Environmental Product Declaration

EPD Number:

General Information

EPD Programme Operator	Applicable Product Category Rules
BRE Global Watford, Herts WD25 9XX United Kingdom	BRE Environmental Profiles 2020 Product Category Rules for Type III environmental product declaration of construction products to EN 15804+A2 PN 514 Rev 3.0
Commissioner of LCA study	**LCA consultant/Tool**
Wembley Innovation Ltd Unit 5 Fourth Way Wembley Middlesex HA9 0LH	Francis Yu/ BRE LINA A2
Declared Unit	**Applicability/Coverage**
1m^2 of 100mm 7.3N HBP Medium Dense Blocks (147kg/m^2).	Product Average.
EPD Type	**Background database**
Cradle to Gate with options	Ecoinvent 3.8

Demonstration of Verification
CEN standard EN 15804 serves as the core PCR [a]
Independent verification of the declaration and data according to EN ISO 14025:2010 ☐Internal ☐ External
(Where appropriate [b])Third party verifier:

a: Product category rules
b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)

Comparability
Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A2:2019. Comparability is further dependent on the specific product category rules, system boundaries and allocations, and background data sources. See Clause 5.3 of EN 15804:2012+A2:2019 for further guidance

Information modules covered

Product			Construction		Use stage							End-of-life					Benefits and loads beyond the system boundary
					Related to the building fabric					Related to the building							
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4		D
Raw materials supply	Transport	Manufacturing	Transport to site	Construction – Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal		Reuse, Recovery and/or Recycling potential
☑	☑	☑	☑	☑	☐	☐	☐	☐	☐	☐	☐	☑	☑	☑	☑		☑

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

Wembley Innovation Ltd
Unit 5 Fourth Way
Wembley
Middlesex
HA9 0LH

Construction Product:

Product Description

HBP Blocks are made of cement, aggregates and water. The blocks covered by this EPD are manufactured with semi-dry components, accurately weighed, thoroughly mixed before adding a measured amount of water. This semi dry mix is fed into a mould and mechanically pressed to form the block shape. Once demoulded, the blocks are cured in a warm and humid chamber, then moved externally for storage.

HBP blocks are used in a variety of applications including both interior and exterior load bearing and non-load bearing walls.

The LCA results listed in this product average EPD are for 1m^2 of 100mm 7.3N Medium Dense Blocks (147kg/m^2). This EPD can also be used for 1m^2 of 100mm 3.6N/10.4N Medium Dense Blocks, 140mm 3.6N/7.3N/10.4N Medium Dense Blocks, 190mm 3.6N/7.3N/10.4N Medium Dense Blocks, 215mm 3.6N/7.3N/10.4N Medium Dense Blocks and the corresponding LCA results can be calculated using the conversion factors from the end-user table in the Interpretation section of the EPD.

Technical Information

Property	Value, Unit
Physical and mechanical properties compliance	BS EN 771-3
Quality Management System compliance	ISO 9001, ISO 14001 and ISO 45001
Category I, Manufacturing Control compliance	BS EN 771-3

Property	Value, Unit
Dimensions (mm)	W: 100mm/140mm/190mm/215mm, L: 440mm, H: 215mm
Dimensional tolerances	Category: D1 Flatness: NPD Parallelism: NPD
Configuration	Group 1 Solid
Dimensional stability	Moisture movement <=0.6mm/m
Shear bond	0.15N/mm² (fixed value)
Flexural bond strength	NPD
Characteristic compressive strength	3.6 N/mm², 7.3N/mm², 10.4N/mm² (⊥ bed face)
Net dry density of concrete	1400-1600 kg/m3
Reaction to fire	Euroclass A1
Water absorption	NPD
Water Vapour Diffusion	5/15μ (fixed value)
Thermal conductivity	P = 50% 0.57 W/(m.K) [λ10,dry]
Durability against freeze-thaw	Not to be left exposed
Reaction to fire	Classification to EN 13501-1: A1

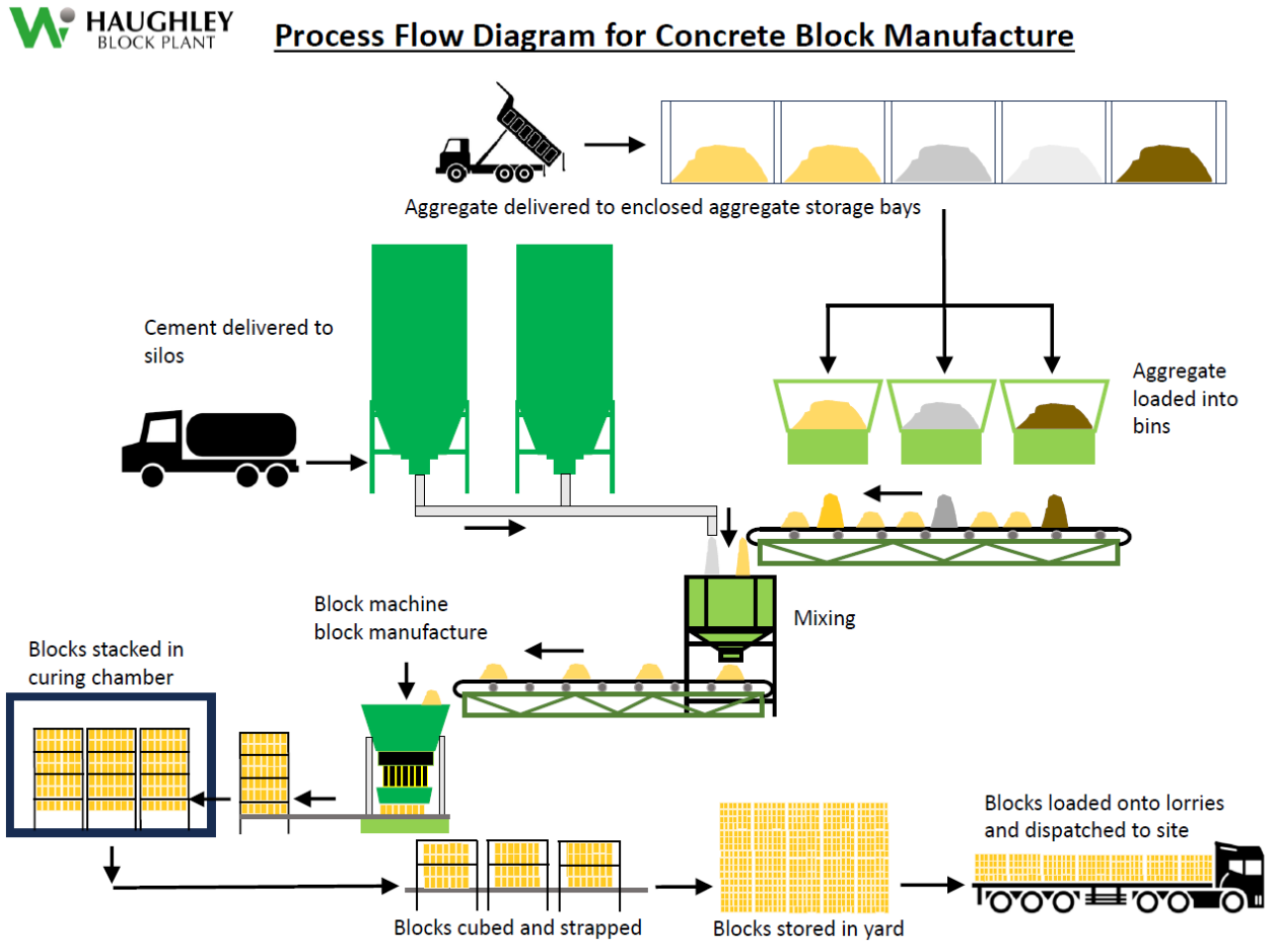
Main Product Contents

Material/Chemical Input	%
Grit	42
Lightweight Filler Material	47
Cement	11

Manufacturing Process

Aggregates and cement are delivered to the factory where they are mixed and transported via conveyors to the block machine which manufactures modular/special block units. These units are then stacked in the curing chambers. Post curing chamber, they are taken to the cuber, strapped and banded.
They are then stored in the yard and loaded onto lorries for customer distribution. The Haughley Block Plant factory is 100% solar with significant surplus generation sold back into the grid (at peak season we can produce 328KW per hour, the factory uses 208KWh per day on average), ancillary equipment is lithium battery powered. The Haughley Block Plant factory recycles 100% of factory produced product waste during the manufacturing.

Process flow diagram



Construction Installation

All block products are manually constructed to create block walling. The construction of walls should be in accordance with BS EN 1996: (1-1: 2005, 1-2: 2005) and 2: 2006) and normal good practice. For use above DPC, the blocks should be laid using mortar strength class M4. Below DPC level strength class M4, or M6, can be used depending on the risk of saturation and freezing.

Use Information

There is no energy use associated with the product once installed.

End of Life

The service life of HBP blocks is up to 150 years if manufacturer's recommendations on installation and use are followed. At the end-of-life stage, the concrete block walls are crushed and screened on site as part of the building demolition. Industrial average end-of-life data has been used for this EPD, according BRE PCR for Type III EPD of Construction Products to EN 15804+A2, 90% of the concrete blocks are recycled as aggregates and 10% are sent to landfill.

Life Cycle Assessment Calculation Rules

Declared / Functional unit description

1m^2 of 100mm 7.3N HBP Medium Dense Block (147kg/m^2).

System boundary

This cradle-to-gate with options EPD has assessed in accordance with the modular approach as defined in EN15804:2012+A2:2019 and includes the processes covered in the manufacturing site and product stage A1 to A3, A4, A5, C1-C4 and D.

Data sources, quality and allocation

Specific primary data derived from Haughley Block Plant Ltd's production process in Station Road, Haughley, Suffolk, IP14 3QP factory, have been modelled using the LINA LCA A2 software A2 and the ecoinvent 3.8 database. In accordance with the requirements of EN 15804:2012+A2:2019, the most current available data has been used. The manufacturer-specific data from Haughley Block Plant Ltd covers a period of one year (01/01/2022 – 31/12/2022). Secondary data has been obtained for all other upstream and downstream processes that are beyond the control of the manufacturer (i.e. raw material production) from the ecoinvent 3.8 database. Renewable electricity (from solar PV) is used in the EPD with an emission factor of 0.077 kgCO2e/kWh. HBP blocks production data includes data for all product variants. As the total weight of the input materials is less than the total weight of the output in the data collection, a 3.4% of material uplift has therefore been implemented for the input raw materials to make the input weight equal to the output weight. All ecoinvent datasets are complete within the context used and conform to the system boundary and the criteria for the exclusion of inputs and outputs, according to the requirements specified in EN 15804:2012+A2:2019.

This LCA is based on 100mm, 7.3N HBP Medium Dense Block, a list of conversion factors has been attached at the end of EPD for variants (100/140/190/215mm, 3.6/7.3/10.4N HBP Medium Dense Solid Block). Haughley Block Plant Ltd manufactures other products in addition to HBP Medium Dense Block series, therefore an allocation of fuel, water, material usage, and waste are required. The allocation has been made based on the total production output of Haughley Block Plant Ltd's Haughley factory and weighted accordingly by mass. All the input and output materials such as, transportation, packaging, energy, water use and wastes are included according to the provisions of the BRE PCR PN514 and EN 15804:2012+A2:2019. Only exception is emissions to air, water & soil. Site wide values for energy, water and wastewater have been taken from bills. Figures for the raw materials, ancillary materials and packaging were from actual usages.

Quality Level	Geographical representativeness	Technical representativeness	Time representativeness
Very Good	Data from area under study.	Data from processes and products under study. Same state of technology applied as defined in goal and scope (i.e. identical technology).	There is less than 5 years between the ecoinvent LCI reference year, and the time period for which the LCA was undertaken.

Specific UK datasets have been selected from the ecoinvent LCI for this LCA. The quality level of geographical and technical representativeness is therefore very good. The quality level of time representativeness is good as the background LCI datasets are based on ecoinvent v3.8 which was compiled in 2021. Therefore, there is less than 5 years between the ecoinvent LCI reference year and the time period for which the LCA was undertaken.

Cut-off criteria

All raw materials, packaging materials, transportation, process energy, general energy, water use, production and non-production waste have been included where appropriate. Only direct emissions to air, water and soil are not produced and have been excluded.

LCA Results

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts									
			GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc	ODP	AP	EP-freshwater
			kg CO_2 eq	kg CO_2 eq	kg CO_2 eq	kg CO_2 eq	kg CFC11 eq	mol H^+ eq	kg $(PO_4)^{3-}$ eq
Product stage	Raw material supply	A1	2.50E+01	2.49E+01	1.08E-01	6.03E-03	5.46E-07	7.04E-02	7.67E-03
	Transport	A2	5.63E-01	5.62E-01	5.44E-04	2.03E-04	1.34E-07	2.35E-03	3.51E-05
	Manufacturing	A3	-1.28E+00	5.05E-01	-1.79E+00	1.99E-03	8.28E-08	3.91E-03	1.50E-04
	Total (of product stage)	A1-3	2.43E+01	2.60E+01	-1.68E+00	8.23E-03	7.63E-07	7.67E-02	7.86E-03
Construction process stage	Transport	A4	8.82E-01	8.80E-01	8.56E-04	3.17E-04	2.10E-07	3.68E-03	5.48E-05
	Construction	A5	1.02E+00	1.06E+00	-4.25E-02	9.62E-04	3.60E-08	3.36E-03	2.80E-04
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	4.89E-01	4.89E-01	4.17E-04	1.92E-04	1.13E-07	1.98E-03	3.15E-05
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	7.76E-03	7.74E-03	7.67E-06	7.31E-06	3.13E-09	7.28E-05	7.09E-07
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-3.11E-01	-3.09E-01	-1.75E-03	-4.27E-04	-2.23E-08	-1.33E-03	-9.16E-05

GWP-total = Global warming potential, total;
GWP-fossil = Global warming potential, fossil;
GWP-biogenic = Global warming potential, biogenic;
GWP-luluc = Global warming potential, land use and land use change;

ODP = Depletion potential of the stratospheric ozone layer;
AP = Acidification potential, accumulated exceedance; and
EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment

LCA Results (continued)

Parameters describing environmental impacts									
			EP-marine	EP-terrestrial	POCP	ADP-mineral &metals	ADP-fossil	WDP	PM
			kg N eq	mol N eq	kg NMVOC eq	kg Sb eq	MJ, net calorific value	m^3 world eq deprived	disease incidence
Product stage	Raw material supply	A1	1.85E-02	1.98E-01	4.97E-02	3.84E-05	1.89E+02	5.52E+00	3.78E-07
	Transport	A2	7.15E-04	7.82E-03	2.51E-03	1.31E-06	8.76E+00	4.22E-02	6.56E-08
	Manufacturing	A3	1.36E-03	1.46E-02	4.79E-03	5.55E-06	8.92E+00	2.97E-01	9.57E-08
	Total (of product stage)	A1-3	2.06E-02	2.21E-01	5.70E-02	4.52E-05	2.07E+02	5.86E+00	5.40E-07
Construction process stage	Transport	A4	1.12E-03	1.23E-02	3.94E-03	2.02E-06	1.37E+01	6.63E-02	1.04E-07
	Construction	A5	9.08E-04	9.74E-03	2.54E-03	2.16E-06	8.00E+00	2.13E-01	3.36E-08
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	5.97E-04	6.53E-03	2.00E-03	1.70E-06	7.39E+00	3.32E-02	4.22E-08
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	2.53E-05	2.77E-04	8.06E-05	1.77E-08	2.16E-01	9.91E-03	1.47E-09
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-3.10E-04	-3.59E-03	-9.03E-04	-1.60E-06	-6.92E+00	-2.49E-01	-1.20E-08

EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment;
EP-terrestrial = Eutrophication potential, accumulated exceedance;
POCP = Formation potential of tropospheric ozone;
ADP-mineral&metals = Abiotic depletion potential for non-fossil resources;
ADP-fossil = Depletion potential of the stratospheric ozone layer;
WDP = Water (user) deprivation potential, deprivation-weighted water consumption; and
PM = Particulate matter.

LCA Results (continued)

Parameters describing environmental impacts							
			IRP	ETP-fw	HTP-c	HTP-nc	SQP
			kBq U^{235} eq	CTUe	CTUh	CTUh	dimensionless
Product stage	Raw material supply	A1	4.24E-01	3.77E+02	4.55E-09	2.13E-07	5.55E+01
	Transport	A2	4.43E-02	6.84E+00	1.90E-10	7.48E-09	9.89E+00
	Manufacturing	A3	6.03E-02	1.16E+01	2.48E-09	1.08E-08	1.60E+02
	Total (of product stage)	A1-3	5.28E-01	3.95E+02	7.22E-09	2.31E-07	2.25E+02
Construction process stage	Transport	A4	6.94E-02	1.07E+01	2.97E-10	1.17E-08	1.57E+01
	Construction	A5	2.60E-02	1.74E+01	3.01E-10	9.33E-09	1.05E+01
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	3.80E-02	5.77E+00	1.87E-10	6.05E-09	5.08E+00
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	9.60E-04	1.37E-01	3.46E-12	8.98E-11	4.54E-01
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-2.11E-01	-4.34E+00	-1.59E-10	-3.39E-09	-3.46E+00

IRP = Potential human exposure efficiency relative to U235;
ETP-fw = Potential comparative toxic unit for ecosystems;
HTP-c = Potential comparative toxic unit for humans;
HTP-nc = Potential comparative toxic unit for humans; and
SQP = Potential soil quality index.

LCA Results (continued)

Parameters describing resource use, primary energy								
			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
Product stage	Raw material supply	A1	4.97E+00	0.00E+00	4.97E+00	1.87E+02	0.00E+00	1.87E+02
	Transport	A2	1.12E-01	0.00E+00	1.12E-01	8.60E+00	0.00E+00	8.60E+00
	Manufacturing	A3	1.36E+01	1.73E+01	3.09E+01	7.79E+00	1.06E+00	8.85E+00
	Total (of product stage)	A1-3	1.87E+01	1.73E+01	3.60E+01	2.04E+02	1.06E+00	2.05E+02
Construction process stage	Transport	A4	1.75E-01	0.00E+00	1.75E-01	1.35E+01	0.00E+00	1.35E+01
	Construction	A5	8.21E-01	5.19E-01	1.34E+00	7.86E+00	6.58E-02	7.93E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	1.04E-01	0.00E+00	1.04E-01	7.25E+00	0.00E+00	7.25E+00
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	1.84E-03	0.00E+00	1.84E-03	2.12E-01	0.00E+00	2.12E-01
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-1.12E+00	0.00E+00	-1.12E+00	-6.91E+00	0.00E+00	-6.91E+00

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;
PERM = Use of renewable primary energy resources used as raw materials;
PERT = Total use of renewable primary energy resources;

PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials;
PENRM = Use of non-renewable primary energy resources used as raw materials;
PENRT = Total use of non-renewable primary energy resource

LCA Results (continued)

Parameters describing resource use, secondary materials and fuels, use of water						
			SM	RSF	NRSF	FW
			kg	MJ net calorific value	MJ net calorific value	m^3
Product stage	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	1.31E-01
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	1.04E-03
	Manufacturing	A3	0.00E+00	0.00E+00	0.00E+00	7.12E-03
	Total (of product stage)	A1-3	0.00E+00	0.00E+00	0.00E+00	1.39E-01
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	1.63E-03
	Construction	A5	0.00E+00	0.00E+00	0.00E+00	5.09E-03
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	8.23E-04
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	2.32E-04
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	0.00E+00	0.00E+00	-5.95E-03

SM = Use of secondary material;
RSF = Use of renewable secondary fuels;
NRSF = Use of non-renewable secondary fuels;
FW = Net use of fresh water

LCA Results (continued)

Other environmental information describing waste categories					
			HWD	NHWD	RWD
			kg	kg	kg
Product stage	Raw material supply	A1	1.91E+00	3.70E+01	2.93E-04
	Transport	A2	9.24E-03	1.61E-01	5.68E+01
	Manufacturing	A3	3.15E-02	6.28E-01	3.79E-05
	Total (of product stage)	A1-3	1.95E+00	3.78E+01	5.68E+01
Construction process stage	Transport	A4	1.45E-02	2.51E-01	9.20E+01
	Construction	A5	6.62E-02	1.34E+00	2.08E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	8.14E-03	1.45E-01	5.00E-05
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	2.25E-04	3.18E-03	1.42E-06
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-2.03E-02	-4.35E-01	-5.50E-05

HWD = Hazardous waste disposed;
NHWD = Non-hazardous waste disposed;
RWD = Radioactive waste disposed

LCA Results (continued)

Other environmental information describing output flows – at end of life								
			CRU	MFR	MER	EE	Biogenic carbon (product)	Biogenic carbon (packaging)
			kg	kg	kg	MJ per energy carrier	kg C	kg C
Product stage	Raw material supply	A1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Manufacturing	A3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.21E-03
	Total (of product stage)	A1-3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.21E-03
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-3.62E-05
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

CRU = Components for reuse;
MFR = Materials for recycling

MER = Materials for energy recovery;
EE = Exported Energy

Scenarios and additional technical information

Scenarios and additional technical information			
Scenario	Parameter	Units	Results
A4 – Transport to the building site	14% of the production goes to London (161km) 86% of the production is sold locally (50km average) So the total average for the factory is 66km.		
	Fuel type / Vehicle type	Litre of fuel type per distance or vehicle type	Lorry,>32 metric ton
	Distance:	km	66
	Capacity utilisation (incl. empty returns)	%	Lorry, 100% utilization block pallet return
	Bulk density of transported products	kg/m^3	1400-1600
A5 – Installation in the building	All block products are manually constructed to create block walling. The product is manually installed, energy / fuel is negligible. Ready mixed mortar is delivered in tubs.		
	Installation wastage rate	%	3
	Material loss	kg	0.44
Reference service life	The HBP Medium Dense Block have a reference service life of 150 years.		
C1 to C4 End of life,	Description of scenario		
C1 – Deconstruction	Walling is dismantled as part of the whole building demolition process, then crushed and screened for recycled hardcore.	MJ	0
C2 – Transport from site to pre-processing facility or landfill	Deconstructed walling crushed on site and transported locally for re-use as hardcore	km	20
C3 - Pre-processing of uninstalled product	There is no pre-processing of the HBP Medium Dense Block	MJ	0
C4 – Disposal	10% to concrete waste to landfill	kg	1.47
Module D	90% concrete waste to recycling	Kg	13.23

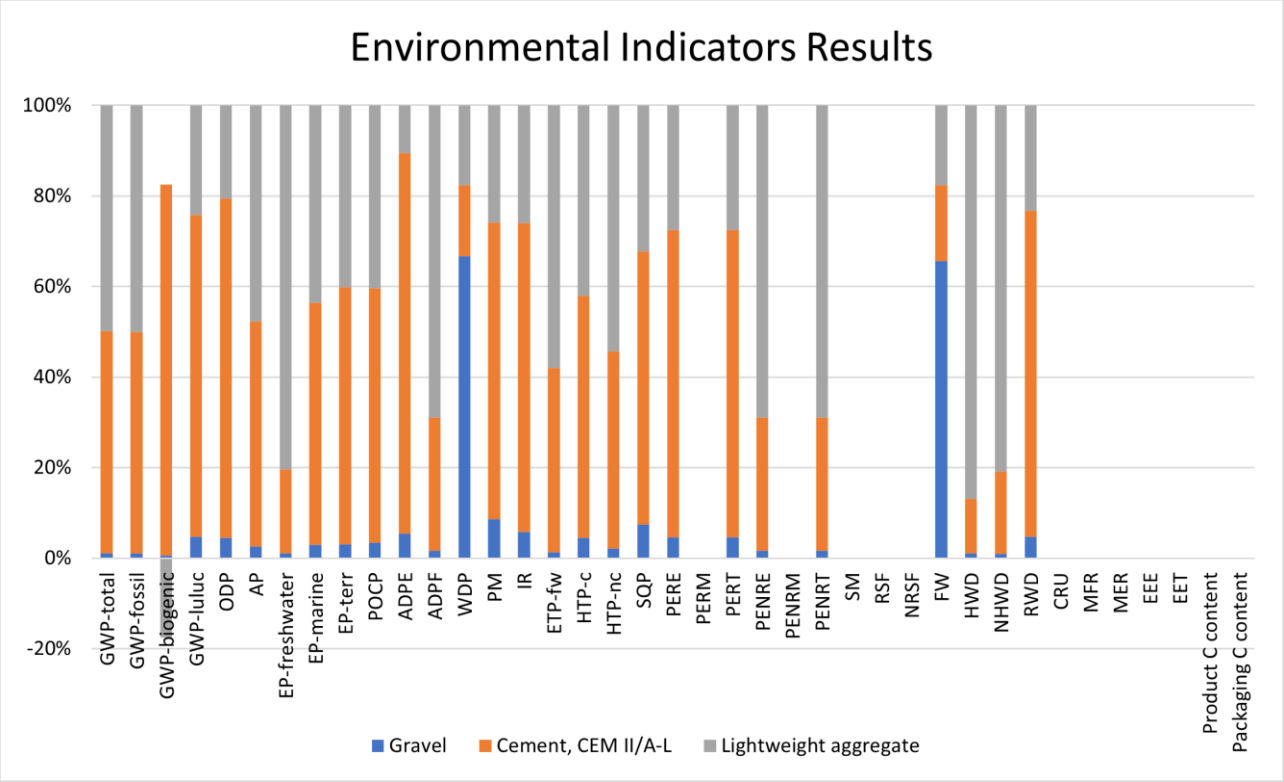
Interpretation

Out of the total mass of input materials, lightweight aggregate accounts for 47%, gravel accounts for 42%, and cement accounts for 11%. The bulk of the environmental impacts and primary energy demand are attributed to the manufacturing phase, covered by information modules A1-A3 of EN15804:2012+A2:2019.

As a result, Cement (CEM II/AL) is responsible for the greatest impact on GWP-biogenic, GWP-luluc, ODP, AP, EP-marine, EP-terr, POCP, ADPE, PM, IR, HTP-c, SQP, PERE, PERT and RWD. Lightweight aggregate is responsible for the greatest impact on GWP-total, GWP-fossil, EP-freshwater, ADPF, ETP-fw, HTP-nc, PENRE, PENRT, HWD and NHWD. Although the total mass and environmental impact of the gravel is relatively small, it contributes 66% of the impact on WDP and 69% on FW.

The LCA results in the EPD are for 1m^2 of 100mm Medium Dense Block (147kg/m^2). The Environmental impacts of the other product sizes in this series can be obtained from multiplying the LCA results of this EPD by the conversion factors:

Block sizes (mm)	Weight (kg/m^2)	Conversion Factors
3.6N/7.3N/10.4N L:440x H:215 x W:100	147	1
3.6N/7.3N/10.4N L:440x H:215 x W:140	196	1.33
3.6N/7.3N/10.4N L:440x H:215 x W:190	273	1.86
3.6N/7.3N/10.4N L:440x H:215 x W:215	299	2.03



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