Environmental Product Declaration

Boise Cascade®
ENGINEERED WOOD PRODUCTS

Cradle-to-Gate EPD for Versa-Lam® Veneer Laminated Lumber (LVL) and Boise Cascade® Veneer Laminated Timber (VLT)

Summary Results		Cradle-to-Gate (A1-A3)
Global warming potential, Total	kg CO_2e	217.16
Global warming potential, Biogenic	kg CO_2e	0.00
Global warming potential, Fossil	kg CO_2e	217.16
Ozone Depletion	kg CF11e	8.73E-06
Acidification	kg SO_2e	0.87
Eutrophication	kg Ne	0.67
Smog	kg O_3e	20.98
Renewable Energy	MJ, LHV	3,367.11
Non-renewable Energy	MJ, LHV	4,090.07

ASTM Certified Environmental Product Declaration

PROGRAM OPERATOR	ASTM International 100 Barr Harbor Drive PO Box C700 West Conshohocken, PA, 19428-2959 USA www.astm.org	ASTM INTERNATIONAL Helping our world work better
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	ASTM Program Operator Rules. Version: 8.0, Revised 04/29/20	
DECLARATION OWNER	Boise Cascade Company	Boise Cascade® ENGINEERED WOOD PRODUCTS
DECLARATION NUMBER	EPD 169	
DECLARED PRODUCT	Laminated Veneer Lumber (LVL); Brand name: Versa-Lam® Veneer Laminated Timber (VLT); Brand name: Boise Cascade® VLT	
DECLARED UNIT	One cubic meter (1 m^3) of Versa-Lam® LVL and Boise Cascade® VLT produced at Boise Cascades facilities.	
REFERENCE PCR AND VERSION NUMBER	ISO 21930:2017 Sustainability in Building and Civil Engineering works – Core Rules for environmental Product Declaration of Construction Products and Services. [9] UL Environment: Product Category Rules for Building-Related Products and Services Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Project Report, v4.0 2022 [14] Part B: Structural and Architectural Wood Products EPD Requirements, v1.1 2020 [15]	
DESCRIPTION OF PRODUCT'S INTENDED APPLICATION AND USE	Boise Cascade® VLT and Versa-Lam® LVL are engineered wood products with high structural strength and stability. They can be used as building material for structural floor slabs, walls, beams, ribs, and columns.	
MARKETS OF APPLICABILITY	Construction Sector, Mass timber design	
DATE OF ISSUE	March 31, 2026	
PERIOD OF VALIDITY	5 years	
EPD TYPE	Product-Specific EPD	
EPD SCOPE	Cradle to Gate	
YEAR OF REPORTED MANUFACTURER PRIMARY DATA	2023	
LCA SOFTWARE	SimaPro v10.2	

LCI DATABASES	USLCI [11], Ecoinvent 3.11 [4], Datasmart 2023 [10]
LCIA METHODOLOGY	TRACI 2.1 v1.09 [3], CML-IA Baseline V3.11, CED, LHV 1.01
THE SUB-CATEGORY PCR REVIEW WAS CONDUCTED BY:	Dr. Thomas Gloria (chair) t.gloria@industrial-ecology.com
LCA AND EPD DEVELOPER This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	The Consortium for Research on Renewable Industrial Materials (CORRIM) PO Box 2432 Corvallis, OR 97330 541-231-2627 www.corrim.org

This declaration was independently verified in accordance with ISO 14025:2006 [6].
The UL Environment "Part A: Calculation Rules for the Life Cycle Assessment and Requirements on the Project Report," v4.0 (2022), in conformance with ISO 21930:2017 with additional considerations from the USGBC/UL Environment Part A Enhancement (2017).

Tim Brooke, ASTM International

☐Internal ☒ External

INDEPENDENT VERIFIER This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	

LIMITATIONS

- Environmental declarations from different programs (ISO 14025) may not be comparable.
- Comparison of the environmental performance of Structural and Architectural Wood Products using EPD information shall be based on the product's use and impacts at the construction works level, and therefore EPDs may not be used for comparability purposes when not considering the construction works energy use phase as instructed under this PCR.
- Full conformance with the PCR for LVL and VLT allows EPD comparability only when all stages of a life cycle have been considered, when they comply with all referenced standards (ISO 21930:2017 §5.5), use the same sub-category Part B PCR, and use equivalent scenarios with respect to construction works. However, variations and deviations are possible. It should be noted that different LCA software and background LCI datasets may lead to different results for upstream or downstream of the life cycle stages declared.

Company and Product Description

Boise Cascade Company

Boise Cascade® is a manufacturer of engineered wood products. Since our founding in 1957, we've grown to become a leading manufacturer and distributor of building materials in North America and beyond. Through conservation and sustainable practices, we are actively contributing to the responsible use and protection of the natural environment, which benefits our employees, our customers, and the communities we work and live in.

Product Description

Versa-Lam® Laminated Veneer Lumber (LVL) and Boise Cascade® Veneer Laminated Timber (VLT), are engineered wood products comprised of thin layers of wood called veneers that are laid up, glued, and pressed to produce structural sized members.

Boise Cascade VLT products are based on Versa-Lam LVL product components, produced using the same machinery and with the same composition, but assembled in larger product dimensions so that it may be used in mass timber designs. As the VLT and LVL products have identical composition and manufacturing processes, they can be considered identical in terms of their environmental impacts as calculated for this EPD.

Laminated veneer lumber (LVL) and VLT are a structural veneer-based building materials that belong to the mass timber product line. Mass timber is a category of engineered wood products characterized by large wood components used in floor, wall, and roof for both residential and commercial construction.

Southern pine dominated the species mix for Boise Cascade LVL and VLT products, based on responses from the participating facilities, representing 74 percent followed by Douglas-fir (*Pseudotsuga menziesii*) at 26 percent. Southern pine is a mixture of several species with similar characteristics. The species are primarily longleaf pine (*Pinus palustris*), loblolly pine (*P. taeda*), shortleaf pine (*P. echinata*), and slash pine (*P. elliottii*). The weighted average moisture content of the LVL and VLT ready for shipment was 6.1 percent, oven dry basis.

Versa-Lam applications are for beams, headers, columns, stair stringers and rim boards and come in a variety of sizes from 1 ½ - 5 ¼ inch thickness, 3 ½ - 24 inch widths with maximum lengths up to 80 feet (most common 48-66 feet). Boise Cascade VLT panel thickness can range from 2-1/8 to 12-3/4 inch and 4-foot widths and lengths up to 60 feet. Boise Cascade VLT is designed for wall, floor, and roof panel applications.

LVL and VLT Certifications

- VLT - APA PR L335-2025
- LVL - APA ICC-ES ESR-1040-2025
- LVL - APA PR-S201-2025

Classification codes for LVL and VLT are the United Nations Standard Products and Services Code (UNSPSC) – 111220 00 and Construction Specifications Institute (CSI) code for engineered wood products 06 11 13, heavy timber framing 06 13 23, and shop-fabricated structural wood 06 17 00 (Table 1).

Table 1. United Nations Standard Products and Services Code (UNSPSC) and Construction Specification Institute (CSI) Master Format Code for LVL and VLT

Classification Scheme	Product category	Product Code
Laminated Veneer Lumber-LVL		
UNSPSC	Wood Veneers	11122004
CSI/CSC	Engineered Wood Products	06 11 13
	Heavy Timber Framing	06 13 23
	Laminated Veneer Lumber	06 17 13
Veneer Laminated Timber-VLT		
UNSPSC	Wood Sheathing or Sheets	30103604
CSI/CSC	Engineered Wood Products	06 11 13
	Heavy Timber Construction	06 13 00
	Shop-Fabricated Structural Wood	06 17 00

Methodological Framework

The underlying LCA [13] was performed in conformance with ISO 14040/44 [7,8], ISO 21930 [9] and EN15804 [5], as well as the PCR.

Type of EPD and Life Cycle Stages

This EPD is intended to represent a product specific life cycle assessment (LCA) for LVL and VLT products produced by Boise Cascade facilities in the U.S. The manufacturer provided production data, resource use, energy and fuel use, transportation distances, and onsite processing emissions. The underlying LCA [13] investigates LVL and VLT production from cradle-to-gate. Information modules included in the LCA are shown in Table 2. This EPD includes mandatory modules A1-A3 for a cradle-to-gate analysis.

Table 2. Life Cycle Stages & Information Modules per ISO 21930

PRODUCTION STAGE			CONSTRUCTION STAGE		USE STAGE							END-OF-LIFE STAGE				OPTIONAL BENEFITS
A1	A2	A3	A4	A5	B1 – B7							C1-C4				D
Extraction and up-stream production	Transport to factory	Manufacturing	Transport to site	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Building Operational Energy During Use	Building Operational Water Use During Use	Deconstruction	Transport	Waste	Disposal	Reuse, Recycle, & Recovery benefits
X	X	X	MND	MND	MND							MND				MND

System Boundaries and Product Flow Diagram

The product system described in Figure 1 includes the following information modules and unit processes:

A1 Extraction and upstream production	A1 includes the cradle-to-gate production of veneer, PLV, and resins that are used in LVL and VLT manufacturing. Also included is the cradle to gate forestry operation that may include nursery operations (which include fertilizer, irrigation, energy for greenhouses if applicable etc.), site preparation, as well as planting, fertilization, thinning and other management operations.
A2 Transport to facility	Average or specific transportation of raw materials (including secondary materials and fuels) from extraction site or source to manufacturing site (including any recovered materials from source to be recycled in the process).
A3 Manufacturing	LVL and VLT Manufacturing including packaging. Packing materials represent only 0.046 percent of the mass of the main product. Lumber Wrap represents 87% and strapping represents 13% of the total packaging mass.

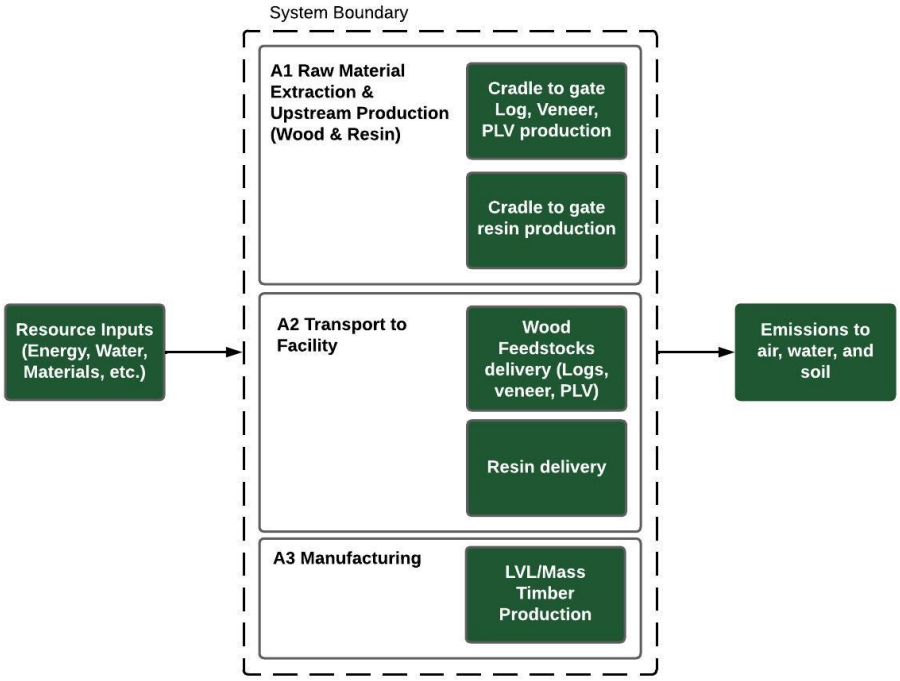

Figure 1. Cradle-to-Gate (A1-A3) System Boundary for Laminated Veneer Lumber and Veneer Laminated Timber Production.

Declared Unit

This LCAs considers the life cycle from "cradle to gate" (Module A1-A3) The declared unit is defined as "the production of one cubic meter (1 m^3) of LVL and VLT produced at one of Boise Cascade's three facilities. The product properties and composition associated with the declared unit are provided in Table 3.

Table 3. Product Properties and Composition of 1 Cubic Meter (m^3) of Laminated Veneer Lumber and Veneer Laminated Timber, Unallocated

Product Properties	Unit per m3	Value
Mass @ moisture content	kg	572.18
Mass @ oven dry	odkg	539.24
Moisture content	%	6.21
Product Composition	**Unit**	**Value**
Wood	odkg	515.18
Adhesive	kg	24.06

Allocation Methods

Allocation is the method used to partition the environmental load of a process when several products or functions share the same process. The input material for producing LVL and VLT are veneers and PLV. Following the PCR [14,15] and ISO 21930:2017, allocation is based on physical properties (e.g., mass or volume). For this study, a mass allocation was achieved for the primary product and subsequent by-products. Some by-products used internally were used for on-site energy generation. Packaging inputs are not related to the by-products and are allocated 100% to the final product.

Cut-off Criteria

The cut-off criteria for all activity stage flows considered within the system boundary conform with ISO 21930: 2017 Section 7.1.8. Specifically, the cut-off criteria were applied as follows:

- All inputs and outputs for which data are available are included in the calculated effects and no collected core process data are excluded.
- A one percent cut-off is considered for renewable and non-renewable primary energy consumption and the total mass of inputs within a unit process. The sum of the total neglected flows does not exceed 5% of all energy consumption and mass of inputs.
- All flows known to contribute to a significant impact or to uncertainty are included.
- The cut-off rules are not applied to hazardous and toxic material flows – all of which are included in the life cycle inventory.
- No material or energy input or output was knowingly excluded from the system boundary.

Data Sources

Primary and secondary data sources, as well as the respective data quality assessment, are documented in the underlying LCA project report in accordance with PCR ([14].Third party verified ISO [6,7,8] secondary LCI data sets contribute <1-14% of total impact to any of the required impact categories identified by the applicable PCR [14,15].

Treatment of Biogenic Carbon

Biogenic carbon emissions and removals are reported in accordance with ISO 21930 7.2.7. and 7.2.12. ISO 21930 requires a demonstration of forest sustainability to characterize carbon removals with a factor of -1 kg CO_2eq/kg CO_2. ISO 21930 Section 7.2.11 Note 2 states the following regarding demonstrating forest sustainability: “Other evidence such as national reporting under the United Nations Framework Convention on Climate Change (UNFCCC) can be used to identify forests with stable or increasing forest carbon stocks.” The United States UNFCCC annual report Table 6-1 provides annual NET GHG Flux Estimates for different land use categories. This report indicates non-decreasing forest carbon stocks and thus the source forests meet the conditions for characterization of removals with a factor of -1 kg CO_2eq/kg CO_2.

Environmental Parameters Derived from the LCA

The impact categories and characterization factors for the LCIA were derived from the U.S. EPA Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts - TRACI 2.1 v1.09 [3]. The total primary energy consumption is tabulated from the LCI results based on the Cumulative Energy Demand Method (CED, LHV, v1.01) published by Ecoinvent [4]. Lower heating value of primary energy carriers is used to calculate the primary energy values reported in the study. Other inventory parameters concerning material use, waste, water use, and biogenic carbon were drawn from the LCI results. We followed the ACLCA's Guidance to Calculating non-LCIA Inventory Metrics in accordance with ISO 21930:2017 [1]. SimaPro 10.1 [12] was used to organize and accumulate the LCI data, and to calculate the LCIA results (Table 4).

Table 4. Selected Impact Category Indicators and Inventory Parameters

Impact Indicators per ISO 21930	Abbreviation	Units	Method
Core Mandatory Impact Indicator			
Global warming potential, Total	GWP_{TOTAL}	kg CO_2 eq	$GWP_{BIOGENIC}$ + GWP_{FOSSIL}
Global warming potential, Biogenic	$GWP_{BIOGENIC}$	kg CO_2 eq	TRACI 2.1 V1.09 + LCI Indicatory
Global warming potential, Fossil	GWP_{FOSSIL}	kg CO_2 eq	TRACI 2.1 V1.09
Depletion potential of the stratospheric ozone layer	ODP	kg CF-11eq	TRACI 2.1 V1.09
Acidification potential of soil and water sources	AP	kg SO_2 eq	TRACI 2.1 V1.09
Eutrophication potential	EP	kg N eq	TRACI 2.1 V1.09
Formation potential of tropospheric ozone	SFP	kg O_3 eq	TRACI 2.1 V1.09
Fossil fuel depletion	FFD	MJ Surplus	TRACI 2.1 V1.09
Abiotic depletion potential (ADP fossil) for fossil resources;	ADPf	MJ, LHV	CML-IA Baseline V3.11
Use of Primary Resources			
Renewable primary energy carrier used as energy	RPRE	MJ, LHV	CED (LHV) V1.01
Renewable primary energy carrier used as material	RPRM	MJ, LHV	LCI Indicator
Non-renewable primary energy carrier used as energy	NRPRE	MJ, LHV	CED (LHV) V1.01
Renewable primary energy carrier used as material	NRPRM	MJ, LHV	LCI Indicator
Secondary material, secondary fuel and recovered energy			
Secondary material	SM	kg	LCI Indicator
Renewable secondary fuel	RSF	MJ, LHV	LCI Indicator
Non-renewable secondary fuel	NRSF	MJ, LHV	LCI Indicator
Recovered energy	RE	MJ, LHV	LCI Indicator
Mandatory Inventory Parameters			
Consumption of freshwater resources;	FW	m^3	LCI Indicator
Indicators Describing Waste			
Hazardous waste disposed	HWD	kg	LCI Indicator
Non-hazardous waste disposed	NHWD	kg	LCI Indicator
High-level radioactive waste, conditioned, to final repository	HLRW	m^3	LCI Indicator
Intermediate- and low-level radioactive waste, conditioned, to final repository	ILLRW	m^3	LCI Indicator
Components for re-use	CRU	kg	LCI Indicator
Materials for recycling	MR	kg	LCI Indicator
Materials for energy recovery	MER	kg	LCI Indicator
Recovered energy exported from the product system	EE	MJ, NCV	LCI Indicator
Additional Inventory Parameters for Transparency			
Biogenic Carbon Removal from Product	BCRP	kg CO2e	Manual
Biogenic Carbon Emission from Product	BCEP	kg CO2e	Manual
Biogenic Carbon Removal from Packaging	BCRK	kg CO2e	Manual
Biogenic Carbon Emission from Packaging	BCEK	kg CO2e	Manual
Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes	BCEW	kg CO2e	Manual

Life Cycle Impact Assessment Results

Table 5 presents the cradle-to-gate (A1-A3) LCIA and LCI parameter results for the declared unit of one m^3 of LVL. No permanent carbon storage is included in the cradle-to-gate (A1-A3) results. As a result, the biogenic carbon balance for the cradle-to-gate portion of the life cycle is net neutral. Cradle-to-gate results for LVL and VLT on a relative basis are presented in Table 6.

Table 5. Cradle-to-Gate LCIA Results for 1 m^3 of Laminated Veneer Lumber and Veneer Laminated Timber – Absolute Basis

Core Mandatory Impact Indicator	Total	A1	A2	A3
GWP_{TOTAL} [kg CO_2 eq]	217.16	(1,111.77)	8.63	1,320.30
$GWP_{BIOGENIC}$ [kg CO_2 eq]	0.00	(1,269.22)	0.00	1,269.22
GWP_{FOSSIL} [kg CO_2 eq]	217.16	157.45	8.63	51.08
ODP [kg CF-11eq]	8.73E-06	0.00	0.00	0.00
AP [kg SO_2 eq]	0.87	0.70	0.06	0.11
EP [kg N eq]	0.67	0.49	0.00	0.17
SFP [kg O_3 eq]	20.98	16.88	1.55	2.54
FFD [MJ, surplus]	427.65	328.04	15.61	84.01
ADP_{FOSSIL} [MJ, LHV]	3,487.99	2,681.10	111.06	695.83
Use of Primary Resources				
RPRE [MJ, LHV]	3,367.11	2,949.96	0.00	417.16
RPRM [MJ, LHV]	11,608.22	11,608.22	0.00	0.00
NRPRE [MJ, LHV]	4,090.07	3,100.54	112.07	877.47
NRPRM [MJ, LHV]	689.01	689.01	0.00	0.00
Secondary Material, Secondary Fuel and Recovered Energy				
SM [kg]	0.00	0.00	0.00	0.00
RSF [MJ, LHV]	0.00	0.00	0.00	0.00
NRSF [MJ, LHV]	0.00	0.00	0.00	0.00
RE [MJ, LHV]	0.00	0.00	0.00	0.00
Mandatory Inventory Parameters				
FW [m^3]	1.66	1.41	0.00	0.25
Indicators Describing Waste				
HWD [kg]	1.77E-02	8.49E-03	0.00	9.19E-03
NHWD [kg]	9.14E+00	5.72E+00	3.30E-06	3.42E+00
HLRW [m3]	2.56E-07	1.81E-07	0.00	7.45E-08
ILLRW [m3]	1.19E-06	8.44E-07	0.00	3.47E-07
CRU [kg]	0.00	0.00	0.00	0.00
MR [kg]	0.00	0.00	0.00	0.00
MER [kg]	0.00	0.00	0.00	0.00
EE [MJ, LHV]	0.00	0.00	0.00	0.00

Table 6. Cradle-to-Gate LCIA Results for 1 m^3 of Laminated Veneer Lumber – Relative Basis

Core Mandatory Impact Indicator	Total	A1	A2	A3
GWP_{FOSSIL} [kg CO_2 eq]	100%	72.5%	4.0%	23.5%
ODP [kg CF-11eq]	100%	97.5%	0.0%	2.5%
AP [kg SO_2 eq]	100%	80.9%	6.4%	12.7%
EP [kg N eq]	100%	73.8%	0.4%	25.8%
SFP [kg O_3 eq]	100%	80.5%	7.4%	12.1%
FFD [MJ, surplus]	100%	76.7%	3.6%	19.6%
ADP_{FOSSIL} [MJ, LHV]	100%	76.9%	3.2%	19.9%
Use of Primary Resources				
RPRE [MJ, LHV]	100%	87.6%	0.0%	12.4%
RPRM [MJ, LHV]	100%	100.0%	0.0%	0.0%
NRPRE [MJ, LHV]	100%	75.8%	2.7%	21.5%
NRPRM [MJ, LHV]	100%	100.0%	0.0%	0.0%
Secondary Material, Secondary Fuel and Recovered Energy				
SM [kg]	0.00	0.00	0.00	0.00
RSF [MJ, LHV]	0.00	0.00	0.00	0.00
NRSF [MJ, LHV]	0.00	0.00	0.00	0.00
RE [MJ, LHV]	0.00	0.00	0.00	0.00
Mandatory Inventory Parameters				
FW [m^3]	100%	85.0%	0.0%	15.0%
Indicators Describing Waste				
HWD [kg]	100%	48.0%	0.0%	52.0%
NHWD [kg]	100%	62.6%	0.0%	37.4%
HLRW [m3]	100%	70.9%	0.0%	29.1%
ILLRW [m3]	100%	70.8%	0.0%	29.2%
CRU [kg]	0.00	0.00	0.00	0.00
MR [kg]	0.00	0.00	0.00	0.00
MER [kg]	0.00	0.00	0.00	0.00
EE [MJ, LHV]	0.00	0.00	0.00	0.00

Biogenic Carbon Results

Wood is a biobased material and thus contains biogenic carbon. The accounting of biogenic carbon follows the requirements set out in ISO 21930:2017 where biogenic carbon enters the product system (removal) as primary or secondary material. Carbon removal is considered a negative emission. The biogenic carbon leaves the system (emission) as a product, by-products, or directly to the atmosphere when combusted for heat energy. These mass flows of biogenic carbon from and to nature are listed in the LCI and are expressed in kg CO_2. The biogenic CO_2 component for LVL and VLT are shown in detail in Table 7.

Table 7 Biogenic Carbon Inventory Parameters for Medium Density Fiberboard per m^3

Additional Inventory Parameters		A1	A3	C4	Total
Biogenic Carbon Removal from Product	kg CO_2	-1,269.22	0.00	0.00	-1,269.22
Biogenic Carbon Emission from Product	kg CO_2	0.00	242.39	988.61	1,231.00
Biogenic Carbon Removal from Packaging	kg CO_2	0.00	0.00	0.00	0.0
Biogenic Carbon Emission from Packaging	kg CO_2	0.00	0.00	0.00	0.00
Biogenic Carbon Emission from Combustion of Waste from Renew. Sources Used in Production	kg CO_2	0.00	38.22	0.00	38.22
Total Biogenic CO_2 Removals & Emissions					
Net Biogenic Carbon Emission	kg CO_2				0.00

LCA Interpretation

Comparability

Environmental declarations from different programs [6] may not be comparable. Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building. This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of ISO 21930:2017 §5.5 are met. In addition, to be compared, EPDs must comply with the same core and sub-category PCRs (Part A and B) and include all relevant information modules. It should be noted that different LCA software and background LCI datasets may lead to different results for upstream or downstream of the life cycle stages declared.

Limitations

This LCA was created using manufacturer average data for upstream materials. Variation can result from differences in supplier locations, manufacturing processes, manufacturing efficiency and fuel type used. This LCA does not report all of the environmental impacts due to manufacturing of the product but rather reports the environmental impacts for those categories with established LCA-based methods to track and report. Unreported environmental impacts include (but are not limited to) factors attributable to human health, land use change, and habitat destruction. In order to assess the local impacts of product manufacturing, additional analysis is required.

Additional Environmental Information

According to ISO 21930 section 9.6, a manufacturer is required to report hazardous and/or dangerous substances. Drying and pressing processes contribute to the production of emissions during product manufacturing. Mills classed as major sources under EPA rules are required to report methanol, formaldehyde, phenol, acetaldehyde, propionaldehyde, and acrolein which are on the US Environmental Agency (EPA) Toxics Release Inventory. These emissions are reported in this EPD.

Boise Cascade Company obtain their wood fiber from sources that are legally and sustainably sourced. Participating facilities reported Fiber Sourcing data for the three sourcing categories established in ASTM-D7612-21: Standard Practice for Categorizing Wood and Wood-Based Products According to Their Fiber Sources [2]. The standard provides criteria for differentiating wood products into three categories:

1. Non-controversial Sources of Forest Products,
2. Responsible Sources of Forest Products, and
3. Certified Sources of Forest Products.

Fiber from non-controversial, or legal, sources are from geographic areas with a low risk of illegal activity and are compliant with legal or other proprietary standards. Products from responsible sources are produced with wood fiber acquired according to an independently certified procurement standard or are from jurisdictions with regulatory or quasi-regulatory programs to implement best management practices. Independently certified procurement standards include FSC Controlled Wood and SFI Fiber Sourcing. To qualify for either standard, a facility must have a system in place that verifies their logs are coming from areas in compliance with forestry best management practices to protect air and water quality and ensure all fiber comes from known and legal sources. Products from certified sources are independently certified to an internationally recognized forest management certification standard, such as those from the Sustainable Forestry Initiative (SFI), Forest Stewardship Council (FSC), Programme for the Endorsement of Forest Certification (PEFC), American Tree Farm System (ATFS), or the Canadian Standards Association (CSA).

Forest Management

While this EPD does not address landscape level forest management impacts that influence forest carbon, wildlife habitat, endangered species, and soil and water quality, these potential impacts may be addressed through requirements put forth in regional regulatory frameworks, ASTM 7612-21 guidance, and ISO 21930 Section 7.2.11 including notes therein. These documents, combined with this EPD, may provide a more complete picture of environmental and social performance of wood products.

Scope of the EPD

EPDs can complement but cannot replace tools and certifications that are designed to address environmental impacts and/or set performance thresholds, e.g., Type 1 certifications, health assessments and declarations, etc.

Data

National or regional life cycle averaged data for raw material extraction does not distinguish between extraction practices at specific sites and can greatly affect the resulting impacts.

Accuracy of Results

EPDs regularly rely on estimations of impacts; the level of accuracy in estimation of effect differs for any product line and reported impact when averaging data.

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