



ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH TRACI 2.1 / ISO 21930

Product: Nexii Wall Panels: Cladding
Manufacturer: Nexii Building Solutions Inc.

EPD HUB, HUB-0635

Publishing date 18 August 2023, last updated on 18 August 2023, valid until 18 February 2025

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Nexii Building Solutions Inc.
Address	1455 W Georgia St, Vancouver, BC
Contact details	inquiries@nexii.com
Website	https://www.nexii.com/

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	ISO 21930:2017 and ISO 14025
PCR	EPD Hub Core PCR version 1.0, 1 Feb 2022
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with modules C1-C4 and D
EPD author	Sara Turner, Sustainability Manager, Nexii
EPD verification	Independent verification of this EPD and data, according to ISO 14025: <input type="checkbox"/> Internal certification <input checked="" type="checkbox"/> External verification
EPD verifier	HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if they do not comply with ISO 21930 and if they are not compared in a building context.

PRODUCT

Product name	Nexii Wall Panels: Cladding
Place of production	Squamish, BC, Canada
Period for data	January 2023 – March 2023
Averaging in EPD	No averaging

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 m ²
Declared unit mass	102.32 kg
GWP-fossil, A1-A3 (kgCO ₂ e)	1.17E2
GWP-total, A1-A3 (kgCO ₂ e)	1.16E2
Secondary material, inputs (%)	88.3
Secondary material, outputs (%)	103.0
Total energy use, A1-A3 (kWh)	829.0
Total water use, A1-A3 (m ³ e)	8.13E-1

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Nexii is a green construction company. We design, manufacture, and assemble buildings and products that are sustainable, cost-effective, and climate resilient. Headquartered in Vancouver, Canada, Nexii's west coast plant is located in Squamish, B.C. Nexii is scaling up to supply all North American markets with industrial, commercial, retail, multi-story, and residential buildings, as well as EV charging infrastructure.

PRODUCT DESCRIPTION

Nexii's Wall Panels are part of a precision manufactured building envelope system, optimized for efficient transportation and rapid assembly on-site. The Cladding Wall Panel is primarily used on industrial or commercial building projects. The buildings have an internal structural system that supports the wall panels and roof. Nexii buildings are designed for superior thermal performance, use durable and healthy materials, and are manufactured in a Zero Waste-certified facility (TRUE Gold Certified, March 2023).



Figure 1: Exploded view of Nexii panel

Nexii's Cladding Wall Panel consists of an insulated expanded polystyrene (EPS) core, structural reinforcement (steel, glass knit mesh), and a 1-2 cm layer of Nexiite cladding on both the interior and exterior faces. Nexiite is a proprietary polymer concrete material, with a high strength-to-weight ratio, no Portland cement, and no Living Building Challenge (LBC) Red List ingredients.

Nexii products are designed for reuse, meaning that buildings can be deconstructed at the end of life, and the panels reused for a second life

elsewhere. The impact of this unique offering is reflected in stages A1-D (cradle to cradle).

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass- %	Material origin
Metals	24.6%	Canada
Minerals	70.4%	Canada, United States, Mexico
Fossil materials	5.0%	Canada
Bio-based materials	0.0%	-

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	
Biogenic carbon content in packaging, kg C	0.04078947

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 m ²
Mass per declared unit	102.3 kg
Reference service life	60 years

The declared unit for this EPD was calculated by averaging panels across a reference project. The thickness of these panels is 25.4 cm. Panel sizes and material ratios may vary depending on project needs.

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0.1 % (1000 ppm). Nexii's Health Product Declarations provide further transparency on our panel ingredients and material composition.

PRODUCT LIFE-CYCLE

SYSTEM BOUNDARY

This EPD covers the life-cycle modules listed in the following table.

Product stage			Assembly stage		Use stage							End of life stage				Beyond the system boundaries		
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D		
x	x	x	MND	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x	x	x
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstr./demol.	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Modules not declared = MND. Modules not relevant = MNR.

MANUFACTURING AND PACKAGING (A1-A3)

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

The utilization rate of the Squamish plant is expected to increase significantly through 2023 and beyond with an associated increase in efficiency of manufacturing energy usage, production losses, and waste. The EPD includes the purchase of Renewable Natural Gas Credits that fund the capture of landfill biogas and replacement of natural gas usage.

PRODUCT END OF LIFE (C1-C4)

Product end of life impacts include the transportation, treatment (including recycling or reuse), and disposal of excess materials and waste. The materials within the panels are assumed to be reused, as the panels themselves are designed and manufactured to be reused after the building is deconstructed. Manufacturing waste is recycled according to each material stream and Nexii's Zero Waste Policy.

BEYOND THE SYSTEM BOUNDARIES (D)

Benefits beyond the system boundaries include the recycling of waste materials from manufacturing processes and the reuse of the panel product as a whole. Benefits from panel reuse are based on Nexii's Deconstruction Case Study, which includes a third-party LCA on the impacts of deconstruction and reuse. Read more [here](#).

MANUFACTURING PROCESS

CORE PROCESSES

The Cladding Wall Panels reflected in this EPD are manufactured in the Squamish, BC facility.

The manufacturing process begins with 3D-modeling by the Architecture and Engineering team, which creates Architectural and Production drawings of the panels. The raw materials are shipped to the facility, including expanded polystyrene (EPS) insulation, steel framing, fibreglass reinforcements, and Nexiite (proprietary polymer concrete material) ingredients. The panels are assembled and finished within the facility, packaged for transportation, and shipped to site when complete. Core manufacturing processes include:

- Material receiving
- EPS cutting
- EPS and frame assembly
- Nexiite mixing, pouring, and casting
- Panel finishing (painting and sealing)
- Panel packaging and shipping

The finishing process is project-specific and is not included within the boundaries of this LCA.

For each functional unit, 53.3 kWh of electricity, 859.1 MJ of renewable natural gas, 1.2 MJ of diesel, and 2.4 MJ of propane is consumed.

Production losses refer excess material utilized in manufacturing that does not make it into the final panel product. Production losses are tracked for major material categories including EPS, Nexiite, and steel.

These are minimized wherever possible and excess materials are diverted to the best next life use:

- EPS - EPS offcuts are used to protect panels in transit and are densified and recycled within the plant.
- Steel - Scrap metals are recycled at a local metal recycling facility.
- Nexiite - A majority of excess Nexiite is upcycled into Nexii products and any constituent components recycled locally.”

PACKAGING

We pay careful attention to the packaging process to ensure the safe transportation and delivery of our Cladding Wall Panels. Panels are wrapped in recyclable cardboard and polyethylene wrap materials. These materials are collected on-site and brought back to the plant for reuse, sorting, and local recycling. For each functional unit, 0.31 kg of cardboard and 0.81 kg of polyethylene are used for packaging.

RENEWABLE NATURAL GAS

Nexii pledges to achieve net zero carbon across our operations and value chain by 2030. For the Squamish plant, our net zero roadmap includes electrifying the building and phasing out fossil-fuel combustion. Since this will be a longer-term transition, Nexii has committed to purchasing Renewable Natural Gas (RNG) to fund the replacement of natural gas combustion with methane from landfills. This is viewed as an interim measure as we continue to prioritize facility electrification and decarbonization. For transparency, the Environmental Impact Data is presented with and without RNG applied.

PRODUCT AND MATERIAL END-OF-LIFE

DISASSEMBLY ASSUMPTIONS

Nexii Cladding Panels are designed for disassembly and reuse. Once the building's end-of-life has been reached, the envelope can be disassembled and the Nexii panels can be reused on another building project.

The deconstruction process involves using power tools to unbolt the panels, cutting machines to remove the seals between panels, and crane/lift equipment to take the panels down. Most of the energy use is attributed to the crane/lift equipment, estimated at 0.93 litres of diesel per functional unit (Nexii Disassembly LCA Study, 2022). Once deconstructed, the panels are taken to the nearest Nexii facility for remediation work, if necessary.

TRANSPORTATION

The waste materials associated with the product are transported by truck (or freight lorry), typically from the deconstruction site to a recycling facility or waste facility. A transportation distance of 50 km was applied to the waste materials, to be representative of urban centres where a majority of Nexii products are located.

WASTE TREATMENT

Waste associated with the end-of-life of the product is reused or recycled locally. The results shown in the table below are from the tracked waste streams at the Squamish plant, along with values from the third-party deconstruction LCA.

Waste Stream	Disposal Method	Amount (kg/functional unit)
Plastic film/soft plastics	Recycled locally	0.81
Wood	Recycled locally	0.90
Cardboard	Recycled locally	1.87
Paper	Recycled locally	0.06
Panel product	Reused	102.32

LIFE-CYCLE ASSESSMENT

CUT-OFF CRITERIA

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module-specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

ALLOCATION, ESTIMATES AND ASSUMPTIONS

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging materials	No allocation
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

AVERAGES AND VARIABILITY

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	Not applicable

No averaging across different products was conducted in the creation of this EPD.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 21930. Ecoinvent and One Click LCA databases were used as sources of environmental data.

COMPARABILITY

The Cladding Wall Panel is a composite product that provides structural, insulation, cladding, moisture control, air barrier, and finishing elements. Direct comparisons between this product and other assemblies should include consideration of all these elements for functional equivalence, conform to ISO 21930, and use the same system boundaries.

ENVIRONMENTAL IMPACT DATA

Results shown below are for a 10-inch panel with a declared unit of 1 m2.

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP – total ¹⁾	kg CO ₂ e	1.06E2	3.73E0	6.3E0	1.16E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.1E0	7.12E-1	3.02E0	1.52E-4	-5.72E1
GWP – fossil	kg CO ₂ e	1.05E2	3.73E0	8.26E0	1.17E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.1E0	7.12E-1	2.46E-1	1.52E-4	-4.71E1
GWP – biogenic	kg CO ₂ e	3.75E-1	1.51E-3	-1.99E0	-1.61E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	8.29E-4	3.2E-4	2.77E0	3.01E-7	-1E1
GWP – LULUC	kg CO ₂ e	3.59E-1	1.37E-3	3.25E-2	3.93E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	1.41E-4	2.67E-4	2.19E-4	4.51E-8	-1.03E-1
Ozone depletion pot.	kg CFC ₁₁ e	8.13E-6	8.2E-7	6.9E-7	9.64E-6	MND	MND	MND	MND	MND	MND	MND	MND	MND	6.77E-7	1.57E-7	3.09E-8	6.25E-11	-1.45E-6
Acidification potential	mol H ⁺ e	9.34E-1	2.48E-2	4.55E-2	1E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	4.39E-2	4.05E-3	1.44E-3	1.44E-6	-2.36E-1
EP-freshwater ²⁾	kg Pe	2.12E-2	3.62E-5	3.61E-4	2.16E-2	MND	MND	MND	MND	MND	MND	MND	MND	MND	6.06E-6	7.18E-6	5.37E-6	1.83E-9	-1.58E-3
EP-marine	kg Ne	1.43E-1	9.39E-3	1.11E-2	1.63E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	1.96E-2	1.42E-3	5.65E-4	4.96E-7	-4.37E-2
EP-terrestrial	mol Ne	1.65E0	1.03E-1	1.2E-1	1.88E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	2.15E-1	1.57E-2	4.8E-3	5.47E-6	-4.81E-1
POCP (“smog”) ³⁾	kg NMVOCe	5.76E-1	2.85E-2	4.27E-2	6.48E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	5.62E-2	4.47E-3	1.62E-3	1.59E-6	-1.97E-1
ADP-minerals & metals ⁴⁾	kg Sbe	4.38E-3	9.62E-5	1.09E-4	4.58E-3	MND	MND	MND	MND	MND	MND	MND	MND	MND	2.87E-6	1.79E-5	4.11E-6	1.39E-9	-2.52E-3
ADP-fossil resources	MJ	1.26E3	5.56E1	1.72E2	1.48E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4.18E1	1.07E1	3.42E0	4.24E-3	-8.1E2
Water use ⁵⁾	m ³ e depr.	5.6E1	2.12E-1	6.84E1	1.25E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	2.78E-2	4.4E-2	5.72E-2	1.96E-4	-2.75E1

1) GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO₄e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

USE OF NATURAL RESOURCES

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Renew. PER as energy ⁸⁾	MJ	3.64E2	6.21E-1	2.96E2	6.61E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	1.1E-1	1.24E-1	1.37E-1	3.43E-5	-7.17E1
Renew. PER as material	MJ	4.24E1	0E0	1.83E1	6.08E1	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	-1.78E1	0E0	5.31E1
Total use of renew. PER	MJ	4.07E2	6.21E-1	3.14E2	7.22E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	1.1E-1	1.24E-1	-1.77E1	3.43E-5	-1.86E1
Non-re. PER as energy	MJ	2.16E3	5.56E1	1.12E2	2.32E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4.18E1	1.07E1	3.42E0	4.24E-3	-4.89E2
Non-re. PER as material	MJ	2.64E3	0E0	4.86E0	2.65E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	-2.51E2	0E0	-5E0
Total use of non-re. PER	MJ	4.8E3	5.56E1	1.16E2	4.97E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4.18E1	1.07E1	-2.48E2	4.24E-3	-4.94E2
Secondary materials	kg	9.03E1	0E0	1.22E0	9.16E1	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	1.38E0

Renew. secondary fuels	MJ	1.17E-1	0E0	0E0	1.17E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Non-ren. secondary fuels	MJ	2.45E-1	0E0	0E0	2.45E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Use of net fresh water	m³	7.37E-1	9.66E-3	6.63E-2	8.13E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	2.78E-3	2.02E-3	8.76E-4	4.64E-6	-3.03E-1

8) PER = Primary energy resources.

END OF LIFE – WASTE

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste	kg	4.2E1	7.13E-2	5.59E-1	4.26E1	MND	MND	MND	MND	MND	MND	MND	MND	MND	1.3E-2	1.41E-2	0E0	3.96E-6	-5.56E0
Non-hazardous waste	kg	3.51E2	4.13E0	1.5E1	3.7E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	2.21E-1	9.34E-1	0E0	2.88E-2	-5.83E1
Radioactive waste	kg	1.18E-2	3.69E-4	3.36E-4	1.25E-2	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.03E-4	7.06E-5	0E0	2.81E-8	-5.08E-4

END OF LIFE – OUTPUT FLOWS

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	1.02E2	0E0	0E0
Materials for recycling	kg	3.37E-1	0E0	1.78E1	1.82E1	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	2.83E0	0E0	0E0
Materials for energy rec	kg	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0
Exported energy	MJ	0E0	0E0	0E0	0E0	MND	MND	MND	MND	MND	MND	MND	MND	MND	0E0	0E0	0E0	0E0	0E0

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	1.01E2	3.69E0	7.89E0	1.12E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.08E0	7.05E-1	5.71E-1	1.49E-4	-4.37E1
Ozone depletion Pot.	kg CFC ₁₁ e	7.29E-6	6.52E-7	5.81E-7	8.52E-6	MND	MND	MND	MND	MND	MND	MND	MND	MND	5.35E-7	1.25E-7	2.5E-8	4.95E-11	-1.32E-6
Acidification	kg SO ₂ e	6.73E-1	1.75E-2	3.64E-2	7.27E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.11E-2	2.89E-3	1.2E-3	6.01E-7	-1.95E-1
Eutrophication	kg PO ₄ ³ e	2.81E-1	4.19E-3	1.55E-2	3E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	6.89E-3	6.85E-4	2.41E-3	1.16E-7	-5.95E-2
POCP ("smog")	kg C ₂ H ₄ e	7.42E-2	5.62E-4	3.04E-3	7.78E-2	MND	MND	MND	MND	MND	MND	MND	MND	MND	9.23E-4	9.99E-5	1.89E-4	4.41E-8	-2.01E-2
ADP-elements	kg Sbe	4.38E-3	9.62E-5	1.09E-4	4.58E-3	MND	MND	MND	MND	MND	MND	MND	MND	MND	2.87E-6	1.79E-5	4.11E-6	1.39E-9	-2.52E-3
ADP-fossil	MJ	1.26E3	5.56E1	1.72E2	1.48E3	MND	MND	MND	MND	MND	MND	MND	MND	MND	4.18E1	1.07E1	3.42E0	4.24E-3	-8.1E2

ENVIRONMENTAL IMPACTS – TRACI 2.1. / ISO 21930

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Global Warming Pot.	kg CO ₂ e	1.01E2	3.69E0	7.97E0	1.13E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.05E0	7.04E-1	6.08E-1	1.48E-4	-6.68E1
Ozone Depletion	kg CFC ₁₁ e	8.81E-6	8.68E-7	7.74E-7	1.05E-5	MND	MND	MND	MND	MND	MND	MND	MND	MND	7.14E-7	1.66E-7	3.33E-8	6.61E-11	-4.26E-6
Acidification	kg SO ₂ e	6.24E-1	2.24E-2	3.88E-2	6.85E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	4.03E-2	3.61E-3	1.41E-3	1.28E-6	-3.35E-1
Eutrophication	kg Ne	1.1E-1	2.44E-3	5.64E-3	1.18E-1	MND	MND	MND	MND	MND	MND	MND	MND	MND	3.18E-3	4.26E-4	3.13E-4	1.53E-7	-6.3E-2
POCP ("smog")	kg O ₃ e	8.93E0	5.98E-1	6.43E-1	1.02E1	MND	MND	MND	MND	MND	MND	MND	MND	MND	1.25E0	9.04E-2	2.76E-2	3.16E-5	-2.71E0
ADP-fossil	MJ	2.56E2	7.83E0	2.1E1	2.85E2	MND	MND	MND	MND	MND	MND	MND	MND	MND	6.32E0	1.5E0	4.24E-1	6.15E-4	-2.03E2

VERIFICATION STATEMENT

VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online
This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

HaiHa Nguyen, as an authorized verifier acting for EPD Hub Limited
18.08.2023




SCALING TABLE

Global Warming Potential	kg CO2e/m2		kg CO2e/ft2	
	8"	10"	8"	10"
Cradle to gate (A1-A3)	107.6	112.7	10.0	10.5
Cradle to grave (A1-C)	111.9	117.0	10.4	10.9
Cradle to cradle (A1-D)	45.1	50.2	4.2	4.7

ADDITIONAL TECHNICAL DATA

Metrics	Metric		Imperial	
	8"	10"	8"	10"
Thermal Performance (Nominal)	RSI 4.6	RSI 6.0	R-26.0	R-34.0
Panel Thickness	20.3 cm	25.4 cm	8"	10"
Panel Weight	101.3 kg/m2	102.3 kg/m2	20.8 lb/ft2	21.0 lb/ft2