ENVIRONMENTAL PRODUCT DECLARATION

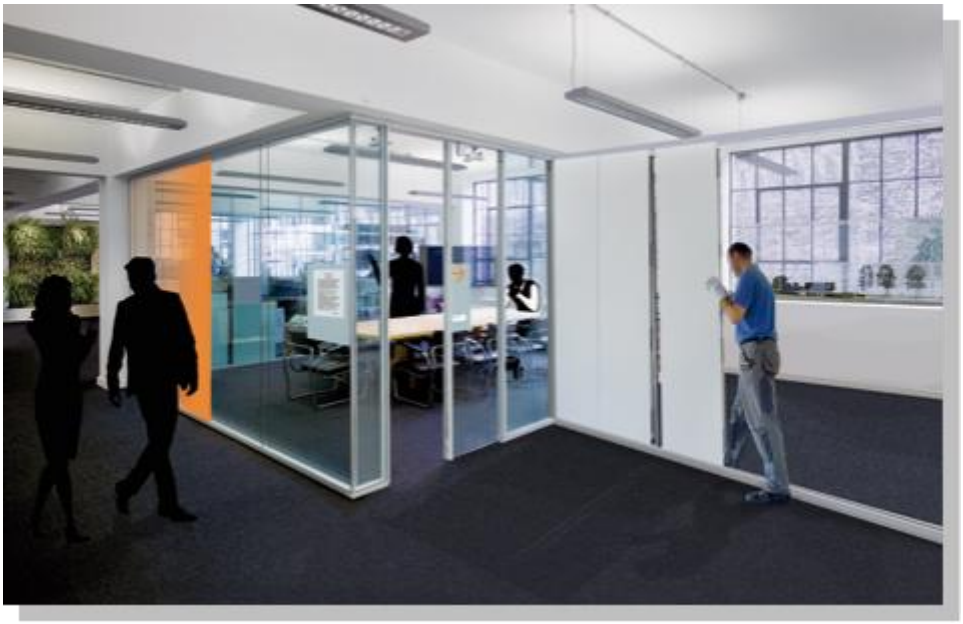
In accordance with ISO 14025 and EN 15804 for:

[Solid Panel Partition]

From

[Clestra Hauserman (Taicang) Products Architectural Co., Ltd.]

Declared product:Solid Panel Partition



Programme operator:	EPD China
Registration number:	EPD-CN-00020
Issued date:	2025-05-22
Valid until:	2030-05-21

Programme Information

EPD Owner	Clestra Hauserman (Taicang) Architectural Products Co., Ltd. Contact: Steven Zuo s.zuo@clestra.cn 008613816898396 Website: https://www.clestra.com/cn/ Address:Building 3, No.199 Wuyang Road,Chengxiang Town,Taicang City, Jiangsu Province
Product Name	Solid Panel Partition
Production Site	Building 3, No.199 Wuyang Road,Chengxiang Town,Taicang City, Jiangsu Province
Identification of product	UNCPC code:421 Structural metal products and parts thereof
Field of Application	Widely used in the fields of industrial and commercial construction
Programme Operator	EPD China Address of Headquarter: Tianping Road, Xuhui District, Shanghai Website: www.epdchina.cn Email: info@epdchina.cn | secretary@epdchina.cn
LCA Practitioner	Steven Zuo, Clestra Hauserman (Taicang) Architectural Products Co., Ltd., s.zuo@clestra.cn
Responsibility	The EPD owner has the sole ownership, liability, and responsibility for the EPD
Comparability	EPDs within same category of product in different programme operator are not suggested to be compared. Full conformance with a PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible even applying the same PCR.
Liability	The EPD owner has the sole ownership, liability, and responsibility for the EPD.
Validity	The EPD is published on 2025-05-22 and valid to2030-05-21
LCA Software (version)	Simapro9.6
LCI Dataset (version)	Ecoinvent3.10
Year(s) of Primary Data	March 1, 2024, to February 28, 2025
PCR	EPDCN-PCR-202204 PCR for construction products and construction services Version number: V2.1
Other Reference Document	EN 15804:2012+A2:2019/AC:2021, Sustainability of construction works-Environmental product declarations - Core rules for the product category of construction products
Verification statement according EN15804	
Independent verification of the declaration and data according to EN ISO 14025:2010 ☐ internal ☑ external Third-party institution verification: <Ying Su, CTI Certification Co., Ltd> is an approved certification body accountable for third-party verification Approved by: EPD China	

Procedure for follow-up of data during EPD validity involves a third-party certification body:

☑ Yes ☐ No

General Information

1.1 Company information

In this section, it is suggested to include but not limited to following information:

- Owner of the EPD：

Clestra Hauserman (Taicang) Architectural Products Co., Ltd.

- Contact:

Steven Zuo s.zuo@clestra.cn

- Name and location of production site(s):

Building 3, No.199 Wuyang Road,Chengxiang Town,Taicang City, Jiangsu Province

- Brief description of the company:

Clestra Hauserman (Taicang) Architectural Products Co., Ltd. is a company founded on April 21, 2010. The factory was located at Building 3, Xiangchuang Intelligent Manufacturing Industrial Park, No.199 Wuyang Road, Chengxiang Town, Taicang City.

Clestra Hauserman (Taicang) Architectural Products Co., Ltd. belongs to the partition industry and operates on a production and processing business model. The registered capital is 1 million RMB, the company was registered in 2010, and the legal representative is KIM SEONG JOONG. The company is located in Suzhou City, Jiangsu Province. Clestra Hauserman (Taicang) Architectural Products Co., Ltd. has the brand "Clestra," under its umbrella, and its products include partitions, fixed partitions, movable partitions, etc. The company adheres to the business philosophy of "customer first, keen to progress," providing customers with high-quality products and services.

1.2 Scope and type of EPD

In this section, it is suggested to include but not limited to following information:

- Description of system boundaries:

Cradle to Grave (A1-A5,B1-B7, C1-C4, D).

- System diagram:

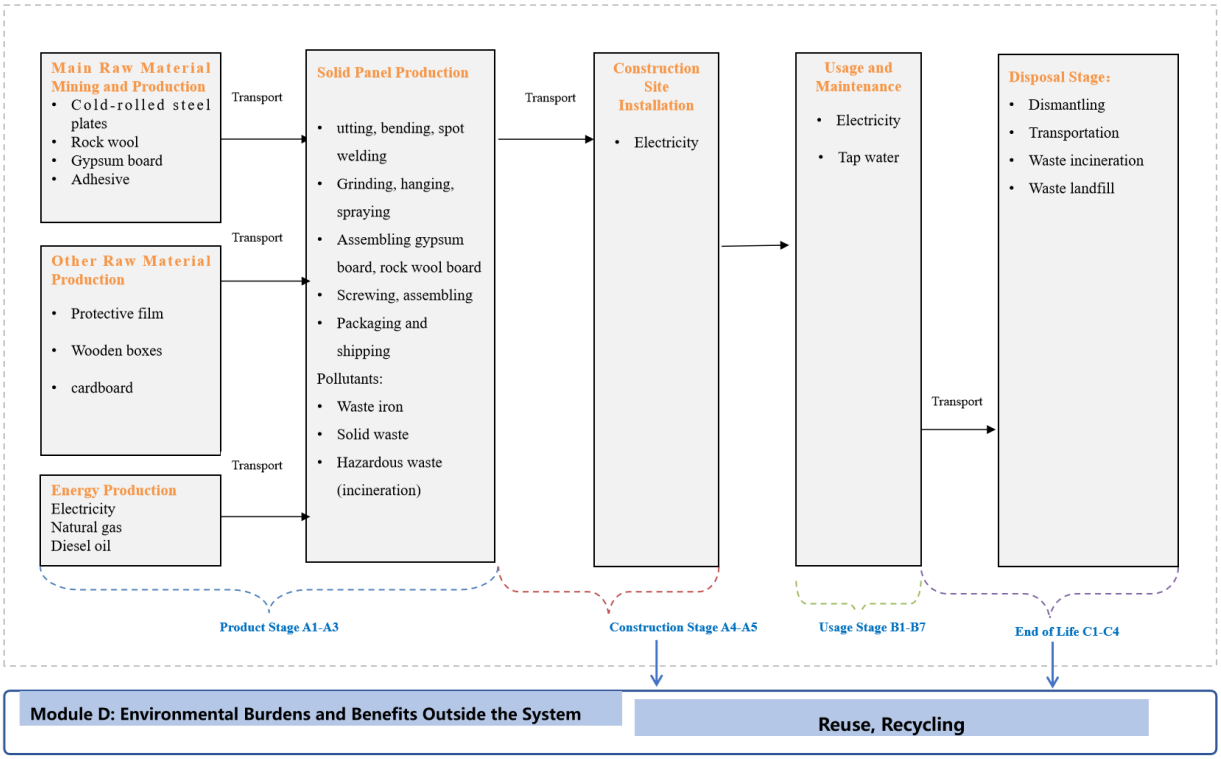


Table: Process stages and and EPD modules.

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				BENEFITSAND LOADSBEYOND THESYSTEM BOUNDARIES
Raw material supply	Transport	Production	Transport from the gate to the	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ 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	X	X	X	X	X	X	X	X	X	X	X	X

2 Detailed Product Description

In this section, it is suggested to include but not limited to following information:

- Description of the product

The Solid Panel Partition produced by Clestra Hauserman (Taicang) Architectural Products Co., Ltd.typically refers to a partition product made mainly of steel plates, widely used in industrial and commercial construction fields.It has the functions of wear resistance, fire resistance, sound insulation, etc.

Figure: Picture of the declared product.

- Description of the production processes

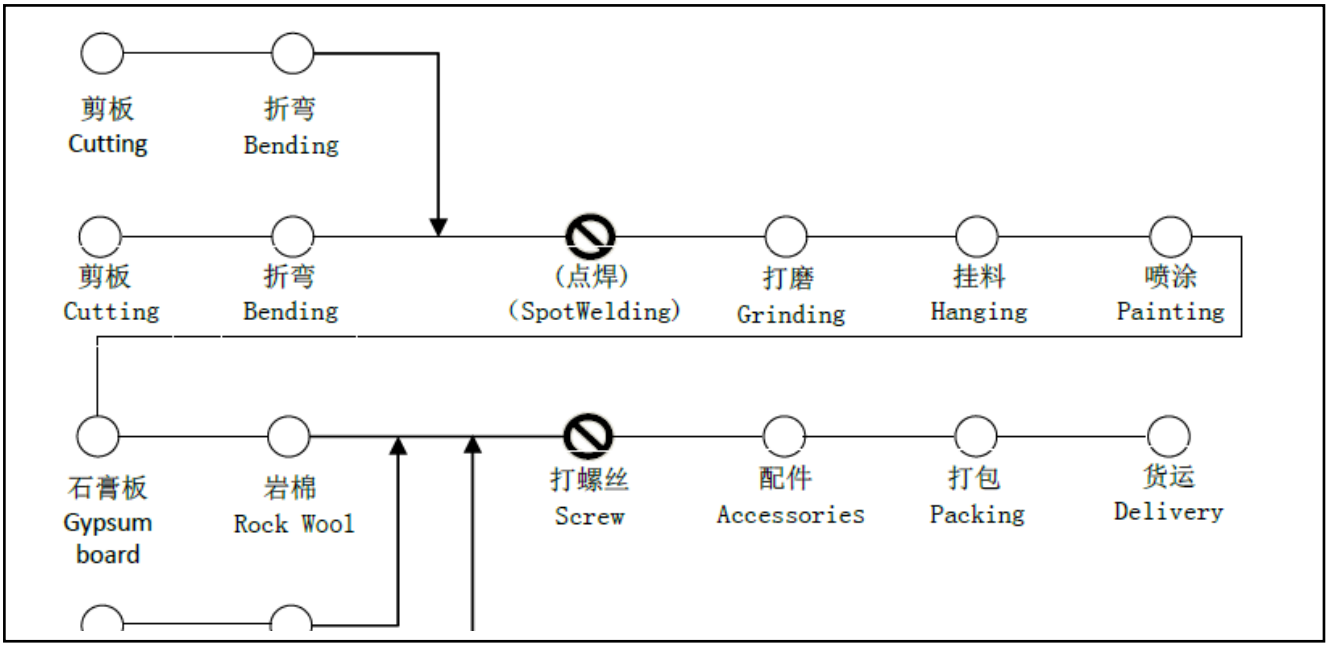


Figure: The production process in selected stages.

- Product components

Table: Main product components and packaging materials per unit.

Product components	Weight, kg	Weight-% (versus the product)
Steel cold rolled coil	21.12	54.90
Rock wool	2.85	7.41
Gypsum wallboard	14.06	36.55
Adhesive	0.44	1.14
TOTAL	38.47	100.00
Packaging materials	Weight, kg	Weight-% (versus the product)
Protective film	0.0480	0.12%
Wooden boxes	2.46	6.39%
Cardboard	0.118	0.31%
TOTAL	2.626	6.82%

Products do not contain any substances that can be included in “Candidate List of Substances of Very High Concern for Authorization” and raw materials used are not part of the EU REACH regulation.

3 LCA results according to EN 15804

3.1 Environmental Impacts

The results of the underlying LCA is provided in this section as environmental impacts, resource use, output flows and additional information on biogenic carbon. All pre-set parameters of EN 15804 are required.

Table: Environmental impacts according to EN 15804.

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT per declared unit																		
Core indicator	Unit	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	[kg CO2 eq.]	7.82E+01	6.34E-01	5.03E+00	4.32E+00	5.36E-01	0.00E+00	4.41E-02	8.79E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.54E-01	0.00E+00	2.83E+00	-3.69E+01
Global Warming Potential fossil fuels (GWP-fossil)	[kg CO2 eq.]	8.26E+01	6.34E-01	4.68E+00	4.32E+00	1.32E-01	0.00E+00	4.39E-02	8.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.53E-01	0.00E+00	6.82E-01	-3.68E+01
Global Warming Potential biogenic (GWP-biogenic)	[kg CO2 eq.]	-4.54E+00	-9.42E-05	3.47E-01	-5.32E-04	4.04E-01	0.00E+00	1.32E-04	-4.71E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.43E-06	0.00E+00	2.15E+00	-1.67E-01
Climate change - land use and change in land uise	[kg CO_2 eq.]	7.39E-02	2.78E-04	2.03E-03	1.87E-03	6.27E-05	0.00E+00	5.36E-05	4.79E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.99E-04	0.00E+00	5.28E-04	-5.99E-03
Depletion potential of the stratospheric ozone layer (ODP)	[kg CFC 11 eq.]	5.07E-07	9.01E-09	7.31E-08	6.11E-08	1.62E-09	0.00E+00	6.29E-09	2.65E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.05E-08	0.00E+00	1.94E-08	-4.25E-15
Acidification potential, Accumulated Exceedance (AP)	[mol H+ eq.]	4.83E-01	1.12E-02	2.17E-02	6.63E-02	6.36E-04	0.00E+00	2.30E-04	4.70E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.51E-03	0.00E+00	4.54E-01	-9.31E-02
Eutrophication potential, fraction of nutrients reaching freshwater end compartment (EP-	[kg P eq.]	9.64E-03	3.27E-05	7.60E-04	2.41E-04	3.44E-05	0.00E+00	1.79E-05	1.70E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.91E-05	0.00E+00	1.22E-04	-1.55E-05

freshwater)																		
Formation potential of tropospheric ozone (POCP)	[kg NMVOC eq.]	2.08E-01	9.06E-03	1.82E-02	5.51E-02	7.88E-04	0.00E+00	1.44E-04	2.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.49E-03	0.00E+00	3.21E-02	-6.14E-02
Abiotic depletion potential for non-fossil resources (ADP-minerals&metals)	[kg Sb eq.]	6.61E-04	1.23E-06	1.53E-05	9.22E-06	4.28E-07	0.00E+00	1.99E-07	3.96E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.41E-06	0.00E+00	1.79E-06	-2.08E-05
Abiotic depletion potential for fossil resources (ADP-fossil)	MJ, net calorific value	8.53E+02	8.28E+00	8.93E+01	5.70E+01	1.87E+00	0.00E+00	5.57E-01	9.71E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E+01	0.00E+00	8.40E+00	-3.89E+02
Water (user) deprivation potential, deprivation-weighted water consumption (WDP)	[m3 world eq. Deprived]	3.23E+02	3.40E-02	5.36E-01	2.47E-01	-4.08E-01	0.00E+00	2.15E+00	1.09E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.76E-02	0.00E+00	-2.31E+00	-1.11E+02

3.2 Resource use and waste categories

Table: Resource use and waste categories according to EN 15804.

RESULTS OF THE LCA - Resource use and waste categories per declared unit																		
Core indicator	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Use of renewable primary energy excluding renewable primary energy resources used as raw materials (PERE)	MJ	1.54E+02	8.16E-02	2.39E+00	5.93E-01	5.08E-02	0.00E+00	6.19E-02	6.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-01	0.00E+00	2.66E-01	-8.20E+00
Use of renewable primary energy resources used as raw materials (PERM)	MJ	4.67E+01	0.00E+00	0.00E+00	0.00E+00	-4.67E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renewable primary energy resources (PERT) (primary energy and primary energy resources used as raw materials)	MJ	2.01E+02	8.16E-02	2.39E+00	5.93E-01	-4.66E+01	0.00E+00	6.19E-02	6.08E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.39E-01	0.00E+00	2.66E-01	-8.20E+00
Use of non-renewable primary energy excluding non- renewable primary energy resources used as raw materials (PENRE)	MJ	8.53E+02	8.28E+00	8.93E+01	5.70E+01	1.87E+00	0.00E+00	5.58E-01	9.71E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E+01	0.00E+00	8.41E+00	-3.89E+02

Use of non-renewable primary energy resources used as raw materials (PENRM)	MJ	2.26E+00	0.00E+00	0.00E+00	0.00E+00	-2.26E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of non-renewable primary energy resources (PENRT) (primary energy and primary energy resources used as raw materials)	MJ	8.55E+02	8.28E+00	8.93E+01	5.70E+01	-3.83E-01	0.00E+00	5.58E-01	9.71E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.06E+01	0.00E+00	8.41E+00	-3.89E+02
Use of secondary material (SM)	kg	4.27E-01	3.66E-03	9.79E-03	2.53E-02	6.25E-04	0.00E+00	1.57E-03	1.26E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.74E-03	0.00E+00	2.96E-03	0.00E+00
Use of renewable secondary fuels (RSF)	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels (NRSF)	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of fresh water (FW)	m3	1.19E+01	8.31E-04	1.38E-02	6.04E-03	-9.48E-03	0.00E+00	5.00E-02	2.89E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.41E-03	0.00E+00	-5.36E-02	-5.63E+00
Hazardous waste disposed (HWD)	kg	3.92E+00	1.23E-02	4.29E-01	8.71E-02	7.61E-03	0.00E+00	4.82E-03	1.03E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.85E-02	0.00E+00	5.62E-02	0.00E+00
Non-hazardous waste disposed (NHWD)	kg	4.62E+01	2.03E-01	4.14E+00	1.48E+00	1.31E+01	0.00E+00	8.78E-01	8.09E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.48E-01	0.00E+00	7.99E+01	0.00E+00
Radioactive waste disposed (RWD)	kg	2.68E-04	1.24E-06	8.49E-05	9.02E-06	1.46E-06	0.00E+00	1.30E-06	2.26E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-06	0.00E+00	3.53E-06	0.00E+00
Components for re-use (CRU)	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling(MR)	kg	2.28E-02	4.81E-04	8.45E-03	2.83E-03	5.34E-05	0.00E+00	4.05E-05	7.33E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.78E-05	0.00E+00	1.22E-04	0.00E+00
Materials for energy recovery (MER)	kg	8.89E-05	3.35E-07	1.65E-06	2.54E-06	1.09E-07	0.00E+00	4.22E-08	3.25E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-07	0.00E+00	7.04E-07	0.00E+00
Exported energy (EE)	MJ	4.28E-01	1.19E-03	5.38E-03	8.91E-03	3.41E-04	0.00E+00	6.70E-04	6.99E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.32E-03	0.00E+00	3.64E-02	0.00E+00

3.3 Information on biogenic carbon content

Information on biogenic carbon content which shall be included in the EPD as follows:

Biogenic carbon content	Unit (expressed per functional unit or per declared unit)
Biogenic carbon content in product	0 kg C
Biogenic carbon content in accompanying packaging	1.208 kg C
NOTE：1 kg biogenic carbon is equivalent to 44/12 kg of CO_2.	

3.4 Additional impact indicators

A set of optional additional indicators must be addressed in a mandatory table (see table below) in the EPD if complying with EN 15804. If the EPD owner decides to not declare one or any additional indicator from the list in EN 15804, the boxes for those modules are assigned ND = not declared. Any additional indicator not declared must be identified in the table e.g. as an entry of "ND" to the table or as text.

Table: Optional additional impact indicators according to EN 15804.

RESULTS OF THE LCA - ADDITIONAL ENVIRONMENTAL IMPACT per functional or declared unit																		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Particulate matter	disease inc.	6.20E-06	3.30E-08	2.65E-07	2.43E-07	1.20E-08	0.00E+00	2.80E-09	6.23E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.97E-08	0.00E+00	4.01E-07	-1.57E-06
Ionising radiation	kBq U-235 eq	2.34E+02	5.07E-03	3.46E-01	3.69E-02	5.96E-03	0.00E+00	5.21E-03	9.21E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.68E-03	0.00E+00	2.05E-02	-1.63E+02
Land use	Pt	6.41E+02	2.75E+00	1.01E+01	2.14E+01	2.05E+00	0.00E+00	1.21E-01	1.81E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E+00	0.00E+00	1.30E+01	-1.36E+01

4 Supplementary information

4.1 Calculation rules

In this section, it is suggested to include but not limited to following information:

- Declared unit:

1m² steel partition

- The mass of declared unit:

38.5kg

- Assumptions:

(1)Construction process stage (A4-A5): The energy consumption data for the construction stage is assumed based on experience;

(2)Use stage (B1-B7): The energy and resource consumption data for the use stage is assumed based on experience;

(3)End of life stage (C1-C4): After the product is used, it is demolished and transported to the waste disposal site. The corresponding transportation data is assumed based on experience. The treatment methods for metal products, rubber products, and packaging materials are all reasonable assumptions made according to the product characteristics and recycling methods.

In the Product installation (A5)module, the energy consumption data for the construction stage is assumed based on experience, assuming that the on-site assembly process only consumes electricity, with an electricity consumption of 0.05kWh.

B1：The installed product does not consume energy during use stage。

B2: To maintain cleanliness, tap water is used for cleaning during the product use stage. According to experience, it is estimated that 1kg of tap water will be consumed for cleaning in one year, and the total tap water consumption during the product's entire life cycle (50 years) will be 50kg;

B3: In addition, according to experience, the product will be maintained once every 10 years during the use stage, with each maintenance consuming 0.025kWh of electricity, resulting in a total of 4 maintenances during the life cycle, with a total electricity consumption of 0.1kWh.

In the End of Life Stage(C1-C4), the recycling process will recover 70% of the scrap iron, and 30% of the scrap iron will be disposed of through landfill. The environmental benefits generated by recycling scrap iron will be presented in module D. The disposal method for waste gypsum board, rock wool board, and scrap iron materials in the product is landfill disposal.

The specific assumptions for each module can be found in corresponding product LCA report.

- Cut off rules:

The threshold for substance set in this report is 1%. The exclusion threshold for individual material flows is 0.1%, and the total exclusion should not exceed 1% of the total mass. However, any toxic and harmful materials and substances should be included in the inventory, and this report should not be overlooked. Due to some processes that may have environmental impacts, the corresponding processes will be excluded when the following situations occur.

(1) There is no appropriate accounting and quantification method;

(2) Although the quantification process is feasible, it does not conform to economic benefits, and the mass accounts for less than 0.1% of the total mass.

The processes excluded in this report include:

The construction process (A3) does not involve the use of circulating cooling water, so the water consumption of the product production process is not considered.

3.1.5 Assumptions

- Data quality:

Specific data on material and energy usage have been collected for the product life cycle. These data are provided by Clestra Hauserman (Taicang) Architectural Products Co., Ltd. and use real production data from March 1, 2024, to February 28, 2025.

In addition, the environmental impact data for the general data of resource consumption and energy consumption per 1m2 Solid Panel Partition product have been collected. These data come from the Ecoinvent database, version 3.10. No alternative data were used in this study.

This study uses Ecoinvent 3.10 as the reference database because it is consistent with the input streams of materials and energy in the following aspects:

ides with the input flows of matter and energy on the following aspects:

Technological equivalence: the data derives from the same physical and chemical processes, or at least the same technological coverage.

Limits towards nature: the data contains all the quantitative information necessary for the LCA and EPD.

Limits towards technical systems: the considered stages of the life cycle are equivalent.

Data processing and analysis are carried out in accordance with international standards ISO 14025, ISO 14040, ISO 14044, ISO 21930, and UNE-EN 15804:2012 + A2:2019.

- Allocations:

The consumption of electricity, diesel, natural gas, and pollutant emissions in the Solid Panel Partition production process all involve allocation.

The factory produces a variety of products, mainly including Solid Panel Partition s, steel doors, double-glazed partitions, and frameless double-glazed doors. These products are all produced in the same production workshop at different times, but since the factory has not statistically measured the energy consumption and pollutant emissions at different times, the energy consumption and pollutant emissions of the target unit product in this report are allocated by mass. That is to say:

Electricity consumption per $1m^2$ product = weight of $1m^2$ product * total electricity consumption during the statistical period / total production of the factory during the statistical period;

Natural gas consumption per $1m^2$ product = weight of $1m^2$ product * total natural gas consumption during the statistical period / total production of the factory during the statistical period;

Diesel consumption per $1m^2$ product = weight of $1m^2$ product * total diesel consumption during the statistical period / total production of the factory during the statistical period;

Pollutant generation per $1m^2$ product = weight of $1m^2$ product * generation quantity of a certain pollutant during the statistical period / total production of the factory during the statistical period;

This report does not involve the allocation of co-products or by-products.

4.2 Scenarios and additional technical information

In this section, it is suggested to include but not limited to following information:

EN15804	Life Cycle Stage
Product stage (A1-A3)	Al: Raw material extraction and processing(Cold-rolled, steel plates,Rock wool,Gypsum board,Adhesive etc.)
	A2: Transport to the Clestra Hauserman (Taicang) Architectural Products Co., Ltd.
	A3: Manufacturing(Electricity,Natural gas,Diesel oi,Pollutants)
Construction process stage(A4-A5)	A4: Transport to the building site
	A5: Installation into the building(Electricity)
Use stage related to the building fabric (B1-B5)	B1: Use or application of the installed product(Not consuming energy and resources)
	B2: Maintenance(Consuming tap water)

	B3: Repair(Electricity)
	B4: Replacement(Not consuming energy and resources)
	B5: Refurbishment(Not consuming energy and resources)
Use stage related to the operation ofthe building (B6-B7)	B6: Operational energy use(Not consuming energy and resources)
	B7: Operational water use(Not consuming energy and resources)
End-of-life stage (C1-C4)	C1: De-construction, demolition (Not consuming energy and resources)
	C2: Transport to waste processing
	C3:Waste processing for reuse, recovery and/or recycling(Not consuming energy and resources)
	C4: Disposal(landfill)
D Benefits and loads beyond the system boundary	D:Reuse, recovery and/or recycling potentials, expressed as netimpacts and benefits(Scrap iron recycling)

4.3 Dangerous substances

There are no dangerous substances into indoor air, oil and water during the use stage.

4.4 Other optional additional environmental information

Not public

References

[1]ISO 14040:2021 – Environmental management – Life cycle assessment – Principles and framework
[2]ISO 14044:2021 – Environmental management – Life cycle assessment – Requirements and guidelines
[3]ISO 14067:2018 Greenhouse gases – Carbon footprint – Quantification requirements and guidelines
[4]Guidelines for the calculation and reporting of greenhouse gas emissions from enterprises in other industries (for trial implementation)
[5]2006 IPCC Guidelines for National Greenhouse Gas Inventories
[6]Product Category Rules (PCR): Construction products, 2019:14, Version 1.3.4.
[7]EN15804 :2012+A2:2019: Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.
[8]EPD China General Programme Instruction

Annex

An **General Data Quality Assessment**

Annex may contain all additional information required for specific national use in different countries.

No	Name	Geographical representativeness	Technical representativeness	Time representativeness
1	Steel cold rolled coil {GLO} | blast furnace route and electric arc furnace route | production mix, at plant | 1kg, typical thickness between 0.15 - 3 mm. typical width between 600 - 2100 mm | LCI result	1	3	5
2	Insulation spiral-seam duct, rockwool, DN 400, 30 mm {GLO}| market for insulation spiral-seam duct, rockwool, DN 400, 30 mm | EN15804, U	1	3	5
3	Steel cold rolled coil {GLO} | blast furnace route and electric arc furnace route | production mix, at plant | 1kg, typical thickness between 0.15 - 3 mm. typical width between 600 - 2100 mm | LCI result	1	3	5
4	Gypsum wallboard product, regular, 0.5 inch (12.7 mm)/m2/RNA	1	3	5
5	Adhesive, for metal {RoW}| market for adhesive, for metal | EN15804, U	1	3	5
6	Packaging film, low density polyethylene {GLO}| market for packaging film, low density polyethylene | EN15804, U	1	3	5
7	Plywood {RoW}| market for plywood | EN15804, U	1	3	5
8	Folding boxboard carton {RoW}| market for folding boxboard carton | EN15804, U	1	3	5
9	Transport, freight, lorry 16-32 metric ton, EURO5{RoW}| market for transport, freight, lorry 16-32 metric ton, EURO5 | EN15804, U	1	3	5
10	Transport, freight, sea, ferry {GLO}| market for transport, freight, sea, ferry | EN15804, U	5	5	5
11	Heat, central or small-scale, natural gas {GLO}| market group for heat, central or small-scale, natural gas | EN15804, U	1	3	5
12	Diesel, low-sulfur {GLO}| market group for diesel, low-sulfur | EN15804, U	1	3	5
13	Electricity, low voltage {CN-ECGC}| market for electricity, low voltage | EN15804, U	5	3	5
14	Municipal solid waste {RoW}| treatment of municipal solid waste, municipal incineration | EN15804, U	1	3	5
15	Hazardous waste, for incineration {RoW}| market for hazardous waste, for incineration | EN15804, U	1	3	5
16	Transport, freight, lorry 16-32 metric ton, EURO5 {RoW}| market for transport, freight, lorry 16-32 metric ton, EURO5 | EN15804, U	1	3	5
17	Transport, freight, sea, ferry {GLO}| market for transport, freight, sea, ferry | EN15804, U	1	3	5
18	Tap water {GLO}| market group for tap water | EN15804, U	1	3	5
19	Electricity, low voltage {CN-ECGC}| market for electricity, low voltage | EN15804, U	5	3	5
20	Transport, freight, lorry 16-32 metric ton, EURO6 {RER}| market for transport, freight, lorry 16-32 metric ton, EURO6 | EN15804, U	1	3	5
21	Waste gypsum {RoW}| treatment of waste gypsum, sanitary landfill | EN15804, U	1	3	5
22	Municipal solid waste {RoW}| treatment of, sanitary landfill | EN15804, U	1	3	5
23	Scrap steel {RoW}| treatment of scrap steel, inert material landfill | EN15804, U	1	3	5
24	Steel cold rolled coil {GLO} | blast furnace route and electric arc furnace route | production mix, at plant | 1kg, typical thickness between 0.15 - 3 mm. typical width between 600 - 2100 mm | LCI result	1	3	5
Average		1.5	3.1	5.0
Final average score		3.19		

CLESTRA

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