: Resource& Recovery Stage							

LCA Results

Table 7: Waste Output & Flows

Impact category	Unit	A1-A3	A4	C1	C2	C3	C4	D
HWD	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	kg	5.26E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RWD	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CRU	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.95E+00	0.00E+00	0.00E+00
MER	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE (Electrical)	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE (Thermal)	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Acronyms	HWD: Hazardous waste disposed, NHWD: Non-hazardous waste disposed, RWD: Radioactive waste disposed, CRU: Components for reuse, MFR: Material for recycling, MER: Materials for energy recovery, EE (Electrical): Exported energy electrical, EE (Thermal): Exported energy, Thermal							
Legend	A1: Raw Material Supply, A2: Transport, A3: Manufacturing, A4: Transportation of Product C1:Demolition and Deconstruction , C2: Waste Transport, C3: Waste Processing, C4:Waste Disposal, D: Resource& Recovery Stage							
*Disclaimer 1	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							
**Disclaimer 2	GWP-GHG = Global Warming Potential total excl. biogenic carbon following IPCC AR5 methodology. The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. The GWP-GHG indicator is identical to GWP-total except that the characterisation factor (CF) for biogenic CO2 is set to zero.							
*** Disclaimer 3	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.							

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References

ISO 14020:2000
Environmental Labels and Declaration- General Principles

ISO 14025 DIN ISO 14025:2009-11:
Environmental Labels and declarations- Type III environmental declarations
Principles and procedures

ISO 14040/44 DIN EN ISO 14040:2006-10.
Environmental management Life Cycle Assessment Principles and framework
(ISO14040:2006) and Requirements and guidelines (ISO 14044:2006)

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

GPI General Programme Instructions of the International EPD system Version 4.0

PCR for Construction Products PCR 2019:14, version 1.3.4

The International EPD System
The International EPD System is a programme for type III environmental declarations, maintaining a system to verify and register EPDs as well as keeping a library of EPDs and PCRs in accordance with ISO 14025.
www.environdec.com

Ecoinvent Version 3.8
Ecoinvent Centre
www.ecoinvent.org

SimaPro
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