



Rolling Steel Service Doors

Stormtite™ Insulated Heavy-Duty Rolling Doors Model 625, FireKing® Models 630 & 631

Rolling Service Doors offer robust security and customizable access solutions for various commercial applications. These doors are designed to withstand heavy use while providing secure access control.



Performance dashboard

Features & functionality

Model 625: An insulated, heavy-duty rolling service door that is an ideal choice for applications requiring a moderate level of thermal protection.

Model 630: These fire-rated rolling steel doors offer superior protection wherever a listed fire door is required. Common applications include factories, warehouses, mills, distribution centers and parking garages.

Model 631: A smaller fire door with UL/ULC ratings. Offers superior protection wherever a small UL listed fire door is required.

Visit Overhead Door for more product information:

[Model 625](#)
[Fire-Rated Model 630](#)
[Fire-Rated Model 631](#)

MasterFormat® 08 33 23
Product specifications:
[Rolling Steel Door 625 Specs](#)
[Fire-Rated Doors 630 Specs](#)
[Fire-Rated Doors 631 Specs](#)

For spec help, call 800-929-3667

Environment & materials

Improved by:

High-wind load options (Models 625, 630, 631)
Fire Sentinel® time-delay release device (Models 630, 631)
FireLite® vision lites, smoke detectors, horns and strobes (Models 630, 631)

Certification & rating systems:

Air infiltration package that meets requirements of IECC® code (Model 625)

[See LCA, interpretation & rating systems](#)



SM Transparency Report (EPD)™

EPD

3rd-party reviewed



Transparency Report (EPD)

3rd-party verified



Validity: 04/28/2025 – 04/28/2030
SM-OHD – 20250428 – 002

LCA

This environmental product declaration (EPD) was externally verified by Lindita Bushi, PhD, Senior Research Associate at Athena, according to ISO 21930:2017; UL Part A; UL Part B for Commercial Steel Doors and Steel Frames; and ISO 14025:2006.

Athena Sustainable Materials Institute
600 Grings Hill Road
Sinking Spring, PA 19608
www.athenasmi.org
(610) 985-0933



Athena Sustainable Materials Institute

SUMMARY

Reference PCR

UL Part B: Commercial Steel Doors and Steel Frames

Regions; system boundaries

North America; Cradle-to-gate

Declared unit

One 3-feet x 7-feet commercial steel door

LCIA methodology: TRACI 2.1

LCA software; LCI databases
openLCA 2.3; ecoinvent v3.10

Public LCA

LCA of Overhead Door™ Sectional and Rolling Doors

In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

Overhead Door

2501 S. State Hwy 121
Business Suite 200
Lewisville, Texas 75067
1 (800) 929-3667

Contact us

LCA results & interpretation

Rolling Service Doors

Model 625

Fire-Rated Model 630

Fire-Rated Model 631

EPD additional content

Scope and summary

☒ Cradle to gate ☐ Cradle to gate with options ☐ Cradle to grave

Application

The Rolling Steel Service Door Model 625 is a slatted door that rolls up to store in a coil above the opening, mounted to the face of the wall and supported by the vertical wall, requiring no connection to the ceiling or roof structure. Rolling doors are used to provide security against entry or weather protection at exterior and interior openings in industrial, commercial, institutional, and other buildings.

Declared unit

One 3-feet x 7-feet commercial steel door considered in isolation, without an external frame, weighing 105.3 kg (1,058.4 kg/m³). The 0.051 m thick door includes the door sections, tracking guides, insulation and inserts, spring, hardware, seals, and powder coating.

Manufacturing data

Reporting period: January 2023 – December 2023

Location: Lewistown, PA

What's causing the greatest impacts

All life cycle stages

The raw material supply phase dominates the results, accounting for over 90% of the total impacts across nine out of ten TRACI 2.1 categories, with the exception of fossil fuel depletion. The transportation phase (A2) accounts for the next highest contributions, particularly in impact categories such as global warming potential, acidification, eutrophication, smog formation, and fossil fuel depletion. The exception is ozone depletion, where the manufacturing phase (A3) is the second-largest contributor.

Raw material supply

Steel-based parts account for ~80% of the total mass of the products and contribute the most to impacts in the raw material supply phase (A1). While the steel-based parts have 85% recycled content, they account for ~80% of global warming potential impacts in this phase. The next largest contributors are the foam used in the panes for insulation and the synthetic rubber used for sealing the panel.

Transportation

The transportation (A2) of raw materials is the second largest impactful contributor to life cycle impacts. Raw materials are transported by semi-truck to the Overhead Door™ facility, accounting for a relatively high contribution to impact categories such as global warming potential, acidification, eutrophication, smog formation, and fossil fuel depletion.

Manufacturing

The manufacturing phase (A3) is the least impactful contributor to the total results. The potential impacts associated with on-site electricity, LPG, diesel, propane, water usage, wastewater treatment, and final product packaging are relatively low compared to those generated during the transportation phase.

Embodied carbon

Embodied carbon can be defined as the cradle-to-gate (A1-A3) global warming potential impacts. The total embodied carbon per declared unit of Rolling Steel Service Door Model 625 is 2.06E+03 kg CO₂-eq per declared unit.

Sensitivity analysis

Sensitivity analyses were performed to check the robustness of the results where the highest potential environmental impacts are occurring. As the bulk of impacts are attributed to raw materials acquisition, and steel-based parts are the major contributors to those impacts, they were selected for sensitivity analysis.

Global warming potential was evaluated for sensitivity since Overhead Door™ is interested in the potential CO₂-equivalent emissions of its products. Steel-based parts were selected for sensitivity analysis due to their relatively higher contribution to the overall results. While the steel-based parts have 85% recycled content, decreasing the mass of steel by 20% could result in a potential decrease of total impacts by over 10%.

How we're making it greener

Steel plays a large role in the environmental impact of overhead doors. Overhead Door works with steel suppliers who leverage an approximately 85% recycled content, minimizing the amount of primary material needed to manufacture their products.

LCA results

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
	(X) A1 Raw material supply	(X) A2 Transport	(X) A3 Manufacturing
			
Information modules: Included (X) Excluded (MND)*			
*Modules A4, A5, B, C, and D are excluded.			

SM Single Score [Learn about SM Single Score results](#)

Impacts per declared unit	2.65E+03 mPts	5.22E+01 mPts	1.87E+01 mPts
Materials or processes contributing >20% to total impacts in each life cycle stage	Energy and materials consumed during steel-based part manufacturing.	Truck transportation to manufacturing facility.	Natural gas consumption for heat generation in manufacturing processes.

LCIA impact results per declared unit

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
Ecological damage			
Impact category	Unit		
GWP, IPCC _{Total}	kg CO ₂ eq ⓘ 1.95E+03	8.22E+01	2.77E+01
GWP, IPCC _{Biogenic}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	-1.67E+01
GWP, IPCC _{Fossil}	kg CO ₂ eq ⓘ 1.95E+03	8.22E+01	4.45E+01
GWP, TRACI _{Total}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	4.37E+01
GWP, TRACI _{Biogenic}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	-1.67E+01
GWP, TRACI _{Fossil}	kg CO ₂ eq ⓘ 1.97E+03	8.15E+01	6.04E+01
Ozone depletion	kg CFC-11 eq ⓘ 2.19E-05	1.33E-06	4.78E-06
Acidification	kg SO ₂ eq ⓘ 1.27E+01	3.10E-01	2.55E-01
Eutrophication	kg N eq ⓘ 3.13E+00	9.08E-02	8.76E-02
Human health damage			
Impact category	Unit		
Smog	kg O ₃ eq ⓘ 1.11E+02	7.91E+00	5.51E+00
Respiratory effects	kg PM _{2.5} eq ⓘ 2.64E+00	4.30E-02	3.09E-02
Additional environmental information			
Impact category	Unit		
Carcinogenics	CTU _h ⓘ 97.60%	1.77%	0.63%
Non-carcinogenics	CTU _h ⓘ 97.29%	1.98%	0.74%
Ecotoxicity	CTU _e ⓘ 96.46%	2.80%	0.74%
Fossil fuel depletion	MJ surplus ⓘ 1.84E+03	1.62E+02	1.14E+02

References

LCA Background Report

LCA of Overhead Door™ sectional and rolling doors (public version), Overhead Door™ 2025. Developed using the TRACI v2.1, IPCC 2013 AR5, CML, and Cumulative Energy Demand (LHV) impact assessment methodologies, openLCA 2.3 software, and ecoinvent v3.10.

ISO 14025:2006 Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

ISO 21930:2017, Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services - serves as the core PCR.

UL Part A: Life Cycle Assessment Calculation Rules and Report Requirements v4.0

March, 2022. PCR review conducted by Lindita Bushi, PhD, Chair (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Hugues Imbeault-Têtreault (Group AGECO); and Jack Geigib (Ecoform).

UL Part B: Commercial Steel Doors and Steel Frames EPD Requirements

September, 2020. PCR review conducted by Lindita Bushi, PhD, Chair (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Tim Weller (Allegion), Tim.weller@allegion.com; and Dan Glover (ASSA ABLOY Door Group), dan.glover@assaabloy.com.

UL Environment General Program Instructions v2.5, March 2020 (available upon request)

Download PDF SM Transparency Report/ EPD

SM Transparency Reports (TR) are ISO 14025 Type III environmental declarations (EPD) that enable purchasers and users to compare the potential environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. Environmental declarations of products that conform to the same PCR and include the same life cycle stages, but are made by different manufacturers, may not sufficiently align to support direct comparisons. They therefore cannot be used as comparative assertions unless the conditions as defined in ISO 14025 Section 6.7.2. 'Requirements for Comparability' are satisfied. In order to support comparative assertions, this EPD meets all comparability requirements stated in ISO 14025:2006. However, differences in certain assumptions, data quality, and variability between LCA data sets may still exist. Any EPD comparison must be carried out at the building level per ISO 21930 guidelines, use the same sub-category PCR where applicable, include all relevant information modules, be limited to EPDs applying a functional unit, and be based on equivalent scenarios with respect to the context of construction works. Some LCA impact categories and inventory items are still under development and can have high levels of uncertainty. To promote uniform guidance on the data collection, calculation, and reporting of results, the ACLCA methodology (ACLCA 2019) was used.

Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved life-cycle environmental performance.

LEED BD+C: New Construction | v4 - LEED v4

Building product disclosure and optimization

Environmental product declarations

☐ Industry-wide (generic) EPD	½ product
☒ Product-specific Type III EPD	1 product

LEED BD+C: New Construction | v4.1 - LEED v4.1

Building product disclosure and optimization

Environmental product declarations

☐ Industry-wide (generic) EPD	1 product
☒ Product-specific Type III EPD	1.5 products

Collaborative for High Performance Schools National Criteria

MW C5.1 – Environmental Product Declarations

☒ Third-party certified type III EPD	2 points
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Green Globes for New Construction and Sustainable Interiors

Materials and resources

☒ NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell	
☒ NC 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs	

BREEAM New Construction 2018

Mat 02 - Environmental impacts from construction products

Environmental Product Declarations (EPD)

☐ Industry-average EPD	.5 points
☐ Multi-product specific EPD	.75 points
☒ Product-specific EPD	1 point

SM Transparency Report (EPD)™

EPD

LCA

3rd-party reviewed	☒
Transparency Report (EPD)	
3rd-party verified	☒

Validity: 04/28/2025 – 04/28/2030
SM-OHD – 20250428 – 002

This environmental product declaration (EPD) was externally verified by Lindita Bushi, PhD, Senior Research Associate at Athena, according to ISO 21930:2017; UL Part A; UL Part B for Commercial Steel Doors and Steel Frames; and ISO 14025:2006.

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Athena Sustainable Materials Institute

SUMMARY

Reference PCR

UL Part B: Commercial Steel Doors and Steel Frames

Regions; system boundaries

North America; Cradle-to-gate

Declared unit

One 3-feet x 7-feet commercial steel door

LCIA methodology; TRACI 2.1

LCA software; LCi: openLCA

openLCA 2.3; ecoinvent v3.10

Public LCA

LCA of Overhead Door™ Sectional and Rolling Doors

In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

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LCA results & interpretation

Rolling Service Doors

Model 625

Fire-Rated Model 630

Fire-Rated Model 631

EPD additional content

Scope and summary

☒ Cradle to gate

☐ Cradle to gate with options

☐ Cradle to grave

Application

The Fire-Rated Rolling Service Door Model 630 is a slatted door that rolls up to store in a coil above the opening, mounted to the face of the wall and supported by the vertical wall, requiring no connection to the ceiling or roof structure. These doors feature fusible links mounted on both sides of the wall that separate to automatically close the door. Rolling doors are used to provide security against entry or weather protection at exterior and interior openings in industrial, commercial, institutional, and other buildings.

Declared unit

One 3-foot x 7-foot commercial steel door considered in isolation, without an external frame, weighing 116.5 kg (1,171.2 kg/m³). The 0.051 m thick door includes the door sections, tracking guides, insulation and inserts, spring, hardware, seals, and powder coating.

Manufacturing data

Reporting period: January 2023 – December 2023

Location: Lewistown, PA

What's causing the greatest impacts

All life cycle stages

The raw material supply phase dominates the results, accounting for over 90% of the total impacts across nine out of ten TRACI 2.1 categories, with the exception of fossil fuel depletion. The transportation phase (A2) accounts for the next highest contributions, particularly in impact categories such as global warming potential, acidification, eutrophication, smog formation, and fossil fuel depletion. The exception is ozone depletion, where the manufacturing phase (A3) is the second-largest contributor.

Raw material supply

Steel-based parts account for ~80% of the total mass of the products and contribute the most to impacts in the raw material supply phase (A1). While the steel-based parts have 85% recycled content, they account for ~80% of global warming potential impacts in this phase. The next largest contributors are the foam used in the panes for insulation and the synthetic rubber used for sealing the panel.

Transportation

The transportation (A2) of raw materials is the second largest impactful contributor to life cycle impacts. Raw materials are transported by semi-truck to the Overhead Door™ facility, accounting for a relatively high contribution to impact categories such as acidification, global warming potential, ozone depletion, smog formation, and fossil fuel depletion.

Manufacturing

The manufacturing phase (A3) is the least impactful contributor to the total results. The potential impacts associated with on-site electricity, LPG, diesel, propane, water usage, wastewater treatment, and final product packaging are relatively low compared to those generated during the transportation phase.

Embodied carbon

Embodied carbon can be defined as the cradle-to-gate (A1-A3) global warming potential impacts. The total embodied carbon per declared unit of Rolling Steel Service Door Model 630 is 2.14E+03 kg CO₂-eq per declared unit.

Sensitivity analysis

Sensitivity analyses were performed to check the robustness of the results where the highest potential environmental impacts are occurring. As the bulk of impacts are attributed to raw materials acquisition, and steel-based parts are the major contributors to those impacts, they were selected for sensitivity analysis.

Global warming potential was evaluated for sensitivity since Overhead Door™ is interested in the potential CO₂-equivalent emissions of its products. Steel-based parts were selected for sensitivity analysis due to their relatively higher contribution to the overall results. While the steel-based parts have 85% recycled content, decreasing the mass of steel by 20% could result in a potential decrease of total impacts by over 10%.

How we're making it greener

Steel plays a large role in the environmental impact of overhead doors. Overhead Door works with steel suppliers who leverage an approximately 85% recycled content, minimizing the amount of primary material needed to manufacture their products.

LCA results

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
	(X) A1 Raw material supply	(X) A2 Transport	(X) A3 Manufacturing
			
Information modules: Included (X) Excluded (MND)*			
*Modules A4, A5, B, C, and D are excluded.			

SM Single Score

Learn about SM Single Score results

Impacts per declared unit	2.88E+03 mPts	5.76E+01 mPts	1.87E+01 mPts
Materials or processes contributing >20% to total impacts in each life cycle stage	Energy and materials consumed during steel-based part manufacturing.	Truck transportation to manufacturing facility.	Natural gas consumption for heat generation in manufacturing processes.

LCIA impact results per declared unit

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
Ecological damage			
Impact category	Unit		
GWP, IPCC _{Total}	kg CO ₂ eq ⓘ 2.02E+03	9.08E+01	2.77E+01
GWP, IPCC _{Biogenic}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	-1.67E+01
GWP, IPCC _{Fossil}	kg CO ₂ eq ⓘ 4.14E+02	7.87E+01	1.87E+01
GWP, TRACI _{Total}	kg CO ₂ eq ⓘ 2.03E+03	9.00E+01	4.37E+01
GWP, TRACI _{Biogenic}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	-1.67E+01
GWP, TRACI _{Fossil}	kg CO ₂ eq ⓘ 2.03E+03	9.00E+01	6.04E+01
Ozone depletion	kg CFC-11 eq ⓘ 2.24E-05	1.47E-06	4.78E-06
Acidification	kg SO ₂ eq ⓘ 1.36E+01	3.43E-01	2.55E-01
Eutrophication	kg N eq ⓘ 3.29E+00	1.00E-01	8.76E-02
Human health damage			
Impact category	Unit		
Smog	kg O ₃ eq ⓘ 1.15E+02	8.73E+00	5.51E+00
Respiratory effects	kg PM _{2.5} eq ⓘ 2.69E+00	4.75E-02	3.09E-02
Additional environmental information			
Impact category	Unit		
Carcinogenics	CTU _n ⓘ 97.62%	1.80%	0.58%
Non-carcinogenics	CTU _n ⓘ 97.32%	2.00%	0.68%
Ecotoxicity	CTU _e ⓘ 96.59%	2.75%	0.65%
Fossil fuel depletion	MJ surplus ⓘ 1.83E+03	1.79E+02	1.14E+02

References

LCA Background Report

LCA of Overhead Door™ sectional and rolling doors (public version), Overhead Door™ 2025. Developed using the TRACI v2.1, IPCC 2013 AR5, CML, and Cumulative Energy Demand (LHV) impact assessment methodologies, openLCA 2.3 software, and ecoinvent v3.10.

ISO 14025:2006 Environmental labels and declarations — Type III

environmental declarations — Principles and procedures.

ISO 21930:2017, Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services - serves as the core PCR.

UL Part A: Life Cycle Assessment Calculation Rules and Report Requirements v4.0

March, 2022. PCR review conducted by Lindita Bushi, PhD, Chair (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Hugues Imbeault-Tétreault (Group AGECO); and Jack Geigib (Ecoform).

UL Part B: Commercial Steel Doors and Steel Frames EPD Requirements

September, 2020. PCR review conducted by Lindita Bushi, PhD, Chair (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Tim Weller (Allegion), Tim.weller@allegion.com; and Dan Glover (ASSA ABLOY Door Group), dan.glover@assaabloy.com.

UL Environment General Program Instructions v2.5, March 2020 (available upon request)

Download PDF SM Transparency Report/ EPD

SM Transparency Reports (TR) are ISO 14025 Type III environmental declarations (EPD) that enable purchasers and users to compare the potential environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. Environmental declarations of products that conform to the same PCR and include the same life cycle stages, but are made by different manufacturers, may not sufficiently align to support direct comparisons. They therefore cannot be used as comparative assertions unless the conditions as defined in ISO 14025 Section 6.7.2. 'Requirements for Comparability' are satisfied. In order to support comparative assertions, this EPD meets all comparability requirements stated in ISO 14025:2006. However, differences in certain assumptions, data quality, and variability between LCA data sets may still exist. Any EPD comparison must be carried out at the variability level per ISO 21930 guidelines, use the same sub-category PCR where applicable, include all relevant information modules, be limited to EPDs applying a functional unit, and be based on equivalent scenarios with respect to the context of construction works. Some LCA impact categories and inventory items are still under development and can have high levels of uncertainty. To promote uniform guidance on the data collection, calculation, and reporting of results, the ACLCA methodology (ACLCA 2019) was used.

Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved life-cycle environmental performance.

LEED BD+C: New Construction | v4 - LEED v4

Building product disclosure and optimization

Environmental product declarations

☐ Industry-wide (generic) EPD	½ product
☒ Product-specific Type III EPD	1 product

LEED BD+C: New Construction | v4.1 - LEED v4.1

Building product disclosure and optimization

Environmental product declarations

☐ Industry-wide (generic) EPD	1 product
☒ Product-specific Type III EPD	1.5 products

Collaborative for High Performance Schools National Criteria

MW C5.1 – Environmental Product Declarations

☒ Third-party certified type III EPD	2 points
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Green Globes for New Construction and Sustainable Interiors

Materials and resources

☒ NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell	
☒ NC 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs	

BREEAM New Construction 2018

Mat 02 - Environmental impacts from construction products

Environmental Product Declarations (EPD)

☐ Industry-average EPD	.5 points
☐ Multi-product specific EPD	.75 points
☒ Product-specific EPD	1 point

SM Transparency Report (EPD)™

EPD	LCA
3rd-party reviewed	☒
Transparency Report (EPD)	
3rd-party verified	☒

Validity: 04/28/2025 – 04/28/2030

SM-OHD – 20250428 – 002

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Athena Sustainable Materials Institute

SUMMARY

Reference PCR

UL Part B: Commercial Steel Doors and Steel Frames

Regions; system boundaries

North America; Cradle-to-gate

Declared unit

One 3-foot x 7-foot commercial steel door

LCIA methodology: TRACI 2.1

LCA software; LCI databases

openLCA 2.3; ecoinvent v3.10

Public LCA

LCA of Overhead Door™ Sectional and Rolling Doors

In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

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LCA results & interpretation

Rolling Service Doors

Model 625

Fire-Rated Model 630

Fire-Rated Model 631

EPD additional content

Scope and summary

☒ Cradle to gate ☐ Cradle to gate with options ☐ Cradle to grave

Application

The Fire-Rated Rolling Service Door Model 631 is a slatted door that rolls up to store in a coil above the opening, mounted to the face of the wall and supported by the vertical wall, requiring no connection to the ceiling or roof structure. These doors feature fusible links mounted on both sides of the wall that separate to automatically close the door. Rolling doors are used to provide security against entry or weather protection at exterior and interior openings in industrial, commercial, institutional, and other buildings.

Declared unit

One 3-feet x 7-feet commercial steel door considered in isolation, without an external frame, weighing 73.4 kg (737.6 kg/m³). The 0.051 m thick door includes the door sections, tracking guides, insulation and inserts, spring, hardware, seals, and powder coating.

Manufacturing data

Reporting period: January 2023 – December 2023

Location: Lewistown, PA

What's causing the greatest impacts

All life cycle stages

The raw material supply phase dominates the results, accounting for over 90% of the total impacts across nine out of ten TRACI 2.1 categories, with the exception of fossil fuel depletion. The manufacturing phase (A3) accounts for the next highest contributions, particularly in impact categories such as global warming potential, ozone depletion, acidification, eutrophication, smog formation, and fossil fuel depletion. The transportation phase (A2) shows a similar contribution overall, though its impacts are generally lower than those of A3.

Raw material supply

Steel-based parts account for ~80% of the total mass of the products and contribute the most to impacts in the raw material supply phase (A1). While the steel-based parts have 85% recycled content, they account for ~80% of global warming potential impacts in this phase. The next largest contributors are the foam used in the panes for insulation and the synthetic rubber used for sealing the panel.

Transportation

The transportation phase (A2) is the least impactful contributor to the total results. Raw materials are transported by semi-truck to the Overhead Door™ facility.

Manufacturing

The manufacturing phase (A3) of raw materials is the second largest impactful contributor to life cycle impacts. The potential impacts associated with on-site electricity, LPG, diesel, propane, water use, wastewater treatment, and final product packaging are relatively higher than those generated during the transportation phase.

Embodied carbon

Embodied carbon can be defined as the cradle-to-gate (A1-A3) global warming potential impacts. The total embodied carbon per declared unit of Rolling Steel Service Door Model 631 is 1.43E+03 kg CO₂-eq per declared unit.

Sensitivity analysis

Sensitivity analyses were performed to check the robustness of the results where the highest potential environmental impacts are occurring. As the bulk of impacts are attributed to raw materials acquisition, and steel-based parts are the major contributors to those impacts, they were selected for sensitivity analysis.

Global warming potential was evaluated for sensitivity since Overhead Door™ is interested in the potential CO₂-equivalent emissions of its products. Steel-based parts were selected for sensitivity analysis due to their relatively higher contribution to the overall results. While the steel-based parts have 85% recycled content, decreasing the mass of steel by 20% could result in a potential decrease of total impacts by over 10%.

How we're making it greener

Steel plays a large role in the environmental impact of overhead doors. Overhead Door works with steel suppliers who leverage an approximately 85% recycled content, minimizing the amount of primary material needed to manufacture their products.

LCA results

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
	(X) A1 Raw material supply	(X) A2 Transport	(X) A3 Manufacturing
			
Information modules: Included (X) Excluded (MND)*			
*Modules A4, A5, B, C, and D are excluded.			

SM Single Score [Learn about SM Single Score results](#)

Impacts per declared unit	1.88E+03 mPts	3.27E+01 mPts	1.87E+01 E+01 mPts
Materials or processes contributing >20% to total impacts in each life cycle stage	Energy and materials consumed during steel-based part manufacturing.	Truck transportation to manufacturing facility.	Natural gas consumption for heat generation in manufacturing processes.

LCIA impact results per declared unit

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
Ecological damage			
Impact category	Unit		
GWP, IPCC _{Total}	kg CO ₂ eq ⓘ 1.36E+03	5.15E+01	2.77E+01
GWP, IPCC _{Biogenic}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	-1.67E+01
GWP, IPCC _{Fossil}	kg CO ₂ eq ⓘ 1.36E+03	5.15E+01	4.45E+01
GWP, TRACI _{Total}	kg CO ₂ eq ⓘ 1.36E+03	5.11E+01	4.37E+01
GWP, TRACI _{Biogenic}	kg CO ₂ eq ⓘ 0.00E+00	0.00E+00	-1.67E+01
GWP, TRACI _{Fossil}	kg CO ₂ eq ⓘ 1.36E+03	5.11E+01	6.04E+01
Ozone depletion	kg CFC-11 eq ⓘ 1.46E-05	8.36E-07	4.78E-06
Acidification	kg SO ₂ eq ⓘ 8.86E+00	1.94E-01	2.55E-01
Eutrophication	kg N eq ⓘ 2.09E+00	5.69E-02	8.76E-02
Human health damage			
Impact category	Unit		
Smog	kg O ₃ eq ⓘ 7.76E+01	4.95E+00	5.51E+00
Respiratory effects	kg PM _{2.5} eq ⓘ 1.84E+00	2.69E-02	3.09E-02
Additional environmental information			
Impact category	Unit		
Carcinogenics	CTU _h ⓘ 97.56%	1.56%	0.89%
Non-carcinogenics	CTU _h ⓘ 97.21%	1.75%	1.04%
Ecotoxicity	CTU _e ⓘ 96.48%	2.48%	1.04%
Fossil fuel depletion	MJ surplus ⓘ 1.21E+03	1.01E+02	1.14E+02

References

LCA Background Report

LCA of Overhead Door™ sectional and rolling doors (public version), Overhead Door™ 2025. Developed using the TRACI v2.1, IPCC 2013 AR5, CML, and Cumulative Energy Demand (LHV) impact assessment methodologies, openLCA 2.3 software, and ecoinvent v3.10.

ISO 14025:2006 Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

ISO 21930:2017, Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services - serves as the core PCR.

UL Part A: Life Cycle Assessment Calculation Rules and Report Requirements v4.0

March, 2022. PCR review conducted by Lindita Bushi, PhD, Chair (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Hugues Imbeault-Têtreault (Group AGECO); and Jack Geibig (Ecoform).

UL Part B: Commercial Steel Doors and Steel Frames EPD Requirements

September, 2020. PCR review conducted by Lindita Bushi, PhD, Chair (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Tim Weller (Allegion), Tim.weller@allegion.com; and Dan Glover (ASSA ABLOY Door Group), dan.glover@assaabloy.com.

UL Environment General Program Instructions v2.5, March 2020 (available upon request)

Download PDF SM Transparency Report/ EPD

SM Transparency Reports (TR) are ISO 14025 Type III environmental declarations (EPD) that enable purchasers and users to compare the potential environmental performance of products on a life cycle basis. They are designed to present information transparently to make the limitations of comparability more understandable. Environmental declarations of products that conform to the same PCR and include the same life cycle stages, but are made by different manufacturers, may not sufficiently align to support direct comparisons. They therefore cannot be used as comparative assertions unless the conditions as defined in ISO 14025 Section 6.7.2. 'Requirements for Comparability' are satisfied. In order to support comparative assertions, this EPD meets all comparability requirements stated in ISO 14025:2006. However, differences in certain assumptions, data quality, and variability between LCA data sets may still exist. Any EPD comparison must be carried out at the building level per ISO 21930 guidelines, use the same sub-category PCR where applicable, include all relevant information modules, be limited to EPDs applying a functional unit, and be based on equivalent scenarios with respect to the context of construction works. Some LCA impact categories and inventory items are still under development and can have high levels of uncertainty. To promote uniform guidance on the data collection, calculation, and reporting of results, the ACLCA methodology (ACLCA 2019) was used.

Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved life-cycle environmental performance.

LEED BD+C: New Construction | v4 - LEED v4

Building product disclosure and optimization

Environmental product declarations

☐ Industry-wide (generic) EPD	½ product
☒ Product-specific Type III EPD	1 product

LEED BD+C: New Construction | v4.1 - LEED v4.1

Building product disclosure and optimization

Environmental product declarations

☐ Industry-wide (generic) EPD	1 product
☒ Product-specific Type III EPD	1.5 products

Collaborative for High Performance Schools National Criteria

MW C5.1 – Environmental Product Declarations

☒ Third-party certified type III EPD	2 points
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Green Globes for New Construction and Sustainable Interiors

Materials and resources

☒ NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell	
☒ NC 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs	

BREEAM New Construction 2018

Mat 02 - Environmental impacts from construction products

Environmental Product Declarations (EPD)

☐ Industry-average EPD	.5 points
☐ Multi-product specific EPD	.75 points
☒ Product-specific EPD	1 point



SM Transparency Report (EPD)™

EPD

LCA

3rd-party reviewed



Transparency Report (EPD)

3rd-party verified

Validity: 04/28/2025 – 04/28/2030
SM-OHD – 20250428 – 002

This environmental product declaration (EPD) was externally verified by Lindita Bushi, PhD, Senior Research Associate at Athena, according to ISO 21930:2017; UL Part A; UL Part B for Commercial Steel Doors and Steel Frames; and ISO 14025:2006.

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Athena Sustainable Materials Institute

SUMMARY

Reference PCR

UL Part B: Commercial Steel Doors and Steel Frames

Regions; system boundaries

North America; Cradle-to-gate

Declared unit

One 3-feet x 7-feet commercial steel door

LCIA methodology: TRACI 2.1

LCA software: LCI databases openLCA 2.3; ecoinvent v3.10

Public LCA

LCA of Overhead Door™ Sectional and Rolling Doors

In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

Overhead Door
2501 S. State Hwy 121
Business Suite 200
Lewisville, Texas 75067
1 (800) 929-3667

Contact us

EPD additional content

Rolling Service Doors

Model 625	Fire-Rated Model 630	Fire-Rated Model 631	EPD additional content
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Data

Background This product-specific plant-specific declaration was created by collecting production data from the facility in Lewistown, PA. All unit processes were modeled using primary data. Secondary data sources include those available in the ecoinvent v3.10 database.

Allocation The Overhead Door™ Lewistown facility produces various kinds of door and access solutions. To accurately allocate electricity, LPG, diesel, propane, water usage and wastewater generation to the studied production lines, the plant's total annual energy and water consumption (as reported in utility bills) was proportionally distributed. Surface is used as an allocation parameter. Annual facility resources were first normalized to each product series based on the total number of overhead doors produced and later scaled down to a 3-feet by 7-feet unit level using annual production quantities. All associated manufacturing resources and waste flows were allocated using the same approach. Per ISO 21930, 2.8.4.1.2, the useable output flows such as steel scrap is not considered as co-products but is considered waste, and no allocation to secondary material, secondary fuels, or recovered energy is applied. There are no co-products produced during their manufacturing processes.

Cut-off criteria

for the inclusion of mass and energy flows are 1% of renewable primary resource (energy) usage, 1% nonrenewable primary resource (energy) usage, 1% of the total mass input of that unit process, and 1% of environmental impacts. The total of neglected input flows per module does not exceed 5% of energy usage, mass, and environmental impacts.

The only exceptions to these criteria are substances with hazardous and toxic properties, which must be listed even when the given process unit is under the cut-off criterion of 1% of the total mass. No renewable energy was used in production beyond that accounted for in the RFCE eGRID data set, and no energy was recovered. No known flows are deliberately excluded from this declaration, and no substances considered to be hazardous or toxic according to the TRI or local regulations are present in the products. Biogenic carbon is included in reported results. Therefore, these criteria have been met.

Quality The precision of the data is considered high. Overhead Door™ personnel provided detailed bills of materials, and facility managers provided utility information for the manufacturing facilities. The raw material transportation distances were calculated based on the raw material manufacturers' addresses. The data included is considered complete. The LCA model included all known material and energy flows. As pointed out in that section, no known flows above 1% were excluded and the sum of all excluded flows totals less than 5%, whether evaluated by mass, energy, or potential environmental impact. The consistency of the model is considered high. The bills of materials provided by Overhead Door™ personnel were developed for multiple internal departments and are maintained regularly. Furthermore, the modeling assumptions were consistent throughout the model, with a preference for the ecoinvent v3.10 database.

LCIA impact factors required by the PCR are global warming potential (GWP 100), IPCC 2013, ozone depletion, acidification, eutrophication, smog, andAbiotic Resource Depletion Potential of Non-renewable (fossil) energy resources (ADPFossil); "These six impact categories are globally deemedmature enough to be included in Type III environmental declarations. Other categories are being developed and defined and LCA should continue making advances in their development. However, the EPD users shall not use additional measures for comparative purposes."

Major system boundary exclusions

- Building operational energy and water use for office work
- Construction of major capital equipment
- Human labor and employee transport
- Disposal of packaging materials associated with the final product (A5 module), except for biogenic carbon balance reporting

Technical data

Name	Value
Sound transmission coefficient	ASTM E90-09, Standard Test Method for Laboratory Measurement of Transmission Loss of Building Partitions: STC-21
U Value	NFRC 102 - Test Procedure for Measuring the Steady-State Thermal Transmittance of Fenestration Systems: 0.13 Btu/h °F ft ²

Rolling Steel Service Door Model 625: LCIA results, resource use, output and waste flows, and carbon emissions & removals per declared unit

Parameters	Unit	A1	A2	A3	Total
LCIA results					
GWP _{total} (IPCC 2013)	kg CO ₂ eq	1.95E+03	8.22E+01	2.77E+01	2.06E+03
GWP _{Biogenic} (IPCC 2013)	kg CO ₂ eq	0.00E+00	0.00E+00	-1.67E+01	-1.67E+01
GWP _{Fossil} (IPCC 2013)	kg CO ₂ eq	1.95E+03	8.22E+01	4.45E+01	2.08E+03
Global warming (TRACI 2.1)	kg CO ₂ eq	1.97E+03	8.15E+01	6.04E+01	2.11E+03
Ozone depletion	kg CFC-11 eq	2.19E-05	1.33E-06	4.78E-06	2.80E-05
Acidification	kg SO ₂ eq	1.27E+01	3.10E-01	2.55E-01	1.33E+01
Eutrophication	kg N eq	3.13E+00	9.08E-02	8.76E-02	3.31E+00
Smog	kg O ₃ eq	1.11E+02	7.91E+00	5.51E+00	1.25E+02
Fossil fuel depletion	MJ surplus	1.84E+03	1.62E+02	1.14E+02	2.12E+03
Additional environmental information					
Respiratory effects	kg PM _{2.5} eq	2.64E+00	4.30E-02	3.09E-02	2.71E+00
Carcinogenics	CTUh	97.60%	1.77%	0.63%	100%
Non carcinogenics	CTUh	97.29%	1.98%	0.74%	100%
Ecotoxicity	CTUe	96.46%	2.80%	0.74%	100%
Resource use indicators					
Renewable primary energy used as energy carrier (fuel)	MJ, NCV	4.42E+02	2.69E+00	1.01E+02	5.46E+02
Renewable primary resources with energy content used as material	MJ, NCV	0.00E+00	0.00E+00	1.84E+02	1.84E+02
Total use of renewable primary resources with energy content	MJ, NCV	4.42E+02	2.69E+00	2.85E+02	7.30E+02
Non-renewable primary resources used as an energy carrier (fuel)	MJ, NCV	4.04E+03	2.03E+02	9.45E+01	4.34E+03
Non-renewable primary resources with energy content used as material	MJ, NCV	1.24E+02	0.00E+00	5.26E+00	1.29E+02
Total use of non-renewable primary resources with energy content	MJ, NCV	4.16E+03	2.03E+02	9.98E+01	4.47E+03
Secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Renewable secondary fuels	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-renewable secondary fuels	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Recovered energy	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water resources	m3	3.98E+00	1.76E-01	1.63E+01	2.05E+01
Abiotic depletion potential, fossil	MJ, NCV	3.68E+03	2.00E+02	1.46E+02	4.03E+03
Output flows and waste category indicators					
Hazardous waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste disposed	kg	0.00E+00	0.00E+00	1.97E-03	1.97E-03
High-level radioactive waste, conditioned, to final repository	kg	1.46E-03	1.22E-05	1.41E-04	1.62E-03
Intermediate- and low-level radioactive waste, conditioned, to final repository	kg	2.98E-03	2.88E-05	3.18E-04	3.33E-03
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon emissions and removals					
Biogenic carbon removal from product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon emission from product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon removal from packaging	kg CO ₂	0.00E+00	0.00E+00	-1.67E+01	-1.67E+01
Biogenic carbon emission from packaging	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon emission from combustion of waste from renewable sources used in production processes	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Calcination carbon emissions	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbonation carbon removals	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon emissions from combustion of waste from renewable and non-renewable sources used in production processes	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Fire-Rated Rolling Service Door Model 630: LCIA results, resource use, output and waste flows, and carbon emissions & removals per declared unit

Parameters	Unit	A1	A2	A3	Total
LCIA results					
GWP _{total} (IPCC 2013)	kg CO ₂ eq	2.02E+03	9.08E+01	2.77E+01	2.14E+03
GWP _{Biogenic} (IPCC 2013)	kg CO ₂ eq	0.00E+00	0.00E+00	-1.67E+01	-1.67E+01
GWP _{Fossil} (IPCC 2013)	kg CO ₂ eq	2.02E+03	9.08E+01	4.45E+01	2.15E+03
Global warming (TRACI 2.1)	kg CO ₂ eq	2.03E+03	9.00E+01	6.04E+01	2.18E+03
Ozone depletion	kg CFC-11 eq	2.24E-05	1.47E-06	4.78E-06	2.87E-05
Acidification	kg SO ₂ eq	1.36E+01	3.43E-01	2.55E-01	1.42E+01
Eutrophication	kg N eq	3.29E+00	1.00E-01	8.76E-02	3.47E+00
Smog	kg O ₃ eq	1.15E+02	8.73E+00	5.51E+00	1.29E+02
Fossil fuel depletion	MJ surplus	1.83E+03	1.79E+02	1.14E+02	2.12E+03
Additional environmental information					
Respiratory effects	kg PM _{2.5} eq	2.69E+00	4.75E-02	3.09E-02	2.77E+00
Carcinogenics	CTUh	97.62%	1.80%	0.58%	100%
Non carcinogenics	CTUh	97.32%	2.00%	0.68%	100%
Ecotoxicity	CTUe	96.59%	2.75%	0.65%	100%
Resource use indicators					
Renewable primary energy used as energy carrier (fuel)	MJ, NCV	4.49E+02	2.97E+00	1.01E+02	5.53E+02
Renewable primary resources with energy content used as material	MJ, NCV	0.00E+00	0.00E+00	1.84E+02	1.84E+02
Total use of renewable primary resources with energy content	MJ, NCV	4.49E+02	2.97E+00	2.85E+02	7.36E+02
Non-renewable primary resources used as an energy carrier (fuel)	MJ, NCV	4.20E+03	2.24E+02	9.45E+01	4.52E+03
Non-renewable primary resources with energy content used as material	MJ, NCV	5.97E+00	0.00E+00	5.26E+00	1.12E+01
Total use of non-renewable primary resources with energy content	MJ, NCV	4.21E+03	2.24E+02	9.98E+01	4.53E+03
Secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Renewable secondary fuels	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-renewable secondary fuels	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Recovered energy	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water resources	m3	3.98E+00	1.76E-01	1.63E+01	2.05E+01
Abiotic depletion potential, fossil	MJ, NCV	3.72E+03	2.21E+02	1.46E+02	4.08E+03
Output flows and waste category indicators					
Hazardous waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste disposed	kg	0.00E+00	0.00E+00	1.83E-02	1.83E-02
High-level radioactive waste, conditioned, to final repository	kg	1.51E-03	1.35E-05	1.41E-04	1.66E-03
Intermediate- and low-level radioactive waste, conditioned, to final repository	kg	3.05E-03	3.18E-05	3.18E-04	3.40E-03
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon emissions and removals					
Biogenic carbon removal from product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon emission from product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon removal from packaging	kg CO ₂	0.00E+00	0.00E+00	-1.67E-01	-1.67E-01
Biogenic carbon emission from packaging	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon emission from combustion of waste from renewable sources used in production processes	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Calcination carbon emissions	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbonation carbon removals	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon emissions from combustion of waste from renewable and non-renewable sources used in production processes	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Fire-Rated Rolling Service Door Model 631: LCIA results, resource use, output and waste flows, and carbon emissions & removals per declared unit

Parameters	Unit	A1	A2	A3	Total
LCIA results					
GWP _{total} (IPCC 2013)	kg CO ₂ eq	1.36E+03	5.15E+01	2.77E+01	1.43E+03
GWP _{Biogenic} (IPCC 2013)	kg CO ₂ eq	0.00E+00	0.00E+00	-1.67E+01	-1.67E+01
GWP _{Fossil} (IPCC 2013)	kg CO ₂ eq	1.36E+03	5.15E+01	4.45E+01	1.45E+03
Global warming (TRACI 2.1)	kg CO ₂ eq	1.36E+03	5.11E+01	6.04E+01	1.48E+03
Ozone depletion	kg CFC-11 eq	1.46E-05	8.36E-07	4.78E-06	2.02E-05
Acidification	kg SO ₂ eq	8.86E+00	1.94E-01	2.55E-01	9.31E+00
Eutrophication	kg N eq	2.09E+00	5.69E-02	8.76E-02	2.24E+00
Smog	kg O ₃ eq	7.76E+01	4.95E+00	5.51E+00	8.81E+01
Fossil fuel depletion	MJ surplus	1.21E+03	1.01E+02	1.14E+02	1.43E+03
Additional environmental information					
Respiratory effects	kg PM _{2.5} eq	1.84E+00	2.69E-02	3.09E-02	1.90E+00
Carcinogenics	CTUh	97.56%	1.56%	0.89%	100%
Non carcinogenics	CTUh	97.21%	1.75%	1.04%	100%
Ecotoxicity	CTUe	96.48%	2.48%	1.04%	100%
Resource use indicators					
Renewable primary energy used as energy carrier (fuel)	MJ, NCV	3.08E+02	1.69E+00	1.01E+02	4.10E+02
Renewable primary resources with energy content used as material	MJ, NCV	0.00E+00	0.00E+00	1.84E+02	1.84E+02

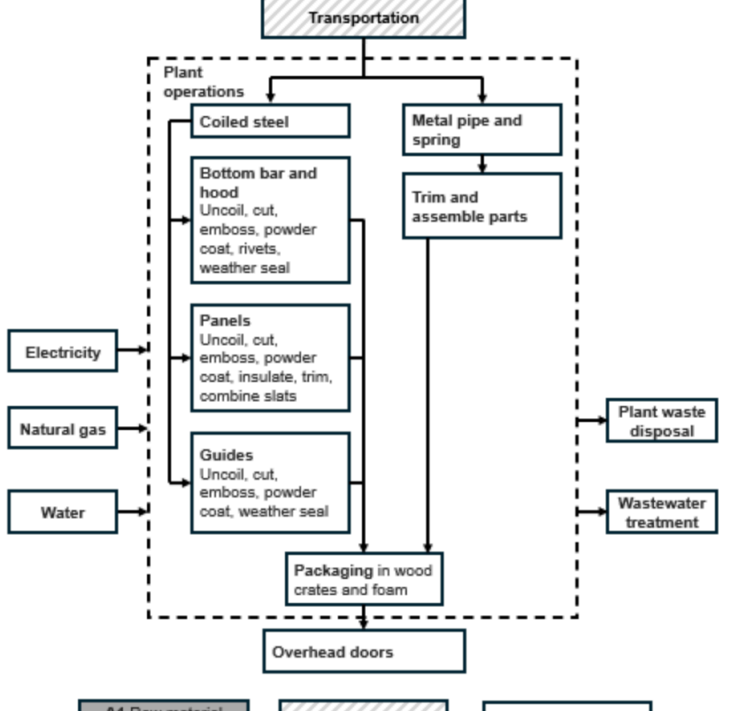
Scenarios and additional technical information

Installation [A5] While the impacts from installation are out of the scope of this cradle-to-gate study, ISO 21930:2017 requires that biogenic carbon emissions associated with packaging disposal be separately reported.

Product: Rolling Steel Service Door - 625, Fire-Rated Rolling Service Door - 630, Fire-Rated Rolling Service Door - 631.

Parameter	A5	Unit
Biogenic carbon emissions from packaging	1.67E+01	kg CO ₂

Flow diagram



Packaging

At the Lewistown facility, products are packaged in custom boxes made of pine wood and cardboard, with Styrofoam used to protect the corners.

Major assumptions and limitations

- One 3-feet x 7-feet commercial steel door without the frame is considered the declared unit in the study, although the studied products are not typically produced to this size
- Variations in color choices are assumed to be negligible
- While glazing, additional coatings, and accessories may be optionally included in the products offered, they were not considered in this study
- Generic data sets used for material inputs, transport, and waste processing are considered good quality, but actual impacts from material suppliers, transport carriers, and local waste processing may vary
- The impact assessment methodology categories do not represent all possible environmental impact categories; characterization factors used within the impact assessment methodology may contain varying levels of uncertainty
- LCA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks

Additional Statements

- EPDs can complement but cannot replace tools and certifications that are designed to address environmental impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, etc.
- The electricity, LPG, diesel, propane, and water usage, as well as wastewater generation associated with the studied production lines, were estimated and proportionally distributed in this EPD using surface area as the allocation parameter.

Total use of renewable primary resources with energy content	MJ, NCV	3.08E+02	1.69E+00	2.85E+02	5.94E+02
Non-renewable primary resources used as an energy carrier (fuel)	MJ, NCV	2.82E+03	1.27E+02	9.45E+01	3.04E+03
Non-renewable primary resources with energy content used as material	MJ, NCV	7.58E+00	0.00E+00	5.26E+00	1.28E+01
Total use of non-renewable primary resources with energy content	MJ, NCV	2.83E+03	1.27E+02	9.98E+01	3.05E+03
Secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Renewable secondary fuels	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-renewable secondary fuels	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Recovered energy	MJ, NCV	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water resources	m3	3.98E+00	1.76E-01	1.63E+01	2.05E+01
Abiotic depletion potential, fossil	MJ, NCV	5.51E+03	1.25E+02	1.46E+02	5.78E+03
Output flows and waste category indicators					
Hazardous waste disposed	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Non-hazardous waste disposed	kg	0.00E+00	0.00E+00	1.09E-02	1.09E-02
High-level radioactive waste, conditioned, to final repository	kg	1.02E-03	7.65E-06	1.41E-04	1.17E-03
Intermediate- and low-level radioactive waste, conditioned, to final repository	kg	2.06E-03	1.80E-05	3.18E-04	2.40E-03
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon emissions and removals					
Biogenic carbon removal from product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon emission from product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon removal from packaging	kg CO ₂	0.00E+00	0.00E+00	-1.67E+01	-1.67E+01
Biogenic carbon emission from packaging	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon emission from combustion of waste from renewable sources used in production processes	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Calcination carbon emissions	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbonation carbon removals	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon emissions from combustion of waste from renewable and non- renewable sources used in production processes	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00



SM Transparency Report (EPD)™

EPD

LCA

3rd-party reviewed



Transparency Report (EPD)

3rd-party verified



Validity: 04/28/2025 – 04/28/2030
SM-OHD – 20250428 – 002

This environmental product declaration (EPD) was externally verified by Lindita Bushi, PhD, Senior Research Associate at Athena, according to ISO 21930:2017; UL Part A; UL Part B for Commercial Steel Doors and Steel Frames; and ISO 14025:2006.

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Athena Sustainable Materials Institute

SUMMARY

Reference PCR

UL Part B: Commercial Steel Doors and Steel Frames

Regions; system boundaries

North America; Cradle-to-gate

Declared unit

One 3-foot x 7-foot commercial steel door

LCIA methodology: TRACI 2.1

LCA software; LCI databases

openLCA 2.3; ecoinvent v3.10

Public LCA

LCA of Overhead Door™ Sectional and Rolling Doors

In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

Overhead Door

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