

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017

SmartEPD-2026-139-0931-01

Symphony m High NRC



Date of Issue:	Expiration:	Last updated:
Jun 17, 2026	Jun 17, 2031	Jun 17, 2026



General Information

CertainTeed Saint-Gobain

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🌐 [certainteed.com](https://www.certainteed.com)



Product Name:	Symphony m High NRC
Declared Unit:	0.093 m2
Declaration Number:	SmartEPD-2026-139-0931-01
Date of Issue:	June 17, 2026
Expiration:	June 17, 2031
Last updated:	June 17, 2026
EPD Scope:	Cradle to gate with other options A1 - A3, A4, A5, C1 - C4
Market(s) of Applicability:	North America

General Organization Information

CertainTeed Corporation, a subsidiary of Saint-Gobain, is a leading North American manufacturer of interior building materials including gypsum, ceilings, and insulation as well as exterior building materials which include roofing, vinyl siding, trim, and water protection.

Further information can be found at: <https://www.certainteed.com/>

Limitations, Liability and Ownership

Environmental declarations from different programs (ISO 14025) may not be comparable.

Comparison of the environmental performance of products using EPD information shall be based on the product's use and impacts at the building level, and therefore EPDs may not be used for comparability purposes when not considering the whole building life cycle.

EPD comparability is only possible when all stages of a life cycle have been considered. 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. A manufacturer shall not make claims based on an industry-average EPD which leads the market to believe the industry-average is representative of manufacturer-specific or product-specific results. The environmental impact results of products in this document are based on a declared unit and therefore do not provide sufficient information to establish comparisons.

The results shall not be used for comparisons without knowledge of how the physical properties of the product impact the precise function at the construction level. The environmental impact results shall be converted to a functional unit basis before any comparison is attempted.

The EPD owner has sole ownership, liability, and responsibility for the EPD.

Reference Standards

Standard(s):	ISO 14025 and ISO 21930:2017
Core PCR:	UL Part A PCR for Building-Related Products and Services v.4

	Date of issue: March 01, 2022
Sub-category PCR:	UL Part B: Non-Metal Ceiling and Interior Wall Panels v.2
	Date of issue: April 13, 2021
	Valid until: October 31, 2026
Sub-category PCR review panel:	 Contact Smart EPD for more information.
General Program Instructions:	 Smart EPD General Program Instructions v.2.0, March 2025

Verification Information

LCA Author/Creator:	 Elise.Curren@saint-gobain.com
EPD Program Operator:	 Smart EPD
	 info@smartepd.com
	 www.smartepd.com
	 585 Grove St., Ste. 145, Herndon, VA 20170, USA
Verification:	Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071:
	 Lucas Pedro Berman  Senda - Consultoria Ambiental & Energetica
	 info@sendaconsultorias.com
	Independent external verification of EPD, according to ISO 14025 and reference PCR(s):
	 Lucas Pedro Berman  Senda - Consultoria Ambiental & Energetica
	 info@sendaconsultorias.com

External

External

Product Information

Declared Unit:	0.093 m2
Mass:	0.51 kg
Product Specificity:	 Product Average
	 Product Specific
Variation in GWP Result (Products):	-1% to +3%

Product Description

Symphony m ceiling panels are made of a unique mineral fiber blend that provides excellent acoustic performance, making them ideal for spaces where sound control is a priority, such as conference rooms, classrooms, and healthcare facilities. With an NRC (Noise Reduction Coefficient) rating of up to 0.85, these tiles can significantly reduce unwanted noise and echo, creating a more comfortable and productive environment.

The product offering includes:

- Symphony m High NRC: Provides exceptional sound mitigation for areas that demand high acoustical performance
- Symphony m High CAC: Offers superior sound blocking, coupled with high sound absorption (NRC-0,80 / CAC-40-42)
- Symphony m Rx: Best suited for healthcare applications and clean room installations

Further information can be found at: <https://certainteed.widen.net/content/uvvda3kfox/pdf/symphonym-collection-data-sheet-e-us-2504ctc.pdf?u=nwk4fd>

Product Specifications

Product Classification Codes:	EC3 - Finishes -> CeilingPanel -> AcousticalCeilings UNSPSC - 301616
Sound absorption coefficient (NRC) (ASTM C423):	0.80-0.85
Light reflectance (ASTM E1477):	0.90 %
Interzone Attenuation of Open Office Components (AC):	N/A
Sound Transmission Class (STC) (ASTM E413 and ASTM E90):	N/A dB
Sound Attenuation Between Rooms Sharing a Common Ceiling Plenum (CAC)(ASTM E1414 and Classification E413):	35-42 dB
Surface burning characteristics of building materials (ASTM E84, ASTM E1264):	ASTM E1264 Class A for flame spread & smoke development flame spread/smoke developed
Declared thickness:	2.22 cm
Surface weight per declared unit:	0.51 kg/m ²

Material Composition

Material/Component Category	Origin	% Mass
Mineral Fiber Board	None	87-97%
Paint	None	3-9%
Laminate	None	0-4%
Adhesive	None	0-2%

Packaging Material	Origin	kg Mass
Cardboard Box	None	2.49E-03
Plastic Film	None	7.47E-04
Label	None	3.62E-05
Pallet	None	7.11E-03

Biogenic Carbon Content	kg C per 0.093 m ²
Biogenic carbon content in product	0.0271
Biogenic carbon content in accompanying packaging	0.00483

Hazardous Materials

No regulated hazardous or dangerous substances are included in this product.

EPD Data Specificity

- Primary Data Year: November 2024- October 2025
- Manufacturing Specificity:
 - ✗ Industry Average
 - ✗ Manufacturer Average
 - ✓ Facility Specific

Averaging:
This is a product average EPD for products manufactured at a facility in Plymouth, WI. The fiber board that is used as a raw material is produced in L'Anse, MI at a separate CertainTeed Manufacturing facility. Multiple products within the similar product lines were analyzed and a weighted average based on production volume was calculated to showcase the results.

System Boundary

Production	A1	Raw material supply	✓
	A2	Transport	✓
	A3	Manufacturing	✓
Construction	A4	Transport to site	✓
	A5	Assembly / Install	✓
Use	B1	Use	ND
	B2	Maintenance	ND
	B3	Repair	ND
	B4	Replacement	ND
	B5	Refurbishment	ND
	B6	Operational Energy Use	ND
	B7	Operational Water Use	ND
End of Life	C1	Deconstruction	✓
	C2	Transport	✓
	C3	Waste Processing	✓
	C4	Disposal	✓

Benefits & Loads Beyond System Boundary	D	Recycling, Reuse Recovery Potential	ND
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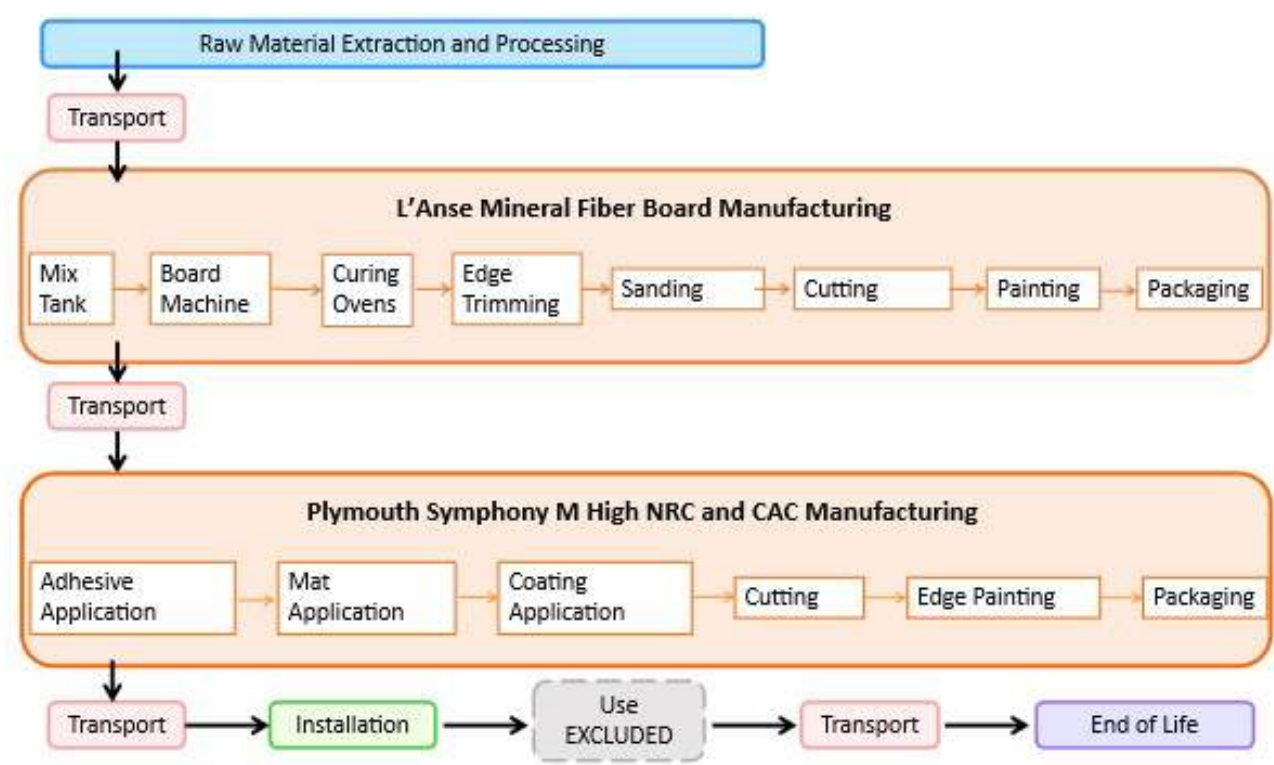
Note:

ND = Module not declared

Plants

- CertainTeed Architectural Solutions 1415 Pilgrim Rd, Plymouth, WI, USA
- CertainTeed Architectural Solutions 200 S Main St, L'Anse, MI 49946, USA

Product Flow Diagram



Software And Database

- LCA Software:

Sphera LCA for Experts (formerly GaBi) v. 10.8
- LCI Foreground Database(s):

Sphera Managed LCA Content v. v. 2025.2
- LCI Background Database(s):

EcolInvent v. 3.11

A foreground LCI database is the database used to model the primary, site-specific data collected for this EPD. A background LCI database is the database used to model generic or non-specific data.

Data Quality

Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty. The data sources used are complete and representative of North America (depending on the material source) in terms of the geographic and technological coverage and are less than ten years old. Any deviations from these initial data quality requirements for secondary data are documented in the report.

The results of an LCA are only as good as the quality of input data used. Important data quality factors include precision (measured, calculated, or estimated), completeness, consistency, and reproducibility. The primary data from the manufacturing facilities was from November 2024 to October 2025. Each background dataset used was taken from Sphera's Managed LCA Content v2025.2, US LCI, and Ecoinvent v3.11 databases. Background datasets used in this study may be found in table Table 3-1: Data Sources and Quality for LCA. These databases are widely distributed and referenced within the LCA community and are either partially or fully critically reviewed.

Life Cycle Module Description

Raw Materials and Product Recipe (Module A1)

A thorough analysis of the material inputs was completed for the inventory of this study.

Raw Material Transportation (Module A2)

Raw materials are transported to the manufacturing sites by standard freight truck, train, or ocean freighters. Unless otherwise noted, transport vehicles are fueled with diesel fuel.

Manufacturing Process Overview (Module A3)

A detailed analysis of the ceiling tile manufacturing process was completed by the Saint-Gobain North American Environmental, Social and Governance (ESG) department to observe and understand the manufacturing processes for the mineral fiber board manufacture. The mineral fiber board is produced at the CertainTeed manufacturing facility in L'Anse, Michigan. To produce the tiles, the raw materials for the core component are mixed. The resulting slurry is filtered to remove any impurities, and fed into the board machine where the excess water is drained. Boards are dried in a large oven heated with natural gas and waste steam. The panel sections of the mineral fiber board are then trimmed, cut to size, and further finished with various fissuring or texturing options. The coatings are then applied to the entire surface of the boards and heated a second time to cure the coating.

At the CertainTeed Plymouth facility, glue is applied to the mineral fiber boards for the laminate to adhere to the board. After the laminate is added to the panel, paint is applied and then the panels are put through a natural gas oven to dry. The panels are then cut to size, packaged, and shipped.

Packaging (Module A3)

Packaging of the final product after production is included in the life cycle assessment. The product is stacked in cardboard cartons, wrapped in shrink wrap, and paper labels affixed. The packages of product in cardboard sleeves are then stacked on a pallet with other finished product and wrapped in shrink wrap again before final shipping. The weight of each material per square foot of finished product was calculated, and was assumed to be the same for each of the product categories included in this study.

Transportation (Module A4)

Final products are transported on trucks throughout the United States and Canada. This study used distribution locations and volumes from the reference period to obtain the distribution transportation distance.

Product Installation (Module A5)

Ceiling Panels are installed by hand by maneuvering and tilting the panels above the ceiling grid, then carefully resting the panels on the grid. Panels for borders are cut to size before installation with a handheld cutting tool.

Use (Modules B1-B7)

The use phase is excluded from the study. The associated results tables will be excluded from the Scenarios Section.

End of Life (C1-C4).

This study assumes a product service life of 30 years. The selected service life used in this study reflects the indicated in the PCR. The end-of-life treatment reflects the product disposal assumptions per the PCR.

LCA Discussion

Allocation Procedure

Allocation was conducted based on the share of square footage of net saleable production during the reference period (November 1, 2024-October 31, 2025) for both L'Anse, MI and Plymouth, WI. The resource consumption related to production scales with surface area, thus square footage is the most appropriate allocation basis.

Internal recycling of the product occurs at the L'Anse, MI facility. The process is a closed-loop recycling process, where "broke" material is created from offcuts and excess material during edge trimming, sanding and cutting. This material is put through a pulper and returned back to the mix tank. Because the scrap rate exceeds the consumption of internal recycled material, broke is treated as a waste product. All manufacturing and raw material burdens are attributed to the mineral fiber board, and broke material inputs re-enter the system burden free. Electricity consumption for the broke pulper is included in the overall electricity consumption for the site, and is accounted for in the mineral fiber board. Broke is not considered a secondary raw material. All secondary material reported is pre or post-consumer secondary material sourced externally.

Cut-off Procedure

The study used the cut-off approach. No credit was taken for recycled content at end of life.

Renewable Electricity

Energy Attribute Certificates (EACs) such as
Renewable Energy Certificates (RECs) or Power
Purchase Agreements (PPAs) are included in the
baseline reported results:

✗ No

Scenarios

Transport to the building/construction site (A4)

A4 Module

Fuel Type:	Average Fuel Mix
Vehicle Type:	Combination Truck
Transport Distance:	844 km
Packaging Mass:	1.04E-02 kg
Weight of products transported:	.51 kg
Assumptions for scenario development:	Final products are transported on trucks throughout the United States and Canada.

Installation in to the building/construction site (A5)

A5 Module

Installation Scrap Rate Assumed:	7 %
Product Lost per Declared/Functional Unit:	3.57E-02 kg
Waste Materials at the Construction Site Before Waste Processing:	4.61E-02 kg
Biogenic Carbon Contained in Packaging (kg C):	4.52E-03 kg
Assumptions for scenario development:	Ceiling Panels use a suspended grid system to hold them place. This study covers the ceiling panels only and does not include the grid system. Ceiling Panels are installed by hand by maneuvering and tilting the panels above the ceiling grid, then carefully resting the panels on the grid. Panels for borders are cut to size before installation with a handheld cutting tool. As required by the PCR, this study assumes a 7% scrap rate of the ceiling panels from the installation of the product. Packaging disposal assumptions based off the Product Category Rules for Building-Related Product and Services: Part A – Life Cycle Assessment Calculation Rules and Report Requirements. Version 4.0 . March 2022. UL Environment.

End of Life (C1 - C4)

C1 - C4 Modules

Recovery

Recycling:	8.81E-04 kg
Landfill:	5.09E-01 kg

Disposal

Product or Material for Final Disposal:	5.10E-01 kg
Removals of Biogenic Carbon:	9.29E-02 kg CO2

Assumptions for scenario development:

This study assumes a product service life of 30 years. The selected service life used in this study reflects the indicated in the PCR. Product disposal assumptions based off the Product Category Rules for Building-Related Product and Services: Part A – Life Cycle Assessment Calculation Rules and Report Requirements. Version 4.0 March 2022. UL Environment.

Results

Environmental Impact Assessment Results

IPCC AR5 GWP 100, TRACI 2.1, CML 2016 v4.8

per 0.093 m2 of product.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

Impact Category	Unit	Method	A1 - A3	A4	A5	C1	C2	C3	C4
GWP-total	kg CO2 eq	IPCC AR5 GWP 100	1.04e+0	4.13e-2	1.04e-1	0	1.68e-3	0	1.04e-1
GWP-total (excl biogenic)	kg CO2 eq	IPCC AR5 GWP 100	1.09e+0	4.13e-2	8.26e-2	0	1.68e-3	0	1.16e-2
ODP	kg CFC 11 eq	TRACI 2.1	9.13e-9	1.54e-12	6.40e-10	0	6.27e-14	0	2.38e-15
AP	kg SO2 eq	TRACI 2.1	3.83e-3	2.45e-4	2.92e-4	0	9.95e-6	0	5.77e-5
EP	kg N eq	TRACI 2.1	1.81e-3	1.36e-5	1.28e-4	0	5.51e-7	0	2.39e-6
POCP	kg O3 eq	TRACI 2.1	4.16e-2	6.73e-3	3.53e-3	0	2.74e-4	0	1.03e-3
ADP-fossil	MJ	CML 2016 v4.8	1.48e+1	5.19e-1	1.11e+0	0	2.11e-2	0	1.65e-1

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

Resource Use Indicator

per 0.093 m2 of product.

Indicator	Unit	A1 - A3	A4	A5	C1	C2	C3	C4
RPRE	MJ	2.46e+0	0	1.75e-1	0	0	0	2.42e-2
RPRM	MJ	7.37e-1	0	5.16e-2	0	0	0	0
NRPRE	MJ	1.53e+1	5.24e-1	1.15e+0	0	2.13e-2	0	1.70e-1
NRPRM	MJ	3.87e-2	0	2.71e-3	0	0	0	0
SM	kg	3.21e-1	0	2.25e-2	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0
FW	m3	2.15e-2	0	1.51e-3	0	0	0	1.85e-5
RE	MJ	3.00e+0	4.00e+0	5.00e+0	1.30e+1	1.40e+1	1.50e+1	1.60e+1

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRM or PENRM = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

Waste and Output Flow Indicators

per 0.093 m2 of product.

Indicator	Unit	A1 - A3	A4	A5	C1	C2	C3	C4
HWD	kg	1.41e-2	0	1.01e-3	0	0	0	4.07e-11
NHWD	kg	3.00e-1	0	6.27e-2	0	0	0	5.10e-1
HLRW	kg	1.73e-7	0	1.30e-8	0	0	0	2.13e-9
ILLRW	kg	1.59e-4	0	1.19e-5	0	0	0	1.87e-6
CRU	kg	0	0	0	0	0	0	0
MFR	kg	1.27e-2	0	8.68e-3	0	0	0	8.81e-4
MER	kg	0	0	6.36e-4	0	0	0	0
EEE	MJ	0	0	8.83e-4	0	0	0	0
EET	MJ	0	0	1.81e-3	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

Carbon Emissions and Removals

per 0.093 m² of product.

Indicator	Unit	A1 - A3	A4	A5	C1	C2	C3	C4
BCRP	kg CO ₂	-9.29e-2	0	-6.50e-3	0	0	0	0
BCEP	kg CO ₂	0	0	6.95e-3	0	0	0	9.29e-2
BCRK	kg CO ₂	-1.66e-2	0	-1.16e-3	0	0	0	0
BCEK	kg CO ₂	0	0	1.78e-2	0	0	0	0
BCEW	kg CO ₂	0	0	0	0	0	0	0
CCE	kg CO ₂	0	0	0	0	0	0	0
CCR	kg CO ₂	0	0	0	0	0	0	0
CWNR	kg CO ₂	0	0	0	0	0	0	0

Note:

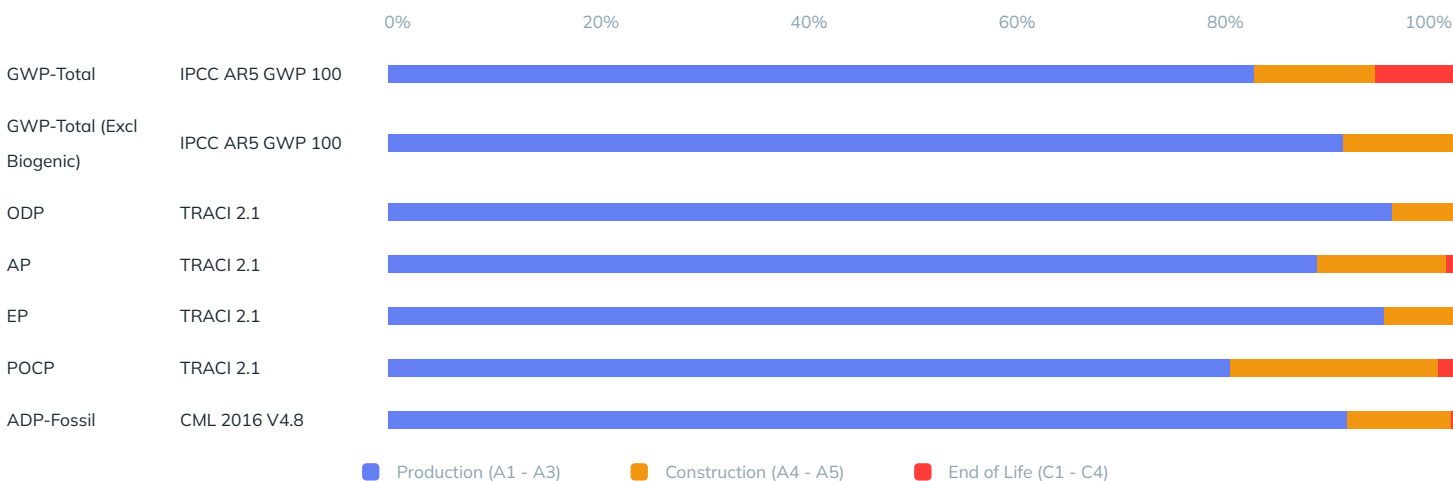
Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

Interpretation

Based on the results from the life cycle assessment, life cycle impacts are strongly driven by the raw materials. This stage accounts for 83% of the GWP-Fossil and GWP-total impact, and is the main contributor to most indicators assessed in this study. Across the study, the input with the most significant contribution towards most indicators was the mineral fiber board from L'Anse. Within the mineral fiber board, the mineral wool and natural gas contribute significantly towards the material's impact. To reduce the impact of the raw materials, it is recommended that the site works on improving yields and incorporating more internally recycled material into the product. To reduce processing impacts, it is recommended that the site reduced natural gas consumption through improved energy efficiency or electrification of gas dryers.



Modified Impact Results: Renewable Electricity

per 0.093 m2 of product.

Impact Category	Unit	Method	A1 - A3	A4	A5	C1	C2	C3	C4
GWP-total	kg CO2 eq	IPCC AR5 GWP 100	9.84e-1	4.13e-2	9.84e-2	0	1.68e-3	0	1.04e-1
GWP-fossil	kg CO2 eq	IPCC AR5 GWP 100	1.04e+0	4.13e-2	7.72e-2	0	1.68e-3	0	1.16e-2
ODP	kg CFC 11 eq	TRACI 2.1	9.58e-9	1.54e-12	6.71e-10	0	6.27e-14	0	2.38e-15
AP	kg SO2 eq	TRACI 2.1	3.81e-3	2.45e-4	2.89e-4	0	9.95e-6	0	5.77e-5
EP	kg N eq	TRACI 2.1	1.83e-3	1.36e-5	1.30e-4	0	5.51e-7	0	2.39e-6
POCP	kg O3 eq	TRACI 2.1	4.06e-2	6.74e-3	3.43e-3	0	2.74e-4	0	1.03e-3
ADP-fossil	MJ	CML 2016 v4.8	1.43e+1	5.19e-1	1.05e+0	0	2.11e-2	0	1.65e-1
ADP-fossil	MJ	TRACI 2.1	ND	ND	ND	ND	ND	ND	ND

Note:

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

Saint-Gobain is committed to achieving Carbon Neutrality by 2050. In January 2021, Saint-Gobain North America (SGNA) started receiving Renewable Energy Certificates (RECs) from a 12-year virtual power purchase agreement (vPPA) with the Blooming Grove Wind Farm in McLean County, Illinois. In 2024, SGNA also began receiving RECs from Danish Fields Solar Project (15-year renewable electricity supply agreement) and Cottonwood Bayou Solar Project (10-year renewable electricity supply agreement), two solar projects in Texas.

Each year within time periods of these renewable energy agreements, the company receives and retires these RECs, effectively reducing CO2 equivalent emissions from electricity usage in the United States and Canada. The retirement of these RECs is done on a yearly basis. Considering most of the reference period for this study is in 2025, the electricity split for 2025 was selected to model the electricity with renewable energy. The table below shows the breakdown of electricity consumption at the site in 2025.

The updated results incorporate the impact of RECs on the electricity used in the manufacturing process (A3), as shown in the aggregated A1, A2, and A3 data in the 'Modified Impact Results: Renewable Electricity' table. The reduced impacts resulting from allocated RECs at the L'Anse, MI site were calculated using 100% wind-generated electricity, covering 30% of the site's electricity consumption in 2025 and 100% solar-generated electricity covering 44% of the site's electricity consumption in 2025. The reduced impacts resulting from allocated RECs at the Plymouth, WI site were calculated using 100% wind-generated electricity, covering 30% of the site's electricity consumption in 2025 and 100% solar-generated electricity covering 43% of the site's electricity consumption in 2025. The Blooming Grove REC data was modelled using the 'US-SERC Electricity production, wind, 1-3MW turbine, onshore' dataset, with a carbon intensity of 13.2 kg CO2e/MWh*. The Texas Solar REC data for Danish Fields and Cottonwood Bayou was modelled using the 'US-TRE electricity product, 3kWp slanted-roof installation, multi-Si, panel, mounted' dataset, with a carbon intensity of 66.4 kg CO2e/MWh*. Any remaining energy not covered by RECs was modelled based on local energy grid information for the manufacturing site(s).

*GWP IPCC AR5 (excluding biogenic carbon)

Further Information

HPD available

Declare Living Building Challenge Red List Free

USDA certified Bio-Based content up to 98%

References

- Product Category Rules for Building-Related Product and Services: Part A – Life Cycle Assessment Calculation Rules and Report Requirements. Version 4. March 2022. UL Environment.
- Product Category Rule Guidance for Building-Related Products and Services Part B: Non-Metal Ceiling and Interior Wall Panel EPD Requirements, Version 2.0 2021. UL Environment.
- ISO 14040: 2006 Series – Environmental Management-Life Cycle Assessment
- ISO 21930:2017– Sustainability in building construction – Environmental declaration of building products
- IPCC 2006 Guidelines Vol 1
- LCA FE Databases. <https://LCA.FE.sphera.com/america/>
- US LCI Database. <https://www.nrel.gov/lci/>
- Ecoinvent v3.11 Database. <http://ecoinvent.org/>
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