

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025:2006 AND ISO 21930:2017

SmartEPD-2026-145-1091-01

5/8" FireLITE® Type X - Seattle



certainteed
SAINT-GOBAIN



Date of Issue: Expiration: Last updated:
Oct 07, 2026 Oct 07, 2031 Oct 07, 2026

Refer to the EPD Library at www.smartepd.com for the latest EPD listing information



General Information

CertainTeed Saint-Gobain

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Sustainability@Saint-Gobain.com

 certainteed.com



Product Name:	5/8" FireLITE® Type X - Seattle
Functional Unit:	1,000 ft2
Declaration Number:	SmartEPD-2026-145-1091-01
Date of Issue:	October 07, 2026
Expiration:	October 07, 2031
Last updated:	October 07, 2026
EPD Scope:	Cradle to grave A1 - A3, A4, A5, B1 - B7, 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. The EPD owner has sole ownership, liability, and responsibility for the EPD.

Reference Standards

Standard(s):	ISO 14025:2006 and ISO 21930:2017
Core PCR:	Smart EPD® Part A Product Category Rules for Building and Construction Products and Services, 1000, v1.2 Date of issue: March 14, 2025
Sub-category PCR:	Smart EPD® Part B PCR for Gypsum Panels, 1000-004, v2.0 Date of issue: February 24, 2025 Valid until: February 24, 2030

Sub-category PCR review panel:

General Program Instructions:

 Contact Smart EPD for more information.

 Smart EPD General Program Instructions v.2.0, March 2025

Verification Information

LCA Author/Creator:

EPD Program Operator:

Verification:

 Saint-Gobain North American ESG Sustainability Group

 sustainability@saint-gobain.com

 Smart EPD

 info@smartepd.com

 www.smartepd.com

 585 Grove St., Ste. 145, Herndon, VA 20170, USA

Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071:

 Vijay Thakur

 Individual Verifier

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Independent external verification of EPD, according to ISO 14025 and reference PCR(s):

 Vijay Thakur

 Individual Verifier

 thakur.vijay3011@gmail.com

External

External

Product Information

Functional Unit:

Mass:

Reference Service Life:

Product Specificity:

1,000 ft2

879 kg

75 Years

 Product Average

 Product Specific

Product Description

CertainTeed FireLITE® Type X Lightweight Drywall Panel is an interior drywall panel consisting of a non-combustible, fire-resistant Type X gypsum core enclosed in 100% recycled face and back paper. CertainTeed FireLITE® Type X Lightweight Drywall Panel is a lightweight gypsum board and is more than 10% lighter vs. standard 5/8" type X Drywall Panels. CertainTeed FireLITE® Type X Lightweight Drywall Panels feature a specially formulated core providing fire resistance ratings when used in tested assemblies. Long edges are slightly tapered, allowing joints to be reinforced and concealed with joint tape and joint compound. CertainTeed FireLITE® Type X Lightweight Drywall Panels are available in a variety of lengths and widths.

Further information can be found at: <https://www.certainteed.com/products/drywall-products/firelite-type-x>

Product Specifications

Product Classification Codes:

Form Factor:

EC3 - Finishes -> Gypsum

UNSPSC - 301615

Finishes >> Gypsum

Options:	✓ Other (specify)
Other (specify):	Fire Resistant
CSI/Masterformat:	Gypsum Board
Product class and standard:	Gypsum Board (ASTM C1396)
Core type:	Type X
Face type:	Paper
Options:	✓ Recycled paper (post-consumer)
Recycled paper (pre-consumer) Percentage:	100 %

Material Composition

Material/Component Category	Origin	% Mass
Gypsum	Confidential	85 - 95
Internally Recycled Gypsum	Confidential	2 - 6
Paper	Confidential	2 - 6
Silicone	Confidential	2 - 5
Fiberglass	Confidential	0 - 1
Additives	Confidential	0 - 1

Packaging Material	Origin	kg Mass
Tape	Confidential	0.2
Spacer (Rejected gypsum board)	Confidential	1.65
Rail Bad	Confidential	0.05
Trailer Barrier	Confidential	0.05

Biogenic Carbon Content		kg C per 1000 ft2
Biogenic carbon content in product		17.11
Biogenic carbon content in accompanying packaging		0

Hazardous Materials
No regulated hazardous or dangerous substances are included in this product

EPD Data Specificity

Primary Data Year:	2025
Manufacturing Specificity:	✗ Industry Average

- ✗
Manufacturer Average

✓
Facility Specific

Averaging:
Averaging was not conducted for this EPD.

System Boundary

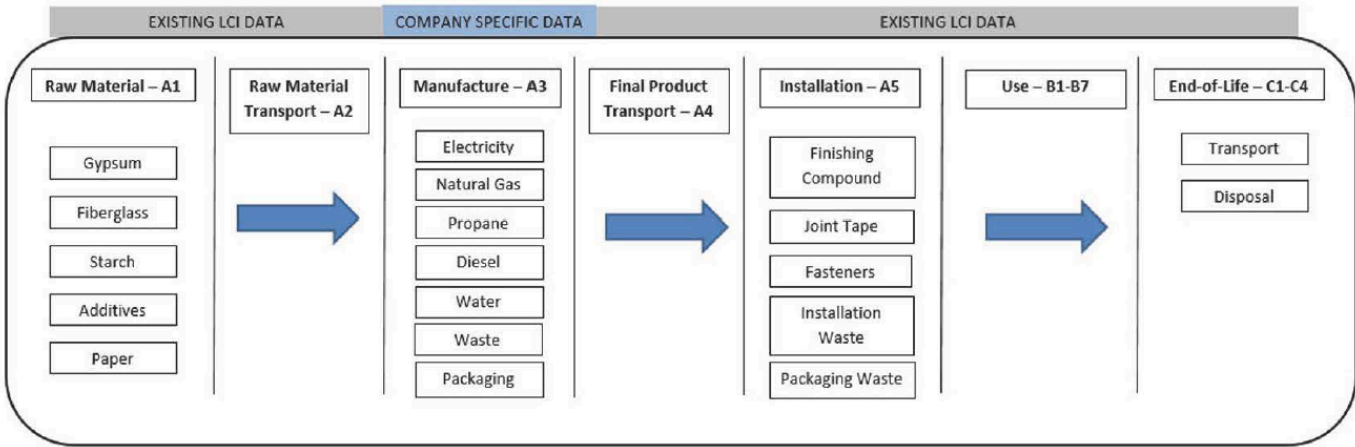
Production	A1	Raw material supply	✓
	A2	Transport	✓
	A3	Manufacturing	✓
Construction	A4	Transport to site	✓
	A5	Assembly / Install	✓
Use	B1	Use	✓
	B2	Maintenance	✓
	B3	Repair	✓
	B4	Replacement	✓
	B5	Refurbishment	✓
	B6	Operational Energy Use	✓
	B7	Operational Water Use	✓
End of Life	C1	Deconstruction	✓
	C2	Transport	✓
	C3	Waste Processing	✓
	C4	Disposal	✓
Benefits & Loads Beyond System Boundary	D	Recycling, Reuse Recovery Potential	ND

Note:
ND = Module not declared

Plants


CertainTeed Gypsum 5931 E Marginal Wy S, Seattle, WA 98134, USA

Product Flow Diagram



Software And Database

- LCA Software:
- Sphera LCA for Experts (formerly GaBi) v. 10.9.2
- LCI Foreground Database(s):
- Sphera Managed LCA Content (formerly GaBi Professional Database) v. 2025.1
- LCI Background Database(s):
- Ecoinvent v. 3.12 | US LCI v. 1.2025-06.0
- Sphera Managed LCA Content (formerly GaBi Professional Database) v. 2025.1

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

Data quality assessments were conducted in accordance with the guidance provided in Assessing Data Quality of Background Life Cycle Inventory (LCI) Datasets published by the American Center for Life Cycle Assessment (ACLCA, 2022).

Primary manufacturing data were collected directly from CertainTeed facility personnel and operational records for the reporting period. Energy and water consumption data were obtained from utility meters and internal tracking systems, while material consumption and production data were derived from facility records. Allocation methodologies were reviewed by facility personnel and subject matter experts. As these data originate directly from measured operational sources, the temporal, geographic, and technological representativeness of the primary data is considered high. Quantitative uncertainty analyses were not performed for the primary data; however, the data are considered reliable due to the use of established monitoring, reporting, and recordkeeping systems.

Secondary datasets were used to model upstream raw material extraction and processing, transportation, fuel production, electricity generation, and other background processes. Background datasets were selected primarily from the Sphera Managed LCA Content (MLC) database, supplemented by USLCI and Ecoinvent v3.12 datasets where necessary. Dataset selection considered the ACLCA recommended data quality indicators, including technological representativeness, geographic representativeness, temporal representativeness, completeness, precision/uncertainty, consistency, and methodological appropriateness.

The selected secondary datasets are representative of North American conditions, contemporary production technologies, and recent reporting periods to the extent possible. Where a preferred dataset was unavailable, the most appropriate proxy dataset was selected and documented. Any deviations from the target data quality criteria, including the use of proxy datasets, are identified and justified within the study documentation.

Based on the ACLCA data quality assessment criteria, the overall quality of the primary data is considered high, while the uncertainty associated with background datasets is generally greater than that associated with the facility-specific primary data. This uncertainty has been considered during interpretation of the life cycle assessment results.

Data Sources

Material/Process Category	Module	Material/Process Name	Inventory Dataset Name	Dataset Geographic Region	Reporting Period/Year Dataset Represents	Reference	Amount (if relevant)	Unit
Silicone	A1-A3	Silicone	Confidential	Confidential	2025-2028	Ecoinvent 3.12	Confidential	kg
Paper	A1-A3	Paper	Confidential	Confidential	2025-2028	Sphera	Confidential	kg
Starch	A1-A3	Starch	Confidential	Confidential	2025-2028	Sphera	Confidential	kg
Natural Gas	A1-A3	Natural Gas	Confidential	Confidential	2022-2028	Sphera	Confidential	MJ
Electricity	A1-A3	Electricity	Confidential	Confidential	2025-2028	Sphera	Confidential	MJ
Fiberglass	A1-A3	Fiberglass	Confidential	Confidential	2025-2028	Sphera	Confidential	kg

Life Cycle Module Description

Manufacturing

The process begins with internally recycled gypsum material added to the natural gypsum raw material. Water is then added to produce a stucco slurry. Additional additives are mixed with the slurry as indicated by the specific product recipe. Large rolls of the facing and backing paper are loaded onto spools that feed the manufacturing line. The backing paper is fed through first, the slurry is applied to the backing paper, and then the facing paper is fed through the line and applied on top of the slurry. The wet board is fed through rollers to ensure proper thickness and allow the material set. The boards are then cut to length and aligned for processing through the ovens for the remainder of the drying process. After drying in the ovens, the boards are stacked by two, with end tape applied for shipping.

Packaging

Packaging of the final product after production is included in the life cycle assessment. Packaging material includes the end tape applied at the end of the manufacturing process, as well as spacers used to stack the boards at varying heights for easier loading and unloading. The spacers used in the packaging are made at the manufacturing facility using rejected boards from the manufacturing process.

LCA Discussion

Allocation Procedure

Allocation was conducted based on the production mass data provided by the facilities as a percentage of the overall production mass. Since the plant does not have submetering, there is no way to determine exact consumption for specific product lines. Mass allocation is the most accurate and representative way to allocate energy and water usage data. No waste flows during production have been allocated as co-products. Emissions associated with land use change were not included in the LCA due to the negligible impacts. The gypsum board product is made in Seattle, WA. However, there are additional products produced at this location that were excluded from the study.

Cut-off Procedure

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For that a documented assumption is admissible. For Hazardous Substances as defined by the U.S. Occupational Health and Safety Act the following requirements apply:

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

If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided. This EPD is in compliance with the cut-off criteria. No known flows were deliberately excluded. Capital items for the production processes (machines, buildings, etc.) were not taken into consideration.

Renewable Electricity

Energy Attribute Certificates (EACs) such as Renewable Energy Certificates (RECs) or Power Purchase Agreements (PPAs) are included in the baseline reported results:	✓ Yes
Electricity Source:	Offsite
Renewable type(s):	Wind and Solar
Percent of EPD Owner's product-related electricity covered:	75 %
Grid type used to model remaining electricity:	Consumption Grid
Commitment pledged for entire EPD validity period:	✓ Yes
Electricity accounting methodology:	Market-based

Scenarios

Transport to the building/construction site (A4)

A4 Module

Fuel Type:	Diesel
Liters of Fuel:	4 l/100km
Vehicle Type:	Commercial tractor-trailer truck
Transport Distance:	448 km
Capacity Utilization:	70 %
Packaging Mass:	1.94 kg
Weight of products transported:	879 kg
Capacity utilization volume factor:	<1
Fuel Type:	Diesel
Liters of Fuel:	8.8 l/100km
Vehicle Type:	Rail
Transport Distance:	208 km
Capacity Utilization:	70 %

Packaging Mass:	1.94 kg
Weight of products transported:	879 kg
Capacity utilization volume factor:	<1
Fuel Type:	Diesel
Liters of Fuel:	4 l/100km
Vehicle Type:	Single unit truck
Transport Distance:	40 km
Capacity Utilization:	70 %
Packaging Mass:	1.94 kg
Weight of products transported:	879 kg
Capacity utilization volume factor:	<1
Assumptions for scenario development:	Final products are transported via truck throughout North America. Distances and modes of transport for final product transportation are specified in the PCR.

Installation in to the building/construction site (A5)

A5 Module

Installation Scrap Rate Assumed:	10 %
Ancillary Materials:	72.2 kg
Product Lost per Declared/Functional Unit:	87.85 kg
Mass of Packaging Waste Specified by Type:	1.94 kg
Assumptions for scenario development:	The Gypsum Panel PCR specifies the default on-site installation waste scenario is 10% of the installed surface area. The PCR also specifies ancillary materials required for installation of gypsum panels as joint compound, joint tape, and fasteners. This study used the installation calculator located on the CertainTeed Gypsum website to calculate the amount of ancillary materials required for installation. In addition, disposal of the packaging material is included in the installation phase

Use (B1)

B1 Module

Use Conditions:

As specified in the PCR, gypsum panel products are assumed to have no material or energy inputs or emissions during the use (B1), maintenance (B2), repair (B3), replacement (B4), or refurbishment (B5) life cycle stages. The PCR also specifies that gypsum panel products are assumed to have no operational energy use (B6) and no operational water use (B7) during the use phase of the life cycle.

Maintenance (B2)

B2 Module

Maintenance Process Information:	None required
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Repair (B3)

B3 Module

Further assumptions for scenario development:	None required
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Replacement (B4)

B4 Module

Further assumptions for scenario development: None required

Refurbishment (B5)

B5 Module

Refurbishment Process Description: None required

Operational Energy Use (B6) & Operational Water Use (B7)

B6 & B7 Modules

Further assumptions for scenario development:
None required

End of Life (C1 - C4)

C1 - C4 Modules

Collection Process

Collected with Mixed Construction Waste: 879 kg

Disposal

Product or Material for Final Disposal: 879 kg
Removals of Biogenic Carbon: 62.73 kg CO2

Assumptions for scenario development:
The PCR supports the scenario for industry practices that all gypsum panel products shall be disposed in an appropriate construction and demolition landfill at the end of life. At this time, there are no known scenarios for the deconstruction of gypsum boards from the building at the end of life, although the PCR requires inclusion of the energy required for deconstruction and dust released in the air. Per PCR guidance, the impacts from deconstruction module (C1) is assumed to be zero ("0") based on manual labor using hand tools. At this time, there is no known method for distinguishing gypsum board dust from the overall dust generated in the demolition of a building, so the deconstruction module assumed no dust generated. The PCR also specifies the assumption that no gypsum panel waste goes to a waste processing facility prior to disposal in a landfill, so the waste processing module (Module C3) is assumed to be burden free. The product's end-of-life disposition is assumed to be inert in a landfill per the PCR. Disposal in an appropriate construction and demolition landfill or in commercial incineration facilities is permissible and should be done in accordance with local, provincial, and federal regulations.

Results

Environmental Impact Assessment Results

IPCC AR5 GWP 100, TRACI 2.2, TRACI 2.1, CML 2016 v4.8

per 1,000 ft2 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	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
GWP-total (incl biogenic)	kg CO2 eq	IPCC AR5 GWP 100	1.41e+2	4.19e+1	5.87e+1	0	0	0	0	0	0	0	0	1.01e+1	0	7.99e+1
GWP-fossil	kg CO2 eq	IPCC AR5 GWP 100	2.04e+2	4.16e+1	5.87e+1	0	0	0	0	0	0	0	0	1.00e+1	0	1.71e+1
GWP-total	kg CO2 eq	TRACI 2.2	1.44e+2	4.14e+1	5.77e+1	0	0	0	0	0	0	0	0	9.93e+0	0	7.96e+1
GWP-total (excl biogenic)	kg CO2 eq	TRACI 2.2	2.07e+2	4.11e+1	5.77e+1	0	0	0	0	0	0	0	0	9.89e+0	0	1.68e+1
ODP	kg CFC 11 eq	TRACI 2.1	3.51e-4	1.45e-11	4.29e-7	0	0	0	0	0	0	0	0	3.49e-12	0	9.06e-11
AP	kg SO2 eq	TRACI 2.2	2.49e+0	1.27e-1	3.30e-1	0	0	0	0	0	0	0	0	2.94e-2	0	8.85e-2
EP-Fw	kg P eq	TRACI 2.2	4.13e-3	2.72e-5	8.62e-4	0	0	0	0	0	0	0	0	6.53e-6	0	5.70e-6
EP-Marine	kg N eq	TRACI 2.2	1.23e+0	1.16e-1	9.92e-2	0	0	0	0	0	0	0	0	2.67e-2	0	4.41e-2
POCP	kg O3 eq	TRACI 2.2	4.40e+1	3.40e+0	3.34e+0	0	0	0	0	0	0	0	0	6.59e-1	0	1.59e+0
ADP-fossil	MJ	CML 2016 v4.8	1.98e+3	5.27e+2	1.22e+3	0	0	0	0	0	0	0	0	1.26e+2	0	2.50e+2

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 = Particulate 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.

Global Warming Potential or Climate Change is an indicator aimed at including in a single value the added effect of all the substances contributing to the greenhouse effect.

Global Warming Potential (GWP-Total) includes biogenic carbon, fossil carbon, land use and land use change. To calculate GWP-Total within the above table, the equation below is used:

GWP-total = GWP-biogenic + GWP-fossil + GWP-luluc

- GWP-total or GWPtotal (including biogenic) is the sum of GWP-biogenic, GWP-fossil and GWP-luluc
- GWP-biogenic only includes biogenic carbon which is carbon that is stored in bio-sourced materials, like plants, trees, and soil. This excludes fossil.
- GWP-fossil or GWPtotal (excluding biogenic) only includes fossil carbon which is the carbon dioxide emitted when fossil fuels like coal, oil, or natural gas are combusted. This excludes biogenic.
- GWP-luluc only includes the greenhouse gas emissions that arise in connection with changes in the specified carbon stock as a result of land use and land use change, such as deforestation.

Depending on the required or optional standards, GWP can be reported with different methods and indicators including United States Environmental Tool for Reduction and Assessment of Chemicals and Other Environmental Impacts (TRACI 2.1, etc.), Intergovernmental Panel on Climate Change (IPCC) Assessment Report (AR 5, AR 6, etc.), Environmental Footprint (EF 3.0, 3.1), and/or EN 15804. GWP can be reported on a time frame such as GWP 100 for 100-year time horizon.

Resource Use Indicator

per 1,000 ft2 of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
PERE	MJ	1.30e+3	2.14e+1	3.26e+2	0	0	0	0	0	0	0	0	4.68e-1	0	3.89e+1
PERM	MJ	1.09e+2	0	0	0	0	0	0	0	0	0	0	0	0	0
PERT	MJ	1.41e+3	2.14e+1	3.26e+2	0	0	0	0	0	0	0	0	4.68e-1	0	3.89e+1
PENRE	MJ	3.05e+3	5.31e+2	1.27e+3	0	0	0	0	0	0	0	0	4.38e+1	0	2.56e+2
PENRM	MJ	6.64e+0	0	0	0	0	0	0	0	0	0	0	0	0	0
PENRT	MJ	3.06e+3	5.31e+2	1.27e+3	0	0	0	0	0	0	0	0	4.38e+1	0	2.56e+2
FW	m3	1.52e+0	1.65e-2	1.22e+0	0	0	0	0	0	0	0	0	3.95e-3	0	2.77e-2
SM	kg	5.08e+1	0	0	0	0	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RE	MJ	0	0	0	0	0	0	0	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:

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 1,000 ft² of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
HWD	kg	4.59e+0	1.11e-7	5.46e-7	0	0	0	0	0	0	0	0	2.67e-8	0	7.04e-8
NHWD	kg	2.55e+1	6.24e-2	1.05e+2	0	0	0	0	0	0	0	0	1.50e-2	0	8.79e+2
HLRW	kg	2.80e-5	1.93e-6	1.11e-5	0	0	0	0	0	0	0	0	4.62e-7	0	2.45e-6
ILLRW	kg	2.68e-2	1.62e-3	1.01e-2	0	0	0	0	0	0	0	0	3.88e-4	0	2.11e-3
CRU	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MNER	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	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:

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 1,000 ft2 of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
BCRP	kg CO2	-6.28e+1	0	0	0	0	0	0	0	0	0	0	0	0	0
BCEP	kg CO2	0	0	0	0	0	0	0	0	0	0	0	0	0	6.28e+1
BCRK	kg CO2	0	0	3.80e+1	0	0	0	0	0	0	0	0	0	0	0
BCEK	kg CO2	0	0	-3.80e+1	0	0	0	0	0	0	0	0	0	0	0
BCEW	kg CO2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCE	kg CO2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CCR	kg CO2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CWNR	kg CO2	0	0	0	0	0	0	0	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.

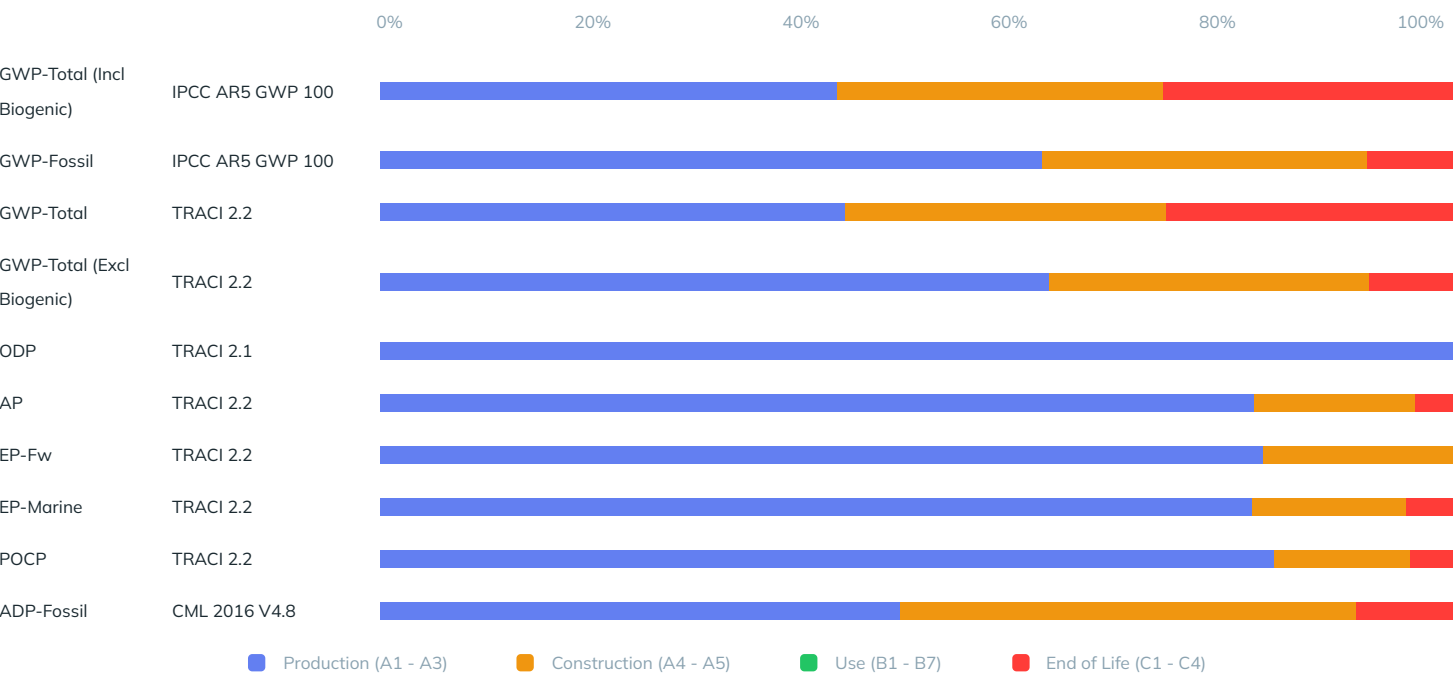
Abbreviations:

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 of the life cycle assessment model, the environmental impacts are primarily driven by the A1- A3 product stag which accounts for 62% of the cradle-to-grave Global Warming Potential (GWP)– fossil. Additional significant contributors include installation (A5), and product distribution (A4), contributing approximately 18%, and 13% of total GWP impacts, respectively. End-of-life activities (C1–C4) contribute 5% of impacts.

Installation remains a notable contributor to overall environmental impacts due to the assumptions required by the applicable Product Category Rules (PCRs). In the absence of site-specific installation data, the PCR requires the application of a 10% installation waste scenario. Because installation practices vary significantly among contractors and project conditions, CertainTeed has limited influence over these impacts. Furthermore, the use of internally recycled gypsum and other recycled materials helps reduce the demand for virgin raw materials, thereby lowering upstream environmental burdens associated with raw material extraction and processing.



Additional Environmental Information

Gypsum Drywall Disposal Considerations (Part B Product Category Rules for Gypsum Panels, Standard 1000-004, version 2. 2025. SmartEPD)

Disposal of gypsum drywall in landfills has been shown to elevate hydrogen sulfide (H₂S) concentrations in landfill gas, a concern with respect to odor generation, worker safety, and potential adverse effects on landfill gas collection and gas-to-energy systems. To minimize these impacts, diversion of gypsum-containing materials from landfill disposal through recycling and recovery programs is encouraged where facilities and infrastructure are available.

End-of-life management practices should comply with applicable federal, state, provincial, and local regulations. Recycling of gypsum products can reduce landfill burdens and support circular material use by recovering gypsum for incorporation into new products or other beneficial applications.

Further Information

Renewable Energy Credit (REC) Impacts

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 main set of 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 life cycle impact assessment result tables. The reduced impacts resulting from allocated RECs at the plants were calculated using 100% wind-generated electricity, covering between 49% of the site's(s') electricity consumption in 2025 and 100% solar-generated electricity covering 26% of the site's electricity consumption in 2025. The Blooming Grove REC data was modeled 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 modeled 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 modeled based on local energy grid information for the manufacturing site(s).

References

- Product Category Rule for Environmental Product Declarations: Part A Product Category Rules For Building And Construction Products And Services, Standard 1000, Version 1.2. 2025. SmartEPD.
- Product Category Rule for Environmental Product Declarations: Part B Product Category Rules for Gypsum Panels, Standard 1000-004, version 2. 2025. SmartEPD
- ISO 14040: 2006 Series – Environmental Management-Life Cycle Assessment
- ISO 14044: 2006 Series – Environmental Management-Life Cycle Assessment
- ISO 21930 – Sustainability in building construction – Environmental declaration of building products
- Sphera LCA FE Databases. <https://lcadatabase.sphera.com/>
- US LCI Database. <https://www.nrel.gov/lci/>
- Ecoinvent v3.12 Database. <http://ecoinvent.org/>
- CertainTeed Gypsum Website. <https://www.certainteed.com/products/drywall-products-systems-products>