

Flex Height-Adjustable Desk

APAC



Certified
Environmental
Product Declaration
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About this product

Everything you'd expect from a height-adjustable desk, plus it's designed to move as quickly as you do. It's stable, yet mobile. Push them together for collaborative work or move it to a quiet nook for focus time.

The reference product is a table covering 0.72 m² meaning 1.4 units are required to meet the functional unit of 1 m² of physical floor space for a 10-year period.

Date of Issue: May 03, 2024
Date of Expiration: May 03, 2029

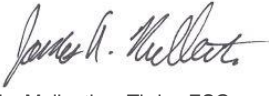
Learn more

- Explore Steelcase environmental philosophy and commitments [overview](#).
- Find product details and sustainability certifications on [product page](#) at steelcase.com.
- See our product [warranty](#).
- Contact epd@steelcase.com for any EPD-related questions or inquiries.

About this document

This declaration describes the Life Cycle Assessment of the Flex Height-Adjustable desk produced for the APAC market by Steelcase Inc. in China. The assessment is performed according to the ISO standards 14040 (2006), 14044 (2006) and 14025 (2006), and BIFMA PCR for Tables: UNCPC 3812 to generate an EPD for business-to-business communication.

ASSESSMENT OVERVIEW

EPD commissioner	Steelcase® Inc
Corporate Address	901 44th Street SE Grand Rapids, Michigan 49508-7594 United States
Product group	Tables
Product name	Flex Height-Adjustable desk
Product intended use	Table
Product reference service life	10 years
Reference standards	ISO 14025, ISO 14040, ISO 14044
EPD scope	Cradle to grave
EPD number	EPD10939
Date of issuance	May 03, 2024
Date of expiration	May 03, 2029
EPD type	Product specific
EPD Product Coverage	Flex Height-Adjustable desk for the APAC market
Intended audience	Business to business (B2B)
Year of reported manufacturer data	2023
Functional unit	One square meter of physical floor space for a reference service life of 10 years
Applicable markets/regions	APAC
LCA software and database version	GaBi 10.6.2.9; GaBi database, 2022.2
LCIA methodology and version number	TRACI 2.1
Program administrator	NSF Certification LLC 789 N. Dixboro, Ann Arbor, MI 48105 www.nsf.org
Reference PCR and version number	BIFMA PCR for Tables: UNCPC 3812 (BIFMA PCR, 2022)
PCR reviewer	Review Panel Chaired by Dr. Thomas Gloria
EPD reviewer	External review conducted by:  Jim Mellentine, Thrive ESG This declaration and its Life Cycle Assessment was independently verified in accordance with ISO standards 14040 (2006), 14044 (2006), 14025 (2006), and BIFMA PCR for Seating UNCPC 3811 (2020).
LCA reviewer	External review conducted by:  Jim Mellentine, Thrive ESG The product Life Cycle Assessment was conducted in accordance with ISO 14044 and the reference PCR.
Disclaimer	The PCR this EPD was based on was written to determine the potential environmental impacts of a table product from cradle to grave. It 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 specifics of the product modeled.

ASSESSMENT PARAMETERS

Functional unit

One square meter of physical floor space for a reference service life of 10 years. To fulfill the functional unit, 1.4 units are required.

Product scope

The product assessed is the Flex Height-Adjustable desk (product number FLXERQ) with rectangular top, cable support and a power bar.

One Flex Height-Adjustable desk is intended for use by 1 occupant.

Manufacturing location

Dongguan, China





Assessment goal and scope

The potential environmental impacts of Flex Height-Adjustable desk and its packaging throughout its entire life cycle – including raw materials extraction, production, transport, use, and end of life – were assessed. In the absence of primary information, the GaBi database was used for secondary data.

The life cycle stages included in this assessment follow the BIFMA PCR for Tables: UNCPC 3812. Material acquisition and pre-processing (including transportation), production, distribution, use and end-of-life are assessed for the table product.

Assessment boundary

The Life Cycle Assessment considers the full life cycle of the product as described here, cradle to grave. Life cycle stages and phases included in this assessment follow the BIFMA PCR for Tables and are presented in the following table.

	Stage	Status
 <p>Cradle to inbound gate MATERIALS ACQUISITION Raw material extraction and pre-processing Transportation up to the factory gate and internal transport.</p>	A1. Raw material supply	✓
	A2. Transport	✓
	<p>Gate to gate PRODUCTION PROCESS Transportation of furniture components and materials from Tier 1 suppliers to Steelcase final manufacturing facility. External and internal production.</p>	
 <p>Gate to grave DISTRIBUTION, USE AND END OF LIFE Distribution of products, installation, use and end of life.</p>	A3. Manufacturing	✓
	A4. Transport	✓
	A5. Installation	✓
	B1. Use	✓
	B2. Maintenance/cleaning	✓
	B3. Repair	✓
	B4. Replacement	✓
	B5. Refurbishment	✓
	B6. Operational energy use	✓
	B7. Operational water use	✓
	C1. Disassembly	✓
	C2. Transport	✓
	C3. Waste processing	✓
	C4. Disposal	✓
<p>Beyond the boundary D. Reuse/recovery</p>		

RESULTS

The product composition, packaging composition, recycled content, recyclability visuals, and life cycle impacts below relate specifically to one m² (1.4 units) of the Flex Height-Adjustable desk configuration listed above.

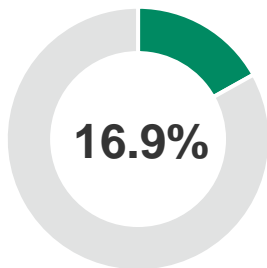
Product composition per m²

Material	Weight (kg)	Weight (%)	Resource Type
Steel	39.688	61.56%	Recycled, Virgin Non-renewable
Aluminum	1.335	2.07%	Recycled, Virgin Non-renewable
Copper	0.112	0.17%	Virgin Non-renewable
Brass	0.016	0.02%	Virgin Non-renewable
Zinc	0.008	0.01%	Virgin Non-renewable
Melamine Faced Particleboard	16.481	25.56%	Virgin Non-renewable
ABS	0.729	1.13%	Virgin Non-renewable
Rubber	0.594	0.92%	Virgin Non-renewable
Nylon	0.526	0.82%	Virgin Non-renewable
PET	0.498	0.77%	Virgin Non-renewable
Acetal	0.290	0.45%	Virgin Non-renewable
PVC	0.070	0.11%	Virgin Non-renewable
Electronic Motor	2.531	3.93%	Virgin Non-renewable
Electrical Components	1.315	2.04%	Virgin Non-renewable
Polycarbonate	0.168	0.26%	Virgin Non-renewable
Polypropylene	0.112	0.17%	Virgin Non-renewable
Total	64.473	100.00%	

Product packaging composition per m²

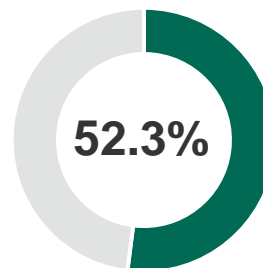
Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	4.767	81.440%	Non-renewable
Paper	0.370	6.314%	Non-renewable
Expanded Polyethylene	0.427	7.295%	Non-renewable
Polyethylene	0.290	4.951%	Non-renewable
Total	5.853	100.00%	

Product recycled content* and recyclability** summary



TOTAL RECYCLED CONTENT*

16.9%



RECYCLABILITY BY WEIGHT**

52.3%

*Total recycled content based on supplier's data. The source of recycled content of various materials could be either post-industrial or post-consumer based on market availability.

**Recyclability: this recyclability rate is the maximum amount of the product that is recyclable, based on the availability of recycling facilities in the specified regions and the ability of the product to be disassembled. Note that, per the requirements of the PCR, the end-of-life results presented in this EPD were calculated using the US EPA's recycling rates within the 2020 Municipal Solid Waste Report for parts that can be disassembled.

Life cycle impact by category and stage

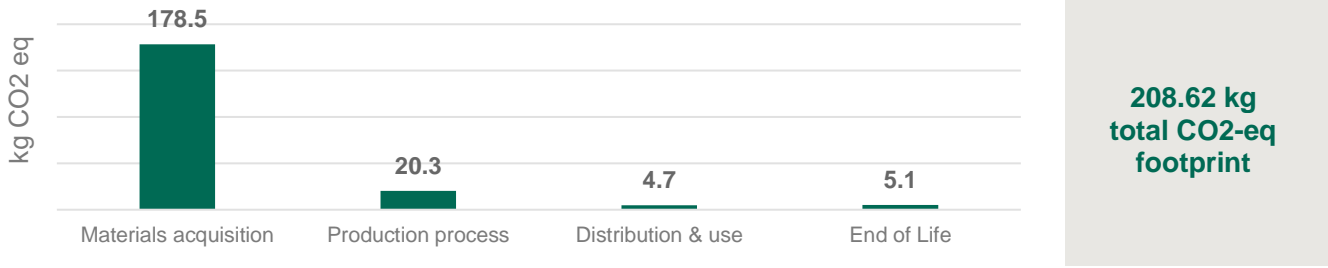
Environmental impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for one m² (1.4 units) of a Flex Height-Adjustable desk, maintained for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

	Unit	Life cycle stages				Totals
		A1-A2 Materials acquisition	A3 Production process	A4-B7 Distribution & Use	C1-C4 End of life	
*Global warming potential excl biogenic CO2 (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	1.78E+02	2.03E+01	4.73E+00	5.06E+00	2.09E+02
*Global warming potential incl biogenic CO2 (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	1.64E+02	8.85E+00	6.40E+00	6.51E+00	1.86E+02
*Acidification Emissions that increase the acidity of the environment due to various chemical reactions and/or biological activity, or by natural circumstances.	kg SO2 eq	5.78E-01	8.13E-02	8.78E-03	1.30E-02	6.81E-01
*Photochemical ozone creation (Smog) Through various chemical reactions, which occur between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in sunlight.	kg O3 eq	8.50E+00	1.12E+00	1.10E-01	2.06E-01	9.93E+00
*Eutrophication Enrichment of an aquatic ecosystem with nutrients (nitrates, phosphates) that accelerate biological productivity and an undesirable accumulation of algal biomass.	kg N eq	2.48E-02	1.17E-02	1.98E-03	1.95E-03	4.04E-02
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	6.56E-08	4.38E-08	4.85E-14	1.23E-09	1.11E-07
Primary energy demand Energy consumption at the source.	MJ	3.24E+03	5.02E+02	1.97E+01	3.34E+01	3.80E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	2.16E+04	1.31E+02	1.33E+02	2.16E+00	2.18E+04
Renewable primary resources used as an energy carrier First use materials from renewable sources with energy content used as a fuel	MJ	6.11E+02	3.22E+01	1.83E+00	3.14E+00	6.49E+02
Renewable primary resources used as material First use materials from renewable sources with energy content used as a material	MJ	0.00E+00	7.13E+01	0.00E+00	0.00E+00	7.13E+01
Non-renewable primary resources used as an energy carrier First use materials from non-renewable sources with energy content used as a fuel	MJ	1.56E+03	2.45E+02	1.65E+01	2.80E+01	1.85E+03
Non-renewable primary resources used as material First use materials from non-renewable sources with energy content used as a material	MJ	3.96E+02	3.09E+01	0.00E+00	0.00E+00	4.26E+02
Recovered energy EEE Electrical energy recovered from disposal of waste in previous systems	MJ	4.03E-01	1.48E-01	1.19E-00	3.83E+00	5.57E+00
Recovered energy EET Thermal energy recovered from disposal of waste in previous systems	MJ	7.22E-01	1.97E-01	2.14E+00	4.32E+00	7.38E+00

*Methods: TRACI 2.1 + IPCC AR6

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, the specifics of the product modeled, and the software tool used to conduct the study.

Global warming potential summary



Additional environmental indicators are reported in the table below.

	Unit	Life cycle stages				Totals
		A1–A2 Materials acquisition	A3 Production process	A4-B7 Distribution & Use	C1-C4 End of life	
Mineral depletion Abiotic depletion potential	Kg SB eq	8.82E-04	1.23623E-05	1.78241E-07	1.27395E-07	8.94E-04
Fossil fuel depletion Abiotic depletion potential	MJ	2.26E+03	2.81E+02	8.04E+01	2.70E+01	2.64E+03
Human toxicity Cancer effects	CTUh	1.04E-06	1.97E-09	6.64E-11	1.82E-10	1.04E-06
Human toxicity Non-cancer effects	CTUh	2.56E-07	1.49E-10	6.64E-11	1.82E-10	1.04E-06
Land use Land transformation	Pt	3.84E+02	2.79E+02	4.76E-01	1.79E+00	6.65E+02
Ionising raditaion Human health effect	kBq U-235 eq	3.98E+00	8.73E-01	1.18E-02	2.84E-02	4.89E+00

*METHODS: CML, EF 3.1

ADDITIONAL ENVIRONMENTAL INFORMATION

Indoor air: Steelcase tables products are certified with SCS’s Indoor Advantage Gold™ program, conforming to the ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2021) and CDPH/EHLB Standard Method (CA 01350) v1.2-2017. The certification can be found [here](#).

Improper disposal of product: At the end of its useful life, manage Steelcase 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.

REFERENCES

Life Cycle Assessment, LCA Report for Steelcase. WAP Sustainability Consulting November 2022. *Updated by Steelcase March 2024.*

NSF BIFMA Product Category Rule (PCR) for Tables: UNCPC 3812.

NSF Certification Policies for Environmental Product Declarations (EPD). November 1, 2022.

ISO 14025:2006 Environmental Labels and Declarations – Type III Environmental Declarations – Principles and Procedures.

ISO 14040:2006 Environmental Management – Life Cycle Assessment – Principles and Framework, Requirements and Guidelines.

ISO 14044:2006 Environmental Management – Life cycle assessment – Requirements and Guidelines.

ISO 14044: 2006/ Amd 1:2017 Environmental Management – Life cycle assessment – Requirements and Guidelines – Amendment 1.

Steelcase[®]

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Contact
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