BLUE RIDGE FIBERBOARD®

STRUCTODEK® HD

FIBERBOARD ROOF INSULATION COVER BOARD WITH PRIMED RED COATING

STRUCTODEK HD WITH PRIMED RED COATING can be used as an insulation board, cover board, or re-roof/recover board. The product is a high-density roofing board designed for low-slope single-ply, as well as traditional roof system applications. It makes roofing easier with physical properties that generate structural rigidity and dimensional stability. Coating integrated on the surface of STRUCTODEK HD possesses unique bonding characteristics that ultimately result in superior adhesion capabilities with the current membrane & adhesive technology on the market today.





Performance dashboard

Features & functionality

Compatible with PVC, TPO, EPDM, CSPE single-ply membranes as well as more traditional systems

Compatible with most low VOC, water-based and traditional adhesives

Superior adhesion without excess adhesive absorption

Compatible with most direct peel-and-stick applications

BUR compatible – easily handles hot asphalt

Approved in thousands of FM RoofNav® & UL Class A and Class 1 rated roof system assemblies

STRUCTODEK protects the underlying insulation from foot traffic, rooftop mechanical equipment, and hail impact damage

Possesses SOUNDSTOP® sound deadening technology

Lightweight, installs and cuts easily with a knife, saving you time and money

Visit BLUE RIDGE FIBERBOARD for more product information:

STRUCTODEK HD

MasterFormat® 07 22 16
Product specifications:

STRUCTODEK HD Data Sheet
STRUCTODEK HD Safety Data Sheet

For spec help, contact us or call 800-596-9699

Environment & materials

Improved by:

Utilization of 75% post-industrial waste wood

Biobased adhesive and binder

No added formaldehyde

Contributes to LEED credits for LEED certification

Carbon sequestering wood chips

Made in America

Certifications, rating systems & disclosures:

Health Product Declaration, 100ppm

USDA® BioPreferred Program 100% Bio-based content material, per ASTM 6866-22 Method B

CDPH Standard Method v1.2, MAS Certified Green® Low-Emitting Materials

Does not contain any Living Building Challenge Red List 4.0 chemicals

Buy American Act compliant

See LCA, interpretation & rating systems

SM Transparency Report (EPD)™

EPD	LCA
3rd-party reviewed	✓
	Transparency Report (EPD)
3rd-party verified	✓

Validity: 04/24/25 – 04/24/30
SM-WRM – 04242025 – 004

This environmental product declaration (EPD) was externally verified by Lindita Bushi, PhD, Senior Research Associate at Athena, according to ISO 21930:2017; UL Part A; UL Part B for Structural and Architectural Wood Products; and ISO 14025:2006.

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Athena Sustainable Materials Institute

SUMMARY
Reference PCR
UL Part B: Structural and Architectural Wood Products v1.1

Regions; system boundaries
North America; Cradle-to-gate

Declared unit: 1 m^3

LCIA methodology: TRACI 2.1

LCA software; LCI database
SimaPro Developer 9.6; ecoinvent v3.10, US-EI 2.2

Public LCA:
LCA of W. R. Meadows Blue Ridge Fiberboard products

In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

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LCA results & interpretation

STRUCTODEK HD

LCA results & interpretation | EPD additional content

Scope and summary

● Cradle to gate ○ Cradle to gate with options ○ Cradle to grave

Application
STRUCTODEK HD is a non-asphaltic fiberboard for roofing. It can be used as an insulation board, cover board, or re-roof/recover board. The product is a high-density roofing board designed for low-slope single-ply and traditional roof system applications. The coating enhances adhesion with single-ply membranes like PVC, TPO, EPDM, and CSPE. It is compatible with low VOC, water-based, foam, and traditional adhesives. It supports peel-and-stick and BUR systems with proprietary coating, minimizing adhesive absorption and ensuring strong bonds. Moisture-resistant components protect edges during use and cutting. It provides sound-deadening and thermal insulation (R-value of 1.3 per ½"). Its compressive strength is 25 psi at 10% deformation. Panels are fiberglass-free, easy to cut, and come in 4'x4' or 4'x8' sizes.

Declared unit
One cubic meter weighs 266 kg (266 kg/m^3). To fulfill the declared unit, 78.7 individual 1 m2 panels at ½" (12.7 mm) thickness are needed. The panel's moisture content is 0.5% max.

Manufacturing data
Reporting period: January 2023 – December 2023
Location: Danville, VA

Sensitivity analysis
Sensitivity analyses were performed to check the robustness of the results where the highest potential environmental impacts are occurring. As the bulk of impacts are attributed to manufacturing activities, electricity usage was selected for sensitivity analysis.

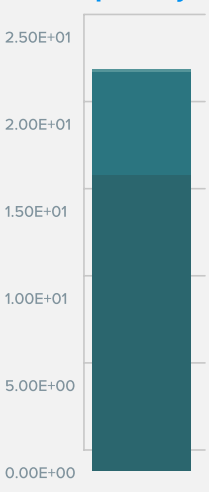
Global warming potential was evaluated for sensitivity since BLUE RIDGE FIBERBOARD is interested in the potential CO_2-equivalent emissions of its products. By increasing the renewable energy percentage from 7%, reflecting the residual mix for the manufacturing facility subregion, to approximately 50%, potential CO_2-equivalent emissions could be reduced by approximately 20.0%. This shows that global warming potential is sensitive to increases in electricity from renewable energy sources.

Embodied carbon
Embodied carbon can be defined as the cradle-to-gate (A1-A3) global warming potential impacts. The total embodied carbon per declared unit of STRUCTODEK HD is 2.08E+02 kg CO_2-eq.

Material composition by wt%

MATERIAL	WT%
Cellulose, pulp	80-85%
Starch	8-10%
Paraffin	2-5%
Water	2-5%
Aluminum sulfate	1-2%
Clay	1-2%
Sodium aluminate	<1%
Pigment	<1%

Total impacts by life cycle stage [mPts/decl unit]



LIFE CYCLE STAGE	MPTS/DECL. UNIT
Raw material acquisition	1.72E+01
Transportation	2.77E-01
Manufacturing	5.44E+00
Total impacts = 2.29E+01 mPts	

What's causing the greatest impacts

All life cycle stages
The raw material acquisition stage dominates the results, accounting for over 54% of the total impacts for seven life cycle impact categories, followed by the manufacturing stage. For smog, global warming, ozone depletion, and fossil fuel depletion, manufacturing accounted for over 50% of the total results. The biobased binder was the largest contributor to total results among the raw materials.

Raw material acquisition
The raw material acquisition (A1) stage has the most significant contribution to most impact categories, primarily due to the biobased binder. While the wood chips account for a much larger share by weight of the raw materials, the use of post-industrial wood chips reduces its contribution to the potential impacts. The starch component in the binder contributed to over 50% of impacts for seven out of ten impact categories.

Transportation
The transportation (A2) of raw materials is the least impactful contributor to the total results. Materials are sourced from within America and transported via semi-truck to the manufacturing facility.

Manufacturing
Manufacturing (A3) is the second highest contributor to most impact categories. The primary driver of environmental impacts within the manufacturing stage is the energy required to produce the panels. However, impacts from the manufacturing stage dominate the results for global warming, ozone depletion, and fossil fuel depletion, stemming primarily from the use of electricity and natural gas. Activities in this stage also include final product packaging and manufacturing waste disposal.

How we're making it greener
BLUE RIDGE FIBERBOARD is committed to producing products and systems to reduce our energy usage, material resource consumption, and environmental impact. Products are composed primarily of all-natural, earth-friendly carbon-sequestering wood chips and use a biobased binder.

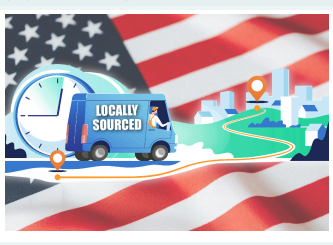
WOOD IS A CARBON-SMART BUILDING MATERIAL CHOICE

- Reducing and reversing the acceleration of global warming happens by making carbon-smart choices. The wood in BLUE RIDGE FIBERBOARD products captures and stores the CO_2 inherent in wood fibers, which locks up this carbon for the installation's lifetime.
- Trees take up carbon dioxide through photosynthesis and store it in wood fibers. Softwood chips used as the source material for our products, lock in carbon for the life of the building installation.
- As trees grow, they absorb carbon dioxide from the atmosphere during the process of photosynthesis, emitting oxygen and utilizing the carbon to create the tree's very roots, trunk, branches, and leaves. This process is called carbon sequestration, which captures and stores carbon dioxide from the atmosphere. One cubic meter of wood can trap approximately 1 ton of carbon dioxide. To put this concept in perspective, the EPA states an average car emits about 4.6 metric tons of CO_2 per year.
- UNECE (United Nations Economic Commission for Europe) emphasizes that the use of wood in the construction industry reduces CO_2 emission by 30% when used instead of steel. Throughout the life of a wooden structure, its wood components store and restrict the release of carbon dioxide.

RESPONSIBLE WOOD SOURCING
BLUE RIDGE FIBERBOARD responsibly sources 100% of its wood. We work with suppliers adhering to responsible sourcing principles. Wood supplied to us comes from a known source, is legally harvested and traded, and does not threaten high conservation value. It does not come from deforestation or other ecosystem conversion, which leads to biodiversity loss, including that of rare, threatened, and endangered species, and it is not endangered. It is harvested and produced, ensuring that human and worker rights are protected, including decent and humane working conditions and no forced labor.

See how we make it greener

LCA results

LIFE CYCLE STAGE	A1 RAW MATERIAL ACQUISITION	A2 TRANSPORT	A3 MANUFACTURING
	(X) A1 Raw material acquisition	(X) A2 Transport	(X) A3 Manufacturing
Information modules: **Included (X)** | Excluded (MND)* *Modules A4, A5, B, C, and D are excluded.			

SM Single Score
Learn about SM Single Score results

Impacts per declared unit	1.72E+01 mPts	2.77E-01 mPts	5.44E+00 mPts
Materials or processes contributing >20% to total impacts in each life cycle stage	Extraction and preprocessing of starch component in biobased binder.	Truck transportation to manufacturing facility.	Electricity and natural gas consumption during manufacturing process.

Life cycle impact results per declared unit

LIFE CYCLE STAGE	A1 RAW MATERIAL SUPPLY	A2 TRANSPORT	A3 MANUFACTURING
Ecological damage			
Impact category / Unit			
GWP, IPCC TOTAL — kg CO_2 eq	5.43E+00	4.77E+00	1.94E+02
GWP, IPCC BIOGENIC — kg CO_2 eq	-3.58E+01	0.00E+00	3.58E+01
GWP, IPCC FOSSIL — kg CO_2 eq	4.12E+01	4.77E+00	1.58E+02
GWP, TRACI 2.1 TOTAL — kg CO_2 eq	9.40E+00	4.71E+00	1.94E+02
GWP, TRACI 2.1 BIOGENIC — kg CO_2 eq	-3.58E+01	0.00E+00	3.58E+01
GWP, TRACI 2.1 FOSSIL — kg CO_2 eq	5.86E-01	1.83E-02	1.91E+00
Ozone depletion — kg CFC-11 eq	1.74E-06	7.31E-08	8.02E-06
Acidification — kg SO_2 eq	5.19E-01	5.60E-03	3.44E-01
Eutrophication — kg N eq	4.41E-01	4.09E-04	3.45E-02
Human health damage			
Impact category / Unit			
Smog — kg O_3 eq	4.03E+00	8.61E-02	4.18E+00
Respiratory effects — kg $PM_{2.5}$ eq	3.85E-02	1.47E-03	2.34E-02
Additional environmental information			
Impact category / Unit			
Carcinogenics — CTU h	91.79%	0.13%	8.08%
Non-carcinogenics — CTU h	94.92%	0.73%	4.35%
Ecotoxicity — CTU e	97.12%	1.58%	1.29%
Fossil fuel depletion — MJ surplus	8.41E+01	9.00E+00	2.93E+02

References

LCA Background Report
LCA of W. R. Meadows BLUE RIDGE FIBERBOARD products (public version), 2025. Developed using the IPCC Fifth Assessment Report (AR5) 100-year time, TRACI v2.1, CML, and Cumulative Energy Demand (LHV) impact assessment methodologies, SimaPro Analyst 9.6 software, and ecoinvent v3.10 and US-EI 2.2 databases.

ISO 14025: 2006 Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

ISO 21930: 2017, Sustainability in buildings and civil engineering works -- Core rules for environmental product declarations of construction products and services serves as the core PCR.

UL Part A: Life Cycle Assessment Calculation Rules and Report Requirements v4.0
March 2022. PCR review conducted by Lindita Bushi, PhD, Senior Research Associate (Athena Sustainable Materials Institute), lindita.bushi@athenasmi.org; Hugues Imbeault-Tétreault (Group AGECO); and Jack Geibig (Ecoform).

UL Part B: Structural and Architectural Wood Products EPD Requirements, v1.1
May 2020. PCR review conducted by Dr. Thomas Gloria, Chair (Industrial Ecology Consultants), t.gloria@industrial-ecology.com; Dr. Indro Ganguly (University of Washington); and Dr. Sahoo (University of Georgia).

UL Environment General Program Instructions v2.5, March 2020 (available upon request)

Download PDF SM Transparency Report/ EPD

SM Transparency Reports (TR) are ISO 14025 Type III environmental declarations (EPD) that enable purchasers and users to compare the potential environmental performance of products on a life cycle basis. 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 21930:2017 §5.5 are met. 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. LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks. These six impact categories are globally deemed mature enough to be included in Type III environmental declarations. Other categories are being developed and defined and LCA should continue making advances in their development. However, the EPD users shall not use additional measures for comparative purposes. 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 structural and architectural wood products allows EPD comparability only when all stages of a life cycle have been considered, when they comply with all referenced standards, use the same sub-category Part B PCR, and use equivalent scenarios with respect to construction works. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

Rating systems

The intent is to reward project teams for selecting products from manufacturers who have verified improved life-cycle environmental performance.

LEED BD+C: New Construction | v4 - LEED v4
Building product disclosure and optimization

Environmental product declarations

○ Industry-wide (generic) EPD	½ product
● Product-specific Type III EPD	1 product

LEED BD+C: New Construction | v4.1 - LEED v4.1
Building product disclosure and optimization

Environmental product declarations

○ Industry-wide (generic) EPD	1 product
● Product-specific Type III EPD	1.5 products

Collaborative for High Performance Schools National Criteria
MW C5.1 – Environmental Product Declarations

● Third-party certified type III EPD	2 points

Green Globes for New Construction and Sustainable Interiors
Materials and resources

- ● NC 3.5.1.2 Path B: Prescriptive Path for Building Core and Shell
- ● NC 3.5.2.2 and SI 4.1.2 Path B: Prescriptive Path for Interior Fit-outs

BREEAM New Construction 2018
Mat 02 - Environmental impacts from construction products

Environmental Product Declarations (EPD)

○ Industry-average EPD	.5 points
○ Multi-product specific EPD	.75 points
● Product-specific EPD	1 point

SM Transparency Report (EPD)™

EPD	LCA
3rd-party reviewed	●
Transparency Report (EPD)	
3rd-party verified	●

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Regions; system boundaries
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Declared unit: 1 m^3
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SimaPro Developer 9.6; ecoinvent v3.10, US-EI 2.2
Public LCA:
LCA of W. R. Meadows Blue Ridge Fiberboard products
In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

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EPD additional content

STRUCTODEK HD

LCA results & interpretation | EPD additional content

Data

Background This product-specific plant-specific declaration was created by collecting production data from the facility in Danville, VA. All unit processes were modeled using primary data. Secondary data sources include those available in the ecoinvent v3.10 and US-EI 2.2 databases.

Product-specific packaging includes poly bags which are typically disposed of at the site of installation.

Allocation The BLUE RIDGE FIBERBOARD facility produces multiple types of panel products each year. To allocate electricity and natural gas consumption accurately to each product, total annual energy consumption was distributed based on the proportion of each product's annual production (by mass) relative to the total plant production. This approach assigns manufacturing activities proportionally to each product type.

All associated manufacturing resources and waste flows were allocated using the same approach. There are no co-products produced during their manufacturing processes. The model used in the LCA ensures that the sum of the allocated inputs and outputs of a unit process shall be equal to the inputs and outputs of the unit process before allocation. This means that no double counting or omissions of inputs or outputs through allocation is occurring.

For recycled content, system boundaries were drawn consistent with the cut-off allocation approach. Post-industrial wood chips, which are used as an input into some of the included production processes, are assumed to enter the system burden-free in that burden associated with the production of virgin wood chips is not allocated to the fiberboard life cycle.

Cut-off criteria for the inclusion of mass and energy flows are 1% of renewable primary resource (energy) usage, 1% nonrenewable primary resource (energy) usage, 1% of the total mass input of that unit process, and 1% of environmental impacts. The total of neglected input flows per module does not exceed 5% of energy usage, mass, and environmental impacts.

The only exceptions to these criteria are substances with hazardous and toxic properties, which must be listed even when the given process unit is under the cut-off criterion of 1% of the total mass. No known flows are deliberately excluded from this declaration, and no substances considered to be hazardous or toxic according to the Resource Conservation and Recovery Act (RCRA), Subtitle C are present in the products. Therefore, these criteria have been met. Biogenic carbon is included in reported results.

Quality
The precision of the data is considered high. BLUE RIDGE FIBERBOARD personnel provided a detailed bill of materials, and facility managers provided utility information for the manufacturing facility. The raw material transportation distances were provided directly by the facility.

The data included is considered complete. The LCA model included all known material and energy flows. As pointed out in that section, no known flows above 1% were excluded and the sum of all excluded flows totals less than 5%, whether evaluated by mass, energy, or potential environmental impact.

The consistency of the model is considered high. Furthermore, the modeling assumptions were consistent throughout the model, with a preference for the ecoinvent v3.10 database.

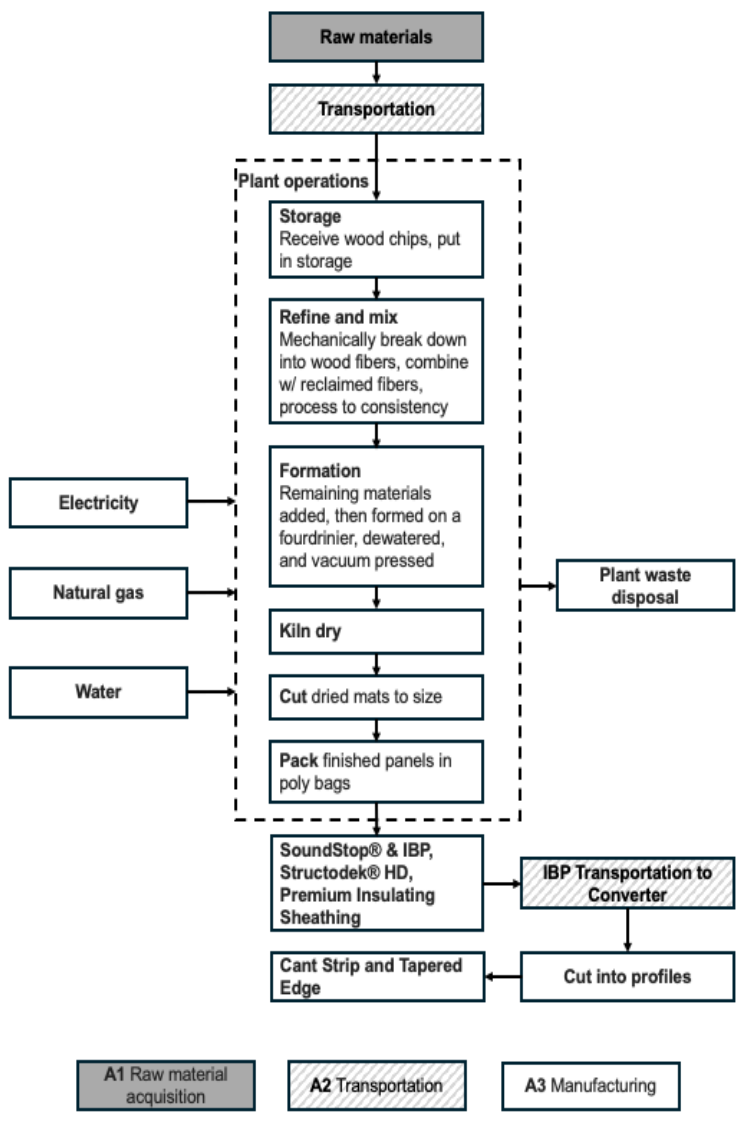
Major system boundary exclusions

- Manufacture and transport of packaging not associated with final product
- Construction of major capital equipment
- Maintenance and operation of support equipment
- Human labor and employee transport
- Disposal of final product, except for biogenic carbon balance reporting

Scenarios and additional technical information

Disposal of waste [C4] While the impacts from final product disposal are out of the scope of this cradle-to-gate study, ISO 21930:2017 requires that biogenic carbon emissions associated with product disposal be separately reported. The biogenic carbon emissions from product in module C4 total 3.58E+01 kg CO_2.

Flow diagram



Major assumptions and limitations

- Generic data sets used for material inputs, transport, and waste processing are considered good quality, but actual impacts from material suppliers, transport carriers, and local waste processing may vary
- The impact assessment methodology categories do not represent all possible environmental impact categories; characterization factors used within the impact assessment methodology may contain varying levels of uncertainty
- LCA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks
- This EPD covers only the cradle-to-gate impacts of products using a declared unit. The results listed in this EPD cannot be used to compare between products.

LCIA impact factors required by the PCR are global warming, ozone depletion, acidification, eutrophication, smog, and fossil fuel depletion; "These six impact categories are globally deemed mature enough to be included in Type III environmental declarations. Other categories are being developed and defined and LCA should continue making advances in their development. However, the EPD users shall not use additional measures for comparative purposes."

LCIA results, resource use, output and waste flows, and carbon emissions & removals per declared unit (1 m^3 of panel)

Parameter	Unit	A1	A2	A3	Total
LCIA results					
GWP, $IPCC_{TOTAL}$	kg CO_2 eq	5.43E+00	4.77E+00	1.94E+02	**2.04E+02**
GWP, $IPCC_{BIOGENIC}$	kg CO_2 eq	-3.58E+01	0	3.58E+01	**0**
GWP, $IPCC_{FOSSIL}$	kg CO_2 eq	4.12E+01	4.77E+00	1.58E+02	**2.04E+02**
GWP, TRACI 2.1_{TOTAL}	kg CO_2 eq	9.40E+00	4.71E+00	1.94E+02	**2.08E+02**
GWP, TRACI $2.1_{BIOGENIC}$	kg CO_2 eq	-3.58E+01	0	3.58E+01	**0**
GWP, TRACI 2.1_{FOSSIL}	kg CO_2 eq	4.52E+01	4.71E+00	1.58E+02	**2.08E+02**
Ozone depletion	kg CFC-11 eq	1.74E-06	7.31E-08	8.02E-06	**9.83E-06**
Acidification	kg SO_2 eq	5.19E-01	5.60E-03	3.44E-01	**8.69E-01**
Eutrophication	kg N eq	4.41E-01	4.09E-04	3.45E-02	**4.76E-01**
Smog	kg O_3 eq	4.03E+00	8.61E-02	4.18E+00	**8.29E+00**
Respiratory effects	kg PM2.5 eq	3.85E-02	1.47E-03	2.34E-02	**6.34E-02**
Additional environmental information					
Carcinogenics	CTUh	91.8%	0.130%	8.08%	**100%**
Non carcinogenics	CTUh	94.9%	0.730%	4.35%	**100%**
Ecotoxicity	CTUe	97.1%	1.58%	1.29%	**100%**
Fossil fuel depletion	MJ surplus	8.41E+01	9.00E+00	2.93E+02	**3.86E+02**
Resource use indicators					
Renewable primary energy used as energy carrier (fuel)	MJ, NCV	3.11E+02	1.04E-01	1.13E+02	**4.24E+02**
Renewable primary resources with energy content used as material	MJ, NCV	1.82E+03	0	0	**1.82E+03**
Total use of renewable primary resources with energy content	MJ, NCV	2.13E+03	1.04E-01	1.13E+02	**2.24E+03**
Non-renewable primary resources used as an energy carrier (fuel)	MJ, NCV	9.65E+02	6.78E+01	3.74E+03	**4.77E+03**
Non-renewable primary resources with energy content used as material	MJ, NCV	2.86E+02	0	0	**2.86E+02**
Total use of non-renewable primary resources with energy content	MJ, NCV	1.25E+03	6.78E+01	3.74E+03	**5.06E+03**
Secondary materials	kg	0.00E+00	0	0	**0.00E+00**
Renewable secondary fuels	MJ, NCV	0	0	0	**0**
Non-renewable secondary fuels	MJ, NCV	0	0	0	**0**
Recovered energy	MJ, NCV	0	0	0	**0**
Use of net fresh water resources	m3	3.08E+01	4.98E-02	3.23E+00	**3.41E+01**
Abiotic depletion (fossil fuels)	MJ, LHV	1.11E+03	6.36E+01	2.23E+03	**3.41E+03**
Output flows and waste category indicators					
Hazardous waste disposed	kg	7.25E+00	1.44E-02	2.02E-01	**7.47E+00**
Non-hazardous waste disposed	kg	8.25E+01	5.82E-02	9.39E+01	**1.77E+02**
High-level radioactive waste, conditioned, to final repository	kg	2.83E-04	7.60E-07	1.89E-05	**3.03E-04**
Intermediate- and low-level radioactive waste, conditioned, to final repository	kg	6.12E-04	1.49E-06	1.21E-02	**1.27E-02**
Components for re-use	kg	0	0	0	**0**
Materials for recycling	kg	0	0	0	**0**
Materials for energy recovery	kg	0	0	0	**0**
Exported energy	MJ	0	0	0	**0**
Carbon emissions and removals					
Biogenic carbon removal from product	kg CO_2	-3.58E+01	0	0	**-3.58E+01**
Biogenic carbon emission from product	kg CO_2	0	0	0	**0**
Biogenic carbon removal from packaging	kg CO_2	0	0	0	**0**
Biogenic carbon emission from packaging	kg CO_2	0	0	0	**0**
Biogenic carbon emission from combustion of waste from renewable sources used in production processes	kg CO_2	0	0	0	**0**
Calcination carbon emissions	kg CO_2	0	0	0	**0**
Carbonation carbon removals	kg CO_2	0	0	0	**0**
Carbon emissions from combustion of waste from non-renewable sources used in production processes	kg CO_2	0	0	0	**0**

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SimaPro Developer 9.6; ecoinvent v3.10, US-EI 2.2
Public LCA:
LCA of W. R. Meadows Blue Ridge Fiberboard products
In accordance with ISO 14044 and the reference PCR, this life cycle assessment was conducted by Sustainable Minds and reviewed by Lindita Bushi, PhD, Senior Research Associate at Athena.

Blue Ridge Fiberboard
250 Celotex Dr.
Danville, VA 24541
www.blueridgefiberboard.com
866-850-8834

Contact us

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How we make it greener

STRUCTODEK HD

Expand all

RAW MATERIALS ACQUISITION

BLUE RIDGE FIBERBOARD recognizes the importance of sourcing local, responsibly sourced raw materials. This commitment not only supports our local economy and creates more substantial, more resilient communities but also ensures that we maintain the highest standards of quality and sustainability in our products.

All materials are sourced from the United States. By partnering with local suppliers who share our dedication to environmental stewardship and ethical practices, we reduce our carbon footprint and promote the well-being of our planet.

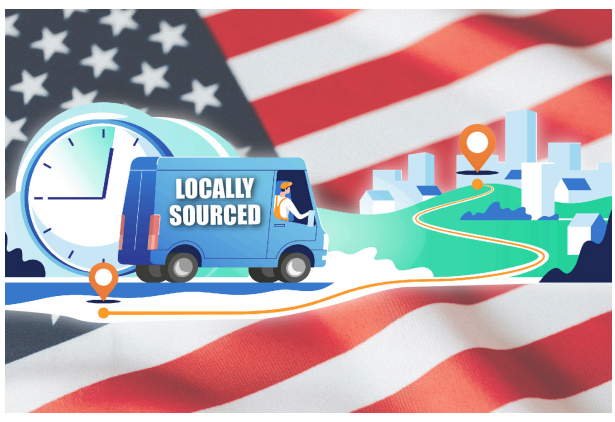
The major material in this product is carbon sequestering wood chips. Our product uses a bio-based binder and adhesive, which are sustainable alternatives to fossil fuel-based binders, further reducing our environmental impact. Our product is free from added formaldehyde, ensuring the safety and health of our employees, customers, and the environment.



TRANSPORATION

Using US-based materials lowers the environmental impact of our transportation, which is crucial for reducing our carbon footprint. By sourcing materials locally, we minimize the effects of long-distance shipping and overseas transportation, which often involve high emissions from fossil fuels.

- Over 94% of wood chips are sourced within 100 miles of manufacturing
- The majority of raw material is sourced within 200 miles
- All packaging is locally sourced



MANUFACTURING

BLUE RIDGE FIBERBOARD encourages ongoing process improvement. It draws on personnel throughout the mill, from management to hourly employees, to analyze the manufacturing processes and recommend and implement methods for constant quality improvement and resource conservation.

In practice, quality control is performed throughout the process from production to finished product by monitoring individual processes, taking measurements, collecting samples, and testing them to the appropriate internal and external standards. These results are then documented for reference. The manufacturing managers review the compiled data routinely and report findings to the appropriate operating personnel.

Biobased materials play a significant role in greener chemistry by being derived from renewable biological resources. These materials often tend to release fewer hazardous chemicals during production and use, contributing to safer working environments and less environmental pollution. This alignment with the principles of green chemistry supports the creation of more sustainable, eco-friendly products and processes, benefiting both human health and the planet.

- 75% is post-industrial recycled content wood sourced from sawmill waste, including but not limited to sawdust, bark, chips, slabs, and cuttings from lumber or timber
- Intentionally added product ingredients have been screened against chemicals listed in the Living Building Challenge Red List 4.0, April 2024 and do not contain any of the listed ingredients
- All manufacturing fiberboard waste, including the sawdust, is reincorporated into the product
- Clarified water and wastewater solids are recycled back into the product



USE & END OF LIFE

BLUE RIDGE FIBERBOARD utilizes a Quality Systems Program to ensure compliance with ASTM, UL, and FM certifications and standards. These rigorous standards safeguard products and are prescriptive of International Building Codes (IBC).

Specifications:

- Classified by Underwriters Laboratories to ANSI/UL 263, UL File R25702
- Conforms to ASTM C208, Type I, Sound deadening board
- Fire Resistance Rated UL Wall Designs: U305, U309, U311, U339, U387, U411, and U465
- Flame Spread Index 85 Smoke Developed 65
- Sound Transmission Class (STC) 23
- Meets the requirements of the Build America, Buy America Act (BABA) and Buy American Act (BAA)
- Contributes to thermal insulation with R-values of 1.3 per ½”

BLUE RIDGE FIBERBOARD is a proud member of the Single-Ply Roofing Industry.

We understand the importance of end-of-life disposal. Because of the material's required installation method and the difficulty of removal once installed, locally available C&D waste disposal methods can be used. The material's biobased makeup allows this product to take advantage of a biodegradable option if one is available.



SM Transparency Report (EPD)™

EPD	LCA
3rd-party reviewed	✓
Transparency Report (EPD)	
3rd-party verified	✓

Validity: 04/24/25 – 04/24/30
SM-WRM – 04242025 – 004

This environmental product declaration (EPD) was externally verified by Lindita Bushi, PhD, Senior Research Associate at Athena, according to ISO 21930:2017; UL Part A; UL Part B for Structural and Architectural Wood Products; and ISO 14025:2006.

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Athena Sustainable Materials Institute

SUMMARY

Reference PCR
UL Part B: Structural and Architectural Wood Products v1.1

Regions; system boundaries
North America; Cradle-to-gate

Declared unit: 1 m^3

LCIA methodology: TRACI 2.1

LCA software; LCI database
SimaPro Developer 9.6; ecoinvent v3.10, US-EI 2.2

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