stylex

VERIFIED by SCS Global Services ENVIRONMENTAL PRODUCT DECLARATION BASED ON LCA

Declaration Owner

Stylex
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Product:

F4

Functional Unit

The functional unit is one (1) unit of seating to seat a single occupant, maintained for a 10-year period.

EPD Number and Period of Validity

SCS-EPD-10602
EPD Valid February 12, 2026, through February 11, 2031

Product Category Rule

BIFMA PCR for Seating. NSF International. Version 4.
Valid through January 31, 2030.

Program Operator

SCS Global Services
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Declaration owner:	Stylex
Address:	740 Coopertown Rd, Delanco, NJ 08075
For Additional Explanatory Material:	sustainability@stylexdesign.com
Declaration Number:	SCS-EPD-101602
Date of Issue:	February 12, 2026
Declaration Validity Period:	February 12, 2026 through February 11, 2031
Program Operator:	SCS Global Services, 2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA
Declaration URL Link:	https://www.scsglobalservices.com/certified-green-products-guide
General Program Instructions:	SCS Type III Environmental Declaration Program: Program Operator Manual. V12.0
Product(s):	F4
Functional Unit:	One (1) unit of seating to seat a single occupant maintained for a 10-year period
Product RSL:	10 Year
Product Subcategory:	Option B: Swivel/Task Chair (single occupant)
Product's intended application and use:	The F4 Chair features ergonomic design and responsive engineering that support natural movement and balanced comfort across a wide range of seated gestures.
Markets of Applicability:	NA
Year(s) of Reported Manufacturer Primary Data:	2024
LCA Software & Version Number:	openLCA 2.4.0
LCI Database(s) & Version Number:	Ecoinvent 3.8
LCA Practitioner:	Sahil Akolawala
Reference PCR:	BIFMA PCR for Seating. NSF International. Version 4. Valid through January 31, 2030
Overall data quality assessment score:	2.77/5.00
Sub-category PCR review:	Thomas P. Gloria, Ph.D., Industrial Ecology Consultants; Jack Geibig, EcoForm; Michael Overcash, PhD, Environmental Clarity
Independent critical review of the LCA and data, according to ISO 14044 and the PCR:	☐ internal ☒ external
LCA Reviewer:	Lucas Wathen, SCS Global Services
Independent verification of the declaration and data, according to ISO 14025 and the PCR:	☐ internal ☒ external
EPD Verifier:	Lucas Wathen, SCS Global Services
Declaration Contents:	

Disclaimers: *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.*

Conformity: *This EPD conforms to ISO 14025:2006, and ISO 21930:2017.*

Ownership: *The EPD owner has the sole ownership, liability, and responsibility of the EPD.*

Accuracy of Results: *Due to PCR constraints, this EPD provides estimations of potential impacts that are inherently limited in terms of accuracy.*

Comparability: *Environmental declarations from different programs (ISO 14025) may not be comparable. This EPD shall conform to the requirements of this PCR for Seating Products and 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. Comparability of EPDs is limited to those applying a functional unit*

1. Stylex

Stylex, headquartered in Delanco, New Jersey, designs and manufactures high-quality, customizable commercial spaces. With over 200 team members, Stylex is committed to creating products that are functional, beautiful, and sustainable.

Now part of the Flokk family—a European leader in seating solutions—Stylex continues its mission to develop enduring products with minimal environmental impact. This partnership blends Nordic values of innovation and human-centered design with Stylex's American craftsmanship to drive purposeful, responsible design forward.

2. Product

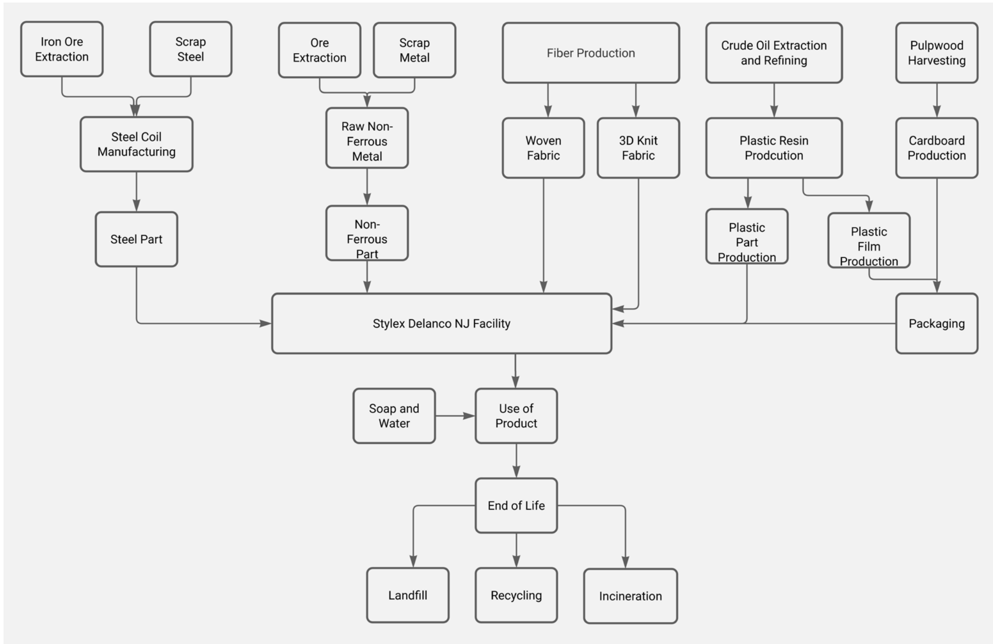
2.1 PRODUCT DESCRIPTION

F4 is a user-responsive task chair that blends timeless styling with a lightweight, refined aesthetic. Engineered through thoughtful material selection and component design, F4 moves intuitively with the user—supporting a wide range of seated postures without the need for manual adjustments. The result is a seating experience that is both comfortable and effortlessly adaptive.

2.2 PRODUCT SPECIFICATION

The product specification is F262, representing an F4 Product with Arms, Medium Back, a Mesh Back, and an Upholstered Seat.

2.3 FLOW DIAGRAM



2.4 PRODUCT AVERAGE

The product specification chosen to represent F4 was due to the popularity of the specification, determined by evaluating sales for the reporting year.

2.5 APPLICATION

The F4 Chair combines ergonomic design and responsive engineering to support fluid, natural movement in active work environments. Its innovative mechanism and flexible structure provide balanced comfort and proper posture without manual adjustments, accommodating a wide range of seated gestures in modern office settings.

2.6 TECHNICAL REQUIREMENTS

All products fall under UN CPC 43812 *"Other furniture, of a kind used in offices"*. Additional technical data for each product system can be found in Table 1. Stylex has conducted ANSI/BIFMA x5.1 Testing on all products under study. Stylex has also conducted ANSI/BIFMA M7.1-2011 (R-2016) on all products under study. Specifications of the product under study are: F4.

Table 1: Performance and technical data for each product system included.

Product System	Mass (kg)	Intended User (seating)	Kg/Seating	M7.1-2011 (R-2016) Certificate	Expected Life Span
F4	1.46E+01	1	1.46E+01	92105-420	10+

Since the product passed the appropriate ANSI/BIFMA Product Safety and Performance standard, the Reference Service Life of the product is assumed to be 10 years, applying to reference in-use conditions only.

3. Methodological Framework

3.1 FUNCTIONAL UNIT

Table 2. Functional unit, reference flow, and number of product lifetimes.

Product Name	F4
Functional Unit (FU)	1 unit of seating maintained for 10 years.
Reference Flow (kg)	1.46E+01
Subcategory	Task Seating
Number of Seating Units	1
Total product life cycles to satisfy FU	1
Reference Service Life (years)	10

3.2 SYSTEM BOUNDARY

The scope of the EPD is cradle-to-gate with options, including raw material extraction and processing, transport to manufacturer, chair manufacturing, distribution, and end-of-life.

Table 3. Information modules included for cradle-to-gate with options LCA.

Product			Construction		Use							End-of-life				Benefits and loads beyond the system boundary
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw material extraction and processing	Transport to manufacturer	Manufacturing	Transport	Construction - installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal	Reuse, recovery and/or recycling potential
x	x	x	x	x	x	MND	MND	x	MND	MND	MND	x	x	x	x	MND

X = Module Included | MND = Module Not Declared

3.3 MODULE D

Module D was not declared.

3.4 ALLOCATION

To derive a per-unit for manufacturing inputs and outputs such as electricity, thermal energy, and waste streams, allocation based on total mass production by unit was adopted. As a default, secondary Ecoinvent datasets use a mass basis for allocation.

The method in which recycled materials were handled is relevant to the defined system boundary. Throughout the study, recycled materials were accounted for via the cut-off method. In this method, impacts and benefits associated with the previous life of a raw material from recycled stock are excluded from the system boundary. Additionally, impacts and benefits associated with secondary functions of materials at the end of life are also excluded (i.e.

production into a third life or energy generation from incineration). The study does include the impacts associated with reprocessing and preparation of recycled materials feed streams that are included in the studied product.

3.5 CUT-OFF RULES

Any material present at or above 1 wt% of the final product was included within the scope of this study. Material inputs less than 1% were included if sufficient data was available to warrant inclusion and/or the material input was thought to have significant environmental impacts.

No energy inputs were excluded in this study. Excluded materials include felts and adhesives used in assembly of the product.

Table 4. Cut-off criteria.

Included	Excluded
Raw Material Extraction for Product and Packaging	Felts in Product
Transportation Impacts, Upstream and Downstream	Adhesives in Product
Energy Flows at Delanco, NJ	
Waste Flows at Delanco, NJ	
Product Maintenance	
End of Life Impacts	

3.6 DATA SOURCES

Table 5. Data Sources.

Flow	Geo	Dataset	Data Source	Publication Date	Proxy
Raw Materials/Processes					
Aluminum	GLO	aluminium, Cast Alloy	Ecoinvent 3.11	2024	N/A
Foam	RER	Polyurethane, flexible foam	Ecoinvent 3.11	2024	N/A
Packaging (Cardboard)	CA-QC	Corrugated board box	Ecoinvent 3.11	2024	N/A
Packaging (Foam)	CA-QC	Polystyrene product, extruded, CO2 blown	Ecoinvent 3.11	2024	N/A
Plastics (General/Nylon)	GLO	nylon 6	Ecoinvent 3.11	2024	N/A
Plastics	RER	Polypropylene, granulate	Ecoinvent 3.11	2024	N/A
Packaging (Plastics)	RER	Polyethylene production, linear low density, granulate	Ecoinvent 3.11	2024	N/A
Steel	RER	Steel, low-alloyed	Ecoinvent 3.11	2024	N/A
Textiles/Mesh	RER	nylon 6	Ecoinvent 3.11	2024	N/A
Manufacturing Processes					
Aluminum	GLO	metal working, average for aluminium product manufacturing	Ecoinvent 3.11	2024	N/A
Packaging (Plastics)	CA-QC	Blow moulding	Ecoinvent 3.11	2024	N/A
Plastics	CA-QC	Injection Moulding	Ecoinvent 3.11	2024	N/A
Steel	GLO	Metal working, average for steel product manufacturing	Ecoinvent 3.11	2024	N/A
Textiles/Mesh	GLO	weaving, synthetic fibre	Ecoinvent 3.11	2024	N/A
Transportation Processes					
Truck	RER	transport, freight, lorry, all sizes, EURO4	Ecoinvent 3.11	2024	N/A
Ship	GLO	transport, freight, sea, container ship	Ecoinvent 3.11	2024	N/A
Waste Processes					
Aluminum incineration	CH	Treatment of scrap aluminium, municipal incineration	Ecoinvent 3.11	2024	N/A
Aluminum landfill	CH	Treatment of scrap aluminium, sanitary landfill	Ecoinvent 3.11	2024	N/A
Plastic incineration	CH	Treatment of waste plastic, mixture, municipal incineration	Ecoinvent 3.11	2024	N/A
Plastic Landfill	CH	Treatment of waste plastic, mixture, sanitary landfill	Ecoinvent 3.11	2024	N/A
Steel Incineration	CH	Treatment of scrap steel, municipal incineration	Ecoinvent 3.11	2024	N/A
Steel Landfill	CH	Treatment of scarp steel, inert material landfill	Ecoinvent 3.11	2024	N/A
Textile Incineration	CH	Treatment of waste textile, soiled, municipal incineration	Ecoinvent 3.11	2024	N/A

3.7. DATA QUALITY

The data quality assessment addressed the following parameters: time-related coverage, geographical coverage, technological coverage, precision, completeness, representativeness, consistency, reproducibility, sources of data, and uncertainty.

Table 6. Data quality.

Data Quality Parameter	Data Quality Discussion
Time-Related Coverage: Age of data and the minimum length of time over which data is collected	Primary data was provided by the manufacturer and represents data for the period of January 2024 through December 2024. Stylex owns the manufacturing facility and provided primary data for the full year. Time coverage for primary data is completely representative. Secondary data was collected for raw materials, the processing of each, and others outside the facility boundary. Secondary dataset time coverage varies and is based on when the data was collected. Therefore, the most recent data set was chosen, and meets the PCR requirements of being no older than 10 years.
Geographical Coverage: Geographical area from which data for unit processes is collected to satisfy the goal of the study	The geographical scope of all remaining stages is Noth America (US and Canada), in selecting secondary data from Ecoinvent, priority was given to technological representativeness of the data. Of the sets that were deemed of high enough quality, then the most representative geographical data was used. This led to Global, European, and Rest of World being used when North America data was not available.
Technology Coverage: Specific technology or technology mix	Primary data provided by the manufacturer is specific to the facility and the processes and products included in the boundary. Given that this study is for products manufactured at the Delanco, NJ facility, the technological coverage is completely representative. Secondary data was used to fill in gaps throughout the supply chain to address all inputs from Cradle-to-Gate with options. Technological coverage of the datasets is considered to be representative of the actual supply chain. Improving primary data in the supply chain would increase the technological coverage, but the use of secondary data sets for generic processes meets the goal and scope of the study.
Precision: Measure of the variability of the data values for each data expressed	The precision of the data is considered to be good, as a list of suppliers and a bill of materials was provided for the product under study. All inbound transportation data is a weighted average of all suppliers for each material, which was determined by distance of the supplier's facility to the production facility in Delanco, NJ. All outbound transpiration data is a weighted average of sales.
Completeness: Percentage of flow that is measured or estimated	The LCA model included all known mass and energy flows for production of the F4 product line. In some instances, surrogate data used to represent upstream and downstream operations may be missing some data which is propagated in the model. No known processes or activities contributing to more than 1% of the total environmental impact for each indicator are excluded. In total, these missing data represent less than 5% of the mass or energy flows.
Representativeness: Qualitative assessment of the degree to which the data set reflects the true population of interest	Data used in the assessment represent typical or average processes as currently reported from multiple data sources to Ecoinvent and are therefore generally representative of the actual processes and technologies for production of these materials. Considerable deviation may exist among actual processes on a site-specific basis; though such a determination would require detailed data collection at each node upstream.
Consistency: Qualitative assessment of whether the study methodology is applied uniformly to the various components of the analysis	The consistency of the assessment is considered to be high. Data sources of similar quality and age are used with a bias towards Ecoinvent data. Different portions of the product life cycle are equally considered; however, it must be noted that final disposal of the product is based on assumptions of current US practice or market values from Ecoinvent.
Reproducibility: Qualitative assessment of the extent to which information about the methodology and data values would allow an	Based on the description of data and assumptions used this assessment would be reproducible by other practitioners. All assumptions, models, and data sources are documented.

Data Quality Parameter	Data Quality Discussion
independent practitioner to reproduce the results reported in the study	
Sources of the Data: Description of all primary and secondary data sources	Data representing energy use at the Delanco, NJ facility represents a yearly consumption and is considered high quality, as this represents fluctuations in production. Secondary LCI datasets from the Ecoinvent database are used as appropriate.
Uncertainty of the Information: Uncertainty related to data, models, and assumptions	Uncertainty of any primary data provided by Stylex is dependent on how the data was allocated to each product. This allocation came from annual utility data and mass produced. A more sub metered processes may lead to more detailed utility data, therefore decreasing the uncertainty of the primary data. For secondary data, all uncertainty is outlined and published by Ecoinvent for Ecoinvent 3.8 datasets.

3.8 PERIOD UNDER REVIEW

Annual shipping data was collected from January 2024 through December 2024 to inform the product distribution model. All other primary data was provided by the manufacturer and represents all data for the same year period. Secondary dataset time coverage varies and is based on when the data was collected.

3.9 COMPARABILITY AND BENCHMARKING

The PCR this EPD was based on was written to determine the potential environmental impacts of a furniture seating product from cradle-to-gate with options. 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.

3.10 ESTIMATES AND ASSUMPTIONS

- This LCA was conducted with an attributional approach.
- All primary and secondary data was modelled in OpenLCA using EcoInvent datasets to calculate the potential environmental impacts during each stage of the product's life. For any processes that were not available in the EcoInvent database, proxy data was used. No proxy data was used for this study.
- Stylex energy usage was provided per unit for the January 2024- December 2024 production data collected.
- The Delanco Facility keeps track of all waste material over the data collection period. All waste streams are treated as described in section 4.5. All waste transportation is determined by using EPA WARM data, which is estimated at 20 miles (32km).
- The fate of the product and packaging was determined using EPA WARM data.
- Type and distance of transportation was determined by developing a weighted average for all shipping data from January 2024 – December 2024 based on sales.
- Any material present at or above 1 wt% of the final product was included within the scope of this study. Material inputs less than 1% were included if sufficient data was available to warrant inclusion and/or the material input was thought to have significant environmental impacts. No energy inputs were excluded in this study.
- To derive a per-unit for manufacturing inputs and outputs such as electricity, thermal energy, and waste streams, allocation based on total mass produced by unit was adopted. As a default, secondary EcoInvent datasets use a mass basis for allocation.
- The method in which recycled materials were handled is relevant to the defined system boundary. Throughout the study, recycled materials were accounted for via the cut-off method. In this method, impacts and benefits associated with the previous life of a raw material from recycled stock are excluded from the system boundary.

- Secondary data sets used in the model are disclosed in Appendix A of the underlying LCA report along with data quality indicators related to geographical, time representation, and technological coverage of the datasets. If any proxy data was used, it is also included if applicable.

LCIA Summary from Section 4 of the Underlying LCA Report:

- Electrical, Fuels, and Water Consumption
  - Data was collected over the year January 2024 to December 2024. This was used to determine an electricity demand for producing one unit of seating.
- Raw Materials and Purchasing
  - Stylex provided all bills of materials and supplier names. Aluminum, Steel, Plastics, Textiles, Casters, and Gas Springs comprise all the raw materials. Inbound shipping distances were calculated using secondary data from the Seating PCR.
- Waste Amounts
  - Stylex tracks all waste streams associated with manufacturing of the product over the data collection period. All waste was characterized, disposed of, and treated appropriately as outlined in Section 3.3 of the underlying LCA report.
- Outbound Shipping Distance
  - A weighted average of the distances to all states where Stylex products are shipped was calculated based on sales shipped. It was found that on average, the shipping distance was 1000 km by truck.
- End of Life (EoL) Scenarios
  - No primary data for the fate of the product was available. Waste from products and packaging was disposed of based on EcoInvent market treatment methods. No credits were taken for energy recovery from waste. Cut-off criteria for recycling were applied.

Furthermore, additional decisions are summarized below:

- The use and selection of secondary datasets from EcoInvent to represent an aspect of the supply chain is a significant value choice. These datasets were chosen by the LCA Practitioner after discussions with Stylex and review of the EcoInvent datasets. It should be noted that no generic data is a perfect fit. Obtaining primary data from the supply chain data would improve the accuracy of results, however, budget and time constraints were considered.
- All declared product systems were modelled using the same assumptions within this study and the results can be applied to all systems using the performance characteristics in Section 2.6 of the EPD. All systems are made from the same materials and processed identically. The only variations of the systems are the materials used for analysis.
- Worldsteel and IAI/EAA datasets were not used for steel and aluminum, respectively, as they were not available to practitioners at the time of the study for use in openLCA.

The following limitations to this study have been identified:

- Availability of more regionally appropriate data sets would improve accuracy.
- Since this LCA uses the cut-off approach to model recycled material in the product, no credit is given to the end of the product system. Instead, the manufacturer realized reduced environmental impacts through the absence of the burden of virgin material.
- Only known and quantifiable environmental impacts are considered.
- Due to the assumptions and value choices listed above, these results do not reflect the real-life impact scenarios and hence, they cannot assess actual and exact impacts. Instead, it only represents potential environmental impacts.

3.11 UNITS

All data and results are presented using SI units.

4. Technical Information and Scenarios

4.1 MATERIAL COMPOSITION

Insert material content of product, including packaging. Include percentage of recycled content.

Table 7. Material Composition.

Material	kg	Percent	Recycled Content (%)	Post-Consumer (%)	Pre-Consumer %
Aluminum	8.56E+00	58.67%	0.00%	0.00%	0.00%
Caster	4.60E-01	3.15%	0.00%	0.00%	0.00%
Gas Spring	1.08E+00	7.40%	0.00%	0.00%	0.00%
High Density Polyethylene	3.00E-02	0.21%	0.00%	0.00%	0.00%
Nylon	1.22E+00	8.36%	0.00%	0.00%	0.00%
Nylon Fabric	2.00E-02	0.14%	0.00%	0.00%	0.00%
POM	9.00E-02	0.62%	0.00%	0.00%	0.00%
Polypropylene	1.08E+00	7.40%	0.00%	0.00%	0.00%
Polyurethane Foam	9.80E-01	6.72%	0.00%	0.00%	0.00%
Steel	7.20E-01	4.93%	0.00%	0.00%	0.00%
Textile	3.60E-01	2.47%	0.00%	0.00%	0.00%
Total Without Packaging	1.46E+01	100.00%	-	-	-
Cardboard	1.07E+00	-	0.00%	0.00%	0.00%
Foam	5.00E-02	-	0.00%	0.00%	0.00%
Plastic Bags	5.00E-02	-	0.00%	0.00%	0.00%
Total With Packaging	1.58E+01	-	-	-	-

4.2 MANUFACTURE

The manufacturing stage includes all processes that occur at Stylex's manufacturing processes and production of any additional energy, utilities, or materials that are not considered raw materials. This also includes any intermediary transportation of these materials. The finished product does not contain any materials that are required to be labeled as hazardous or dangerous substances in its Bill of Materials.

4.3 PRODUCT TRANSPORT

Table 8. Product Transport.

Name	Unit	Value
Type of transport	-	Truck
Type of vehicle	-	EURO 4 Lorry
Distance	km	1.00E+03
Diesel	liters/kg-100 km	4.46E-03 (per kg shipped 100 km)

4.4 PRODUCT INSTALLATION

Table 9. Product Installation

Name	Unit	Value
Description of the installation process		Manual Installation
Ancillary materials	kg	0.00
Product loss per functional unit	kg	0.00
Energy use during installation (by energy carrier)	MJ	0.00
Water use during installation (by water source)	m^3	0.00
Direct emissions to ambient air, soil and water	kg	0.00
Packaging waste (specified by type)	kg	1.07E+00 (Cardboard) 5.00E-02 (Foam) 5.17E-01 (Plastic)
Biogenic carbon content of packaging	kg C	9.02E-01 kg CO2e/kg (Carboard) 0.00E+00 kg CO2e/kg (Foam) 0.00E+00 kg CO2e/kg (Plastic)

4.5 DISPOSAL

Transportation distance to the final disposal location was determined to be 32 km as per the EPA WARM model. All waste treatment was classified based on US EPA Municipal Solid Waste for Durable Goods. There are no known hazardous or toxic properties regarding improper disposal of the product.

Table 10. End-of-life.

Name		Unit	Value
Assumptions for scenario development			Assumed Disposal Pathways Align with US EPA Municipal Solid Waste for Durable Goods Assumed that the product is collected separately
Collection process (specified by type)	Collected separately	kg	1.46E+01
	Collected with mixed construction waste	kg	N/A
Recovery (specified by type)	Reuse	kg	N/A
	Recycling	kg	Aluminum 1.46E+00 Caster 1.52E-01 Gas Spring 3.56E-01 HDPE 2.70E-03 Nylon 1.10E-01 Nylon Fabric 1.80E-03 POM 8.10E-03 Polypropylene 9.72E-02 Polyurethane Foam 1.76E-01 Steel 2.38E-01 Textile 5.40E-02
	Landfill	kg	Aluminum 5.82E+00 Caster 2.53E-01 Gas Spring 5.94-01 HDPE 2.28E-02 Nylon 9.27E-01 Nylon Fabric 1.52E-02 POM 6.84E-02 Polypropylene 8.21E-01 Polyurethane Foam 5.29E-01 Steel 3.96E-01 Textile 2.38E-01
	Incineration	kg	Aluminum 1.20E+00 Caster 5.52E-01 Gas Spring 1.30E+00 HDPE 4.80E-02 Nylon 1.95E-01 Nylon Fabric 3.20E-03 POM 1.44E-02 Polypropylene 1.73E-01 Polyurethane Foam 2.65E-01 Steel 8.64E-02 Textile 6.84E-02
Disposal (specified by type)	Product or material for final deposition	kg	Aluminum 7.02E+00 Caster 3.08E-01 Gas Spring 8.86E-01 HDPE 2.76E-02 Nylon 1.12E+00 Nylon Fabric 1.84E-02 POM 8.28E-02 Polypropylene 9.94E-01 Polyurethane Foam 7.94E-01 Steel 4.82E-01 Textile 3.06E-01
Removals of biogenic carbon (excluding packaging)		kg C	0.00E+00

4.6 BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY

Module D was not included in the LCA study and therefore benefits and loads beyond the system boundary were not analyzed.

5. LCA: Results

Results of the Life Cycle Assessment are presented below. It is noted that LCA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks. The following environmental impact category indicators are reported using characterization factors based on IPCC and TRACI 2.1. Results reported in MJ are calculated using lower heating values. All values are rounded to three significant digits.

Table 11. LCA indicators reported

Impact Category	Unit
Global Warming Potential, Excluding Biogenic (IPCC AR6)	kg CO2 eq
Global Warming Potential, Biogenic (IPCC AR6)	kg CO2 eq
Acidification Potential (TRACI 2.1)	kg SO2 eq
Smog Formation Potential (TRACI 2.1)	kg O3 eq
Eutrophication Potential (TRACI 2.1)	kg N eq
Ozone Depletion Potential (TRACI 2.1)	kg CFC 11 eq

The following inventory parameters, specified by the PCR, are also reported.

Table 12 Life Cycle Inventory (LCI) indicators reported

Resources	Unit
Renewable Primary Energy Used as Energy Carrier [RPR_E]	MJ, LHV
Renewable Primary Energy resources used as raw materials [RPR_M]	MJ, LHV
Non-renewable Primary Energy Used as Energy Carrier [$NRPR_E$]	MJ, LHV
Non-renewable primary energy resources used as raw materials [$NRPR_M$]	MJ, LHV
Use of secondary materials [SM]	kg
Use of Renewable secondary fuels [RSF]	MJ, LHV
Use of non-renewable secondary fuels [NRSF]	MJ, LHV
Use of net fresh water resources [FW]	m^3
Resources	**Unit**
Hazardous waste disposed [HWD]	kg
Non-Hazardous waste disposed [NHWD]	kg
High Level Radioactive waste, conditioned, to final repository [HLRW]	kg
Intermediate/Low Level Radioactive waste, conditioned, to final repository [ILLRW]	kg
Components for reuse [CRU]	kg
Materials for recycling [MR]	kg
Materials for energy recovery [MER]	kg
Recovered Energy [RE]	MJ, LHV
Exported Energy [EE]	MJ, LHV

Table 13. Life cycle impact assessment (LCIA) results, per functional unit.

Impact Category	Life cycle stage						
	A1	A2	A3	A4	A5	C2	C4
Global Warming, Excluding Biogenic	1.27E+02	8.17E+00	1.00E+02	1.90E+00	3.24E-01	6.25E-02	2.42E+00
[kg CO_2 eq]	52.95%	3.40%	41.69%	0.79%	0.14%	0.03%	1.01%
Global Warming, Biogenic	-3.99E+00	2.24E-02	-8.85E+00	5.21E-03	1.23E+00	1.72E-04	4.48E-01
[kg CO_2 eq]	35.84%	-0.20%	79.48%	-0.05%	-11.05%	0.00%	-4.02%
Acidification	7.57E-01	3.99E-02	4.42E-01	9.29E-03	4.01E-04	3.05E-04	3.46E-03
[kg SO_2 eq]	60.45%	3.19%	35.29%	0.74%	0.03%	0.02%	0.28%
Eutrophication	6.21E-01	9.59E-03	3.72E-01	2.23E-03	6.64E-03	7.34E-05	4.43E-02
[kg N eq]	58.82%	0.91%	35.23%	0.21%	0.63%	0.01%	4.20%
Ozone Depletion	3.48E-06	1.78E-06	4.70E-06	4.15E-07	4.44E-09	1.37E-08	3.44E-08
[kg CFC-11eq]	33.37%	17.09%	45.06%	3.98%	0.04%	0.13%	0.33%
Smog	7.85E+00	9.95E-01	5.69E+00	2.31E-01	1.10E-02	7.61E-03	8.69E-02
[kg O_3 eq]	52.79%	6.69%	38.26%	1.55%	0.07%	0.05%	0.58%

Table 14. Life cycle inventory (LCI) results, resource use, per functional unit.

Parameter	Life cycle stage						
	A1	A2	A3	A4	A5	C2	C4
RPR_E [MJ, LHV]	1.32E+02	1.23E+00	1.20E+02	2.85E-01	1.90E-02	4.39E+00	3.71E-01
	51.03%	0.48%	46.54%	0.11%	0.01%	1.70%	0.14%
RPR_M [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RPR_T [MJ, LHV]	1.32E+02	1.23E+00	1.20E+02	2.85E-01	1.90E-02	4.39E+00	3.71E-01
	51.03%	0.48%	46.54%	0.11%	0.01%	1.70%	0.14%
$NRPR_E$ [MJ, LHV]	7.31E+02	1.30E+01	6.50E+02	3.03E+00	5.64E-01	6.63E+00	2.97E+00
	51.95%	0.93%	46.18%	0.22%	0.04%	0.47%	0.21%
$NRPR_M$ [MJ, LHV]	1.30E+00	1.79E-01	5.33E+00	4.17E-02	5.36E-02	2.45E-02	2.35E-01
	18.16%	2.50%	74.39%	0.58%	0.75%	0.34%	3.28%
$NRPR_T$ [MJ, LHV]	7.32E+02	1.32E+01	6.55E+02	3.07E+00	6.17E-01	6.66E+00	3.21E+00
	51.78%	0.93%	46.33%	0.22%	0.04%	0.47%	0.23%
SM [kg]	4.53E-02	5.21E-03	1.50E-01	1.21E-03	2.68E-04	1.07E-03	1.64E-03
	22.08%	2.54%	73.34%	0.59%	0.13%	0.52%	0.80%
RSF [MJ, LHV]	6.43E-03	1.30E-03	4.01E-02	3.03E-04	6.36E-05	1.32E-04	3.25E-04
	13.23%	2.67%	82.40%	0.62%	0.13%	0.27%	0.67%
NRSF [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW [m3]	8.24E+00	1.60E-02	8.72E-01	3.71E-03	1.69E-03	1.61E-01	7.68E-03
	88.58%	0.17%	9.38%	0.04%	0.02%	1.73%	0.08%
RE [MJ, LHV]	N/A	N/A	0.00E+00	N/A	0.00E+00	N/A	N/A

Table 15. Life cycle inventory (LCI) results, waste/output, per functional unit.

Parameter	Life cycle stage						
	A1	A2	A3	A4	A5	C2	C4
HWD [kg]	8.61E-02	5.83E-03	1.47E-01	1.36E-03	3.87E-04	4.46E-05	2.54E-03
	35.39%	2.40%	60.43%	0.56%	0.16%	0.02%	1.04%
NHWD [kg]	6.75E-01	5.28E-02	4.09E+01	1.23E-02	7.08E-03	4.04E-04	4.86E-02
	1.62%	0.13%	98.09%	0.03%	0.02%	0.00%	0.12%
HLRW [kg]	2.45E-04	7.25E-06	5.20E-04	1.68E-06	8.95E-08	5.54E-08	1.33E-06
	31.60%	0.93%	67.06%	0.22%	0.01%	0.01%	0.17%
ILLRW [kg]	1.66E-03	7.95E-04	3.38E-03	1.85E-04	8.84E-07	6.08E-06	1.21E-05
	27.49%	13.16%	55.97%	3.06%	0.01%	0.10%	0.20%
CRU [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR [kg]	3.23E-02	4.44E-03	1.12E-01	1.03E-03	2.19E-04	3.39E-05	1.20E-03
	21.36%	2.94%	74.06%	0.68%	0.14%	0.02%	0.79%
MER [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

6. Interpretation

The largest environmental impacts associated with Stylex's F4 chair stem from raw material sourcing—particularly aluminum, textiles, and plastics.

Looking at improvements, Stylex can focus on more responsible sourcing and specify a higher recycled content in their products to reduce the impacts. Additionally, collecting consistent primary data and more detailed shipment data—shipments per SKU by mass— annually, to create a consistent normalization metric across the model provides a clearer insight into the product's environmental performance.

Within Stylex's own facilities, natural gas use represents the largest share of direct impact. Transitioning to more efficient electric heating or sourcing renewable energy would further reduce environmental impacts.
This report reflects an ongoing effort. By identifying opportunities for improvement, Stylex reinforces the idea that good design includes responsible manufacturing—and that small, steady changes can lead to meaningful environmental progress.

7. Additional Environmental Information

7.1 ENVIRONMENT AND HEALTH DURING MANUFACTURING

With regards to manufacturing, the final assembly site operates under an ISO 14001-aligned environmental management system. No intentionally added substances of very high concern (SVHCs) are present based on supplier declarations and compliance data. Therefore, no incident risks beyond standard industrial handling are associated with shipping, using, or disposing of the finished products.

7.2 ENVIRONMENT AND HEALTH DURING INSTALLATION OR USE

The product requires no energy during use and has no additional demands on the environment. Following standard maintenance guidelines helps maximize service life.

Materials comply with major chemical-safety regulations. GREENGUARD testing confirms measurable VOC emissions that remain within certification limits. No additional toxicity concerns have been identified based on available data. Therefore, no hazards have been identified for normal use based on available material specifications, VOC-emission testing, and supplier information.

7.3 ENVIRONMENTAL ACTIVITIES AND CERTIFICATIONS

Stylex's products meet GREENGUARD VOC-emission requirements, ANSI/BIFMA e3-2019 certified, and are listed at https://stylex.ecomedes.com.

7.4 FURTHER INFORMATION

Overall, no evidence from available supplier documentation or LCA data indicates that material sourcing or manufacturing for these products is associated with biodiversity-sensitive areas or direct habitat impacts.

Regarding geographical aspects, no unique geographic factors not already represented in datasets used in the LCA.

Additionally, there is no information derived from LCA that is not included in the LCI or LCIA formats.

For waste management of the product, recycling of metal components is preferred. Plastic and foam components may be recyclable where local infrastructure allows. Refer to our disassembly and recycling instructions.

For further information, please contact sustainability@stylexdesign.com.

8. References

1. Stylex: Life Cycle Assessment of F4, Sava, Luna Elevated, Luna Plinth and Verve. December 2025.
2. ISO 14025:2006 Environmental labels and declarations – Type III environmental declarations – Principles and Procedures.
3. ISO 14040: 2006 Environmental Management – Life cycle assessment – Principles and Framework
4. ISO 14044: 2006/Amd 1:2017/ Amd 2:2020 Environmental Management – Life cycle assessment – Requirements and Guidelines.
5. ISO 21930: 2017 Sustainability in building construction – Environmental declaration of building products.
6. SCS Type III Environmental Declaration Program: Program Operator Manual. V12.0 December 2023. SCS Global Services.
7. BIFMA Product Category Rule (PCR) for Seating. NSF International. Version 4. Valid through January 31, 2030.

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