



## SOUNDSTOP®

SOUNDSTOP sound-deadening fiberboard is a high-quality, cost-effective solution to airborne sound reduction. It favorably increases sound transmission class (STC) and outside inside transmission class (OITC) values of walls, ceilings, and floors by absorbing airborne sound vibrations. Meeting national codes and building standards, SOUNDSTOP is as versatile as it is effective, perfect in applications ranging from walls to ceilings to floors. It can be used in homes and commercial buildings where airborne noise and sound transmission from room to room needs to be eliminated. The product also blocks outside noise from heavy traffic, blaring horns, airports, children playing, or other exterior noises that are a concern.



### Performance dashboard

#### Features & functionality

Cost-effective solution for reducing airborne sound transmission

Enhances acoustic privacy and occupant comfort in interior spaces

Installs easily behind gypsum drywall in wall and ceiling assemblies

Contributes to property value by improving interior sound performance

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

Visit **BLUE RIDGE FIBERBOARD** for more product information:  
[SOUNDSTOP](#)

MasterFormat® 09 81 13  
Product specifications:

[SOUNDSTOP Guide Spec](#)  
[SOUNDSTOP Technical Data Sheet](#)

For spec help, [contact us](#) or call 800-596-9699

#### Environment & materials

##### Improved by:

Utilization of 75% post-industrial waste wood

Biobased 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

Build America, Buy America Act (BABA) and Buy American Act (BAA) compliant

[See LCA, interpretation & rating systems](#)



SM Transparency Report (EPD)™

#### EPD

3rd-party reviewed



Transparency Report (EPD)

3rd-party verified



Validity: 04/24/25 – 04/24/30  
SM-WRM – 04242025 – 001

#### LCA

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<sup>3</sup>

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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Contact us

LCA results & interpretation

SOUNDSTOP

- LCA results & interpretation
- EPD additional content

Scope and summary

- ☒ Cradle to gate
- ☐ Cradle to gate with options
- ☐ Cradle to grave

**Application**

SOUNDSTOP is a cellulose fiberboard designed for reducing airborne noise. It absorbs airborne sound vibration by taking the shock or sound vibrations that travel through drywall and stopping the movement of the sound or shock to the other side. It can be applied to walls, ceilings, and floors to increase sound transmission class (STC) and outside inside transmission class (OITC). It can be used in homes and commercial buildings where airborne noise and sound transmission from room to room need to be eliminated. SOUNDSTOP is installed behind gypsum drywall in interior wall and ceiling applications, or between two layers of subfloor in floor applications.

**Declared unit**

One cubic meter weighing 254 kg (254 kg/m³). 78.7 individual 1 m<sup>2</sup> panels at ½" (12.7 mm) thickness are needed to fulfill the declared unit. The moisture content of the panel is 10% max.

**Manufacturing data**

Reporting period: January 2023 – December 2023

Location: Danville, VA

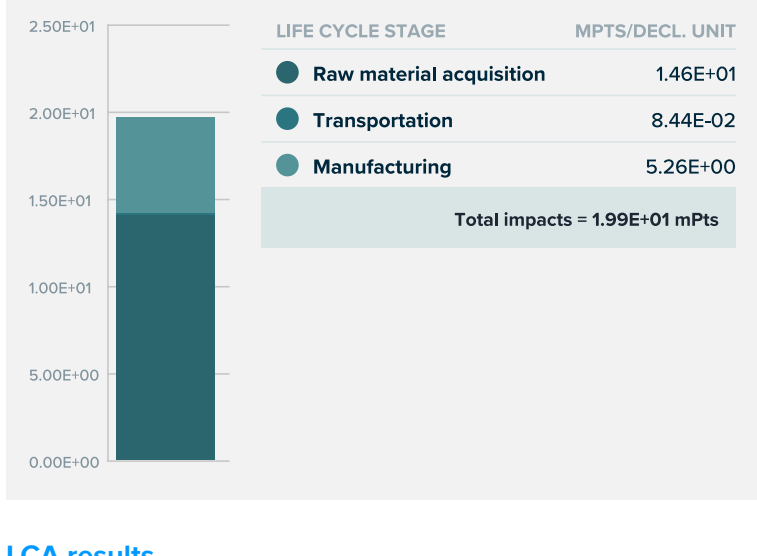
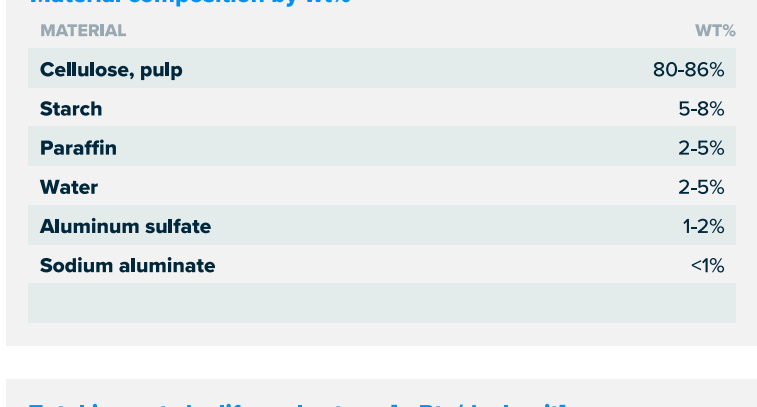
**Sensitivity analysis**

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<sub>2</sub>-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<sub>2</sub>-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 SOUNDSTOP is 1.89E+02 kg CO<sub>2</sub>-eq.



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:<br>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                                                          | 1.46E+01 mPts                                                        | 8.44E-02 mPts                                   | 5.26E+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 <sub>TOTAL</sub>           | kg CO <sub>2</sub> eq   | 1.46E+00     | 1.86E+02         |
| GWP, IPCC <sub>BIOGENIC</sub>        | kg CO <sub>2</sub> eq   | 0.00E+00     | 3.54E+01         |
| GWP, IPCC <sub>FOSSIL</sub>          | kg CO <sub>2</sub> eq   | 1.46E+00     | 1.51E+02         |
| GWP, TRACI 2.1 <sub>TOTAL</sub>      | kg CO <sub>2</sub> eq   | 1.44E+00     | 1.85E+02         |
| GWP, TRACI 2.1 <sub>BIOGENIC</sub>   | kg CO <sub>2</sub> eq   | 0.00E+00     | 3.54E+01         |
| GWP, TRACI 2.1 <sub>FOSSIL</sub>     | kg CO <sub>2</sub> eq   | 1.44E+00     | 1.50E+02         |
| Ozone depletion                      | kg CFC-11 eq            | 2.23E-08     | 7.64E-06         |
| Acidification                        | kg SO <sub>2</sub> eq   | 1.71E-03     | 3.27E-01         |
| Eutrophication                       | kg N eq                 | 1.25E-04     | 5.54E-02         |
| Human health damage                  |                         |              |                  |
| Impact category                      | Unit                    |              |                  |
| Smog                                 | kg O <sub>3</sub> eq    | 2.63E-02     | 3.97E+00         |
| Respiratory effects                  | kg PM <sub>2.5</sub> eq | 4.48E-04     | 2.27E-02         |
| Additional environmental information |                         |              |                  |
| Impact category                      | Unit                    |              |                  |
| Carcinogenics                        | CTU <sub>h</sub>        | 0.05%        | 8.91%            |
| Non-carcinogenics                    | CTU <sub>h</sub>        | 0.28%        | 5.25%            |
| Ecotoxicity                          | CTU <sub>e</sub>        | 5.25%        | 1.56%            |
| Fossil fuel depletion                | MJ surplus              | 2.75E+00     | 2.78E+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](mailto:lindita.bushi@athenasmi.org); Hugues Imbeault-Têtreault (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](mailto: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.

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 out of ten TRACI 2.1 impact categories, followed by the manufacturing stage. For global warming, ozone depletion, and fossil fuel depletion, manufacturing accounted for over 75% of the total results. Among the raw materials, the biobased binder was the largest contributor to total results.

**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<sub>2</sub> 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<sub>2</sub> per year.
- UNECE (United Nations Economic Commission for Europe) emphasizes that the use of wood in the construction industry reduces CO<sub>2</sub> 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



EPD additional content

SOUNDSTOP

- 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.

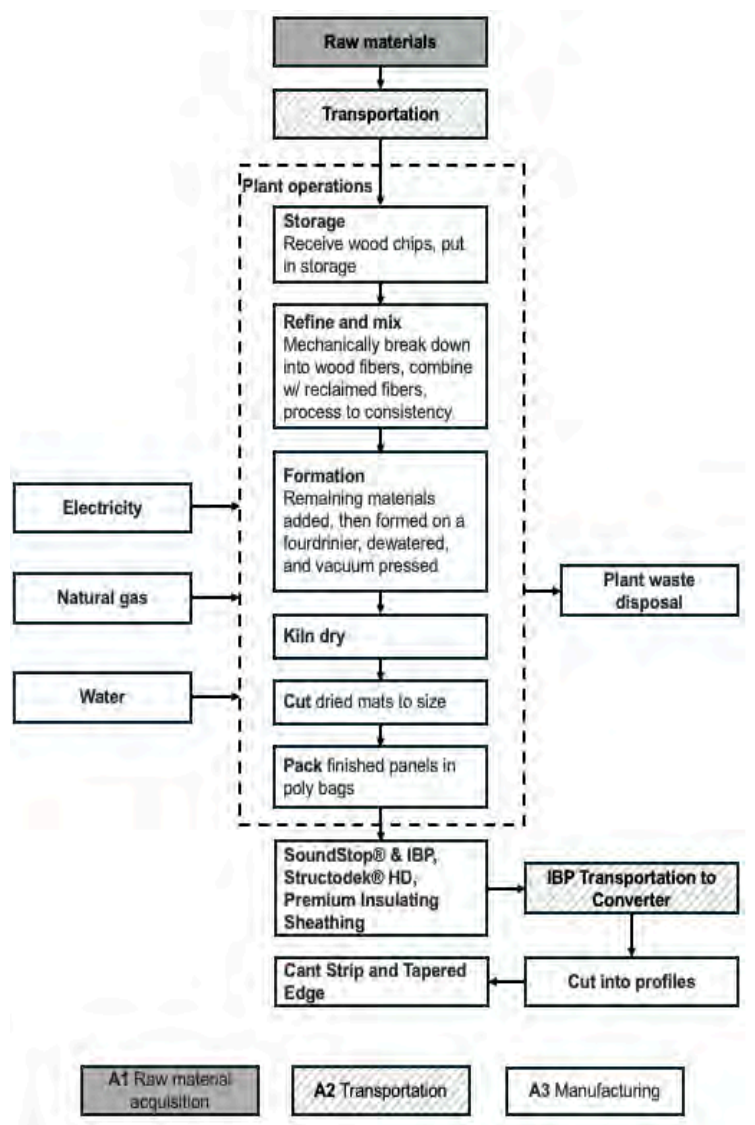
Major system boundary exclusions

- 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 3.54E+01 kg CO<sub>2</sub>.

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<sup>3</sup> of panel)

| Parameter                                                                                             | Unit                  | A1        | A2       | A3       | Total            |
|-------------------------------------------------------------------------------------------------------|-----------------------|-----------|----------|----------|------------------|
| <b>LICA results</b>                                                                                   |                       |           |          |          |                  |
| GWP, IPCC <sub>TOTAL</sub>                                                                            | kg CO <sub>2</sub> eq | -1.07E+00 | 1.46E+00 | 1.86E+02 | <b>1.86E+02</b>  |
| GWP, IPCC <sub>BIOGENIC</sub>                                                                         | kg CO <sub>2</sub> eq | -3.54E+01 | 0        | 3.54E+01 | <b>0</b>         |
| GWP, IPCC <sub>FOSSIL</sub>                                                                           | kg CO <sub>2</sub> eq | 3.43E+01  | 1.46E+00 | 1.51E+02 | <b>1.86E+02</b>  |
| GWP, TRACI 2.1 <sub>TOTAL</sub>                                                                       | kg CO <sub>2</sub> eq | 2.00E+00  | 1.44E+00 | 1.85E+02 | <b>1.89E+02</b>  |
| GWP, TRACI 2.1 <sub>BIOGENIC</sub>                                                                    | kg CO <sub>2</sub> eq | -3.54E+01 | 0        | 3.54E+01 | <b>0</b>         |
| GWP, TRACI 2.1 <sub>FOSSIL</sub>                                                                      | kg CO <sub>2</sub> eq | 3.74E+01  | 1.44E+00 | 1.50E+02 | <b>1.89E+02</b>  |
| Ozone depletion                                                                                       | kg CFC-11 eq          | 1.38E-06  | 2.23E-08 | 7.64E-06 | <b>9.04E-06</b>  |
| Acidification                                                                                         | kg SO <sub>2</sub> eq | 4.23E-01  | 1.71E-03 | 3.27E-01 | <b>7.51E-01</b>  |
| Eutrophication                                                                                        | kg N eq               | 3.44E-01  | 1.25E-04 | 5.54E-02 | <b>3.99E-01</b>  |
| Smog                                                                                                  | kg O <sub>3</sub> eq  | 3.32E+00  | 2.63E-02 | 3.97E+00 | <b>7.31E+00</b>  |
| Fossil fuel depletion                                                                                 | MJ surplus            | 7.51E+01  | 2.75E+00 | 2.78E+02 | <b>3.56E+02</b>  |
| <b>Additional environmental information</b>                                                           |                       |           |          |          |                  |
| Respiratory effects                                                                                   | kg PM2.5 eq           | 4.47E-02  | 4.48E-04 | 2.27E-02 | <b>6.78E-02</b>  |
| Carcinogenics                                                                                         | CTUh                  | 91.02%    | 0.05%    | 8.93%    | <b>100%</b>      |
| Non carcinogenics                                                                                     | CTUh                  | 94.47%    | 0.28%    | 5.25%    | <b>100%</b>      |
| Ecotoxicity                                                                                           | CTUe                  | 97.82%    | 0.62%    | 1.56%    | <b>100%</b>      |
| <b>Resource use indicators</b>                                                                        |                       |           |          |          |                  |
| Renewable primary energy used as energy carrier (fuel)                                                | MJ, NCV               | 4.35E+01  | 3.17E-02 | 1.08E+02 | <b>1.51E+02</b>  |
| Renewable primary resources with energy content used as material                                      | MJ, NCV               | 7.21E+02  | 0        | 0        | <b>7.21E+02</b>  |
| Total use of renewable primary resources with energy content                                          | MJ, NCV               | 7.65E+02  | 3.17E-02 | 1.08E+02 | <b>8.73E+02</b>  |
| Non-renewable primary resources used as an energy carrier (fuel)                                      | MJ, NCV               | 5.04E+02  | 2.07E+01 | 3.56E+03 | <b>4.08E+03</b>  |
| Non-renewable primary resources with energy content used as material                                  | MJ, NCV               | 2.81E+02  | 0        | 0        | <b>2.81E+02</b>  |
| Total use of non-renewable primary resources with energy content                                      | MJ, NCV               | 7.85E+02  | 2.07E+01 | 3.56E+03 | <b>4.36E+03</b>  |
| Secondary materials                                                                                   | kg                    | 1.62E+02  | 0        | 0        | <b>1.62E+02</b>  |
| Renewable secondary fuels                                                                             | MJ, NCV               | 0         | 0        | 0        | <b>0</b>         |
| Non-renewable secondary fuels                                                                         | MJ, NCV               | 0         | 0        | 0        | <b>0</b>         |
| Recovered energy                                                                                      | MJ, NCV               | 0         | 0        | 0        | <b>0</b>         |
| Use of net fresh water resources                                                                      | m3                    | 2.68E+01  | 2.71E-02 | 3.74E+00 | <b>3.06E+01</b>  |
| Abiotic depletion (fossil fuels)                                                                      | MJ, LHV               | 7.07E+02  | 1.94E+01 | 2.12E+03 | <b>2.85E+03</b>  |
| <b>Output flows and waste category indicators</b>                                                     |                       |           |          |          |                  |
| Hazardous waste disposed                                                                              | kg                    | 5.37E+00  | 4.39E-03 | 1.86E-01 | <b>5.56E+00</b>  |
| Non-hazardous waste disposed                                                                          | kg                    | 6.18E+01  | 1.78E-02 | 8.79E+01 | <b>1.50E+02</b>  |
| High-level radioactive waste, conditioned, to final repository                                        | kg                    | 1.40E-04  | 2.32E-07 | 1.64E-05 | <b>1.56E-04</b>  |
| Intermediate- and low-level radioactive waste, conditioned, to final repository                       | kg                    | 2.98E-04  | 4.54E-07 | 1.15E-02 | <b>1.18E-02</b>  |
| Components for re-use                                                                                 | kg                    | 0         | 0        | 0        | <b>0</b>         |
| Materials for recycling                                                                               | kg                    | 0         | 0        | 0        | <b>0</b>         |
| Materials for energy recovery                                                                         | kg                    | 0         | 0        | 0        | <b>0</b>         |
| Exported energy                                                                                       | MJ                    | 0         | 0        | 0        | <b>0</b>         |
| <b>Carbon emissions and removals</b>                                                                  |                       |           |          |          |                  |
| Biogenic Carbon Removal from Product                                                                  | kg CO <sub>2</sub>    | -3.54E+01 | 0        | 0        | <b>-3.54E+01</b> |
| Biogenic Carbon Emission from Product                                                                 | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |
| Biogenic Carbon Removal from Packaging                                                                | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |
| Biogenic Carbon Emission from Packaging                                                               | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |
| Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |
| Calcination Carbon Emissions                                                                          | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |
| Carbonation Carbon Removals                                                                           | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |
| Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes     | kg CO <sub>2</sub>    | 0         | 0        | 0        | <b>0</b>         |



## How we make it greener

### SOUNDSTOP

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, which is a sustainable alternative 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, 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) and International Residential Codes (IRC).

##### 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, U465, U340, U341, V324, V346, and W307
- 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 process 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)<sup>™</sup>

### EPD

3rd-party reviewed



Transparency Report (EPD)

3rd-party verified



Validity: 04/24/25 – 04/24/30  
SM-WRM – 04242025 – 001

### LCA

**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<sup>3</sup>

**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.**

#### Blue Ridge Fiberboard

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