



### **MEDIUM DENSITY FIBERBOARD (MDF)**

Our MDF is a medium density fiberboard that meets California Air Resource Board (CARB) requirements as well as those of the US EPA TSCA Title VI. This product is FSC® (Forest Stewardchip Council®) certified for its chain of custody by NEPCon and ECC™ certified (Eco-Certified Composite) by the Composite Panel Association (CPA). It is made using 100% pre-consumer recycled and recovered wood fiber. Uniboard's MDF is available in a collection of melamine colours.

### **VALIDATED ECO-DECLARATION**

### **PRODUCT SPECIFICATIONS**

#### References

Medium Density Fiberboard (MDF) laminated or not laminated

#### **Final manufacturing location**

Mont-Laurier, Quebec J9L 3W3 Sayabec, Quebec G0J 3K0 Val-d'Or, Quebec J9P 5G6 CANADA

#### Components

Wood fibers, MUF resin, water, wax, scavenger and melamine-cellulose

### **ATTRIBUTES**

### **Recycled Content**

Pre-consumer: 81.4% - 83.7% Post-consumer: 0%

### Sourcing of raw materials

The origin and extraction location of raw materials have been documented for 81.4% - 83.7% of the final product weight ratio.

### **Certified Wood**

NC-COC-002726

Rapidly renewable materials

**Biobased materials** 

### **ENVIRONMENTAL IMPACTS**

### **Life Cycle Assessment**

Reference service life

### Product's carbon footprint

#### **Environmental Product Declaration**

Industry-wide (generic) (Déc. 2018 ISO 14025:2006, TypeIII to Nov. 2023) The EPD excludes the laminated product.

### **INGREDIENTS AND EMISSIONS**

## Declaration of chemical ingredients

1,000 ppm

Type of declaration HPD® version 2.1.1

Health Product Declaration®

**Emission test** 

COV

**Formaldehyde** ≤ 0.11 ppm

### **TECHNICAL PERFORMANCES**

### Performance tests

ANSI A208.2-2016/ASTM E84

# MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

#### Certification ISO 14001

### **Extended Producer Responsibility**

(Take Back Program)

#### **Corporate Sustainability Report**

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

### **CERTIFICATIONS AND CONFORMITIES**







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The mark of responsible forestry

Uniboard Canada Inc. is a leading North American manufacturer of engineered wood products, with installed capacity of over 660 million square feet of raw particleboard, high-density and medium-density fiberboard, of wich over 50% is converted into value-added TFL.

5555, Ernest Cormier Street, Laval, Quebec H7C 2S9 CANADA www.uniboard.com

MasterFormat®: **06 42 00** Validated Eco-Declaration:

VED16-1068-04

Original issue date: **05/2016**Period of validity: **08/2020** to **08/2021** 



MEDIUM DENSITY FIBERBOARD (MDF)





Manufactured from softwoods and hardwoods, this renowned solid wood substitute is well suited for a range of applications, such as commercial and residential furniture, store fixtures, cabinets, millword, moulding, flooring and slotwall. Uniboard's MDF is available in a wide selection of dimensions and thicknesses, as well as with a section of melamine color.

### **ATTRIBUTES**

### RECYCLED CONTENT

Components	Weight ratio	Pre-consumer	Post-consumer 0%	
Wood fibers	81.4% - 83.7%	100%		
Final product	Weight ratio	Pre-consumer	Post-consumer	
Medium density fiberboard (MDF)	100%	81.4% - 83.7%	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 the manufacturing the final product.

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

### **SOURCING OF RAW MATERIALS**

Weight ratio	Final manufacturing location
100%	Mont-Laurier, (Quebec) J9L 3W3 CANADA Sayabec, (Quebec) G0J 3K0 CANADA Val-d'Or, (Quebec) J9P 5G5 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	Location of suppliers	Extraction location	Transport from suppliers
Wood fibers	81.4% - 83.7%	Canada (QC, ON)	QC, ON and North-East of the United-States	Road
MUF resin	8.3% - 8.5%	N/A	N/A	N/A
Water	4.9% - 5.0%	N/A	N/A	N/A
Scavenger	2.2% - 2.3%	N/A	N/A	N/A
Melamine-Cellulose	0.0% - 2.8%	N/A	N/A	N/A
Wax	0.4% - 0.5%	N/A	N/A	N/A

The source of extraction and location of certain raw materials could not be documented.

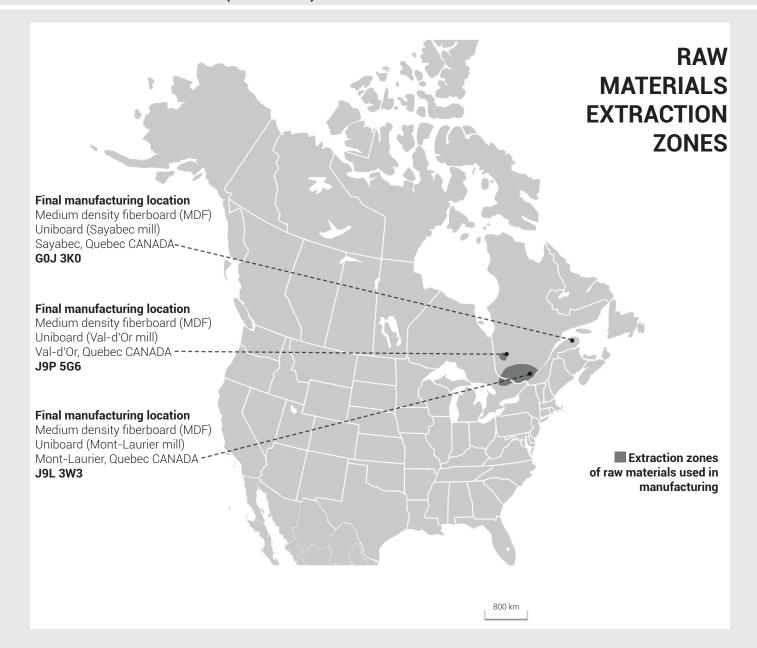


MEDIUM DENSITY FIBERBOARD (MDF)



### **ATTRIBUTES (CONTINUED)**

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



HARVEST LOCATIONS OF WOOD FIBERS: (Details available upon request)

Canada : Quebec, New Brunswick, Ontario and North East of the United States



MEDIUM DENSITY FIBERBOARD (MDF)



### **ATTRIBUTES (CONTINUED)**

### **FSC® CERTIFICATION**

FSC® Certified Medium density fiberboard (MDF) (When specified)



Medium density fiberboard (MDF)	% Wood component	% FSC <sup>®</sup> - Certified Wood	Total % FSC® - Certified wood used in the final assembly of the product versus the total weight of the wood components (based on weight ratio)		
Wood fibers 81.4% - 83.7%		81.4% - 83.7%	100%		
Uniboard mills		tification number Certifi	cation agency Period of validity		

Uniboard mills	Certification number	Certification agency	Period of validity
Mont-Laurier, Quebec J9L 3W3 CANADA Sayabec, Quebec G0J 3K0 CANADA Val-d'Or, Quebec J9P 5G5 CANADA	NC-COC-002726	FSC controlled wood, FSC Mix	11/6/2017 to 11/05/2022

responsible forestry

Methodology: on-site audit, supply chain evaluation and validation of FSC certification documents confirming the type of certification and calculation, based on FSC certified wood weight ratio in the final product.

Vertima's procedure: VERT-032008-03, Second Edition.

### **ENVIRONMENTAL IMPACTS**

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

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

In 2018, Uniboard collaborated to the update of the generic Environmental Product Declaration for MDF production by providing its MDF production data of the Mont-Laurier plant. The project was lead by the Composite Panel Association (CPA) and audited by UL Environnement, the program operator. **The EPD excludes the laminated product.** 

### Reference PCR

FPInnovations: 2011. Product Category Rules (PCR) for preparing an Environmental Product Declaration for North American Structural and Architectural Wood Products. Version 2 (UN CPC 31, NAICS 321), June 18, 2015.

Functional Unit	Scope of the LCA	Reference service life	Period of validity
1m³ of MDF	Cradle-to-gate	N/A	12/2018 to 11/2023

#### Table 2: Cradle-to-Gate- Impact Assessment Result - 1m3 North American MDF

Impact categories	Unit	Per m <sup>3</sup> of MDF includes forestry operations
Global warming potential	kg CO <sub>2</sub> eq.	759.15
Ozone depletion potential	kg CFC-11 eq.	5.81E-05
Acidification potential	kg SO <sub>2</sub> eq.	5.52
Smog creation potential	kg O <sub>3</sub> eq.	69.63
Eutrophisation potential	kg N eq.	3.42
Total consumption primary energy	Unit	Per m <sup>3</sup> of MDF includes forestry operations
Non-renewable fossil	MJ	10 578.48
Non-renewable nuclear	MJ	1 370.91

Assessment (LCA) results for all processes up to the point that MDF is packaged and ready for shipment at the manufacturing gate. The life cycle of MDF includes the production of wood residues that are a coproduct of lumber milling. The cradle-toproduct gate system thus forest management, includes logging, transportation of logs to lumber mills, sawing, transportation of wood residues to MDF plants, and MDF production.

The EPD includes Life Cycle

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.

Source: EPD report

Validated Eco-Declaration:
VED16-1068-04
Period of validity:
08/2020 to 08/2021

Validated Eco-Declaration - FSC®- Certification

MEDIUM DENSITY FIBERBOARD (MDF)



### **INGREDIENTS AND EMISSIONS**

### **DECLARATION OF CHEMICAL INGREDIENTS**



Type of declaration: Health Product Declaration® (HPD®) version 2.1.1

**Period of validity:** July 15, 2019 to July 15, 2022

The content of Uniboard® Medium density fiberboard (MDF) was assessed for health hazard warnings as required using Pharos¹.

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

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

**Declaration:** ■ 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:

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 processes.

Highest concern GreenScreen® Benchmark: Benchmark 12

PBT (Persistent, Bioaccumulative,	Toxic)
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Cancer

Gene mutation

Development

Reproductive

Endocrine

Respiratory

□ Neurotoxicity

Mammal

Land toxicity

Aquatic toxicity

Skin or eye

Physical hazard

☐ Global warming

Ozone depletionMultiple

Unknown

Pharos Project: Database that provides human and environnmental health information of chemicals, materials, and building products. (http://www.pharosproject.net)

2GreenScreen (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®)
Particules wood	Main component	81.4% - 83.7%	9004-34-6	-	-
MUF resin	Binder	8.3% - 8.5%	Undisclosed	LT-1	LT-UNK, BM-4
Water	Humidity	4.9% - 5.0%	7732-15-5	BM-4	-
Urea	Scavenger	2.2% - 2.3%	57-13-6	LT-UNK	NOGS
Wax	Repellant	0.4% - 0.5%	64742-61-6	LT-1	-
Melamine	Finishing	0.0% - 2.8%	Undisclosed	BM-1	LT-1, LT-P1, LT-UNK

<sup>1</sup>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.

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Validated Eco-Declaration:

**VED16-1068-04** Period of validity:

08/2020 to 08/2021



MEDIUM DENSITY FIBERBOARD (MDF)



### TECHNICAL PERFORMANCES

### **PERFORMANCE TESTS**

Non-exhaustive list. See Medium density fibreboard (MDF) product specifications sheet at www.uniboard.com for more information.

- Medium density fiberboard (MDF) for Interior Applications Standard ANSI A208.2-2016;
- Flame Spread Index: Class 3 or C ULC 723-10 (ASTM E84);
- Formaldehyde emissions test: Phase 2 of CARB ATCM 93120 and TSCA Title VI compliant.

### **WARRANTY**

Lifetime warranty when Medium density fiberboard (MDF) are used for the purpose for which they have been designed, that is to say for indoor use.

### MANUFACTURER'S ENVIRONMENTAL MANAGEMENT PROGRAM

### MANUFACTURER'S COMMITMENT

Respect for the environment underlines Uniboard®'s entire manufacturing process. Our environmental policy is based on the sustainable use of natural resources and was implemented with the health and well-being of our employees, customers and the community in mind.

Our environmental audit program helps us stay abreast of changing rules and regulations while identifying potential risks in our operations. Long before environmental concerns became mainstream, Uniboard was in the forefront by recycling post-industrial wood waste otherwise destined to be burnt or sent to land fill.

Today, we continue to ensure the proper use of wood fiber waste into value-added and environmental friendly products. Uniboard recuperates and reuses post-industrial and urban wood waste to reduce wood fiber consumption and land filling.



MEDIUM DENSITY FIBERBOARD (MDF)



### 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.

MATER	IALS AND RESOURCES	PRODUCT CONTRIBUTIONS		
	Building Product Disclosure and Optimization  – Environmental Product Declaration (EPD)  Option 1: Environmental Product Declaration (1 point)  Medium Density Fiberboard (MDF) contributes to this credit due to the availability of a industry-wide (generic) EPD (type III) and is valued as 1/2 whole product out of the 20 needed for purposes of credit achievement calculation.	Contribute	ENVIRONMENTAL IMPACTS	
MR			Industry-wide (generic) EPD, Type III  The EPD excludes the laminated product.	
	Building Product Disclosure and Optimization		ATTRIBUTES	
MR	<ul> <li>— Sourcing or Raw Materials</li> <li>Option2: Leadership extraction practices (1 point)</li> <li>May also contribute to the location valuation factor if the product is sourced (extracted, manufactured, purchased) within 160 km of the project site.</li> </ul>	Contribute	Recycled Content pre-consumer (81.4% - 83.7%) and FSC®- Certified (100%) (When specified)	
	Building Product Disclosure and Optimization  — Material Ingredients  Option 1: Material ingredients reporting (1 point)	Contribute	INGREDIENTS AND EMISSIONS	
MR			HPD® version 2.1.1 Health Product Declaration®	
INDOOF	R ENVIRONMENTAL QUALITY	PI	RODUCT CONTRIBUTIONS	
	Low-Emitting Materials Option 1: Product category calculation (1-3 points)		INGREDIENTS AND EMISSIONS	
EQ		Do not contribute <sup>1</sup>	<sup>1</sup> CARB Phase 2 compliant but must be CARB NAF or ULEF compliant to contribute to credit requirements	

### LEED® v4 requirements for homes

Applies to single family homes, low-rise multi-family (one to three stories), or mid-rise multi-family (four to six stories); includes Homes and Multifamily Lowrise and Multifamily Midrise.

INDOOR ENVIRONMENTAL QUALITY		PRODUCT CONTRIBUTIONS	
MR	Certified Tropical Wood	Prerequisite	ATTRIBUTES
Prereq 1		Trerequisite	Uniboard's product do not contain tropical species
	Environmentally Preferable Products		ATTRIBUTES
MR Prereq 2	Option 2: Environmentally Preferable Products <sup>2</sup> At least 90% of all materials in each category must meet credit requirements. Medium Density Fiberboard (MDF) contributes to 0.5 point for FSC® -Certified and to 0.5 point for Recycled Content.	Contribute <sup>2</sup>	Recycled Content pre-consumer (81.4% - 83.7%) and FSC®- Certified (100%) (When specified)
INDOOR ENVIRONMENTAL QUALITY		Р	RODUCT CONTRIBUTIONS

Prereq 2  2At least 90% of all materials in each category must meet credit requirements. Medium Density Fiberboard (MDF) contributes to 0.5 point for FSC® -Certified and to 0.5 point for Recycled Content.		Contribute <sup>2</sup>	Recycled Content pre-consumer (81.4% - 83.7%) and FSC®- Certified (100%) (When specified)		
INDOOR ENVIRONMENTAL QUALITY			PRODUCT CONTRIBUTIONS		
		Low-Emitting Products		INGREDIENTS AND EMISSIONS	
	EQ Credit 7	At least 90% of all materials in each category must meet credit requirements.	Do not contribute <sup>3</sup>	<sup>1</sup> CARB Phase 2 compliant but must be CARB NAF or ULEF compliant to contribute to credit requirements	

It is important to note that the points identified above are linked with each of the credits where the product contributes as part of a LEED® v4 certification process. The product itself is only one element among others to reach the target score.

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, caused in all or in part, by errors and/or omissions relative to the collection, compilation and/or interpretation of data.

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