

# **Epure Standard, Meeting, and Management Tables**



## **Environmental Product Declaration**

EPD-S-P-13325

Date of Issue: May 20, 2024 Date of Expiration: May 19, 2029

## **Product Category Rule**

BIFMA PCR for Tables, UNCPC 3812 v1 EN 15804+A2:2019/AC2021 Construction Products PCR:2019:14 version 1.3.4 In accordance with ISO 14025

## **Program**

Program: The International EPD System

www.environdec.com

Program Operator: EPD International AB



#### **Functional Unit**

1 m<sup>2</sup> of floor space, maintained for a period of 10 years produced in Europe.

This EPD was not written to support comparative assertions. EPDs based on different PCRs or different calculation models may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results due to and not limited to the practitioner's assumptions, the source of the data used in the study and the software tool used to conduct the study.

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com.



Procedure for follow-up of data during EPD validity involves third-party verifier	☐ Yes
This life cycle assessment was conducted in accordance with ISO 14044, EN 15804+A2, and the reference PCR by:	WAP Sustainability Consulting
Independent, third party verification of the declaration and data, according to ISO 14040 (2006), ISO 14025 (2006), 14025 (2006), EN 15804+A2, and BIFMA PCR for Tables: UNCPC 3812 V1 (2021), which serves as the core PCR.	Thomas Gloria, Industrial Ecology Consultants  Approved by: The International EPD® System
The sub-category PCR review was conducted by:	Thomas Gloria, PhD (chair) Jack Geibig, P.E. Michael Overcash, PhD
Core PCR review was conducted by:	The Technical Committee of the International EPD® System. See www.environdec.com for a list of members. Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat. www.environdec.com/contact.
LCIA Methodology and Version Number	EN 15804+A2, IPCC AR6 + TRACI 2.1
LCI Database and Version Number	Sphera MLC (GaBi) 2023.2
LCA Software and Version Number	Sphera LCA FE (GaBi) 10.7
Year of reported manufacturer primary data	2022
EPD Scope	Cradle to Grave
Range of Dataset Variability	N/A
Intended Audience	Business-to-Business, Business-to-Consumer
EPD Type	Product Specific
Period of Validity	5 years from date of issue
Date of Issue	May 20, 2024
Markets of Applicability	Europe
Product RSL	10 years
Product's intended Application and Use	Commercial Furniture
Reference PCR and Version Number	produced in Europe  CEN standard EN 15804 serves as the core PCR PCR 2019:14 Construction products, version 1.3.4 BIFMA PCR for Tables: UNCPC 3812 v1
Declared Product and Functional Unit	1 m <sup>2</sup> of floor space covered by Epure, maintained for a 10-year period
Declaration Number	Holland, MI 49423 sustainability@haworth.com EPD-S-P-13325
Manufacturer Name and Address	Haworth, Inc. One Haworth Center
Trogram operator	EPD International AB  Box 210 60  SE-100 31 Stockholm  Sweden
Program Operator	The International EPD® System

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

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

This study utilizes the BIFMA Tables PCR as a cPCR. This BIFMA PCR was used to meet market expectations such as Building Transparency EC3 comparisons, LEED and existing vendor procurement requirements, and product scoring programs. The EPD should not be used outside of this context.

## **Company Description**

Haworth strives to be a sustainable corporation. We believe operating a sustainable corporation will allow us to help people do great things for generations to come. We are on a journey—one that promotes longevity and delivers value to the people, communities, and planet that we serve. At our core, we are a family—and we weather challenges together. Haworth is built upon a culture that empowers members and all stakeholders to make positive changes. We strengthen existing partnerships and build new ones, while empowering our members and leveraging our global reach, as we continue our drive toward making positive changes for the people and communities, we serve all over the world.

## **Product Description**

Designed by Emmanuel Dietrich, Epure features a highly adaptable design featuring an Isoplan® structural worktop and no tool assembly. The innovative concept of Epure ensures unrivalled flexibility and practicality whilst limiting the number of structural components. Epure is manufactured at Haworth's facility in St. Hilaire, France– an ISO 14001 and ISO 9001 certified facility. This product can be easily disassembled at the end of its useful life. Components are identified with ISO recycling symbols and material information to assist in the recycling effort, where practical. Haworth offers circular service solutions for product take back, refurbishment, or recycling after the product's useful life. This product falls under UN CPC 3812.

Results were calculated for a single configuration of the table (EURD1608) with a rectangular melamine top measuring 1600 mm in width and 800 mm in depth with a 2 mm ABS edge and fixed aluminum legs. However, this EPD encompasses results for all variations within the Epure Table (Epure Standard, Epure Meeting, Epure Management) family excluding storage elements. The configuration selected was determined to have the highest potential impacts of all Epure table model configurations produced in Europe, making the results in this EPD conservative and thus representative of all products listed. Product codes within the variation allowance include those beginning with EUB, EUC, EUE, EUF, EUG, EUL, EUM, EUR, EUS, or EUW, Storage elements are not represented under this EPD.

The composition of the table is provided below, with a total product weight of 36.2 kg, an area of 1.28 m<sup>2</sup>, and total packaging weight of 0.48 kg. To meet the functional unit, 0.78 units of Epure are required with a reference flow of 28.2 kg.

Material	[kg]	[%]	Recycled Content [%]	Resource Type
Fiberboard	27.8	77%	0%	Virgin Non-renewable
Aluminum	7.3	20%	60%	Recycled, Virgin Non-renewable
Polypropylene	0.4	1%	0%	Virgin Non-renewable
Acrylonitrile Butadiene Styrene	0.4	1%	11%	Recycled, Virgin Non-renewable
Zinc	0.3	1%	0%	Virgin Non-renewable
Packaging				-
Cardboard	0.24	51%	47%*	Recycled, Virgin Renewable
Polyethylene	0.16	33%	0%	Virgin Non-renewable
LDPE	0.07	15%	0%	Virgin Non-renewable
Paper	0.01	1%	0%	Virgin Renewable

<sup>\*</sup>Recycled content cardboard packaging is an average value associated with background LCI datasets

#### **Additional Environmental Information**

The product under review is manufactured at a zero waste-to-landfill facility that is ISO 14001- and ISO 9001- certified. In addition, this product has the following certifications:

- NF Environment Certified
- NF Office Excellence Certified
- Indoor Advantage Gold Certified

- European Level 3 Certified
- PEFC Certified



At the end of its useful life, manage Haworth products correctly in accordance with all applicable regulations for effective end-of-life management, including recycling, disposal, or incineration. Improper management may result in the release of chemicals that may represent a risk to the environment and human health & safety.

## **Functional Unit**

The functional unit is  $1 \text{ m}^2$  of floor space, maintained for a 10-year period. The products under study have a 10-year service life under ANSI/BIFMA X5.5 and therefore do not require replacements to meet the functional unit. The area of each table was calculated in accordance with the method outlined by section 3 of the PCR.

## **LCA Stages**



Materials Acquisition & Pre-Processing | Includes raw material extraction, pre-processing of materials, and transport to production.

*Production* | Includes component and final assembly manufacturing operations, both by Haworth and upstream suppliers, as well as intermediate transport and packaging requirements.

Distribution, Storage, and Use | Includes an average distribution to customers. No additional storage is required. There are no impacts associated with use of the product.

End-of-Life | Includes transport to and disposal of product and packaging based on average EU recycling rates.

#### **LCA** Information

General principles of allocation were based on ISO 14040/44. Where possible, allocation was avoided. At the part supplier production facilities, manufacturing inputs and outputs are allocated to co-products by mass because of the use of secondary datasets and no primary data available for part suppliers. At Haworth assembly facilities, manufacturing inputs and outputs are allocated to co-products based on economic value. This choice was deemed the most appropriate at Haworth facilities due to the availability of data on economic value. As a default, Sphera Managed LCA Content datasets use a physical mass basis for allocation.

Throughout the study recycled materials were accounted for via the cut-off method. Under this method, impacts and benefits associated with the previous life of a raw material from recycled stock are excluded from the system boundary and includes the impacts associated with reprocessing and preparation of recycled materials. Additionally, impacts and benefits associated with secondary functions of materials at end of life are also excluded.

Production of capital goods, infrastructure, and personnel-related activities are excluded, as required by the BIFMA PCR for tables.

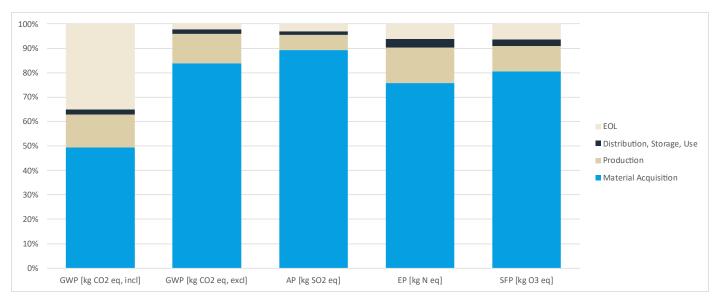
## **LCA Results**

All results are given per functional unit, which is  $1\,\text{m}^2$  of floor space, maintained for a 10-year period. Results are reported separately by life cycle stage per the BIFMA PCR for tables. It is discouraged to use of results for Material Acquisition and Production without considering the results for End of Life.

Impact Category	Material Acquisition	Production w/ grid electricity*	Production w/ purchased renewables*	Distribution, Storage, Use	End of Life	Total**
IPCC AR6 LCIA Impacts					·	
Global Warming Potential, incl biogenic [kg CO <sub>2</sub> eq]	2.75E+01	7.42E+00	3.33E+01	1.21E+00	1.94E+01	5.55E+01
Global Warming Potential, excl biogenic [kg CO <sub>2</sub> eq]	5.37E+01	7.81E+00	2.92E+01	1.21E+00	1.36E+00	6.41E+01
TRACI 2.1 LCIA Impacts					•	
Acidification Potential [kg SO <sub>2</sub> eq]	3.18E-01	2.18E-02	5.60E-02	5.58E-03	1.05E-02	3.56E-01
Eutrophication Potential [kg N eq]	1.06E-02	2.04E-03	1.50E-02	4.95E-04	8.64E-04	1.40E-02
Ozone Depletion Potential [kg CFC 11 eq]	1.04E-07	1.53E-12	1.17E-12	3.13E-15	3.45E-08	1.39E-07
Smog Formation Potential [kg O₃ eq]	3.69E+00	4.73E-01	8.27E-01	1.29E-01	2.88E-01	4.58E+00
Resource Use Indicators						
Renewable primary resources used as energy carrier [MJ]	8.26E+02	4.12E+01	1.64E+02	6.79E-01	2.75E-01	8.68E+02
Renewable primary resources with energy content used as material [MJ]	0.00E+00	2.72E+00	2.72E+00	0.00E+00	0.00E+00	2.72E+00
Renewable primary resources, total [MJ]	8.26E+02	4.39E+01	1.67E+02	6.79E-01	2.75E-01	8.71E+02
Non-renewable primary resources used as energy carrier [MJ]	-5.91E+01	1.99E+02	1.38E+02	1.70E+01	9.06E+00	1.66E+02
Non-renewable primary resources with energy content used as a material [MJ]	-5.91E+01	1.99E+02	1.38E+02	1.70E+01	9.06E+00	1.66E+02
Non-renewable primary resources, total [MJ]	-1.18E+02	3.98E+02	0.00E+00	3.41E+01	1.81E+01	3.32E+02
Recovered energy [MJ]	0.00E+00	1.63E+00	0.00E+00	0.00E+00	8.75E+01	8.91E+01
Net fresh water usage [kg]***	4.02E-01	5.77E-02	6.76E-02	2.33E-03	4.74E-02	5.09E-01

<sup>\*</sup>Impacts in the "production w/ grid electricity" stage includes electricity from the grid and on-site renewables whereas "production w/ purchased renewables" also includes electricity from the grid (if any), on-site renewables (if any), and voluntary renewable electricity purchased by Haworth for production purposes.

The chart below presents the relative contribution of each life cycle stage to the TRACI 2.1 and IPCC environmental impact categories by life cycle stage per the BIFMA PCR for tables.



<sup>\*\*</sup>Includes material acquisition, production w/ grid, distribution, storage, use, and EOL.

<sup>\*\*\*</sup> Water usage from electricity generation is included

Additionally, results have been calculated using LCIA methodologies for core environmental impact categories specified in EN 15804+A2, as well as LCI indicators required by EN15804+A2. Results are reported per functional unit. For this product, 0.78 units of product is required to meet the functional unit. The results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks. It is discouraged to use of results for A1-A3 without considering the results for C1-C4.

	Product Stage w/ grid*	Product Stage w/ renewables*	Construct	tion Stage				Us	e Sta	ge				End of Life	Load	enefits and s Beyond the em Boundary
	A1-A3	A1-A3	A4	A5	B1	В2	В3	В4	В5	В6	В7	C1	C2	C3	C4	D
GWP-GHG [kg CO2 eq.]	6.15E+01	8.48E+01	1.21E+00	5.76E-02	0	0	0	0	0	0	0	0	7.15E-02	6.04E-01	6.88E-01	-3.03E+01
Climate Change - total [kg CO2 eq.]	3.49E+01	6.07E+01	1.21E+00	1.93E-01	0	0	0	0	0	0	0	0	7.38E-02	1.83E+01	8.43E-01	-4.71E+00
Climate Change, fossil [kg CO2 eq.]	6.14E+01	6.47E+01	1.21E+00	5.38E-02	0	0	0	0	0	0	0	0	7.15E-02	6.04E-01	3.71E-02	-3.02E+01
Climate Change, biogenic [kg CO2 eq.]	-2.65E+01	-3.97E+00	7.80E-04	1.39E-01	0	0	0	0	0	0	0	0	2.36E-03	1.77E+01	8.06E-01	2.55E+01
Climate Change, land use and land use change [kg CO2 eq.]	1.34E-02	1.74E-02	1.38E-03	3.86E-06	0	0	0	0	0	0	0	0	2.07E-05	2.79E-06	3.09E-05	-2.08E-02
Ozone depletion [kg CFC-11 eq.]	1.01E-07	1.01E-07	1.48E-13	2.89E-14	0	0	0	0	0	0	0	0	5.39E-15	2.43E-08	6.18E-14	-6.94E-11
Acidification [Mole of H+ eq.]	4.04E-01	4.24E-01	5.98E-03	5.18E-05	0	0	0	0	0	0	0	0	6.62E-04	9.90E-03	2.10E-04	-1.11E-01
Eutrophication, freshwater [kg P eq.]	1.28E-04	9.15E-04	5.95E-06	2.76E-07	0	0	0	0	0	0	0	0	8.99E-08	1.33E-07	2.12E-06	-1.78E-04
Eutrophication, marine [kg N eq.]	6.54E-02	7.63E-02	3.01E-03	1.85E-05	0	0	0	0	0	0	0	0	3.33E-04	4.27E-03	2.92E-04	-2.77E-02
Eutrophication, terrestrial [Mole of N eq.]	7.80E-01	8.50E-01	3.32E-02	2.30E-04	0	0	0	0	0	0	0	0	3.65E-03	5.02E-02	7.96E-04	-2.85E-01
Photochemical ozone formation, human health [kg NMVOC eq.]	2.17E-01	2.41E-01	6.12E-03	4.97E-05	0	0	0	0	0	0	0	0	6.27E-04	1.10E-02	4.89E-04	-7.88E-02
Resource use, mineral and metals [kg Sb eq.]**	4.69E-04	4.71E-04	7.94E-08	3.39E-10	0	0	0	0	0	0	0	0	1.47E-09	-6.94E-07	9.77E-10	-2.70E-04
Resource use, fossils [MJ]**	1.14E+03	1.08E+03	1.59E+01	9.95E-02	0	0	0	0	0	0	0	0	1.01E+00	7.38E+00	5.50E-01	-4.82E+02
Water use [m³ world equiv.]**	8.33E+00	8.52E+00	7.06E-02	2.17E-02	0	0	0	0	0	0	0	0	1.23E-03	2.01E+00	3.42E-03	-2.89E+00
Use of renewable primary energy (PERE) [MJ]	8.70E+02	9.93E+02	6.79E-01	1.82E-02	0	0	0	0	0	0	0	0	1.38E-02	1.94E-01	4.96E-02	-5.25E+02

	Product Stage w/ grid*	Product Stage w/ renewables*	Construc	tion Stage				Us	e Sta	ge			_	End of Life	Load	enefits and s Beyond the em Boundary
	A1-A3	A1-A3	A4	A5	В1	В2	В3	В4	В5	В6	В7	C1	C2	СЗ	C4	D
Primary energy resources used as raw materials (PERM) [MJ]	2.72E+00	2.72E+00	0	0	0	0	0	0	0	0	0	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renewable primary energy resources (PERT) [MJ]	8.73E+02	9.96E+02	6.79E-01	1.82E-02	0	0	0	0	0	0	0	0	1.38E-02	1.94E-01	4.96E-02	-5.25E+02
Use of non-renewable primary energy (PENRE) [MJ]	6.41E+02	5.80E+02	1.70E+01	1.01E-01	0	0	0	0	0	0	0	0	1.03E+00	7.38E+00	5.50E-01	-4.83E+02
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	5.01E+02	5.01E+02	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1.14E+03	1.08E+03	1.70E+01	1.01E-01	0	0	0	0	0	0	0	0	1.03E+00	7.38E+00	5.50E-01	-4.83E+02
Input of secondary material (SM) [kg]	5.04E+00	5.04E+00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of non renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use of net fresh water (FW) [m3]	4.60E-01	4.69E-01	2.33E-03	5.14E-04	0	0	0	0	0	0	0	0	3.91E-05	4.67E-02	9.71E-05	-2.73E-01
Hazardous waste disposed (HWD) [kg]	2.05E-05	2.05E-05	4.90E-11	3.44E-12	0	0	0	0	0	0	0	0	8.79E-13	5.96E-13	4.63E-11	-8.50E-06
Non-hazardous waste disposed (NHWD) [kg]	7.87E+00	3.35E+01	1.48E-03	2.91E-02	0	0	0	0	0	0	0	0	5.08E-05	1.53E-02	3.78E-01	-5.30E+00
Radioactive waste disposed (RWD) [kg]	6.96E-02	4.15E-02	4.89E-05	3.38E-06	0	0	0	0	0	0	0	0	9.67E-07	3.95E-04	6.50E-06	-3.41E-02
High-level radioactive waste, conditioned, to final repository (HLRW) [kg]	3.59E-05	2.62E-05	5.80E-08	2.87E-09	0	0	0	0	0	0	0	0	1.15E-09	6.67E-07	5.65E-09	-2.35E-05
Intermediate- and low-level radioactive waste, conditioned, to final repository (ILLRW) [kg]	6.96E-02	4.15E-02	4.88E-05	3.37E-06	0	0	0	0	0	0	0	0	9.66E-07	3.95E-04	6.50E-06	-3.40E-02
Components for re-use (CRU) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	6.89E+00	6.89E+00	0	2.32E-01	0	0	0	0	0	0	0	0	0	1.68E+01	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Product Stage w/ grid*	Product Stage w/ renewables*	Construct	tion Stage	Use Stage								_	End of Life		Benefits and Loads Beyond the System Boundary	
	A1-A3	A1-A3	A4	A5	В1	В2	В3	В4	В5	В6	В7	C1	C2	С3	C4	D	
Total recovered energy exported from the product system (EEE and EET) [MJ]	1.63E+00	0	0	8.33E-01	0	0	0	0	0	0	0	0	0	8.66E+01	0	0	
Particulate matter [Disease incidences]	1.54E-05	1.56E-05	5.97E-08	3.60E-10	0	0	0	0	0	0	0	0	6.19E-09	3.51E-08	2.02E-09	-1.16E-06	
lonizing radiation, human health [kBq U235 eq.]***	1.56E+01	8.30E+00	4.12E-03	5.14E-04	0	0	0	0	0	0	0	0	7.69E-05	6.62E-03	9.62E-04	-6.44E+00	
Ecotoxicity, freshwater [CTUe]**	4.46E+02	5.21E+02	1.33E+01	6.10E-02	0	0	0	0	0	0	0	0	1.13E+00	9.32E-01	9.58E-01	-1.22E+02	
Human toxicity, cancer [CTUh]**	8.60E-07	8.62E-07	3.09E-10	3.03E-12	0	0	0	0	0	0	0	0	1.84E-11	2.45E-10	2.37E-11	-1.25E-08	
Human toxicity, non-cancer [CTUh]**	1.21E-06	1.33E-06	5.01E-09	1.77E-10	0	0	0	0	0	0	0	0	3.57E-10	1.85E-08	2.95E-09	-3.23E-07	
Land Use [Pt]**	6.27E+01	3.53E+02	2.99E+00	2.20E-02	0	0	0	0	0	0	0	0	4.33E-02	1.79E-02	4.79E-02	-6.33E+03	

The life cycle modules are defined by EN 15804 as follows: Product Stage – raw material supply, transport, and manufacturing; Construction Stage – distribution and installation; Use Stage – use of installed product, maintenance, repair, replacement, refurbishment, operational energy use, and operational water use; End of Life - deconstruction, transport of waste, waste processing, and disposal; Benefits and Loads Beyond the System Boundary - credits from energy and material capture.

As required by the construction products PCR, this EPD shall declare the energy source behind electricity used in the manufacturing process in A3 and its climate impact as kg CO2 eq./kWh (using the GWP-GHG indicator).

#### A3 Electricity Climate Impact

Site	Energy Source	GWP-GHG	Unit
St. Hilaire, France (grid)	National residual mix	6.14E-02	kg CO2 eq / kWh
St. Hilaire, France (purchased renewables)	Renewable sources from supplier: biomass, biogas, wastewater treatment	2.59E+00	kg CO2 eq / kWh

<sup>\*</sup>Impacts in the "product stage w/ grid electricity" stage includes electricity from the grid and on-site renewables whereas "product stage w/ purchased renewables" also includes electricity from the grid (if any), on-site renewables (if any), and voluntary renewable electricity purchased by Haworth for production purposes.

<sup>\*\*</sup>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 experience with the indicator.

<sup>\*\*\*</sup>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.

Functional	U	ın	ш
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Parameter	Value
Declared unit	1 m <sup>2</sup> floorspace maintained for a 10-year period
Number of occupants	1
Reference service life required	10 years
Biogenic carbon in product	40.0 kg C
Biogenic carbon in packaging	0.31 kg C

## A4: Transport to the building site

Parameter	Value per functional unit	
Transportation type	Truck	
Fuel consumption (I/km)	0.42 diesel	
Distance	529 km	
Capacity utilization	67%	
Capacity utilization volume factor	=1	
Weight of product (kg)	28.242	
Volume (m³)	0.93	

Δ5.	Installation	in the	huilding

Parameter	Value per functional unit
Packaging waste produced	0.37 kg
Installation Assumptions	No product waste, Installed with hand tools.

#### B2: Maintenance

B2: Maintenance							
Parameter	Value per functional unit						
Maintenance Process	No maintenance is expected for this product						
Maintenance cycle	0						
Ancillary Materials for maintenance (kg/cycle)	0						
Waste materials resulting from maintenance (kg)	0						
Net fresh water consumption during maintenance (m³)	0						
Energy input during maintenance (kWh)	0						

## Reference service life (RSL)

Parameter	Value per functional unit						
Reference service life	10 years						
Design application parameters	Use as indicated in product brochure and warranty						
Declared product properties	Properties given in product description on page 3						
Indoor environment	Typical office and home environment						
Use conditions	Typical office and home use						

#### B3: Repair

Parameter	Value per functional unit
Repair process	No repairs are expected for this product
Inspection process	No repairs are expected for this product
Repair cycle (#/RSL)	0
Ancillary materials (kg)	0
Waste materials from repair (kg)	0
Net freshwater consumption during repair (m³)	0
Energy input during repair (kWh)	0

## B4: Replacement

Parameter	Value per functional unit							
Replacement cycle (#/RSL)	0							
Energy input during replacemen (kWh)	t 0							
Exchange of worn parts during the products life cycle (kg)	0							

#### **B5: Refurbishment**

DOT NOT AT DIGHTHOUSE										
Value per functional unit										
No refurbishment is expected for this product										
0										
0										
0										
0										

#### B6 and B7: Use of energy and Use of Water

	<del></del>							
Parameter	Value per functional unit							
Ancillary materials (kg)	0							
Net freshwater consumption (m <sup>3</sup>	0							
Power output of equipment (kW)	0							
Characteristic performance	n/a							

#### C1-C4: End-of-life

Parameter	Value per functional unit
Weight of product collected	28.242 kg
Weight to recycling	16.77 kg
Weight to energy recovery	10.917 kg
Weight to landfill	0.555 kg
Distance to recycling	32.2 km
Distance to energy recovery	32.2 km
Distance to landfill	32.2 km



## **Modules Declared and Data Variation**

	Product stage Construction process stage					Use stage							End of life stage				Resource recovery stage
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling- potential
Module	A1	A2	АЗ	A4	A5	B1	B2	В3	В4	B5	В6	В7	C1	C2	СЗ	C4	D
Modules declared	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Geography	GLO	GLO	GLO	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU	EU
Specific Data Used		1%															
Variation - products		0%		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - Sites		0%		-	-	-	-	-	-	=	-	-	-	-	=	-	-

### References

- EN 15804:2012+A2.2019/AC:2021, Sustainability of construction works Environmental product declarations Core rules for the product category of construction products
- 2. ISO 14040: 2006/ Amd 1:2020: Environmental Management Life cycle assessment Requirements and Guidelines.
- 3. ISO 14044: 2006/ Amd 1:2017/ Amd 2:2020: Environmental Management Life cycle assessment Requirements and Guidelines Amendment 1.
- 4. ISO 14025:2006 Environmental labels and declarations Type III environmental declarations Principles and Procedures.
- ISO 21930:2017 Sustainability in buildings and civil engineering works Core rules for environmental product declarations
  of construction products and services.
- 6. IPCC. (2021). Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. [Masson-Delmotte, V., P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press. In Press.
- 7. Life Cycle Assessment, LCA Report for Haworth. WAP Sustainability Consulting. March 2024.
- 8. NSF International. BIFMA PCR for Tables: UNCPC 3812, valid through January 31, 2026
- 9. TRACI: The Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts. Version 2.1 User Guide https://nepis.epa.gov/Adobe/PDF/P100HN53.pdf.
- 10. US EPA, 2022. Facts and Figures about Materials, Waste and Recycling.- <a href="https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials">https://www.epa.gov/facts-and-figures-about-materials</a>- <a href="materials-waste-and-recycling/national-overview-facts-and-figures-materials">https://www.epa.gov/facts-and-figures-about-materials</a>- <a href="materials-waste-and-recycling/national-overview-facts-and-figures-materials">https://www.epa.gov/facts-and-figures-about-materials</a>- <a href="materials-waste-and-recycling/national-overview-facts-and-figures-materials">https://www.epa.gov/facts-and-figures-about-materials</a>- <a href="materials-waste-and-recycling/national-overview-facts-and-figures-materials">https://www.epa.gov/facts-and-figures-about-materials</a>- <a href="materials-waste-and-recycling/national-overview-facts-and-figures-materials">https://www.epa.gov/facts-and-figures-materials</a>- <a href="materials-waste-and-recycling/national-overview-facts-and-figures-materials-">https://www.epa.gov/facts-and-figures-materials</a>- <a href="materials-waste-and-waste-and-waste-and-recycling-and-waste-and-
- 11. Product Category Rules for Construction Products PCR 2019:14 Version 1.3.4. EPD International AB. 2023.
- 12. General Programme Instructions for the International EPD System Version 4.0. EPD International AB. March 2021.