

Tekno Amer Blok



Łukasiewicz
Institute of Ceramics
and Building Materials

**ENVIRONMENTAL PRODUCT
DECLARATION
No. nr 01-05/2024**

**Construction blocks
PK 8, PKL 8, PK 9, PK 12, PKL 12, PK14,
PK 19, PK 17,8, PK 24**



STRUCTURES

FACADES

FENCES

Declaration owner:

TeknoAmerBlok Sp. z o.o.

Program owner:

Łukasiewicz – Institute of Ceramics and
Building Materials

Center for Environmental Engineering

Program Name

Environmental Product Declaration – B2B

Date of issue:



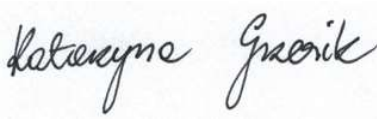
07.05.2024

Declaration valid until:

07.05.2029

1. OVERVIEW

<p>Declaration owner: TeknoAmerBlok Sp. z o.o.</p>	<p>Products covered by the declaration: Construction blocks PK 8, PKL 8, PK 9, PK 12, PKL 12, PK14, PK 19, PK 17,8, PK 24</p>
<p>Program owner: Łukasiewicz Institute of Ceramics and Building Materials Center for Environmental Engineering Opole http://www.icimb.pl/opole/</p>	<p>Declaration owner: TeknoAmerBlok Sp. z o.o. ul. 3 Generała Sikorskiego str 05-191 Nasielsk Telefon: +48 22 614 96 63 Adres e-mail: sprzedaz@teknoamerblok.pl https://teknoamerblok.pl/pl/</p>
<p>Release Date: 07.05.2024</p>	<p>Declared unit: The declared unit (DU) for the products in declaration is 1 kg (1 kilogram) of Construction blocks</p>
<p>Declaration valid until: 07.05.2029</p>	<p>Scope: The declaration covers the product: construction blocks: PK 8, PKL 8, PK 9, PK 12, PKL 12, PK14, PK 19, PK 17.8, PK 24.</p> <p>manufactured in 2 plants of TeknoAmerBlok Sp. z o. o. in:</p> <ul style="list-style-type: none"> • Stare Pieścirogi, 3 Generała Sikorskiego str, 05-191 Nasielsk, • Sierakowice, 1 Kozielska str, 44-156 Sierakowice. <p>The environmental declaration is based on average data provided by the manufacturer for two production plants for individual products covered by the declaration manufactured by TeknoAmerBlok Sp. z o. o.</p> <p>The average values of the input and output streams were calculated based on data provided by the manufacturer from two production plants. Contains information about the impact of the declared products on the environment.</p> <p>All data regarding the production cycle were collected by TeknoAmerBlok Sp. z o. o. from the period from November 1, 2022 to October 31, 2023 (12 months) and correspond to the production technology at that time.</p> <p>The life cycle assessment has been developed in accordance with the requirements of the PN-EN ISO 15804+A2:2020, PN-EN ISO 14025 and PN-EN ISO 14040 standards. The product categorization rules were adopted in accordance with the PN-EN 15804 and PN-EN 16757 standards.</p>

Product categorization rules (PCR)	According to the standard: PN-EN 15804+A2:2020-03 Sustainability of construction works. Environmental product declarations. Basic principles of categorization of construction products. PN-EN 16757:2017 Sustainable nature of construction works. Environmental product declarations. Principles of Product Categorization for concrete and products from concrete.
Representativeness:	Polish product, years 2022 - 2023
Declared durability:	50 years
Reasons for performing LCA:	B2B
Life Cycle Analysis (LCA):	LCA analysis covers modules A1-A3, A4, A5, C1-C4 and D in accordance with the PN-EN 15804+A2 standard (cradle-to-gate with options)
Łukasiewicz Institute of Ceramics and Building Materials, provides access to the type III environmental declaration for construction blocks from TeknoAmerBlok Sp. z o. o. to interested parties.	
<p>Authors' team:</p> <p>Katarzyna Kiprian, M.Sc. Ewa Głodek-Bucyk, Ph.D. Patrik Okoń, M.Sc.</p> <p>Approved:</p> <p> Joanna Poluszyńska, PhD Director of the Center for Environmental Engineering</p> <p> Ewa Głodek-Bucyk, Ph.D. Leader of the Process Engineering Research Group</p>	<p>CEN standard PN-EN 15804+A2 serves as the main PCR document.</p> <p>Independent verification of declarations and data according to EN ISO 14025:2010</p> <p><input type="checkbox"/> Internal <input checked="" type="checkbox"/> External</p> <p> Katarzyna Grzesik, PhD, DSc</p>

2. MANUFACTURER AND PRODUCT INFORMATION

TeknoAmerBlok Sp. z o.o. was established as a result of the merger of TeknoBlok and AmerBlok companies existing since the early 1990s. For this reason, it has many years of experience in the production of concrete elements intended for facades, walls with increased fire and acoustic insulation, as well as all other types of masonry structures. TeknoAmerBlok has two professional plants in Nasielsk and Sierakowice and a headquarters located in Warsaw. The company specializes in concrete structural and facade elements, but also in innovative fencing systems and special concrete elements.

Construction blocks are produced in the process of vibro-pressing C30/37 class concrete. During a technologically advanced process, brick elements are created with very good technical parameters. The production of hollow bricks takes place in molds, which results in a very accurate product in terms of dimensions and an exceptionally smooth face of the walls that does not require plastering. A modern technological line allows the production of hollow bricks of various thicknesses used to build walls for various purposes (including foundation walls, partition walls, inter-unit walls, curtain walls and special walls) that meet high fire protection and acoustic insulation requirements.

The offer of construction blocks also includes supplementary shapes that speed up the bricklaying process, as well as lintel and column shapes that enable the construction of complex brick structures.

The approximate composition of construction blocks is shown in the table below:

Table 1 Indicative composition of the product covered by the declaration

Materials	Mass share [%]
Cement	9-13
Aggregate 0-2	44-50
Aggregate 2-8	20-26
Aggregate 0-4	10-20
Water	3-4
Ash	5-8
Additional component	0,08-0,1

The production process of TeknoAmerBlok construction blocks begins with the receipt of raw materials, which are stored in silos (cement, ash), in bulk (aggregates) and in the warehouse (additives). Using feeders, individual components are dosed into the mixer according to the recipe. The obtained concrete is poured into molds, compacted using a concrete block machine, and then sent to the curing room. Appropriate conditions are maintained in the ripening chamber, thanks to which the blocks have the required parameters. After passing the quality control, the finished product is packed and transported to the warehouse, where it awaits collection by the customer.

The technological diagram is shown in Figure 1.

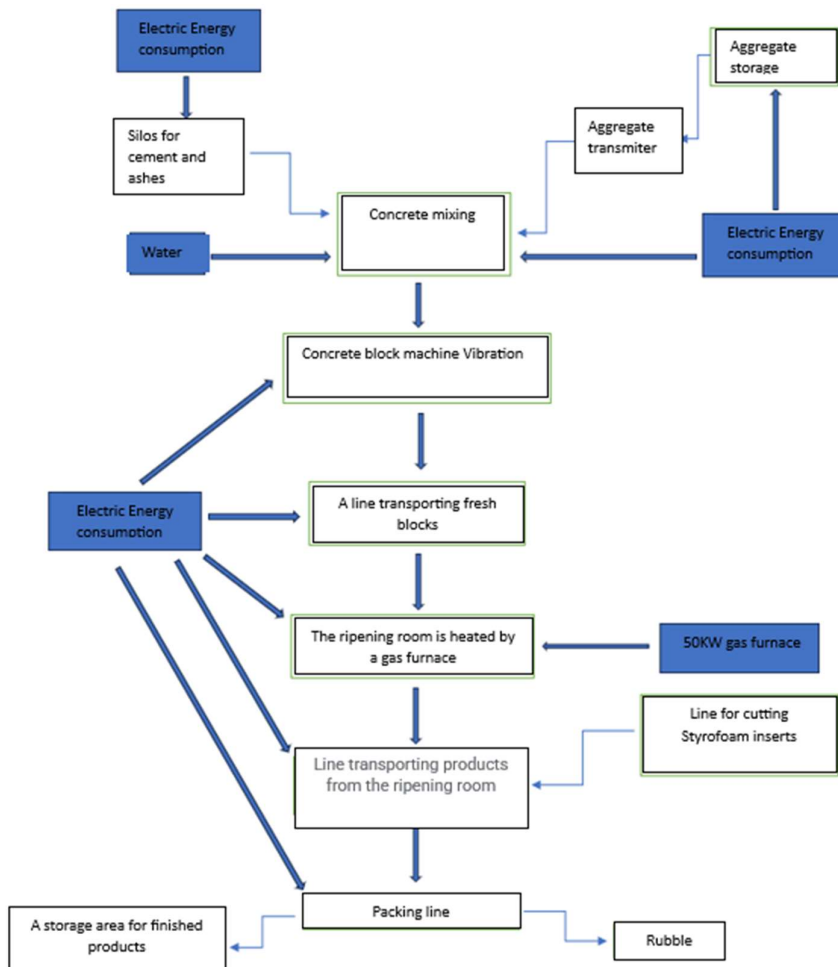


Figure 1: Diagram of the production process of construction blocks at the TeknoAmerBlok Sp. z o.o. plant in Nasielsk and Sierakowice.

A schematic diagram of the construction blocks is shown in Figure 2. The basic parameters are presented in Table 2.

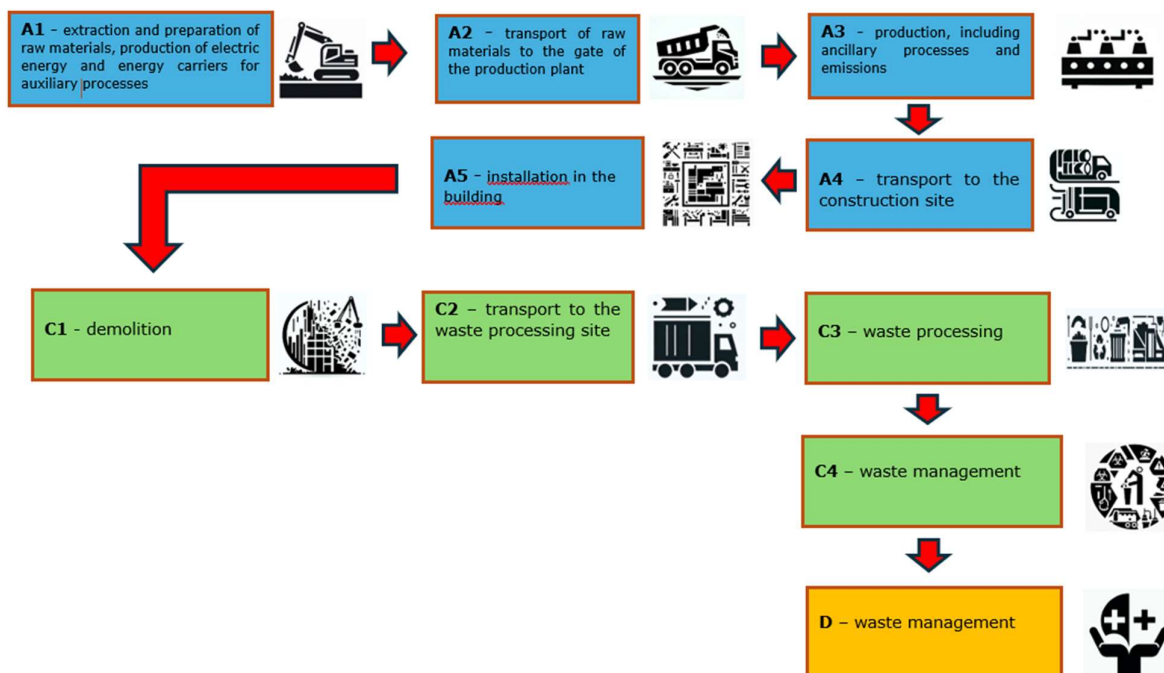


Figure 2 Schematic diagram of a construction blocks

Table 2 Basic properties of functional construction blocks

	Dimensions [mm]	Weight [kg]	Compressive strength [MPa]	Acoustic insulation		Fire insulation	Consumption per 1 m ² [szt]
				RA1	Rw		
PK 8	390x190x80	10,5	12,5/15/20	47	48	EI 90	12,5
PKL 8	390x190x80	8,2	4,5	43	44	EI120	12,5
PK 9	390x190x90	10,6	12,5/15/20	48	49	EI 120	12,5
PK 12	390x190x120	13,1	12,5/15/20	49	50	EI 120	12,5
PKL 12	390x190x120	10,3	4,5	45	46	EI 120	12,5
PK 14	390x190x140	13,5	12,5/15/20	49	50	EI 240	12,5
PK 17,8	390x190x178	18,7	12,5/15/20	55	56	REI 240	12,5
PK19	390x190x190	18,4	12,5/15/20	56	57	REI 240	12,5
PK 24	390x190x240	21,7	12,5/15/20	55	56	REI 240	12,5

3. LCA: RULES OF CALCULATIONS



System limitations

The life cycle analysis of the tested products includes modules A1-A3, A4, A5, C1-C4 and D (Cradle to Gate whit options) in accordance with PN-EN 15804.

Data collection period

Data regarding the production process come from the years 2022 - 2023 (period from November 1, 2022 to October 31, 2023).

Declared unit

The declared unit is 1 kilogram of construction blocks produced at the plant TeknoAmerBlok Sp. z o. o.

Assumptions

A1 - extraction and consumption of raw materials refer to specific mass shares in the production process per declared unit of the product,

A2 - distances from the place of obtaining raw materials to the production plant, individual for each raw material, means of transport varied depending on the method of delivery of raw materials,

A3 - CO₂, NO_x, SO₂ and dust emission values from the production process obtained as a result of measurements carried out at the plant, the rest estimated on the basis of fuel consumption.

A4 - transport - data used for calculations are included in the developed scenario.

A5 - refers to energy consumption and covers all processes related to the placement and installation of construction blocks. Calculations are performed based on the developed scenario.

C1 - describes the treatment of construction debris during dismantling/demolition. Calculations are performed based on the developed scenario.

C2 - refers to the transportation of construction and demolition waste to a recovery or disposal facility. Calculations are performed based on the developed scenario.

C3 - takes into account the environmental impact when processing construction and demolition waste containing concrete in a waste recovery facility. Calculations are performed based on the developed scenario.

C4 - should take into account the impact of stored construction rubble containing gypsum plasters. In the developed scenario, landfill operations are not taken into account because construction rubble is not worthless waste and is subject to recycling, and should not be disposed of in municipal waste landfills.

D - concerns the impact and effects of using secondary material. Calculations are made based on about the developed scenario.

Cut-off criteria

99% of all mass streams involved in the production process were taken into account. All energy used in the process has been taken into account in the environmental declaration.

General information

Data for calculations come from Ecoinvent v. 3.9.2, KOBiZE, and available Environmental Product Declarations. Emission factors for electricity were determined using actual KOBiZE data. The emission factor used for Polish electricity (Ecoinvent supplemented with current national KOBiZE data) is 0.685 kg CO₂/kWh. A detailed analysis of data quality was part of the external audit.

Allocation

All data regarding components manufactured at TeknoAmerBlok's plant Sp. z o. o. were supplied by the manufacturer and were referred to the declared unit of the product - **1 kg** of construction blocks. The allocation principles used in this EPD are based on general ones ICIMB-PCR A principles.

4. LCA: SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION

For the life cycle analysis of products covered by the Cradle to gate with options, scenarios have been developed for modules A4, A5 and C1-C4 and D:

Module A4 – Transport to the construction site – Transport is carried out by trucks with a load capacity of 16-32 tonnes that meet the EURO 6 emission standards. The average distance from the plant to the customer is 20 km.

Module A5 – Installation in the building – Covers all processes related to the installation of hollow brick. The information provided by the producer was used to develop the script. The installation of hollow bricks is done manually by overlapping the hollow bricks with mortar in between. The mortar is mixed with a hammer drill or an electric mixer.

Module C1 - Demolition/demolition – according to the current state of the art, the disassembly of hollow brick structures is carried out with the use of excavators equipped with a hammer. An excavator with a hammer (2.9 l of fuel/m³) is used for demolition works

Module C2 – Transport – Waste is directed to the waste treatment plant. From there, after separating the recyclable fraction, the fraction for thermal processing and the fraction for storage in a landfill, their appropriate amounts are directed to further processes.

- Transport is carried out by trucks with a load capacity of 16 - 32 tons, meeting the EURO 6 emission standards,
- The material is transported to the waste management plant.
- Transport to the waste treatment plant takes place at a distance of 5 km from the demolition site.
- Transport counted there + return.

Module C3 - Waste treatment, e.g. collection of demolition fractions and treatment of material streams for reuse, recycling and energy recovery. All waste from assembly and demolition (A5 and C1) goes to the waste treatment plant. Electricity consumption per 1 kg of waste is 0.03 kWh/kg, and energy consumption for internal transport vehicles is 0.3 MJ/kg.

The following processes were assumed for the calculations: unloading (loader), crushing (crusher).

Module C4 - Storage of part of the waste separated in the processing process (module C2) and thermal utilization of part of the waste fraction were assumed. As a result of thermal utilization, energy is released, which is partially recovered as heat and electrical energy. It was assumed that the average calorific value of polystyrene is 37 MJ/kg. The efficiency of heat recovery from waste incineration is 32.0%, while the efficiency of electricity production is 11.2%. The benefits of thermal waste treatment are included in module D as exported energy.

Module D - Potential for reuse – Potential for reuse of material, the benefits of thermal waste treatment (polystyrene incineration) have been taken into account here

In order to obtain results for 1 m³ of construction blocks, the values from Table 3 should be divided by the density coefficient appropriate for the construction blocks.

Table 3 Density of blocks

Block	Density [kg/m ³]
PK 8	1660
PKL 8	1280
PK 9	1600
PK 12	1500
PKL 12	1104
PK 14	1370
PK 17,8	1600
PK 19	1300
PK 24	1250

5. LCA: RESULTS

The table below shows the LCA modules included in the calculation of the environmental impact categories for the products covered by the declaration.

SYSTEM BOUNDARIES (X –MODULE INCLUDED IN LCA, MND – MODULE NOT DECLARED)																
Products stage			Construction process stage		Use stage							End-of-life stage				Benefits and loads beyond the system boundary
Raw material supply	Transport	Production	Transport	Construction process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction	Transport	Waste processing	Disposal	Reuse-recovery-recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X

The following tables present the results of the LCA analysis for the construction blocks.

Explanations of the abbreviations used to describe the impact category are given below:

GWP-total	Total Global Warming Potential
GWP-fossil	Global Warming Potential: Fossil Fuels
GWP-biogenic	Global warming potential: biogenic
GWP-luluc	Global warming potential: land use and land conversion
ODP	Stratospheric ozone depletion potential
AP	Acidification potential
EP-freshwater	Eutrophication potential of freshwater environments

EP-marine	Eutrophication potential of saltwater environments
EP-terrestrial	The potential for eutrophication of terrestrial environments
POCP	Tropospheric ozone formation potential
ADP-minerals&metals	Abiotic depletion potential of non-fossil fuels
ADP-fossil	Abiotic depletion potential of fossil fuel feedstocks
WDP	Water deprivation potential (user),
PM	Potential incidence of diseases caused by particulate emissions
IRP	Ionizing radiation (potential effectiveness of human exposure to U235)
ETP-fw	Potential Comparative Unit of Toxicity to Ecosystems
HTP-c	Potential comparative entity toxic to humans, cancer
HTP-nc	Potential comparative entity toxic to humans, non-cancer diseases
SQP	Potential soil quality indicator
PERE	Consumption of renewable energy resources, excluding renewable energy resources used as raw material
PERM	Consumption of renewable energy resources used as raw material
PERT	Total consumption of renewable, primary energy resources
PEN-RE	Consumption of non-renewable primary energy resources, excluding non-renewable primary energy resources used as feedstock
RE	Consumption of non-renewable energy resources used as a raw material
PENRT	Total consumption of non-renewable, primary energy resources
SM	Consumption of secondary materials
RSF	Consumption of renewable alternative fuels
NRSF	Consumption of non-renewable alternative fuels
FW	Fresh water consumption



MAIN IMPACT INDICATORS: 1 kg construction blocks											
Life cycle stage											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq.	5,27E-02	7,13E-03	-1,34E-02	3,80E-03	1,48E-05	5,96E-03	1,71E-03	5,10E-02	2,83E-04	-3,53E-03
GWP-fossil	kg CO ₂ eq.	5,20E-02	7,12E-03	1,99E-02	3,79E-03	1,41E-05	5,95E-03	1,71E-03	5,00E-02	2,82E-04	-3,52E-03
GWP-biogenic	kg CO ₂ eq.	7,62E-04	6,66E-06	-3,33E-02	3,55E-06	6,59E-07	1,45E-06	1,60E-06	9,97E-04	7,88E-07	-9,19E-06
GWP-luluc	kg CO ₂ eq.	1,24E-05	3,47E-06	4,47E-05	1,84E-06	1,34E-08	6,58E-07	8,28E-07	2,33E-05	3,73E-08	-4,00E-07
ODP	kg CFC11 eq.	3,13E-10	1,51E-10	3,06E-10	8,04E-11	2,05E-14	9,25E-11	3,62E-11	4,78E-10	4,41E-12	-5,33E-11
AP	mol H+ eq.	1,82E-04	1,51E-05	9,09E-05	8,08E-06	6,35E-08	5,39E-05	3,63E-06	3,56E-04	2,51E-06	-3,13E-05
EP-freshwater	kg PO ₄ eq.	1,23E-05	4,96E-07	1,33E-05	2,63E-07	1,79E-08	1,78E-07	1,18E-07	2,78E-05	8,55E-09	-1,60E-07
EP-marine	kg N eq.	4,57E-05	3,81E-06	2,52E-05	2,04E-06	1,13E-08	2,50E-05	9,17E-07	1,38E-04	1,16E-06	-1,43E-05
EP-terrestrial	mol N eq.	5,05E-04	3,87E-05	2,52E-04	2,07E-05	8,69E-08	2,71E-04	9,32E-06	1,44E-03	1,26E-05	-1,55E-04
POCP	kg NMVOC eq.	1,36E-04	2,35E-05	9,25E-05	1,25E-05	2,44E-08	8,04E-05	5,64E-06	4,26E-04	3,74E-06	-4,63E-05
ADP-minerals & metals	kg Sb eq.	7,12E-08	2,29E-08	4,49E-08	1,21E-08	1,32E-11	2,03E-09	5,44E-09	2,97E-08	1,10E-10	-1,22E-09
ADP-fossil	MJ	3,31E-01	9,85E-02	2,62E-01	5,25E-02	1,46E-04	7,61E-02	2,36E-02	5,88E-01	3,61E-03	-4,45E-02
WDP	WDP (m ³) świat. ekw	5,47E-03	4,12E-04	4,01E-03	2,19E-04	6,73E-07	1,68E-04	9,87E-05	1,83E-03	7,96E-06	-9,83E-05
ADDITIONAL IMPACT INDICATORS: 1 kg construction blocks											
Life cycle stage											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	1,07E-09	5,12E-10	1,10E-09	2,75E-10	1,19E-13	1,50E-09	1,24E-10	7,45E-09	7,11E-11	-8,63E-10
IRP	kBq U235 eq.	1,48E-03	1,35E-04	9,18E-04	7,10E-05	1,23E-07	3,61E-05	3,20E-05	3,59E-04	2,14E-06	-2,22E-05
ETP-fw	CTUe	1,23E-05	4,96E-07	1,33E-05	2,63E-07	1,79E-08	1,78E-07	1,18E-07	2,78E-05	8,55E-09	-1,60E-07
HTP-c	CTUh	5,54E-12	1,66E-12	4,13E-11	8,83E-13	4,98E-16	9,79E-13	3,98E-13	5,49E-12	4,64E-14	-5,98E-13
HTP-nc	CTUh	8,55E-11	2,55E-11	1,02E-10	1,36E-11	1,30E-14	2,89E-11	6,11E-12	1,59E-10	1,42E-12	-2,47E-11
SQP	-	1,19E-01	5,88E-02	3,02E+00	3,17E-02	2,53E-05	5,09E-03	1,43E-02	6,26E-02	4,46E-03	-3,36E-03
INDICATORS DESCRIBING RESOURCE CONSUMPTION: 1 kg construction blocks											
Life cycle stage											
Indicator	Unit	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	1,74E-02	1,57E-03	5,62E-01	8,26E-04	1,34E-05	4,34E-04	3,72E-04	2,23E-02	1,06E-04	-4,01E-04
PERM	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	1,74E-02	1,57E-03	5,62E-01	8,26E-04	1,34E-05	4,34E-04	3,72E-04	2,23E-02	1,06E-04	-4,01E-04
PEN-RE	MJ	3,96E-01	1,03E-01	2,95E-01	5,48E-02	1,97E-04	7,99E-02	2,47E-02	6,83E-01	3,78E-03	-4,69E-02
RE	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,96E-01	1,03E-01	2,95E-01	5,48E-02	1,97E-04	7,99E-02	2,47E-02	6,83E-01	3,78E-03	-4,69E-02
SM	kg	0,00E+00	0,00E+00	9,56E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m ³	1,24E-04	1,60E-05	4,14E-04	8,32E-06	2,88E-07	2,58E-06	3,74E-06	4,45E-04	1,26E-07	-6,94E-06



INDICATORS DESCRIBING OUTPUT STREAMS AND WASTE: 1 kg construction blocks												
Indicator	Unit	Life cycle stage										
		A1	A2	A3	A4	A5	C1	C2	C3	C4	D	
Amount of hazardous waste	kg	WN	WN	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Amount of non-hazardous waste	kg	WN	WN	9,56E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Amount of radioactive waste	kg	WN	WN	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Reusable components	kg	WN	WN	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Recycling materials	kg	WN	WN	9,56E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Energy recovery materials	kg	WN	WN	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,23E-03
Exported energy	MJ/energy carrier	WN	WN	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00

Biogenic Carbon

Biogenic carbon content in the product (kg Corg)

0,00E+00

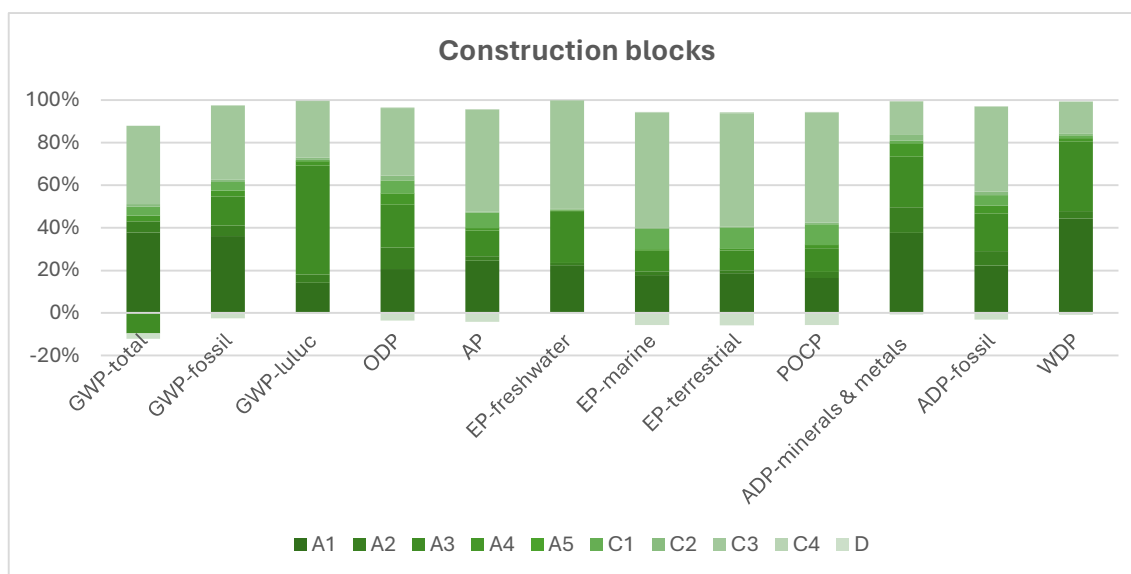
Biogenic carbon content in the package (kg Corg)

2,61E-02

6. INTERPRETATION OF RESULTS

Figure 2 shows a graph of the contributions of individual life cycle modules to the basic categories of the impact of the construction blocks:

Fig. 2 Shares of life cycle modules for the main categories of impacts – Construction blocks:



LITERATURE

- ✓ PN-EN ISO 14025:2014-04, Environmental labels and declarations -- Type III environmental declarations -- Rules and procedures.
- ✓ PN-EN 15804+A2:2020, Sustainability of building structures -- Environmental product declarations -Basic principles of categorization of construction products.
- ✓ PN-EN 16757:2017, Sustainability of construction works. Environmental Product Declarations. Product Categorization Rules for concrete and concrete products.
- ✓ PN-EN ISO 14040:2009 Environmental management. Life Cycle Assessment. Principles and structure.
- ✓ PN-EN ISO 14044:2009, Environmental management. Life Cycle Assessment. Requirements and guidelines.
- ✓ EN 15942:2012, Sustainability of construction works – Environmental product declarations – Communication format business-to-business.
- ✓ Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products
- ✓ Data from the company's website: www.teknoamerblok.pl

Explanatory material can be obtained by contacting a representative of TeknoAmerBlok Sp. z o.o. directly.



Łukasiewicz
Institute
of Ceramics
and Building
Materials

Łukasiewicz Research Network - Institute of Ceramics and Building Materials
31-983 Kraków, Cementowa 8 Str., Poland

CENTER OF ENVIRONMENTAL ENGINEERING

45-641 Opole, Oświęcimska 21 Str., Poland
Phone: +48 77 456 32 01

www.icimb.lukasiewicz.gov.pl
info.opole@icimb.lukasiewicz.gov.pl

PROCESS ENGINEERING RESEARCH GROUP

TYPE III ENVIRONMENTAL DECLARATION CERTIFICATE

no. 01-05/2024

Products:

Construction blocks

PK 8, PKL 8, PK 9, PK 12, PKL 12, PK 14, PK 19, PK 17,8, PK 24

Owner:

TeknoAmerBlok Sp. z o.o.

**3 Generała Sikorskiego Str.
05-191 Nasielsk**

The declaration was developed in accordance with the requirements of the standard:

PN-EN 15804+A2: 2020-03

Sustainability of construction works
Environmental product declarations
Core rules for the product category of construction products

The declaration was verified in accordance with the requirements of the standard:

PN-EN ISO 14025:2010

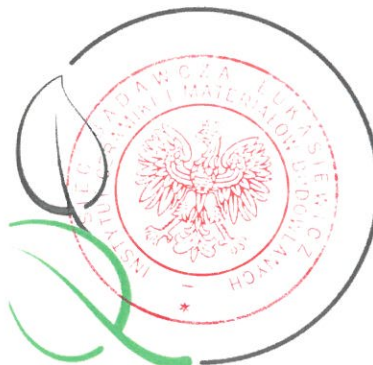
Environmental labels and declarations
Type III environmental declarations. Principles and procedures

The certificate was issued for the first time on **May, 07 2024** and is valid for 5 years or until the said EPD is amended.

**Process Engineering
Research Group Leader**

Ewa Głodek-Bucyk

Ewa Głodek-Bucyk, PhD Eng.



**Director of
Center Of Environmental
Engineering**

Joanna Poluszyńska

Joanna Poluszyńska, PhD

Opole, May 2024