

# ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	Skyfold Inc.
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-SKY-20260314-CBA1-EN
Issue date	02.04.2026
Valid to	01.04.2031

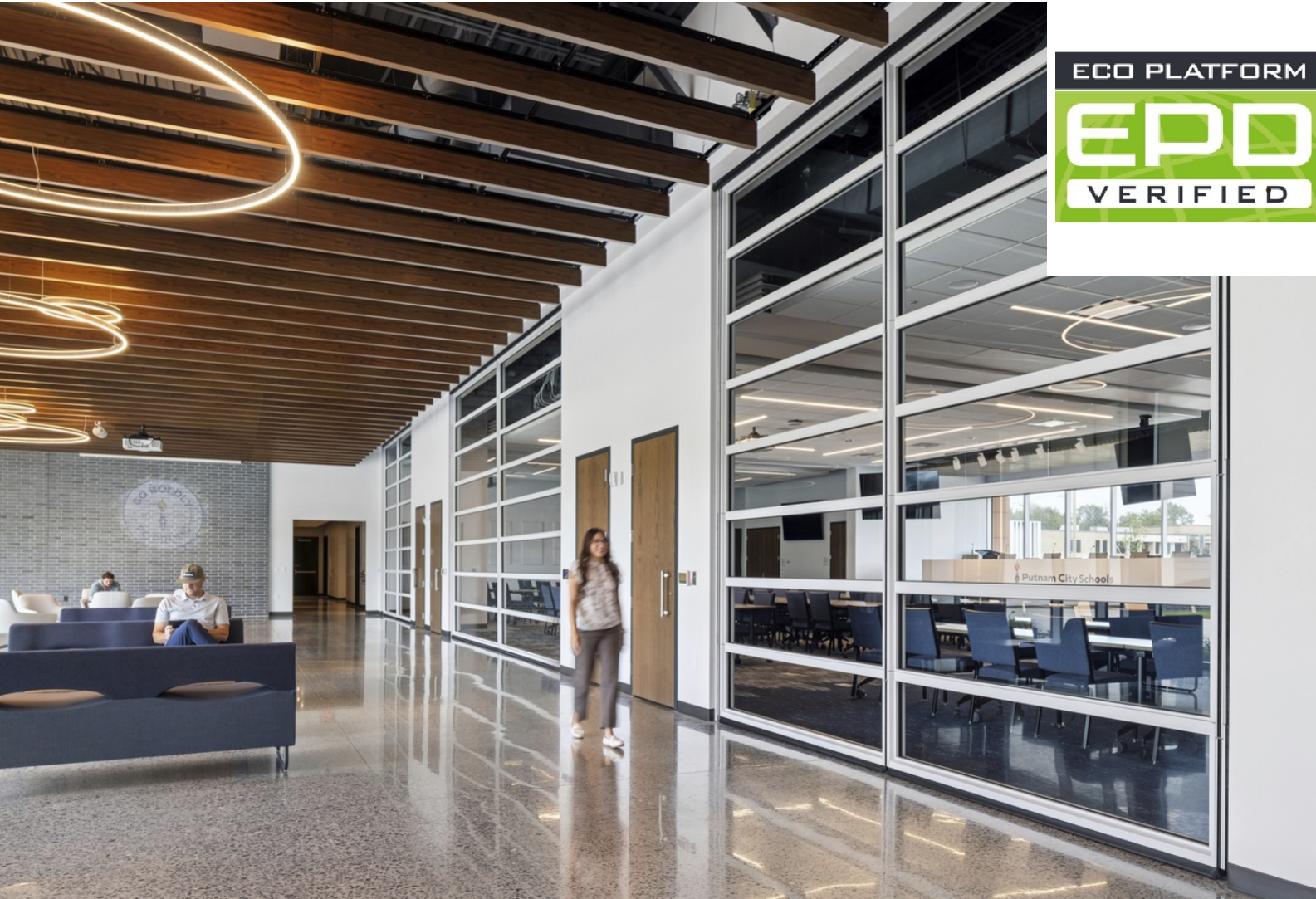
## Movable Wall Mirage® Skyfold

[www.ibu-epd.com](http://www.ibu-epd.com) | <https://epd-online.com>



ECO PLATFORM

**EPD**  
VERIFIED



**General Information**

**Skyfold**

**Programme holder**

IBU – Institut Bauen und Umwelt e.V.  
 Hegelplatz 1  
 10117 Berlin  
 Germany

**Declaration number**

EPD-SKY-20260314-CBA1-EN

**This declaration is based on the product category rules:**

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

**Issue date**

02.04.2026

**Valid to**

01.04.2031



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



Dr. Martina Bender  
 (Managing Director Institut Bauen und Umwelt e.V.)

**Movable Wall Mirage®**

**Owner of the declaration**

Skyfold Inc.  
 Avenue Lee 325  
 H9X 3S3 Montréal  
 Canada

**Declared product / declared unit**

1 m<sup>2</sup> of the Movable Wall Mirage® consisting of the following items:

- Lifting mechanism assembly
- Motor assembly
- Product packaging

**Scope:**

This Environmental Product Declaration refers to a movable wall manufactured by Skyfold. The declared unit corresponds to 1 m<sup>2</sup> of the product. Each panel represents an area of 30 ft<sup>2</sup>. Glass is not supplied by Skyfold and is therefore excluded from the product system described in this EPD.

The production site is located in Baie Durfe, Québec (Canada).

Electricity consumption is based on the Canadian national grid mix which has a high share of renewable energy sources (primarily hydropower).

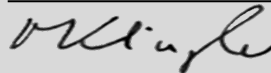
The data represents the year 2025.

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*.

**Verification**

The standard EN 15804 serves as the core PCR	
Independent verification of the declaration and data according to ISO 14025:2011	
<input type="checkbox"/>	internally
<input checked="" type="checkbox"/>	externally



Matthias Klingler,  
 (Independent verifier)

## Product

### Product description/Product definition

The Skyfold Mirage® is an automated, vertically operating glass partition designed for flexible interior space division. The system is available with multiple glazing options, including glass and acrylic (plexiglass) panels. It incorporates sealing interfaces intended to support acoustic performance. The use of transparent or translucent panel configurations can allow light transmission between adjacent interior spaces, including areas with limited access to natural light. The system provides an acoustic performance of up to STC 33 (Rw 33) and is suitable for applications requiring visual separation with controlled privacy, such as meeting rooms, classrooms, and collaborative work areas.

For the use and application of the product the respective national provisions at the place of use apply:

- Sound Transmission Class (STC)
- Americans with Disabilities Act (ADA)
- ISO 9001
- ISO 14001

### Application

Skyfold Mirage® movable wall systems are intended for interior applications including commercial office environments to fit in rooms with tall ceilings, such as conference rooms, auditoriums, hotel ballrooms, gymnasiums and convention centers.

### Technical Data

Technical specifications of the products included in the LCA scope, as well as product performance testing results are available on the manufacturer's website ([www.skyfold.com](http://www.skyfold.com)).

Name	Value	Unit
Airborne sound reduction	33	dB

Performance data of the product with respect to its characteristics in accordance with the relevant technical provision which can be applied are mentioned above.

This EPD follows the additional requirements for construction

products considered as electronic or electric equipment.

### Base materials/Ancillary materials

The major material composition including the packaging of the product is listed below:

Name	Value	Unit
Steel	47	%
Wood	32	%
Aluminium	17	%
Plastics	2	%
Others	2	%

The product includes partial articles which contain substances listed in the Candidate List of REACH Regulation 1907/2006/EC (date: 04.02.2026) exceeding 0.1 percentage by mass: no

The Candidate List can be found on the ECHA website address: <https://echa.europa.eu/de/home>.

### Manufacture

Skyfold Mirage® movable wall systems are custom manufactured by Skyfold Inc. in an ISO 9001-certified facility in Baie Durfe, Québec, Canada. The manufacturing process generally consists of controlled, factory-based assembly operations, including fabrication of steel-faced acoustic panels, assembly of aluminum and steel structural frames, integration of acoustic cores, seals, and mechanical lifting systems, and installation of electrical and control components. Finishes are applied according to project specifications, followed by quality inspection and functional testing. Completed wall assemblies are then packaged for shipment to site. Specific manufacturing steps and materials may vary depending on wall size, acoustic rating, and selected finishes.

### Reference service life

The reference service life of Skyfold Mirage® is about 50 years, depending on the application and frequency of use (approx. 50 closing cycles per year). For repairs and renewals, suitable spare parts are available.

## LCA: Calculation rules

### Declared Unit

The declared unit is 1 m<sup>2</sup> of the product: Skyfold Mirage® including packaging

Name	Value	Unit
Declared unit	1	m <sup>2</sup>
Grammage	13.63	kg/m <sup>2</sup>
Weight (per ft <sup>2</sup> )	1.27	kg
Weight (per ft <sup>2</sup> )	2.79	lb
Weight (per m <sup>2</sup> )	30.05	lb
Layer thickness	0.13	m

1 m<sup>2</sup> = 10.7639 ft<sup>2</sup>

1 kg/m<sup>2</sup> = 0.205 lb/ft<sup>2</sup>

1 Inch = 0.0254 m

### System boundary

The type of EPD is: cradle to gate with options, modules C1–C4, and module D (A1-A3 + C + D and additional modules: A4+ A5+B6)

### Production - Module A1-A3

The product stage includes: — A1, raw material extraction, processing and mechanical treatments, processing of secondary material input (e.g. recycling processes), — A2, transport to the manufacturer, — A3, manufacturing and assembly including provision of all materials, products and the Canadian national grid mix which has a high share of renewable energy sources (primarily hydropower), as well as waste processing up to the end-of-waste state. The electricity used corresponds to an average emission factor of 0.170 kg CO<sub>2</sub> equivalent per kWh.

### Construction stage - Modules A4-A5

The construction process stage includes: — A4, transport to the building site; — A5, installation into the building; including provision of all materials, products and energy, as well as waste processing up to the end-of-waste state or disposal of final residues during the construction process stage.

### Use stage - Module B6

The use stage related to the operation of the building includes: — B6, operational energy use.

### End-of-life stage - Modules C1-C4 and D

The end-of-life stage includes: — C1, de-construction, demolition; — C2, transport to waste processing; — C3, waste processing for reuse, recovery and/or recycling; — C4, disposal; including provision and all transport, provision of all materials, products and related energy and water use. Module D (Benefits and loads beyond the system boundary) includes:— D, recycling potentials, expressed as net impacts and benefits.

### Geographic Representativeness

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

### 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. Background database: GaBi, CUP 2024.2.

## LCA: Scenarios and additional technical information

### Characteristic product properties of biogenic carbon

Name	Value	Unit
Biogenic carbon content in product	0	kg C / lb C
Biogenic carbon content in accompanying packaging	1.98 / 4.36	kg C / lb C

Baie Durfe, Québec (Canada) is considered for A3.

Note: 1 kg (2.20 lb) of biogenic carbon is equivalent to 44/12 kg of CO<sub>2</sub>.

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO<sub>2</sub>.

### Operational energy use (B6)

559 W reflects the power used by one door operator, which corresponds to 30 ft<sup>2</sup> of product area. The annual energy use is calculated per operator and then converted to kWh/m<sup>2</sup> to align with the declared unit of 1 m<sup>2</sup>.

Name	Value	Unit
Days per year in use	26	days
Electricity consumption for 1 year (per m <sup>2</sup> of a unit)	0.34	kWh
Electricity consumption for 1 year (per ft <sup>2</sup> of a unit)	0.03	kWh
On mode power (per unit)	559	W
On mode per day (per unit)	0.02	hr
Off mode per day (per unit)	23.98	hr

### Transport to the building site (A4)

Name	Value	Unit
Litres of fuel	0.0276	l/tkm
Transport distance	100	km
Transport distance	62.1	mi
Capacity utilisation (including empty runs)	55	%

The product is transported via truck. The main distribution region is US. In order to allow scaling to a specific point of installation 100 km / 62.1 mi are declared.

### Installation into the building (A5)

Name	Value	Unit
Waste packaging (paper)	0.01 / 0.002	kg per m <sup>2</sup> / lb per ft <sup>2</sup>
Waste packaging (wood)	4.31 / 0.88	kg per m <sup>2</sup> / lb per ft <sup>2</sup>

### Reference service life

Name	Value	Unit
Reference service life	50	a

### End of life (C1-C4)

C1: The product dismantling from the building is done manually without environmental burden.

C2: Transport to waste management is 50 km.

Name	Value	Unit
Collected separately waste type	9.32 / 20.54	kg / lb
Recycling	9.1 / 20.06	kg / lb
Energy recovery	0.25 / 0.55	kg / lb

The product is disassembled in a recycling process. Material recycling is then assumed for the metals, and electronics. The plastic components are assumed to be incinerated with energy recovery. Region for the End of Life is: Global

### Reuse, recovery and/or recycling potentials (D), relevant scenario information

Name	Value	Unit
Recycling	100	%

The collection rate is 100 %.

## LCA: Results

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	X	MND	X	X	X	X	X

### RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m<sup>2</sup> Movable Wall Mirage®

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
GWP-total	kg CO <sub>2</sub> eq	3.55E+01	1.41E-01	7.14E+00	8.04E+00	0	4.82E-02	5.92E-01	0	-1.88E+01
GWP-fossil	kg CO <sub>2</sub> eq	3.45E+01	1.35E-01	1.38E-01	8.03E+00	0	4.62E-02	5.91E-01	0	-1.87E+01
GWP-biogenic	kg CO <sub>2</sub> eq	9.4E-01	5.86E-03	7.01E+00	3.43E-03	0	2.01E-03	1.55E-04	0	-6.23E-02
GWP-luluc	kg CO <sub>2</sub> eq	1.51E-02	5.26E-06	3E-05	1.55E-03	0	1.8E-06	4.02E-05	0	-3E-03
ODP	kg CFC11 eq	1.26E-10	1.18E-14	7.94E-13	5.21E-11	0	4.02E-15	6.1E-13	0	-1.58E-10
AP	mol H <sup>+</sup> eq	1.5E-01	1.49E-04	3.47E-03	1.64E-02	0	5.09E-05	1.34E-04	0	-5.98E-02
EP-freshwater	kg P eq	6.58E-05	3.44E-08	1.88E-07	5.82E-06	0	1.18E-08	1.23E-07	0	-1.5E-05
EP-marine	kg N eq	3.01E-02	5.3E-05	1.65E-03	3.17E-03	0	1.82E-05	3.16E-05	0	-8.58E-03
EP-terrestrial	mol N eq	3.35E-01	6.02E-04	1.91E-02	3.45E-02	0	2.06E-04	5.57E-04	0	-9.29E-02
POCP	kg NMVOC eq	9.03E-02	1.56E-04	4.26E-03	9.33E-03	0	5.33E-05	8.66E-05	0	-2.66E-02
ADPE	kg Sb eq	7.72E-04	3.5E-09	8.66E-09	8.1E-07	0	1.2E-09	5.19E-09	0	-5.22E-05
ADPF	MJ	4.44E+02	1.88E+00	2.08E+00	1.33E+02	0	6.44E-01	6.57E-01	0	-2.87E+02
WDP	m <sup>3</sup> world eq deprived	1.19E+01	2.71E-04	7.31E-01	1.84E+00	0	9.27E-05	5.93E-02	0	-1.23E+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 m<sup>2</sup> Movable Wall Mirage®

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
PERE	MJ	2.73E+02	9.05E-03	5.65E+01	3.86E+01	0	3.1E-03	3.71E-01	0	-1.26E+02
PERM	MJ	5.6E+01	0	-5.6E+01	0	0	0	0	0	0
PERT	MJ	3.29E+02	9.05E-03	4.9E-01	3.86E+01	0	3.1E-03	3.71E-01	0	-1.26E+02
PENRE	MJ	4.38E+02	1.88E+00	2.08E+00	1.33E+02	0	6.44E-01	5.7E+00	0	-2.87E+02
PENRM	MJ	5.04E+00	0	0	0	0	0	-5.04E+00	0	0
PENRT	MJ	4.44E+02	1.88E+00	2.08E+00	1.33E+02	0	6.44E-01	6.57E-01	0	-2.87E+02
SM	kg	6.87E+00	0	0	0	0	0	0	0	2.44E+00
RSF	MJ	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m <sup>3</sup>	4.43E-01	1.1E-05	1.72E-02	5.65E-02	0	3.78E-06	1.51E-03	0	-2.08E-01

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 m<sup>2</sup> Movable Wall Mirage®

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
HWD	kg	1.45E-06	5.8E-11	1.03E-09	7.63E-08	0	1.99E-11	7.69E-10	0	-1.61E-07
NHWD	kg	9.79E+00	1.8E-04	5.33E-02	4.84E-02	0	6.16E-05	5.84E-02	0	-3.85E+00
RWD	kg	2.2E-02	2.09E-06	9.29E-05	1.32E-02	0	7.16E-07	6.82E-05	0	-2.91E-02
CRU	kg	0	0	0	0	0	0	0	0	0
MFR	kg	6E-03	0	0	0	0	0	8.84E+00	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EEE	MJ	1.42E+01	0	8.04E+00	0	0	0	8.78E-01	0	0
EET	MJ	2.56E+01	0	1.43E+01	0	0	0	2.03E+00	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 m<sup>2</sup> Movable Wall Mirage®**

Parameter	Unit	A1-A3	A4	A5	B6	C1	C2	C3	C4	D
PM	Disease incidence	2.6E-06	1.36E-09	1.04E-08	1.97E-07	0	4.66E-10	1.44E-09	0	-9.24E-07
IR	kBq U235 eq	2.52E+00	2.86E-04	1.47E-02	1.16E+00	0	9.8E-05	1.07E-02	0	-5.66E+00
ETP-fw	CTUe	1.33E+02	1.39E+00	6.95E-01	3.16E+01	0	4.77E-01	2.17E-01	0	-5.96E+01
HTP-c	CTUh	2.37E-07	2.52E-11	5.12E-11	1.21E-09	0	8.62E-12	1.51E-11	0	-5.01E-09
HTP-nc	CTUh	3.29E-07	7.9E-10	8.22E-10	2.35E-08	0	2.71E-10	7.76E-10	0	-1.04E-07
SQP	SQP	3.78E+02	6.48E-03	5.32E-01	1.54E+01	0	2.22E-03	2.51E-01	0	-2.3E+01

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.

This EPD was created using a software tool.

## References

### ADA

Americans with Disabilities Act 1990  
<https://www.ada.gov/>

### STC

Sound Transmission Class  
<https://asastandards.org/terms/sound-transmission-class/>

### ISO 9001

DIN EN ISO 9001:2025-09, Quality management systems - Requirements (ISO/DIS 9001:2025); German and English version prEN ISO 9001:2025

### ISO 14001

DIN EN ISO 14001:2015-11, Environmental management systems - Requirements with guidance for use (ISO 14001:2015); German and English version EN ISO 14001:2015

### NRC

Noise Reduction Coefficient  
<https://asastandards.org/terms/noise-reduction-coefficient/>

### EN 15804

EN 15804:2012+A1 2013, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

### EN 15804

EN 15804:2012+A2:2019+AC:2021, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

### ISO 9001

ISO 9001:2015, Quality management systems — Requirements. Specifies criteria for quality management systems to ensure consistent product and service quality and enhance customer satisfaction.

### ISO 14001

ISO 14001:2015, Environmental management systems — Requirements with guidance for use. Specifies criteria for

environmental management systems to enhance environmental performance and ensure compliance with applicable legal and regulatory requirements.

### ISO 14025

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

### Further References

#### IBU 2022

General Instructions for the EPD programme of Institut Bauen und Umwelt e.V. Version 2.1, Berlin: Institut Bauen und Umwelt e.V., 2022, [www.ibu-epd.com](http://www.ibu-epd.com).

#### SPHERA LCA FE

Sphera LCA for Experts, LCA FE, Software system and databases, Managed LCA content MLC (fka GaBi database), University of Stuttgart and Sphera Solutions GmbH

#### MLC documentation

MLC life cycle inventory data documentation  
<https://lcadatabase.sphera.com/>

#### LCA-tool dormakaba

Tool No.: IBU-DOR-202508-LT2-EN.  
Developed by Sphera Solutions GmbH

#### PCR Part A

PCR – Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Project Report according to EN15804+A2:2019, Version 1.4, 2024, Institut Bauen und Umwelt e.V., [www.ibu-epd.com](http://www.ibu-epd.com).

#### PCR Part B

PCR – Part B: Requirements on the EPD for Room partition systems, version 08/2021, Institut Bauen und Umwelt e.V., [www.ibu-epd.com](http://www.ibu-epd.com).

The literature referred to in the Environmental Product Declaration must be listed in full. Standards already fully quoted in the EPD do not need to be listed here again.

The current version of PCR Part A and PCR Part B of the PCR document on which they are based must be referenced.



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