



# Masonite Architectural - Wood Door Leaves

Program Operator: SCS GLOBAL SERVICES | SCS-EPD-04165 | EPD Valid: 9/13/2016 to 9/12/2021

To access the full EPD, please visit: [scsglobalservices.com/certified-green-products-guide](https://scsglobalservices.com/certified-green-products-guide)

## PRODUCT

Production-weighted average wood door leaf, produced by Masonite Architectural at their North American manufacturing facilities. The scope includes various door cores, surface materials, and specialty options for Flush doors and Stile & Rail doors.



## IMPACT CATEGORIES

**Global Warming Potential:** The rise in the average temperature of the Earth's climate system and its related effects caused by the increasing concentrations of greenhouse gases in the atmosphere.

**Ozone Depletion Potential:** The destruction of the stratospheric ozone layer, which shields the Earth from ultraviolet radiation, caused by ozone-depleting substances.

**Photochemical Ozone Creation Potential:** Atmospheric low level ozone created by the reaction of nitrogen oxides with volatile organic compounds in the presence of sunlight. A component of smog.

**Acidification Potential:** Increasing concentrations of hydrogen ion in the environment, potentially affecting flora and fauna. Principally occurs from the combustion of fossil fuels.

**Eutrophication Potential:** Excessive levels of nutrients to aquatic systems resulting in the explosive growth of plants and algae creating a state of hypoxia.

Material Content		
Material Type	Average Weight (kg)	Percent of Total
Engineered Wood	39	69%
Wood	13	23%
Mineral Core	3.2	5.6%
Adhesives/Catalysts	0.61	1.1%
Various Other	0.45	1.1%
<b>TOTAL</b>	<b>56</b>	<b>100%</b>

## LIFE CYCLE IMPACT ASSESSMENT RESULTS

Impact Category	Units	Total (A1-A3)	Extraction of Raw Materials and Processing (A1)	Transport to Manufacturing Facility (A2)	Product Manufacturing (A3)
Impact Indicator					
Global Warming Potential	kg CO <sub>2</sub> eq	82	40	9.3	32
Acidification Potential	kg SO <sub>2</sub> eq	0.49	0.28	4.3x10 <sup>-2</sup>	0.16
Eutrophication Potential	kg N eq	0.20	0.11	1.0x10 <sup>-2</sup>	8.4x10 <sup>-2</sup>
Smog Creation Potential	kg O <sub>3</sub> eq	5.7	3.3	1.0	1.4
Ozone Depletion Potential	kg CFC-11 eq	1.0x10 <sup>-5</sup>	5.8x10 <sup>-6</sup>	2.3x10 <sup>-6</sup>	2.0x10 <sup>-6</sup>
Primary Energy Consumption					
Total Primary Energy	MJ	3,200	2,500	150	530
Nonrenewable	MJ	1,300	740	150	490
Renewable	MJ	1,800	1,800	1.8	45
Material Resources					
Non-renewable materials	kg	65	37	12	16
Renewable materials	kg	67	65	4.2x10 <sup>-2</sup>	1.9
Fresh water	L	630	40	2.4	590
Waste Flows					
Hazardous waste	kg	6.3x10 <sup>-3</sup>	3.8x10 <sup>-3</sup>	1.1x10 <sup>-3</sup>	1.5x10 <sup>-3</sup>
Non-hazardous waste	kg	15	6.3	6.6	2.1

Flush Doors		
Location	Door Cores	Surface Materials
London, Ontario, Canada	SCL; MDF; Particleboard; Fire Resistant Composite	Wood veneer; High Density Fiberboard; Medium Density Overlay
Saint Ephrem, Quebec, Canada	Particleboard; SCL/LVL; Fire Resistant Composite;	Wood veneer; High- and Low-Pressure Laminate; Medium Density Overlay;
Marshfield, Wisconsin	Particleboard; SCL/LVL; Fire Resistant Composite; Staved lumber; Acoustical.	Wood veneer; High- and Low-Pressure Laminate; High Density Fiberboard; Medium Density Overlay; High Impact
Northumberland, Pennsylvania	Particleboard; SCL/LVL; Fire Resistant Composite; Staved lumber; Hollow Core; Acoustical.	Wood veneer; Hardboard/Molded panel; Low- and High-Pressure Laminate; High Density Fiberboard; Medium Density Overlay; High Impact
Algoma, Wisconsin	Particleboard; SCL/LVL; Fire Resistant Composite; Staved lumber; Acoustical.	Wood veneer; High- and Low-Pressure Laminate; High Density Fiberboard; Medium Density Overlay; High Impact
Jefferson City, Tennessee	Particleboard; SCL/LVL; Fire Resistant Composite; Staved lumber; Acoustical.	Wood veneer; High- and Low-Pressure Laminate; High Density Fiberboard; Medium Density Overlay; High Impact
Largo, Florida	MDF	N/A
Stile & Rail Doors		
Location	Door Cores	Surface Materials
Algoma, Wisconsin	Particleboard; SCL/LVL; Staved lumber; MDF	Wood veneer; High Density Fiberboard
London, Ontario, Canada	Particleboard; SCL/LVL; Fire Resistant Composite; Staved lumber; MDF	Wood veneer; High Density Fiberboard

### ADDITIONAL ENVIRONMENTAL INFORMATION

Masonite Architectural is committed to environmental responsibility and reducing impacts by using wood fiber from well managed forests and other renewable biobased materials in all of its interior door products, utilizing recycled materials in all of its doors, and improving indoor air quality by using adhesives and binders that contain low levels of VOCs (volatile organic compounds) and no added urea formaldehyde. These efforts, and the third party certifications, are described below. Ultimately, all Masonite doors are available with at least one of these environmental attributes:



The mark of responsible forestry  
**FSC® C005458**  
**FSC® C013696**

**Certified Wood**  
 Masonite Architectural offers products with FSC® certified wood upon request, including 100% FSC and FSC Mix.



**Low-Emitting Products**  
 Masonite Architectural wood door leaves support a healthy indoor environment through emissions testing and certification under the Indoor Advantage™ Gold program.



**Recycled Content**  
 Masonite Architectural seeks to reduce the use of virgin and primary resources through the use of recycled materials in its products.

Wood products such as wood door leaves have the potential to store carbon; as trees grow, carbon dioxide is removed from the atmosphere and incorporated into the wood. The carbon storage is impermanent and will change over time as the wood product degrades or is burned. Product carbon storage is estimated assuming that wood is “carbon neutral” following the PCR method and based on review of North American forest carbon stocks. The production weighted average wood door leaf is estimated to sequester 37 kg CO2 eq.

This document is a summary of a verified EPD. To access the full EPD, please visit: [www.scsglobalservices.com/certified-green-products-guide](http://www.scsglobalservices.com/certified-green-products-guide) **Functional Unit:** The declared unit is a wood door leaf, measuring 21 ft² (1.95 m²) at a nominal 1-3/4 inch (44.45 mm) thickness. Results represent a production weighted average wood door leaf. **Product Category Rule:** Product Category Rule for Preparing an Environmental Product Declaration for Interior Architectural Wood Door Leaves (March 2015). **Scope of Results Reported:** The PCR requirements limit the scope of the LCA metrics such that the results exclude several environmental and social performance benchmarks and thresholds. **Accuracy of Results:** Due to PCR constraints, the reference EPD provides estimations of potential impacts that are inherently limited in terms of accuracy. **Comparability:** The PCR that the reference EPD was based on was not written to support comparative assertions.

