

Strength of expertise



STEEL DOOR

Over the years, Métalec Steel Doors and Frames has forged a solid reputation in the field of steel door manufacturing for commercial, industrial and institutional projects.

∕lodels:

- Satin Finish Steel Door with Honeycomb Core
- Stainless Steel Door with Honeycomb Core
- R-12.9 Insulated Steel Door
- Lead-Lined RX Steel Door
- R-8.75 Insulated Steel Door
- Steel Door with Temperature Rise Core (PCR)

VALIDATED ECO-DECLARATION

PRODUCT SPECIFICATIONS

Reference

Steel Door 18 GA, satin finish, 36" x 84" x 13/4"

Final manufacturing locations

2150 Leon Harmel Street, Quebec, Quebec G1N 4L2 CANADA

7800 Bombardier Street, Anjou, Quebec H1J 2G3 CANADA

Composition

Carbon steel, stainless steel, lead sheet, hinge reinforcements, lock reinforcements, full honeycomb core, tempcore, polyisocyanurate, polystyrene insulation, adhesive, epoxy glue, paint (for touch-ups).

ATTRIBUTES

Recycled content

Pre-consumer and post-consumer contents vary according to the product (see pages 2 and 3).

Sourcing of raw materials

The sourcing of raw materials is documented between 1.3% and 65.1% based on the weight of the final manufactured product.

FSC® -

Rapidly renewable materials

Biobased materials

ENVIRONMENTAL IMPACTS

Life Cycle Assessment

Product's carbon footprint

Environmental Product Declaration

ISO 14025:2006

INGREDIENTS AND EMISSIONS

Declaration of chemical ingredients

1,000 ppm

Type of declaration

ation HPD® version 2.1
Health Product Declaration®

Emission test

CDPH Test compliance

VOC

Paint (for touch-ups) 83 g/L
Adhesive 127 g/L
Epoxy glue <20 g/L

(All products are applied at the plant)

Formaldehyde

Other

TECHNICAL PERFORMANCES

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Performance tests

Compliance with steel and stainless steel standards

ASTM A 653 / A 653M, NA AMM, HMMA 803, ASTM A 240 / A 240M.

Fire resistance testing CAN/ULC-S104-M80, UBC7-2 (1994), UL10 (b), NFPA252, NFPA80, CSDMA, NAAMM, HMMA

MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

ISO 14001 Certification

Extended Producer Responsibility

(Take Back Program)

ASTM E152.

Corporate Sustainability Report

- (CSR: GRI, ISO 26000, BNQ 21000 or other)

CERTIFICATIONS & CONFORMITY REPORTS



Métalec manufactures steel doors and frames for commercial, industrial and institutional projects. Models offered include fire-rated steel doors, security doors, soundproof doors, stainless steel doors, insulated doors and steel frames.

Quebec Division: 2150 Leon Harmel Street, Quebec, Quebec G1N 4L2 CANADA Montreal Division: 7800 Bombardier Street, Anjou, Quebec H1J 2G3 CANADA www.metalec.com

MasterFormat®: **08 11 00**Validated Eco-Declaration: **EDV17-1081-02**

Original issue date: **11/2017**Revised: **04/09/2018**

Period of validity: **11/2019** to **11/2020**



STFFL DOOR





Dimensions

- Width: 36"
- · Height: 84"
- Thickness: 13/4"
- · Other dimensions available upon request.

Models

- Satin Finish Steel Door with Honeycomb Core (Satin finish galvanized steel 18 GA, also available in GA 20-16-14)
- Stainless Steel Door with Honeycomb Core (Stainless steel 18 GA, type #304, finish #4 for projects showcasing the beauty or prestige of stainless steel)
- R-12.9 Insulated Steel Door (Satin finish galvanized steel 18 GA, also available in GA 20-16-14)
- Lead-Lined RX Steel Door (Satin finish galvanized steel 18 GA, also available in GA 20-16-14)
- R-8.75 Insulated Steel Door (Satin finish galvanized steel 18 GA, also available in GA 20-16-14)
- Steel Door with Temperature Rise Core (PCR) (Satin finish galvanized steel 18 GA, also available in GA 20-16)

ATTRIBUTES

RECYCLED CONTENT

Weight ratio	Pre-consumer	Post-consumer	
100%	26.1%	42.3%	
Weight ratio	Pre-consumer	Post-consumer	
94.7%	27.0%	42.0%	
3.5%	0%	50.0%	
1.4%	27.0%	42.0%	
0.5%	27.0%	42.0%	
	100% Weight ratio 94.7% 3.5% 1.4%	100% 26.1% Weight ratio Pre-consumer 94.7% 27.0% 3.5% 0% 1.4% 27.0%	

Final product	Weight ratio	Pre-consumer	Post-consumer
Stainless Steel Door with Honeycomb Core	100%	26.1%	42.3%
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer
Stainless steel18 GA	94.7%	27.0%	42.0%
Full honeycomb core	3.5%	0%	50.0%
Hinge reinforcements	1.4%	27.0%	42.0%
Lock reinforcements	0.5%	27.0%	42.0%

Final product	Weight ratio	Pre-consumer	Post-consumer
R-12.9 Insulated Steel Door	100%	25.9%	39.7%
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer
Carbon steel 18 GA	92.8%	27.0%	42.0%
Polyisocyanurate insulation	5.1%	8.0%	0%
Hinge reinforcements	1.5%	27.0%	42.0%
Lock reinforcements	0.2%	27.0%	42.0%

The data included in this Environmental Data Sheet has been provided by the client and the suppliers, who are responsible for its veracity and its integrity. Vertima follows a rigorous protocol, including an on-site audit of the factory, an audit of the manufacturer's supply chain documentation, and the analysis and validation of all supporting documents. However, Vertima cannot be held responsible for false or misleading information that may cause any loss or damage suffered, in all or in part, caused by errors and omissions relative to data collection, compilation and/or interpretation. The analysis protocol used by Vertima is available on request.

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STFFL DOOR



ATTRIBUTES (CONTINUED)

RECYCLED CONTENT (CONTINUED)

Final product	Weight ratio	Pre-consumer	Post-consumer
Lead-Lined RX Steel Door	100%	13.0%	49.8%
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer
Carbon steel 18 GA	40.8%	27.0%	42.0%
Lead sheet	36.0%	0%	90.0%
Polyisocyanurate insulation	22.3%	8.0%	0%
Hinge reinforcements	0.6%	27.0%	42.0%
Lock reinforcements	0.1%	27.0%	42.0%

Final product	Weight ratio	Pre-consumer	Post-consumer
R-8.75 Insulated Steel Door	100%	26.3%	40.7%
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer
Carbon steel 18 GA	95.2%	27.0%	42.0%
Polystyrene insulation	2.6%	5.0%	0%
Hinge reinforcements	1.5%	27.0%	42.0%
Lock reinforcements	0.2%	27.0%	42.0%

Final product	Weight ratio	Pre-consumer	Post-consumer
Steel Door with Temperature Rise Core (PCR)	100%	17.5%	27.3%
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer
Carbon steel 18 GA	63.8%	27.0%	42.0%
Hinge reinforcements	1.0%	27.0%	42.0%
Lock reinforcements	0.1%	27.0%	42.0%

Validated Eco-Declaration - Recycled Content

Methodology: on-site audit, supply chain evaluation, analysis and validation of the recycled content data according to the weight ratio of each of the components used in manufacturing the final assembly.

Vertima protocol: VERT-032008-01, Second Edition.

SOURCING OF RAW MATERIALS

Weight ratio	Final manufacturing locations
100%	Quebec, Quebec G1N 4L2 and Anjou, Quebec H1J 2G3

Validated Eco-Declaration – Sourcing of raw materials

Methodology: on-site audit, supply chain evaluation, analysis and validation of the sourcing data according to the weight ratio of each of the components used in manufacturing the final product.

Vertima protocol: VERT-032008-02, Second Edition.

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Validated Eco-Declaration:
EDV17-1081-02
Period of validity:
11/2019 to 11/2020





ATTRIBUTES (CONTINUED)

SOURCING OF RAW MATERIALS (CONTINUED)

Components	Weight ratio	Extraction locations	Transportation
Carbon steel 18 GA	40.8% - 95.2%	Hamilton, Ontario	Truck
Stainless steel 18 GA ¹	94.7%	Hamilton, Ontario	Truck
Lead sheet ²	36.0%	Lachine, Quebec	Truck
Hinge reinforcements	0.6% - 1.5%	Hamilton, Ontario	Truck
Lock reinforcements	0.1% - 0.5%	Hamilton, Ontario	Truck
Full honeycomb core ³	3.5%	N/A	N/A
Tempcore ⁴	34.7%	N/A	N/A
Polystyrene insulation⁵	2.6%	N/A	N/A
Polyisocyanurate insulation ⁶	5.1% - 22.3%	N/A	N/A
Adhesive	Negligible	N/A	N/A
Epoxy glue	Negligible	N/A	N/A
Paint (for touch-ups)	Negligible	N/A	N/A

¹Stainless steel is used only in the Stainless Steel Door with Honeycomb Core.

- For the Satin Finish Steel Door with Honeycomb Core, raw materials extraction is documented at 44.3% based on the weight of the final product assembly.
- For the Stainless Steel Door with Honeycomb Core, raw materials extraction is documented at 44.3% based on the weight of the final product assembly.
- For the R-12.9 Insulated Steel Door, raw materials extraction is documented at 65.1% based on the weight of the final product assembly.
- For the Lead-Lined RX Steel Door, raw materials extraction is documented at 61.0% based on the weight of the final product assembly.
- For the R-8.75 Insulated Steel Door, raw materials extraction is documented at 67.0% based on the weight of the final product assembly.
- For the Steel Door with Temperature Rise Core (PCR), raw materials extraction is documented at 65.0% based on the weight of the final product assembly.



²Sheet lead is used only in the Lead-Lined RX Steel Door.

³The honeycomb core is used only in the Satin Finish Steel Door with Honeycomb Core and the Stainless Steel Door with Honeycomb Core.

⁴Tempcore is used only in the Steel Door with Temperature Rise Core (PCR).

⁵Polystyrene insulation is used only in the R-8.75 Insulated Steel Door.

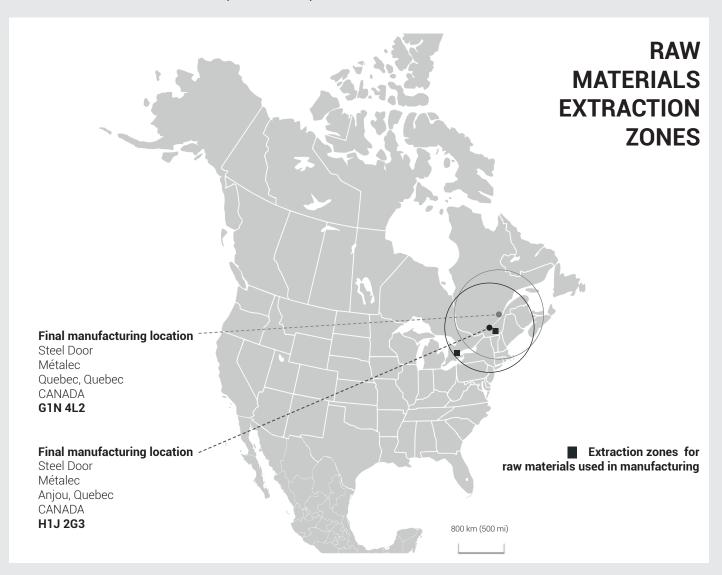
⁶Polyisocyanurate insulation is used only in the R-12.9 Insulated Steel Door and the Lead-Lined RX Steel Door.





ATTRIBUTES (CONTINUED)

SOURCING OF RAW MATERIALS (CONTINUED)



1. EXTRACTION LOCATION OF RECYCLED STEEL (Carbon steel 18 GA, stainless steel 18 GA, sheet lead, hinge reinforcements, lock reinforcements)

Canada: Hamilton, Ontario

2. EXTRACTION LOCATION OF RECYCLED STEEL (Lead sheet)

Canada: Lachine, Quebec





STFFL DOOR



INGREDIENTS AND EMISSIONS

DECLARATION OF CHEMICAL INGREDIENTS



Type of declaration: Health Product Declaration® (HPD®) version 2.1 Period of validity: November 30, 2017 to November 30, 2020

HPD name: R-8.75 & R-12.9 Insulated Steel Doors

Summary of product contents and results from chemical substances screening against (HPD Priority Lists1) and the GreenScreen for Safer Chemicals®,2.

HPDC repository URL: http://www.hpd-collaborative.org/hpd-public-repository/

The results presented below are specific to the R-12.9 and R-8.75 Insulated Steel Doors. For the Steel Door with Honeycomb Core and the Steel Door with Temperature Rise Core, please consult the HPDC repository.

The Health Product Declaration® and its logo are used with permission from the Health Product Declaration® Collaborative.

Declaration: ■ Prepared by Vertima Inc., HPDC-approved third party

Content inventory threshold: 1,000 ppm Full disclosure of intentional ingredients: Yes Full disclosure of known hazards: Yes

Hazard(s) associated with product ingredients

The HPD standard is a declaration of product content and direct health hazards associated with exposure to its different components. This Declaration is not an assessment of the risks associated with the actual use of the product. It does not address the potential health impacts of the substances used or created during manufacturing that do not appear in the final product as residuals, nor substances created through combustion or other degradation processes.

G	reenScreen®	score of highes	t concern:	List Trans	lator Li	ikely B	enchmark 1	3

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PBT (Persistent, Bioaccumulative, Toxic)	Respiratory	Physical hazare
Cancer	Neurotoxicity	☐ Global warming
Gene mutation	Mammals	☐ Ozone depletio
■ Development	Land toxicity	Multiple
Reproductive	Aquatic toxicity	☐ Unknown
■ Endocrine	Skin or eve	

GreenScreen (GS) scores for chemical ingredients: Benchmark 1 (Avoid, chemical of high concern), Benchmark 2 (Use but search for safer substitutes), Benchmark 3 (Use but still opportunity for improvement), Benchmark 4 (Prefer, safer chemical)

TABLE OF INGREDIENTS

Name	Role	Weight ratio	CAS ¹	GreenScreen®2	Note(s) (for more information, please refer to the HPD®)
Carbon steel 18 GA (Galvannealed Steel #1)	Main component	63.8%	7440-02-0, 7439-92-1 7440-43-9	LT-1	LT-P1 score also present
	Hardware reinforcement	1.7% - 1.8%	64742-65-0, 64742-54-7 64742-93-4	LT-1	LT-UNK, BM3 scores also present
Adhesive (Adhesive #1)	Assembly	0.1% - 0.5%	Undisclosed (2)	LT-UNK	-
Paint	Finish	0%	13463-67-7	LT-1	LT-UNK score also present
Polyisocyanurate insulation (Polyurethane-Based)	R-12.9 Insulation	0% - 6.2%	109-66-0 78-78-4	LT-P1	LT-UNK score also present
Polystyrene insulation (Insulating Material)	R-8.75 Insulation	0% - 2.59%	109-66-0 78-78-4	LT-P1	LT-UNK score also present

Only the CAS numbers with the score of highest concern are listed. The complete list of substances can be found in the HPD®.
2GS List Translator (LT) scores for chemical ingredients: LT-1, equivalent to GS Benchmark 1; LT-P1, possible equivalent of GS Benchmark 1; LT-U or LT-UNK, present on official lists but there is insufficient information to classify the hazards as LT-1 or LT-P1 (does not mean the chemical is safe).

Validated Eco-Declaration – Declaration of chemical ingredients
Methodology: validation of the documentation confirming the methodology and reporting of chemical ingredients.

Vertima protocol: VERT-032009-01, Second Edition.

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Validated Eco-Declaration: EDV17-1081-02 Period of validity: 11/2019 to 11/2020



Please refer to Annex D of HPD®Open Standard version 2.1. May 2017; http://www.hpd-collaborative.org

²GreenScreen for Safer Chemicals®: http://www.greenscreenchemicals.org/

STFFL DOOR



INGREDIENTS AND EMISSIONS (CONTINUED)

EMISSIONS TEST

Analysis method



California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017

(Emissions testing method for California Specification 01350) **Product name:** Steel Door with Honeycomb Core - PS-18

Certificate number: 0180315-04 Date of issue: 02 19 2018

Analysis laboratory: Berkeley Analytical

The acceptable criteria and results demonstrate compliance with the standard for the product analyzed:

Exposure scenario ¹	Individual VOC of concern ²		Formal	dehyde³	TVOC ⁴
	Criteria	Compliant	Criteria	Compliant	Results
Classroom	≤½ Chronic REL	Yes	≤9.0 µg/m³	Yes	≤0.5 mg/m³
Private office	≤½ Chronic REL	Yes	≤9.0 µg/m³	Yes	≤0.5 mg/m³

Product covering⁵: Does not apply

Source: Berkeley Analytical – VOC Emission Testing Certificate

Analysis method



California Department of Public Health CDPH/EHLB/Standard Method Version 1.2, 2017

(Emissions testing method for California Specification 01350)

Product name: Steel Door with Polyurethane Insulated Core - PS-18 IS

Certificate number: 0180315-04 **Date of issue:** 02 19 2018

Analysis laboratory: Berkeley Analytical

The acceptable criteria and results demonstrate compliance with the standard for the product analyzed:

Exposure scenario ¹	Individual VO	C of concern ²	concern ² Formaldehyde ³		TVOC ⁴
	Criteria	Compliant	Criteria	Compliant	Results
Classroom	≤½ Chronic REL	Yes	≤9.0 µg/m³	Yes	≤0.5 mg/m³
Private office	≤½ Chronic REL	Yes	≤9.0 µg/m³	Yes	≤0.5 mg/m³

Product covering⁵: Does not apply

Source: Berkeley Analytical – VOC Emission Testing Certificate

1 The exposure scenarios and product quantities for classrooms and offices are as defined in Tables 4-2 - 4-5 (CDPH Std. Mtd. V1.2-2017).

²The individual VOC limits are as defined in Table 4-1 (ibid).

³The maximum concentration for formaldehyde is ≤9 µg/m³, issued January 1, 2012; the previous limit was ≤16.5 µg/m³ (ibid).

⁴For informational purposes only: three different ranges of TVOC results predicted, i.e., ≤0.5 mg/m³, >0.5 – 4.9 mg/m³ and ≥5.0 mg/m³.

For informational purposes only and applicable only to tests on products applied in liquid form; number of grams of sample applied per square meter of substrate.

Validated Eco-Declaration – Emissions Tests

Methodology: validation of documents confirming the methodology and the results of the general evaluation of emissions.

Vertima protocol: VERT-032008-02, Second Edition.

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STFFL DOOR



INGREDIENTS AND EMISSIONS

VOLATILE ORGANIC COMPOUNDS (VOCs)

Paint (for touch-ups) is applied during manufacturing of the steel door. For the product category presented below, the value refers to the VOC content of the paint in its liquid state.

PAINT							
Manufacturer	Product	VOC content					
MICCA	Paint (for touch-ups)	83 g/L					

Epoxy glue and adhesive are applied during the steel door manufacturing process. For the product category presented below, the value refers to the VOC content of the epoxy glue and adhesive in a liquid state.

ADHESIVES						
Manufacturer	Product	VOC content				
Adchem / Adfast	Adhesive	127 g/L				
Adfast Corp	Epoxy glue*	< 20 g/L				

^{*}Epoxy glue is used only in the Satin Finish Steel Door with Honeycomb Core and the Stainless Steel Door with Honeycomb Core.

Validated Eco-Declaration – Volatile organic compound (VOC) emissions Methodology: validation of documents attesting VOC emissions. Vertima validation protocol: VERT-032009-02, Second Edition.

TECHNICAL PERFORMANCES

PERFORMANCE TESTS

Non-exhaustive list. Please consult the steel door technical documentation for more information.

Compliance with steel standards: ASTM A 653 / A 653M, NAAMM, HMMA 803, ASTM A 240 / A 240M.

Fire resistance testing: CAN/ULC-S104-M80, UBC7-2 (1994), UL10 (b), NFPA252, NFPA80, CSDMA, NAAMM, HMMA, ASTM E152

WARRANTY

Métalec Steel Doors and Frames guarantees its products for a five-year period, starting from the delivery date, against all manufacturing defects (if products are properly installed).

Métalec Steel Doors and Frames will repair or replace all products that are deemed to be defective, following an inspection by one of its representatives, if the representative has determined that there is a manufacturing defect.

Métalec is solely responsible for the product delivered to its client's warehouse. This warranty does not include:

installation, paint application and other fees that the client or user may have incurred. Note that the deflection of a steel door caused by exposure to sunlight is not considered a manufacturing defect but rather as a natural and uncontrollable physical reaction; in this case, the warranty does not apply. Certain restrictions apply.

Source: www.metalec.com

MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

ENVIRONMENTAL COMMITMENT

Métalec Steel Doors and Frames aims to make a positive contribution to the world and reduce its environmental footprint in all of the actions it undertakes. The company is committed to showing leadership, rigor and determination in its pursuit of environmentally conscious actions to advance sustainable development among its clients and the public.

Métalec's environmental commitment goes beyond the manufacturing of products that are respectful of the environment and in conformity with LEED requirements. We also aim to integrate sustainable practices in our factories and processes.

Source: www.metalec.com

Validated Eco-Declaration:
EDV17-1081-02
Period of validity:
11/2019 to 11/2020





SUMMARY OF PRODUCT CONTRIBUTIONS

LEED® v4 for Building Design and Construction (BD+C)

New Constructions, Core and Shell, Schools, Retail, Data Centers, Warehouses and Distribution Centers, Hospitality and Health Care Establishments.

LEED® v4 for Interior Design and Construction (ID+C)

Commercial Interiors, Retail and Hospitality.

MATERIALS AND RESOURCES		PRODUCT CONTRIBUTIONS	
MR	Building Product Disclosure and Optimization — Sourcing of Raw Materials Option 2: Best extraction practices (1 point) The steel door may also contribute to the location valuation factor if the product is sourced (extracted, manufactured, purchased) within a 160-km radius of the project site.	Contribute	ATTRIBUTES Recycled content - Variable depending on product Pre-consumer (0.5% - 26.3%) Post-consumer (27.3% - 68.8%) (see pages 2 and 3)
MR	Building Product Disclosure and Optimization – Material Ingredients Option 1: Materials Ingredients Reporting (1 point) The steel doorcontributes with its Health Product Declaration® and is valued as 1 whole product out of the 20 needed for credit achievement calculation purposes.	Contribute	HPD® version 2.1 Health Product Declaration®
INTERIOR ENVIRONMENTAL QUALITY		PRODUCT CONTRIBUTIONS	
IEQ	Low-Emitting Products Option 1: Product category calculation (1-3 points) The number of points depends on the LEED® rating system chosen and the number of compliance categories.	Contribute ¹	INGREDIENTS AND EMISSIONS 1 The Satin Finish Steel Door with Honeycomb Core and the R-12.9 Insulated Steel Door comply with the California Department of Public Health (CDPH) Standard Method v1.2-2017.

Note that the total number of possible points indicates the number of achievable points in each credit category where the specific product may contribute. The product itself cannot achieve this score, as defined above, but is considered as a beneficial element in all building components used in order to achieve LEED®credits.

