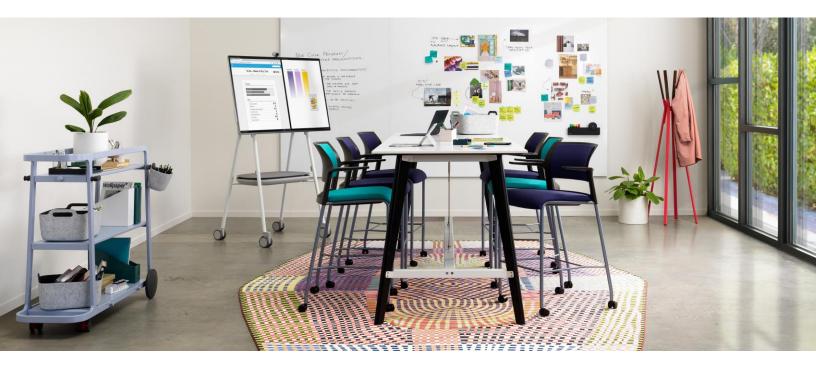


# Move<sup>TM</sup>

## **AMERICAS**





# About this product

As you sit, you move. That's why Move was designed to conform to the natural motion of your body. Comfortable, versatile and stackable, this lightweight seating solution offers a variety of styles and works in a wide range of settings.

One chair is required to meet the functional unit of seating one individual for a 10-year period.

Date of Issue: April 17, 2024 Date of Expiration: April 17, 2029

## About this document

This declaration describes the Life Cycle Assessment of the Move™ produced for the Americas market by Steelcase Inc. in Reynosa, Mexico. The assessment is performed according to the ISO standards 14040 (2006), 14044 (2006) and 14025 (2006), and BIFMA PCR for Seating: UNCPC 3811 (2020) to generate an EPD for business-to-business communication.

## Learn more

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

## **ASSESSMENT OVERVIEW**

EPD commissioner	Steelcase® Inc		
Corporate Address	901 44th Street SE Grand Rapids, Michigan 49508-7594 United States		
Product group	Seating		
Product name	Move™		
Product intended use	Office Chair		
Product reference service life	10 years		
Reference standards	ISO 14025, ISO 14040, ISO 14044		
EPD scope	Cradle to grave		
EPD number	EPD10935		
Date of issuance	April 17, 2024		
Date of expiration	April 17, 2029		
EPD type	Product specific		
EPD Product Coverage	Move™ made and sold in Americas		
Intended audience	Business to business (B2B)		
Year of reported manufacturer data	2023		
Functional unit	One unit of seating to seat one individual for a reference service life of 10 years		
Applicable markets/regions	Americas		
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 Seating: UNCPC 3811 (BIFMA PCR, 2020)		
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 seating 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 unit of seating to seat one individual for a reference service life of 10 years. One product is required to fulfill the functional unit.

#### **Product scope**

One Move<sup>TM</sup> (product number 490410) was modeled for this EPD. Standard features on this model include plastic back, upholstered seat, and hard caster. This chair configuration is determined to be representative of all configurations produced in the Americas and sold in the Americas.

Move™ chairs are manufactured in Reynosa, Mexico, and shipped to customers in the Americas region.



#### Assessment goal and scope

The potential environmental impacts of Move<sup>™</sup> 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 Seating: UNCPC 3811 V3. Material acquisition and pre-processing (including transportation), production, distribution, use and end-of-life are assessed for the seating 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 phase included in this assessment follow the BIFMA PCR for Seating and are presented in the following table.

		Stage	Status
S7	Cradle to inbound gate  MATERIALS ACQUISITION	A1. Raw material supply	✓
	Raw material extraction, pre-processing.  Transportation up to the factory gate and internal transport.	A2. Transport	✓
<u></u>	Gate to gate  PRODUCTION PROCESS  External and internal manufacturing of products, ancillary materials, parts, packaging.	A3. Manufacturing	<b>√</b>
HO		A4. Transport	✓
	Gate to grave  DISTRIBUTION, USE AND END OF LIFE  Distribution of products, installation, use and end of life.	A5. Installation	<b>√</b>
		B1. Use	✓
		B2. Maintenance/cleaning	✓
		B3. Repair	<b>√</b>
		B4. Replacement	✓
		B5. Refurbishment	✓
		B6. Operational energy use	✓
		B7. Operational water use	✓
		C1. Disassembly	✓
		C2. Transport	✓
		C3. Waste processing	✓
		C4. Disposal	✓
	Beyond the boundary	D. Reuse/recovery	

#### **RESULTS**

The product composition, packaging composition, recycled content, and recyclability visuals below relate specifically to configuration 490410.

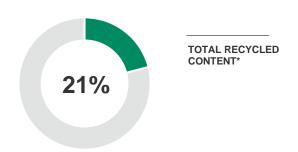
## **Product composition**

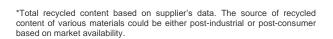
Material	Weight (kg)	Weight (%)	Resource Type
Nylon PA6	0.10	1.20%	Virgin non- renewable
Nylon PA66	0.10	1.20%	Virgin non- renewable
Steel	4.93	59.11%	Recycled, Virgin non-renewable
Polypropylene (PP)	1.49	17.87%	Virgin non- renewable
Rubber	0.09	1.08%	Virgin non- renewable
PU Foam	1.43	17.15%	Virgin non- renewable
Polyester	0.2	2.40%	Virgin non- renewable
Total	8.34	100%	

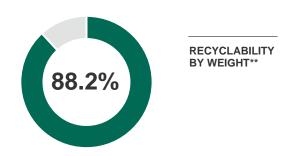
## **Product** packaging composition

Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	4.2	80.6%	Renewable
Linear low- density polyethylene (LLDPE)	0.8	16.3%	Non-renewable
Polypropylene (PP)	0.2	3.1%	Non-renewable
Total	5.2	100%	

## Product recycled content\* and recyclability\*\* summary







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

#### **RESULTS**

Results for one Move™ chair are shown on the subsequent pages.

## 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 seat maintained for one individual 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.

		Life cycle stages				
	Unit	Materials acquisition	Production process	Distribution & Use	End of life	Totals
*Global warming potential (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	2.91E+0	1 1.72E+0	1 3.35E+0	0 1.79E+00	5.14E+01
*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	1.05E-0	1 6.42E-0	2 1.55E-0	2 1.89E-03	1.86E-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	1.33E+0	0 8.13E-0	1 3.03E-0	1 3.59E-02	2.48E+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	5.80E-0	3 9.62E-0	3 1.45E-0	3 6.18E-04	1.75E-02
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	1.69E-0	7 3.83E-1	0 1.10E-1	4 5.14E-13	1.69E-07
Primary energy demand Energy consumption at the source.	MJ	6.71E+0	2 4.60E+0	2 3.86E+0	1 4.35E+00	1.17E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	6.46E+0	2 1.38E+0	2 6.23E+0	0 4.68E+00	7.94E+02

## \*Methods: TRACI 2.1

## Global warming potential summary



#### ADDITIONAL ENVIRONMENTAL INFORMATION

Indoor air: Steelcase seating 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 for seating. The certification can be found here.

#### **REFERENCES**

Life Cycle Assessment, LCA Report for Steelcase. WAP Sustainability Consulting. August 2023.

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.

Product Category Rule for Environmental Product Declarations, BIFMA PCR for Seating: UNCPC 3811 (ext. 2020-111)



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