ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH EN 15804+A2 & ISO 14025

Baumit Ratio Glatt L
BAUMIT, spol. s r.o.

EPD HUB, HUB-5466
Published on 20.02.2026, last updated on 20.02.2026, valid until 19.02.2031

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	BAUMIT, spol. s r.o.
Address	Průmyslová 1841, 250 01 Brandýs nad Labem, Czech Republic
Contact details	info@baumit.cz
Website	www.baumit.cz

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	Third party verified EPD
Parent EPD number	-
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Ing. Jaromír Žumár, Ph.D., BAUMIT, spol. s r.o.
EPD verification	Independent verification of this EPD and data, according to ISO 14025: ☐ Internal verification ☑ External verification
EPD verifier	Yazan Badour as an authorized verifier for EPD Hub

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.

PRODUCT

Product name	Baumit Ratio Glatt L
Additional labels	-
Product reference	206110V-30
Place(s) of raw material origin	Czech Republic
Place of production	Czech Republic
Place(s) of installation and use	Czech Republic
Period for data	01/01/2024 – 31/12/2024
Averaging in EPD	Multiple factories
Variation in GWP-fossil for A1-A3 (%)	+49,4
GTIN (Global Trade Item Number)	-
NOBB (Norwegian Building Product Database)	-
A1-A3 Specific data (%)	56,7

ENVIRONMENTAL DATA SUMMARY

Declared unit	1 ton of plaster
Declared unit mass	1000 kg
Mass of packaging	2,41 kg
GWP-fossil, A1-A3 ($kgCO_2e$)	103
GWP-total, A1-A3 ($kgCO_2e$)	95,2
Secondary material, inputs (%)	0,01
Secondary material, outputs (%)	0
Total energy use, A1-A3 (kWh)	381
Net freshwater use, A1-A3 (m^3)	0,72

PRODUCT AND MANUFACTURER

ABOUT THE MANUFACTURER

Baumit manufactures facade systems, plasters, mortars, screeds, adhesives and other building materials at several European production sites. This EPD covers gypsum plaster produced at Čakovice and Dětmarovice plants.

PRODUCT DESCRIPTION

Baumit Ratio Glatt L is a factory-produced, lightweight gypsum-lime dry plaster intended for machine application on interior walls and ceilings in residential and non-residential buildings. The plaster is supplied as a dry powder in bags and consists of hydrated lime, gypsum, fine plaster sand, expanded perlite and additives. Maximum grain size is approx. 1 mm.

The product is suitable for interior applications with normal humidity levels. Typical thickness is 8–10 mm. The product complies with EN 13279-1:2008 and has Reaction to Fire Class A1. Average water vapour diffusion factor μ ≈ 10.

Further information can be found at:
www.baumit.cz

PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	0	-
Minerals	99,62	EU
Fossil materials	0	-
Bio-based materials	0,38	EU

BIOGENIC CARBON CONTENT

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	1,2
Biogenic carbon content in packaging, kg C	0,878

FUNCTIONAL UNIT AND SERVICE LIFE

Declared unit	1 ton of plaster
Mass per declared unit	1000 kg
Functional unit	-
Reference service life	-

SUBSTANCES, REACH - VERY HIGH CONCERN

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).

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 product is manufactured in two Baumit dry-mortar plants (Čakovice and Dětmarovice). Raw materials are delivered in bulk or big bags, dosed according to the recipe, mixed and filled into paper bags or delivered via reusable silos. Production losses and filter dust are collected and returned into the mixing process and are therefore included in module A3 as internal recycling.

Reusable delivery silos are excluded because they are considered capital goods used repeatedly over many years and therefore fall under the EN 15804+A2 exclusions for capital equipment. Paper bags, pallet wrapping and pallets are included.

The foreground data for A1–A3 are based on 2024 annual production data for each plant. Differences between the plants include the proportion of packaging (bagged versus silo delivery), the supplier mix of raw materials, and plant-specific energy consumption. For the grouped EPD, Čakovice is used as the representative model, and averaging of Dětmarovice and Čakovice data has been applied according to the EPD Hub PCR to confirm representativeness.

TRANSPORT AND INSTALLATION (A4-A5)

No additional production or installation losses are included in module A4; material losses are accounted for exclusively in module A5, where a 5% installation loss is assumed.

Transport to the construction site (A4) is modelled as truck transport from the respective production plant to typical building sites in the Czech Republic. Average one-way transport distances of approximately 88 km from Čakovice and 87 km from Dětmarovice are used, based on Baumit logistics data. Transport is modelled with standard Euro-class lorry datasets including

upstream fuel supply and road infrastructure. A conservative assumption of 100 % mass and volume utilization with inclusion of empty return trips is applied via the background transport datasets.

Installation (A5) represents machine application of the plaster in interior walls and ceilings. Site energy use, water for mixing/cleaning and installation waste are included for the declared unit, based on Baumit application guidelines and expert judgement. Packaging waste from paper bags, plastic wrapping and pallets is transferred to module A5 and treated using typical European waste management routes.

Material loss of 5 % is assumed to happen during installation with 80 % of water evaporation during hardening of the plaster.

Packaging waste from paper bags and plastic wrapping is transferred to module A5 and treated according to typical European waste management routes. Pallets are assumed to be returned to the production plant for reuse (maximum five cycles).

PRODUCT USE AND MAINTENANCE (B1-B7)

The use phase is not modelled, as the product is an interior gypsum plaster with no operational energy use and no regular maintenance, repair or replacement foreseen under normal indoor conditions. Any contribution of the use stage (B1–B7) to the life-cycle impacts is therefore assumed to be negligible compared with the production, installation and end-of-life stages. Air, soil, and water impacts during the use phase have not been studied.

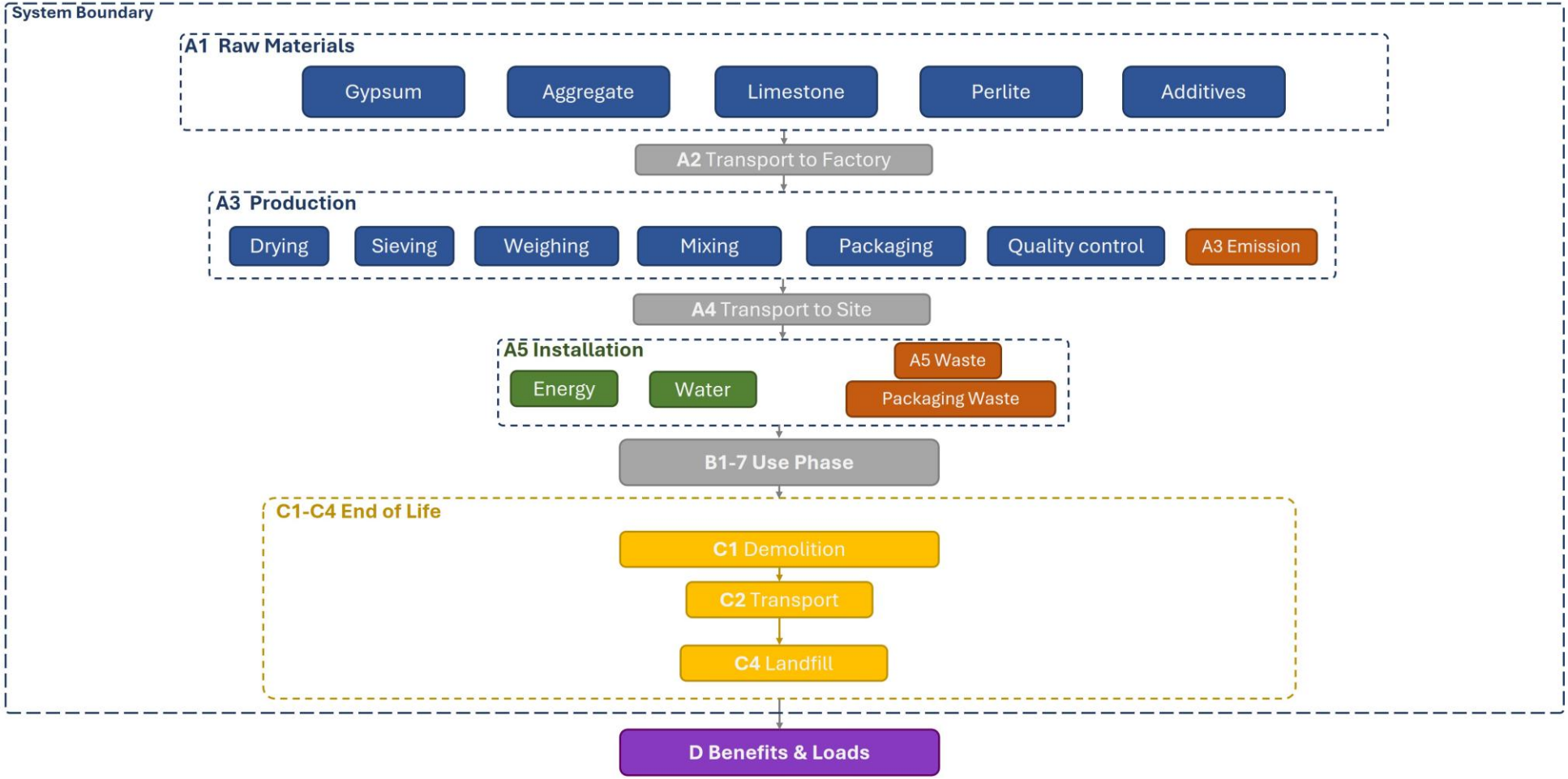
PRODUCT END OF LIFE (C1-C4, D)

At the end of life of the building, the plaster is assumed to be removed together with other wall materials during demolition. Demolition work is included in C1 as a generic demolition process with low energy demand per kilogram of construction waste.

In C2, transport of the mixed construction and demolition waste to a regional inert landfill is modelled with truck transport of 50 km. In C3, no further processing of the plaster is assumed. In C4, 100 % of the gypsum plaster is landfilled as mineral waste according to European practice. Packaging waste generated during installation is treated in A5; no additional packaging is assumed at the end of life.

Benefits and loads beyond the system boundary arise from the recycling or energy recovery of paper, plastic and wood packaging generated during the installation stage (A5). These materials are modelled according to European average waste treatment and recycling routes. The benefits reported in Module D represent the avoided impacts from substitution of primary packaging materials or fuels. No Module D benefits are claimed for the gypsum plaster itself, as no material recovery is expected at end of life.

SYSTEM DIAGRAM



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.

This LCA study includes all relevant material, transport, energy and emission flows associated with the life cycle of the product. All industrial processes required for raw material acquisition and pre-processing, production, distribution, installation and end-of-life treatment are included. Packaging used in bagged delivery is included, while silos are assumed to be reused multiple times and therefore excluded as reusable capital goods. Production losses and collected filter dust are returned to the mixing process and are included in the model as internal recycling.

Very small consumptions of lubricating oil and certain chemical admixtures are excluded because their quantities fall clearly below the 1 % cut-off criterion and their environmental relevance is negligible for the declared unit.

The following processes are excluded according to the provisions of EN 15804+A2:

– production, maintenance and end-of-life of capital equipment (machinery, buildings, silos, vehicles);
– construction and maintenance of infrastructure;
– personnel-related activities, including administration;
– energy and water use related to company management, sales and other non-production functions.

No other relevant processes required by EN 15804+A2 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	No allocation
Ancillary materials	Not applicable
Manufacturing energy and waste	Allocated by mass or volume

Estimations and assumptions mainly concern cut-off criteria, proxy datasets and scenario definitions. Where specific supplier data were not available, representative Ecoinvent v3.10 (EF 3.1) datasets for equivalent materials and processes in the EU/CZ context have been used. Minor formulation components and auxiliary chemicals below 1 % of product mass, which are not expected to significantly influence the results, are modelled using representative datasets or are excluded if they meet the general cut-off criteria.

For transport modules A2, A4 and C2, average distances based on Baumit logistics information are applied; vehicle capacity utilization is implemented via the background transport datasets. The resulting uncertainties are not expected to change the conclusions of the study.

PRODUCT & MANUFACTURING SITES GROUPING

Type of grouping	Multiple factories
Grouping method	Based on a representative product
Variation in GWP-fossil for A1-A3, %	+49,4

This EPD represents Baumit Ratio Glatt L produced at two Baumit dry-mortar plants: Čakovice and Dětmarovice. Both plants use the same manufacturing process and recipe concept. Differences arise mainly from the supplier mix of individual raw materials, the packaging method (ratio of bag delivery versus reusable silos) and differences in site-specific energy consumption.

The LCA results of both plants were compared and show variations within an acceptable range for a grouped EPD. Čakovice is used as the representative model. The grouped results are representative for Baumit Ratio Glatt L and also for very similar gypsum plasters with only minor variations in ingredient proportions.

LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator for EPD Hub V3 and EPD Process Certification v3.2.3. 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 and One Click LCA databases as sources of environmental data. Allocation used in Ecoinvent 3.10.1/3.11 environmental data sources follow the methodology ‘allocation, Cut-off, 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	3,83E+01	3,47E+01	2,22E+01	9,52E+01	9,55E+00	6,09E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,96E+00	0,00E+00	2,42E+01	-1,98E+00
GWP – fossil	kg CO_2e	4,25E+01	3,47E+01	2,54E+01	1,03E+02	9,55E+00	5,76E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,96E+00	0,00E+00	1,98E+01	-1,17E-01
GWP – biogenic	kg CO_2e	-4,42E+00	6,90E-03	-3,22E+00	-7,63E+00	2,16E-03	3,24E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,35E-03	0,00E+00	4,42E+00	-1,87E+00
GWP – LULUC	kg CO_2e	2,17E-01	1,24E-02	2,54E-02	2,55E-01	4,27E-03	2,71E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,66E-03	0,00E+00	5,15E-02	7,02E-03
Ozone depletion pot.	kg $CFC\text{-}_{11}$e	5,34E-07	6,90E-07	8,64E-07	2,09E-06	1,41E-07	4,01E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,79E-08	0,00E+00	4,13E-07	-5,85E-10
Acidification potential	mol H^+e	2,15E-01	7,21E-02	4,44E-02	3,31E-01	3,26E-02	6,65E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,03E-02	0,00E+00	1,08E-01	-1,25E-03
EP-freshwater[2)]	kg Pe	6,97E-03	2,33E-03	4,56E-03	1,39E-02	7,43E-04	2,58E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,64E-04	0,00E+00	1,62E-03	-7,94E-04
EP-marine	kg Ne	5,18E-02	1,73E-02	1,57E-02	8,48E-02	1,07E-02	5,98E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	6,67E-03	0,00E+00	4,11E-02	-9,17E-04
EP-terrestrial	mol Ne	5,79E-01	1,87E-01	1,60E-01	9,26E-01	1,16E-01	5,99E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,26E-02	0,00E+00	4,45E-01	-8,78E-03
POCP ("smog")[3)]	kg NMVOCe	1,59E-01	1,20E-01	6,57E-02	3,45E-01	4,80E-02	1,96E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,99E-02	0,00E+00	1,56E-01	-2,80E-03
ADP-minerals & metals[4)]	kg Sbe	2,17E-02	1,15E-04	2,06E-05	2,19E-02	2,66E-05	1,14E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,66E-05	0,00E+00	5,26E-05	3,91E-07
ADP-fossil resources	MJ	3,73E+02	4,88E+02	4,23E+02	1,28E+03	1,39E+02	1,04E+03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,64E+01	0,00E+00	3,53E+02	-7,95E-01
Water use[5)]	m^3e depr.	1,14E+01	2,42E+00	2,82E+00	1,67E+01	6,84E-01	2,60E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,27E-01	0,00E+00	1,41E+00	7,22E-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	3,13E-06	2,55E-06	4,26E-07	6,11E-06	9,56E-07	1,94E-06	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,96E-07	0,00E+00	1,06E-05	-1,31E-08
Ionizing radiation[6)]	kBq U235e	1,39E+00	6,29E-01	2,52E+00	4,55E+00	1,21E-01	2,08E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,53E-02	0,00E+00	2,66E-01	1,15E-01
Ecotoxicity (freshwater)	CTUe	1,48E+02	6,49E+01	3,14E+01	2,44E+02	1,96E+01	1,51E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,22E+01	0,00E+00	8,51E+01	-7,37E-01
Human toxicity, cancer	CTUh	1,70E-08	5,82E-09	4,82E-09	2,77E-08	1,58E-09	1,02E-08	ND	ND	ND	ND	ND	ND	ND	0,00E+00	9,83E-10	0,00E+00	4,45E-09	4,12E-11
Human tox. non-cancer	CTUh	2,32E-07	3,09E-07	8,50E-08	6,26E-07	8,97E-08	5,73E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,60E-08	0,00E+00	1,61E-07	2,76E-09
SQP[7)]	-	4,83E+02	2,95E+02	3,59E+02	1,14E+03	1,40E+02	2,63E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,70E+01	0,00E+00	4,79E+02	-1,16E+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	6,74E+01	8,54E+00	3,85E+01	1,14E+02	1,90E+00	6,62E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,18E+00	0,00E+00	4,38E+00	-1,68E+01
Renew. PER as material	MJ	4,99E+01	0,00E+00	2,95E+01	7,94E+01	0,00E+00	-2,95E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	-4,99E+01	1,77E+01
Total use of renew. PER	MJ	1,17E+02	8,54E+00	6,81E+01	1,94E+02	1,90E+00	-2,89E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,18E+00	0,00E+00	-4,55E+01	8,82E-01
Non-re. PER as energy	MJ	3,53E+02	4,88E+02	4,16E+02	1,26E+03	1,39E+02	1,04E+03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,64E+01	0,00E+00	3,54E+02	-1,04E+00
Non-re. PER as material	MJ	2,13E+01	0,00E+00	6,68E+00	2,80E+01	0,00E+00	-6,68E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	-2,13E+01	2,42E+00
Total use of non-re. PER	MJ	3,75E+02	4,88E+02	4,23E+02	1,29E+03	1,39E+02	1,03E+03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,64E+01	0,00E+00	3,32E+02	1,38E+00
Secondary materials	kg	9,93E-02	2,26E-01	1,10E-01	4,36E-01	5,90E-02	1,12E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,68E-02	0,00E+00	1,25E-01	7,40E-01
Renew. secondary fuels	MJ	1,31E-02	2,86E-03	4,94E-01	5,10E-01	7,49E-04	2,61E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	4,67E-04	0,00E+00	1,92E-03	-9,33E-06
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	4,83E-01	6,65E-02	1,73E-01	7,22E-01	2,05E-02	1,78E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,28E-02	0,00E+00	2,04E-01	1,78E-02

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	1,78E+00	7,09E-01	1,22E+00	3,71E+00	2,35E-01	9,26E+00	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,46E-01	0,00E+00	5,22E-01	1,96E-02
Non-hazardous waste	kg	8,51E+01	1,50E+01	2,24E+01	1,23E+02	4,34E+00	2,13E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	2,71E+00	0,00E+00	1,05E+01	-1,62E+00
Radioactive waste	kg	3,49E-04	1,56E-04	6,05E-04	1,11E-03	2,95E-05	4,95E-03	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,84E-05	0,00E+00	6,51E-05	2,96E-05

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	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
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,42E+00	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 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	3,19E+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	1,34E+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	1,85E+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	4,26E+01	3,45E+01	2,53E+01	1,02E+02	9,50E+00	5,75E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,92E+00	0,00E+00	1,97E+01	-1,10E-01
Ozone depletion Pot.	kg CFC_{-11}e	4,76E-07	5,49E-07	7,03E-07	1,73E-06	1,12E-07	3,37E-07	ND	ND	ND	ND	ND	ND	ND	0,00E+00	7,02E-08	0,00E+00	3,29E-07	-4,65E-10
Acidification	kg SO_2e	1,67E-01	5,80E-02	3,35E-02	2,59E-01	2,49E-02	5,83E-01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,55E-02	0,00E+00	8,00E-02	-6,38E-04
Eutrophication	kg PO_4^3e	1,87E-01	1,46E-02	2,85E-02	2,30E-01	6,06E-03	4,25E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	3,78E-03	0,00E+00	2,47E-02	-1,84E-04
POCP (“smog”)	kg C_2H_4e	1,33E-02	6,13E-03	3,72E-03	2,32E-02	2,22E-03	2,70E-02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,38E-03	0,00E+00	7,11E-03	-1,62E-04
ADP-elements	kg Sbe	1,06E-04	1,13E-04	1,89E-05	2,38E-04	2,60E-05	6,15E-05	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,62E-05	0,00E+00	5,13E-05	2,89E-07
ADP-fossil	MJ	3,50E+02	4,77E+02	3,77E+02	1,20E+03	1,37E+02	6,64E+02	ND	ND	ND	ND	ND	ND	ND	0,00E+00	8,52E+01	0,00E+00	3,49E+02	-2,83E+00

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	4,28E+01	3,47E+01	2,54E+01	1,03E+02	9,55E+00	5,77E+01	ND	ND	ND	ND	ND	ND	ND	0,00E+00	5,96E+00	0,00E+00	1,98E+01	-1,10E-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, Europe, Ecoinvent, 0.0773 kgCO2e/MJ
2. Electricity, medium voltage, residual mix, Czech Republic, Ecoinvent, 0.76 kgCO2e/kWh
3. Market for diesel, burned in building machine, World, Ecoinvent, 0.10 kgCO2e/MJ

Transport scenario documentation - A4 (Transport resources)

1. Market for transport, freight, lorry >32 metric ton, EURO5, 88,5 km

Transport scenario documentation A4

Scenario parameter	Value
Capacity utilization (including empty return) %	50
Bulk density of transported products	9,20E+02
Volume capacity utilization factor	1

Installation scenario documentation - A5 (Installation resources)

1. Market for tap water, Ecoinvent, 533.0 kg
2. Electricity, medium voltage, residual mix, Ecoinvent, 65.1 kWh

Installation scenario documentation - A5 (Installation waste)

1. Direct emission to air: Water, One Click LCA, 0.4264 m3
2. Treatment of waste gypsum plasterboard, collection for final disposal, Ecoinvent, 50.0 kg
3. Treatment of waste paper, unsorted, sorting, Ecoinvent, Materials for recycling, 0.98 kg
4. Treatment of waste packaging paper, municipal incineration, Ecoinvent, 0.094 kg
5. Exported Energy: Thermal, Ecoinvent, 0.29 MJ
6. Exported Energy: Thermal, Ecoinvent, 0.43 MJ
7. Exported Energy: Thermal, Ecoinvent, 1.127 MJ
8. Exported Energy: Electricity, Ecoinvent, 0.21 MJ
9. Exported Energy: Electricity, Ecoinvent, 0.31 MJ
10. Exported Energy: Electricity, Ecoinvent, 0.82 MJ
11. Treatment of waste packaging paper, sanitary landfill, Ecoinvent, 0.11 kg
12. Treatment of waste polyethylene, for recycling, unsorted, sorting, Ecoinvent, Materials for recycling, 0.05 kg
13. Treatment of waste polyethylene, municipal incineration, Ecoinvent, 0.046 kg
14. Treatment of waste polyethylene, sanitary landfill, Ecoinvent, 0.029 kg
15. Treatment of waste wood, post-consumer, sorting and shredding, Ecoinvent, Materials for recycling, 0.39 kg
16. Treatment of waste wood, untreated, municipal incineration, Ecoinvent, 0.37 kg
17. Treatment of waste wood, untreated, sanitary landfill, Ecoinvent, 0.47 kg

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

1. Treatment of waste mineral plaster, collection for final disposal, Ecoinvent, 1106.6 kg
2. Diesel, burned in building machine, Ecoinvent, 10.0 kWh

Scenario information	Value
Scenario assumptions e.g. transportation	At the end of the building's life, the plaster is removed together with wall surfaces during demolition. Diesel consumption for demolition is estimated at 0.01 kWh/kg of plaster, representing typical manual or mechanical removal in residential and commercial buildings. Demolished material is transported 50 km by diesel lorry (16–32 t, Euro 6) to a construction and demolition waste management facility. No backhauling is considered. In the Czech Republic, recycling of gypsum plasters is not common, and no recovery or reuse is assumed. The waste is therefore 100% landfilled at an inert or non-hazardous waste landfill (Modules C3–C4). During disposal, no significant emissions or energy recovery occur. The plaster remains chemically stable under landfill conditions, and potential sulfate leaching is considered negligible.

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

Yazan Badour as an authorized verifier for EPD Hub Limited 20.02.2026

VERIFIED ISO 14025