ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	Lindner Group
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-LIS-20250313-IBC1-EN
Issue date	03.06.2025
Valid to	02.06.2030

Glass partition walls - average product (based on Lindner Life Stereo 125, Lindner Life Contour 126, Lindner Life Freeze 137, Multiclean LVT 437, Multiclean CLVT 437, Multiclean CPH 448)

Lindner SE

Institut Bauen und Umwelt e.V.

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1. General Information

Lindner SE

Glass partition walls - average product (based on Lindner Life Stereo 125, Lindner Life Contour 126, Lindner Life Freeze 137, Multiclean LVT 437, Multiclean CLVT 437, Multiclean CPH 448)

Programme holder

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Owner of the declaration

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94424 Arnstorf
Germany

Declaration number

EPD-LIS-20250313-IBC1-EN

Declared product / declared unit

The declared unit refers to 1 m² of average product.

This declaration is based on the product category rules:

Room partition systems, 01.08.2021
(PCR checked and approved by the SVR)

Scope:

The average product is based on the following specific products from Lindner:

- Lindner Life Stereo 125
- Lindner Life Contour 126
- Lindner Life Freeze 137
- Multiclean LVT 437
- Multiclean CLVT 437
- Multiclean CPH 448

The products are similar in their composition and produced in Germany (metal) and the Czech Republic (assembly of the glass partition wall).

The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

Issue date

03.06.2025

Valid to

02.06.2030

Verification

The standard EN 15804 serves as the core PCR
Independent verification of the declaration and data according to ISO 14025:2011
☐ internally ☒ externally

Dipl.-Ing. Hans Peters
(Chairman of Institut Bauen und Umwelt e.V.)

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Dr. Niels Jungbluth,
(Independent verifier)

2. Product

2.1 Product description/Product definition

The LVT system partition walls and the Multiclean series in various sound insulation executions (Lindner Life Stereo 125, Lindner Life Contour 126, Lindner Life Freeze 137, Multiclean LVT 437, Multiclean CLVT 437, Multiclean CPH 448) are industrially prefabricated modular components that open up all architectural possibilities. Thanks to the non-load bearing partition systems, rooms can be changed in a short space of time.

The wall systems consist of a substructure and can be fitted with a wide variety of glazing and wall shells.

The use of the products is subject to the respective national regulations at the place of use, in Germany, for example, the building regulations of the federal states and the technical provisions based on these regulations.

2.2 Application

Depending on the nature of the product, the system partitions mentioned under 2.1 can be used in office and conference rooms, industrial and work rooms, training and research rooms or in pharmaceutical production, medical technology, microsystems and precision engineering.

2.3 Technical Data

The technical data of the products within the scope of the EPD must be stated with reference to the test rules (e.g. standards) on which the individual data is based.

Non-load bearing system partitions are not subject to CE labelling.

The properties relevant to the product are listed in the following table.

Constructional data

Name	Value	Unit
Wall tickness	80 - 100	mm
Maximum wall height	6000	mm
Module width	100 - 1500	mm
Heat transfer coefficient	N/A	W/(m2K)
Sound insulation	37 - 52	dB
Sound absorption coefficient for the frequency ranges 125, 250, 500, 1000, 2000 and 4000 Hz relevant in construction	-	%

These wall systems have smooth glass surfaces. Glass has no significant absorption coefficient and is therefore not relevant.

The wall systems are never used as façades, so a heat transfer coefficient is not required.

Performance data of the product according to the harmonised standards, based on provisions for harmonization.

DIN 4103-1 - Internal non-load bearing partitions - requirements and verification

DIN EN ISO 10140-2 - Acoustics - Laboratory measurement of sound insulation of building elements - Part 2: Measurement of airborne sound insulation

DIN EN ISO 10848-2 - Acoustics - Laboratory and field measurement of flanking transmission for airborne, impact and building service equipment sound between adjoining rooms - Part 2: Application to Type B elements when the junction has a small influence

2.4 Delivery status

The packaging materials used are always the same, regardless of the size of the product. The glazing frames, profiles and accessories are generally packed on wooden racks that are suitable for forklift trucks and pallet trucks.

2.5 Base materials/Ancillary materials

Name	Value	Unit
Glass	68,6 - 77,0	%
Aluminium	8,2 - 15,1	%
Steel	10,53 - 12,84	%
PVC sealing tape	0,0 - 0,02	%
2-K-Silicone adhesive	3,4 - 4,7	%
Clean room silicone sealant or Hybrid 1K	0,4 - 0,5	%

Further components for the wall systems are standard parts for fastening, mineral wool inserts, plasterboard inserts, surface treatments and cleaning agents. The main product components and/or substances shall be indicated in % by mass to enable the user of the EPD to understand the composition of the product as supplied.

The candidate list can be found on the *ECHA* website address: echa.europa.eu/de/home

1) This product/article/at least one partial article contains substances listed in the candidate list (date: 21.01.2025) exceeding 0.1 percentage by mass: no

2) This product/article/at least one partial article contains other carcinogenic, mutagenic, reprotoxic (CMR) substances in categories 1A or 1B which are not on *the candidate list*, exceeding 0.1 percentage by mass: no

3) Biocide products were added to this construction product or it has been treated with biocide products (this then concerns a treated product as defined by the *(EU) Ordinance on Biocide Products No. 528/2012)*: no

2.6 Manufacture

Production and processing of glazing frames:

The profiles are delivered and cut to size. In addition, the necessary holes are drilled to attach the hanging claws. The glass panes are ordered and delivered in fixed dimensions. They are cleaned before assembly. In the individual production steps, the aluminium profiles are assembled into frames that run around the glass pane. Seals are inserted between the aluminium profiles and the glass pane.

The LVT and Multiclean LVT upright profiles are available from stock in various lengths or can be ordered on a project-specific basis to optimise waste.

They are shortened to the appropriate height of the system wall as required.

The Multiclean CLVT and Multiclean CPH stud profiles are cut and edged from large format sheets.

Floor/ceiling/wall connection profiles and other steel

accessories are cut and folded from large-format sheets.

Sheet metal in various lengths is available from stock or can be ordered on a project-specific basis to optimise cutting.

Seals are supplied in rolls and are shortened and installed as required.

The components listed are assembled on site and then form a system partition wall.

The Lindner Group has a quality management system in accordance with *EN ISO 9001*.

The glazing frames consisting of aluminium and glass including the sealings as well as the supporting upright profiles are manufactured in the Czech Republic, and the substructure made of sheet steel is manufactured in Germany.

2.7 Environment and health during manufacturing

The individual components are manufactured in environmentally authorised facilities. The Lindner Group has an energy management system in accordance with *EN ISO 50001* and an environmental management system in accordance with *EN ISO 14001*.

For mineral wool insulation materials, reference must be made to the special regulations in Germany: Ban on the manufacture and use of biopersistent fibres (*Hazardous Substances Ordinance, Annex IV, No. 22*) Prohibition of placing biopersistent fibres on the market (*Chemicals Prohibition Ordinance, No. 23 of the Annex to § 1*).

2.8 Product processing/Installation

The individual components delivered to the construction site are joined together to form a system wall. Assembly must be carried out by trained personnel; the assembly guidelines serve as a reference. The installation can be carried out using standard tools.

All electrically operated tools and equipment are subject to operational safety testing in accordance with the German Ordinance on Industrial Safety and Health.

2.9 Packaging

The packages consist of wooden pallets and intermediate layers of polystyrene strips, other parts are packed in cardboard boxes. Large-volume packages are wrapped in plastic film to prevent environmental influences.

The packaging material is easy to separate and can be reused or recycled if necessary. The rest can be collected by type and sent to the regional recycling provider. Residual materials must be disposed of in accordance with the relevant national regulations.

2.10 Condition of use

If used as intended, no material changes in the composition are to be expected during the utilisation phase.

2.11 Environment and health during use

With normal use, in accordance with the intended purpose of the system partition walls, no damage or adverse effects on health are to be expected according to the current state of knowledge.
According to current knowledge, there is no risk to water, air or soil if the products described are used as intended.

2.12 Reference service life

The useful life of non-load bearing walls is ≥ 50 years (according to *BBSR* table, code no. 342.411, as of 02/2017, published by the Building Institute for Research on Building, Urban Affairs and Spatial Development). If used properly, there are no costs for maintenance, repair or replacement during this time. The partition wall element is easy to move. Each glazing element can be removed, moved and replaced individually. The product can be maintained and repaired by trained personnel at the product's place of use. Spare parts are provided by the manufacturer during the service life of the product.

2.13 Extraordinary effects

Fire
Our products are non-flammable in the essential components (e.g. glass, aluminium).
The non-essential components are categorised in building material class B2 (e.g. seals).

Information on the fire performance according to *EN 13501-1* or established national standards. According to *EN 13501-1*:

- The classes of building products regarding their fire performance are predefined as: A1, A2, B, C, D, E, and F;
- The classes of flaming droplets/particles are pre-defined as: d0, d1, or d2;
- The classes for smoke density are pre-defined as: s1, s2, or s3

Fire protection

Name	Value
Building material class	A2
Burning droplets	s1
Smoke gas development	d0

Water
Lindner system partition walls are installed indoors and generally do not come into contact with water. Short-term exposure to moisture through cleaning does not damage the system, provided it can dry completely afterwards. Long-term exposure of the partition walls to water can lead to corrosion and the formation of stains on the surfaces of some components.

In the cleanroom sector, customised cleaning agents and disinfectants are clarified and approved for the surface resistance of Multiclean wall systems during the usage phase.

Mechanical destruction
In the event of mechanical destruction, the durability and functionality of the system is impaired. Depending on the size of the destroyed surfaces, they can be rebuilt by replacing or reassembling them without impairing their functionality.

2.14 Re-use phase

The system partition walls can be dismantled non-destructively and reused in unchanged form for the same application, or individual components can be reprocessed in production and thus reused. For other reuse/disposal, separation from other building materials on the construction site is recommended.

Further utilization / recycling Individual components of the system partition walls can be recycled. For the main components such as steel, glass and aluminium, it is recommended that they be 100 % recycled.

2.15 Disposal

Any system partition wall residues that accumulate on the construction site should be recycled. If this is not possible, they must be sent for energy recovery instead of landfill.

2.16 Further information

Further product information can be found at www.Lindner-Group.com

3. LCA: Calculation rules

3.1 Declared Unit

The declared unit refers to 1 m² of glass partition wall (average product), with a thickness of 100 mm. The weight of the average product is 45,829 kg/m².
The average product includes the following specific products: Lindner Life Stereo 125 (47dB), Lindner Life Contour 126 (44dB), Lindner Life Freeze 137 (44dB), Multiclean LVT 437, Multiclean CLVT 437 and Multiclean CPH 448.

Declared unit and mass reference

Name	Value	Unit
Declared unit	1	m^2
Grammage	45.829	kg/m^2
Layer thickness	0.1	m

The data has been collected for each individual product. The average has been calculated based on the yearly produced area (weighted average).
The deviation for GWP-total from the single products to the average declared product is as follows:

- Lindner Life Stereo 125 (47 dB): -3,5 %
- Lindner Life Contour 126 (44 dB): -5,9 %
- Lindner Life Freeze 137 (44 dB): +6,8 %
- Multiclean LVT 437: +5,3 %
- Multiclean CLVT 437: +15,9 %
- Multiclean CPH 448: +9,4 %

3.2 System boundary

Type of EPD: cradle to gate with options. The EPD considers module A1--A3, A4, A5, C1--C4 and D.

Module A1 considers provision of all raw materials and energy supply (DE: 0,85 kg CO_2-eq./kWh, CZ: 0,64 kg CO_2-eq./kWh).
Module A2 considers the raw material transportation to the production sites located in Germany and the Czech Republic.
Module A3 considers the manufacturing of the products at the production sites. Manufacturing losses are considered in module A3. The packaging is also included.
Module A4 considers a 100 km truck transport to the construction site.
Module A5 considers a manual construction (load-free). It includes the treatment and disposal of packaging materials. Credits for potential avoided burdens due to energy substitution of electricity and thermal energy generation are declared in module D.

Module C1 considers the manual deconstruction (load--free) of the product at End-of--life.
Module C2 considers a 50 km truck transport to waste processing.
Module C3 considers the waste processing: metal recycling for recyclable wall components. Non-recyclable wall components are incinerated (e.g. plastics).
Module C4 considers landfill.

Module D includes potential benefits for the thermal and electrical energy generated in module A5 due to packaging treatment and also the material credit due to the recycling and incineration in module C3. Avoided burdens have been calculated by the inversion of electricity grid mix and thermal energy from natural gas. The material credit is calculated by using generic data.

3.3 Estimates and assumptions

The following assumptions are included in the EPD:

- It is assumed that packaging materials are disposed of via incineration (wooden pallets) and recycling (cardboard).
- It is assumed that the glass is landfilled at the End-of-life (worst-case).

3.4 Cut-off criteria

The packaging of the raw materials, as well as their disposal, is not considered in the scope of this study.

3.5 Background data

The background data has been taken from the latest available *Sphera LCA FE* (former *GaBi database*).
The requirements for data quality and background data correspond to the specifications of the *PCR Part A*.

3.6 Data quality

All primary data is collected for the reference year 2023.
All secondary data comes from the *Sphera LCA FE* databases and are representative of the years 2020---2026. As the study intended to compare the product systems for the reference year, temporal representativeness is good.
All 6 products are produced in a similar way and in the same production sites in Germany and the Czech Republic. Therefore, the overall technological and geographical representativeness is also considered to be good.

3.7 Period under review

The period under review for the collection of production data is the whole year 2023.

3.8 Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Europe

3.9 Allocation

The production process does not deliver any co-products. The applied software model does not contain any allocation.

3.10 Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account. The background data are taken from the *Sphera LCA FE* database, *CUP 2024.2*.

4. LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

Biogenic carbon is present only in the packaging material.

Information on describing the biogenic carbon content at factory gate

Name	Value	Unit
Biogenic carbon content in accompanying packaging	1.97	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO_2.

The following technical information is a basis for the declared modules.

Transport to the building site (A4)

Module A4 considers a 100 km distance transported by truck.

Name	Value	Unit
Litres of fuel	0.128	l/100km
Transport distance	100	km
Capacity utilisation (including empty runs)	61	%

Installation into the building (A5)

The installation of the glass partition is done manually (load-free).
The packaging material treatment and disposal are also considered in module A5.

Name	Value	Unit
Output substances following waste treatment on site (PE-foil)	0,015	kg
Output substances following waste treatment on site (cardboard)	0,048	kg
Output substances following waste treatment on site (wooden pallets and softwood)	4,765	kg

The reference service life for the product is more than 50 years, depending on the area of use.

End of life (C1-C4)

The deconstruction (module C1) is assumed to be done manually (no environmental impact).
The transport distance to waste processing (C2) is assumed to be 50 km (transported by truck).

Name	Value	Unit
Collected as mixed construction waste	45.829	kg
Recycling	10.565	kg
Energy recovery	0.54	kg
Landfilling	34.724	kg

Reuse, recovery and/or recycling potentials (D)

Module D includes potential benefits in form of energy recovery of the incineration process in A5 (incineration of packaging waste) and C3 (recycling of the metals and incineration of plastics).

5. LCA: Results

The following tables display the environmentally relevant results according to *EN 15804+A2*, EF 3.1 for 1 m² of average product.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m² glass partition (average product)

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq	1.01E+02	3.95E-01	7.88E+00	0	1.98E-01	2.81E+00	5.23E-01	-2.61E+01
GWP-fossil	kg CO_2 eq	1.08E+02	3.88E-01	1.81E-01	0	1.94E-01	2.81E+00	5.2E-01	-2.61E+01
GWP-biogenic	kg CO_2 eq	-7.11E+00	9.27E-04	7.7E+00	0	4.63E-04	1.55E-04	0	-4.33E-02
GWP-luluc	kg CO_2 eq	6.67E-02	6.53E-03	7.57E-05	0	3.26E-03	4.69E-05	3.12E-03	-7.16E-03
ODP	kg CFC11 eq	5.36E-10	5.72E-14	8.71E-13	0	2.86E-14	4.73E-13	1.4E-12	2.28E-12
AP	mol H^+ eq	5.67E-01	6.05E-04	1.31E-03	0	3.02E-04	8.24E-04	3.69E-03	-7.85E-02
EP-freshwater	kg P eq	1.51E-04	1.66E-06	2.24E-07	0	8.29E-07	1.22E-07	1.18E-06	-9.37E-06
EP-marine	kg N eq	1.35E-01	2.31E-04	3.84E-04	0	1.16E-04	2.54E-04	9.5E-04	-1.88E-02
EP-terrestrial	mol N eq	1.49E+00	2.72E-03	5.51E-03	0	1.36E-03	3.93E-03	1.05E-02	-2.06E-01
POCP	kg NMVOC eq	3.12E-01	6.01E-04	1.06E-03	0	3.01E-04	6.65E-04	2.91E-03	-5.7E-02
ADPE	kg Sb eq	1.07E-03	3.38E-08	9.26E-09	0	1.69E-08	4.14E-09	3.37E-08	-1.29E-06
ADPF	MJ	1.35E+03	5.12E+00	1.92E+00	0	2.56E+00	7.23E-01	6.86E+00	-2.89E+02
WDP	m^3 world eq deprived	9.57E+00	6.01E-03	8.65E-01	0	3.01E-03	2.86E-01	5.95E-02	-3.07E+00

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential)

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m² glass partition (average product)

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	4.1E+02	4.41E-01	8.72E+01	0	2.2E-01	2.3E-01	1.2E+00	-1.07E+02
PERM	MJ	8.67E+01	0	-8.67E+01	0	0	0	0	0
PERT	MJ	4.97E+02	4.41E-01	5.43E-01	0	2.2E-01	2.3E-01	1.2E+00	-1.07E+02
PENRE	MJ	1.32E+03	5.12E+00	2.61E+00	0	2.56E+00	7.23E-01	4.22E+01	-2.89E+02
PENRM	MJ	3.61E+01	0	-6.9E-01	0	0	0	-3.54E+01	0
PENRT	MJ	1.35E+03	5.12E+00	1.92E+00	0	2.56E+00	7.23E-01	6.86E+00	-2.89E+02
SM	kg	1.03E+01	0	0	0	0	0	0	8.23E+00
RSF	MJ	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0
FW	m^3	3.63E-01	4.91E-04	2.03E-02	0	2.45E-04	6.74E-03	1.82E-03	-8.41E-02

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 = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 m² glass partition (average product)

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	6.87E-07	1.96E-10	1.13E-09	0	9.79E-11	5.3E-10	1.71E-09	-1.41E-08
NHWD	kg	1.94E+01	8.35E-04	1.55E-01	0	4.18E-04	5.99E-02	3.48E+01	-7.07E+00
RWD	kg	4.65E-02	9.32E-06	1.03E-04	0	4.66E-06	2.04E-05	7.2E-05	-1.41E-02
CRU	kg	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	9.88E+00	0	0
MER	kg	0	0	0	0	0	0	0	0
EEE	MJ	0	0	1.1E+01	0	0	4.7E+00	0	0
EET	MJ	0	0	1.98E+01	0	0	1.08E+01	0	0

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 m² glass partition (average product)

Parameter	Unit	A1-A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	6.12E-06	6.38E-09	8.74E-09	0	3.19E-09	4.55E-09	4.63E-08	-1.45E-06
IR	kBq U235 eq	5.4E+00	1.35E-03	1.64E-02	0	6.76E-04	2.17E-03	8.33E-03	-1.6E+00
ETP-fw	CTUe	1.07E+03	3.8E+00	8.27E-01	0	1.9E+00	2.72E-01	3.95E+00	-6.32E+01
HTP-c	CTUh	5.02E-08	7.67E-11	8.24E-11	0	3.83E-11	2.94E-11	9.33E-11	-2.72E-08
HTP-nc	CTUh	6.66E-07	3.44E-09	4.33E-09	0	1.72E-09	1.36E-09	3.6E-09	-1.33E-07
SQP	SQP	1.39E+03	2.52E+00	6.09E-01	0	1.26E+00	2.29E-01	1.89E+00	-6.85E+00

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator 'Potential Human exposure efficiency relative to U235'. 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 or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.
Disclaimer 2 – for the indicators 'abiotic depletion potential for non-fossil resources', 'abiotic depletion potential for fossil resources', 'water (user) deprivation potential, deprivation-weighted water consumption', 'potential comparative toxic unit for ecosystems', 'potential comparative toxic unit for humans – cancerogenic', 'Potential comparative toxic unit for humans - not cancerogenic', 'potential soil quality index'. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

6. LCA: Interpretation

The interpretation is based on the assumptions and limitations described with regard to the methods and the data.
Based on the results related to the modules, the main points are:

- the manufacturing phase (A1-A3) dominates the product system (energy consumption and raw material production);
- the transport modules (A4 and C2) have a negligible influence;
- the manual construction (A5) and deconstruction (C1) are load--free;
- the packaging treatment (A5) shows some environmental impacts.

Based on a dominance analysis the main points are:

- the environmental impacts from the production of aluminium and glass are of the utmost importance;
- steel has also some influence on the environmental profile;
- all other impacts are of minor relevance.

7. Requisite evidence

The Test report no. 392-2018-0018802 dated 27 June 2018 is available for the LVT system partitions.
The testing institute was Eurofins (Eurofins Product Testing A/S, Smedeskovvej 38, DK-84464 Galten, Denmark). Result:
The tested product fulfils the requirements of the Indoor Air Comfort® GOLD certification, among others.

AgBB overview of results (28 days [mg/m³])

Name	Value	Unit
TVOC	< 0,005	mg/m3
TSVOC	< 0,005	mg/m3
R value (dimensionless)	< 0	mg/m3
VOC without NIK	< 0,005	mg/m3
Formaldehyde	< 0,003	mg/m3
Carcinogenic Substances	< 0,001	mg/m3

8. References

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EN ISO 14001
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EN ISO 14025:2011, Environmental labels and declarations — Type III environmental declarations — Principles and procedures

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Further References

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