

#### Hardwood Floors



#### CLASSIC

(SOLID WOOD)

3/4" thick solid hardwood boards with tongue and groove and micro-V beveled on 4 sides.

#### VALIDATED ECO-DECLARATION

#### PRODUCT SPECIFICATIONS

#### Reference

Solid wood (Classic)

#### **Final manufacturing location**

Saint-Georges, QC G5Y 8J5 or Toronto, ON M8Z 1K8 CANADA

#### Components

Hardwood and finishes.

#### **ATTRIBUTES**

#### **Recycled Content**

Pre-consumer: 0% Post-consumer: 0%

#### Sourcing of raw materials

The source of extraction and/or location of raw materials has been documented for 99.0% of final product weight.

Certified Wood	<b>PEFC</b> See page 4
Rapidly renewable materials	-
Biobased materials	-

#### **ENVIRONMENTAL IMPACTS**

Life Cycle Asses	sment
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**Reference service life** 25 years

Product's carbon footprint 08/2014

#### **Environmental Product Declaration**

Industry-wide (generic) ISO 14025:2006 08/2014 to 08/2019 Type III

#### **INGREDIENTS AND EMISSIONS**

Declaration of chemical ingredients

1,000 ppm

**Type of declaration** HPD® version 2.1 Health Product Declaration®

**Emission tests** Complying with the CDPH

**VOCs** CDPH test results ≤ 0.5 mg/m<sup>3</sup>

**Formaldehyde** CDPH test results ≤ 9.0 ug/m<sup>3</sup>

Others

## TECHNICAL PERFORMANCES

#### Performance tests

Relevant performances tests list. Fire reaction available on request.

# MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

ISO 14001 Certification

**Extended Producer Responsibility** (Take Back Program)

Corporate Sustainability Report (CSR: GRI, ISO 26000, BNQ 21000 or others)

#### **CERTIFICATIONS AND CONFORMITIES**





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Designed and manufactured in North America, Mirage Floors are synonymous with superior quality, beauty, durability and guarantee product consistency, added value, and lifelong good looks. Mirage epitomizes attention to detail and the desire to create a product in perfect harmony with its environment. For more than 35 years, Mirage has been committed to operating in an environmentally responsible manner in order to ensure sustainable development for current and future generations.

MasterFormat®: **09 64 00** Validated Eco-Declaration:

**VED15-0501-02**Original issue date: **06/2009** 

Period of validity: **02/2019** to **02/2020** 



SOLID WOOD (CLASSIC)





#### Characteristics

- Boards with uniform thicknesses and widths
- · Micro-V joint on all four sides of the board

#### **ATTRIBUTES**

#### RECYCLED CONTENT

Final product	Weight ratio	Pre-consumer	Post-consumer
Solid wood (Classic)	100%	0%	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 product.

Vertima's procedure: VERT-032008-01, Second Edition.

#### **SOURCING OF RAW MATERIALS**

Weight ratio	Final manufacturing location
100%	Saint-Georges, QC G5Y 8J5 CANADA or Toronto, ON M8Z 1K8 CANADA

Validated Eco-Declaration – Sourcing of raw materials

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

Vertima's procedure: VERT-032008-02, Second Edition.

Component	Weight ratio	Extraction location	Transportation
Hardwood	99.0%	Canada and United States	Road
Finishes	<1.0%	N/A	N/A

The source of extraction and/or location of raw materials has been documented for 99.0% of final product weight.

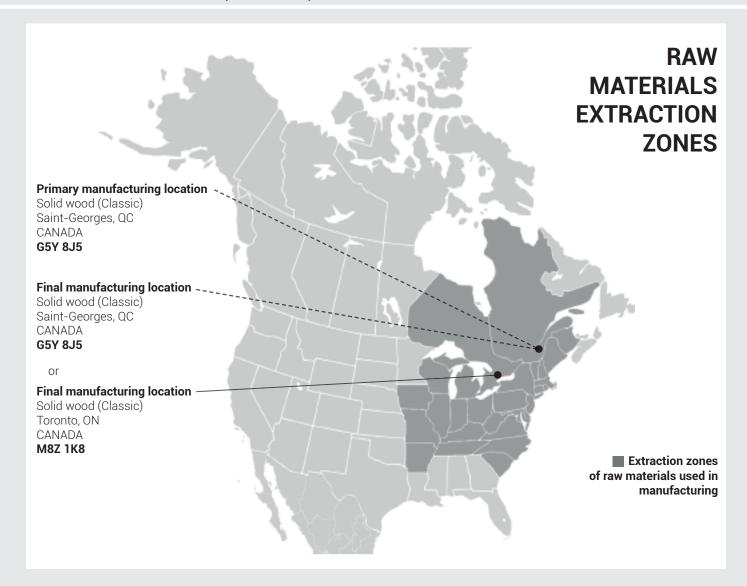


SOLID WOOD (CLASSIC)



# **ATTRIBUTES (CONTINUED)**

#### **SOURCING OF RAW MATERIALS (CONTINUED)**



#### **WOOD HARVEST LOCATION** (Details available upon request)

Canada: Quebec, New Brunswick, Ontario.

**United States:** Arkansas, Connecticut, Delaware, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, Wisconsin.



SOLID WOOD (CLASSIC)



# **ATTRIBUTES (CONTINUED)**

#### **CERTIFIED WOOD**

Hardwood is currenlty excluded in PEFC certificate, however contact Mirage for options regarding PEFC Certification.

#### **ENVIRONMENTAL IMPACTS**

#### **ENVIRONMENTAL PRODUCT DECLARATION (EPD)**

☑ Industry-wide (generic), ISO 14025:2006, Type III

In 2011, Mirage (Boa-Franc) collaborated to a life-cycle analysis to implement a generic Environmental Product Declaration for all production of hardwood floors in Eastern Canada. This approach was carried out by the owner of the Quebec Wood Export Bureau (QWEB) and audited by the FPInnovations program operator.

**Reference PCR** 

FPInnovations for "North American Structural and Architectural Wood Products" Version 1.1, May 2013 NSF National Center for Sustainability Standards for "Flooring: Resilient, Laminate, Ceramic, Wood"

Declared Unit	Scope of the LCA	Reference service life	Period of validity
1 sq meter of installed flooring or 1m² of installed flooring	Cradle-to-grave	25 years	08/2014 to 08/2019

#### Table - Life cycle environmental performance calculated using TRACI v2.1

Impact categories	Unit	Per 10 sq.ft. of flooring	Per 1m² of flooring
Global warming potential*	kg CO <sub>2</sub> eq	-2.13	-2.29
Acidification potential	kg SO <sub>2</sub> eq	0.07	0.08
Eutrophization potential	Kg N eq	4.90.10 <sup>-3</sup>	5.27.10 <sup>-3</sup>
Smog creation potential	kg O <sub>3</sub> eq	1.42	1.53
Ozone depletion potential	kg CFC-11 eq	4.34.10 <sup>-8</sup>	4.67.10 <sup>-8</sup>
Total consumption primary energy	Unit	Per 10 sq.ft. of flooring	Per 1m² of flooring
Non-renewable fossil	MJ	149.09	160.48
Non-renewable nuclear	MJ	17.88	19.25

This EPD encompasses products from multiple manufacturers and represents an average of pre-finished hardwood strip flooring produced in Eastern Canada. This average is based on a sample that included five Eastern Canadian flooring mills and three finishing plants. This data represents about 10% of total Canadian hardwood flooring production in the year 2004.

Source: EPD report

Validated Eco-Declaration – Environmental Product Declaration (EPD)
Methodology: validation of documents and methodology surrounding the product LCA report and EPD.
Vertima's procedure: VERT-032010-03, Second Edition.



<sup>\*</sup> GWP includes all biogenic carbon sinks and sources throughout the product system boundary.

SOLID WOOD (CLASSIC)



#### INGREDIENTS AND EMISSIONS

#### DECLARATION OF CHEMICAL INGREDIENTS



Type of declaration: Health Product Declaration® (HPD®) version 2.1

Period of validity: May 2018 to November 2020

HPD name: Solid wood - St-Georges

Summary of product contents and results from screening individual chemical substances against HPD Priority Lists<sup>1</sup> and the GreenScreen for Safer Chemicals<sup>®,2</sup>.

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

The presented results are specific to Solid wood prefinished at St-Georges plant. For more details about the HPD® related to Solid wood prefinished at Toronto plant and entitled "Solid wood - Toronto", please consult the HPD Public repository.

The Health Product Declaration® and logo is owned by the Health Product Declaration® Collaborative and is used with permission.

<b>Declaration:</b> Prepared by Vertima inc., third party approved by HPDC	
Ingredients inventory threshold: 1,000 ppm	

Full disclosure of intentional ingredients: Yes Full disclosure of known hazards: Yes

#### Hazard(s) associated with the product ingredients: (Not associated with actual use of finished product)

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

Highest concern GreenScreen® Benchmark: Benchmark 13

PDT (Pers	stent, Bloaccumulative, 10	XIC)
Cancer		

Gene mutation Development

Reproductive

Endocrine

espiratory	
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Neurotoxicity

Mammal Land toxicity

Aquatic toxicity

Skin or eye

Physical hazard

Global warming

Ozone depletion Multiple

Unknown

<sup>1</sup>Refer to Annex D of HPD® Open Standard Version 2.1, May 2017: http://www.hpd-collaborative.org <sup>2</sup>GreenScreen for Safer Chemicals® method: http://www.greenscreenchemicals.org/

GreenScreen (GS) Benchmark scores of 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**

Component	Role	Weight ratio	CAS <sup>1</sup>	GreenScreen®,2	Other applicable score (for more details refer to the HPD®)
Hardwood	Main material	99.0%	-	-	-
Finishes	Finishes	<1.0%	14807-96-6 1330-20-7	BM-1	LT-1, LT-P1, LT-UNK, BM-2 and BM-4 scores 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®.

<sup>2</sup>GS List Translator (LT) scores of chemical ingredients: LT-1, likely GS Benchmark 1; LT-P1, possible GS Benchmark 1; LT-U or LT-UNK, present on GS Specified 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's procedure: VERT-032009-01, Second Edition.





SOLID WOOD (CLASSIC)



# **INGREDIENTS AND EMISSIONS (CONTINUED)**

#### **EMISSION TESTS**

#### **Reference Standard**



California Department of Public Health CDPH/EHLB/Standard Method Version 1.1, 2010

(Emission testing method for CA Specification 01350)

Certificate number: 150224-01 Issue Date: February 24, 2015

Final maunfacturing location: St-Georges, QC

Analytical Lab: Berkeley Analytical

#### Acceptance Criteria and Results Demonstrating Compliance of Product Sample to Referenced Standard:

Exposure Scenario <sup>1</sup>	Individual VOCs of Concern <sup>2</sup>		Formaldehyde <sup>3</sup>		TVOC <sup>4</sup>
	Criterion	Compliant	Criterion	Compliant	Range
School 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
Single Family Residence (if applicable)	≤½ Chronic REL	Yes	≤9.0 µg/m³	Yes	≤0.5 mg/m³

Product Coverage<sup>5</sup>: Not applicable

Source: Berkeley Analytical - VOC Emission Test Certificate

#### **Reference Standard**



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

(Emission testing method for CA Specification 01350)

Certificate number: 171017-03 Issue Date: October 17, 2017

**Final maunfacturing location:** Toronto, ON **Analytical Lab:** Berkeley Analytical

#### Acceptance Criteria and Results Demonstrating Compliance of Product Sample to Referenced Standard:

Exposure Scenario <sup>1</sup>	Individual VOC	Cs of Concern <sup>2</sup>	Formaldehyde <sup>3</sup>		TVOC <sup>4</sup>
	Criterion	Compliant	Criterion	Compliant	Range
School 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 Coverage<sup>5</sup>: Not applicable

Source: Berkeley Analytical - VOC Emission Test Certificate

Exposure scenarios & product quantities for classroom & office are defined in Tables 4-2 - 4-5 (CDPH Std. Mtd. V1.1-2010 or V1.2-2017).

Validated Eco-Declaration—Emissions testing Methodology: validation of documents certifying the test results. Vertima's procedure: VERT-032009-02, Second Edition.



<sup>&</sup>lt;sup>2</sup>Maximum allowable concentrations of individual target VOCs are specified in Table 4-1 (ibid)

<sup>&</sup>lt;sup>3</sup>Maximum allowable formaldehyde concentration is ≤9 μg/m³, effective Jan 1, 2012; previous limit was ≤16.5 μg/m³ (ibid).

<sup>&</sup>lt;sup>4</sup>Informative only; predicted TVOC Range in three categories, i.e., ≤0.5 mg/m³, >0.5 – 4.9 mg/m³, and ≥5.0 mg/m³.

Informative and applicable only to tests of wet-applied products; grams of sample applied per square meter of substrate.

SOLID WOOD (CLASSIC)



## **TECHNICAL PERFORMANCES**

#### **PERFORMANCE TESTS**

Contact manufacturer for more details.

#### WARRANTY

See product detailed description.

# MANUFACTURER'S ENVIRONMENTAL MANAGEMENT PROGRAM

#### RESPONSIBLE RAW MATERIALS PROCUREMENT REPORT

Report name	Date		
Controlled Wood Risk Evaluation	Updated annually		



Validated Eco-Declaration - Supply Chain Management Report Methodology: validation of documents attesting the supply chain management report. Vertima's procedure: VERT-032009-04, First Edition.

SOLID WOOD (CLASSIC)



# PRODUCT CONTRIBUTION SUMMARY

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

New Construction, Core and Shell, School, Retail, Data Centers, Warehouse and Distribution Centers, Hospitality and Healthcare.

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

Commercial Interiors, Retail and Hospitality.

MATERIALS AND RESOURCES		PRODUCT CONTRIBUTIONS		
	Building Product Disclosure and Optimization  – Environmental Product Declaration (EPD)	Contribute	ENVIRONMENTAL IMPACTS	
MR	Option 1: Environmental Product Declaration (1 point) The Solid wood (Classic) contributes to this credit due to the availability of a industry-wide (generic) EPD (Type III) and is valued as 0.5 whole product out of the 20 needed for the purposes of credit achievement calculation.		Industry-wide (generic) EPD (Type III) compliant with ISO 14025:2006.	
Building Product Disclosure and Optimization			INGREDIENTS AND EMISSIONS	
MR	<ul> <li>Material Ingredients</li> <li>Option 1: Material ingredients reporting (1 point)</li> <li>The Solid wood (Classic) contributes to this credit due to the availability of Health Product Declarations® and is valued as 1 whole product out of the 20 needed for the purposes of credit achievement calculation.</li> </ul>	Contribute	HPD® version 2.1 Health Product Declaration®	
INDOOR ENVIRONMENTAL QUALITY		PRODUCT CONTRIBUTIONS		
	Low-Emitting Materials		INGREDIENTS AND EMISSIONS	
EQ	Option 1: Product category calculation (1-3 points)  Number of points is dependent on the LEED rating system and the number of compliant categories. For the flooring category 100% of flooring must meet the requirements.	Contribute	The Solid wood (Classic) has been tested according with the standard method of the California Department of Public Health (CDPH).	

#### **LEED® v4 requirements for homes**

Applies to single family homes, multi-family (one to three stories), or multi-family (four to six stories). Includes homes and multifamily low-rise and multi-family mid-rise.

MATERIALS AND RESOURCES		PRODUCT CONTRIBUTIONS	
MD			ATTRIBUTES
MR Prerequisite	Certified Tropical Wood	-	To meet the prerequisite, don't select tropical species of Mirage.
INDOOR ENVIRONMENTAL QUALITY		PRODUCT CONTRIBUTIONS	
INDOOF	R ENVIRONMENTAL QUALITY	PF	RODUCT CONTRIBUTIONS
INDOOF	R ENVIRONMENTAL QUALITY  Low-Emitting Products (0.5-3 points)	PF	RODUCT CONTRIBUTIONS INGREDIENTS AND EMISSIONS

It is important to consider that the total amount of possible points reflects the number of achievable points in each credit category. The product itself cannot achieve this score, as defined above, but is considered as a beneficial element in order to obtain LEED® credits.

