ENVIRONMENTAL PRODUCT DECLARATION

Issued in accordance with PN-EN ISO 14025:2010 and PN-EN 15804+A2:2020-03

for:

READY BATHROOM sp. z o.o.
ul. Hangarowa 17
59-220 Legnica, Poland

product:

Ready-mixed concrete (EN 206) for precast constructions

Program:	CWB-EPD
Program Operator:	CWB sp. z o.o.
EPD reg. no.:	002-CWB-2024
Date of release:	29.06.2024
Date of update:	n/a
Validity date:	29.06.2029

The Type III Environmental Declaration (EPD) is valid for 5 years from the date of publication. However, the declaration may be subject to: changes, reviews, updates.

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1. General information

1.1 Program information

Program:	CWB-EPD
Program Operator:	CWB sp. z o.o.
Address:	ul. Koński Jar 10/78 02-785 Warszawa, Poland
Website:	jccwb.pl
email:	biuro@jccwb.pl

CWB sp. z o. o. was established in 2017 and is registered in the register of entrepreneurs kept by the District Court for the Capital City of Warsaw, received the KRS number: 0000681366 and NIP/TAX: 5213784152. CWB sp. z o.o. has legal personality and is fully responsible for all its program activities.

In 2018, it obtained PCA accreditation (number AC 202, according to the ISO/IEC 17065 standard), and since March 15, 2018, it has been a notified body with number 2767 under Regulation 305/2011 (CPR).

CWB sp. z o. o., as the organizational unit that is the program operator (PO/OP), runs the type III environmental declaration program in accordance with documented principles and rules and the provisions of the ISO 14025 and EN 15804+A2 standards.

1.2 Accountabilities for PCR, LCA, verification

UNSD-CPC (international product code)

- 375

PCR

- The EN 15804 standard serves as the core Product Category Rules (PCR).
- Used PCR/cPCR: PCR-CWB-IOW - PCR instrukcje ogólne wyrobu
- PCR review was conducted by: Komitet Środowiskowo-Techniczny (kst@jccwb.pl)

LCA

- LCA accountability: Robert Nowak, Poland

Third-party verification

- Independent, external verification of declarations and data, in accordance with the ISO 14025:2006 standard, was performed by:

☒	Independent external EPD verification by individual verifier/verification body
☐	Internal EPD verification

- External verifier: Mariusz Dworak, Poland
  (PO approved verifiers)
- The EPD Owner has sole responsibility for this EPD.

Additionally, please note that EPDs belonging to the same product category but registered in different EPD programs or not compliant with the EN 15804+A2 standard may not be comparable. To be comparable, EPDs must be based on the same PCR document (or on a fully compliant PCR document) and cover products with identical functions, technical parameters and applications (including the same FU), have identical system boundaries and data descriptions and use the same data quality requirements, data collection methods and allocation methods, and be valid at the time of comparison (additional information is provided in the standards: EN 15804+A2 and ISO 14025).

1.3 Company information

EPD owner:

READY BATHROOM sp. z o.o.

ul. Hangarowa 17

59-220 Legnica, Poland

Contact:

Jan Grivalsky - jan.grivalsky@readybathroom.com

Company information:

The company has been operating on the Polish market for 8 years. We specialize in the production of concrete products and we are committed in supplying products in accordance with national and European Union law. Our goal is to meet the growing quality, functional and environmental requirements of our products.

Our experience spans projects from apartment buildings, youth housing, hotels to townhouses and care homes. We produce cabins in lightweight concrete, steel and fiberboard, as well as combination solutions to meet any weight requirements. Over the past 5 years, we have delivered more than 30,000 shower cabins to Danish construction projects.

Certificates related to the product or management system:

not applicable

Name and location of manufacturing plants:

READY BATHROOM sp. z o.o.

ul. Hangarowa 17

59-220 Legnica, Poland

1.4 Product information

Product name:

- Ready-mixed concrete LC20/22 for precast constructions
- Ready-mixed concrete C30/37 for precast constructions

Product identification:

Ready-mixed concrete according to PN-EN 206 standard used in precast constructions

Product description:

Concrete is a heterogeneous and multi-phase composite made mainly of cement, aggregate and water, which after mixing becomes a viscoplastic-solid body. Thanks to the hydration of the cement, this mixture turns into a solid, which continues to change its properties as it matures. It is one of the most common building materials in modern construction. Covered by the EN 206 standard in Europe.

Covered by this EPD document – the Ready-mixed concrete according to PN-EN 206 standard has been specifically designed for use in precast constructions.

Other product classification codes:

not applicable

Geographical scope:

The EPD type is "cradle to gate with additional options" and is a specific EPD for products: Ready-mix Concrete (see table below) manufactured by companies that own EPD and sold both domestically and internationally. All data refer to the production year 2023-2024. According to PCR and the LCA study, this is a cradle-to-gate solution with options. The modules included are A1, A2, A3, C and D. All manufacturing activities and packaging production are located in module A3, while energy production and input materials are located in A1. The production plant is located in Poland, Europe. The scope of the potential sales market covers the entire world.

Manufacturing place	Tech. specification	Product type	Prodyct type name
READY BATHROOM sp. z o.o. ul. Hangarowa 17 59-220 Legnica, Poland	PN-EN 206+A2	LIGHT CONCRETE LC20/22	TECHNOLOGICAL RECIPE: LC20/22
READY BATHROOM sp. z o.o. ul. Hangarowa 17 59-220 Legnica, Poland	PN-EN 206+A2	CONCRETE STANDARD C30/37	TECHNOLOGICAL RECIPE: C30/37

Other required product information is available in the GPI and PCR documents.

1.5 LCA related information

Functional/declared unit (FU/DU):

1 m3

Reference service life:

50 years

Time representativeness (data collection):

LCA software database used:

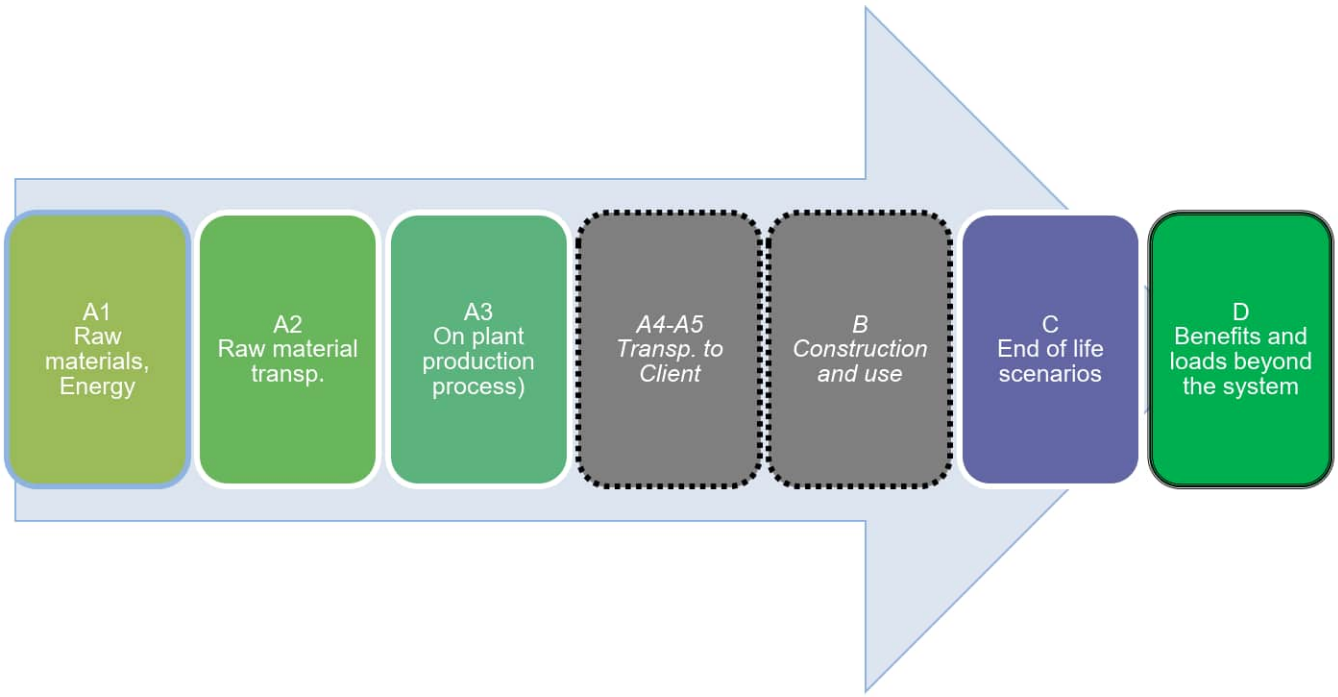
Ecochain 1.1.170 / ecoinvent 3.8

Description of system boundaries:

- Cradle to gate with C1-C4, D (A1-A3+C+D)

This EPD covers the selected stages, because other life cycle stages are dependent on particular scenarios and are better developed for specific building or construction works when chosen and specified.

1.5.1 Process diagram



1.5.2 Data sources and data quality

The boundary of the LCA geographical system is Poland. All processes (including the energy mix) apply to production plants located in Poland. All production plants mentioned in this EPD are 100% responsible for the whole production of the product of the EPD owner in Poland. All process material flows are based on company- and site- specific data collected for one year of operations, from Jun 2023 to Jun 2024. Manufacturer product life cycle modelling was performed using: Ecochain software. All relevant LCI master

data sets come from the ecoinvent database. All supplied raw materials come from domestic and European producers, from known sources.

No manufacturer-specific EPD has been used for raw materials. Additional data was collected and verified during the on-site visit. The background data is based on reviewed data from life cycle inventories. It was assumed that thanks to the validation of all data sets, the data quality for the entire study could be assessed as very good and sufficient for this application.

1.5.3 Allocation

The allocation is performed according to the PCR methodology. As no co-products are produced, the flow of materials and energy and the associated release of substances and energy into the environment is related exclusively to the product manufactured. In this case scenario there is no need for making allocations for by-products.

The LCA does not include the followings: equipment production, its maintenance, additional transport (e.g. employee transport).

1.5.4 Assumptions

LCA was made using Ecochain with ecoinvent database for modelling of energy use and environmental impact to obtain a suitable estimation for products being manufactured. All modelling assumptions were adopted from the relevant PCR and cPCR document.

Modules: A1-A3

Raw material (inbound) transport distances are generated from using real-life distances data and are accurate across operations.

It is assumed that all types of products consume the same amount of fuel and energy in production and are responsible for the same amount of waste flows from modules A to C (+D).

The calculation of the materials for each plant is based on the manufacturer's data. The product design (percentage of materials) has been defined in the system used by the company. Water consumption in the production process depends on the design of a given product.

The manufacturer's company used the following EPDs for input materials: n/a.

The transport involved road transport, EURO6 exhaust emission class with the tonnage declared by the customer or in phases outside production - 16-32 tons were assumed.

Modules: A4-A5

The transport involved road transport, EURO6 exhaust emission class with the tonnage declared by the customer or in phases outside production - 16-32 tons were assumed.

The distance from the concrete production site to the customer's premises is assumed to be 10 km, which is the average distance between points in this geographical region (A4-A5).

This module is not covered by the EPD.

Modules: B

Product does not require maintenance (B2), repair (B3), replacement (B4), refurbishment (B5), operational energy use (B6) or operational water use (B7) during its Reference Service Life.

This module is not covered by the EPD.

Modules: C

The transport involved road transport, EURO6 exhaust emission class with the tonnage declared by the customer or in phases outside production - 16-32 tons were assumed.

The distance between waste processing and storage sites was declared as 50 km.

Module: D

For modules C and D, the following assumptions were made:

- product recovery after demolition equal to 100%, recycling and use equal to 80%, storage (i.e. landfill) at the level of 20% for 100 years (C30/37)

- product recovery after demolition equal to 100%, recycling and use equal to 20%, storage (i.e. landfill) at the level of 80% for 100 years (LC20/22).

The manufacturing plant and representative plant (if applicable) were defined using systematic methodologies, well described and documented within the relevant LCA content, taking into account material sourcing, sales volume and geographical specificities.

1.5.5 Cut-off rules

The cut-off criteria were adopted as specified in EN 15804+A2 standard. Where there is insufficient data or data gaps for a unit process, the cut-off criteria equals to (max.) 1% of the total mass of input of certain process. The total of neglected input flows per module is at maximum of 5% of energy and mass usage. The exception is being made, if they have any of the following:

- significant effects of or energy use in the extraction, use or disposal occur
- product/s or process are classed as hazardous waste.

For the foreground process of ready-mix concrete production, no cut-off criteria has been necessary. All raw materials and associated transport to the plant, process energy and water use are included.

1.5.6 Description of system boundaries

The scope of the study was “Cradle to gate” with options, covering modules A1-A3, C1-C4 and D.

1.5.7 Module information, scenarios and additional information (according to EN 15804+A2, GWP-GHG results)

Stages:	Product			Construction process		Use							End of life				Resource recovery
	Raw material supply	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
Modules:	**A1**	**A2**	**A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Declared	X	X	X	-	-	-	-	-	-	-	-	-	X	X	X	X	X
Geography	EU	EU	EU	-	-	-	-	-	-	-	-	-	EU	EU	EU	EU	EU
Use of specific data	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation (products)	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation (man. plants)	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-

X – applies, EU – European Union area, "-„ – does not apply

2. Content information

Ready-mixed concrete LC20/22			
Product components	**Weight, kg**	**Post-consumer material, weight-%**	**Biogenic material, weight-% and kg C/kg**
Cement CEM II	380	---	---
Addition	30	---	---

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Fine aggregate	780	---	---
Coarse aggregate	-	---	---
Light aggregate	250	---	---
Water	177	---	---
Admixtures	8	---	---
Fiber	5	---	---
Total:	**1630**	---	---

Ready-mixed concrete C30/37

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Cement CEM II	380	---	---
Addition	30	---	---
Fine aggregate	746	---	---
Coarse aggregate	1006	---	---
Light aggregate	-	---	---
Water	165	---	---
Admixtures	8	---	---
Fiber	5	---	---
Total:	**2340**	---	---

Ready-mixed concrete LC20/22,C30/37

Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C/kg
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Total:	---	---	---

2.1 Recycled material

Provenience and usage of recycled materials (pre-consumer or post-consumer) in the product:

not applicable.

2.2 Dangerous substances

Type and type of hazardous substances used in the process:

not applicable.

3. Results of environmental performance indicators

In case of all manufacturing plants having lower than ±10% differences between the environmental indicators for the product designs described in the EPD, they are (re)presented in the same EPD using the impacts of an environmentally representative plant.

The below listed environmental information is for the representative plant (in case of 1 manufacturing plant – term representative plant is not applicable) and its associated representative product, based on the following criteria: which plant is most important in relation to total production, cost of production (environmental, mass and economical). Additionally no allocation was needed and implemented.

In case of construction services, the total value of A1-A3 is replaced with the total value of A1-A5.

3.1 Mandatory impact category indicators (EN 15804)

LC20/22 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq.	4,17E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,62E-01	1,33E+01	1,08E+01	1,75E+01	-1,01E+00
GWP-biogenic	kg CO_2 eq.	6,05E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,46E-04	1,21E-02	1,68E-02	-3,98E+00	-2,08E-03
GWP-luluc	kg CO_2 eq.	1,79E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,54E-05	5,30E-03	1,42E-03	1,07E-02	-1,27E-03
GWP-total	kg CO_2 eq.	4,23E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,62E-01	1,33E+01	1,08E+01	1,35E+01	-1,01E+00
ODP	kg CFC 11 eq.	8,84E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,40E-07	3,07E-06	6,01E-07	5,23E-06	-6,94E-08
AP	mol H^+ eq.	1,71E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,80E-03	3,77E-02	3,14E-02	9,47E-02	-6,55E-03
EP-freshwater	kg P eq.	9,27E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,17E-06	9,46E-05	6,00E-05	1,48E-04	-3,55E-05
EP-marine	kg N eq.	3,61E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,02E-03	7,48E-03	1,32E-02	2,83E-02	-1,56E-03
EP-terrestrial	mol N eq.	4,22E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,12E-02	8,34E-02	1,44E-01	3,12E-01	-1,88E-02
POCP	kg NMVOC eq.	1,14E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,35E-03	3,21E-02	3,94E-02	9,71E-02	-5,22E-03
ADP-miner. metals	kg Sb eq.	1,69E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,37E-07	4,70E-05	3,23E-06	5,33E-05	-1,06E-05
ADP-fossil	MJ	3,45E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,98E+00	2,01E+02	4,73E+01	3,53E+02	-1,14E+01
WDP	m^3	8,64E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,41E-02	6,12E-01	5,33E-01	9,12E+00	-1,96E+01

The abbreviations and markings used are in accordance with Annex C of the EN 15804+A2 standard

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C30/37 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO_2 eq.	3,45E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,62E-01	1,90E+01	2,01E+01	6,27E+00	-5,79E+00
GWP-biogenic	kg CO_2 eq.	7,02E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,46E-04	1,74E-02	2,61E-02	-9,94E-01	-1,19E-02
GWP-luluc	kg CO_2 eq.	1,49E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,54E-05	7,61E-03	2,58E-03	3,85E-03	-7,31E-03
GWP-total	kg CO_2 eq.	3,52E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,62E-01	1,91E+01	2,01E+01	5,28E+00	-5,81E+00
ODP	kg CFC 11 eq.	8,22E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,40E-07	4,41E-06	2,07E-06	1,88E-06	-3,99E-07
AP	mol H^+ eq.	1,21E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,80E-03	5,41E-02	1,03E-01	3,40E-02	-3,76E-02
EP-freshwater	kg P eq.	6,29E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,17E-06	1,36E-04	1,04E-04	5,30E-05	-2,04E-04
EP-marine	kg N eq.	2,99E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,02E-03	1,07E-02	4,47E-02	1,02E-02	-8,95E-03
EP-terrestrial	mol N eq.	3,50E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,12E-02	1,20E-01	4,90E-01	1,12E-01	-1,08E-01
POCP	kg NMVOC eq.	9,26E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,35E-03	4,60E-02	1,34E-01	3,49E-02	-3,00E-02
ADP-miner. metals	kg Sb eq.	1,49E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,37E-07	6,75E-05	7,46E-06	1,91E-05	-6,09E-05
ADP-fossil	MJ	2,83E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	8,98E+00	2,89E+02	1,45E+02	1,27E+02	-6,57E+01
WDP	m^3	8,19E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,41E-02	8,79E-01	8,38E-01	3,27E+00	-1,13E+02

The abbreviations and markings used are in accordance with Annex C of the EN 15804+A2 standard

3.2 Additional impact category indicators (EN 15804)

LC20/22 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERM	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	6,33E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,05E-02	2,87E+00	1,99E+00	3,93E+00	-8,48E-01
PENRE	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRM	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	3,64E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	9,54E+00	2,13E+02	5,02E+01	3,74E+02	-1,22E+01
SM	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	3,94E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,13E-04	2,28E-02	2,18E-02	2,24E-01	-4,58E-01
GWP-GHG	kg CO_2 eq.	4,23E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,62E-01	1,33E+01	1,08E+01	1,35E+01	-1,01E+00
Other EN 15804 / ISO 21930	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

The abbreviations and markings used are in accordance with the EN 15804+A2 standard.

C30/37 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERM	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	6,94E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,05E-02	4,13E+00	3,28E+00	1,41E+00	-4,87E+00
PENRE	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRM	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	2,97E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	9,54E+00	3,06E+02	1,54E+02	1,34E+02	-6,99E+01
SM	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	5,46E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,13E-04	3,27E-02	3,42E-02	8,03E-02	-2,63E+00
GWP-GHG	kg CO_2 eq.	3,52E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,62E-01	1,91E+01	2,01E+01	5,28E+00	-5,81E+00
Other EN 15804 / ISO 21930	---	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

The abbreviations and markings used are in accordance with the EN 15804+A2 standard.

3.3 Waste indicators (EN 15804)

LC20/22 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	2,52E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,46E-05	5,25E-04	1,08E-04	7,10E-04	-2,39E-05
Non-hazardous waste disposed	kg	5,63E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,20E-02	1,05E+01	3,06E-01	1,31E+03	-1,80E-01
Radioactive waste disposed	kg	1,67E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,20E-05	1,36E-03	3,23E-04	2,34E-03	-3,48E-05

The abbreviations and markings used are in accordance with the EN 15804+A2 standard, Table 7.

C30/37 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	2,43E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,46E-05	7,54E-04	3,66E-04	2,55E-04	-1,37E-04
Non-hazardous waste disposed	kg	4,90E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,20E-02	1,51E+01	5,13E-01	4,71E+02	-1,04E+00
Radioactive waste disposed	kg	1,63E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,20E-05	1,95E-03	9,97E-04	8,41E-04	-2,00E-04
The abbreviations and markings used are in accordance with the EN 15804+A2 standard, Table 7.																

3.3 Output flow indicators (EN 15804)

LC20/22 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	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	M.J	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	M.J	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
The abbreviations and markings used are in accordance with the EN 15804+A2 standard, Table 8.																

C30/37 - Results per functional or declared unit

Indicator	Unit	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Material for recycling	kg	0,00E+00	ND	ND	ND	ND	ND	ND	ND	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	ND	ND	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	M.J	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
Exported energy, thermal	M.J	0,00E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
The abbreviations and markings used are in accordance with the EN 15804+A2 standard, Table 8.																

3.4 Biogenic carbon content (EN 15804)

LC20/22 - Results per functional or declared unit

Indicator	Unit	Quantity
Biogenic carbon content in product	kg C	ND (<5%)
Biogenic carbon content in packaging	kg C	ND (<5%)
kg of biogenic carbon is equivalent to 44/12 kg of CO_2		
The abbreviations and markings used are in accordance with the EN 15804+A2 standard, Table 9.		

C30/37 - Results per functional or declared unit

Indicator	Unit	Quantity
Biogenic carbon content in product	kg C	ND (<5%)
Biogenic carbon content in packaging	kg C	ND (<5%)

Indicator	Unit	Quantity
kg of biogenic carbon is equivalent to 44/12 kg of CO_2		
The abbreviations and markings used are in accordance with the EN 15804+A2 standard, Table 9.		

If the weight of materials containing biogenic carbon in the product is less than 5% of the weight of the product, the declaration of the biogenic carbon content may be omitted. If the weight of materials containing biogenic carbon in the packaging is less than 5% of the total weight of the packaging, the declaration of the biogenic carbon content in the packaging may be omitted.

4. Additional environmental information

As an environmental aware company we are trying to prevent environmental pollution by implementing in our operations the best available technology and by using and maintaining our installations in optimum ways. Protecting the environment by preserving non-renewable natural resources, increasing energy efficiency, reducing the environmental emissions, limiting the impact of materials transportation to and from our operations is part of our operations in the company.

On production, we also work continuously to develop solutions and processes that enable the use of the most environmentally friendly production methods. We promote a culture of sustainability awareness among our employees and students. We reduce the amount of waste going to landfills by sorting waste, increasing resource efficiency and increasing our recycling efforts. We reduce energy consumption by optimizing best practices and installing efficient equipment wherever practical.

For more information about our environmental goals and activities and responsible sourcing and using of materials, please visit our website: www.readybathroom.com/sustainability

The EPD does not give information on release of dangerous substances to soil, water and indoor air because the proper standards on measurement of release of these regulated dangerous substances from construction products using internationally accepted test methods.

5. Changes compared to previous editions of the document

n/a.

6. References

Type III Environmental Declaration (EPD) program – general program instructions (GPI-EPD/01), 22.04.2024

PN-EN ISO 14025:2010 Environmental labels and declarations - Type III environm. declarations - Principles and procedures

PN-EN 15804+A2:2020-03 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

PN-EN 16757:2023-04 Sustainability of construction works - Environmental product declarations - Product Category Rules for concrete and concrete elements