Davies' Remanufactured SC Answer Office System

Product description:

The Davies Remanufactured SC Answer office system (Reman Answer) can give your workspace a modern look and feel while reducing your environmental footprint and acquisition cost. Davies can build you a tailor fit solution utilizing remanufactured panel frames, skins, and connectors as well as retrofit some of our custom solutions such as glass add-ups.

This EPD covers one square meter of workspace designed for use by one person and has an expected service life of 10 years. The EPD describes the results of an ISO 14040:2006 and 14044:2006 compliant LCA that follows the ISO 21930:2017(E) standard. The PCR used for this study is the NSF 1101-25 BIFMA PCR for Office Furniture Workspace Product UNCPC 3814, Version 2.

Explanatory information on the product can be found at:

https://www.daviesoffice.com/contact

Additional sustainability information and certifications can be found at:

https://www.daviesoffice.com/sustainability

EPD Program Operator
NSF International
789 N. Dixboro Rd.
Ann Arbor MI 48105 USA
www.nsfsustainability.org

NSF

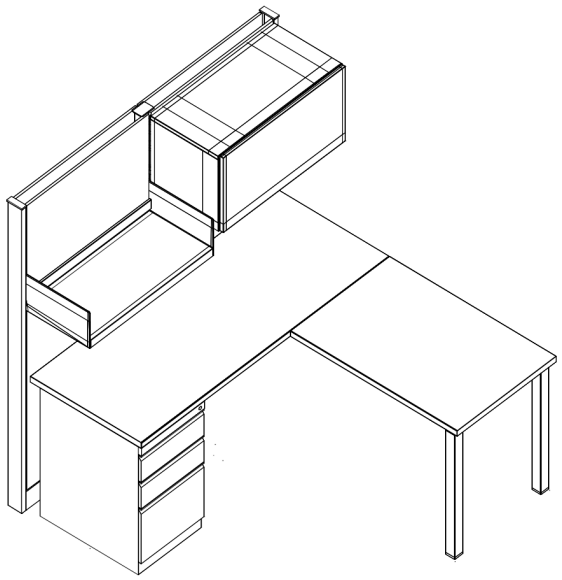
Certified Environmental Product Declaration
www.nsf.org

Date of Issue: February 25, 2026
Period of Validity: 5 years
Declaration#: EPD11179

EPD Information	
Manufacturer's name and address	Davies Refurbishing Office, Inc. 40 Loudonville Road, Albany, NY 12204 USA
EPD type and scope	Product-Specific, cradle to gate with options
Defined functional or declared unit	One square meter (1 m^2) of workspace for a 10-year period.
Products intended application and use	To provide for the usage by one person a working area that is separate from another person's working area.
Product reference service life	10 Years in a typical office environment.
Markets of applicability	North America
Date of issue	February 25, 2026
Period of validity	2/25/2026 – 2/25/2031
Date of reported manufacturers primary data	2024
LCA Information	
LCA Software and version number	SimaPro 10.2.0.2
LCI Database and version number	ecoinvent 3 – allocation, cut-off by classification – unit ecoinvent 3 – allocation, cut-off, EN 15804 – unit
LCIA methodology and version number	TRACI 2.2, IPCC GWP100 version 1.03, and EN 15804 +A2 (adapted)
Overall data quality assessment score	2
This life cycle assessment was conducted in accordance with ISO 14044:2006/AMD 1:2007/AMD 2:2020 and the reference PCR by:	Allen Luccitti, Senior Engineer, on behalf of New York State Pollution Prevention Institute (NYSP2I) Miko Buenk, Engineer, RIT on behalf of NYSP2I https://www.rit.edu/affiliate/nysp2i/ Disclaimer: Funding provided by the Environmental Protection Fund as administered by the New York State Department of Environmental Conservation. The opinions, results, findings and/or interpretations of data contained herein are the responsibility of Rochester Institute of Technology and do not necessarily represent the opinions, interpretations or policy of New York State.
This life cycle assessment was independently verified in accordance with ISO 14044:2006/AMD 1:2007/AMD 2:2020 and the reference PCR by:	Joseph Geibig jgeibig@ecoform.com 
PCR Information	
Program Operator	NSF International, www. nsf.org 789 N. Dixboro, Ann Arbor, MI 48105.
Reference PCR and version number	NSF 1101-25 BIFMA PCR for Office Furniture Workspace Products UNCPC 3814, Version 2
General Program instructions and version no.	ISO 21930, second edition, 2017-07
The sub-category PCR review was conducted by:	Industrial Ecology Consultants, Thomas P. Gloria, PhD, t.gloria@industrial-ecology.com
This declaration was independently verified in accordance with ISO 14025: 2006. ISO 21930:2017 serves as the core PCR. Sub-category PCR: NSF Office Furniture Workspace Product Category Rule ☐Internal ☐ External	Joseph Geibig jgeibig@ecoform.com 

Disclaimer: EPDs are comparable only if: they comply with NSF 1101-25 and ISO 21930, include all relevant information modules, and are based on equivalent scenarios with respect to the context of construction works, and apply the same functional unit. The PCR this EPD was based on was written to determine the potential environmental impacts of a furniture workspace 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.

Product Details



Functional Unit

One square meter (1 m2) of workspace for one person that is separate from another person's working area with a reference service life of 10 years.

Reference flows

All Reference flows are normalized to the functional unit by using the overall floorspace of the Reman Answer, 2.62m^2. One functional unit of Reman Answer weighs 50.1 kg and represents 0.394 Reman Answer units.

The Reman Answer modeled in the study is a remanufactured conventional office cubicle workspace representative of a typical configuration using Reman Answer components. The Reman Answer fits into product subcategory option C and includes a two-piece L-shaped worksurface, a wall panel system with two panels, attached shelf, attached bin, and attached pedestal. 1.49 m^2 of work surface and 0.26 m^3 of storage space is provided. All pieces are stationary. The product meets the ANSI/BIFMA x5.6 requirements, giving it a reference service life of 10 years when used in a typical office environment.

As a remanufactured product, the Reman Answer incorporates a substantial portion of components recovered from returned workstations. Approximately 62% of the total product mass is retained from previous use, including steel frames, connectors, and panel cores. These components are recovered, cleaned, refinished, and reintroduced into the product system. These components are classified as reused components, distinct from post-consumer (recycled) material inputs.

Product Material Content			
Material	**Percent of product mass (%)**	**Recycled, post-consumer (% of material mass)**	**Retained, post-consumer (% of material mass)**
Steel	63.5%	-	90.0%
Plastic	4.80%	-	7.83%
Fabric	1.59%	-	-
Wood	23.0%	11.1%	-
Fiberglass	3.99%	-	100%
Powder coat	1.33%	-	-
Glue/Adhesive	0.44%	-	-
TOTAL	100%	2.55%	61.5%

Product Packaging Content		
Material	**Percent of packaging mass (%)**	**Recycled, post-consumer (% of material mass)**
Corrugated	94.0%	50.3%
Shrink Wrap	2.90%	-
Foam	2.87%	-
Tape	0.190%	-
TOTAL	100%	47.3%

Goal and Scope

Goal: To conduct a life cycle assessment (LCA) to determine the way the environment is impacted throughout the life cycle modules and publish the results in an EPD. This study was performed in accordance with ISO 14040:2006/Amd 1 2020 (E), ISO 14044:2006/Amd1 2017/Amd2 2020 (E), and ISO 21930:2017(E). The PCR used for this study is the NSF 1101-25 BIFMA PCR for Office Furniture Workspace Product UNCPC 3814, Version 2.

Life cycle impact categories: TRACI 2.2 and IPCC GWP100 version 1.03 were used to assess the environmental impacts of the Reman Answer. The impact categories analyzed include: global warming potential, ozone depletion potential, eutrophication potential, acidification potential, smog (photochemical oxidant creation potential), and biogenic GWP.

Inventory indicators: EN 15804 + A2 (adapted) was used to assess inventory parameters. The inventory indicators include: PERE (renewable primary resources used as energy), PERM (renewable primary resources used as material), PENRE (non-renewable primary resources used as energy), PENRM (non-renewable primary energy resources used as material), Use of secondary material, Use of renewable secondary fuels, Use of non-renewable secondary fuels, Resource use - fossils, Recovered energy, Net use of fresh water, Biogenic carbon content – product, Biogenic carbon content – packaging, Hazardous waste disposed, Non-hazardous waste disposed, Radioactive waste disposed, Components for re-use, Materials for recycling, Materials for energy recovery, Exported energy – electricity, Exported energy – heat.

Cut-off Criteria: In cases of insufficient input data or data gaps, mass and energy flows within the product boundary may be excluded if they're less than 1% of the total mass and energy flow, and the cumulative omitted mass or energy flow shall not exceed 5%. However, all substances with hazardous and toxic properties will be identified and declared according to regulations applicable in the market for which the EPD is valid, regardless of if the unit process is under the cut-off rule. There are no unit processes excluded from this analysis based on the stated rules. Worker commute to their jobs at Davies' manufacturing facility is a life cycle aspect considered outside of the system boundaries of this study.

Allocation: In terms of the manufacturing life cycle, Davies manufactures only one product at a time, eliminating the need to allocate impacts across product systems. Allocation of inputs and outputs was completed through normalization of the reference flow to the functional unit on a mass basis. No burdens are allocated across the system boundary with secondary material, secondary fuel, or recovered energy flows arising from waste. There were no co-products, so there was no co-product allocation. Overhead energy consumption was allocated to the individual Reman Answer using an allocation procedure based on sales data. Transportation impacts are allocated by mass and distance traveled and are represented as "metric ton-kilometer" distances.

System Boundary

Cradle to gate with options, covering the A1-A3, A5, B1, B4 and C1-C4 life cycle stage modules. Modules A4, B2-B3, B5-B7, and D are excluded from the analysis.

A1-A3 covers the production stage, including the raw material extraction, transportation of raw materials and the return of core to the manufacturing facility, and the production and remanufacture of components.

A5 covers the installation stage, which includes the assembly and installation of the system by the customer using an electric drill and the disposal of the packaging.

B1 covers the use stage, the Reman Answer does not include any electrical components and has no impact associated with its use.

B4 covers the replacement stage, however, no replacement was required to meet the 10-year service life.

C1-C4 covers the end-of-life stages, including the deconstruction of the product by the customer using an electric drill, transport to the disposal site by truck, waste processing for recovery, and the disposal of the product in municipal solid waste.

Production Stage			Construction Stage		Use Stage							End of life Stage				Benefits and loads beyond the system boundary
Raw material extraction	Transport	Manufacturing	Transportation to site	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operation energy use	Operation water use	De-Construction	Transport	Waste Processing	Disposal	Reuse/Recycle
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D

Technical Information Scenarios[1]

Activities beyond the factory gate are not under the direct control of Davies, therefore technical information scenarios are needed to model their impact. Technical information scenarios are assumptions and modeling choices that support the analysis.

A2 Transport	Type of transport	Market average freight truck, freight rail, and container ship
	Distance	Transportation distances for new materials were estimated using default values from the NSF BIFMA PCR. Transportation of remanufactured components (core returns) was based on sales volumes, aggregated to the state level. Weighted average distance of 1700 km calculated and applied to mass values that consider mass of unused core.
A5 Construction	Assembly process	Assembled using an electric drill, drill energy use determined via time study and drill specifications.
	Output	2.26 kg of packaging disposed of with an ecoinvent US waste scenario.
C1-C4 End of life	Disassembly	Disassembled using a drill, drill energy use determined via time study and drill specifications.
	Transport	The default transportation distance of 32 km was multiplied with the weight of the Davies Reman Answer.
	Waste scenario	The end fate of the waste was determined using a surrogate waste disposal scenario from an ecoinvent US waste scenario that separates waste types and directs specific percentages of each material to different waste treatment processes such as recycling or landfill.

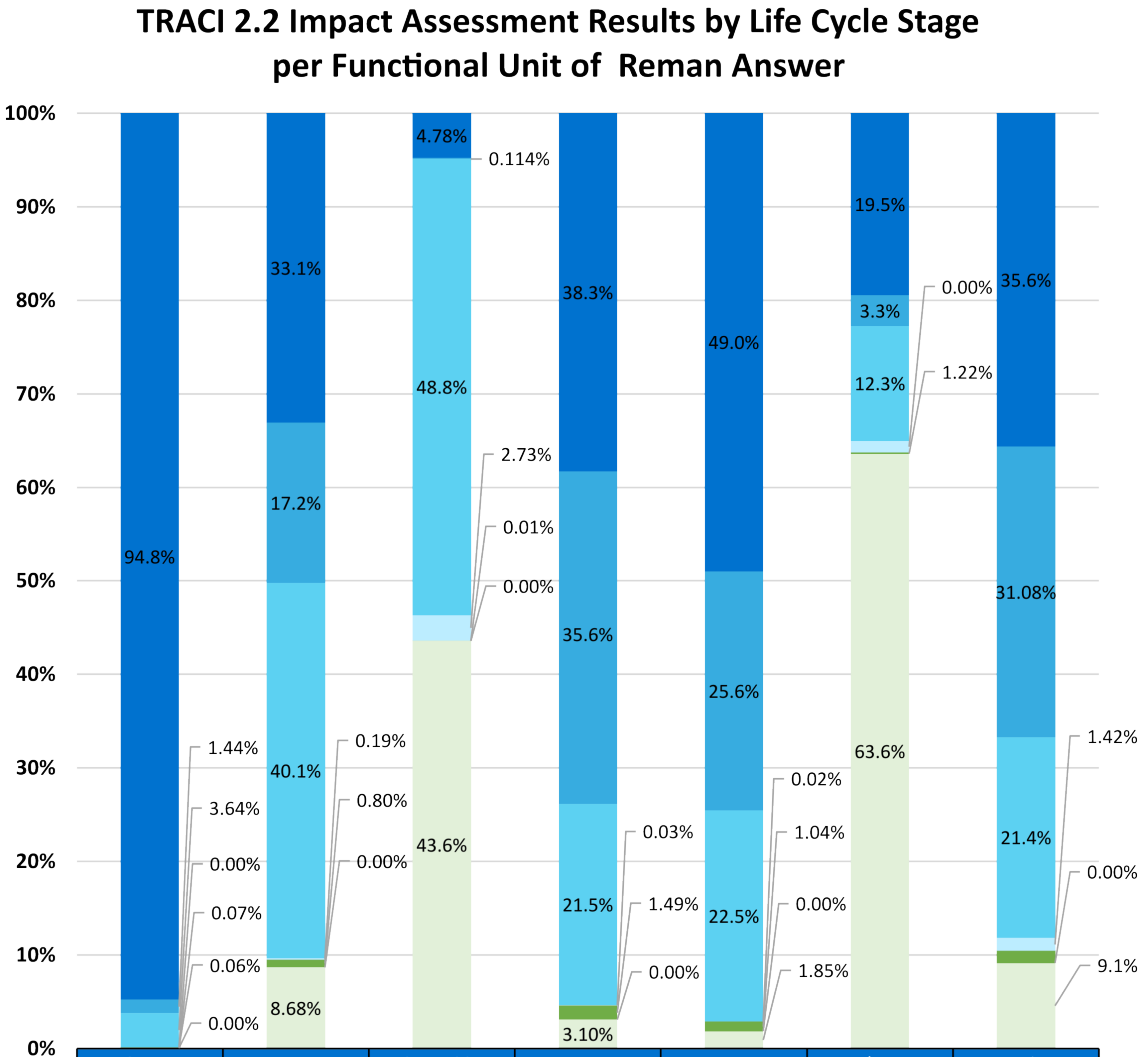
[1] Technical information scenarios that are not relevant to the product system are omitted

Life Cycle Inventory Assessment[2]

Category	Unit	A1	A2	A3	A5	C1	C2	C3	C4	Total
RPRE	MJ (LHV)	234	2.76	64.2	4.32E-02	2.90E-04	0.128	0.824	0.169	302
NRPRE	MJ (LHV)	381	182	494	4.36E-01	2.56E-03	8.47	5.17	7.51	1080
RPRM	MJ (LHV)	-	-	-	-	-	-	-	-	-
NRPRM	MJ (LHV)	-	-	-	-	-	-	-	-	-
Use of secondary material	kg	33.6	0.0808	1.32	1.14E-03	2.93E-07	3.72E-03	8.06E-03	0.0119	35.1
Use of renewable secondary fuels	MJ (LHV)	12.0	1.01E-03	0.297	5.42E-06	8.51E-10	4.80E-05	6.29E-04	1.13E-04	12.3
Use of non-renewable secondary fuels	MJ (LHV)	-	-	-	-	-	-	-	-	-
Resource use, fossils	MJ	381	182	494	4.36E-01	2.56E-03	8.46	5.17	7.51	1080
Recovered energy	MJ	0.273	0.0453	0.903	3.14E-04	3.77E-06	1.79E-03	6.35E-03	0.792	2.02
Net use of fresh water	m3	0.294	0.028	0.111	-3.48E-04	7.55E-07	1.32E-03	2.77E-03	-0.0306	0.407
Removal of Biogenic carbon- product	kg C	4.92	-	-	-	-	-	-	-	4.92
Emission of biogenic carbon - product	kg C	-	-	-	-	-	-	-	4.92	4.92
Removal of Biogenic carbon- packaging	kg C	-	-	0.908	-	-	-	-	-	0.908
Emission of biogenic carbon - packaging	kg C	-	-	-	0.908	-	-	-	-	0.908
Hazardous waste disposed	kg	3.14	0.402	0.850	6.67E-03	7.00E-06	0.019	4.88E-02	0.334	4.80
Non-hazardous waste disposed	kg	64.0	7.65	22.0	0.612	5.68E-04	0.369	2.07	46.5	143
Radioactive waste disposed	kg	2.57E-04	3.97E-05	8.28E-04	4.97E-07	1.17E-08	1.78E-06	1.09E-05	2.08E-06	1.14E-03
Components for re-use	kg	-	-	-	-	-	-	-	-	-
Materials for recycling	kg	0.0142	6.41E-03	0.393	2.04	1.46E-07	1.01E-04	24.9	0.884	28.3
Materials for energy recovery	kg	2.03E-03	1.14E-05	2.41E-05	7.64E-08	2.21E-11	5.47E-07	2.12E-06	5.60E-07	2.07E-03
Exported energy - electricity	MJ	1.10E-01	1.80E-02	8.70E-01	2.19E-04	3.71E-06	7.63E-04	5.65E-03	6.63E-01	1.67E+00
Exported energy - heat	MJ	1.63E-01	2.73E-02	3.34E-02	9.48E-05	5.84E-08	1.02E-03	6.99E-04	1.29E-01	3.55E-01

[2] Not all LCA datasets for upstream materials include these impact categories and thus results may be incomplete. Use caution when interpreting data in these categories

Life Cycle Impact Assessment Results[3]



	Ozone depletion (kg CFC-11 eq)	Global warming (kg CO2 eq)	GWP100 - Biogenic (kg CO2 eq)	Smog (kg O3 eq)	Acidification (kg SO2 eq)	Freshwater eutrophication (kg P eq)	Marine eutrophication (kg N eq)
A1	1.43E-05	24.6	0.135	1.64	0.119	5.22E-03	0.0149
A2	2.16E-07	12.8	3.23E-03	1.53	0.0621	8.83E-04	0.0130
A3	5.47E-07	29.8	1.38	0.924	0.0547	3.30E-03	8.99E-03
A5	9.25E-11	0.141	7.71E-02	1.37E-03	5.27E-05	3.27E-04	5.96E-04
C1	5.56E-13	1.42E-04	4.58E-08	3.61E-06	3.28E-07	5.37E-08	3.64E-08
C2	9.73E-09	0.593	1.54E-04	0.0640	2.51E-03	4.34E-05	5.47E-04
C3	-	-	-	-	-	-	-
C4	9.43E-09	4.58	3.06	0.082	3.28E-03	2.07E-02	4.27E-03
Total	1.50E-05	72.4	4.66	4.24	0.242	0.0304	0.0424

[3] The Ecoinvent 3.11 system model used by TRACI does not burden the product system with C3 impacts.

Declaration of Additional Environmental Information

Content of Regulated Hazardous Substances: The Reman Answer contains formaldehyde as a component of the binder in the particle board used in the New Work Surfaces.

Substance	Substance Description	CAS Number	Applicable Regulations
Formaldehyde	Used as a component of the binder in particle board	50-00-0	Toxic Substances control act

Release of Dangerous Substances from Construction Products: No dangerous substances are known to be released from the Reman Answer.

References

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