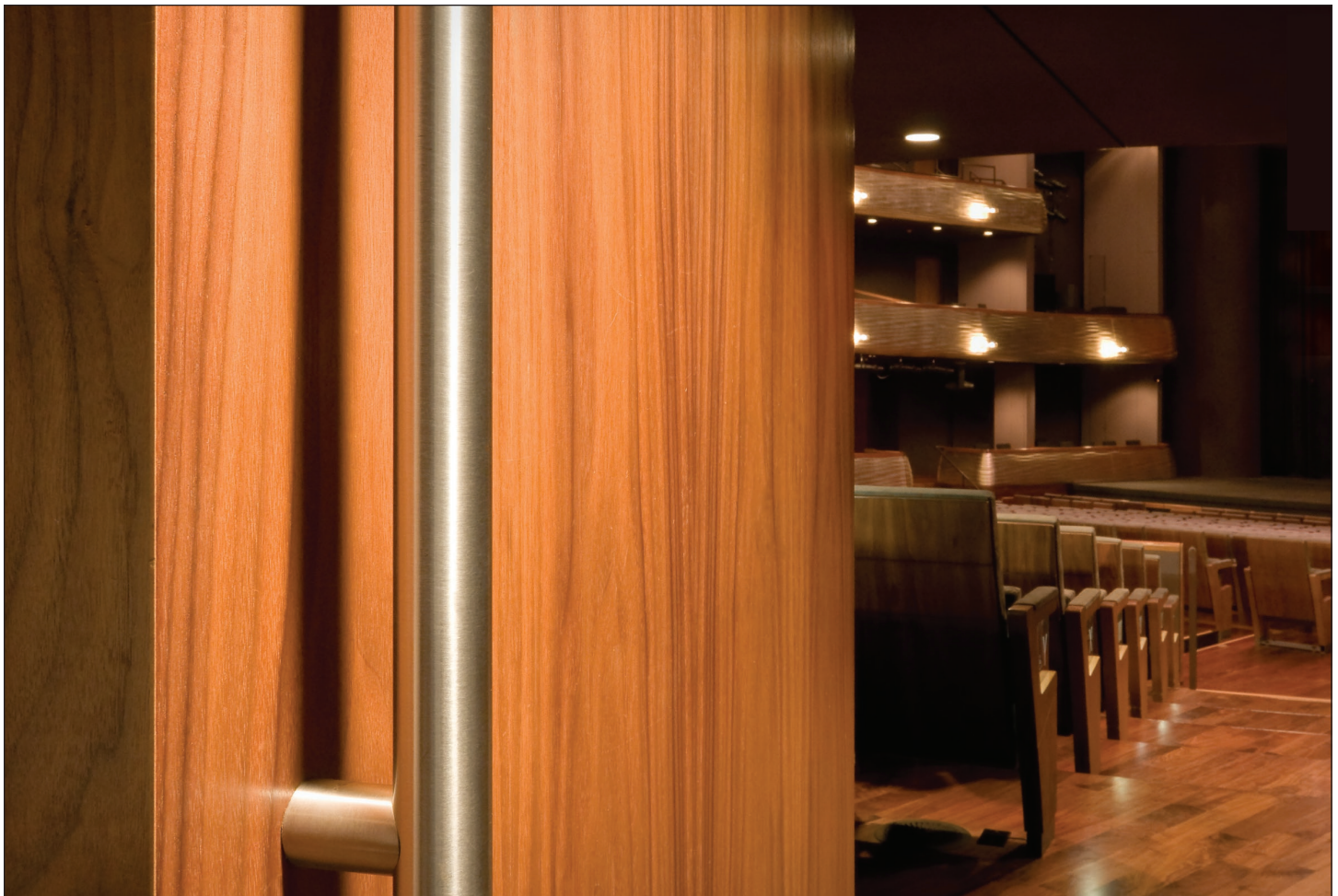


## ARCHITECTURAL WOOD DOOR LEAF Revised 0815

Almost 60 years ago in Holstein, Iowa, VT Industries was founded on the principles of craftsmanship, attention to detail, and service. Today, those same principles are still the driving force behind everything VT offers, helping us become the industry leader in the manufacturing of architectural wood doors.

At VT Industries, we are constantly adapting our manufacturing techniques and using sustainable materials to ensure environmental responsibility. All of our doors are manufactured in state-of-the-art, highly automated facilities using low-emitting, sustainable materials to ensure our doors last the life of a building.

VT leads the industry with environmental innovation and education, and plans to maintain this leadership position. We continue to adapt our processes by involving all employees and encouraging them to find ways to make our business more effective and efficient.



ENVIRONMENTAL PRODUCT DECLARATION VERIFICATION

EPD Information			
Program Operator		NSF International	
Declaration Holder		VT Industries	
Product Architectural Wood Door Leaf	Approved July 3, 2015	Valid until March 1, 2021	Declaration Number EPD10058
Independent verification of the declaration and data, according to ISO 14025:2006.			
<input type="checkbox"/> Internal	<input checked="" type="checkbox"/> External	Lori Bestervelt Bestervelt@nsf.org	
This life cycle assessment was independently verified by in accordance with ISO 14044 and the reference PCR:			
		Jack Geibig jgeibig@ecoform.com	
LCA Information			
Basis LCA		Life Cycle Assessment of Interior Architectural Wood Door Leaves, June 30, 2015	
LCA Preparer		thinkstep Takuma Ono takuma.ono@thinkstep.com	
This life cycle assessment was critically reviewed in accordance with ISO 14044 by:		Jack Geibig EcoForm jgeibig@ecoform.com	
PCR Information			
Program Operator		ASTM International	
Reference PCR		Interior Architectural Wood Door Leaves	
Date of Issue		March 27, 2015	
PCR review was conducted by:		Jamie Meil (Chairperson)	
		Athena Sustainable Materials Institute	
		jamie.meil@athenasmi.org	

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## PRODUCT DESCRIPTION

VT Architectural Wood Door leaves are intended for interior commercial applications: healthcare, hospitality, multi-family, education, and government. Wood door leaves are predominantly composed of engineered wood core; however, core materials can vary depending on the desired application. Also, surface applications of veneer, laminate, and finishes vary depending on the desired aesthetics.

VT doors are GREENGUARD Certified and GREENGUARD GOLD Certified, the first architectural wood doors to receive certification in each category, and currently the only product with this recognition. Certification guarantees our products are low-emitting, contributing to healthy indoor air quality and building occupant wellness. GREENGUARD Certification standards are the referenced measure of product emissions in numerous green building initiatives.

VT Industries is Forest Stewardship Council (FSC®) Chain-of-Custody (COC) Certified promoting responsible forest management. FSC certified doors are available upon request. Our agrifiber core, a rapidly renewable wheat based product, lowers the need to harvest virgin wood materials and reduces pressure on the world's forests.

Our wood doors assist in achieving multiple Leadership in Energy and Environmental Design (LEED®) credits. LEED, developed by the U.S. Green Build Council, is the benchmark for green building programs. The LEED Green Building Rating System is a voluntary, consensus based national standard for developing high performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its evolution.

Under the LEED New Construction (NC) rating system, Environmental Product Declaration (EPD), recycled content, regional materials, rapidly renewable materials, certified wood, and low-emitting material credits are all relevant to architectural wood doors. VT can assist with these credits. Please see the Appendix at the end of this declaration for LEED V4 credit assistance by individual door type.

### Contact Information

**VT Industries, Inc.**

1000 Industrial Park  
Holstein, IA 51025

890 Central Court  
New Albany, IN 47150

[vtindustries.com](http://vtindustries.com)

Contact: Eric Hanson 800.827.1615 Ext. 267

[eqhanson@vtindustries.com](mailto:eqhanson@vtindustries.com)

## PRODUCT CHARACTERISTICS

The declared product represents the production-weighted average wood door leaf manufactured by VT Industries. This declaration incorporates production from both the Holstein, IA and New Albany, IN facilities.

Applicable CSI MasterFormat Divisions are:

081400  
081500  
081600

Standards:

**ANSI/WDMA I.S. 1A**  
Industry Standard for Interior Architectural Wood Flush Doors  
**ANSI/WDMA I.S. 6A**  
Industry Standard for Interior Architectural Wood Flush Doors

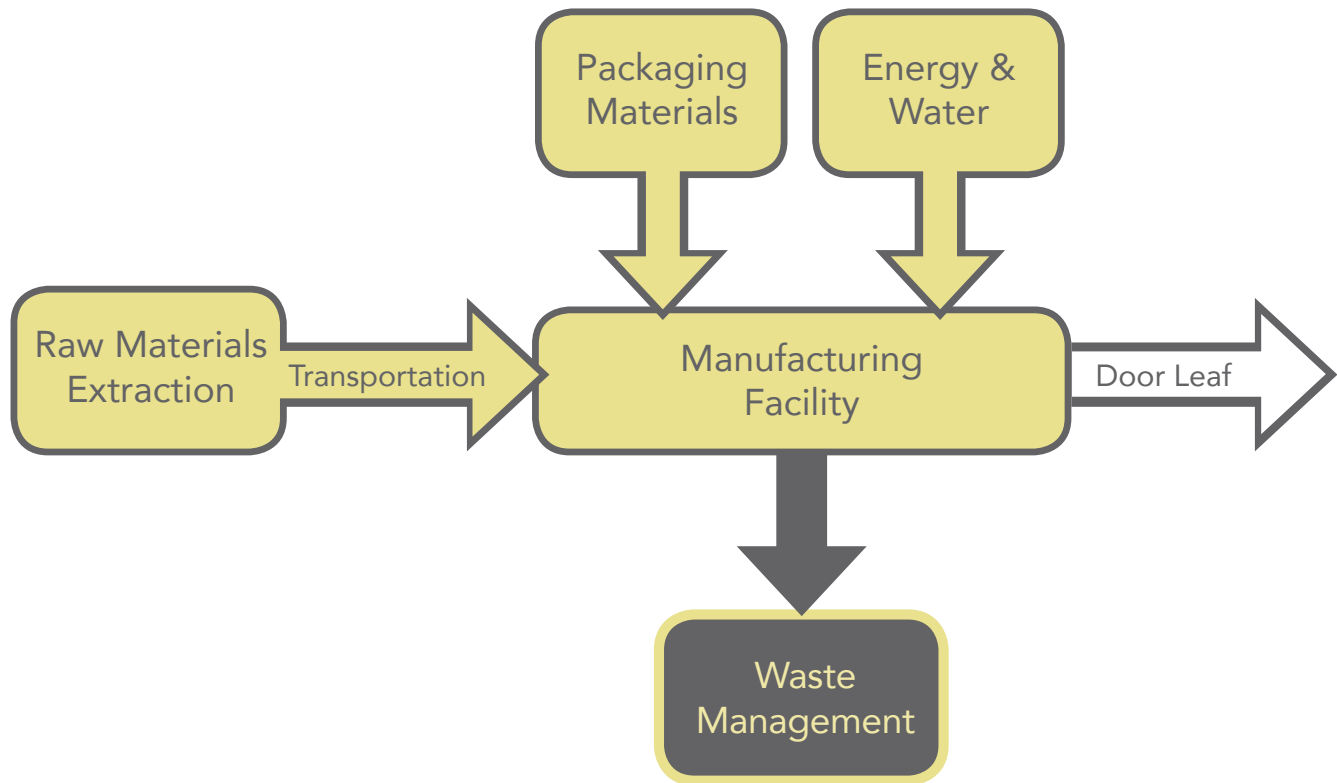


Collection	Door Type	Core Type	Size Width	Height	Thickness	Factory Finish
Artistry	Flush Wood Veneer, Stile & Rail	Particleboard, Stave Lumber, Structural Composite Lumber, Mineral	3'	7'	1-3/4"	Stained, Primed, Painted, Unfinished
Heritage	Flush Wood Veneer, High Pressure Dec- orative Laminate, Stile & Rail, Profiled	Particleboard, Stave Lumber, Struc- tural Composite Lumber, Mineral, Lead Lined, Sound Medium Density Fiberboard	3'	7'	1-3/4"	Stained, Primed, Painted, Unfinished

## MANUFACTURING PROCESS

VT Architectural Wood Doors are manufactured to order in highly-automated facilities, using hot-press technology

- Cores are cut to size
- Inner stile & rails are bonded to core
- Crossbands are applied to both faces
- Edge materials are adhered and trimmed
- Face materials are individually pressed
- Doors are machined to exacting tolerances to accept hardware
- Factory finished using UV cured stains and sealants
- Doors are individually poly-bagged and packaged for shipment



## LIFE CYCLE ASSESSMENT (LCA) - DECLARED UNIT

As per the guiding Product Category Rule (PCR), the declared unit is defined as 21 sq.ft. (1.95m<sup>2</sup>) of door leaf at a nominal 44.45 mm (1-3/4 in.) thickness.

The reference flow to satisfy this declared unit is 53.4 kg of production weighted wood door leaf.

## LCA - SYSTEM BOUNDARIES

This EPD declares the impacts of a production weighted wood door leaf from **cradle-to-gate**. Therefore, post-manufacturing activities are not considered in this declaration. The system boundary translates to life cycle modules A1, A2, and A3 as defined by EN 15804, as shown in Figure 1.

Product Stage			Construction Stage		Use Stage					End-of-Life Stage			
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	C1	C2	C3	C4
Raw materials supply	Transport	Manufacturing	Transport	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	De-construction	Transport	Waste processing	Disposal
<b>X</b>	<b>X</b>	<b>X</b>	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

Figure 1: Cradle-to-gate system boundary per EN15804 life cycle modules. The declared modules shown in bold text and excluded modules in gray text (X = included in LCA; MND = module not declared)

EPDs may enable comparison between products but do not themselves compare products, as stated in ISO 14025 Sections 4 and 6.7.2. It shall be stated in EPDs created using these PCR that only EPDs prepared from cradle-to-grave life cycle results and based on the same function, reference service life (RSL), and quantified by the same functional unit can be used to assist purchasers and users in making informed comparisons between products. EPDs based on cradle-to-gate information modules shall not be used for comparisons unless using a functional unit and complying with all of the requirements set out in ISO 14025, Section 6.7.2. EPDs based on a declared unit shall not be used for comparisons. This EPD covers only the cradle-to-gate impacts of interior architectural wood door leaves using a declared unit and the results cannot be used to compare between products per the guiding PCR.

## LCA - MATERIAL CONTENT/BASE MATERIALS

The representative wood door leaf product is predominantly comprised of engineered wood materials. However, ancillary materials which provide various functions such as sound transmission control, structural support, aesthetics, surface protection, and others are also presented in Table 1.

**Table 1:**

*Materials that comprise the production weighted average wood door leaf product in % by mass*

	% content by mass
Engineered wood product	84.5%
Gypsum	5.40%
Natural Fiber	2.92%
Polymer-paper composite	2.80%
Adhesive	1.78%
Wood product	1.71%
Composites	0.38%
Elemental lead	0.28%
Paint/Stain	0.27%
Polymers	0.001%

## LCA - PARAMETERS TO BE DECLARED IN THE EPD

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 2.

**Table 2:**

*TRACI 2.1 impacts and inventory metrics per 21 sq. ft. of average door leaf categorized by EN 15804 modules*

Type	Unit	A1 - A3
<b>TRACI 2.1 Impacts</b>		
Global Warming Potential (GWP)	kg CO <sub>2</sub> eq.	66.7
Acidification Potential	kg SO <sub>2</sub> eq.	0.452
Eutrophication Potential	kg N eq.	0.0213
Smog Formation Potential (SFP)	kg O <sub>3</sub> eq.	5.73
Ozone Depletion Potential (ODP)	kg CFC-11 eq.	1.76E-07
<b>Total primary energy consumption</b>		
Non-renewable, fossil	MJ	1082
Non-renewable, nuclear	MJ	113
Renewable, geoth.-hydro-solar-waves-wind	MJ	56.4
Renewable, biomass	MJ	6.75E-05
<b>Material resources consumption</b>		
Non-renewable material resources	kg	93.2
Renewable material resources	kg	291
Net fresh water	L	876
<b>Wastes</b>		
Hazardous waste	kg	3.45E-04
Non-hazardous waste	kg	0.556



## SUSTAINABILITY PROGRAMS AND INITIATIVES



### **UL GREENGUARD Certification Program**

Interior products have a significant impact on indoor air quality, and can emit hundreds of chemicals into the air that building occupants breathe. GREENGUARD Certification helps provide assurance that products are low-emitting, and contribute to healthier interiors.

Representative samples of products that have achieved GREENGUARD Certification have been tested and certified to meet some of the world's most rigorous, third-party chemical emissions standards—helping reduce indoor air pollution and the risk of chemical exposure while aiding in the creation of healthier indoor environments.

GREENGUARD Certification has been widely adopted as a trusted standard for low-emitting products. In fact, more than 400 green building codes, standards, guidelines, procurements policies, and rating systems recognize or reference GREENGUARD Certified products. To confirm continuous low emissions performance, GREENGUARD Certified products are required to undergo regular compliance testing on critical components. To view VT Industries Architectural Wood Door compliance certificates visit [www.greenguard.org](http://www.greenguard.org)

### **FOREST STEWARDSHIP COUNCIL (FSC) CHAIN OF CUSTODY**

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 mark of  
responsible forestry

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 allowed to label products with the FSC trademarks.

A certified COC 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. (FSC-C005590, SCS-COC-004128 - Holstein) (FSC-C018924, SW-COC-001518 - New Albany)

## OTHER ENVIRONMENTAL INFORMATION: CARBON SEQUESTRATION

As per the guiding PCR, the carbon sequestration in wood components are presented. The net Global Warming Potential credit for carbon storage is calculated using the FPIInnovations PCR Carbon Sequestration Calculator, which adheres to guidance set by ISO 14047 and adopted by the International Council of Forest and Paper Associations (ICFPA).

According to Table 1, 89.09% of the material content is of wood and other renewable origins (engineered wood products, natural wood products, and natural fibers); therefore, 89% of the reference flow, or 47.6 kg (89.09% of 53.4 kg) is considered for the 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, being 84.45% of the total product is multiplied by 90% to obtain 76.01%. Then the natural fiber (2.92%) and natural wood product (1.71%) are added to comprise 80.72% of the product. The resulting mass of 43.1 kg (80.72% of 53.4 kg) 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 Table 3.

**Table 3:**

*FPIinnovations carbon sequestration calculator user input and output results*

User inputs	Unit	Description
Nonstructural panels		Choose similar product if not in list - do not enter new product name
43.1	oven dry kg	Wood mass only; no resins or moisture
50%		50% provided as default; alternative factors provided on parameters tab
Calculator Outputs	Unit	Description
Initial Greenhouse Gas Credit		
<b>-79.0</b>	<b>kg CO<sub>2</sub>eq.</b>	<b>Carbon sequestered in product at manufacturing gate</b>
Greenhouse Gas Emissions		
6.81	kg CO <sub>2</sub>	Carbon dioxide emissions from recycled wood (accounted as 100% CO <sub>2</sub> emission)
6.81	kg CO <sub>2</sub>	Carbon dioxide emissions from combusted wood waste
4.91	kg CO <sub>2</sub>	Carbon dioxide emissions from aerobic landfills
1.23	kg CO <sub>2</sub>	Carbon dioxide emissions from fugitive landfill gas
6.32	kg CO <sub>2</sub>	Carbon dioxide emissions from combusted landfill gas
<b>26.1</b>	<b>kg CO<sub>2</sub></b>	<b>Total carbon dioxide emissions</b>
0.37	kg CH <sub>4</sub>	Methane emissions from fugitive landfill gas
<b>0.37</b>	<b>kg CH<sub>4</sub></b>	<b>Total methane emissions</b>
Net Global Warming Potential Credit		
<b>-43.7</b>	<b>kg CO<sub>2</sub>eq.</b>	<b>Sequestration, net of greenhouse gas emissions</b>

According to the FPIinnovations calculator, net **43.7 kgCO<sub>2</sub>-equivalent** is sequestered per declared unit at cradle-to-gate.

## REFERENCES

- BARE 2012 J. Bare, Tool for the Reduction and Assessment of Chemical and other Environmental Impacts (TRACI) - Software Name and Version Number: TRACI version 2.1 - User's Manual, U.S. EPA, 2012.
- EN 15804 European Committee for Standardization (CEN). "EN15804:2012. Sustainability of construction works – Environmental product declarations— Core rules for the product category of construction products"
- THINKSTEP 2015 thinkstep AG. "GaBi Databases 2014". November 2014. Documentation available at <http://database-documentation.gabi-software.com/support/gabi/>
- ISO 14040 International Standard Organization. ISO 14040:2006-10, Environmental management – Life cycle assessment – Principles and framework (ISO 14040:2006)." German and English version EN ISO 14040:2006. Geneva. 2006
- ISO 14044 International Standard Organization. "ISO 14044:200610, Environmental management – Life cycle assessment – Requirements and guidelines (ISO 14044:2006)." German and English version EN ISO 14044:2006 Geneva. 2006
- ASTM 2014 Product Category Rules (PCR) For Preparing an Environmental Product Declaration for: Interior Architectural Wood Door Leaves. ASTM. 2014
- FPInnovations 2015 Carbon Tool B2B 2.18. FPInnovations. <https://fpinnovations.ca/ResearchProgram/environment-sustainability/epd-program/Pages/default.aspx>. Accessed 2015.
- ASTM 2014 ASTM, Product Category Rules (PCR) For Preparing an Environmental Product Declaration for: Interior Architectural Wood Door Leaves, 2014
- Puettmann, et al. 2013 Puettmann, M., Oneil, E., Wilson, J., 2013. Cradle to Gate Life Cycle Assessment of U.S. Particleboard Production

## GLOSSARY OF TERMS

### **Environmental Product Declaration (EPD)**

Document providing quantified environmental data using predetermined parameters and, where relevant, additional environmental information.

### **Product Category Rules (PCR)**

Document outlining set of specific rules, requirements and guidelines for developing EPDs for one or more product categories

### **Life Cycle Assessment (LCA)**

Compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle.

### **Cradle-to-Gate**

An LCA with a system boundary which includes supply chain stages from raw material extraction to the end of product manufacturing.

### **Global Warming Potential (GWP)**

A measure of greenhouse gas emissions, such as CO<sub>2</sub> and methane. These emissions are causing an increase in the absorption of radiation emitted by the earth, increasing the natural greenhouse effect. This may in turn have adverse impacts on ecosystem health, human health and material welfare.

### **Acidification Potential (AP)**

A measure of emissions that cause acidifying effects to the environment. The acidification potential is a measure of a molecule's capacity to increase the hydrogen ion (H<sup>+</sup>) concentration in the presence of water, thus decreasing the pH value. Potential effects include fish mortality, forest decline and the deterioration of building materials.

### **Eutrophication Potential (EP)**

Eutrophication covers all potential impacts of excessively high levels of macronutrients, the most important of which nitrogen (N) and phosphorus (P). Nutrient enrichment may cause an undesirable shift in species composition and elevated biomass production in both aquatic and terrestrial ecosystems. In aquatic ecosystems increased biomass production may lead to depressed oxygen levels, because of the additional consumption of oxygen in biomass decomposition.

### **Smog Formation Potential (SFP)**

A measure of emissions of precursors that contribute to ground level smog formation (mainly ozone O<sub>3</sub>), produced by the reaction of VOC (volatile organic carbons) and carbon monoxide in the presence of nitrogen oxides under the influence of UV light. Ground level ozone may be injurious to human health and ecosystems and may also damage crops.

## GLOSSARY OF TERMS Cont.

### **Ozone Depletion Potential (ODP)**

A measure of air emissions that contribute to the depletion of the stratospheric ozone layer. Depletion of the ozone leads to higher levels of UVB (ultraviolet B) rays reaching the earth's surface with detrimental effects on humans and plants.

### **Carbon Sequestration**

Uptake and long term storage, typically 100 years or more, of carbon dioxide from the atmosphere.

### **Greenhouse Gas Emissions**

Air emissions which are identified to contribute to Global Warming Potential impacts.

### **TRACI 2.1 (Tool for the Reduction and Assessment of Chemical and other environmental Impacts)**

Impact assessment methodology developed by USEPA for characterizing impacts for United States.

APPENDIX:  
LEED Credit Assistance by Door Type

# HERITAGE

LEED NC v4		MR	MR <sup>1</sup>	MR	MR	EQ
VT Door Type	VT Environmental Selection	Building Life-Cycle Impact Reduction	Extraction / Manufacture Location	Building Product Disclosure and Optimization – Environmental Product Declarations (EPD) – Option 1	Building Product Disclosure and Optimization – Sourcing of Raw Materials – Option 2	Low Emitting Materials – Composite Wood Category
<b>PARTICLEBOARD / STAVE LUMBER / STRUCTURAL COMPOSITE LUMBER CORE</b>						
5502H, 5P02H, 5507H, 5P07H	FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5502H, 5P02H, 5507H, 5P07H	CONTROLLED FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
5508H, 5P08H, 808H, 8P08H	FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5508H, 5P08H	CONTROLLED FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
303H, 3P03H, 404, 4P04H, 707H, 7P07H	FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5502H, 5P02H, 303H, 3P03H, 404, 4P04H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	90% pre-consumer recycled material	CARB ULEF or CARB NAF
5502H, 5P02H, 303H, 3P03H, 404, 4P04H	NONE	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	90% pre-consumer recycled material	N/A
5507H, 5P07H, 707H, 7P07H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	CARB ULEF or CARB NAF
5507H, 5P07H, 707H, 7P07H	NONE	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	N/A
5508H, 5P08H, 808H, 8P08H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	CARB ULEF or CARB NAF
5508H, 5P08H, 808H, 8P08H	NONE	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	N/A

<sup>1</sup> Project site must be located within 100 miles of extraction and manufacture location for valuation factor.

# HERITAGE

LEED NC v4		MR	MR <sup>1</sup>	MR	MR	EQ
VT Door Type	VT Environmental Selection	Building Life-Cycle Impact Reduction	Extraction / Manufacture Location	Building Product Disclosure and Optimization – Environmental Product Declarations (EPD) – Option 1	Building Product Disclosure and Optimization – Sourcing of Raw Materials – Option 2	Low Emitting Materials – Composite Wood Category
<b>AGRIFIBER CORE</b>						
5509H, 5P09H, 909H, 9P09H	FSC	Product LCA Data Available in EPD	Wahpeton, ND / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5509H, 5P09H	CONTROLLED FSC	Product LCA Data Available in EPD	Wahpeton, ND / Holstein, IA	Product Specific, Type III EPD	FSC Mix 90%	CARB ULEF or CARB NAF
5509H, 5P09H, 909H, 9P09H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Wahpeton, ND / Holstein, IA	Product Specific, Type III EPD	90% pre-consumer recycled material	CARB ULEF or CARB NAF
5509H, 5P09H, 909H, 9P09H	NONE	Product LCA Data Available in EPD	Wahpeton, ND / Holstein, IA	Product Specific, Type III EPD	90% pre-consumer recycled material	N/A
<b>MINERAL CORE</b>						
5545H, 5P45H, 1345H, 1P45H	FSC	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5511H, 5P11H, 1111H, 1P11H	FSC	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5545H, 5P45H	CONTROLLED FSC	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	FSC Mix 90%	CARB ULEF or CARB NAF
5511H, 5P11H	CONTROLLED FSC	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	FSC Mix 87%	CARB ULEF or CARB NAF
5545H, 5P45H, 1345, 1P45	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	CARB ULEF or CARB NAF
5511H, 5P11H, 1111H, 1P11H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	CARB ULEF or CARB NAF
5545H, 5P45H, 1345, 1P45	NONE	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	N/A
5511H, 5P11H, 1111H, 1P11H	NONE	Product LCA Data Available in EPD	Cuba, MO / Holstein, IA	Product Specific, Type III EPD	20% pre-consumer recycled material	N/A

<sup>1</sup> Project site must be located within 100 miles of extraction and manufacture location for valuation factor.



# HERITAGE

LEED NC v4		MR	MR <sup>1</sup>	MR	MR	EQ
VT Door Type	VT Environmental Selection	Building Life-Cycle Impact Reduction	Extraction / Manufacture Location	Building Product Disclosure and Optimization – Environmental Product Declarations (EPD) – Option 1	Building Product Disclosure and Optimization – Sourcing of Raw Materials – Option 2	Low Emitting Materials – Composite Wood Category
<b>LEAD LINED PARTICLEBOARD CORE</b>						
5515H, 5P15H, 1515H, 1P15H	FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5515H, 5P15H	CONTROLLED FSC	Product LCA Data Available in EPD	Spring City, TN / Holstein, IA	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
5515H, 5P15H, 1515H, 1P15H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	51% pre-consumer recycled material	CARB ULEF or CARB NAF
5515H, 5P15H, 1515H, 1P15H	NONE	Product LCA Data Available in EPD	Kenora, ON / Holstein, IA	Product Specific, Type III EPD	51% pre-consumer recycled material	N/A
<b>SOUND CORE</b>						
5540H, 5P40H, 1240H, 1P40H, 1050H, 1250H, 1P50H, 5550H, 5P50H	FSC	Product LCA Data Available in EPD	Clarksville, IA / Holstein, IA	Product Specific, Type III EPD	FSC Mix 98%	CARB ULEF or CARB NAF
5540H, 5P40H, 1240H, 1P40H, 1050H, 1250H, 1P50H, 5550H, 5P50H	CONTROLLED FSC	Product LCA Data Available in EPD	Clarksville, IA / Holstein, IA	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
5540H, 5P40H, 1240H, 1P40H, 1050H, 1250H, 1P50H, 5550H, 5P50H	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Clarksville, IA / Holstein, IA	Product Specific, Type III EPD	13% pre-consumer recycled material	CARB ULEF or CARB NAF
5540H, 5P40H, 1240H, 1P40H, 1050H, 1250H, 1P50H, 5550H, 5P50H	NONE	Product LCA Data Available in EPD	Clarksville, IA / Holstein, IA	Product Specific, Type III EPD	13% pre-consumer recycled material	N/A

<sup>1</sup> Project site must be located within 100 miles of extraction and manufacture location for valuation factor.

# ARTISTRY

LEED NC v4		MR	MR <sup>1</sup>	MR	MR	EQ
VT Door Type	VT Environmental Selection	Building Life-Cycle Impact Reduction	Extraction / Manufacture Location	Building Product Disclosure and Optimization – Environmental Product Declarations (EPD) – Option 1	Building Product Disclosure and Optimization – Sourcing of Raw Materials – Option 2	Low Emitting Materials – Composite Wood Category
<b>PARTICLEBOARD CORE</b>						
5502A, 5P02A	FSC	Product LCA Data Available in EPD	Bennettsville, SC / New Albany, IN	Product Specific, Type III EPD	FSC Mix 99%	CARB ULEF or CARB NAF
5502A, 5P02A	CONTROLLED FSC	Product LCA Data Available in EPD	Bennettsville, SC / New Albany, IN	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
5502A, 5P02A	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Bennettsville, SC / New Albany, IN	Product Specific, Type III EPD	87% pre-consumer recycled material	CARB ULEF or CARB NAF
5502A, 5P02A	NONE	Product LCA Data Available in EPD	Bennettsville, SC / New Albany, IN	Product Specific, Type III EPD	87% pre-consumer recycled material	N/A
<b>STAVE LUMBER CORE</b>						
5507A, 5P07A	FSC	Product LCA Data Available in EPD	Spring City, TN / New Albany, IN	Product Specific, Type III EPD	FSC Mix 99%	CARB ULEF or CARB NAF
5507A, 5P07A	CONTROLLED FSC	Product LCA Data Available in EPD	Spring City, TN / New Albany, IN	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
5507A, 5P07A	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Kenora, ON / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	CARB ULEF or CARB NAF
5507A, 5P07A	NONE	Product LCA Data Available in EPD	Kenora, ON / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	N/A
<b>STRUCTURAL COMPOSITE LUMBER CORE</b>						
5508A, 5P08A	FSC	Product LCA Data Available in EPD	Spring City, TN / New Albany, IN	Product Specific, Type III EPD	FSC Mix 99%	CARB ULEF or CARB NAF
5508A, 5P08A	CONTROLLED FSC	Product LCA Data Available in EPD	Spring City, TN / New Albany, IN	Product Specific, Type III EPD	FSC Mix 97%	CARB ULEF or CARB NAF
5508A, 5P08A	NONE	Product LCA Data Available in EPD	Kenora, ON / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	N/A
<b>AGRIFIBER CORE*</b>						
5509A, 5P09A	FSC	Product LCA Data Available in EPD	Wahpeton, ND / New Albany, IN	Product Specific, Type III EPD	FSC Mix 99%	CARB ULEF or CARB NAF
5509A, 5P09A	CONTROLLED FSC	Product LCA Data Available in EPD	Wahpeton, ND / New Albany, IN	Product Specific, Type III EPD	FSC Mix 87%	CARB ULEF or CARB NAF
5509A, 5P09A	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Wahpeton, ND / New Albany, IN	Product Specific, Type III EPD	87% pre-consumer recycled material	CARB ULEF or CARB NAF
5509A, 5P09A	NONE	Product LCA Data Available in EPD	Wahpeton, ND / New Albany, IN	Product Specific, Type III EPD	87% pre-consumer recycled material	N/A

<sup>1</sup> Project site must be located within 100 miles of extraction and manufacture location for valuation factor.

# ARTISTRY

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VT Door Type	VT Environmental Selection	Building Life-Cycle Impact Reduction	Extraction / Manufacture Location	Building Product Disclosure and Optimization – Environmental Product Declarations (EPD) – Option 1	Building Product Disclosure and Optimization – Sourcing of Raw Materials – Option 2	Low Emitting Materials – Composite Wood Category
<b>MINERAL CORE</b>						
5545A, 5P45A	FSC	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	FSC Mix 99% 23%	CARB ULEF or CARB NAF
5511A, 5P11A	FSC	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	FSC Mix 99% 15%	CARB ULEF or CARB NAF
5545H, 5P45H	CONTROLLED FSC	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	FSC Mix 87% 23%	CARB ULEF or CARB NAF
5511A, 5P11A	CONTROLLED FSC	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	FSC Mix 80% 15%	CARB ULEF or CARB NAF
5545A, 5P45A	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	CARB ULEF or CARB NAF
5511A, 5P11A	NAUF / NAF / ULEF	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	CARB ULEF or CARB NAF
5545A, 5P45A	NONE	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	NA
5511A, 5P11A	NONE	Product LCA Data Available in EPD	Cuba, MO / New Albany, IN	Product Specific, Type III EPD	10% pre-consumer recycled material	NA

<sup>1</sup> Project site must be located within 100 miles of extraction and manufacture location for valuation factor.