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Product Sustainability & LEED® Data

This form includes the most current and accurate sustainability data available to support LEED® and other green building rating programs. It should be referenced in conjunction with the associated Environmental Product Declaration and other certifications posted at ul.com/spot or at http://oregondoor.com/sustainability.

Product Information

Product Name: *Architectural Series Flush Door \ FSC 86% Mix Acoustic Core STC 40-Wood Face*	
Manufacturing Location: *Winston, Oregon*	
Product Code: *AWAC4003*	Date: *February 1, 2019*

General Green Building Data

Recycled Content Percentage of finished product by weight	
Pre-consumer: *22%*	Post-consumer: *0%*
Third-Party Verifier: *UL Environment*	

Regional Materials
Source location/point of extraction of raw materials for major components

INGREDIENT	*POINT OF EXTRACTION (CITY, STATE, COUNTRY)*	*% BY WEIGHT*
None		

Rapidly Renewable (Bio-based) Materials
Materials typically harvested within a 10-year cycle

BIO-BASED MATERIAL	*% BY WEIGHT*
None	

Certified Wood
Wood-based material certified by Forest Stewardship Council or other organization

WOOD-BASED MATERIAL	*CERTIFICATION BODY*	*% NEW WOOD*	*% CERTIFIED*
None			

LEED® 2009

Indoor Environmental Quality
Low-Emitting Materials: VOCs

IEQ 4.4—Composite Wood and Agrifiber Products (mg/m^3): *.22*

See above for information on Recycled Content, Bio-based Materials, and Certified Wood

Product Name: *Architectural Series Flush Door \ FSC 86% Mix Acoustic Core STC 40-Wood Face*	
Product Code: *AWAC4003*	Date: *February 1, 2019*

LEED® v4

MR Credit 2: Building Product Disclosure and Optimization Environmental Product Declarations		
Option 1—EPD Program Operator: *UL Environment*		
EPD Type: *Product-Specific Type III*		
Option 2—Third Party Certification Program:		
1.	2.	3.
See previous page for information on Recycled Content, Bio-based Materials, and Certified Wood		

MR Credit 3: Building Product Disclosure and Optimization Sourcing of Raw Materials
Option 1—Sustainability Report Type: *None*
Option 2—Extended Producer Responsibility Program: *Take Back Program*
See previous page for information on Recycled Content, Bio-based Materials, and Certified Wood

MR Credit 4: Building Product Disclosure and Optimization Material Ingredients
Option 1—Report Type: *None*
Option 2—Documentation Program:
Option 3—Verification Body:

EQ Credit 2: Low-Emitting Materials
General Emissions Evaluation Criteria: *UL 2818. Section 7.1 and 7.2 Emission Limits*
Total VOC Content (mg/m^3): *.22*
Certification: *GREENGUARD/GREENGUARD Gold*

EQ Credit 9: Acoustic Performance
Acoustical Properties: *STC40 when installed with appropriate gasketing*

Living Building Challenge

Declaration Status: *None*
Life Expectancy:
End of Life:
Declare Label Registered with LBC:

Manufacturing Facility

Location: *477 Dillard Gardens Road, Winston, OR 97470 USA*	
Water intensity (gal/unit): *.0002*	Energy intensity (kWh/unit): *.0036*
Annual renewable energy credits purchased (%): *58%*	
EPA Green Power Partnership Participant: *Yes*	
Pacific Power Blue Sky Renewable Energy Participant: *Yes—Visionary*	

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AWAC4003 *Architectural Series Flush Door*

FSC® Mix 86% Acoustic Core STC 40

Positive Pressure	**5-Ply**
Thickness	1-¾" Only
Maximum Sizes	**Non-Rated:** Single 4^0 x 9^0 Pairs 6^0 x 7^0 **Up to 20 minute:** Single 4^0 x 8^0 Pairs 6^0 x 7^0
Core	FSC® certified proprietary acoustic core
Edges	**Stiles:** Minimum width 1-¼" SCL with matching or compatible edge band **Rails:** Minimum width 3-$^5/_8$" SCL
Edge Construction	**Category B:** Frame applied intumescent required
Faces	All commercially available FSC® certified veneers per AWI 1300, G11, $^1/_{50}$" minimum veneer thickness; medium density overlay (MDO)
Adhesive	**Type 1**—Waterproof Bond
Core Bonding	Stiles and rails are securely bonded utilizing type 1 adhesive in conjunction with superior RF bonding technology. To ensure freedom from telegraphing of core components, the core unit is then sanded before face veneers are applied.
Warranty (1)	**Interior Use**—Life of installation **Exterior Use**—No Warranty
Construction Standards	**Meet or Exceed** WDMA I.S. 1-A, NFPA 80, AWS Section 9, WH/ITS Labeling Service, UBC7-2-1997, UL10C, ASTM E 90 under Architectural Testing Inc.
Performance Standards	Meets or exceeds WDMA I.S.1-A **Heavy Duty** performance
Factory Finish	WDMA TR-8/AWS System 9 (UV Cured Acrylated Polyurethane) > Clear > Standard color selections > Custom color matching (2)
Factory Machining	> Pre-fitting >Templated hardware prep > Lite cutouts (consult factory) Consult factory for full list of machining options
Gasketing	Gasket system #100, supplied by others, required for approved STC rating. Contact factory for hardware details and test report
Sustainability	CALGreen Compliant GREENGUARD and GREENGUARD Gold Certified Extended Producer Responsibility Program—Take Back Program Certified Wood—Wood components composed of FSC® certified wood. FSC® License Code FSC-C012639 Extracted: Clarksville, Iowa. Manufactured: Winston, Oregon

(1) See complete Oregon Door limited door warranty for details.
(2) Set-up fee for custom matching applies. Approval of custom samples is required prior to finishing.

477 Dillard Gardens Road | PO Box 1960 | Winston, Oregon 97496 | 541.679.6791 | oregondoor.com

ENVIRONMENTAL PRODUCT DECLARATION

ARCHITECTURAL WOOD DOOR LEAF

INTERIOR FLUSH DOOR – ACOUSTIC CORE – WOOD VENEER FACING

ARCHITECTURAL SERIES: MODELS AWAC3501, AWAC3502, AWAC3503, AWAC3504, AWAC354501, AWAC354502, AWAC354503, AWAC354504, AWAC356001, AWAC356002, AWAC356003, AWAC356004, AWAC359001, AWAC359002, AWAC359003, AWAC359004, AWAC3601, AWAC3602, AWAC3603, AWAC3604, AWAC3701, AWAC3702, AWAC3703, AWAC3704, AWAC3801, AWAC3802, AWAC3803, AWAC3804, AWAC3901, AWAC3902, AWAC3903, AWAC3904, AWAC4001, AWAC4002, AWAC4003, AWAC4004, AWAC404501, AWAC404502, AWAC404503, AWAC404504, AWAC4101, AWAC4102, AWAC4103, AWAC4104, AWAC414501, AWAC414502, AWAC414503, AWAC414504, AWAC4201, AWAC4202, AWAC4203, AWAC4204, AWAC424501, AWAC424502, AWAC424503, AWAC424504, AWAC4301, AWAC4302, AWAC4303, AWAC4304, AWAC434501, AWAC434502, AWAC434503, AWAC434504, AWAC4401, AWAC4402, AWAC4403, AWAC4404, AWAC444501, AWAC444502, AWAC444503, AWAC444504, AWAC4501, AWAC4502, AWAC4503, AWAC4504, AWAC454501, AWAC454502, AWAC454503, AWAC454504, AWAC4601, AWAC4602, AWAC4603, AWAC4604, AWAC4701, AWAC4702, AWAC4703, AWAC4704, AWAC4801, AWAC4802, AWAC4803, AWAC4804, AWAC4901, AWAC4902, AWAC4903, AWAC4904

Shown above: Oregon Door Architectural Series Model AWPC04, FSC® Certified Mix 100% particleboard core door with Horizontal grain quartered white oak veneer face. Manufactured in Winston, Oregon.

OregonDoor
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Oregon Door is a leading manufacturer of high-quality architectural flush wood and FRP doors. Headquartered in the Pacific Northwest, the company appreciates the beauty of the region and understands the responsibility a manufacturer must play as a good steward of the environment.

Environmental responsibility is at the heart of Oregon Door's ethos and the company continually strives to be the leader in providing sustainable solutions for all opening needs.

What makes Oregon Door different? In addition to its true commitment to sustainability—an extraordinary line of products, uncommon flexibility, bend- over-backwards commitment and quick in-house decisions stand out.

Find more information at oregondoor.com.

UL CERTIFIED
ENVIRONMENTAL PRODUCT DECLARATION
UL.COM/EPD

ENVIRONMENTAL PRODUCT DECLARATION

OregonDoor

Interior Flush Door – Acoustic Core, Wood Veneer Facing

According to ISO 14025 and EN 15804

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

PROGRAM OPERATOR	UL Environment
DECLARATION HOLDER	Oregon Door
DECLARATION NUMBER	4787690567.103.1
DECLARED PRODUCT	Interior Flush Door – Acoustic Core, Wood Veneer Facing
REFERENCE PCR	PCR for Interior Architectural Wood Door Leaves (ASTM, March 2015)
DATE OF ISSUE	October 31, 2017
PERIOD OF VALIDITY	5 Years
CONTENTS OF THE DECLARATION	Product definition and information about building physics Information about basic material and the material's origin Description of the product's manufacture Indication of product processing Information about the in-use conditions Life cycle assessment results Testing results and verifications

The PCR review was conducted by:	Review Panel Chair: Jamie Meil, Athena cert@astm.org
This declaration was independently verified in accordance with ISO 14025 by Underwriters Laboratories ☐ INTERNAL ☒ EXTERNAL	Wade Stout, UL Environment
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	Thomas P. Gloria, Industrial Ecology Consultants

This EPD conforms with EN 15804

Product Description

Product Description

This Environmental Product Declaration covers Oregon Door interior flush doors with acoustic core and wood veneer facing. The results represent a production-weighted average door leaf.

Industry Standards

- Architectural Woodwork Standards (AWS) Edition 2
- ANSI/WDMA I.S. 1A Industry Standard for Interior Architectural Wood Flush Doors

Product Images

Figure 1: Images of the declared product in various applications

Oregon Door's acoustic core doors with wood veneer facing are offered in multiple configurations for just about any interior commercial opening. All commercially-available wood veneer species are available, including sketch-face, DOORfx graphic applications, and specialty options. Oregon Door's advanced manufacturing tools can also factory-machine for all hardware, glass, louver, and other applications.

Material Content

Table 1: Material composition of a production-weighted average door leaf

Material	Mass %
Core	
STC medium density fiberboard	31.1
STC neoprene	25.4
STC particleboard	3.68
STC RigiCore EX	14.9
Stiles and Rails	
Laminated stile	9.81
Facing	
2-ply doorskin	9.73
Solid bamboo	0.00362
Hardboard	1.75
Medium density overlay on HDF backer	0.579
Other	
Glass accessories	0.64
Wood accessories	0.166
Metal accessories	0.0062
Adhesive	2.12

Manufacturing Process

Oregon Door products are manufactured in strict accordance to all industry standards using a combination of old-world craftsmanship and cutting-edge technology.

The general process includes the following steps:

(1) Raw Material Received and Allocated
(2) Cores Sized
(3) Stiles and Rails Bonded to Core
(4) Crossband and Face Veneer Bonded to Core
(5) Trimmed to Final Size
(6) Edge Materials Adhered and Trimmed
(7) Machined to Exacting Hardware Tolerances
(8) Factory Finished using Water-Based, UV-Cured Stains and Sealants
(9) Products Individually Inspected by Trained Personnel
(10) Products Packaged for Shipment

The figure below illustrates the declared product.

Figure 2: Input and output flows of the Oregon Door manufacturing facility

Product Life Cycle Flow Diagram

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

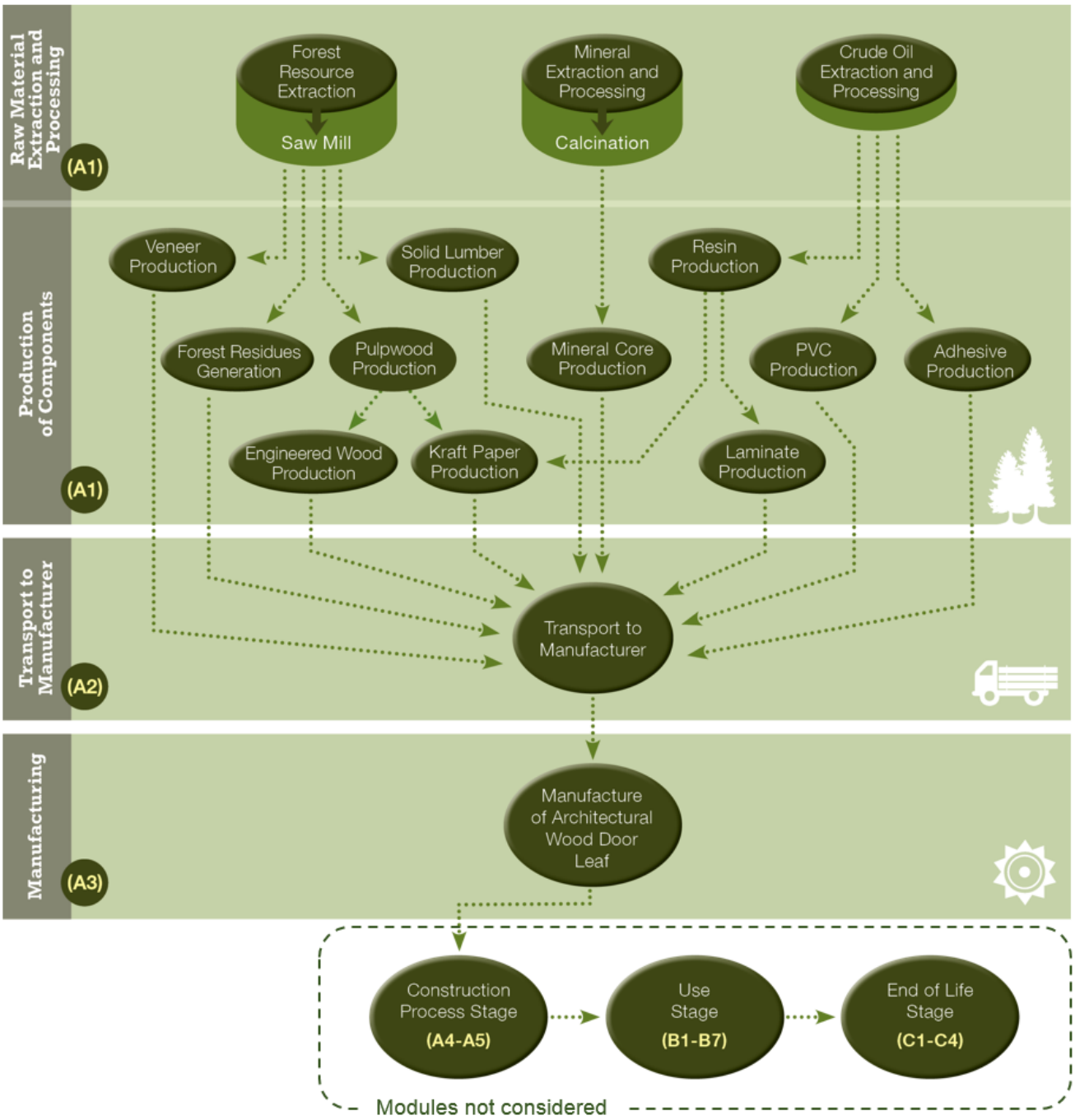

Figure 3: System boundary of study

Life Cycle Assessment

Declared Unit

Per the PCR, the declared unit is a wood door leaf measuring 21 ft2 (1.95 m2) at a nominal thickness of 1-3/4" (44.45 mm). The reference flow to satisfy this declared unit is 104 kg of production-weighted wood door leaf.

System Boundaries

This EPD declares the impacts of a production-weighted wood door leaf from cradle-to-gate. Therefore, post-manufacturing life cycle stages are not considered in this declaration. The applied system boundary represents the life cycle modules A1, A2, and A3 as defined by EN 15804 and shown in Table 2.

Table 2: Cradle-to-gate or product stage information module covered in the EPD

PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE			
Raw material supply	Transport	Manufacturing	Transport	Construction-installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4

Life Cycle Impact Assessment

In accordance to the guiding PCR, TRACI 2.1 impact characterization methodology is used to calculate the declared environmental impacts. Additional inventory metrics are also calculated per the guiding PCR. The declared impacts and inventory metrics are summarized in Table 3.

Table 3: LCA results, per declared unit

Type	A1-A3	Unit
TRACI 2.1 Impact Category		
Global Warming Potential (GWP)	240	kg CO_2 eq
Acidification Potential (AP)	0.894	kg SO_2 eq
Eutrophication Potential (EP)	0.0706	kg N eq
Ozone Depletion Potential (ODP)	2.37E-007	kg CFC-11 eq
Smog Formation Potential (SFP)	14.2	kg O_3 eq
Primary Energy Consumption		
Non-renewable, fossil	4.73E003	MJ (HHV)
Non-renewable, nuclear	308	MJ (HHV)
Renewable (solar, wind, hydroelectric, and geothermal)	808	MJ (HHV)
Renewable (biomass)	380	MJ (HHV)
Material Resource Consumption		
Non-renewable material resources	481	kg
Renewable material resources	2.99E005	kg
Net fresh water (inputs minus outputs)	2E003	L
Waste Generation		
Non-hazardous waste generated	8.02	kg
Hazardous waste generated	4.37E-005	kg

Numbers seem really high

OregonDoor

Interior Flush Door – Acoustic Core, Wood Veneer Facing

According to ISO 14025

Sustainability Programs and Initiatives

GREENGUARD Certification

All Oregon Door products are GREENGUARD and GREENGUARD Gold Certified. This third-party certification assures our doors are low-emitting and contribute to healthy indoor environments.

GREENGUARD Certification establishes acceptable indoor air standards for indoor products, environments, and buildings. GREENGUARD Gold Certification offers stricter certification criteria, considers safety factors to account for sensitive individuals (such as children and the elderly), and ensures that a product is acceptable for use in environments such as schools and healthcare facilities.

GREENGUARD certified products are referenced standards in numerous sustainable building initiatives including: Leadership in Energy and Environmental Design (LEED®), Collaborative for High Performance Schools (CHPS), Green Guide for Health Care (GGHC), Sustainable Building Industry Council (SBIC) and many others. For more information on the GREENGUARD Certification Program emission standards visit greenguard.org.

Recycled Content Validation

All Oregon Door recycled content clams are validated by UL Environment.

Building products that incorporate recycled content materials reduce environmental impacts, resulting from extraction and processing of virgin materials. UL Environment conducts a detailed evaluation of the product and manufacturing operations, to verify and certify recycled content claims on a per product basis. Additionally, UL Environment verifies sources of recycled materials and distinguishes recycled content by pre- and post-consumer content within the supply chain.

Multiple Oregon Door products are manufactured using recycled content materials and the validated percentage is listed on each product data sheet.

FSC® Certification

Oregon Door is Forest Stewardship Council® (FSC) Chain-of-Custody (COC) certified (SCS-COC-000588) promoting responsible forest management.

The Forest Stewardship Council (FSC) promotes environmentally appropriate, socially beneficial, and economically viable management of the world's forests. FSC Chain of Custody (COC) is the path taken by raw materials, processed materials and products, from the forest to the consumer, including all successive stages of processing, transformation, manufacturing and distribution.

The main objective of FSC COC certification is to ensure that FSC certified material is tracked through the supply chain between operations and production processes within operations. Only FSC COC certified operations are permitted to label products with the FSC trademarks.

A certified Chain of Custody up to the final point of sale enables end customers to identify and choose FSC certified products knowing there is a system in place to verify the sources of the wood used to manufacture the products. The FSC label thus provides the link between responsible production and consumption.

Almost all Oregon Door products are available as FSC certified.

Extended Producer Responsibility—Product Reuse

Oregon Door offers an extended producer responsibility (EPR) product reuse strategy that encourages environmentally responsible practices for processing and disposing of wood and fiberglass reinforced polymer (FRP) doors and frames that have reached the end of their useful life.

This provides reuse, repurposing and/or recycling of door products that have reached the end of their initial life cycle and are not set for incorporation into a project's building reuse efforts. Details are available at oregondoor.com or by contacting the factory.

EPA Green Power Partnership

Oregon Door is an Environmental Protection Agency (EPA) Green Power Partner.

In 2001, EPA launched the Green Power Partnership to increase the use of renewable electricity in the United States. The Green Power Partnership is a voluntary program that encourages organizations to use green power as a way to reduce the environmental impacts associated with conventional electricity use. In return for technical assistance and recognition, EPA Green Power Partners commit to use green power for all, or a portion, of their annual electricity consumption. EPA defines green power as a subset of renewable resources that represent those resources that offer the highest environmental benefit.

The overall vision of the Green Power Partnership is to protect human health and the environment by expanding U.S. renewable energy markets through the voluntary use of green power.

Blue Sky Business Partner Program

Oregon Door is a Pacific Power Blue Sky Business Partner at the Visionary level.

The Blue Sky Business Partner Program rewards businesses for supporting renewable energy through the Blue Sky program. The Blue Sky program allows organizations to support renewable energy as a way to reduce the environmental impacts associated with their electricity use and achieve their environmental goals through a renewable energy purchase that represents a specific percentage of their energy use.

Energy Trust of Oregon Strategic Energy Management

Oregon Door is a participant in the Energy Trust of Oregon Strategic Energy Management (SEM) program.

SEM provides training to improve operations and engage team members. Working with energy experts from Energy Trust, the Oregon Door team develops skills to identify operations and maintenance changes that make a big difference in energy use.

Companies participating in SEM learn to:

- Implement ongoing operations and maintenance practices
- Reduce total annual energy costs between five and 10 percent
- Identify and prioritize capital improvements or process changes that lead to more savings
- Overcome barriers to efficiency
- Boost team member engagement to contribute to sustainability goals
- Embed SEM principles in your company's operations

Other Environmental Information: Carbon Sequestration

The guiding PCR permits separate reporting of carbon sequestered in wood components. The net Global Warming Potential credit for carbon storage is calculated using the FPInnovations PCR Carbon Sequestration Calculator, which adheres to guidance set by ISO 14047 and adopted by the International Council of Forest and Paper Associations (ICFPA).

As indicated in Table 1, 32.42 kg (31.10%) of door material content is made of wood and other renewable origins (engineered wood products, natural wood products, and natural fibers), serving as a basis for calculation. Moreover, approximately 10% of the engineered wood is considered to be resinous compounds; therefore, this mass is subtracted from the calculation (Puettmann, et al., 2013). To calculate this subtraction, the engineered wood portion was reduced by 10%. The resulting mass of 29.18 kg (27.99% of total door material content) is entered into the calculator. The wood product description nonstructural panels was found to be closest to wood door leaf. This mass is assumed to be oven dry mass. The carbon content is considered to be the default value of 50%. The output of the calculator is shown in **Error! Reference source not found.**. According to this calculator, 54.09 kg CO2-eq. are sequestered per declared unit in the product phase, A1-A3.

Table 4: FPInnovations carbon sequestration calculator results

User inputs	Unit	Description
Nonstructural panels		
29.18	oven dry kg	Wood mass only; no resins or moisture
50%		50% provided as default
Calculator Outputs	**Unit**	**Description**
Initial Greenhouse Gas Credit		
-51.04	**kg CO_2 eq.**	**Carbon sequestered in product at manufacturing gate**
Greenhouse Gas Emissions		
8.43	*kg CO_2*	*Carbon dioxide emissions from recycled wood (accounted as 100% CO2 emission)*
8.43	*kg CO_2*	*Carbon dioxide emissions from combusted wood waste*
6.09	*kg CO_2*	*Carbon dioxide emissions from aerobic landfills*
1.53	*kg CO_2*	*Carbon dioxide emissions from fugitive landfill gas*
7.83	*kg CO_2*	*Carbon dioxide emissions from combusted landfill gas*
32.3	**kg CO_2**	**Total carbon dioxide emissions**
.45	*kg CH_4*	*Methane emissions from fugitive landfill gas*
.45	**kg CH_4**	**Total methane emissions**
Net GWP Credit		
-54.09	**kg CO_2eq.**	**Sequestration, net of greenhouse gas emissions**

References

GABI TS 2016	thinkstep AG; GaBi ts: Software-System and Database for Life Cycle Engineering. Copyright, TM. Stuttgart, Echterdingen, 1992-2016.
EN 15804	EN 15804:2012-02 Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products
ISO 14025	ISO 14025:2011-10 Environmental labels and declarations - Type III environmental declarations - Principles and procedures
ISO 14040	ISO 14040:2009-11 Environmental management - Life cycle assessment - Principles and framework
ISO 14044	ISO 14044:2006-10 Environmental management - Life cycle assessment - Requirements and guidelines
ASTM 2015	Product Category Rule for Preparing an Environmental Product Declaration for Interior Architectural Wood Door Leaves, 2015

Contact Information

Study Commissioner

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Oregon Door

+1 (541) 679-6791, sustainability@oregondoor.com

477 Dillard Gardens Road, PO Box 1960, Winston, OR 97496

oregondoor.com

LCA Practitioner

thinkstep

thinkstep, inc.

+1 (617) 247-4477, info@thinkstep.com

170 Milk St, 3rd floor, Boston, MA 02109

www.thinkstep.com

CERTIFICATE
OF COMPLIANCE

GREENGUARD

PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818

Oregon Door

Architectural Series Flush Wood Doors–acoustic core/wood facing

97114-410
Certificate Number

05/03/2016 - 05/03/2020
Certificate Period

Certified
Status

UL 2818 - 2013 Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Products tested in accordance with UL 2821 test method to show compliance to emission limits in UL 2818, Section 7.1.

UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC(A)	-	0.50	mg/m³
Formaldehyde	50-00-0	61.3 (50 ppb)	µg/m³
Total Aldehydes (B)	-	0.10	ppm
Particle Matter less than 10 µm (C)	-	50	µg/m³
4-Phenylcyclohexene	4994-16-5	6.5	µg/m³
Individual VOCs (D)	-	1/10th TLV	-

(A) Defined to be the total response of measured VOCs falling within the $C_6 – C_{16}$ range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD (0.50 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.1.

(B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

(C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.

(D) Allowable levels for chemicals not listed are derived from 1/10th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).

UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

CERTIFICATE
OF COMPLIANCE

GREENGUARD

PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2818

GOLD

Oregon Door

Architectural Series Flush Wood Doors–acoustic core/wood facing

97114-420
Certificate Number

05/03/2016 - 05/03/2020
Certificate Period

Certified
Status

UL 2818 - 2013 Gold Standard for Chemical Emissions for Building Materials, Finishes and Furnishings

Product tested in accordance with UL 2821 test method to show compliance to emission limits on UL 2818. Section 7.1 and 7.2.

UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

GREENGUARD Gold Certification Criteria for Building Products and Interior Finishes

Criteria	CAS Number	Maximum Allowable Predicted Concentration	Units
TVOC (A)	-	0.22	mg/m³
Formaldehyde	50-00-0	9 (7.3 ppb)	µg/m³
Total Aldehydes (B)	-	0.043	ppm
4-Phenylcyclohexene	4994-16-5	6.5	µg/m³
Particle Matter less than 10 µm (C)	-	20	µg/m³
1-Methyl-2-pyrrolidinone (D)	872-50-4	160	µg/m³
Individual VOCs (E)	-	1/2 CREL or 1/100th TLV	-

(A) Defined to be the total response of measured VOCs falling within the C_6 – C_{16} range, with responses calibrated to a toluene surrogate. Maximum allowable predicted TVOC concentrations for GREENGUARD Gold (0.22 mg/m³) fall in the range of 0.5 mg/m³ or less, as specified in CDPH Standard Method v1.2.

(B) The sum of all measured normal aldehydes from formaldehyde through nonanal, plus benzaldehyde, individually calibrated to a compound specific standard. Heptanal through nonanal are measured via TD/GC/MS analysis and the remaining aldehydes are measured using HPLC/UV analysis.

(C) Particle emission requirement only applicable to HVAC Duct Products with exposed surface area in air streams (a forced air test with specific test method) and for wood finishing (sanding) systems.

(D) Based on the CA Prop 65 Maximum Allowable Dose Level for inhalation of 3,200 µg/day and an inhalation rate of 20 m³/day

(E) Allowable levels for chemicals not listed are derived from the lower of 1/2 the California Office of Environmental Health Hazard Assessment (OEHHA) Chronic Reference Exposure Level (CREL) as required per the CDPH/EHLB/Standard Method v1.2 and BIFMA level credit 7.6.2 and 1/100th of the Threshold Limit Value (TLV) industrial work place standard (Reference: American Conference of Government Industrial Hygienists, 6500 Glenway, Building D-7, and Cincinnati, OH 45211-4438).

UL investigated representative samples of the identified Product(s) to the identified Standard(s) or other requirements in accordance with the agreements and any applicable program service terms in place between UL and the Certificate Holder (collectively "Agreement"). The Certificate Holder is authorized to use the UL Mark for the identified Product(s) manufactured at the production site(s) covered by the UL Test Report, in accordance with the terms of the Agreement. This Certificate is valid for the identified dates unless there is non-compliance with the Agreement.

Extended Producer Responsibility
Product Reuse

OregonDoor

Habitat for Humanity® ReStore

Oregon Door
is committed to sustainability. As part of this commitment, we offer an extended producer responsibility (EPR) product reuse strategy that encourages environmentally responsible practices for processing and disposing of wood and fiberglass reinforced polymer (FRP) doors and frames that have reached the end of their useful life.

ReStore

This provides reuse, repurposing and/or recycling of door products that have reached the end of their initial life cycle and are not set for incorporation into a project's building reuse efforts. Wood and FRP doors and frames can be donated to Habitat for Humanity ReStore resale outlets. Proceeds from Habitat ReStores help Habitat for Humanity, a nonprofit housing organization, build strength, stability and self-reliance through shelter.

To participate:

1. Contact your customer service representative at Oregon Door.
2. Provide your location.
3. Your customer service representative will provide you with area Habitat for Humanity ReStores locations.
4. Your door product can be delivered to ReStore, where it will continue its life cycle for a good cause.

Oregon Door is committed to providing products and services that are environmentally sound throughout the entire production process and the product life cycle. Sustainability is a central part of our company ethos and our team is dedicated to being the leader in the responsible production of architectural wood and FRP door products.

Notes:
- No credits or exchanges will be issued from Habitat for Humanity or Oregon Door.
- All packing, freight and handling expenses are the sole responsibility of the sender.
- Fire ratings and other various certifications are not valid for donated doors. Contact the factory for details.

Please contact OregonDoor if you have questions.

www.oregondoor.com | 541.679.6791 | P.O. Box 1960, Winston, OR 97496