

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017

SmartEPD-2025-053-0277-01

DuraFlex Insulated Door



Date of Issue:
Jan 22, 2025

Expiration:
Jan 22, 2030

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General Information

DuraFlex

📍 899 Venture Blvd, Wooster, OH 44691

☎ 330-439-5277

✉ customerservice@duraflexdoors.com 🌐 duraservcorp.com



Product Name:	DuraFlex Insulated Door
Functional Unit:	1 piece allowing passage, with the dimensions 9×10 ft
Declaration Number:	SmartEPD-2025-053-0277-01
Date of Issue:	January 22, 2025
Expiration:	January 22, 2030
Last updated:	January 22, 2025
EPD Scope:	Cradle to gate with other options A1 - A3, C1 - C4
Market(s) of Applicability:	North America

Organization Information

From dock design to available 24-hour service, DuraServ is your trusted partner every step of the way. We are committed to building lasting relationships with our partners, providing reliable, innovative loading dock and overhead door solutions that power businesses.

Trust sets DuraServ apart from others in the industry. We strive to foster a culture of respect, where our team members, partners, and customers are treated with respect and professionalism. We take great care of every customer we serve. We prioritize their needs, understand their unique requirements, and tailor our solutions to exceed their expectations.

DuraFlex is a division of DuraServ and DuraFlex created the FIRST impactable sectional door that uses standard door hardware and track. We reduce or eliminate our customers downtime by providing a quality product that can “take a punch.”

DuraFlex IS innovation and we will continue to bring new products to market that will change the game for everyone.

Further information can be found at: <https://duraservcorp.com/about-us/>

Limitations, Liability, and Ownership

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of products using EPD information shall be based on the product's use and impacts at the building level, and therefore EPDs may not be used for comparability purposes when not considering the whole building life cycle. EPD comparability is only possible when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared. The EPD owner has sole ownership, liability, and responsibility for the EPD.

Reference Standards

Standard(s): ISO 14025 and ISO 21930:2017

Core PCR:	Smart EPD® Part A Product Category Rules for Building and Construction Products and Services v1.01 v.1.01 Date of issue: January 15, 2024 Valid until: July 15, 2025
Sub-category PCR review panel:	 Contact Smart EPD for more information.
General Program Instructions:	 Smart EPD General Program Instructions v.1.0, November 2022

Verification Information

ACLCA PCR Guidance Version:	1.0
ACLCA PCR Conformance Level:	Transparency
LCA Author/Creator:	 Olivia Fritz  TrueNorth Collective LLC  olivia.fritz@truenorthcollective.net
EPD Program Operator:	 Smart EPD  info@smartepd.com  www.smartepd.com  585 Grove St., Ste. 145 PMB 966, Herndon, VA 20170, USA
Verification:	Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071: External  Alison Conroy  Independent Contractor  alisonleeconroy@gmail.com Independent external verification of EPD, according to ISO 14025 and reference PCR(s): External  Alison Conroy  Independent Contractor  alisonleeconroy@gmail.com

Product Information

Functional Unit:	1 piece allowing passage, with the dimensions 9×10 ft
Mass:	302 kg
Product Specificity:	 Product Average  Product Specific
Variation in GWP Result (Products):	+95.6% to +104.4%
Variation in GWP Result (Facilities):	0% to 0%

Product Description

DuraFlex Insulated Sectional Doors

DuraFlex is the long-term solution for businesses who can't afford to stop moving. Our flexible, high-strength doors were born as a solution to an all-too-common problem our customers faced. The time and money lost to an inoperable door was stacking up, and our trusted partners needed a sustainable solution.

With our customers' problem in mind, we set out to design a door that could stand the test of time in any work environment. At the end, we had created the new industry standard in durable overhead doors.

Engineering design is the key to our door's longevity. Our panels are constructed from a composite material that gives upon impact, but always flexes back into place. In a warehouse environment, a DuraFlex door can take the bumps and bruises that come with the territory. Add on industry-strength hardware, 3" tracks, and springs with a minimum of 25,000 cycles, and you have a commercial overhead door that is designed to keep your business moving.

DuraFlex Insulated Impactable Sectional Overhead Door using a smooth flush exterior skin. Track Design is Continuous Clip Mount Angle for Steel and Masonry. Panel substrate is 3MM thick composite sheet constructed using HDPE core and galvanized steel for the exterior skin. The interior substrate is a 3/32" thick high gloss white impactable Thermoplastic Polyolefin skin. Door Operation: manual, chain hoist or electric operators.

Product Specifications

Product SKU(s): DuraFlex Insulated Sectional Doors (DFI-110X120--VL2)
DuraFlex Bolted Sectional Doors (110WX120H-VL)

Product Classification Codes: EC3 - Openings -> DoorsAndFrames

Material Composition

Material/Component Category	Origin	% Mass
Steel	US	51.7-53.8
Steel	Taiwan	15.4-16.2
Plastic	US	11.6-12.1
Plastic	Taiwan	5.3-5.5
Thermoset	US	9.5-10.0
Aluminum	US	1.3-1.4
Other	US	2.6-3.6

Packaging Material	Origin	kg Mass
Cardboard	US	2.6
Pallet	US	12.4

Hazardous Materials
No regulated hazardous or dangerous substances are included in this product.

EPD Data Specificity

- Primary Data Year:2023
- Manufacturing Specificity:

✗

Industry Average

✗

Manufacturer Average

✓

Facility Specific

Averaging:

This EPD covers the DuraFlex Insulated Door and DuraFlex Bolted Door, with the option of adding a window. Both the DuraFlex Insulated Door and DuraFlex Bolted Door measure 9x10 ft and use nearly identical amounts of materials. The primary raw material for both products is steel, resulting in similar final product weights.

The weighted average environmental impacts of the DuraFlex Insulated Door and DuraFlex Bolted Door, based on production volume, are presented for this EPD following the guidelines outlined in Section 5.3.1 of the PCR.

According to information received from DuraFlex, the expected ratio of production volume of the DuraFlex Insulated Door to the DuraFlex Bolted Door in the near future will be 1:1. Therefore, a simple average of the environmental impacts of these two products is presented for this EPD.

Additionally, the environmental impact of the doors with windows is reported as a scaling factor.

System Boundary

Production	A1	Raw material supply	✓
	A2	Transport	✓
	A3	Manufacturing	✓
Construction	A4	Transport to site	ND
	A5	Assembly / Install	ND
Use	B1	Use	ND
	B2	Maintenance	ND
	B3	Repair	ND
	B4	Replacement	ND
	B5	Refurbishment	ND
	B6	Operational Energy Use	ND
	B7	Operational Water Use	ND
End of Life	C1	Deconstruction	✓
	C2	Transport	✓
	C3	Waste Processing	✓
	C4	Disposal	✓
Benefits & Loads Beyond System Boundary	D	Recycling, Reuse Recovery Potential	ND

Plants



DuraFlex
899 Venture Blvd, Wooster, OH, USA

Raw Material Supply (A1)

This module covers raw material extraction and processing. This is inclusive of generation of electricity, heat, and other energy resources used for extraction and processing of raw materials, including their extraction, refining and transport.

DuraFlex Insulated Doors and DuraFlex Bolted Doors are primarily made from steel, plastic, rubber and aluminum material. The datasets available in ecoinvent and Industry Data 2.0 were used for the background data.

Background data from ecoinvent and Industry Data 2.0 were also used for raw material processing.

Transportation to Manufacturing Site (A2)

Primary data for transportation modes and distances representing DuraFlex Insulated Doors and DuraFlex Bolted Doors supply chain network were used. The weighted average distance from the local, national, and international suppliers to the DuraFlex manufacturing site in Wooster, OH was used. This is inclusive of the distance required to transport the excess weight required to account for scrap amounts.

Manufacturing (A3)

DuraFlex Insulated Doors are made from ~68% steel, and ~28% plastic and rubber. Major raw materials for DuraFlex Bolted Doors include ~69% steel, and ~27% plastic and rubber components. Components are sourced and pre-processed at the local, national, and international supplier locations. Processes such as powder coating, zinc plating, cutting, etc. are outsourced to local partners. Pre-finished parts are then assembled at DuraFlex's facility in Wooster, OH.

The DuraFlex Insulated Doors and DuraFlex Bolted Doors assembly system starts with receiving and storing input materials from vendors. Forklifts are used to move materials into storage and then to assembly areas where production begins.

Once the doors are assembled, they are moved to the packing department using forklifts. Cardboard inserts are used between panels of doors. The door hardware is placed in a cardboard box. The door and hardware bow are placed on a pallet and poly-wrapped. The packing team prepares the doors for shipping, and forklifts are used again to take the packed doors to the shipping area. The manufacturing process combines equipment like forklifts and hand tools with teamwork to keep production running smoothly.

The information module "manufacturing" includes:

- Generation of electricity and heat from primary energy resources used in manufacturing, including their extraction, refining and transport. For the generation of electricity used in manufacturing, the medium voltage electricity from e-grid subregion RFC was used.
- Manufacturing of products
- Manufacturing of packaging, including their extraction, manufacturing and transport. Cardboard inserts, cardboard box, and pallets are used for product packaging. Background data for raw material extraction, and transportation of packaging material were used from ecoinvent and Industry Data 2.0.
- Waste management from manufacturing packaging and manufacturing wastage including transport up to the recycler or disposal

End of Life (C1-C4)

It is assumed that removal at the end of life requires only human labor and does not contribute to lifetime environmental impacts. Primary data for Deconstruction (C1) and Waste Processing (C3) was not collected and since energy and material use for these stages will be minimal, and the associated impacts were assumed to be zero for this study.

Transport to Disposal Facilities (C2)

For transportation at the end of life, a broad assumption of a distance of 100 km was used. Based on the weight of each product, the intensity of transportation was estimated.

Disposal of the Product (C4)

The rates of recycling, landfilling, and incineration for different types of material were used as provided in Table 4 of the PCR. These percentages are then applied in the LCA model by multiplying to component and packaging weights.

LCA Discussion

Allocation Procedure

The Wooster Facility manufactures DuraCycle Entry/Exit Doors and DuraFlex Dock Doors. Since the assembly process of different products is similar, the facility-level inventories are allocated to products based on the production volume.

Aside from this, no multi-output allocation was necessary in the foreground of the study. Allocation of secondary data taken from ecoinvent v3.10 cut-off by classification has allocation applied to it.

This study uses the cut-off approach method for recycling. According to this approach, the first life of a material bears the environmental burdens of its production (e.g., raw material extraction and processing) and the second life (e.g., scrap input) bears the burdens of refurbishment (e.g., collection and refining of scrap). The burdens from waste treatment are taken on by the next life of the product and are not included in this study.

Cut-off Procedure

Cut-off by Classification.

Renewable Electricity

Energy Attribute Certificates (EACs) such as Renewable Energy Certificates (RECs) or Power Purchase Agreements (PPAs) are included in the baseline reported results:

✗

No

Results

Environmental Impact Assessment Results

IPCC AR5 GWP 100, TRACI 2.1

per 1 piece of product allowing passage, with the dimensions 9×10 ft.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

Impact Category	Method	Unit	A1	A2	A3	A1A2A3	C1	C2	C3	C4
GWP-total	IPCC AR5 GWP 100	kg CO2 eq	1640	33.6	84.5	1760	ND	5.86	ND	4.56
ODP	TRACI 2.1	kg CFC 11 eq	0.0000278	4.84e-7	0.00000192	0.0000302	ND	8.95e-8	ND	3.48e-8
AP	TRACI 2.1	kg SO2 eq	6.49	0.335	0.121	6.95	ND	0.0303	ND	0.015
EP	TRACI 2.1	kg N eq	5.21	0.043	0.43	5.68	ND	0.00649	ND	1.88
POCP	TRACI 2.1	kg O3 eq	77.5	8.19	2.57	88.3	ND	0.853	ND	0.219
GWP-luluc	IPCC AR5 GWP 100	kg CO2 eq	2.24	0.0154	0.0308	2.29	ND	0.00231	ND	0.00127

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particulate Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

Carbon Emissions from Land-use Change (GWP-luluc): This impact category is still under development and may have high levels of uncertainty that preclude international acceptance pending further development. Use caution when interpreting data in this category.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

Resource Use Indicators

per 1 piece of product allowing passage, with the dimensions 9×10 ft.

Indicator	Unit	A1	A2	A3	A1A2A3	C1	C2	C3	C4
PERE	MJ	ND	ND	ND	ND	ND	ND	ND	ND
PERM	MJ	ND	ND	ND	ND	ND	ND	ND	ND
PERT	MJ	ND	ND	ND	ND	ND	ND	ND	ND
PENRE	MJ	ND	ND	ND	ND	ND	ND	ND	ND
PENRM	MJ	ND	ND	ND	ND	ND	ND	ND	ND
PENRT	MJ	ND	ND	ND	ND	ND	ND	ND	ND
RPRE	MJ	1530	7.03	293	1830	ND	1.04	ND	0.873
RPRM	MJ	232	ND	ND	232	ND	ND	ND	ND
RPRT	MJ	1760	7.03	293	2060	ND	1.04	ND	0.873
NRPRE	MJ	22300	444	1380	24100	ND	82.7	ND	28.9
NRPRM	MJ	9.65	ND	ND	9.65	ND	ND	ND	ND
NRPRT	MJ	22300	444	1380	24100	ND	82.7	ND	28.9
ADP-fossil	MJ	1840	58.1	195	2100	ND	10.9	ND	3.5
SM	kg	27.8	ND	ND	27.8	ND	ND	ND	ND
RSF	MJ	ND	ND	ND	ND	ND	ND	ND	ND
NRSF	MJ	ND	ND	ND	ND	ND	ND	ND	ND
FW	m3	13.5	0.0624	0.137	13.7	ND	0.011	ND	-0.339

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRT or PENRT = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

Waste and Output Flow Indicators

per 1 piece of product allowing passage, with the dimensions 9×10 ft.

Indicator	Unit	A1	A2	A3	A1A2A3	C1	C2	C3	C4
HWD	kg	ND	ND	ND	ND	ND	ND	ND	ND
NHWD	kg	ND	ND	17.6	17.6	ND	ND	ND	309
RWD	kg	ND	ND	ND	ND	ND	ND	ND	ND
HLRW	kg	ND	ND	ND	ND	ND	ND	ND	ND
ILLRW	kg	ND	ND	ND	ND	ND	ND	ND	ND
CRU	kg	ND	ND	ND	ND	ND	ND	ND	ND
MFR	kg	ND	ND	7.51	7.51	ND	ND	ND	205
MER	kg	ND	ND	0.63	0.63	ND	ND	ND	1.3
MNER	kg	ND	ND	ND	ND	ND	ND	ND	ND
EEE	MJ	ND	ND	ND	ND	ND	ND	ND	ND
EET	MJ	ND	ND	ND	ND	ND	ND	ND	ND

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

Carbon Emissions and Removals

per 1 piece of product allowing passage, with the dimensions 9x10 ft.

Indicator	Unit	A1	A2	A3	A1A2A3
BCRP	kg CO2	1.17	ND	ND	1.17
BCEP	kg CO2	ND	ND	ND	ND
BCRK	kg CO2	ND	ND	27.4	27.4
BCEK	kg CO2	ND	ND	ND	ND
BCEW	kg CO2	ND	ND	ND	ND
CCE	kg CO2	ND	ND	ND	ND
CCR	kg CO2	ND	ND	ND	ND
CWNR	kg CO2	ND	ND	ND	ND

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

Impact Scaling Factors

Product	Scaling Factor
DuraFlex Insulated Door/ DuraFlex Bolted Door	1.000
DuraFlex Insulated Door with DuraFlex Window	0.981
DuraFlex Bolted Door with DuraFlex Window	1.032

The results in this EPD for this grouping are reported for one piece allowing passage (the declared unit) measuring 9x10 ft of a DuraFlex Insulated Door or a DuraFlex Bolted Door. Environmental impacts of other types of doors in this category, i.e., a DuraFlex Insulated Door with a DuraFlex Window and a DuraFlex Bolted Door with a DuraFlex Window (product-specific results), can be calculated using the following equation:

The product-specific result per declared unit (Results_PS) is equal to the result per declared unit of the reference product (Results_Ref) multiplied by the product-specific declared unit multiplier (Multiplier_PS).

The impact scaling factor table provides the product-specific declared unit multipliers, referred to as Multiplier_PS (marked as "Scaling Factor" in the table). These multipliers are calculated by dividing the specific product's mass per declared unit by the reference product's mass per declared unit.

This calculation method can be applied to derive results for any or all declared indicators and for any reported life cycle module(s). When using this equation, the EPD user defines which indicator(s) and life cycle stage(s) they are considering to calculate a product-specific result. The Results_PS and Results_Ref values must correspond to the same indicator(s) and life cycle stage(s).

Interpretation

Interpretation is the last phase of an LCA, although it is typically done iteratively to inform and refine the goal and scope. In this section, the results are examined based on the data quality and consistency. Key assumptions are reviewed to ensure that conclusions and recommendations are consistent with the goal and scope. It should be noted that LCA results are based on a relative approach and indicate potential environmental effects therefore do not predict actual impacts on category end points. Based on the results and study assumptions, methods and data, the cradle-to-gate impacts for, the contribution analysis indicates that the majority of the potential impacts occur as a result of raw material supply (A1), specifically steel, high-density polyethylene, and aluminum.



DuraFlex Insulated Door and DuraFlex Bolted Door do not release any dangerous substances as classified by the standards listed in PCR Part A 8.4.1.

Certification
None
None

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