Environmental Product Declaration (EPD)
According to ISO 14025 and EN 15804+A2:2019

T50/T50 LOFT all-glass partition wall system with single-glazing

Registration number:	EPD-Kiwa-EE-275330-EN
Issue date:	13-08-2026
Valid until:	13-08-2031
Declaration owner:	Goldbach Kirchner raumconcepte GmbH
Publisher:	Kiwa-Ecobility Experts
Programme operator:	Kiwa-Ecobility Experts
Status:	verified



1 General information

1.1 PRODUCT

T50/T50 LOFT all-glass partition wall system with single-glazing

1.2 REGISTRATION NUMBER

EPD-Kiwa-EE-275330-EN

1.3 VALIDITY

Issue date: 13-08-2026

Valid until: 13-08-2031

1.4 PROGRAMME OPERATOR

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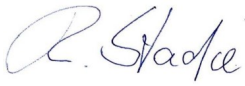


Dr. Ronny Stadie

(Verification body, Kiwa-Ecobility Experts)

1.5 OWNER OF THE DECLARATION

Declaration owner: Goldbach Kirchner raumconcepte GmbH

Address: Am Sportplatz 7 , 63826 Geiselbach, Germany

E-mail: info@goldbachkirchner.de

Website: https://www.goldbachkirchner.de/

Production location: Goldbach Kirchner production

Address production location: Am Sportplatz 7, 63826 Geiselbach, Germany

1.6 VERIFICATION OF THE DECLARATION

The independent verification is in accordance with the ISO 14025:2011. The LCA is in compliance with ISO 14040:2006 and ISO 14044:2006. The EN 15804+A2:2019 serves as the core PCR.

☐ Internal ☒ External



Lucas Pedro Berman, Senda

1.7 STATEMENTS

The owner of this EPD shall be liable for the underlying information and evidence. The programme operator Kiwa-Ecobility Experts shall not be liable with respect to manufacturer data, life cycle assessment data and evidence.

1.8 PRODUCT CATEGORY RULES

Kiwa-EE GPI R.4.0 (2025)
Kiwa-Ecobility Experts, General Programme Instructions “Product Level”, SOP EE 1201_R.4.0 (18.12.2025)

Kiwa-EE GPI R.4.0 Annex B1 (18.12.2025)
Kiwa-Ecobility Experts, General Programme Instructions “Product Level” – Annex B1 Environmental Information Programme according to EN 15804 / ISO 21930 , SOP EE 1203_R.4.0 (18.12.2025)

Specific PCR: IBU PCR Part B
Requirements on the EPD for room partition systems, v8 (18.07.2023)

1 General information

1.9 COMPARABILITY

In principle, a comparison or assessment of the environmental impacts of different products is only possible if they have been prepared in accordance with EN 15804+A2:2019. For the evaluation of the comparability, the following aspects have to be considered in particular: PCR used, functional or declared unit, geographical reference, the definition of the system boundary, declared modules, data selection (primary or secondary data, background database, data quality), scenarios used for use and disposal phases, and the life cycle inventory (data collection, calculation methods, allocations, validity period). PCRs and general program instructions of different EPD program operators may differ. Comparability needs to be evaluated. For further guidance, see EN 15804+A2:2019 and ISO 14025.

1.10 CALCULATION BASIS

LCA method R<THINK: Ecobility Experts | EN15804+A2

LCA software*: Simapro 9.6

Characterization method: RETHINK characterization method (see references for more details)

LCA database profiles: ecoinvent (for version see references)

Version database: v3.20f (20260507)

** Simapro is used for calculating the characterized results of the Environmental profiles within R<THINK.*

1.11 LCA BACKGROUND REPORT

This EPD is generated on the basis of the LCA background report 'T50/T50 LOFT all-glass partition wall system with single-glazing ' with the calculation identifier ReTHiNK-175330.

2 Product

2.1 PRODUCT DESCRIPTION

This is a worst-case EPD for 1 m² of T50/T50 LOFT full-glass partition wall system, produced by Goldbach Kirchner raumconcepte GmbH. As the T50 LOFT and T50 products are very similar to each other, both have been included in one EPD. The LCA is based on the T50 LOFT product variant.
The LCA of the T50 product variant, which is not individually declared in this EPD, has been calculated with a 10 mm tempered glass pane.
The LCA of the T50 LOFT product variant has been calculated with a 10 mm tempered glass pane and additional aluminium profiles.

The weight per m² is 27.3 kg including the wall, ceiling and floor fastening materials. The ceiling and floor fastening materials are based on the average wall element. The wall fastening is adjusted for 1 m² based on an average wall size of 5 meters in length and 2.5 meters in height.

The T50 all-glass partition wall is frameless and consists of aluminium connection profiles in the ceiling, floor, and wall areas, into which single-pane or laminated safety glass elements with a thickness of 10–21 mm can be inserted.

The glass panes are bonded together using glazing tape. In the area of the connecting profiles the panels are secured with the seals. This approach allows the installation of various door types such as solid leaf, tubular frame, and all-glass doors.

Material	m.-% of material
glass	90
aluminium profiles	8
PE sealing	2
steel screws	<1
glazing tape	<1

2.2 APPLICATION (INTENDED USE OF THE PRODUCT)

The T50 all-glass partition wall system with single-glazing is used for interior room partitioning. It serves to create clearly defined, transparent room structures and enables a visually and acoustically effective separation between different rooms. As a all-glass partition wall system, the T50 is typically used in office and administrative buildings, educational and healthcare facilities, commercial interiors, and public buildings. It is non-load-bearing.

The T50 all-glass partition wall system is used in rooms where privacy and sound insulation are key considerations. Due to its modular design, the all-glass partition wall system can be reassembled, dismantled and extended. Thus, it is suitable for circular construction.

2.3 REFERENCE SERVICE LIFE

RSL PRODUCT

According to the service lifes of building components for life cycle analyses in accordance with the Assessment System for Sustainable Building BBSR Table 2017, the reference service life of stand systems is over 50 years. Adding to this, the reference service life has not been taken into account in this EPD since the B module is not declared.

USED RSL (YR) IN THIS LCA CALCULATION:

50

2.4 TECHNICAL DATA

The most important, tested-for technical properties for the product have been laid out in the following table.

Property	Unit	Declared value	Standard
Wall thickness	mm	100	
Airborne sound insulation	Rw,p	32 - 40 dB	DIN EN ISO 140-3 / DIN EN ISO 717-1

Structural strength has been tested according to DIN 4103-1:2015-06.

2.5 SUBSTANCES OF VERY HIGH CONCERN

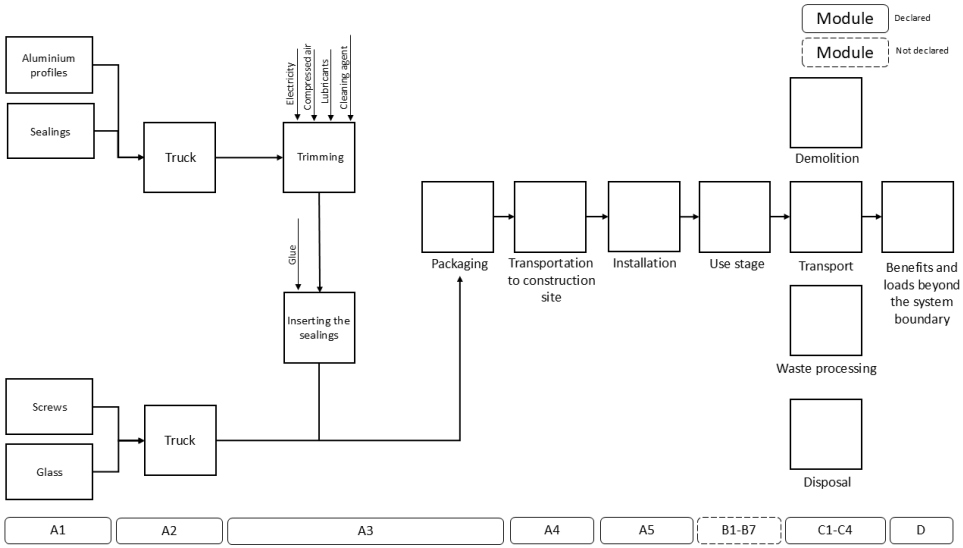
The product does not contain any substances from the “Candidate List of Substances of Very High Concern” (SVHC) in amounts greater than 0.1% (1,000 ppm).

2.6 DESCRIPTION PRODUCTION PROCESS

The main components of the Goldbach Kirchner T50 all-glass partition wall system are glass and aluminium profiles. The aluminium profiles are cut into size. Seals are inserted

2 Product

into the aluminium profiles. The components are packaged in a secure manner and shipped to the client. The wall system is finalized on-site.



2.7 CONSTRUCTION DESCRIPTION

The room partition system is assembled with power tools at the construction site.

3 Calculation rules

3.1 DECLARED UNIT

m2

1 m² of T50 LOFT all-glass partition wall system with single-glazing with a 10 mm tempered glass pane

Reference unit: square meter (m2)

3.2 CONVERSION FACTORS

Description	Value	Unit
Reference unit	1	m2
Weight per reference unit	27.294	kg
Conversion factor to 1 kg	0.036638	m2

3.3 SCOPE OF DECLARATION AND SYSTEM BOUNDARIES

This is a Cradle to gate with options, modules C1-C4 and module D EPD. The life cycle stages included are as shown below:

(X = module included, ND = module not declared)

A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X

The modules of the EN 15804 contain the following:

Module A1 = Raw material supply	Module B5 = Refurbishment
Module A2 = Transport	Module B6 = Operational energy use
Module A3 = Manufacturing	Module B7 = Operational water use
Module A4 = Transport	Module C1 = De-construction / Demolition
Module A5 = Construction - Installation process	Module C2 = Transport
Module B1 = Use	Module C3 = Waste Processing
Module B2 = Maintenance	Module C4 = Disposal
Module B3 = Repair	Module D = Benefits and loads beyond the product system boundaries
Module B4 = Replacement	

3.4 REPRESENTATIVENESS

This EPD is representative for T50/T50 LOFT all-glass partition wall system with single-glazing , a product of Goldbach Kirchner raumconcepte GmbH . The results of this EPD are representative for European Union.

3.5 CUT-OFF CRITERIA

Product stage (A1-A3)
All input flows (e.g. raw materials, transportation, energy use, packaging, etc.) and output flows (e.g. production waste) are considered in this LCA. The total neglected input flows do

3 Calculation rules

therefore not exceed the limit of 5% of energy use and mass.
Excluded processes are:

- Long-term emissions
- The manufacture of equipment used in production, buildings or any other capital goods;
- The transport of personnel to the plant;
- The transportation of personnel within the plant;
- Research and development activities

Construction process stage (A4-A5)
All input flows (e.g. transportation to the construction site, additional raw material use for construction, installation energy (use)of energy use for assembly , etc.) and output flows (e.g. construction waste, packaging waste, etc.) are considered in this LCA. The total neglected input flows do therefore not exceed the limit of 5% of energy use and mass.

End of life stage (C1-C4)
All input flows (e.g. energy use for demolition or disassembly, transport to waste processing, etc.) and output flows (e.g. end-of-life waste processing of the product, etc.) are considered in this LCA. The total neglected input flows do therefore not exceed the limit of 5% of energy use and mass.

Benefits and loads beyond the system boundary (Module D)
All benefits and loads beyond the system boundary resulting from reusable products, recyclable materials and/or useful energy carriers leaving the product system are considered in this LCA.

3.6 ALLOCATION

Allocations were avoided as far as possible. There are no co-products or by-products created in the manufacturing of the examined product. Based on energy consumption measurements, the energy requirements of the production were allocated to the individual products.
Double counting was avoided. Specific information about allocations within the background data is included in the documentation of the ecoinvent datasets.

3.7 DATA COLLECTION & REFERENCE PERIOD

All process-specific data was collected for the period between the 01.01.2024 and the 31.12.2024. The quantities of raw materials, consumables and supplies used and the energy consumption were recorded and averaged over the entire 2024 operating year. The reference area is Germany.

3.8 ESTIMATES AND ASSUMPTIONS

A payload factor of 50 percent was used for all truck transports, which in fact corresponds to a full delivery and empty return trip. A data set for a non-specific truck was used for the supplier transportation.

As the finalized product is delivered to the clients by internal logistics the transport in A4 is modelled using a >32t, EURO6 truck, which corresponds to the trucks used. Due to multiple locations being visited by the same truck daily, it never returns empty, picking up reusable packaging material. This has not been considered in the LCA, where a 50% load and an empty return have been assumed.

As the construction of the product at the construction site is carried out by handheld power tools, no input has been created for A5.

The demolition at end-of-life is assumed to be carried out manually, and therefore no energy consumption has been considered for C1.

For the end-of-life waste scenario, it is assumed that the different parts of the product can be separated and treated individually. Therefore, different scenarios were considered.

The scenario for the aluminium material is based on (ei3.9.1) aluminium (EU), wrought alloy for buildings (i.a. profiles, sheets, pipes) (NMD ID 5) and includes 3% landfill, 3% incineration, and 94% recycling.

The scenario for the glass parts is based on (ei3.9.1) *glass (i.a. flat glass)* (NMD ID 28) and includes 30% landfill and 70% recycling.

The scenario for the steel parts follows the dataset *“steel, fasteners (NMD ID 69)”*, which includes 1% landfill and 99% recycling.

The scenario for the plastic part is based on (ei3.9.1) *plastics, via residue (NMD ID 43)* and includes 20% landfill and 80% incineration.

3.9 DATA QUALITY

The quality level of geographical representativeness can be considered “good”.
The quality level of technical representativeness can be considered “good”.
The quality level of time representativeness can also be regarded as “good”.

The overall data quality for this EPD can, therefore, be described as “good”. All relevant process-specific data were collected during data collection.

In all possible cases, primary data from customers was used, which has very good data quality because it comes directly from the source. In addition, secondary data from the

3 Calculation rules

ecoinvent database (2019, version 3.9.1) was used when no primary data could be supplied. The database is checked regularly and, therefore, meets the requirements of DIN EN ISO 14040/44 (background data not older than 10 years). The background data meets the requirements of EN 15804+A2. The quantities of raw materials, consumables and supplies used and the energy consumption were recorded and averaged over the entire operating year.

The general rule that specific data from certain production processes or average data derived from certain processes must take precedence when calculating an EPD or LCA was adhered to. Data for processes over which the manufacturer has no influence were assigned to generic data/scenarios. When selecting these, care was taken to always choose the data set/scenario that most realistically represents the processes.

3.10 POWER MIX

The "*market-based approach*" was used in this EPD. The company is covering 79% of its electricity with hydro power generated mainly in Italy (65%) and Norway (35%). GoOs have been provided. The GWP-total of the bought electricity is 0.0063 kg CO_2 eqv. per kWh.
The other 21% are self-produced through photovoltaic panels. The GWP-total of the self-generated electricity is 0.027 kg CO_2 eqv. per kWh.
The GWP-total of the applied electricity mix is 0.010647 kg CO_2 eqv. per kWh.

4 Scenarios and additional technical information

4.1 TRANSPORT TO CONSTRUCTION SITE (A4)

For the transport from production place to assembly/user, the following scenario is assumed for module A4 of this EPD.

	Value and unit
Vehicle type used for transport	(ei3.9.1) Lorry (Truck) >32t, EURO6 | market for (EU)
Fuel type and consumption of vehicle	not available
Distance	312 km
Capacity utilisation (including empty returns)	50 % (loaded up and return empty)
Bulk density of transported products	inapplicable
Volume capacity utilisation factor	1

4.2 ASSEMBLY (A5)

The following information describes the scenarios for flows entering the system and flows leaving the system at module A5.

FLOWS ENTERING THE SYSTEM

There are no significant environment impacts as a result of materials or energy used in the construction stage (A5).

FLOWS LEAVING THE SYSTEM

The following output flows leaving the system at module A5 are assumed.

Description	Value	Unit
Output materials as result of loss during construction	3	%
Output materials as result of waste processing of materials used for installation/assembly at the building site	0.000	kg
Output materials as result of waste processing of used packaging	1.427	kg

4.3 DE-CONSTRUCTION, DEMOLITION (C1)

No inputs are needed for the product at the de-construction / demolition phase

4.4 TRANSPORT END-OF-LIFE (C2)

The following distances and transport conveyance are assumed for transportation during end of life for the different types of waste processing.

4 Scenarios and additional technical information

Waste Scenario	Transport conveyance	Not removed (stays in work) [km]	Landfill [km]	Incineration [km]	Recycling [km]	Re-use [km]
(ei3.9.1) aluminium (EU), wrought alloy for buildings (i.a. profiles, sheets, pipes) (NMD ID 5)	(ei3.9.1) Lorry (Truck), unspecified (default) | market group for (GLO)	0	100	150	50	50
(ei3.9.1) glass (i.a. flat glass) (NMD ID 28)	(ei3.9.1) Lorry (Truck), unspecified (default) | market group for (GLO)	0	100	150	50	50
(ei3.9.1) plastics, via residue (NMD ID 43)	(ei3.9.1) Lorry (Truck), unspecified (default) | market group for (GLO)	0	100	150	50	50
(ei3.9.1) steel, fasteners (NMD ID 69)	(ei3.9.1) Lorry (Truck), unspecified (default) | market group for (GLO)	0	100	150	50	50

The transport conveyance(s) used in the scenario(s) for transport during end of life has the following characteristics.

	Value and unit
Vehicle type used for transport	(ei3.9.1) Lorry (Truck), unspecified (default) | market group for (GLO)
Fuel type and consumption of vehicle	not available
Capacity utilisation (including empty returns)	50 % (loaded up and return empty)
Bulk density of transported products	inapplicable
Volume capacity utilisation factor	1

4.5 END OF LIFE (C3, C4)

The scenario(s) assumed for end of life of the product are given in the following tables. First the assumed percentages per type of waste processing are displayed, followed by the assumed amounts.

Waste Scenario	Region	Not removed (stays in work) [%]	Landfill [%]	Incineration [%]	Recycling [%]	Re-use [%]
(ei3.9.1) aluminium (EU), wrought alloy for buildings (i.a. profiles, sheets, pipes) (NMD ID 5)	NL	0	3	3	94	0
(ei3.9.1) glass (i.a. flat glass) (NMD ID 28)	NL	0	30	0	70	0

4 Scenarios and additional technical information

Waste Scenario	Region	Not removed (stays in work) [%]	Landfill [%]	Incineration [%]	Recycling [%]	Re-use [%]
(ei3.9.1) plastics, via residue (NMD ID 43)	NL	0	20	80	0	0
(ei3.9.1) steel, fasteners (NMD ID 69)	NL	0	1	0	99	0

Waste Scenario	Not removed (stays in work) [kg]	Landfill [kg]	Incineration [kg]	Recycling [kg]	Re-use [kg]
(ei3.9.1) aluminium (EU), wrought alloy for buildings (i.a. profiles, sheets, pipes) (NMD ID 5)	0.000	0.054	0.054	1.700	0.000
(ei3.9.1) glass (i.a. flat glass) (NMD ID 28)	0.000	7.373	0.000	17.203	0.000
(ei3.9.1) plastics, via residue (NMD ID 43)	0.000	0.179	0.715	0.000	0.000
(ei3.9.1) steel, fasteners (NMD ID 69)	0.000	0.000	0.000	0.015	0.000
Total	**0.000**	**7.606**	**0.770**	**18.918**	**0.000**

4.6 BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY (D)

The presented Benefits and loads beyond the system boundary in this EPD are based on the following calculated Net output flows in kilograms and Energy recovery displayed in MJ Lower Heating Value.

Waste Scenario	Net output flow [kg]	Energy recovery [MJ]
(ei3.9.1) aluminium (EU), wrought alloy for buildings (i.a. profiles, sheets, pipes) (NMD ID 5)	0.168	0.000
(ei3.9.1) glass (i.a. flat glass) (NMD ID 28)	11.796	0.000
(ei3.9.1) plastics, via residue (NMD ID 43)	0.000	2.885
(ei3.9.1) steel, fasteners (NMD ID 69)	0.012	0.000
Total	**11.976**	**2.885**

5 Results

For the impact assessment long-term emissions (>100 years) are not considered. The results of the impact assessment are only relative statements that do not make any statements about end-points of the impact categories, exceedance of threshold values, safety margins or risks. The following tables show the results of the indicators of the impact assessment, of the use of resources as well as of waste and other output flows.

5.1 ENVIRONMENTAL IMPACT INDICATORS PER SQUARE METER

CORE ENVIRONMENTAL IMPACT INDICATORS EN 15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq.	4.10E+1	6.53E-1	-3.48E-1	4.13E+1	8.98E-1	4.18E+0	0.00E+0	2.71E-1	2.69E+0	6.37E-2	-2.35E+1
GWP-f	kg CO_2 eq.	4.12E+1	6.50E-1	1.34E+0	4.32E+1	8.97E-1	2.53E+0	0.00E+0	2.70E-1	2.64E+0	6.36E-2	-2.31E+1
GWP-b	kg CO_2 eq.	-2.05E-1	2.12E-4	-1.67E+0	-1.88E+0	3.01E-4	1.65E+0	0.00E+0	8.81E-5	5.38E-2	3.96E-5	-1.14E-1
GWP-luluc	kg CO_2 eq.	1.54E-2	2.32E-3	-1.61E-2	1.63E-3	4.38E-4	1.06E-3	0.00E+0	9.64E-4	9.38E-4	1.21E-5	-3.10E-1
ODP	kg CFC 11 eq.	4.54E-9	1.16E-8	2.28E-7	2.44E-7	2.04E-8	3.98E-8	0.00E+0	4.81E-9	6.03E-8	1.52E-9	-4.45E-7
AP	mol H+ eq.	1.73E-1	3.11E-3	3.49E-3	1.80E-1	2.22E-3	6.76E-3	0.00E+0	1.29E-3	3.63E-3	2.98E-4	-1.41E-1
EP-fw	kg P eq.	3.33E-5	6.47E-6	4.48E-5	8.46E-5	7.52E-6	8.83E-6	0.00E+0	2.69E-6	1.95E-5	3.41E-7	-8.90E-4
EP-m	kg N eq.	3.36E-2	1.18E-3	1.52E-3	3.63E-2	5.93E-4	1.50E-3	0.00E+0	4.92E-4	8.90E-4	1.34E-4	-1.93E-2
EP-T	mol N eq.	4.50E-1	1.26E-2	1.49E-2	4.78E-1	6.21E-3	1.88E-2	0.00E+0	5.25E-3	9.43E-3	1.36E-3	-2.39E-1
POCP	kg NMVOC eq.	8.65E-2	4.31E-3	5.95E-3	9.67E-2	3.63E-3	4.33E-3	0.00E+0	1.79E-3	3.00E-3	5.37E-4	-7.64E-2
ADP-mm	kg Sb-eq.	3.63E-6	2.04E-6	2.22E-5	2.79E-5	2.51E-6	1.60E-6	0.00E+0	8.47E-7	1.28E-5	5.27E-8	1.17E-4
ADP-f	MJ	5.43E+2	9.31E+0	3.88E+1	5.91E+2	1.36E+1	2.05E+1	0.00E+0	3.87E+0	7.12E+0	1.14E+0	-2.70E+2
WDP	m3 world eq.	3.55E+0	5.72E-2	2.37E+0	5.97E+0	7.25E-2	2.57E-1	0.00E+0	2.38E-2	2.33E-1	7.34E-3	-5.96E+0

GWP-total=Global Warming Potential total (GWP-total) | **GWP-f**=Global Warming Potential fossil fuels (GWP-fossil) | **GWP-b**=Global Warming Potential biogenic (GWP-biogenic) | **GWP-luluc**=Global Warming Potential land use and land use change (GWP-luluc) | **ODP**=Depletion potential of the stratosperic ozon layer (ODP) | **AP**=Acidification potential, Accumulated Exceedance (AP) | **EP-fw**=Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-freshwater) | **EP-m**=Eutrophication potential, fraction of nutrients reaching marine end compartment (EP-marine) | **EP-T**=Eutrophication potential, Accumulated Exceedance (EP-terrestrial) | **POCP**=Formation potential of tropospheric ozone (POCP) | **ADP-mm**=Abiotic depletion potential for non fossil resources (ADP mm) | **ADP-f**=Abiotic depletion for fossil resources potential (ADP fossil) | **WDP**=Water (user) deprication potential, deprivation-weighted water consumption (WDP)

5 Results

ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS EN 15804+A2

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	disease incidence	2.05E-6	6.42E-8	8.13E-9	2.12E-6	8.86E-8	8.19E-8	0.00E+0	2.67E-8	5.58E-8	7.32E-9	-1.57E-6
IR	kBq U235 eq.	8.72E-1	3.63E-3	2.28E-3	8.78E-1	6.55E-3	3.25E-2	0.00E+0	1.51E-3	2.03E-2	4.92E-4	-8.59E-1
ETP-fw	CTUe	1.52E+3	6.87E+0	4.68E+0	1.53E+3	6.55E+0	5.94E+1	0.00E+0	2.86E+0	2.69E+1	1.05E+0	-1.28E+2
HTP-c	CTUh	3.68E-6	3.44E-10	-1.11E-9	3.68E-6	3.99E-10	1.11E-7	0.00E+0	1.43E-10	9.74E-10	1.74E-11	-4.19E-8
HTP-nc	CTUh	4.36E-4	7.48E-9	-3.60E-9	4.36E-4	9.74E-9	1.31E-5	0.00E+0	3.11E-9	1.89E-8	2.57E-10	-3.18E-7
SQP	Pt	8.65E+1	7.35E+0	1.50E+2	2.44E+2	1.38E+1	8.82E+0	0.00E+0	3.06E+0	5.51E+0	2.33E+0	-7.17E+1

PM=Potential incidence of disease due to PM emissions (PM) | **IR**=Potential Human exposure efficiency relative to U235 (IRP) | **ETP-fw**=Potential Comparative Toxic Unit for ecosystems (ETP-fw) | **HTP-c**=Potential Comparative Toxic Unit for humans (HTP-c) | **HTP-nc**=Potential Comparative Toxic Unit for humans (HTP-nc) | **SQP**=Potential soil quality index (SQP)

CLASSIFICATION OF DISCLAIMERS TO THE DECLARATION OF CORE AND ADDITIONAL ENVIRONMENTAL IMPACT INDICATORS

ILCD classification	Indicator	Disclaimer
ILCD type / level 1	Global warming potential (GWP)	None
	Depletion potential of the stratospheric ozone layer (ODP)	None
	Potential incidence of disease due to PM emissions (PM)	None
ILCD type / level 2	Acidification potential, Accumulated Exceedance (AP)	None
	Eutrophication potential, Fraction of nutrients reaching freshwater end compartment (EP-freshwater)	None
	Eutrophication potential, Fraction of nutrients reaching marine end compartment (EP-marine)	None
	Eutrophication potential, Accumulated Exceedance (EP-terrestrial)	None
	Formation potential of tropospheric ozone (POCP)	None
	Potential Human exposure efficiency relative to U235 (IRP)	1
ILCD type / level 3	Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	2
	Abiotic depletion potential for fossil resources (ADP-fossil)	2
	Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	2
	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	2
	Potential Comparative Toxic Unit for humans (HTP-c)	2
	Potential Comparative Toxic Unit for humans (HTP-nc)	2

5 Results

ILCD classification	Indicator	Disclaimer
	Potential Soil quality index (SQP)	2

Disclaimer 1 – 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.

Disclaimer 2 – 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.

5.2 INDICATORS DESCRIBING RESOURCE USE AND ENVIRONMENTAL INFORMATION BASED ON LIFE CYCLE INVENTORY (LCI)

PARAMETERS DESCRIBING RESOURCE USE

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	6.24E+1	1.32E-1	1.84E+1	8.09E+1	1.99E-1	2.75E+0	0.00E+0	5.48E-2	7.19E-1	2.40E-2	-8.94E+1
PERM	MJ	3.85E+0	0.00E+0	1.41E+1	1.79E+1	0.00E+0	5.37E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
PERT	MJ	6.60E+1	1.32E-1	3.25E+1	9.87E+1	1.99E-1	3.28E+0	0.00E+0	5.48E-2	7.19E-1	2.40E-2	-8.94E+1
PENRE	MJ	5.23E+2	9.33E+0	1.93E+1	5.52E+2	1.36E+1	1.93E+1	0.00E+0	3.88E+0	7.12E+0	1.14E+0	-2.69E+2
PENRM	MJ	1.98E+1	0.00E+0	1.96E+1	3.94E+1	0.00E+0	1.18E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	-6.17E-1
PENRT	MJ	5.43E+2	9.33E+0	3.89E+1	5.92E+2	1.36E+1	2.05E+1	0.00E+0	3.88E+0	7.12E+0	1.14E+0	-2.70E+2
SM	Kg	6.94E+0	0.00E+0	1.26E-1	7.07E+0	0.00E+0	2.12E-1	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
RSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
NRSF	MJ	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
FW	m^3	1.65E-1	2.40E-3	5.02E-2	2.17E-1	2.31E-3	9.99E-3	0.00E+0	9.97E-4	7.60E-3	1.33E-3	-4.74E-1

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 resources | **SM**=Use of secondary material | **RSF**=Use of renewable secondary fuels | **NRSF**=Use of non-renewable secondary fuels | **FW**=Net use of fresh water

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OTHER ENVIRONMENTAL INFORMATION DESCRIBING WASTE CATEGORIES

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	Kg	4.06E-5	5.94E-5	2.78E-3	2.88E-3	8.46E-5	3.98E-4	0.00E+0	2.47E-5	1.13E-2	5.50E-6	1.47E-2
NHWD	Kg	4.14E+0	6.15E-1	1.67E-1	4.92E+0	1.19E+0	1.85E+0	0.00E+0	2.56E-1	1.51E+0	7.60E+0	-5.25E+0
RWD	Kg	9.05E-3	2.13E-6	2.93E-4	9.35E-3	4.15E-6	2.85E-4	0.00E+0	8.86E-7	1.52E-5	2.78E-7	-6.26E-4

HWD=Hazardous waste disposed | **NHWD**=Non-hazardous waste disposed | **RWD**=Radioactive waste disposed

ENVIRONMENTAL INFORMATION DESCRIBING OUTPUT FLOWS

Abbr.	Unit	A1	A2	A3	A1-A3	A4	A5	C1	C2	C3	C4	D
CRU	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
MFR	Kg	6.00E-3	0.00E+0	2.81E-1	2.87E-1	0.00E+0	7.26E-1	0.00E+0	0.00E+0	1.89E+1	0.00E+0	1.76E+0
MER	Kg	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
EET	MJ	3.93E-1	0.00E+0	1.80E-1	5.73E-1	0.00E+0	1.18E-2	0.00E+0	0.00E+0	0.00E+0	0.00E+0	9.41E+0
EEE	MJ	2.00E-1	0.00E+0	1.05E-1	3.05E-1	0.00E+0	6.01E-3	0.00E+0	0.00E+0	0.00E+0	0.00E+0	5.46E+0

CRU=Components for re-use | **MFR**=Materials for recycling | **MER**=Materials for energy recovery | **EET**=Exported Energy, Thermic | **EEE**=Exported Energy, Electric

5 Results

5.3 INFORMATION ON BIOGENIC CARBON CONTENT PER SQUARE METER

BIOGENIC CARBON CONTENT

The following Information describes the biogenic carbon content in (the main parts of) the product at the factory gate per square meter:

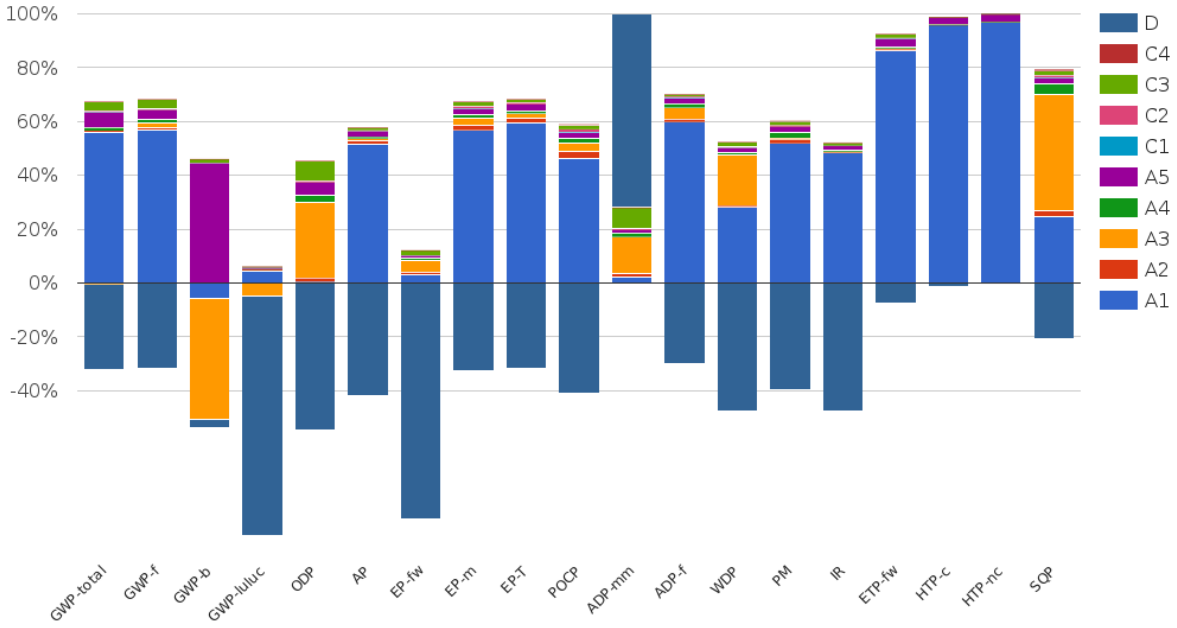
Biogenic carbon content	Amount	Unit
Biogenic carbon content in the product	0.154	kg C
Biogenic carbon content in accompanying packaging	0.4598	kg C

UPTAKE OF BIOGENIC CARBON DIOXIDE

The following amount of carbon dioxide uptake is taken into account. Related uptake and release of carbon dioxide in downstream processes are not taken into account in this number although they do appear in the presented results. One kilogram of biogenic Carbon content is equivalent to 44/12 kg of biogenic carbon dioxide uptake.

Uptake Biogenic Carbon dioxide	Amount	Unit
Packaging	1.686	kg CO2 (biogenic)

6 Interpretation of results



The main impact of the T50 all-glass partition wall system with single-glazing stems from the raw materials in A1.
In most impact categories, A1 is responsible for between 50% and 95% of environmental impacts.
Due to the packaging materials being produced mainly out of wood and paper, A3 has a negative impact in GWP-b, which is balanced by its waste processing in A5.
Also quite prevalent is the D indicator, indicating recycling potentials of the product's components. This is due to the raw materials being primary with a high recyclability factor, ensuring additional potential for usage outside of the current system's boundaries.

The wall fixtures account for around 0.24 kg CO2 eqv. in the GWP-total impact indicator A1-A3.

7 References

ISO 14040
ISO 14040:2006-10, Environmental management - Life cycle assessment - Principles and framework; EN ISO 14040:2006

ISO 14044
ISO 14044:2006-10, Environmental management - Life cycle assessment - Requirements and guidelines; EN ISO 14044:2006

ISO 14025
ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures

EN 15804+A2
EN 15804:2012+A2:2019/AC:2021, Sustainability of Buildings - Environmental Product Declarations - Framework Development Rules by Product Category

Kiwa-EE GPI R.4.0 (2025)
Kiwa-Ecobility Experts, General Programme Instructions “Product Level”, SOP EE 1201_R.4.0 (18.12.2025)

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IBU PCR Part B
Requirements on the EPD for room partition systems, v8 (18.07.2023)

ecoinvent
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R<THINK characterization method
ecoinvent 3.9.1: EN 15804+A1 indicators (CML-IA Baseline v3.09), EN 15804+A2 indicators (EF 3.1)

DIN EN ISO 140-3:2005-03
Acoustics - Measurement of sound insulation in buildings and of building elements - Part 3: Laboratory measurements of airborne sound insulation of building elements

DIN EN ISO 717-1:2021-05
Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation

DIN EN ISO 10140-2:2021-09
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7 References

DIN 4103-1:2015-06
Internal non-loadbearing partitions - Part 1: Requirements and verification

NMD
NATIONAL ENVIRONMENTAL DATABASE, Calculation method to determine the environmental performance of construction works throughout their service life, based on EN 15804+A2., v 1.2 (Januar 2025)

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