

ENVIRONMENTAL PRODUCT DECLARATION

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

SmartEPD-2026-145-0980-01

Type X 5/8" Gypsum Board - Montreal (Prospective EPD)

INFINaé



certainteed
SAINT-GOBAIN



Date of Issue:	Expiration:	Last updated:
Jul 10, 2026	Jul 10, 2027	Jul 10, 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:	Type X 5/8" Gypsum Board - Montreal (Prospective EPD)
Functional Unit:	1,000 ft ²
Declaration Number:	SmartEPD-2026-145-0980-01
Date of Issue:	July 10, 2026
Expiration:	July 10, 2027
Last updated:	July 10, 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.ca/>

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:

Contact Smart EPD for more information.

General Program Instructions:

Smart EPD General Program Instructions v.2.0, March 2025

Verification Information

LCA Author/Creator:



 Saint-Gobain North American ESG Sustainability Group



 sustainability@saint-gobain.com

EPD Program Operator:



 Smart EPD



 info@smartepd.com

Verification:

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



 Vijay Thakur



 Individual Verifier



 thakur.vijay3011@gmail.com

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



 Vijay Thakur



 Individual Verifier

External

External

Product Information

Functional Unit:

1,000 ft2

Mass:

998 kg

Reference Service Life:

75 Years

Product Specificity:

✗

 Product Average

✓

 Product Specific

Product Description

CertainTeed Type X Infinaé™ CarbonLow™ Gypsum Board is specifically engineered for fire-resistive applications, boasting exceptional fire resistance due to its special gypsum core that outperforms standard drywall in heat and flame resistance. Its increased thickness enhances fire protection. This versatile product finds common usage in commercial structures such as hotels, offices, and schools, and also extends its utility to residential settings like basements and garages. It facilitates the creation of fire-rated walls and ceilings that comply with or exceed relevant building codes. Among the notable advantages of CertainTeed Type X Gypsum Board are its high fire resistance, superior thickness, and durability. This makes it an ideal choice for fire-rated applications in both residential and commercial buildings. Installation follows the same methods as traditional drywall, ensuring ease of use. Furthermore, CertainTeed Type X Infinaé™ CarbonLow™ Gypsum Board contributes to sound reduction through its thick gypsum core, enhancing acoustic comfort. It also improves thermal insulation, aiding in energy cost reduction and enhancing overall comfort levels. Its moisture resistance makes it an optimal choice for areas prone to flooding or condensation. CertainTeed Type X Drywall is a sustainable option made with 100% recycled paper and meets In addition to its superior performance, CertainTeed Type X also meets GREENGUARD® Gold for low emitting VOC content. This makes it an environmentally friendly choice for green.

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

Product Specifications

Product Classification Codes:	EC3 - Finishes -> Gypsum UNSPSC - 301615
Form Factor:	Finishes >> Gypsum
Options:	✓ Mold-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 - 9
Paper	Confidential	2 - 6
Fiberglass	Confidential	0 - 1
Silicone	Confidential	0 - 1
Additives	Confidential	0 - 1

Packaging Material	Origin	kg Mass
Spacers	Confidential	1.5 -2
Tape	Confidential	0-1

Biogenic Carbon Content	kg C per 1000 ft2
Biogenic carbon content in product	18.38
Biogenic carbon content in accompanying packaging	0.004

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

EPD Data Specificity

Primary Data Year:2025-2026

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

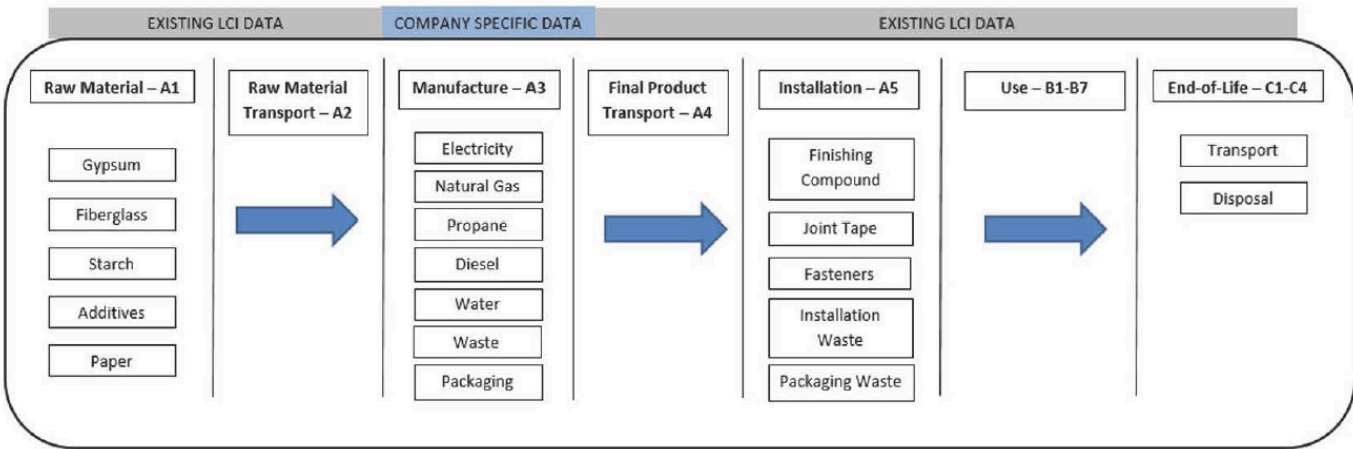
Note:

ND = Module not declared

Plants

 CertainTeed Gypsum 700 1re Avenue, Sainte-Catherine, QC J5C 1C5, Canada

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
Paper	A1-A3	Paper	Confidential	RER	2025-2028	Sphera	Confidential	kg
Starch	A1-A3	Starch	Confidential	US	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 Montreal, QC. 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 ✗ No
 Renewable Energy Certificates (RECs) or Power
 Purchase Agreements (PPAs) are included in the
 baseline reported results:

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:	2.25 kg
Weight of products transported:	998 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:	2.25 kg
Weight of products transported:	998 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:	2.25 kg
Weight of products transported:	998 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:	99.81 kg
Mass of Packaging Waste Specified by Type:	2.25 kg
Biogenic Carbon Contained in Packaging (kg C):	0.004 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:

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.

Repair (B3)

B3 Module

Repair Process Information:

None required

Replacement (B4)

B4 Module

Further assumptions for scenario development: None required

Refurbishment (B5)

B5 Module

Further assumptions for scenario development: 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: 998 kg

Disposal

Product or Material for Final Disposal: 998 kg
Removals of Biogenic Carbon: 67.40 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 AR6 GWP 100, TRACI 2.2, 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 AR6 GWP 100	6.15e+1	4.77e+1	2.08e+1	0	0	0	0	0	0	0	0	1.63e+1	0	8.69e+1
GWP-fossil	kg CO2 eq	IPCC AR6 GWP 100	1.22e+2	4.74e+1	6.65e+1	0	0	0	0	0	0	0	0	1.62e+1	0	1.95e+1
GWP-total	kg CO2 eq	TRACI 2.2	6.67e+1	4.71e+1	1.96e+1	0	0	0	0	0	0	0	0	1.61e+1	0	8.66e+1
GWP-fossil	kg CO2 eq	TRACI 2.2	1.27e+2	4.68e+1	6.53e+1	0	0	0	0	0	0	0	0	1.60e+1	0	1.92e+1
ODP	kg CFC 11 eq	TRACI 2.2	6.87e-5	1.65e-11	5.16e-7	0	0	0	0	0	0	0	0	5.67e-12	0	1.03e-10
AP	kg SO2 eq	TRACI 2.2	2.61e-1	1.45e-1	3.70e-1	0	0	0	0	0	0	0	0	7.53e-2	0	1.01e-1
EP-freshwater	kg N eq	TRACI 2.2	1.83e-3	3.10e-5	1.00e-3	0	0	0	0	0	0	0	0	1.06e-5	0	6.49e-6
EP-marine	kg N eq	TRACI 2.2	1.60e-1	1.32e-1	1.13e-1	0	0	0	0	0	0	0	0	7.01e-2	0	5.02e-2
POCP	kg O3 eq	TRACI 2.2	5.17e+0	3.87e+0	3.84e+0	0	0	0	0	0	0	0	0	2.21e+0	0	1.80e+0
ADP-fossil	MJ	CML 2016 v4.8	1.01e+3	5.99e+2	1.42e+3	0	0	0	0	0	0	0	0	2.06e+2	0	2.84e+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	4.15e+3	2.70e+1	3.73e+2	0	0	0	0	0	0	0	0	8.35e+0	0	4.42e+1
PERM	MJ	7.28e+2	0	0	0	0	0	0	0	0	0	0	0	0	0
PERT	MJ	4.88e+3	2.70e+1	3.73e+2	0	0	0	0	0	0	0	0	8.35e+0	0	4.42e+1
PENRE	MJ	1.13e+3	6.71e+2	1.47e+3	0	0	0	0	0	0	0	0	2.07e+2	0	2.91e+2
PENRM	MJ	4.21e+2	0	0	0	0	0	0	0	0	0	0	0	0	0
PENRT	MJ	1.55e+3	6.71e+2	1.47e+3	0	0	0	0	0	0	0	0	2.07e+2	0	2.91e+2
FW	m3	1.09e+1	2.08e-2	1.31e+0	0	0	0	0	0	0	0	0	6.43e-3	0	3.15e-2
SM	kg	0	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:

Type X 5/8" Gypsum Board - Montreal (Prospective EPD)

CertainTeed Saint-Gobain



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	2.67e+1	1.41e-7	6.29e-7	0	0	0	0	0	0	0	0	4.34e-8	0	8.01e-8
NHWD	kg	1.80e+0	7.88e-2	1.23e+2	0	0	0	0	0	0	0	0	2.43e-2	0	9.01e+2
HLRW	kg	1.77e-5	2.43e-6	1.21e-5	0	0	0	0	0	0	0	0	7.51e-7	0	2.79e-6
ILLRW	kg	1.86e-2	2.04e-3	1.08e-2	0	0	0	0	0	0	0	0	6.31e-4	0	2.40e-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	-6.74e+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	6.74e+1
BCRK	kg CO2	-1.50e-2	0	0	0	0	0	0	0	0	0	0	0	0	0
BCEK	kg CO2	0	0	1.50e-2	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:

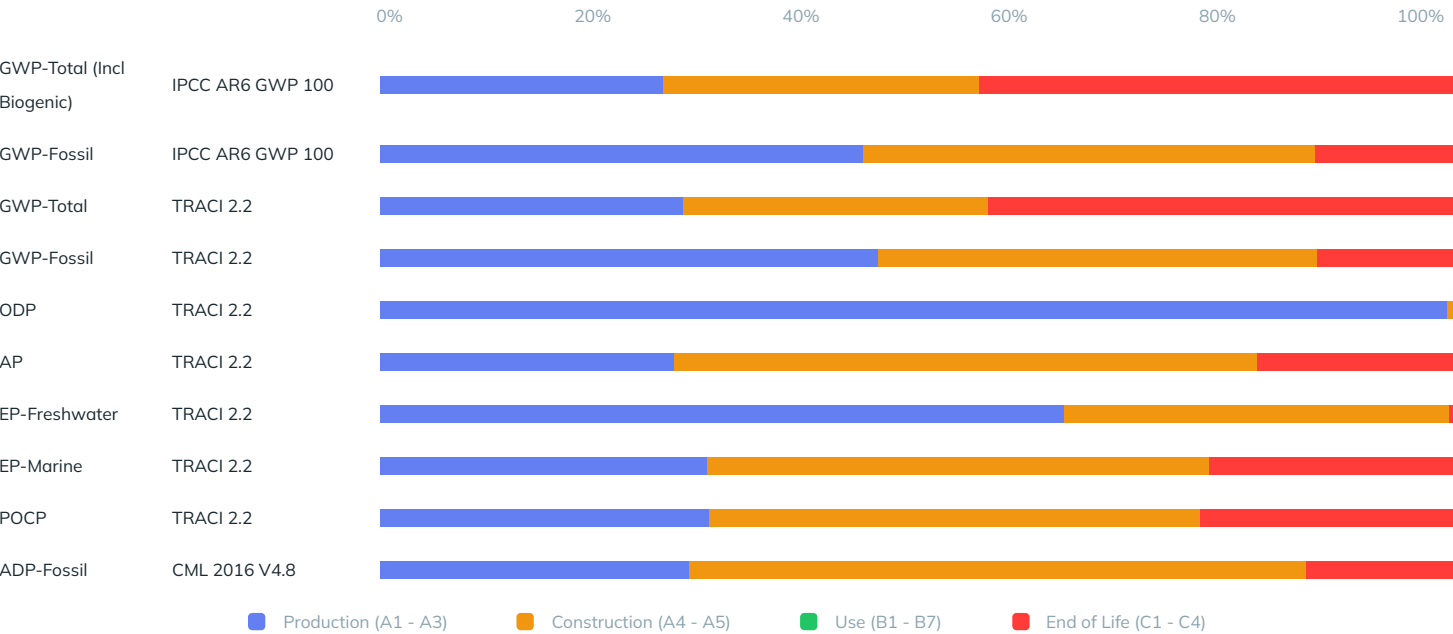
BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = 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 manufacturing stage and its associated upstream and downstream activities. The largest contributors to the overall cradle-to-grave impacts are installation, raw material transportation, and raw material production. Installation is a particularly significant contributor to the overall environmental impact results for gypsum board products.

The PCR requires the application of a 10% installation waste scenario when actual installation data are unavailable. Since no site-specific installation data currently exist and installation practices can vary considerably among contractors, CertainTeed has limited influence over installation-related impacts. The use of internally recycled gypsum material helps reduce overall environmental impact potentials by decreasing the need for virgin raw materials and reducing associated upstream environmental burdens.

Although the manufacturing stage (A3) contributes a relatively small portion of the product's cradle-to-grave Global Warming Potential (GWP), it represents the primary opportunity for impact reduction because it is directly controlled by the manufacturer. The reduction in environmental impacts is primarily driven by the transition from fossil fuel-based manufacturing to electrified production powered by renewable electricity. By replacing natural gas with renewable hydroelectricity in Québec, the project significantly reduces direct (Scope 1) emissions associated with energy-intensive manufacturing processes. In addition, the implementation of multiple heat recovery systems, enhanced energy-efficient plant design, and improved process control strategies further reduces overall energy demand and improves operational efficiency. Together, these measures are expected to improve manufacturing energy efficiency resulting in substantial reductions in environmental impacts while maintaining product quality and production performance.



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

Statement of Prospective Status

This document is a Prospective Environmental Product Declaration (Prospective EPD) developed using six months of actual manufacturing data representative of current production operations. As the data collection period is shorter than that typically used for a standard EPD, the results should be considered prospective and may not fully capture annual variations in production, raw material sourcing, energy consumption, transportation, or other operational factors.

Differences Between a Prospective EPD and a Standard EPD

Unlike a standard EPD, which is typically based on a full year of operational data, this Prospective EPD is based on six months of manufacturing data. Consequently, the environmental impacts reported herein represent the best available estimate of product performance during the reporting period but may not fully reflect seasonal or annual operational variability. Users should exercise caution when comparing the results of this Prospective EPD with those reported in standard EPDs developed using a full year of production data.

Variability and Uncertainty

The environmental impact results presented in this Prospective EPD are based on six months of manufacturing data and are therefore subject to greater uncertainty than results derived from a full annual production cycle. Actual environmental impacts may vary due to seasonal fluctuations in production volumes, raw material sourcing, energy consumption, transportation distances, and other operational factors. The results reported in this declaration are intended to provide an estimate of environmental performance based on available data and should not be interpreted as a guarantee of future environmental impacts. Actual impacts may differ as additional operational data become available.

Standards Conformance

This Prospective EPD has been developed in accordance with ISO 14025 and ISO 21930:2017 and follows the applicable Product Category Rules (PCR) requirements for prospective environmental declarations. The environmental impacts reported represent performance based on the six-month reporting period and should be interpreted in the context of the limited data collection duration.

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>