Environmental Product Declaration

In compliance with ISO 14025 and EN 15804:2012+A2:2019/AC: 2021 for

PLAXIT 612 - Masonry Mortar

EPD Program	Title	Details
International Climate Intelligence System 71-75 Shelton Street Covent Garden London, WC2H 9JQ United Kingdom info@climateintell.com	Registration #	ICIS-202409-50
	Date of Publication	09-09-2024
	Validity	08-09-2029
	Date of Revision	-

The most recent data needs to be provided through an EPD, which may be updated when circumstances change. Thereby the claimed validity is contingent upon ongoing validation at www.climateintell.com

INTERNATIONAL CLIMATE INTELLIGENCE SYSTEM EPD

Plaxit Dry Mix Company L.L.C
P.O.Box 9107
Abu Dhabi,
United Arab Emirates

EPD VERIFIED

www.plaxit.com

TABLE OF CONTENTS

1.0 PROGRAM INFORMATION

Program	International Climate Intelligence System 71-75 Shelton Street Covent Garden London, WC2H 9JQ United Kingdom info@climateintell.com
Product Group Classification	UN CPC 37410
Product Category Rules (PCR)	PCR 2020:17 Construction products (EN 15804:2012+A2:2019 /AC: 2021) Version 1.2.5 dated 01.11.2022. Cement and Building Lime EN 16908:2017+A1:2022 EN standard EN 15804 serves as the Core Product Category Rules (PCR)
Registration Number	ICIS-202409-50
Date of Publication	09-09-2024
Validity Date	08-09-2029
Geographical Scope	United Arab Emirates

2.0 INTRODUCTION

This report contains the environmental performance of the manufacturing process of PLAXIT 612 – Masonry Mortar by Plaxit Dry Mix Company LLC. This Environmental Product Declaration (EPD) has been developed using the Life Cycle Assessment (LCA) methodology. The environmental impact values calculated are expressed to 1 kg of PLAXIT 612 – Masonry Mortar.

The assessed life cycle includes all phases in the manufacturing process of PLAXIT 612 – Masonry Mortar in a "cradle to gate with options" scope. This LCA covers transportation of Raw materials, production, distribution of final product to the customer and end of life stages.

This EPD has been conducted according to the program operator regulations and it has been verified in accordance with the International Climate Intelligence System. The EPD regulation is a system for the international use of Type III Environmental Declarations, according to ISO 14025:2006. Not only the system, but also its applications, is described in the Programmer's Product Category Rules (PCR). This report has been made following the specifications given in the European standard EN 15804:2012+A2:2019/AC:2021.

3.0 COMPANY INFORMATION

Plaxit Dry Mix Company LLC Is A Manufacturer & Supplier Of Dry Mix Products Based On Cement, Lime And Gypsum Which Includes Key Coat, Renders / Plasters, Gypsum Plasters, Mineral Facing Plasters, Thermal Insulation Renders, Tile Adhesives / Joint Fillers, Masonry Mortars, Grouts & Repair Mortars, Dry Concrete & Floor Screeds.

Plaxit Dry Mix has a wide range of machines to suit all applications and volume of work. For a large scale of plaster job, plastering machines with the silo system is the perfect solution. Plastering machines mix and spray the wet mortar on to the wall or ceiling where it is leveled and finished by skilled masons.

Plaxit Dry Mix provides PFT G4 plastering machines to get a consistent quality of wet plaster mortar. An uninterrupted supply of dry mix plaster from the silo, which stands at a convenient place, ensures a continuous work and high output. For high-rise towers relay stations are provided to convey the dry mortar to any desired height. For masonry mortar and screed Plaxit Dry Mix provides horizontal screw mixer for continuous supply of wet mortar.

Certifications

Plaxit Dry Mix Company LLC has achieved the below certifications:

- ISO 9001:2015 – Quality Management System (22593-Q15-001)
- ISO 14001:2015 – Environmental Management System (UAE/5/6249812429)

4.1 Analyzed Product

Plaxit 612 – Masonry Mortar is a dry premixed mortar for laying/fixing the concrete block, clay brick and other similar masonry units. It has an excellent workability and water retention properties. It is manufactured in Abu Dhabi, UAE.

4.2 Product Details – Physical and Chemical Properties

Product Specifications	Details
Physical State	Premixed Granular Powder
Binder	Ordinary Portland Cement
Color	Light Grey
Size of the aggregate	0 – 2.0 mm
Density	Dry -1.70 kg/l, Wet – 2.0 kg/l
Water Requirement	Approx. 14%
Approximate Yield	560 liters/ton
Working time	Approximate 60 minutes
Curing	Minimum 48 hrs with potable water
Compressive Strength	10.0 N/mm^2 at 28 days
Flexural Strength	2.0 N/mm^2 at 28 days
Packing	Silo & 50 kg paper bag
Storage & Shelf Life	12 months from the date of manufacturing, when stored under dry conditions

Applicable Standards	ASTM C270, C144, C348, C349, C109/C109M, BS 5628, 1200, BS EN 998-2, 1015

4.3 Product Application

Apply Plaxit 612 to masonry blocks or lay blocks on top of the mortar before it starts forming the skin. Place masonry blocks into mortar to form uniform joints of approximate 10 mm. Fill the head joints with mortar properly. Tool all the joints when mortar has set to thumb press hard.

5.0 LCA INFORMATION

5.1 Declared Unit

The Declared Unit of the Life Cycle Assessments is 1 kg of Plaxit 612 – Masonry Mortar.

5.2 Time representativeness

Manufacturing facility specific data from Plaxit Dry Mix are based on 1 year average for process data (Reference year January to December 2023). The following rules for time scope of data were applied - < 10 years for background data and < 2 years for manufacturer's data.

5.3 LCA Software and Database

Version 3.17.4.0 of software Air.e LCA™ with Ecoinvent™ 3.10.0 database has been used for LCA modeling and impacts calculations.

5.4 System Boundaries

This EPD covers all product stages from "cradle to gate with options", i.e this LCA covers Production stage A1-A3, Transportation A4, End of life stages C1-C4 and Resource recovery stage D according to EN 15804 + A2/AC:2021.

The procedures that are not controlled by the company, but are included in this environmental study, are:

- The extraction and production of fuels and electricity.
- The production of the machinery, buildings, and vehicles.

All related direct and indirect environmental impacts related to these elements have been calculated and were included in the LCAs in this EPD.

Upstream Processes (**A1: Raw Material Supply**): Production of the product starts with mainly raw material production and transportation from different parts of the world and some locally sourced. 'Raw material supply' includes raw material extraction before production.

Core Processes (**A2: Transportation**): Transport is relevant for delivery of raw materials to the plant and the transport of materials within the plant. Ordinary Portland from Ras Al Khaimah & Abu Dhabi, Hydrated Lime from Abu Dhabi, Lime Stone Aggregate from Fujairah and Chemicals from Germany and in our case, the modelling included each raw material's road and sea distances (average values).

Manufacturing (module A3): The processes that are included in the manufacturing phase are the loading the raw materials, mixing (specified ratio and mixed), and

packaging & wrapping. Electricity and Diesel are consumed in the production process. During the manufacturing process, a small amount of process waste is produced that is reprocessed.

Transport (module A4): To create a scenario of the A4 phase, all the products sold from January to December 2023 has been analyzed as representative of the international transport. The transport means 3.5-7.5t & >32t trucks, Euro 6.

Scenario Details	Description
Vehicle used for transport	3.5-7.5t & >32t trucks, Euro 6.
Vehicle capacity	3.5 -7.5 tons and 32 tons
Fuel type and consumption	Diesel, 0.38 liters per km
Capacity utilization	100% as assumed in Ecoinvent
Bulk transportation	Mass of the transported product.

Dismantling/demolition (module C1)

Demolition of this product is part of the demolition of the building itself. Therefore, it is assumed that the energy used for the demolition of building products has minor significance and the environmental impact of this module is set to be zero.

Transportation of demolished items (module C2)

This module considers that 85% of the construction waste is recycled which is taken to a nearby recycling center averaged at a distance of 50 kms in a >32 ton truck and the remaining 15% of the waste is landfilled using the same transportation assumptions.

Type	Capacity utilization	Type of vehicle	Average distance
Truck	75%	Euro 3.5-7.5t	50 km

Waste processing (module C3)

Several researches and investigations by industry executives concluded that 85% of construction and demolition waste are to be recycled and about 15% landfilled. The construction waste is commonly recycled to bedding aggregated products used for infrastructure and thus the dataset was modeled to fit this assumption. For the waste processing, an energy consumption of 0.01 kWh of electricity/kg of waste input was calculated.

Disposal (module C4)

This module represents the 15% of construction waste which is to be disposed of in a landfill.

Reuse, Recycling, and Recovering Potential (module D)

Module D calculates the potential environmental benefits of recycling and reusing the construction and building materials. 85% of the product is assumed to be recycled to bedding aggregated products used for infrastructures of roads, sidewalks, etc. Module D contains credits from the recycling of construction materials in module C3.

Manufacturing and System Boundaries Diagram

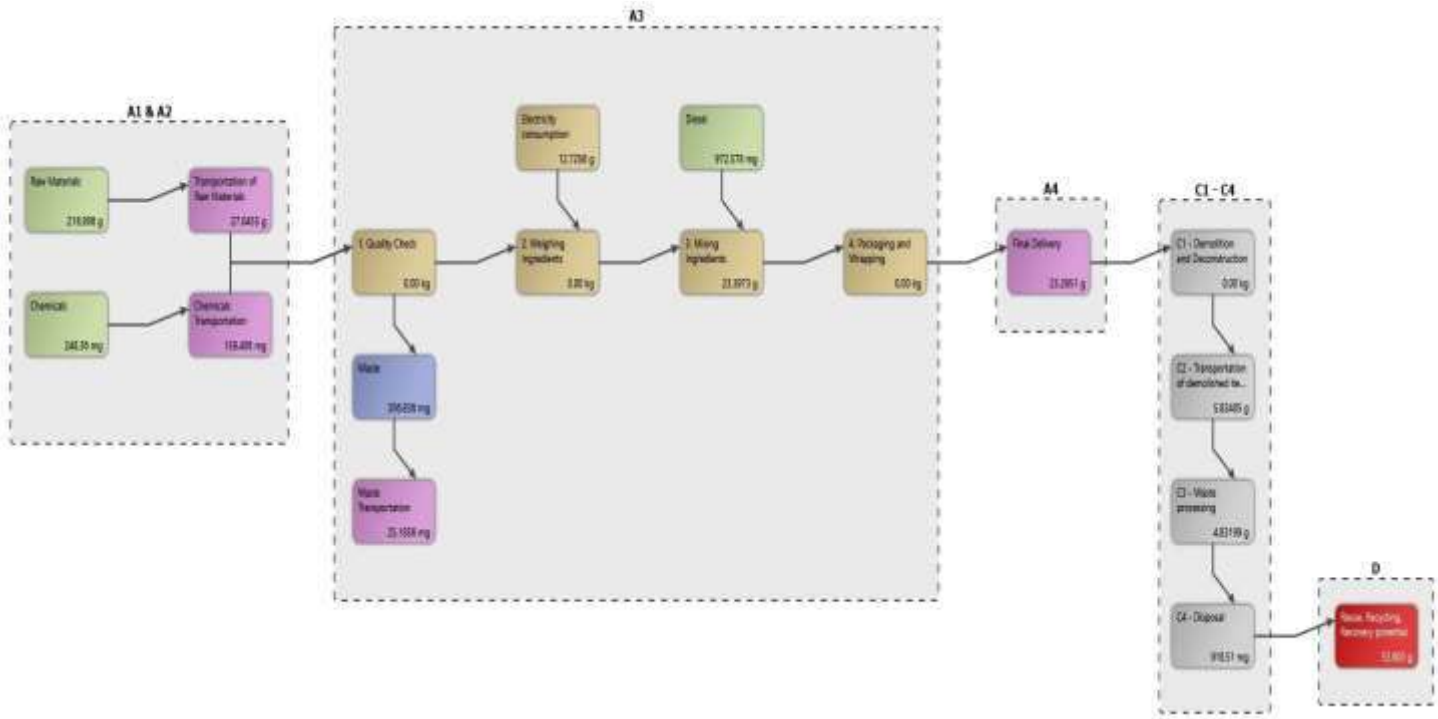
	Production Stage			Construction Process Stage		Use Stage							End of Life Stage				Resource Recovery Stage
	Raw Materials	Transport	Manufacturing	Transport	Construction Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational Energy Use	Operational Water Use	De-construction Demolition	Transport	Waste Processing	Disposal	Reuse Recovery Recycling Potential
Module	**A1**	**A2**	**A3**	**A4**	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	**X**	**X**	**X**	**X**	ND	ND	ND	ND	ND	ND	ND	ND	**X**	**X**	**X**	**X**	**X**
Geography	GLO	GLO	UAE	UAE	-	-	-	-	-	-	-	-	UAE	UAE	UAE	UAE	UAE
Specific data	GWP > 90%				-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	One Product				-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	One manufacturing center				-	-	-	-	-	-	-	-	-	-	-	-	-

X = Included, ND=Module not declared, NR= Module not relevant

Modules from A5 to B7 are not included (X refers to considered stage; N refers to not relevant stage and ND to not declared stage).

Scope of this Life Cycle Assessment 'Cradle to Gate with Options'					
A1 Raw Materials Production	**A2 Transport raw materials**	**A3 Manufacture**	**A4 Distribution**	**End of use Stage (C1-C4)**	**Recovering and Recycling (D)**
	  	  	 		
Raw Materials	Transport from supplier by Road & Sea	Loading, Mixing & packing	Transport to customers by sea and road	Demolition, transport, disposal.	Reuse, recovery and recycling potential

5.5 The following diagram is a detailed LCA description of the modules and boundaries.



5.6 Content Declaration

Product Components	Weight %	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Ordinary Portland Cement	15-20%	0	0
Crushed natural mineral aggregates	80-85%	0	0
Hydrated Lime	1-5%	0	0
Chemical Additives - Cellulose Powder	0.1-1%	0	0
Total	**100**	**0**	**0**

Packaging Materials			
Packaging Materials	**Weight Kg**	**Weight % (Versus the Product)**	**Weight biogenic carbon, kg C/kg**
Wooden Pallet	6.22E-03	0.62	0
Plastic wrap	3.10E-04	0.03	0
Paper Bag	3.00E-03	0.30	0
Total	9.53E-03	0.95	0
*Biogenic carbon content is not presents since the packaging weights less than a 5% over the product's weight.			

5.7 Substances listed in the "Candidate List of SVHC"

During the life cycle of the product, no hazardous substances listed in the "Candidate List of substances of very high concern (SVHC) for authorization" has been used in a percentage higher than 0.1% of the weight of the product.

5.8 More information

Cut-off rules: more than 99% of the materials and energy consumption have been included. The Polluter Pays Principle and the Modularity Principle have been followed.

Allocations: The allocation of common inputs and outputs is based on the general allocation rule what represents the proportion of production of every specific product in overall production expressed in square meter. Generic process data for production of input materials were used.

Electricity: A specific dataset with the Life Cycle Inventory (LCI) corresponding to the electricity mix in Abu Dhabi, United Arab Emirates, has been used for this LCA.

Calculation Rules: Datasets from Ecoinvent 3.10.0 with emission factors for raw materials and generic chemicals have been characterized to adjust them to the

characteristics of manufacturing of suppliers or counties where suppliers are located. Specific datasets with the emissions factors corresponding to the fuel combustion of production plant and machinery have been developed for these LCAs. Indirect emissions due to diesel production and transportation are also included in the environmental impact. Minor components are not directly related to the product, with less than 1% impact, such as office supplies, has been excluded from the assessment.

All transports of components have been included in the LCA considering real distances travelled by materials used for production. It is estimated in a global scale according to Ecoinvent™ criteria. As exact port locations are not known in detail, transport distances have been calculated from a one of the ports in the country of origin to the factory. Operation in port has also been excluded. Road distances calculated using Google Maps. Maritime distances calculated using Marine Traffic Voyage Planner.

By Products Assignment: There are no by-products in this Environmental Product Declaration. Hence no allocation had to be applied.

6.0 ENVIRONMENTAL PERFORMACE

6.1 Potential Environment Impacts

In the following tables, the environmental performance of the declared units "1 kg of Plaxit 612 – Masonry Mortar" is presented for the Plaxit Dry Mix Company. During the assessment it was not evident to distinguish the differences in the consumption of electricity, water and raw material during the manufacturing. Hence, the calculation is based on total production vs total consumption against manufacturing of the product. Environmental impacts are calculated using the EF-3.1, (ILCD).

1 kg of Plaxit 612 – Masonry Mortar

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding thresholds values, safety margins or risks.

Core Environmental Impact Indicators

Impact Category	Unit	A1	A2	A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Climate change (GWP) – fossil	kg CO2e	2.18E-01	2.72E-02	3.74E-02	2.33E-02	ND	ND	0.00E+00	5.82E-03	4.83E-03	9.16E-04	-5.30E-02
Climate change (GWP) – biogenic	kg CO2e	6.84E-04	2.16E-08	1.03E-05	0.00E+00	ND	ND	0.00E+00	0.00E+00	3.70E-07	4.21E-07	-4.89E-04
Climate change (GWP) – LULUC	kg CO2e	2.49E-04	8.80E-08	3.35E-06	0.00E+00	ND	ND	0.00E+00	0.00E+00	1.79E-07	3.23E-07	-1.34E-04
Climate change (GWP) – total	kg CO2e	2.19E-01	2.72E-02	3.74E-02	2.33E-02	ND	ND	0.00E+00	5.82E-03	4.83E-03	9.17E-04	-5.36E-02
Ozone depletion	kg CFC11e	6.80E-09	3.00E-11	2.09E-09	0.00E+00	ND	ND	0.00E+00	0.00E+00	1.30E-10	3.00E-11	-6.02E-09
Acidification	mol H+e	8.10E-04	1.00E-05	3.60E-04	8.19E-06	ND	ND	0.00E+00	2.05E-06	4.35E-06	6.89E-06	-3.90E-04
Eutrophication, aquatic freshwater	kg PO4e	9.31E-05	1.23E-08	2.08E-06	0.00E+00	ND	ND	0.00E+00	0.00E+00	1.45E-07	2.38E-07	-5.43E-05
Eutrophication, aquatic freshwater	Kg P eq	3.03E-05	4.01E-09	6.78E-07	0.00E+00	ND	ND	0.00E+00	0.00E+00	4.71E-08	7.74E-08	-1.77E-05
Eutrophication, aquatic marine	kg Ne	2.32E-04	5.76E-06	1.68E-04	4.07E-06	ND	ND	0.00E+00	1.02E-06	1.36E-06	2.64E-06	-1.11E-04
Eutrophication, terrestrial	mol Ne	2.60E-03	6.00E-05	1.83E-03	5.00E-05	ND	ND	0.00E+00	1.00E-05	1.00E-05	3.00E-05	-1.20E-03
Photochemical ozone formation	kg NMVOCe	7.49E-04	1.70E-05	4.91E-04	1.21E-05	ND	ND	0.00E+00	3.03E-06	1.05E-05	9.85E-06	-3.77E-04
Abiotic depletion, minerals & metals	kg Sbe	9.70E-07	1.80E-10	5.85E-08	0.00E+00	ND	ND	0.00E+00	0.00E+00	2.02E-09	1.27E-09	-6.31E-07
Abiotic depletion of fossil resources	MJ	1.53E+00	1.74E-03	3.43E-01	0.00E+00	ND	ND	0.00E+00	0.00E+00	8.50E-02	2.42E-02	-8.35E-01
Water use	m3e depr.	4.54E-02	3.91E-06	1.29E-03	0.00E+00	ND	ND	0.00E+00	0.00E+00	3.44E-04	1.03E-03	-3.25E-02

EN 15804+ A2 disclaimers for Abiotic depletion and Water use indicators and all 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 experienced with the indicator. "Reading example: 1.57E-03 = 1.57*10-3 = 0.00157"

Additional Environmental Impact Indicators

Impact Category	Unit	A1	A2	A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Particulate matter	Incidence	1.09E-08	5.42E-11	6.79E-10	4.34E-11	ND	ND	0.00E+00	1.08E-11	1.84E-11	1.47E-10	-1.12E-08
Ionizing radiation, human health	kBq U235e	4.50E-03	7.43E-06	5.21E-04	0.00E+00	ND	ND	0.00E+00	0.00E+00	3.94E-06	1.45E-05	-3.41E-03
Eco-toxicity (freshwater)	CTUe	7.15E-01	5.60E-04	4.31E-02	7.00E-05	ND	ND	0.00E+00	2.00E-05	1.52E-03	1.04E-02	-4.20E-01
Human toxicity, cancer effects	CTUh	4.69E-10	9.82E-13	6.07E-12	8.01E-13	ND	ND	0.00E+00	2.00E-13	4.13E-13	4.01E-13	-3.60E-10
Human toxicity, non-cancer effects	CTUh	1.52E-09	1.84E-11	8.70E-11	1.54E-11	ND	ND	0.00E+00	3.85E-12	7.07E-12	4.92E-12	-6.47E-10
Land use related impacts/soil quality	Dimensionless	2.87E+01	2.20E-04	1.96E-02	0.00E+00	ND	ND	0.00E+00	0.00E+00	1.12E-03	4.51E-02	-2.85E+01

EN 15804+A2 disclaimer for Ionizing radiation, human health. This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

Environmental impacts – GWP-GHG

Impact Category	Unit	A1	A2	A3	A4	A5	B1-B7	C1	C2	C3	C4	D
GWP-GHG	kg CO2e	2.18E-01	2.72E-02	3.74E-02	2.33E-02	ND	ND	0.00E+00	5.82E-03	4.83E-03	9.16E-04	-5.31E-02

This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product as defined by IPCC AR 5 (IPCC 2013) This indicator Is almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.

Use of Natural Resources

Impact Category	Unit	A1	A2	A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Renewable PER used as energy	MJ	3.97E+00	1.10E-05	1.70E-03	0.00E+00	ND	ND	0.00E+00	0.00E+00	8.21E-05	1.99E-04	-3.93E+00
Renewable PER used as materials	MJ	3.57E-04	4.84E-08	9.31E-06	0.00E+00	ND	ND	0.00E+00	0.00E+00	9.37E-05	8.17E-07	-1.65E-04
Total use of renewable PER	MJ	3.97E+00	1.10E-05	1.71E-03	0.00E+00	ND	ND	0.00E+00	0.00E+00	1.76E-04	2.00E-04	-3.93E+00

Non-renew. PER used as energy	MJ	1.53E+00	1.74E-03	3.43E-01	0.00E+00	ND	ND	0.00E+00	0.00E+00	8.50E-02	2.42E-02	-8.35E-01
Non-renew. PER used as materials	MJ	1.36E-06	2.89E-11	5.60E-09	0.00E+00	ND	ND	0.00E+00	0.00E+00	4.45E-10	1.71E-08	-1.19E-07
Total use of non-renewable PER	MJ	1.53E+00	1.74E-03	3.43E-01	0.00E+00	ND	ND	0.00E+00	0.00E+00	8.50E-02	2.42E-02	-8.35E-01
Use of secondary materials	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renew. secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

End of Life - Waste

Impact Category	Unit	A1	A2	A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Hazardous waste	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	2.94E+05	0.00E+00
Non-hazardous waste	Kg	0.00E+00	0.00E+00	1.00E+03	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Radioactive waste	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

End of Life - Outflows

Impact Category	Unit	A1	A2	A3	A4	A5	B1-B7	C1	C2	C3	C4	D
Components for reuse	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.68E+06
Materials for recycling	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	Kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy - electricity	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy - thermal	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Biogenic Carbon Content

Details	Unit	A1-A3
Biogenic carbon content in product	Kg C	0
Biogenic carbon content in accompanying packaging	Kg C	0

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO2. "Reading example: 1.57E-03 = 1.57*10-3 = 0.00157"

Disclaimer: "According to the EN 15804:2012+A2:2019 standard, the LCIA results are relative expressions translating impacts into environmental themes such as climate change, ozone depletion, etc. (midpoint impact categories). Thus, the LCIA results do not predict impacts on category endpoints such as impact on the extinction of species or human health. In addition, the results do not provide information about the exceeding of thresholds, safety margins or risks".

6.2 Interpretation of LCA Study Results

In general terms, as it is shown in the table of core environmental impact indicators, A1-A3 modules have the higher impact, representing above 80% of the whole impact. A4 module has a less impact. C2 and C4 module has little impact too, representing at most 0.16% and 0.01% respectively of the whole impact. Refer the below table 1 for more detailed explanations.

Concluding, the study provides fair understanding of environmental impacts during the various life cycle stages of Plaxit 612 – Masonry Mortar production. It also identifies the hot spots in the value chain where improvement activities can be prioritized and accordingly actions can be planned. The scope covers the ecological information to be divided into raw material production (A1), transportation (A2), manufacturing (A3), delivery (A4), product dismantling (C1), transport of dismantled product to site (C2), waste processing (C3), waste disposal (C4) as well as the end of life stage recycling (D) considerations.

7.0 MANDATORY STATEMENTS

Explanatory material can be obtained from EPD owner and/or LCA author. The verifier and The Program Operator do not make any claim or present any responsibility about the legality of the product. The EPD owner has the sole ownership, liability, and responsibility for the EPD. The LCA Author shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

EPDs within the same product category but registered in different EPD programmes may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; have equivalent content declarations; and be valid at the time of comparison.

8.0 ADDITIONAL INFORMATION

8.1 Action against Erosion, Environmental Restoration, and Landscaping of the work.

Application of measures to prevent erosion, restore the environment, and landscape the job includes restoring all elements immediately connected to it. The restoration of other related items indirectly is also suggested, including auxiliary facilities and landfill lands. We recycle as many waste materials as possible. We follow a Just-in-Time manufacturing strategy to increase efficiency, reduce wastage and eliminate the need for excess storage.

Advantages of Plaxit dry mix mortars

- Saving in time and labour
- Consistent in Quality
- Reduction in overhead cost
- Wider choices of material and application process
- Pollution and hazards free mechanized process of application

8.2 Information related to Sector EPD

This is not a sector EPD.

8.3 Differences versus previous versions

This is the first version of the EPD.

9.0 VERIFICATION

Diffusion Institution	International Climate Intelligence System 71-75 Shelton Street Covent Garden London, WC2H 9JQ United Kingdom
Registration Number	ICIS-202409-50
Date of Publication	09-09-2024
Valid until	08-09-2029
Geographical Scope	United Arab Emirates
Product category rules (PCR): PCR 2020:17 Construction products (EN 15804:2012+A2:2019/AC:2021) Version 1.2.5 dated 01.11.2022. Cement and Building Lime EN 16908:2017+A1:2022. EN standard EN 15804 serves as the Core Product Category Rules (PCR)	
PCR review was conducted by: International Climate Intelligence System.	
Independent verification of the declaration and data, according to ISO 14025:2006 and ISO 14040: ☐ EPD Process Certification (internal) ☒ EPD Verification (external)	
Third party verifier: Constantine Stephen.S Accredited by: International Climate Intelligence System	

10.0 CONTACT INFORMATION

EPD Owner	Plaxit Dry Mix Company L.L.C P.O. Box 9107 Abu Dhabi United Arab Emirates Tel : +971-7-2447260 praveen@plaxit.com www.plaxit.com
LCA Author	Alan Christopher -Sustainability Consultant GCAS Quality Certifications P.O.Box 65561, Dubai, UAE www.gcasquality.com info.dubai@gcasquality.com
Verifier Details	Name: Constantine Stephen.S Location: Glasgow Accredited by: International Climate Intelligence System

11.0 REFERENCES

LCA Report: Life Cycle Inventory of Plaxit 612 – Masonry Mortar by Plaxit Dry Mix Company L.L.C

Software: Air.e LCA Version 3.17.4.0 www.solidforest.com

Main database: Ecoinvent 3.10.0 www.ecoinvent.org

Geographical scope of the EPD: United Arab Emirates

ISO 14040:2006 “Environmental management -- life cycle assessment -- principles and framework”;

ISO 14044:2006 “Environmental management -- life cycle assessment -- requirements and guidelines”;

ISO 14020:2000 “Environmental Labels and declarations - General Principles

ISO 14025:2006 “Environmental labels and declarations -- type III environmental declarations -- principles and procedures”.

EN 15804+A2:2019/AC:2021 European Committee for Standardization: Sustainability of construction works − Environmental product declarations − Core rules for the product category of construction products.

General Programme Instructions of the International Climate Intelligence System