

Environmental Product Declaration

Mastic EverPlank



Mastic EverPlank Vinyl Siding combines a true-to-wood look with the trusted performance and durability of vinyl. Featuring a patented technology that allows for end-to-end installation, EverPlank delivers a high-end plank look with easy-install benefits and a lifetime warranty.



Cornerstone Building Brands continues to make on the journey to build a more sustainable, ethical and impactful organization. We are steadfast in our belief that Cornerstone Building Brands' commitment to ESG creates long-term value for all stakeholders. This commitment demonstrates the company's drive to be an industry-leading organization while maintaining its long-established focus on people and communities. The company's vision of being North America's premier building solutions provider is its guiding principle, and its ESG initiatives are essential to that effort.

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025 and ISO 21930. 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.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428 USA	
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	ASTM, General Program Instructions, v8.0, April 29, 2020.	
MANUFACTURER NAME AND ADDRESS	Cornerstone Building Brands 5020 Weston Parkway Cary, N.C. 27513	
DECLARATION NUMBER	582	
DECLARED PRODUCT & FUNCTIONAL UNIT OF DECLARED UNIT	Mastic EverPlank Functional Unit = 1 square meter of Mastic EverPlank over 75 year building lifetime	
REFERENCE PCR AND VERSION NUMBER	UL Environment: Product Category Rules Part B: Cladding Product Systems EPD Requirements, Version 2.0, Published April 2021	
DESCRIPTION OF PRODUCT(S) APPLICATION/USE	Vinyl Siding with additional structural backing layer	
PRODUCT RSL DESCRIPTION	50 Years	
MARKETS OF APPLICABILITY	U.S.	
DATE OF ISSUE	9/29/2023	
PERIOD OF VALIDITY	5 years	
EPD TYPE	Product Specific	
DATASET VARIABILITY	N/A	
EPD SCOPE	Cradle-to-Grave	
YEAR(S) OF REPORTED PRIMARY DATA	December 2022 - March 2023	
LCA SOFTWARE & VERSION NUMBER	SimaPro 9.4	
LCI DATABASE(S) & VERSION NUMBER	Ecoinvent v3.9 & USLCI v2.0	
LCIA METHODOLOGY & VERSION NUMBER	TRACI 2.1; CML 4.1	
The sub-category PCR review was conducted by:	Jim Mellentine, Thrive ESG Jim@ThriveESG.com thriveesg.com	
This declaration was independently verified in accordance with ISO 14025: 2006. The UL Environment: Product Category Rules for Building-Related Products and Services in North America, Part A: Life Cycle Assessment Calculation Rules and Report Requirements, Version 4.0, Published March 2022., based on ISO 21930 serves as the core PCR. ☐ INTERNAL ☒ EXTERNAL	 Timothy S Brooke, ASTM International	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	 Thomas P. Gloria, Ph. D. Industrial Ecology Consultants	

Environmental declarations from different programs (ISO 14025) 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 §5.5 are met. EPDs are comparable only if they comply with the PCR, use the same sub-category PCR where applicable, include all relevant information modules, and are based on equivalent scenarios with respect to the context of construction works. However, variations and deviations are possible, and it should be noted that different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

General Information

Description of Company/Organization

Cornerstone Building Brands is a leading manufacturer of exterior building products for residential and low-rise non-residential buildings in North America. Headquartered in Cary, N.C., we serve residential and commercial customers across the new construction and Repair & Remodel (R&R) markets. Our market-leading portfolio of products spans vinyl windows, vinyl siding, stone veneer, metal roofing, metal wall systems and metal accessories. Cornerstone Building Brands' broad, multi-channel distribution platform and expansive national footprint includes more than 18,800 team members at manufacturing, distribution and office locations throughout North America. Corporate stewardship and Environmental, Social and Governance (ESG) responsibility are embedded in our culture. We are committed to contributing positively to the communities where we live, work and play. For more information, visit us at cornerstonebuildingbrands.com

Product Description

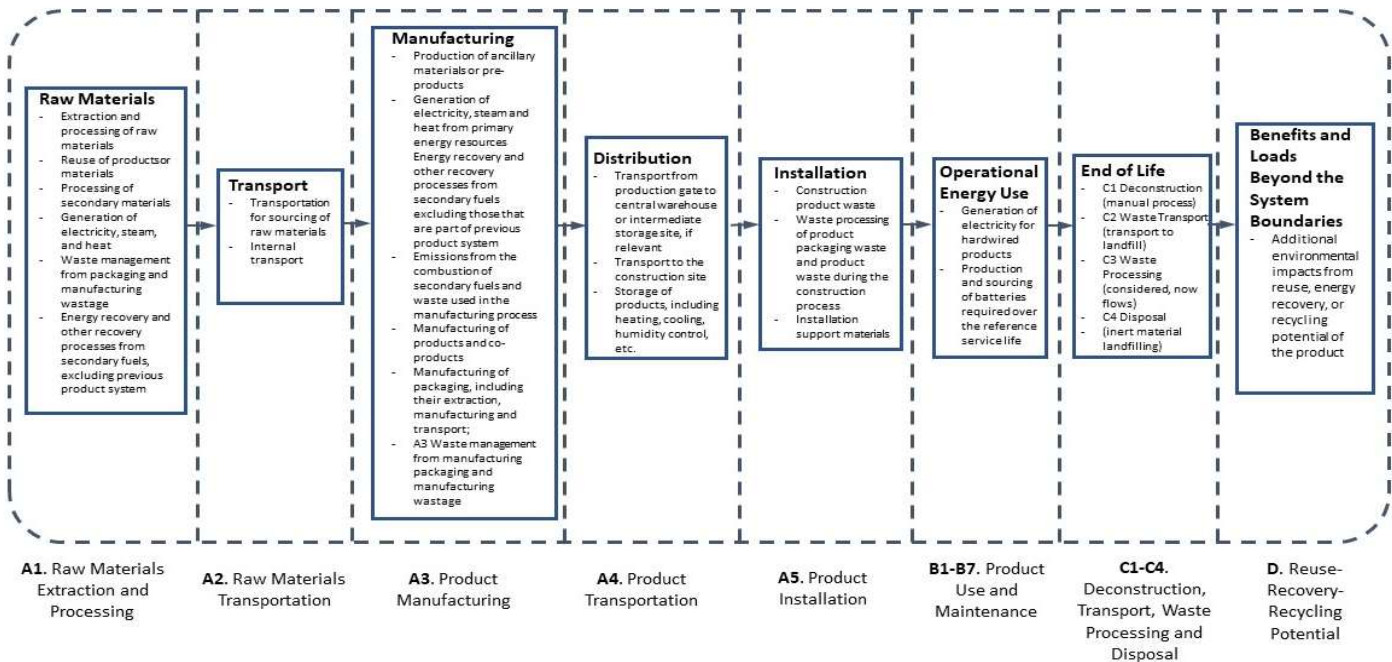
Product Name: Mastic EverPlank

Product Characteristic: Vinyl Siding

Product Features:

- 6" wide, flat plank size with the realistic look and feel of wood. Texture mimics true wood grains.
- Available in sophisticated color palettes to create an elevated aesthetic.
- End to end installation with no overlapping seams. No exposed nail heads for a clean look.
- Resists warping, fading, rotting and high winds. Covered by a lifetime warranty.

Flow Diagram



Environmental Product Declaration

Mastic EverPlank



According to
ISO 14025, ISO 14040,
and ISO 21930

Manufacturer Specific EPD

This product-specific EPD was developed based on a cradle-to-grave life cycle assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, maintenance, disposal, and potential benefits and loads following the end of life disposal. Manufacturing data were gathered directly from company personnel within the December 2022 - March 2023 reference period. When updated company-specific data were not available proxies were used. For any product group EPDs, an impact assessment was completed for each product and the highest impacts were reported as conservative representations of the product group. Variability in the products included is small (such as color, PVC enhancements, etc.) and the product impacts differed by no more than $\pm 10\%$ in any impact category.

Application

The function of Mastic EverPlank is to secure and decorate houses and small apartment buildings. With the additional structural backing layer of this product, it also contributes to a building's insulation.

Material Composition

The primary product components and/or materials must be indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status.

The average composition of Mastic EverPlank is as follows:

Material	Mastic EverPlank
PVC	56.33%
Structural Backing	27.85%
Polyethylene	2.33%
Calcium Carbonate	9.83%
Others	3.66%
Total	100.00%

Technical Data

For the declared product, the following technical data in the delivery status must be provided with reference to the test standard:

Technical Data		
Requirement	Specification	Unit
Length	3.6608	m
Width	0.1905	m
Weight of panel	2.1319	kg
Weight of PVC in panel	1.5422	kg
Weight of structural backing in panel	0.5897	kg
Tensile strength	-	Mpa
Modulus of elasticity	>2.5	MPa
U-value of assembly including interruptions to insulation	0.4608	W/m ² K
R-value of typical materials where continuous	2.17	m ² K/W
UNSPSC	30151800 30151802	-
CSI	074000 074200	-
Water vapor permeance	-	metric perms
Liquid water absorption	-	% of dry weight
Airborne sound reduction	-	dB
Sound absorption	-	%

Placing on the Market / Application Rules

The Mastic EverPlank Vinyl Siding conforms to the certifications and sustainability regulations below:

- ASTM D5206
- ASTM C1363
- ASTM D3679
- ASTM D7793
- ASTM E84
- NFPA 268

Properties of Declared Product as Shipped

EverPlank is packaged into cardboard cartons along with paper labels. These cartons are then put into bundles using plastic strapping and placed onto wooded pallets for delivery.

Methodological Framework

Functional Unit

The declaration refers to the functional unit of 1 unit (or piece) of Mastic EverPlank as specified in the PCR.

Name	Mastic EverPlank	
	Value	Unit
Functional unit	1 m ² of installed panel siding	
Mass	1.33	kg
Density	0.85	kg/m ³
Thickness to achieve functional unit	0.02	m
Panels per functional unit	0.63	

System Boundary

This is a Cradle-to-Grave Environmental Product Declaration. The following life cycle phases were considered:

Product Stage			Construction Process Stage		Use Stage							End-of-Life Stage*				Benefits and Loads Beyond the System Boundaries
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	MND	X	MND	MND	MND	X	X	X	X	X

Description of the System Boundary Stages Corresponding to the PCR

(X = Included; MND = Module Not Declared)

*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

Reference Service Life

The reference service life of a properly installed vinyl siding is 50 years. The building estimated service life is 75 years.

Allocation

Allocation differs between the manufacturing facilities. Allocation for the structural backing manufactured in North Carolina was determined on a per square meter basis for primary data. Allocation for the PVC manufactured in Missouri was determined on a per mass basis for primary data. For secondary data, cut-off methodology was used.

Cut-off Criteria

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For that a documented assumption is admissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.
- If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided.

This EPD is in compliance with the cut-off criteria. No known processes or flows were deliberately neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Data Sources

Primary data were collected for every process in the product system under the control of Cornerstone Building Brands. Secondary data from the Ecoinvent v3.9 & USLCI v2.0 databases were utilized. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the vinyl siding product category.

Data Quality

The data sources used are complete and representative of North America in terms of the geographic and technological coverage and are a recent vintage (i.e., less than ten years old). The data used for primary data are based on direct information sources of the manufacturer. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

Period Under Review

The Mastic EverPlank product is new and has not been manufactured for a full year. The period under review is December 2022 - March 2023.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows ISO 21930 Section 7.2.7

Comparability and Benchmarking

A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to ISO 21930 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be comparable. Full conformance with the UL Environment: Product Category Rules for Building-Related Products and Services in North America, Part A: Life Cycle Assessment Calculation Rules and Report Requirements, Version 4.0, Published March 2022, and UL Environment: Product Category Rules Part B: Cladding Product Systems EPD Requirements, Version 2.0, Published April 2021 allows EPD comparability only when all stages of the product's life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to different results for upstream or downstream of the life cycle stages declared.

Estimates and Assumptions

End-of-Life

In the End-of-Life phase, the product is believed to go 100% to landfill.

Units

The LCA results within this EPD are reported in SI units.

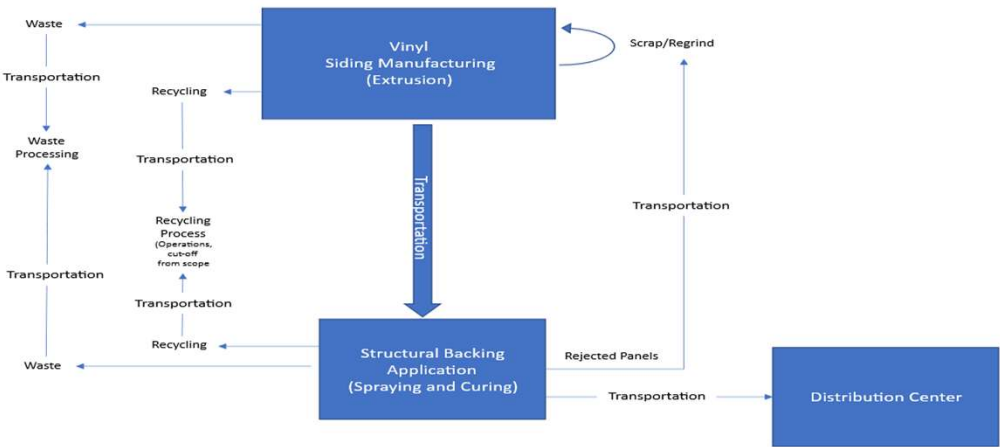
Additional Environmental Information

Background data

For life cycle modeling of the considered products, the SimaPro v9.4.0.2 software is used. Primary data were collected from the Cornerstone facilities. Secondary data was used for upstream raw material production and downstream inventory flows. This secondary data was sourced from either the Ecoinvent v3.9 or USLCI databases.

Manufacturing

The manufacturing of EverPlank starts in Kearney, M.O. where the vinyl component is extruded with a substrate and various capstocks. It is then sent to a second facility in Durham, N.C. where the structural backing component is manufactured. The vinyl panels arrive at the second facility and are inspected. Following the initial inspection, the panels are sent to add structural backing. The panels are sprayed with structural backing, loaded onto a rack, and placed into an oven for curing. Finally, the panels are cut, packaged, and sent to the final distribution center.



Packaging

The packaging material is composed of cardboard, polyethylene, paper, and wood.

Material	Mastic EverPlank
	Quantity (% By Weight)
Wood	53.26%
HDPE	1.24%
Cardboard	43.86%
Paper	1.64%
Total	100%

Transportation

Transportation to the building site is done via a diesel truck.

Transport to the Building Site (A4)		
Name	Mastic EverPlank	Unit
Fuel type	Diesel	-
Liters of fuel	38	l/100km
Capacity utilization (including empty runs)	90	%
Capacity utilization volume factor	1	-
Transport distance	500	km
Gross density of products transported	240.86	kg/m ³

Product Installation

Installation of siding is done primarily via manual labor. Auxiliary materials such as fasteners are required for installation and are included in this stage. Disposal of packaging materials is also included in this stage. For more information go to <https://www.plygem.com/siding/support/installation/>

Installation into the Building (A5)		
Name	Mastic EverPlank	Unit
Installation scrap rate assumed	5	%
Auxiliary materials	0.03	kg
Water consumption	0.00	m ³
Other resources	0.00	kg
Electricity consumption	0.00	kWh
Other energy carriers	0.00	MJ
Product loss per functional unit	0.07	kg
Waste materials at construction site	0.50	kg
Output substance (recycle)	0.00	kg
Output substance (landfill)	0.07	kg
Output substance (incineration)	0.00	kg
Packaging waste (recycle)	0.32	kg
Packaging waste (landfill)	0.09	kg
Packaging waste (incineration)	0.02	kg
Direct emissions to ambient air*, soil, and water	1.42	kg CO ₂
VOC emissions	-	kg

*CO₂ emissions to air from disposal of packaging

Reference Service Life		
Name	Value	Unit
Reference Service Life	50	years
Estimated Building Service Life	75	years
Number of Replacements	0.5	replacements

Product Use

No routine maintenance is required to prolong the lifetime of the product, but cleaning is recommended to maintain appearance. This LCA includes maintenance, and cleaning is assumed to normally done with water and household cleaners. Water and soap are used to clean the siding products per square meter over the lifetime of the product.

Maintenance (B2)		
Name	Value	Unit
Maintenance cycle	-	Cycles/RSI
Maintenance cycle	-	Cycles/ESL
Ancillary materials	0.0026	kg
Net freshwater consumption (city water disposed to the environment)	0.0045	m ³
Direct emissions to ambient air, soil, and water	-	kg

No repairs (B3) or refurbishments (B5) are necessary over the lifetime of the product. However, the service life of the product is 50 years and a building's service life is 75 years, so 0.5 replacements (B4) are needed. There is also no operational energy (B6) or operational water (B7) use over the lifetime of the product.

Disposal

The product is sent to landfill for disposal.

End-of-Life (C1-C4)		
Name	EverPlank	Unit
Collected separately	0.00	kg
Collected as mixed construction waste	1.33	kg
Reuse	0.00	kg
Recycling	0.00	kg
Landfilling	1.33	kg
Incineration with energy recovery	0.00	kg
Energy conversion	0%	%
Material for final deposition	1.33	kg
Removals of biogenic carbon	0.00	kg

Re-use Phase

Due to the structural backing used in the Mastic EverPlank product, it is not reusable.

Reuse, Recovery, And/Or Recycling Potential (D)		
Name	Value	Unit
Net energy benefit from energy recovery from waste treatment declared as exported energy in C3 (R>0.6)	0.00	MJ
Net energy benefit from thermal energy due to treatment of waste declared as exported energy in C4 (R<0.6)	0.00	MJ
Net energy benefit from material flow declared in C3 for energy recovery	0.00	MJ
Process and conversion efficiencies		
Further assumptions for scenario development (e.g. further processing technologies, assumptions on correction factors)		

Mastic EverPlank Results per Functional Unit Over the Building Lifetime of 75 Years

Results shown below were calculated using TRACI 2.1 Methodology.

TRACI 2.1 Impact Assessment												
Parameter	Parameter	Unit	A1-A3	A4	A5	B2	B4	C1	C2	C3	C4	D
GWP	Global warming potential	kg CO ₂ -Eq.	2.30E+01	1.42E-01	1.84E+00	1.82E-02	1.32E+01	0.00E+00	2.84E-02	0.00E+00	1.47E+00	0.00E+00
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	1.39E-06	5.40E-12	8.31E-08	2.40E-09	7.40E-07	0.00E+00	1.08E-12	0.00E+00	1.07E-08	0.00E+00
AP Air	Acidification potential for air emissions	kg SO ₂ -Eq.	1.01E-01	8.45E-04	6.26E-03	6.77E-05	5.46E-02	0.00E+00	1.69E-04	0.00E+00	5.10E-04	0.00E+00
EP	Eutrophication potential	kg N-Eq.	4.18E-02	4.71E-05	7.83E-03	5.12E-04	3.47E-02	0.00E+00	9.44E-06	0.00E+00	1.97E-02	0.00E+00
SP	Smog formation potential	kg O ₃ -Eq.	1.04E+00	2.31E-02	6.88E-02	8.19E-04	5.73E-01	0.00E+00	4.64E-03	0.00E+00	7.76E-03	0.00E+00
FFD	Fossil fuel depletion	MJ-surplus	5.04E+01	2.71E-01	2.82E+00	9.42E-03	2.68E+01	0.00E+00	5.44E-02	0.00E+00	1.15E-01	0.00E+00

*All use phase and disposal stages have been considered and only those with non-zero values have been reported

Results shown below were calculated using CML 2001 - April 2013 Methodology.

CML 4.1 Impact Assessment												
Parameter	Parameter	Unit	A1-A3	A4	A5	B2	B4	C1	C2	C3	C4	D
GWP	Global warming potential	kg CO ₂ -Eq.	2.36E+01	1.42E-01	1.96E+00	1.82E-02	1.36E+01	0.00E+00	2.84E-02	0.00E+00	1.47E+00	0.00E+00
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	1.19E-06	5.35E-12	7.02E-08	2.40E-09	6.33E-07	0.00E+00	1.08E-12	0.00E+00	1.07E-08	0.00E+00
AP Air	Acidification potential for air emissions	kg SO ₂ -Eq.	1.07E-01	6.97E-04	6.48E-03	6.77E-05	5.74E-02	0.00E+00	1.69E-04	0.00E+00	5.10E-04	0.00E+00
EP	Eutrophication potential	kg(PO ₄) ³ -Eq.	2.09E-02	1.24E-04	3.29E-03	5.12E-04	2.20E-02	0.00E+00	9.44E-06	0.00E+00	1.97E-02	0.00E+00
POCP	Formation potential of tropospheric ozone photochemical	kg ethane-Eq.	1.43E-02	3.21E-05	8.88E-04	8.19E-04	1.38E-02	0.00E+00	4.64E-03	0.00E+00	7.76E-03	0.00E+00
ADPE	Abiotic depletion potential for non-fossil resources	kg Sb-Eq.	1.08E-04	0.00E+00	9.39E-06	9.42E-03	8.45E-02	0.00E+00	5.44E-02	0.00E+00	1.15E-01	0.00E+00
ADPF	Abiotic depletion potential for fossil resources	MJ	3.72E+02	1.82E+00	2.14E+01	1.83E-02	1.99E+02	0.00E+00	2.85E-02	0.00E+00	1.82E+00	0.00E+00

*All use phase and disposal stages have been considered and only those with non-zero values have been reported

Results below contain the resource use throughout the life cycle of the product.

Resource Use												
Parameter	Parameter	Unit	A1-A3	A4	A5	B2	B4	C1	C2	C3	C4	D
RPR _E	Renewable primary energy as energy carrier	MJ	2.99E+01	0.00E+00	1.92E+00	2.44E-01	1.59E+01	0.00E+00	0.00E+00	0.00E+00	4.43E-02	0.00E+00
RPR _M	Renewable primary energy resources as material utilization	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRPR _E	Nonrenewable primary energy as energy carrier	MJ	3.51E+02	1.82E+00	2.04E+01	1.27E-01	1.87E+02	0.00E+00	3.65E-01	0.00E+00	9.80E-01	0.00E+00
NRPR _M	Nonrenewable primary energy as material utilization	MJ	2.97E+01	0.00E+00	3.13E+00	0.00E+00	1.64E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
SM	Use of secondary material	kg	0.00E+00	0.00E+00	2.60E-02	0.00E+00	1.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	Use of nonrenewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RE	Energy recovered from disposed waste	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	Use of net fresh water	m ³	1.32E-01	0.00E+00	8.47E-03	5.46E-03	7.06E-02	0.00E+00	0.00E+00	0.00E+00	8.68E-04	0.00E+00

*All use phase and disposal stages have been considered and only those with non-zero values have been reported

Results below contain the output flows and wastes throughout the life cycle of the product.

Output Flows and Waste Categories												
Parameter	Parameter	Unit	A1-A3	A4	A5	B2	B4	C1	C2	C3	C4	D
HWD	Hazardous waste disposed	kg	1.46E-04	0.00E+00	9.70E-06	6.35E-06	7.93E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NHWD	Non-hazardous waste disposed	kg	3.94E+00	0.00E+00	1.15E+00	3.99E-03	4.01E+00	0.00E+00	0.00E+00	0.00E+00	3.06E+00	0.00E+00
HLRW	High-level radioactive waste	kg or m ³	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
ILLRW	Intermediate- and low-level radioactive waste	kg or m ³	1.24E-04	0.00E+00	1.15E-05	4.15E-07	7.03E-05	0.00E+00	0.00E+00	0.00E+00	5.07E-06	0.00E+00
CRU	Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MR	Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	Materials for energy recovery	kg	0.00E+00	0.00E+00	2.30E-02	0.00E+00	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	Recovered energy exported from system	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*All use phase and disposal stages have been considered and only those with non-zero values have been reported

Results below contain direct greenhouse gas emissions and removals throughout the life cycle of the product.

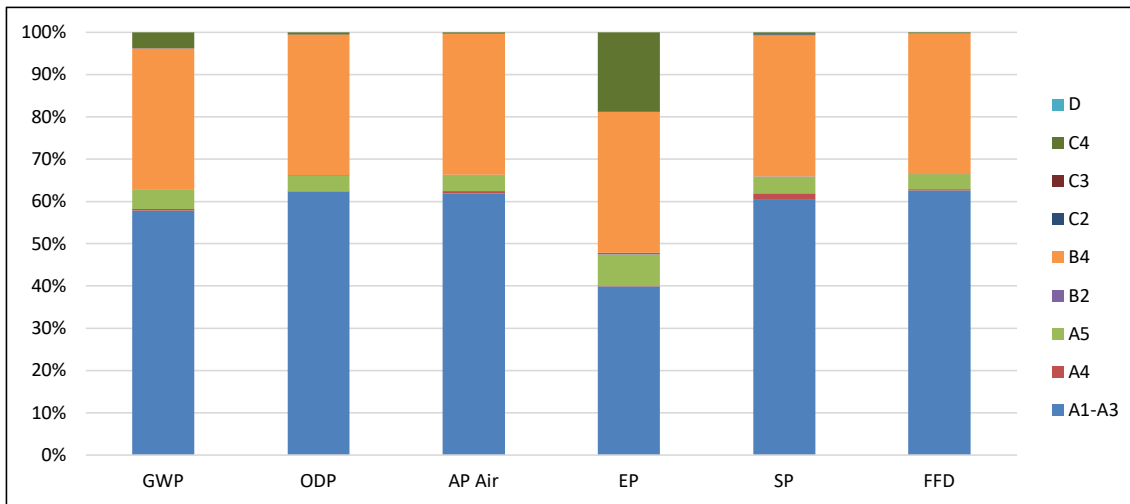
Resource Use												
Parameter	Parameter	Unit	A1-A3	A4	A5	B2	B4	C1	C2	C3	C4	D
BCRP	Biogenic Carbon Removal from Product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCEP	Biogenic Carbon Emissions from Product	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCRK	Biogenic Carbon Removal from Packaging	kg CO ₂	1.42E+00	0.00E+00	0.00E+00	0.00E+00	7.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCEK	Biogenic Carbon Emissions from Packaging	kg CO ₂	0.00E+00	0.00E+00	1.42E+00	0.00E+00	7.12E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
BCEW	Biogenic Carbon Emissions from Combustion of Waste from Renewable Sources Used in Production Process	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CCE	Calcination Carbon Emissions	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CCR	Carbonation Carbon Removal	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
CWNR	Carbon Emissions from Combustion of Waste from Non-renewable Sources Used in Production Process	kg CO ₂	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

*All use phase and disposal stages have been considered and only those with non-zero values have been reported

Mastic EverPlank LCA Interpretation

The production life cycle stage (A1-A3) dominates the impacts across all impact categories. This is due to the upstream production of materials used in the product, along with electricity use in the manufacturing of the product. With 0.5 replacements required over a life-span of a building, the replacement stage (B4), which includes 0.5 of the impacts from all other lifecycle stages combined, is also a main driver of impacts.

It is important to note there are limitations of related to the variations in time periods in which data were collected. Not only were the reference periods for when data was collected different between the two manufacturing facilities, but there was only three months of data collected at each site. The manufacturer is the sole owner and has liability and responsibility for this EPD, including but not limited to insuring EPD updates are made based on the most recent LCA modelling software version and impact assessment version available. If the underlying data results in a change by +/- 10% for any impact category, a data refresh is necessary.



Additional Environmental Information

Environmental and Health During Manufacturing

Cornerstone Building Brands has a long history of safety (EHS), environmental, and product stewardship across the United States and Canada. Cornerstone Building Brands also works with industry experts and trade associations to make sure we are implementing the best practices in our mission to serve the communities where we all work and live. Cornerstone also adopts ASTM, OSHA, and other governmental certifications create the best working conditions for all involved.

Environmental and Health During Installation

There is no harmful emissive potential and no regulated substances of very high concern. No damage to health or impairment is expected under normal use corresponding to the intended use of the product. Following the installation instructions and best practices reduces the amount of scrap and cutting on the job site reducing the risk of personal injury and reducing landfill waste.

Extraordinary Effects

Fire

No danger to the environment can be anticipated.

Water

Contains no known substance that have any impact on water in case of flood.

Mechanical Destruction

No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the TRACI 2.1 and CML 4.1 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Cornerstone Building Brands is an industry leader in creating building material solutions for homeowners. The sustainability of our products start from sourcing raw materials from companies who also believe and practice our standards of ESG and sustainable practices. Cornerstone is an active participant in LEED, U.S. Green Building Council, VSI, and the last two years verified with +Vantage Vinyl certification which is a holistic approach to ESG and sustainable practices through our entire company culture.

Further Information

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References

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- ASTM D5206 Standard Test Method for Windload Resistance of Rigid Plastic Siding
- ASTM C1363 Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus
- ASTM D3679 Standard Specification for Rigid Poly(Vinyl Chloride) (PVC) Siding
- ASTM D7793 Standard Specification for Insulated Vinyl Siding
- ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- NFPA 268 Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source

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- Characterization Method Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers- version 1.2, January 2017.

Environmental Product Declaration

Mastic EverPlank



According to
ISO 14025, ISO 14040,
and ISO 21930

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