MASONITE ARCHITECTURAL

VERIFIED by SCS GLOBAL SERVICES ENVIRONMENTAL PRODUCT DECLARATION BASED ON LCA

Masonite Architectural
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Product

This declaration represents the production-weighted average wood door leaf, manufactured by Masonite Architectural at the following locations:

- Masonite Architectural – Algoma, WI
- Masonite Architectural – Jefferson City, TN
- Masonite Architectural – Largo, FL
- Masonite Architectural – London, Ontario
- Masonite Architectural – Marshfield, WI
- Masonite Architectural – Northumberland, PA
- Masonite Architectural – Saint-Ephrem, Quebec

Functional Unit

The declared unit is a wood door leaf, measuring 21 ft^2 (1.95 m^2) at a nominal 1-3/4 inch (44.45 mm) thickness. Results represent a production weighted average wood door leaf.

EPD Number and Period of Validity

SCS-EPD-04154
Beginning Date: September 13, 2016 – End Date: September 12, 2021
Version: August 9, 2017

Product Category Rule

Product Category Rule for Preparing an Environmental Product Declaration for Interior Architectural Wood Door Leaves (March 2015).

Program Operator

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SCSglobal SERVICES

Table of Contents

Disclaimers: *This Environmental Product Declaration (EPD) conforms to ISO 14025, 14040, ISO 14044, and ISO 21930. This declaration is an environmental product declaration in accordance with ISO 14025 that describes environmental characteristics of the described product and provides transparency and disclosure of environmental impacts. This EPD does not guarantee that any performance benchmarks, including environmental performance benchmarks, are met.*

Scope of Results Reported: *The PCR requirements limit the scope of the LCA metrics such that the results exclude environmental and social performance benchmarks and thresholds, and exclude impacts from the depletion of natural resources, land use ecological impacts, ocean impacts related to greenhouse gas emissions, risks from hazardous wastes and impacts linked to hazardous chemical emissions.*

Accuracy of Results: *Due to PCR constraints, this EPD provides estimations of potential impacts that are inherently limited in terms of accuracy.*

Comparability: *The PCR this EPD was based on was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the specifics of the product modeled.*

PCR review Chair:	Jamie Meil, Athena Sustainable Materials Institute (Review Chair) Email: jamie.meil@athenasmi.org
Approved: September 13, 2016 Valid until: September 12, 2021	
Independent verification of the declaration and data, according to ISO 14025:2006 and ISO 21930:2007.	☐ internal ☑ external
Third party verifier	Tom Gloria, PhD, Industrial Ecology Consultants

COMPANY DESCRIPTION

In the world of architectural and commercial wood doors, Masonite Architectural offers the complete portfolio of products, unmatched expertise and extensive support services to provide unlimited choices for your interior door needs. Masonite Architectural serves a wide range of architectural and commercial applications including health care and hospitality, education, public spaces and government, military, office and mixed use/multi-family. Masonite Architectural combines manufacturing scale, industry-leading innovation and expertise to deliver complete door solutions to our customers and the markets we serve.

PRODUCT SCOPE

The Masonite Architectural door cores, surface materials, and specialty options for Flush doors and Stile & Rail doors included in this EPD are provided in Table 1 below.

Table 1a. *Types of door cores, surface materials, and specialty options covered in this EPD.*

Flush Doors		
Door Core	**Surface Material**	**Specialty Options**
Particleboard (Wood or Strawbased)	Wood Veneer	Acoustic, Lead-lined; Factory Glazing
	HDF/Hardboard	Factory Glazing
	Molded Panel	-
	Laminate (HPL and LPL)	Acoustic; Lead-lined; Factory Glazing
	Medium Density Overlay	Acoustic; Lead-lined; Factory Glazing
	High Impact	Acoustic; Lead-lined; Factory Glazing
Structural Composite Lumber	Wood Veneer	Acoustic; Lead-lined; Factory Glazing
	HDF/Hardboard	Factory Glazing
	Molded Panel	-
	High Pressure Laminate	Acoustic; Lead-lined; Factory Glazing
	Medium Density Overlay	Acoustic; Lead-lined; Factory Glazing
	High Impact	Acoustic; Lead-lined; Factory Glazing
Fire-Resistant Composite	Wood Veneer	Acoustic; Lead-lined; Factory Glazing
	HDF/Hardboard	Factory Glazing
	Molded Panel	-
	High Pressure Laminate	Acoustic; Lead-lined; Factory Glazing
	Medium Density Overlay	Acoustic; Lead-lined; Factory Glazing
	High Impact	Acoustic; Lead-lined; Factory Glazing
Staved Lumber	Wood Veneer	Factory Glazing
	HDF/Hardboard	Factory Glazing
	Molded Panel	-
	High Pressure Laminate	Factory Glazing
	Medium Density Overlay	Factory Glazing
	High Impact	Factory Glazing

Table 1b. *Types of door cores, surface materials, and specialty options covered in this EPD.*

Flush Doors		
Door Core	**Surface Material**	**Specialty Options**
Laminated Veneer Lumber	Wood Veneer	Factory Glazing
	High Pressure Laminate	Factory Glazing
	Medium Density Overlay	Factory Glazing
	High Impact	Factory Glazing
Hollow Core	Wood Veneer	Factory Glazing
	HDF/Hardboard	Factory Glazing
	Molded Panel	-
Medium Density Fiberboard (MDF)	Fire-Resistant	Factory Glazing
	Medium Density Fiberboard	Factory Glazing
Stile & Rail		
Door Core	**Surface Material**	**Specialty Options**
Structural Composite Lumber/ Medium Density Fiberboard/ Particleboard	Wood Veneer	Factory Glazing
	Painted High Density Fiberboard	Factory Glazing
Fire-Resistant Composite	Wood Veneer	Factory Glazing
	Painted High Density Fiberboard	Factory Glazing

MATERIAL CONTENT

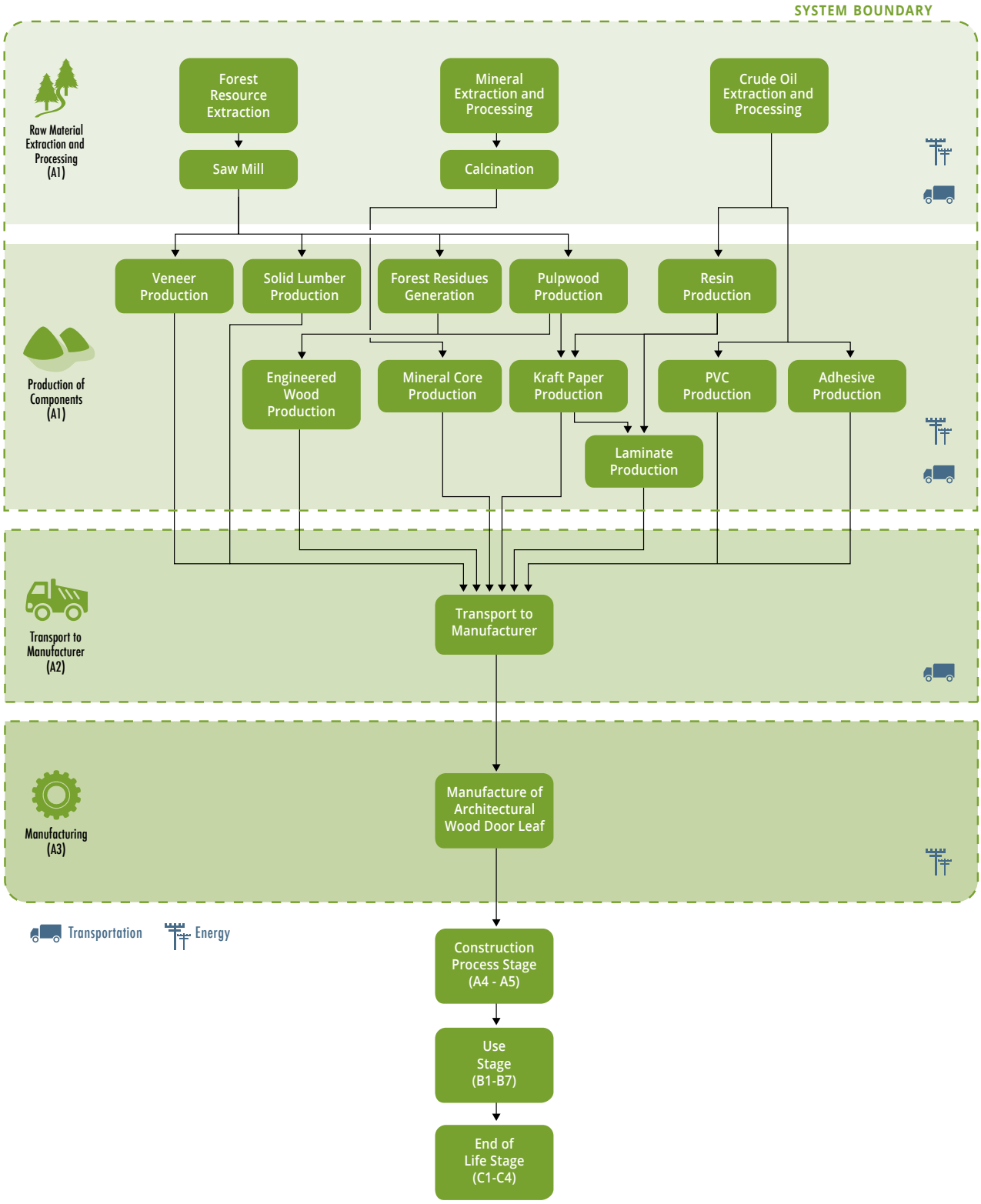
The approximate material composition of a production-weighted representative door is shown below in Table 2.

Table 2. *Material composition of a production-weighted average wood door leaf.*

Material Type	Average Weight (kg)	Value (%)
Engineered Wood	39	69%
Wood	13	23%
Mineral Core	3.2	5.6%
Adhesives/Catalysts	0.61	1.1%
Stains/Coatings	0.18	0.32%
Fiberglass	0.14	0.26%
Lead	0.13	0.24%
Glass	5.0×10^{-2}	0.09%
Natural fiber	4.8×10^{-2}	0.086%
Other Chemicals	4.3×10^{-2}	0.077%
Paper	1.6×10^{-2}	0.029%
Polymers/Plastics	1.6×10^{-2}	0.028%
Steel	3.8×10^{-4}	0.001%
TOTAL (Product)	**56**	**100%**

PRODUCT LIFE CYCLE FLOW DIAGRAM

The diagram below is a representation of the most significant contributions to the production of wood door leaves.



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:

- Recycled Content
- Rapidly Renewable Materials
- Low-Emitting Materials
- Regional Materials
- Certified Wood

FSC www.fsc.org

The mark of responsible forestry

FSC® C005458

Certified Wood

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

CERTIFIED INDOOR AIR QUALITY™ SCS GLOBAL SERVICES

INDOOR ADVANTAGE GOLD BUILDING MATERIALS

Low-Emitting Products

Masonite Architectural wood door leaves support a healthy indoor environment through emissions testing and certification under the Indoor Advantage™ Gold program. The test methods determine individual volatile organic compounds (VOC) emissions based on the California Office of Environmental Health Hazard Assessment's (OEHHA) Chronic Reference Exposure Levels (CRELs). The wood door leaves certified Indoor Advantage™ Gold include doors constructed with the following door cores: Acoustic, Agrifiber, Fire Resistant Composite, High Density Fiberboard (HDF), Hollow Core, Laminated Veneer Lumber (LVL), Particleboard (Standard and No Added Urea Formaldehyde, or NAUF), Staved Lumber, Structural Composite Lumber (SCL), and with the following door surfaces: Wood Veneers; High Impact Surfaces; Laminates; Primed, Painted, and Transparent Finish Hardboard (Embossed and Molded), Primed Medium Density Overlay (MDO), and Hardboard. Factory finished Stile & Rail doors are also certified to Indoor Advantage™ Gold.

A list of the certifications maintained by Masonite Architectural is shown below. Note, some limitations apply and you should consult with a representative of Masonite Architectural to ensure your product selection will meet your project's needs.

Indoor Advantage™ Gold Certificates		
SCS-IAQ-04499	SCS-IAQ-04500	SCS-IAQ-04501

Recycled Content

Masonite Architectural seeks to reduce the use of virgin and primary resources through the use of recycled materials in its products. Masonite Architectural maintains third party certifications for doors with a particleboard core, Medium Density Fiberboard (MDF) doors and Carte Blanche doors. The following is a list of the products certified for their recycled content.

- Particleboard core doors: (Contact factory representative for pre-consumer recycled content percentage): SCS-MC-01451. Note, some limitations apply.
- Carte Blanche™ and MDF doors: (Contact factory representative for pre-consumer recycled content percentage): SCS-MC-01841; SCS-MC-03348; SCS-MC-03349; and SCS-MC-03350.

Carbon Storage

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 following the methods in the PCR, and is calculated using the FP Innovations carbon storage calculator. These calculations assume that wood is "carbon neutral" following the PCR method and based on review of North American forest carbon stocks[1] . Based on the carbon storage calculator, the production weighted average wood door leaf is estimated to sequester 37 kg CO_2 eq.

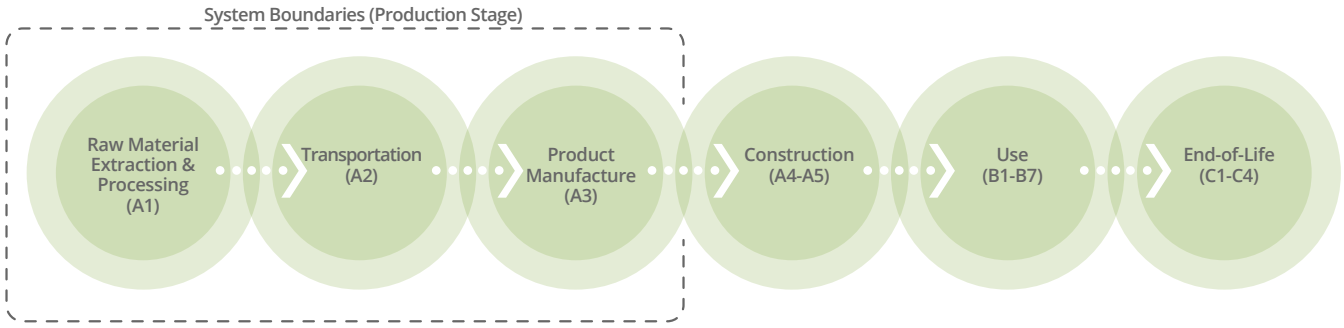
[1] National forest carbon stocks are reported under the United Nations Framework Convention on Climate Change. Canadian forest carbon stocks have fluctuated near net neutrality in recent years (ranging from -98 Tg to +69 Tg since 1990) while United States forest carbon stocks have shown annual stock increases of 600-900 Tg annual since 1990.

LIFE CYCLE ASSESSMENT STAGES AND REPORTED INFORMATION

The EPD represents the potential environmental impacts from the production of the wood door leaf (i.e., cradle-to-gate). The production stage of the product life cycle includes:

- **A1** The extraction and processing of raw materials and the manufacture of material components (e.g., particleboard, wood veneer)
- **A2** The transportation of raw materials from source to manufacturing site
- **A3** The manufacture of wood door leaves and product packaging

An overview of the life cycle stages included is shown in the figure below. Product installation, use, maintenance, and disposal are not included.



LIFE CYCLE IMPACT ASSESSMENT

Results are reported according to the LCIA methodology of Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI version 2.1). See Table 3 for results.

Table 3. *Production weighted average Life Cycle Impact Assessment (LCIA) results for the declared unit for wood door leaves. Values in parenthesis show the percent contribution of each information module to the total cradle-to-gate life cycle result for each impact category. Values may not sum to the exact totals due to rounding.*

Impact Category	Unit	Product Stage			
		Raw Material Extraction and Processing	Transport to Manufacturing Facility	Manufacture of the Product	Total
		A1	A2	A3	A1-A3
Global Warming Potential	kg CO_2 eq	40 (49%)	9.3 (11%)	32 (39%)	82 (100%)
Acidification Potential	kg SO_2 eq	0.28 (58%)	$4.3x10^{-2}$ (8.7%)	0.16 (33%)	0.49 (100%)
Eutrophication Potential	kg N eq	0.11 (53%)	$1.0x10^{-2}$ (5.2%)	$8.4x10^{-2}$ (42%)	0.20 (100%)
Smog Creation Potential	kg O_3 eq	3.3 (58%)	1.0 (18%)	1.4 (24%)	5.7 (100%)
Ozone Depletion Potential	kg CFC-11 eq	$5.8x10^{-6}$ (58%)	$2.3x10^{-6}$ (22%)	$2.0x10^{-6}$ (20%)	$1.0x10^{-5}$ (100%)



Resource Use

The PCR requires that several parameters be reported in the EPD, including resource use, waste categories and output flows, and other environmental information. The results for these parameters per declared unit are shown in Table 4.

Table 4. *Results for resource use, wastes, and output flows for the declared unit for wood door leaves.*

Impact Category	Unit	Product Stage			
		Raw Material Extraction and Processing	Transport to Manufacturing Facility	Manufacture of the Product	Total
		A1	A2	A3	A1-A3
Primary Energy Consumption					
Total Primary Energy	MJ (HHV)	2,500	150	530	3,200
Non-renewable, fossil	MJ (HHV)	690	150	400	1,200
Non-renewable, nuclear	MJ (HHV)	51	2.3	90	140
Renewable (Solar, Wind, Hydro, Geothermal)	MJ (HHV)	19	0.96	5.8	26
Renewable, biomass	MJ (HHV)	1,800	0.84	39	1,800
Material Resource Consumption					
Nonrenewable Material Resources	kg	37	12	16	65
Renewable Material Resources	kg	65	$4.2x10^{-2}$	1.9	67
Freshwater	L	40	2.4	590	630
Waste Generation					
Hazardous waste generated	kg	$3.8x10^{-3}$	$1.1x10^{-3}$	$1.5x10^{-3}$	$6.3x10^{-3}$
Non-hazardous waste generated	kg	6.3	6.6	2.1	15

Data Sources

Unit processes were developed with SimaPro 8.2 software, drawing upon data from multiple sources. Primary data was provided by Masonite Architectural for their products and manufacturing facilities. Secondary LCI data from Ecoinvent v2.2 and v3.2 were used.

Table 5a. *Data sources used for the LCA.*

Material	Dataset	Data Source(s)	Publication Date
Product Materials			
LVL/SCL	Laminated veneer lumber, at plant, US /kg	Ecoinvent v3.2	2015
HPL/LPL	High pressure laminates/US	Ecoinvent v3.2	2015
Fiber Board	Fibreboard, hard (72 pcf) (kg) {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Plywood	Plywood, for indoor use, 32 pcf {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Particleboard	Particle board, for indoor use, 16 pcf {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Straw-based Particleboard	Particle board, straw-based, 27 pcf {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
MDF	Medium density fibreboard (45 pcf) (kg) {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Stiles, rails, cross bands, hardboard	Sawnwood, hardwood, kiln dried, planed, 20 pcf {RoW}| market for | Alloc Rec	Ecoinvent v3.2	2015
Mineral Core	Limestone, crushed, for mill {GLO} | market for | Alloc Rec; Sulfate pulp {GLO} | market for | Alloc Rec; Vermiculite {GLO} | market for | Alloc Rec; Activated silica {AGLO} | market for | Alloc Rec	Ecoinvent v3.2	2015
High Impact (PVC)	Polyvinylchloride, bulk polymerised {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Resins, Adhesives, Catalysts, Coatings	Chemical, inorganic {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
	Chemical, organic {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
	Methylene diphenyl diisocyanate {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
	Monoammonium phosphate, as P2O5, at regional storehouse/RER	Ecoinvent v3.2	2015
	Vinyl acetate {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
	Paraffin {GLO}| market for | Alloc Re;	Ecoinvent v3.2	2015
	Melamine {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
	Phenolic resin {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Lead sheet	Lead {GLO}| market for | Alloc Rec; Sheet rolling, aluminium	Ecoinvent v3.2	2015
	{GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Plastic	Polyethylene, low density, granulate {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Paper core	Kraft paper, unbleached {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Steel	Steel, unalloyed {GLO} | market for | Alloc Rec	Ecoinvent v3.2	2015
Glass	Flat glass, coated {GLO} | market for | Alloc Rec	Ecoinvent v3.2	2015
Proprietary Core	Glass fibre {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015

Table 5b. *Data sources used for the LCA.*

Material	Dataset	Data Source(s)	Publication Date
Electricity/Heat			
Electricity	Electricity, low voltage, at grid/2015	Ecoinvent v2.2/SCS	2010; 2015
LPG	Natural gas, liquefied {GLO} | market for | Alloc Rec	Ecoinvent v3.2	2015
Natural gas	Natural gas, low pressure {RoW} | market for | Alloc Rec	Ecoinvent v3.2	2015
Light fuel oil	Light fuel oil {RoW} | market for | Alloc Rec	Ecoinvent v3.2	2015
Heat, natural gas	Heat, natural gas, at boiler atmospheric low-NOx non-modulating < 100kW/RER	Ecoinvent v2.2	2010
Heat, light fuel oil	Heat, light fuel oil, at boiler 100 kW, non-modulating/CH	Ecoinvent v2.2	2010
Packaging			
Wood	Plywood, for indoor use, 32 pcf {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015
Plastic	Packaging film, low density polyethylene {GLO} | market for |Alloc Rec	Ecoinvent v3.2	2015
Cardboard	Corrugated board, fresh fibre, single wall, at plant/CH	Ecoinvent v2.2	2010
Transportation			
Truck	Transport, freight, lorry 16-32 metric ton, EURO4 {GLO}| market for | Alloc Rec	Ecoinvent v3.2	2015

Data Quality

Table 6a. *Data quality assessment of Life Cycle Inventory.*

Data Quality Parameter	Data Quality Discussion
Time-Related Coverage: Age of data and the minimum length of time over which data is collected	The most recent available data are used, based on other considerations such as data quality and similarity to the actual operations. Typically, these data are less than 10 years old. All of the primary data used represented an average of one year's worth of data collection. Manufacturer-supplied data are based on a data for calendar year 2014.
Geographical Coverage: Geographical area from which data for unit processes is collected to satisfy the goal of the study	The data used in the analysis provide the best possible representation available with current data. Actual processes for upstream operations are primarily North American. Surrogate data used in the assessment are representative of North American or European operations. Data representative of European operations are considered sufficiently similar to actual processes.
Technology Coverage: Specific technology or technology mix	For the most part, data are representative of the actual technologies used for processing, transportation, and manufacturing operations. Representative datasets, specific to the type of material, are used to represent the actual processes where primary data were not available.
Precision: Measure of the variability of the data values for each data expressed	Precision of results are not quantified due to a lack of data. Manufacturer data, and representative data used for upstream processes were typically averaged for one or more years and over multiple operations, which is expected to reduce the variability of results.
Completeness: Percentage of flow that is measured or estimated	The LCA model included all known mass and energy flows for production of the Masonite wood door leaves. In some instances, surrogate datasets used to represent upstream processes may be missing some data which is propagated in the model. No known processes or activities contributing to more than 1% of the total environmental impact for each indicator are excluded. In total, these missing data represent less than 5% of the mass or energy flows.
Representativeness: Qualitative assessment of the degree to which the data set reflects the true population of interest	Data used in the assessment represent typical or average processes as currently reported from multiple data sources, and are therefore generally representative of the range of actual processes and technologies for production of these materials. Considerable deviation may exist among actual processes on a site-specific basis; however, such a determination would require detailed data collection throughout the supply chain back to resource extraction.
Consistency: Qualitative assessment of whether the study methodology is applied uniformly to the various components of the analysis	The consistency of the assessment is considered to be high. Secondary data sources of similar quality and age are used; with a bias towards Ecoinvent v3.1 for secondary data. Different portions of the cradle-to-gate product life cycle are equally considered.
Reproducibility: Qualitative assessment of the extent to which information about the methodology and data values would allow an independent practitioner to reproduce the results reported in the study	Based on the description of data and assumptions used, this assessment would be reproducible by other practitioners. All assumptions, models, and data sources are documented.

Table 6b. *Data quality assessment of Life Cycle Inventory.*

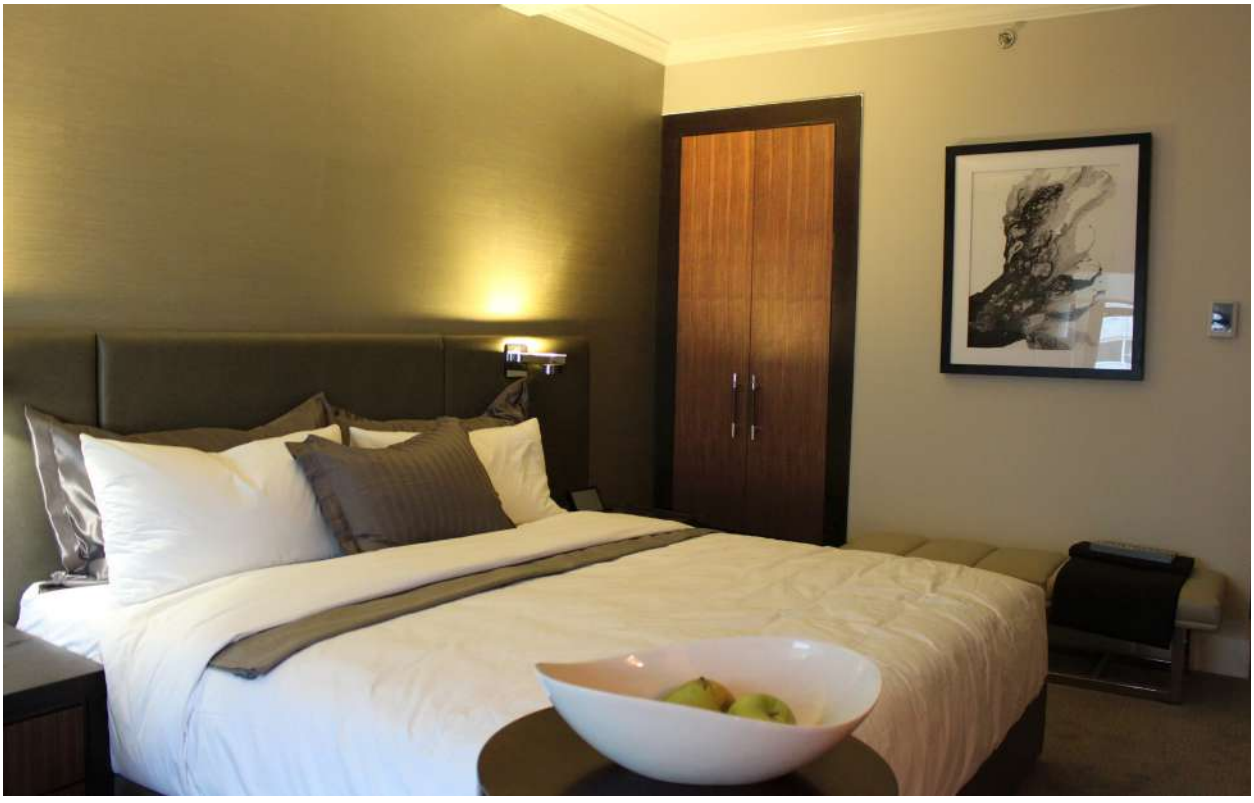
Data Quality Parameter	Data Quality Discussion
Sources of the data: Description of all primary and secondary data sources	Data representing energy use at the Masonite manufacturing facilities represent an annual average and are considered of high quality due to the length of time over which these data are collected, as compared to a snapshot that may not accurately reflect fluctuations in production. A mass and energy balance check was completed during the data collection period. For secondary LCI data, and the Ecoinvent LCI databases are used.
Uncertainty of the information: Uncertainty related to data, models, and assumptions	Uncertainty related to materials in the Masonite products and packaging is low. Primary data for upstream processes were not available; as such, the study relied upon use of existing representative datasets for these cases. These representative datasets contained relatively recent data (~10 years, or more recent), but in some instances lacked geographical representativeness. Uncertainty related to the impact assessment methods used in the study are relatively high. The impact assessment method includes impact potentials that lack characterization of providing and receiving environments or tipping points.

Allocation

This study follows the allocation guidelines of ISO-14044 and allocation rules specified in the PCR, and sought to minimize the use of allocation wherever possible. In general, allocation of resource use at the facility was based on volume.

Impacts from transportation were allocated based on the mass of materials, and the distance transported.

For materials with recycled content, the Recycled Content Method was followed, whereby only the impacts from reprocessing the recycled material is included (impacts from the previous life cycle are not).



Appendix a. *Flush Doors Included in EPD and Available LEED Credit Options.*

Flush Doors					
Door Core	**Extraction/ Manufacture Location**	**Building Product Disclosure and Optimization - EPD, Option 1**	**Building Product Disclosure and Optimization - Sourcing of Raw Materials - Option 2**	**Low Emitting Materials**	**Specialty Options**
Particleboard (Wood or Strawbased*)	Saint-Ephrem, QC; Northumberland, PA; Algoma, WI; Jefferson City, TN; Marshfield, WI**	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Acoustic; Factory Glazing; Lead-lined
Structural Composite Lumber	Saint-Ephrem, QC; Northumberland, PA, Algoma, WI, Jefferson City, TN; Marshfield, WI	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Acoustic; Factory Glazing; Lead-lined
Fire-Resistant Composite	Saint-Ephrem, QC; Northumberland, PA; Algoma, WI; Jefferson City, TN; Marshfield, WI	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Acoustic; Factory Glazing; Lead-lined
Staved Lumber	Northumberland, PA; Algoma, WI; Jefferson City, TN; Marshfield, WI	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Factory Glazing
Laminated Veneer Lumber	Northumberland, PA; Saint-Ephrem, QC; Algoma, WI; Jefferson City, TN; Marshfield, WI	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Factory Glazing
Hollow Core	Northumberland, PA	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	None
Carte Blanche™	Largo, FL	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant	Acoustic; Factory Glazing
Medium Density Fiberboard (MDF)	Largo, FL	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant	Acoustic; Factory Glazing
Fire Resistant Composite/ MDF	Largo, FL	Product Specific Type III EPD	Pre-consumer Recycled Material	N/A	Acoustic; Factory Glazing

NOTE- List is provided as a summary of wood door leaves included in the LCA and EPD. The options shown above may not be available for all doors listed. Contact a Masonite Architectural representative to discuss your design needs.

* Strawbased core qualifies for meeting Building Product Disclosure and Optimization - Sourcing of Raw Materials, Option 2, Bio-based materials.

** Wood-based particleboard core doors manufactured in Marshfield, WI may be eligible for meeting the LEED v4 credit for Regional Materials (Building Product Disclosure and Optimization – Sourcing of Raw Materials, Option 2) for projects located within 100 miles of Marshfield.

Appendix b. *Stile & Rail Doors Included in EPD and Available LEED Credit Options.*

Stile & Rail Doors					
Door Core	**Extraction/ Manufacture Location**	**Building Product Disclosure and Optimization - EPD, Option 1**	**Building Product Disclosure and Optimization - Sourcing of Raw Materials - Option 2**	**Low Emitting Materials**	**Specialty Options**
Structural Composite Lumber/ Medium Density Fiberboard/ Particleboard	London, ON; Algoma, WI	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Factory Glazing
Fire-Resistant Composite	London, ON	Product Specific Type III EPD	FSC Mix; Pre-consumer Recycled Material	CARB Compliant; NAUF	Factory Glazing

NOTE- List is provided as a summary of wood door leaves included in the LCA and EPD. The options shown above may not be available for all doors listed. Contact a Masonite Architectural representative to discuss your design needs.

REFERENCES

1. Life Cycle Assessment of Architectural Wood Door Leaves. Prepared for Masonite Architectural. SCS Global Services. Final Report. August 2015.
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