Environmental Product Declaration

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

Aluminium profiles for insulation systems and drywall constructions

from

LIKOV s.r.o.

Programme:	"National Environmental Labeling Program" - Czech Republic (NPEZ)
Programme operator:	Ministry of the Environment of the Czech Republic, CENIA, Czech Environmental Information Agency, executive function of the NPEZ Agency
EPD registration number:	**3015-EPD-030066844**
Publication date:	2024-12-20
Valid until:	2029-12-20

An EPD should provide current information and may be updated if conditions change.

General information

Programme information

Programme:	"National Environmental Labeling Program" - Czech Republic (NPEZ)
Address:	Ministry of the Environment of the Czech Republic Department of Voluntary Instruments 100 10 Praha 10, Vršovická 1442/65
Website:	www.mzp.cz, www.cenia.cz
E-mail:	info@mzp.cz

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): *EN 15804:2012+A2:2019/AC:2021*
Life Cycle Assessment (LCA)
LCA accountability *LIKOV s.r.o.*
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ EPD verification by accredited certification body Third-party verification: ***Technický a zkušební ústav stavební Praha, s.p.*** is an approved certification body accountable for the third-party verification. 190 00 Praha 9, Prosecká 811/76a, CZ The certification body is accredited by: ***Českým institutem pro akreditaci, o.p.s., Osvědčení č. 456/2024*** Verifier: Ing. Lenka Vrbová
Procedure for follow-up of data during EPD validity involves third party verifier: ☐Ano ☒ne

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

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, 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 characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

Company information

Owner of the EPD: LIKOV s.r.o.

664 34 Kuřim, Blanenská 1859/14, CZ
IČO: 606 97 598
Contact:
Radek Toman, radek.toman@likov.cz, +420 541 552 503

Description of the organisation:

LIKOV s.r.o. has been operating on the market since 1994 and appears to be one of the leading manufacturers of building profiles and construction accessories in Europe. Company exports its product range to more than 40 countries worldwide. In addition to Europe, it also markets its products in Asia, Australia and South America.

Product-related or management system-related certifications:
The quality of the products is ensured by an effective quality management system according to EN ISO 9001 and is in accordance with the technical regulations regarding the type of product. The manufacturer has implemented and certified the EN ISO 14001 environmental management system, the EN ISO 50001 energy management system and the ISO 45001 occupational health and safety management system.

Name and location of production site(s):
LIKOV s.r.o., Blanenská 1859/14, Kuřim, PSČ 66434, Czech Republic

Product information

Product name:

Aluminium profiles for insulation systems and drywall constructions

Product identification:
Aluminium profiles and accessories for interior and exterior use, marked as base profiles: LO, LO perfor, LO-P, LO-F, LO-R, closing profiles: LU, LU perfor, LU-Z, LU-X, set-up and ventilation profiles: LU-N, LU-C, LU-C MAX, LU-L, LU-V, corner and half-corner beads: G-LP, G-LP 135, G-LPU.

Product description:

Aluminium profiles for insulation systems are used for horizontal set-up of first row of insulation boards or for lateral or top termination of the system.
Aluminium profiles for drywall constructions are used to protect the corners formed by the gypsum boards and the ending of the boards with highly aesthetical termination of the putty.
Detailed description of the products is available at https://likov.com/catalogue
Main areas of application:

- Horizontal set-up of external insulation systems
- Lateral and top termination of external insulation systems
- Joints and points of termination of gypsum boards

UN CPC code:
41532 Aluminium bars and profiles

Geographical scope:
The generic data used from the Ecoinvent database are used with validity for the Czech Republic (e.g. energy inputs) and in the event that data for the Czech Republic are not available, data valid for the EU or according to the location of the supplier are used. Based on the evaluation according to EN 15804+A2, Annex E, tab. E.1 the generic data used meet the quality level - medium.
Product packaging:

The profiles are packed in bundles fixed with stretch film or packed in paper cartons. The bundles/cartons are placed on wooden pallets of the appropriate length corresponding to the length of the profiles.

Environment and health during use

During the entire production process, no special health protection measures beyond the legally specified industrial protection measures for production employees are necessary. Due to the areas of use of the product, no environmental impacts and emissions to water, air or soil are expected.

LCA information

Functional unit / declared unit:

The declared unit is 1 kg of the average manufactured product – Aluminium profiles for insulation systems and drywall constructions.

Designation	Unit	Value
Declared unit	kg	1
Conversion factor to 1 kg	kg	1

Reference service life:
The reference lifetime is not declared. These are construction products with many different application purposes. The service life for this product is normally estimated at 50 years.
Time representativeness:
For specific data, the manufacturer's data for the **year 2023** is used. For generic data, data from the Ecoinvent database version 3.8 is used. Based on the evaluation according to EN 15804+A2, Annex E, tab. E.1 the generic data used meet the quality level - very good.
Database(s) and LCA software used:
SimaPro calculation software, version 9.4 SimaPro Analyst, Ecoinvent database version 3.8.
GWP-GHG from electricity production: 0.605 kg CO2 eq/kWh (CZ residual mix).

Description of system boundaries:

b) Cradle to gate with options, modules C1–C4, module D and with optional modules (A1–A3 + C + D and additional modules). The additional modules may be one or more selected from A4–A5 and/or B1–B7.
Additional module A4 is included – transport to the construction site (1 declared unit).

The production phase includes the following modules:

- **A1** - **extraction and processing of raw materials** and production of packaging from input raw materials
- **A2** - **transport of input raw materials** from the supplier to the manufacturer, waste removal
- **A3 - production of products**, production of auxiliary materials and semi-finished products, energy consumption, including waste processing until reaching a state where it ceases to be waste or after removal of the last material residues during the production phase.
  Results A1-A3 include a "***compensation report***" of biogenic CO_2 from packaging released in module A5, as module A5 is not fully included. According to the "polluter pays" principle, the costs/benefits from further management of this packaging are also included in this module.

The construction phase includes the following modules:

- **A4** - **transport to the construction site**. Transport is carried out by truck with a capacity of 7.5 - 16 t (EURO 6). Transport of the declared product unit over a distance of 1 km is considered.

The end-of-life phase includes modules:

- **C1,** deconstruction, demolition; product from the building, including its dismantling or demolition, including the initial sorting of materials at the construction site. Decomposition and/or dismantling of the product is part of the demolition of the entire building. In this case, it is assumed that the impact on the environment is very small and can be neglected. Sorted aluminium elements are intended for collection and mainly for recycling.
- **C2,** transport to the waste processing site; transportation of discarded product as part of waste processing, e.g. to a recycling site, and transportation of waste, e.g. to a final disposal site. The transport from the dismantled building is carried out by a truck with a capacity of 7.5 - 16 t (EURO 6) from 5% to the inert material landfill as a demolition of a mixed building, the estimated transport distance according to calculations: 50 km. Transport to the recycling

centre (95%) is expected to be carried out by the same type of vehicle over a distance of 25 km.

- **C3,** waste treatment for reuse, recovery and/or recycling; e.g. collection of fractions of waste from deconstruction, and processing of waste from material flows intended for reuse, recycling and energy use. A scenario is assumed where 5% of the product is deposited in an inert landfill. 95% is considered for the use of the products as recyclable material.
- **C4,** waste disposal including its pre-processing and management of the disposal site. 5% of the dismantled product is disposed of as mixed construction rubble in an inert material landfill, without taking into account the energy recovery of landfill gas from (minor) organic components.

Benefits and costs beyond the product system boundary are presented in module D.
Module D includes:

- **D,** potential for reuse, recovery and/or recycling, expressed in net impacts or benefits. In the module D scenario, the saving of primary raw material inputs (excluding transport and energy) in another product system is taken into account.

Production:
Profiles are manufactured by shaping and perforating aluminium coils or sheets.

More information:
Information module **A5** from the construction phase was not included in the LCA due to the difficult availability of input data and is therefore not declared.
Information modules from the use phase **B1 to B7** are also not declared, as these types of products, assuming correct use, do not require maintenance, repair or replacement during the normal life time in the use phase. They also do not require energy or water consumption during the use phase.
For the study, all operational data related to the consumption of main and auxiliary materials for the production of the product, energy data, diesel consumption and the distribution of annual waste production and emissions according to plant records were taken. In terms of produced waste, only those wastes that are clearly related to production activities were included in the analysis.
The processes required for the installation of production equipment and the construction of infrastructure were not included in the analysis. Also, administrative processes are not included – inputs and outputs are balanced per production phase.

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

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Modules declared	x	x	x	x	ND	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x
Geography	GLO	GLO, EU	EU, CZ	EU									EU	EU	EU	EU	GLO, EU
Specific data used	> 95 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	< 10 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0 %					-	-	-	-	-	-	-	-	-	-	-	-

The data used to calculate the EPD conforms to the following principles:

Technological point of view: Data corresponding to the current production of individual types of partial products of the plant and corresponding to the current state of the technologies used are used. Based on the evaluation according to EN 15804+A2, Annex E, tab. E.1 the generic data used meet the quality level - very good.

The aspect of completeness and completeness: Most of the input data is based on consumption balances, which are precisely recorded in the manufacturer's information system. The reliability of the source of specific data is determined by the uniformity of the collection methodology of the information system.

Consistency point of view: Uniform points of view are used throughout the report (allocation rules, age of data, technological scope of validity, temporal scope of validity, geographical scope of validity).

Credibility aspect: All important data were checked for adherence to cross-comparison of mass balances.

The GWP-GHG variability between the sub-products included (see Product Description) is less than 10%. Production takes place at only one production site.

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.

Content information

Product components	Weight %	Post-consumer material, weight-%	Biogenic carbon content in kg C/DU
Aluminum	100	0	0
TOTAL	100	0	0
Packaging materials	**Weight %**	**Weight-% (versus the product)**	**Biogenic carbon content in kg C/DU**
Packaging - wood (spruce)	65,9	5,69	2,54E-02
Packaging - LDPE	1,8	0,15	0
Packaging - steel	1,9	0,17	0
Packaging í - PP	2,5	0,22	0
Packaging - PET	1,4	0,12	0
Packaging - paper. cardboard	26,5	2,28	0
TOTAL	100	8,63	2,54E-02

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit (DU)
They are not	-	-	-

Substances listed on the list of substances of very high concern subject to authorization by the European Chemicals Agency are not contained in the product in declarable quantities.

Results of the environmental performance indicators

Mandatory impact category indicators according to EN 15804:2012+A2:2019/AC:2021 (characterisation factors based on EF 3.1 package)

Results per functional or declared unit																
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-fosil	kg CO_2 ekv.	3,02E+00	1,85E-04	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,28E-02	1,78E-02	2,83E-04	-5,89E-01
GWP-biogenic	kg CO_2 ekv.	2,61E-02	1,37E-06	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,78E-04	2,02E-04	6,88E-06	-3,81E-02
GWP- luluc	kg CO_2 ekv.	1,90E-04	9,12E-08	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,05E-05	1,07E-05	5,57E-08	-7,83E-04
GWP - total	kg CO_2 ekv.	3,05E+00	1,86E-04	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,30E-02	1,80E-02	2,90E-04	-6,28E-01
ODP	kg CFC 11 ekv.	2,77E-07	4,02E-12	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,97E-10	3,85E-10	9,80E-12	-1,52E-08
AP	mol H^+ ekv.	1,51E-02	4,04E-07	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,70E-05	9,54E-05	1,83E-06	-2,99E-03
EP-freshwater	kg P ekv.	1,99E-05	1,31E-08	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,58E-06	2,41E-06	1,32E-08	-2,52E-04
EP- marine	kg N ekv.	1,85E-03	1,02E-07	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,17E-05	3,47E-05	7,96E-07	-6,16E-04
EP - terrestrial	mol N ekv.	2,02E-02	1,04E-06	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,18E-04	3,71E-04	8,54E-06	-6,78E-03
POCP	kg NMVOC ekv.	5,91E-03	6,27E-07	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,35E-05	1,35E-04	3,39E-06	-2,16E-03
ADP- minerals& metals*	kg Sb ekv.	6,77E-07	6,04E-10	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,29E-08	4,75E-08	2,98E-10	-7,97E-05
ADP-fosil*	MJ	4,52E+01	2,62E-03	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,21E-01	3,04E-01	7,19E-03	-7,34E+00
WDP*	m^3	1,60E+00	1,10E-05	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,23E-03	-8,81E-03	2,62E-05	-8,95E-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 of these results are high or as there is limited experience with the indicator.*
Disclaimer: If module C is included then when assessing the results of A1-A3, also take into account the results of modules C.

Additional mandatory and voluntary impact category indicators

Results per functional or declared unit																
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 ekv.	2,94E+00	1,85E-04	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,28E-02	1,78E-02	2,83E-04	-5,93E-01
PM	Disease incidence	2,15E-07	1,38E-11	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,43E-09	3,33E-09	4,61E-11	-2,12E-08
IRP	kBq U235 ekv.	4,10E-01	3,55E-06	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,20E-04	4,44E-04	6,85E-06	-5,86E-02
ETP- fw	CTUe	1,04E+01	1,12E-03	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,41E-01	1,32E+00	2,62E-03	-2,54E+01
HTP-c	CTUh	1,79E-08	4,42E-14	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,74E-12	1,51E-11	5,00E-14	-2,71E-10
HTP- nc	CTUh	2,16E-08	6,79E-13	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,72E-11	3,94E-10	1,34E-12	-3,97E-09
SQP	dimensionless	1,26E+01	1,58E-03	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,65E-01	3,78E-01	1,48E-02	-3,94E+00
Acronyms	**GWP-GHG** = this indicator includes all greenhouse gases except biogenic uptake and emissions of carbon dioxide and biogenic carbon stored in the product; as such the indicator is identical to GWP-total except that the CF for biogenic CO 2 is set to zero, **PM** = Potential incidence of disease due to PM emissions, **IRP** = Potential Human exposure efficiency relative to U235, **ETP-fw** = Potential Comparative Toxic Unit for ecosystems, **HTP-c** = Potential Comparative Toxic Unit for humans, **HTP-nc** = Potential Comparative Toxic Unit for humans, **SQP** = Potential soil quality index															

[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 CO_2 is set to zero.*

Resource use indicators

Results per functional or declared unit															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	9,33E+00	4,12E-05	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,60E-03	6,02E-03	1,43E-04	-8,10E-01
PERM	MJ	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	9,33E+00	4,12E-05	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,60E-03	6,02E-03	1,43E-04	-8,10E-01
PENRE	MJ	4,82E+01	2,79E-03	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,41E-01	3,23E-01	7,65E-03	-7,92E+00
PENRM	MJ	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	4,82E+01	2,79E-03	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,41E-01	3,23E-01	7,65E-03	-7,92E+00
SM	kg	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+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 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														

Additional environmental information - Waste indicators

Results per functional or declared unit															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Non-hazardous waste disposed	kg	1,30E-01	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	5,00E-02	0,00E+00
Radioactive waste disposed	kg	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Additional environmental information - Output flow indicators

Results per functional or declared unit																
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Components for re-use	kg	0,00E+00	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	9,81E-03	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	9,50E-01	0,00E+00	0,00E+00
Materials for energy recovery	kg	5,72E-02	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, electricity	MJ	7,26E-02	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	MJ	9,72E-01	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

The result tables shall only contain values or the letters "ND" (Not Declared). It is not possible to specify ND for mandatory indicators. ND shall only be used for voluntary parameters that are not quantified because no data is available.

Other environmental performance indicators

Additional environmental information

).

References

EN ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures
EN 15804:2012+A2:2019/AC:2021 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
EN ISO 14040:2006 Environmental management - Life Cycle Assessment - Principles and Framework
EN ISO 14044:2006 Environmental management - Life Cycle Assessment – Requirements and guidelines
EN ISO 14063:2020 Environmental management - Environmental communication - Guidelines and examples
EN 15643:2021 Sustainability of construction works - Framework for assessment of buildings and civil engineering works
EN 15942:2021 Sustainability of construction works - Environmental product declarations - Communication format business-to-business
EN 17672:2022 Sustainability of construction works - Environmental product declarations - Horizontal rules for business-to-consumer communication
TNI CEN/TR 15941:2012 Sustainability of construction works - Environmental product declarations - Methodology for selection and use of generic data
EN 16908:2017+A1:2022 Cement and building lime - Environmental product declarations - Product category rules complementary to EN 15804
EN 16449:2014 Wood and wood-based products - Calculation of the biogenic carbon content of wood and conversion to carbon dioxide
ILCD General guide for Life Cycle Assessment (2010) - JRC EU
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SimaPro LCA Package, Pré Consultants, the Netherlands, www.pre-sustainability.com
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Explanatory documents are available from the head of Technical Support of the EPD owner.