ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Accrington A Product Group
Forterra Building Products

EPD HUB, HUB-5651
Published on 17.03.2026, last updated on 17.03.2026, valid until 16.03.2031

Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804, EPD Hub PCR version 1.2 (24 Mar 2025) and JRC characterization factors EF 3.1.

Created with One Click LCA

GENERAL INFORMATION

MANUFACTURER

Manufacturer	Forterra Building Products
Address	Grange Park Court, 5 Roman Way, Northampton, NN4 5EA, UK
Contact details	asktechnical@forterra.co.uk
Website	https://www.forterra.co.uk/

This EPD is intended for business-to-business and/or business-to-consumer communication. 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 EN 15804 and if they are not compared in a building context.

EPD STANDARDS, SCOPE AND VERIFICATION

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804:2012+A2:2019/AC:2021 and ISO 14025
PCR	EPD Hub Core PCR Version 1.2, 24 Mar 2025
Sector	Construction product
Category of EPD	Sister EPD
Parent EPD number	HUB-4666
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Joe Gosling, Forterra Building Products
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Vera Durão, as an authorised verifier acting for EPD Hub Limited

PRODUCT

Product name	Accrington A Product Group
Additional labels	-
Product reference	-
Place(s) of raw material origin	United Kingdom
Place of production	Accrington, United Kingdom
Place(s) of installation and use	United Kingdom
Period for data	2022 calendar year
Averaging in EPD	No grouping
Variation in GWP-fossil for A1-A3 (%)	N/A
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	93.5

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 tonne of brick
Declared unit mass	1000 kg
Mass of packaging	1.076 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	194
GWP-total, A1-A3 ($kgCO_2e$)	193
Secondary material, inputs (%)	0.05
Secondary material, outputs (%)	95
Total energy use, A1-A3 (kWh)	665
Net freshwater use, A1-A3 (m^3)	0.23

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Forterra is a leading UK manufacturer of essential clay and concrete building products, with a unique combination of strong market positions in clay bricks, concrete blocks and precast concrete flooring.

Sustainability is a fundamental part of Forterra's strategy, aiming to leave the lightest possible touch on the world we live in. The business has ambitious targets across multiple aspects of sustainability including carbon and packaging reductions, increase in on site renewable power and zero harm in the workforce.

PRODUCT DESCRIPTION

The bricks within this range are extruded wirecut bricks. There are several brick names that fall under this group and a table has been included to identify them. All bricks within this group are manufactured to BS EN 771-1 and are made at Forterra's Accrington factory in Lancashire. The bricks are vertically perforated 1ith 15-25% void sizes.

The declared unit in this EPD is 1 tonne. For easy comparison, scaling tables have been included to allow for conversions for the desired metric including per thousand and per m^2.

Further information can be found at:
https://www.forterra.co.uk/

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	-	-
Minerals	100	UK
Fossil materials	-	-
Bio-based materials	-	-

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	0.2

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 tonne of brick
Mass per declared unit	1000 kg
Functional unit	-
Reference service life	150

SUBSTANCES, REACH - VERY HIGH CONCERN

Substances of very high concern	EC	CAS
-	-	-

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	x	x	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling

Not declared = ND.

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. Also, 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.

A market-based approach is used in modelling the electricity mix utilized in the factory.

The clay used in the manufacturing of brick group A made at the Accrington factory is quarried on site and supplied directly to the factory. The clay is stockpiled before being put through box feeders followed by a series of grinding and milling when it is then mixed with water and additives. Once mixed, the clay is extruded and cut into bricks ready to be dried. Once the bricks are dry they are fired in the kiln by using natural gas. When the bricks have cooled they are then sent to be packaged and either stored in the yard or sent to customer. There are two factors contributing to production losses: process waste and firing losses. The process waste % is the difference between the amount of bricks prepared for firing and the saleable quantity of bricks after firing. Firing loss % is the weight difference before and after firing the bricks. Packs of brick are packaged using paper to secure each layer, plastic strap to keep the pack secure, plastic edge protection to guard against chipping and plastic film for additional security and product protection. Wooden pallets are not used. The manufacturing waste in A3 is reused onsite as an aggregate for use on the sites road network. There are no transport impacts.

The use of renewable energy in manufacturing is demonstrated through contractual instruments (GOs, RECs, etc.), and its use is ensured throughout the validity period of this EPD.

TRANSPORT AND INSTALLATION (A4-A5)

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

A4: The Forterra delivery fleet are Euro6 complaint and the distance to site is an average of Forterra's brick customer base which is 79km. The transported mass is the declared unit of 1 tonne of bricks plus the associated packaging.

A5: Bricks are generally laid by hand and any packaging is removed on the construction site. Packaging waste has been included in this section, 40% of the plastic is assumed to be recycled and 83% of the paper is assumed to be recycled. 23% of the plastic is assumed to be landfilled and 9% of the paper is landfilled. 5% of the bricks will be sent for recycling during the installation and this has been accounted for the quantities. The distance to the waste processing site is assumed to be 15km.

PRODUCT USE AND MAINTENANCE (B1-B7)

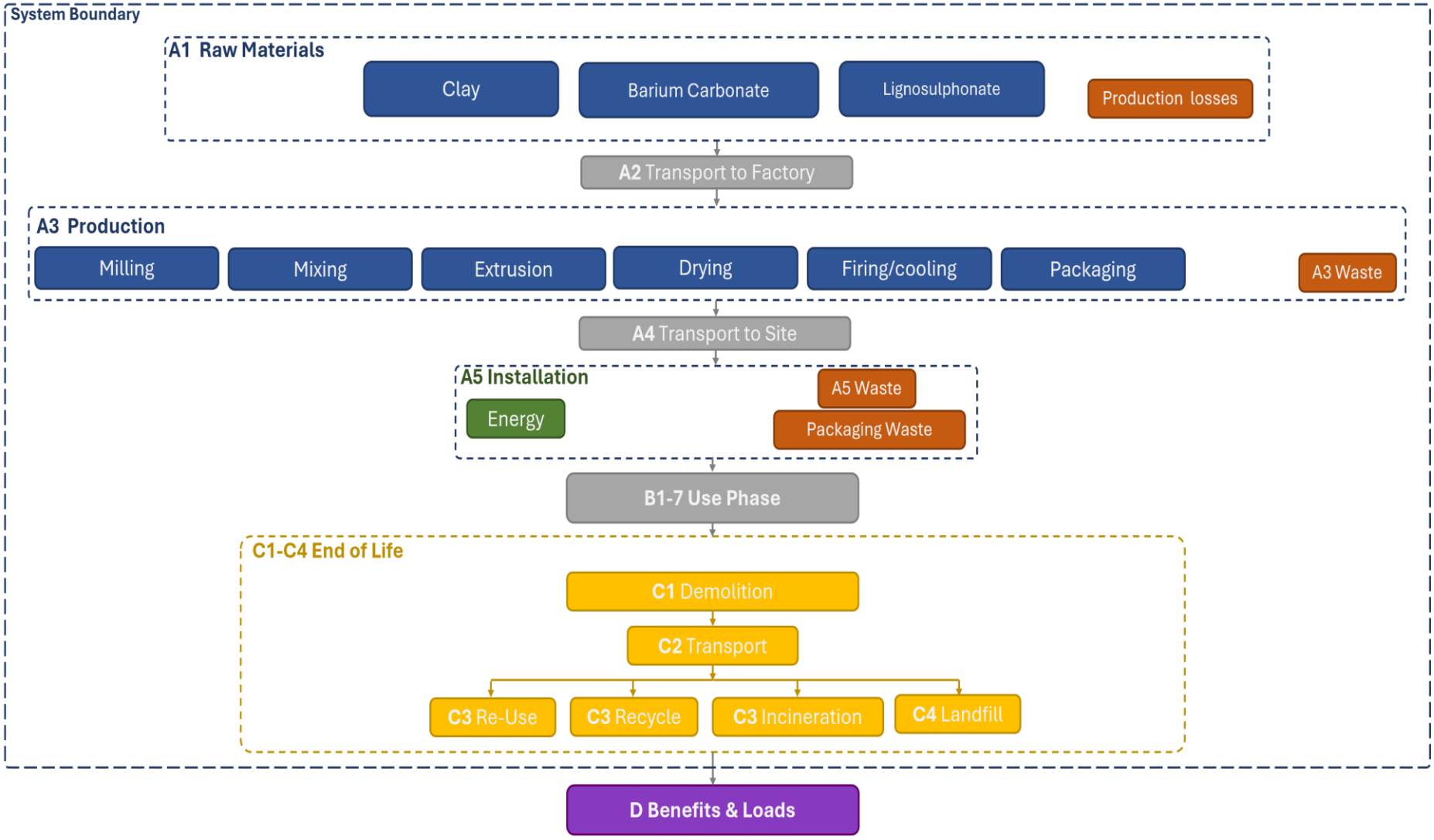
B modules are not relevant to bricks.
Air, soil, and water impacts during the use phase have not been studied.

PRODUCT END OF LIFE (C1-C4, D)

C1-C4: At the end of life, bricks are dismantled as part of the overall deconstruction of the building that they are part of. To process the waste it is assumed that 10kWh of diesel is required. Once the waste has been processed it is assumed that it will travel 15km by road. Based on BRE Global Product Category Rules (PCR) For Type III EPD of Construction Products to EN 15804+A2 95% of the declared unit will be recycled and 5% will go to landfill.

D: The packaging recycled in this stage will reduce the need for virgin material and the associated manufacturing processes to create new packaging products. Similarly, the recycled bricks will be re-used as an aggregate reducing the demand of virgin material and the associated manufacturing processes.

MANUFACTURING PROCESS



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.

The production of capital equipment, construction activities, and infrastructure, maintenance and operation of capital equipment, personnel-related activities, energy and water use related to company management and sales activities are excluded.

VALIDATION OF DATA

Data collection for production, transport, and packaging was conducted using time and site-specific information, as defined in the general information section on page 1 and 2. Upstream process calculations rely on generic data as defined in the Bibliography section. Manufacturer-provided specific and generic data were used for the product's manufacturing stage. The analysis was performed in One Click LCA EPD Generator, with the 'Cut-Off, EN 15804+A2' allocation method, and characterization factors according to EN 15804:2012+A2:2019/AC:2021 and JRC EF 3.1.

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 material	Allocated by mass or volume
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	No grouping
Grouping method	Not applicable
Variation in GWP-fossil for A1-A3, %	N/A

N/A

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.4. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.10.1/3.11/3.12 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11/3.12 environmental data sources follow the methodology ‘allocation, Cut-off, EN 15804+A2‘.

EPD Hub PCR 2.1

BRE Global Product Category Rules For Type III Environmental Declaration Of Construction Products To EN 15804+A2

ENVIRONMENTAL IMPACT DATA

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

CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

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_2e	1.09E+01	3.89E-02	1.82E+02	1.93E+02	8.52E+00	1.24E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.62E+00	4.16E+00	5.00E-01	-1.06E+01
GWP – fossil	kg CO_2e	1.08E+01	3.89E-02	1.83E+02	1.94E+02	8.51E+00	1.17E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.61E+00	4.16E+00	5.00E-01	-1.01E+01
GWP – biogenic	kg CO_2e	1.47E-02	8.36E-06	-7.05E-01	-6.90E-01	1.93E-03	7.42E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.66E-04	-4.24E-04	-8.26E-04	-5.19E-01
GWP – LULUC	kg CO_2e	1.08E-02	1.74E-05	1.26E-02	2.34E-02	3.81E-03	1.76E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.22E-04	4.26E-04	1.38E-04	-6.23E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	1.09E-07	5.74E-10	5.40E-06	5.51E-06	1.26E-07	2.95E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.38E-08	6.37E-08	1.57E-08	-1.06E-07
Acidification potential	mol H^+e	9.54E-02	1.33E-04	1.13E-01	2.09E-01	2.90E-02	1.66E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.51E-03	3.75E-02	5.52E-03	-6.04E-02
EP-freshwater[2)]	kg Pe	3.69E-03	3.03E-06	3.03E-03	6.72E-03	6.63E-04	6.11E-04	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.26E-04	1.20E-04	8.40E-04	-3.43E-03
EP-marine	kg Ne	2.40E-02	4.35E-05	4.10E-02	6.50E-02	9.54E-03	5.61E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.81E-03	1.74E-02	1.38E-03	-1.43E-02
EP-terrestrial	mol Ne	3.00E-01	4.74E-04	4.33E-01	7.34E-01	1.04E-01	6.07E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.97E-02	1.91E-01	1.48E-02	-1.72E-01
POCP ("smog")[3)]	kg NMVOCe	7.97E-02	1.95E-04	2.55E-01	3.35E-01	4.28E-02	2.51E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	8.11E-03	5.68E-02	5.41E-03	-5.02E-02
ADP-minerals & metals[4)]	kg Sbe	3.22E-04	1.08E-07	7.64E-05	3.99E-04	2.37E-05	2.35E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.50E-06	1.49E-06	9.82E-07	-5.59E-05
ADP-fossil resources	MJ	1.26E+02	5.64E-01	2.03E+03	2.16E+03	1.24E+02	1.25E+02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.34E+01	5.44E+01	1.16E+01	-1.36E+02
Water use[5)]	m^3e depr.	5.05E+00	2.79E-03	6.22E+00	1.13E+01	6.10E-01	7.05E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.16E-01	1.36E-01	7.04E-02	-1.42E+01

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.

ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, EF 3.1

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Particulate matter	Incidence	1.70E-06	3.89E-09	1.24E-06	2.94E-06	8.52E-07	6.63E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.62E-07	8.13E-06	8.40E-08	-8.92E-07
Ionizing radiation[6]	kBq U235e	3.09E-01	4.91E-04	1.03E+00	1.34E+00	1.08E-01	1.23E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.04E-02	2.41E-02	1.55E-02	-9.56E-01
Ecotoxicity (freshwater)	CTUe	9.09E+02	7.98E-02	6.26E+01	9.71E+02	1.75E+01	5.27E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.31E+00	2.99E+00	7.78E+00	-2.86E+01
Human toxicity, cancer	CTUh	9.33E-09	6.42E-12	1.34E-08	2.28E-08	1.41E-09	1.42E-09	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.66E-10	4.27E-10	2.16E-10	-2.67E-09
Human tox. non-cancer	CTUh	2.25E-06	3.65E-10	1.79E-07	2.43E-06	8.00E-08	1.35E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.52E-08	6.77E-09	1.39E-08	-7.85E-08
SQP[7]	-	1.01E+02	5.68E-01	6.10E+01	1.62E+02	1.24E+02	2.48E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.36E+01	3.81E+00	2.86E+01	-1.54E+02

6) 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; 7) SQP = Land use related impacts/soil quality.

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	8.62E+00	7.73E-03	2.48E+02	2.57E+02	1.69E+00	7.25E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.21E-01	3.44E-01	2.45E-01	-1.99E+01
Renew. PER as material	MJ	0.00E+00	0.00E+00	1.97E+00	1.97E+00	0.00E+00	-1.97E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.01E+00
Total use of renew. PER	MJ	8.62E+00	7.73E-03	2.50E+02	2.59E+02	1.69E+00	5.28E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.21E-01	3.44E-01	2.45E-01	-1.49E+01
Non-re. PER as energy	MJ	1.26E+02	5.64E-01	2.01E+03	2.14E+03	1.24E+02	9.59E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.34E+01	5.44E+01	1.16E+01	-1.36E+02
Non-re. PER as material	MJ	0.00E+00	0.00E+00	2.14E+01	2.14E+01	0.00E+00	-2.14E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.19E+01
Total use of non-re. PER	MJ	1.26E+02	5.64E-01	2.03E+03	2.16E+03	1.24E+02	7.45E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.34E+01	5.44E+01	1.16E+01	-1.24E+02
Secondary materials	kg	5.23E-01	2.40E-04	7.76E-01	1.30E+00	5.26E-02	7.32E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	9.97E-03	2.26E-02	3.87E-03	4.32E-01
Renew. secondary fuels	MJ	1.99E-03	3.05E-06	2.23E-02	2.43E-02	6.68E-04	1.30E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.27E-04	5.90E-05	7.00E-05	-9.03E-04
Non-ren. secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water	m^3	1.32E-01	8.34E-05	1.02E-01	2.34E-01	1.83E-02	-1.02E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.46E-03	3.59E-03	-1.41E-01	-3.39E-01

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	1.50E+00	9.56E-04	1.07E+00	2.57E+00	2.09E-01	1.69E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.97E-02	6.05E-02	1.96E-02	-8.86E-01
Non-hazardous waste	kg	2.37E+01	1.77E-02	3.00E+01	5.37E+01	3.87E+00	3.59E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	7.35E-01	8.25E-01	1.79E+02	-2.26E+01
Radioactive waste	kg	7.69E-05	1.20E-07	2.55E-04	3.32E-04	2.63E-05	3.08E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	5.00E-06	5.91E-06	3.80E-06	-2.34E-04

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	0.00E+00	0.00E+00	8.93E+00	8.93E+00	0.00E+00	4.47E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.40E-01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	9.50E+02	0.00E+00	0.00E+00
Materials for energy rec	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.36E+00	ND	ND	ND	ND	ND	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	0.00E+00	1.83E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy – Heat	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E+00	ND	ND	ND	ND	ND	ND	ND	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

ENVIRONMENTAL IMPACTS – EN 15804+A1, CML

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_2e	1.08E+01	3.87E-02	1.82E+02	1.93E+02	8.47E+00	1.17E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.61E+00	4.14E+00	4.96E-01	-1.00E+01
Ozone depletion Pot.	kg CFC_{-11}e	9.06E-08	4.58E-10	4.41E-06	4.50E-06	1.00E-07	2.41E-07	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.90E-08	5.04E-08	1.25E-08	-8.79E-08
Acidification	kg SO_2e	7.26E-02	1.01E-04	8.53E-02	1.58E-01	2.22E-02	1.25E-02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.20E-03	2.64E-02	4.43E-03	-4.69E-02
Eutrophication	kg PO_4^3e	2.70E-02	2.47E-05	3.37E-02	6.07E-02	5.40E-03	4.22E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.02E-03	6.16E-03	1.18E-03	-9.75E-03
POCP (“smog”)	kg C_2H_4e	5.04E-03	9.02E-06	1.33E-02	1.84E-02	1.98E-03	1.30E-03	ND	ND	ND	ND	ND	ND	ND	0.00E+00	3.75E-04	1.98E-03	2.87E-04	-4.28E-03
ADP-elements	kg Sbe	3.20E-04	1.06E-07	6.63E-05	3.87E-04	2.32E-05	2.28E-05	ND	ND	ND	ND	ND	ND	ND	0.00E+00	4.39E-06	1.45E-06	9.53E-07	-5.51E-05
ADP-fossil	MJ	1.21E+02	5.56E-01	2.02E+03	2.14E+03	1.22E+02	1.23E+02	ND	ND	ND	ND	ND	ND	ND	0.00E+00	2.31E+01	5.40E+01	1.14E+01	-1.21E+02

ADDITIONAL INDICATOR – GWP-GHG

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG[9)]	kg CO_2e	1.08E+01	3.89E-02	1.83E+02	1.94E+02	8.52E+00	1.17E+01	ND	ND	ND	ND	ND	ND	ND	0.00E+00	1.62E+00	4.16E+00	5.01E-01	-1.01E+01

9) This indicator includes all greenhouse gases excluding biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. In addition, the characterisation factors for the flows – CH4 fossil, CH4 biogenic and Dinitrogen monoxide – were updated. This indicator is identical to the GWP-total of EN 15804:2012+A2:2019 except that the characterisation factor for biogenic CO2 is set to zero.

SCENARIO DOCUMENTATION

DATA SOURCES

Manufacturing energy scenario documentation

1. Heat production, natural gas, at industrial furnace >100kW, Albania, Ecoinvent, 0.0773 kgCO2e/MJ
2. Diesel, burned in building machine, World, Ecoinvent, 0.10 kgCO2e/MJ
3. Electricity production, wind, 1-3MW turbine, onshore, United Kingdom, Ecoinvent, 0.0144 kgCO2e/kWh
4. Propane, burned in building machine, World, Ecoinvent, 0.0945 kgCO2e/MJ

Transport scenario documentation - A4 (Transport resources)

1. Market for transport, freight, lorry >32 metric ton, EURO5, 79 km

Transport scenario documentation A4

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	1.70E+03
Volume capacity utilization factor	<1

Installation scenario documentation - A5 (Installation waste)

1. Treatment of waste polyethylene, for recycling, unsorted, sorting, Ecoinvent, Materials for recycling, 0.28 kg
2. Treatment of waste polyethylene, municipal incineration, Ecoinvent, 0.26 kg
3. Exported Energy: Electricity, Ecoinvent, 1.7545 MJ
4. Exported Energy: Electricity, Ecoinvent, 0.078 MJ
5. Exported Energy: Thermal, Ecoinvent, 2.4185 MJ
6. Exported Energy: Thermal, Ecoinvent, 0.11 MJ
7. Treatment of waste polyethylene, sanitary landfill, Ecoinvent, 0.16 kg
8. Treatment of waste paper, unsorted, sorting, Ecoinvent, Materials for recycling, 0.36 kg
9. Treatment of waste packaging paper, municipal incineration, Ecoinvent, 0.034 kg
10. Treatment of waste packaging paper, sanitary landfill, Ecoinvent, 0.039 kg
11. Treatment of waste brick, sorting plant, Ecoinvent, 50.0 kg

End-of-life scenario documentation - C1-C4 (Data source)

1. Treatment of waste concrete, not reinforced, recycling, Ecoinvent, Materials for recycling, 950.0 kg
2. Treatment of inert waste, sanitary landfill, Ecoinvent, 50.0 kg
3. Diesel, burned in building machine, Ecoinvent, 10.0 kWh

Scenario information	Value
Scenario assumptions e.g. transportation	It is assumed that waste material sent to be processed travels 15km.

THIRD-PARTY VERIFICATION STATEMENT

EPD Hub declares that this EPD is verified in accordance with ISO 14025 by an independent, third-party verifier. The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at EPD Hub. EPD Hub PCR and ECO Platform verification checklist are used.

EPD Hub is not able to identify any unjustified deviations from the PCR and EN 15804+A2 in the Environmental Product Declaration and its project report.

EPD Hub maintains its independence as a third-party body; it was not involved in the execution of the LCA or in the development of the declaration and has no conflicts of interest regarding this verification.

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency. The publisher is responsible for ensuring the factual integrity and legal compliance of this declaration.

The software used in creation of this LCA and EPD is verified by EPD Hub to conform to the procedural and methodological requirements outlined in ISO 14025:2010, ISO 14040/14044, EN 15804+A2, and EPD Hub Core Product Category Rules and General Program Instructions.

Verified tools

Tool verifier: Magaly Gonzalez Vazquez
Tool verification validity: 27 March 2025 - 26 March 2028

Vera Durão, as an authorised verifier acting for EPD Hub Limited

17.03.2026

APPENDIX 1

CONVERSION TABLES

The results in the Environmental Impact table are expressed per tonne. The tables below allow for scaling the data to the desired metric for A1-A3, A1-A5 and the total carbon footprint. The tables are based on a brick weight of 2.375kg and 60 bricks per m^2.

Metric	Multiplication Factor
Per thousand bricks	2.375
Per m^2 bricks	0.1425
Per thousand slips	0.399
Per m^2 slips	0.02394

Metric	GWP Fossil - A1-A3
Per thousand bricks	458
Per m^2 bricks	28

15mm Slips (Red Origin Only)	
Metric	**GWP Fossil - A1-A3**
Per thousand Slips	77
Per m^2 Slips	4.6

APPENDIX 2

BRICK NAMES

The table below indicates bricks included within the Accrington A product group. This list is not exhaustive as other bricks with the same constituent materials may be added to the range over the life of this EPD.

Accrington A Brick Names
Class B Engineering
Langwith Red
Harthill Red
Fulwood
Meadow Red
Woodside Mixture
Farmstead Antique
Russett mixture
Granite Ash
Ochre Brown
Abbey Blend
Breckland multi reserve
Woodstock blend reserve
Southdown
Chatsworth
Abbey weathered
Yorkshire red blend
Heather
Queens blend
Mandarin mixture
Abbey red/Wentworth
Chidwell