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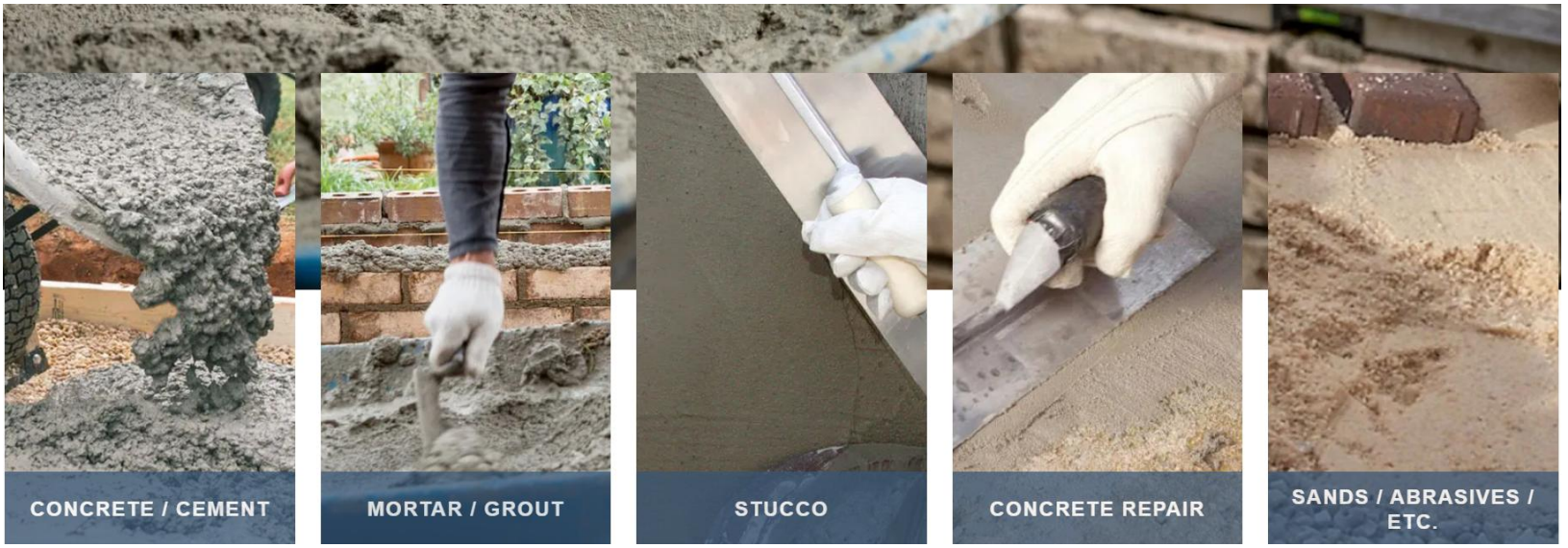
BASALITE®
Concrete Products



Environmental Product Declaration

This document is a product-specific Type III Environmental Product Declaration (EPD) for concrete products manufactured by Basalite Concrete Products at the Dupont facility in WA

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General information

Environmental Product Declaration

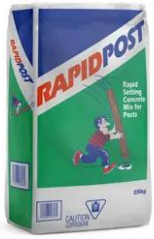
This cradle to gate Environmental Product Declaration covers dry mix products produced at the DuPont Plant. The Life Cycle Assessment (LCA) was prepared in conformity with ISO 21930, ISO 14025, ISO 14040, and ISO 14044. This EPD is intended for business-to-business (B-to-B) audiences.

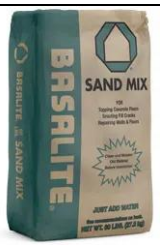
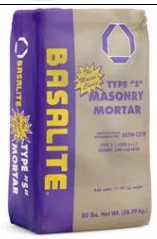
Manufacturer Name and Address	Basalite Concrete Products 3299 International Place DuPont, WA 98501
Program Operator	ASTM International http://www.astm.org/EPDs.htm
General Program instructions and Version Number	ASTM Program Operator for Product Category Rules (PCRs) and Environmental Product Declarations (EPDs), General Program Instructions. Version 8.0, revised April 29, 2020.
Declaration Number	XXX
Reference PCR and Version Number	ISO 21930:2017 Sustainability in Building Construction-Environmental Declaration of Building Products serves as the core PCR
EPD Type and Scope (facility/product/average)	Type III EPD Cradle-to-gate (modules A1 to A3) Facility specific
Defined functional or declared unit	1 Ton of dry mix
Product's intended Application and Use	This EPD is intended for business-to-business (B-to-B) audiences.
Product RSL (Reference Service Life) *	Not Applicable (B modules not included in scope)
Markets of Applicability	United States and Canada
Date of Issue	July 16, 2025
Period of Validity	Five years – until July 15, 2030
Year of reported manufacturer primary data	January 1st, 2024 to December 31st, 2024
LCA Software and Version Number	Simapro 9.1
LCI Database and Version Number	USLCI, SmartData
LCIA Methodology and Version Number	TRACI 2.1 v1.04
Overall Data Quality Assessment Score	2.38 - Good quality

This declaration was independently verified in accordance with ISO 14025: 2006. ISO 21930:2017 serves as the core PCR.	□ Internal ☑ External
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	Nawal Shoaib nawal@climateearth.com Climate Earth, Inc. 137 Park Place, Suite 204, Point Richmond, CA, 94801 (415) 391-2725 ▪ http://www.climateearth.com
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	Thomas P. Gloria, PhD t.gloria@industrial-ecology.com Industrial Ecology Consultants 35 Bracebridge Rd. Newton, MA 02459-1728 (617) 553-4929 http://www.industrial-ecology.com
Explanatory material may be obtained from the following:	Basalite Concrete Products 3299 International Place, Dupont, WA 253-964-5000 dupontsales@basalite.com
*Only applicable where the LCA/EPD includes Module B.	

This EPD reports environmental information for the products produced by Basalite Concrete Products at its DuPont facility. The products covered in this EPD meet the following standards:

Table 1: Products manufactured at the Dupont Plant

Product Name	ASTM Standard	Images
Basalite Concrete	ASTM C387 ASTM C33 ASTM C595	
Type 1L Cement	ASTM C595	
Fast Set Concrete	ASTM C387 ASTM C33 ASTM C595	
Rapid Post	ASTM C387 ASTM C33 ASTM C595	
Paver Lock	ASTM C144 ASTM C33	
Fine Grout	ASTM C476 ASTM C33 ASTM C595	

3:1 Sand Mix	ASTM C270 ASTM C144 ASTM C595 ASTM C1714	
Type S Mortar	ASTM C270 ASTM C144 ASTM C595 ASTM C979 ASTM C1714	
Type N Mortar	ASTM C270 ASTM C144 ASTM C595 ASTM C979 ASTM C1714	
Stucco Premix	ASTM C926 ASTM C897 ASTM C595 ASTM C1328	
Premium Sand	ASTM C144	
Utility Sand	ASTM C33 ASTM C144	

#0 Superfine Sand	ASTM C144	
#1 Fine Sand	ASTM C144	

LCA Study

Product Components

The main product components used in the manufacturing of Portland plant products are:

Main Materials	Input range
Cement	8-25%
Sand	40-100%
SCM	0-5%
Chemicals	0-5%

Declared Unit

The declared unit is one metric tonne of finished product.

System boundary

This study captures the following mandatory cradle-to-gate (A1-A3) life cycle product stages (as illustrated in Figure 1):

A1 - Extraction and processing of raw materials including fuels used in extraction and transport within the process.

A2 – Specific transportation of raw materials from extraction site or source to manufacturing site (including any recovered materials from source to be recycled in the process) and including empty backhauls and transportation to interim distribution centers or terminals.

A3 – Manufacturing of the product, including all energy and materials required and all emissions and wastes produced.

Product Stage			Construction Process Stage		Use Stage							End of Life Stage			
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4
Raw material supply	Transport	Manufacturing	Transport	Construction-installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

Figure 1. Life-Cycle Stages and Modules (Note: MND = module not declared; x = module included)

Except as noted above, all other life cycle stages as described in Figure 1 are excluded from the LCA study. The following processes are also excluded from the study:

1. Production, manufacture, and construction of manufacturing capital goods and infrastructure;
2. Production and manufacture of production equipment, delivery vehicles, and laboratory equipment;
3. Personnel-related activities (travel, furniture, office supplies);
4. Fuel used to transport personnel around the mine and sand & gravel facility.
5. Energy and water use related to company management and sales activities.

The main processes included in the system boundary are illustrated in Figure 2.

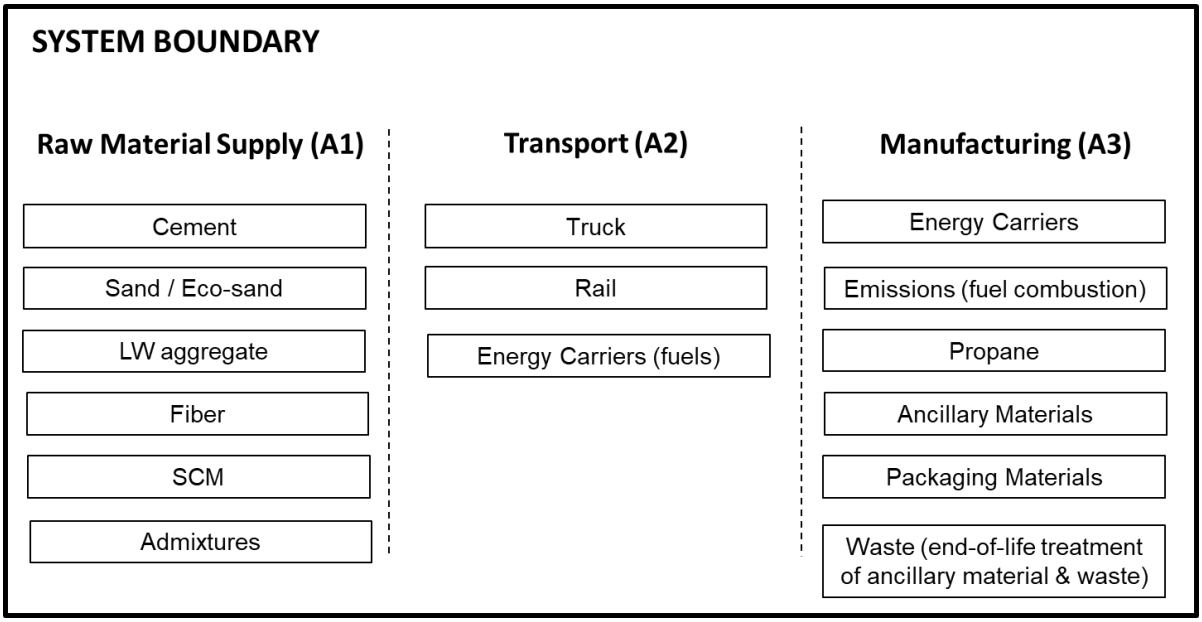


Figure 2. Main Processes Included in System Boundary

Explanatory materials may be requested by contacting:

Basalite Concrete Products
3299 International Place, Dupont, WA
253-964-5000
dupontsales@basalite.com

Environmental Impacts

Cradle to Gate (A1-A3) facility average impact results per 1 tonne for products produced at DuPont Plant (see This EPD reports environmental information for the products produced by Basalite Concrete Products at its DuPont facility. The products covered in this EPD meet the following standards:
Table 1) are outlined in Table 2.

Table 2: Cradle-to-Gate Impact Results for DuPont Plant Covered in Study per 1 tonne

Impact category	Unit	#0 SUPER FINE DRY SAND	#1 FINE DRY SAND	FINE GROUT	MORTOR-TYPE IL CEMENT	PREMIUM SAND	STUCCO PREMIX	THIN SET MORTAR
Global warming	kg CO2 eq	54	54	251	186	54.5	191	392
Ozone depletion	kg CFC-11 eq	4.10E-06	4.10E-06	9.57E-06	7.34E-06	4.13E-06	7.47E-06	1.12E-05
Eutrophication	kg N eq	0.25	0.25	0.48	0.4	0.25	0.4	0.61
Acidification	kg SO2 eq	0.27	0.27	0.74	0.55	0.27	0.56	1.15
Smog	kg O3 eq	4.6	4.6	13.5	9.76	4.6	10	20.4
Abiotic depletion non-fossil mineral	kg Sb eq	2.20E-05	2.20E-05	5.88E-05	4.56E-05	2.20E-05	4.63E-05	5.23E-04
Abiotic depletion (fossil fuels)	MJ	720	720	1715	1373	715	1429	3400
Renewable primary energy resources as energy	MJ	1600	1600	1638	1625	1605	1626	1843
Renewable primary resources as material	MJ	x	x	0.17	x	x	0.66	8.18
Non-renewable primary resources as energy	MJ	860	860	1922	1520	864	1578	3188
Non-renewable primary resources as material	MJ	x	x	8.17	x	x	0.3	359
Consumption of fresh water	m3	5.4	5.4	5.29	5.3	5.4	5.45	6.17
Secondary materials	kg	x	x	58.7	16.5	x	17	35.1
Renewable secondary fuels	MJ	x	x	10.9	7.56	x	7.78	16.1
Non-renewable secondary fuels	MJ	x	x	105	73	x	75.1	155
Recovered energy	MJ	x	x	x	x	x	x	x
Hazardous waste disposed	kg	x	x	2.61E-03	1.74E-03	x	1.80E-03	1.00E-02
Non-hazardous waste disposed	kg	1.2	1.2	2.26	1.9	1.18	1.95	30.5
High-level radioactive waste	m3	7.80E-08	7.80E-08	8.51E-08	7.71E-08	7.80E-08	7.86E-08	7.62E-08
Intermediate and low-level radioactive waste	m3	4.70E-07	4.70E-07	7.24E-07	4.67E-07	4.71E-07	4.80E-07	4.62E-07
Components for reuse	kg	x	x	x	x	x	x	x
Materials for recycling	kg	2.90E-03	2.90E-03	0.11	0.08	2.95E-03	0.08	0.16
Materials for energy recovery	kg	0.032	0.032	0.03	0.03	0.03	0.03	0.03

Recovered energy exported from product system	MJ	x	x	0.39	0.27	x	0.28	0.58
Calcination	kg CO2 eq	x	x	96.3	67	x	68.9	143

Previous table continued.

Impact category	Unit	TYPE N MORTAR	TYPE S MORTAR-TYPE IL	UTILITY SAND	FAST SET CONCRETE	PAVER LOCK	RAPID POST	SAND MIX 3:1
Global warming	kg CO2 eq	151	151	54.5	163	116	151	254
Ozone depletion	kg CFC-11 eq	6.48E-06	6.48E-06	4.13E-06	1.31E-05	4.28E-06	8.36E-06	8.88E-06
Eutrophication	kg N eq	0.36	0.36	0.25	0.36	0.31	0.36	0.48
Acidification	kg SO2 eq	0.48	0.48	0.27	0.56	0.55	0.55	1.17
Smog	kg O3 eq	8.49	8.49	4.6	10.4	8.62	9.89	26.1
Abiotic depletion non-fossil mineral	kg Sb eq	3.93E-05	3.93E-05	2.20E-05	3.52E-04	6.27E-04	1.23E-04	5.43E-05
Abiotic depletion (fossil fuels)	MJ	1197	1197	715	1265	2062	1328	1932
Renewable primary energy resources as energy	MJ	1620	1620	1605	1630	1837	1655	1632
Renewable primary resources as material	MJ	x	x	x	0.2	7.41	0.97	x
Non-renewable primary resources as energy	MJ	1343	1343	864	1486	1754	1514	2131
Non-renewable primary resources as material	MJ	x	x	x	6	459	29	x
Consumption of fresh water	m3	5.22	5.22	5.4	5.33	6.55	5.49	5.3
Secondary materials	kg	12.1	12.1	x	49.1	x	43.6	48.1
Renewable secondary fuels	MJ	5.55	5.55	x	4.77	x	4.37	9.69
Non-renewable secondary fuels	MJ	53.5	53.5	x	46.1	x	42.2	93.5
Recovered energy	MJ	x	x	x	x	x	x	x
Hazardous waste disposed	kg	1.28E-03	1.28E-03	x	1.48E-03	5.34E-03	1.87E-03	2.32E-03
Non-hazardous waste disposed	kg	1.71	1.71	1.18	3.27	38.9	3.27	2.11
High-level radioactive waste	m3	7.70E-08	7.70E-08	7.80E-08	8.65E-08	7.79E-08	8.55E-08	8.34E-08
Intermediate and low-level radioactive waste	m3	4.66E-07	4.66E-07	4.71E-07	7.54E-07	4.70E-07	7.20E-07	6.65E-07
Components for reuse	kg	x	x	x	x	x	x	x
Materials for recycling	kg	0.06	0.06	2.95E-03	0.06	2.95E-03	0.05	0.1
Materials for energy recovery	kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Recovered energy exported from product system	MJ	0.2	0.2	x	0.17	x	0.16	0.35
Calcination	kg CO2 eq	49.1	49.1	x	42.3	x	38.7	85.8

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