ENVIRONMENTAL PRODUCT DECLARATION

as per *ISO 14025* and *EN 15804+A2*

Owner of the Declaration	Türk Ytong San. A.S.
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-TYS-20250678-CBA1-EN
Issue date	24/02/2026
Valid to	23/02/2031

Multipor Mineral Insulation Board

Türk Ytong Sanayi A.Ş.

www.ibu-epd.com | https://epd-online.com

YTONG

General Information

Türk Ytong Sanayi A.Ş.

Programme holder

IBU – Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

Declaration number

EPD-TYS-20250678-CBA1-EN

This declaration is based on the product category rules:

Aerated concrete, 01/08/2021
(PCR checked and approved by the SVR)

Issue date

24/02/2026

Valid to

23/02/2031

Dipl.-Ing. Hans Peters
(Chairman of Institut Bauen und Umwelt e.V.)

Florian Pronold
(Managing Director Institut Bauen und Umwelt e.V.)

Multipor Mineral Insulation Board

Owner of the declaration

Türk Ytong San. A.S.
Aydinevler Mahallesi, Inönü Caddesi, Gökçe Sokak Maltepe No:3
34854 Istanbul
Turkey

Declared product / declared unit

1 m³ of Multipor mineral insulation board with an average bulk density of 108 kg/m^3

Scope:

The life cycle assessment is based on the 2024 consumption and production data of the Türk Ytong Sanayi A.Ş' Çatalca plant in Türkiye. The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

Verification

The standard EN 15804 serves as the core PCR
Independent verification of the declaration and data according to ISO 14025:2011
☐ internally ☒ externally

Mr Stephen Forson ,
(Independent verifier)

YTONG

Product

Product description/Product definition

Multipor is a non-combustible, mineral-based insulation board for use in energy-efficient building envelopes. It is a rigid, mineral insulation panel classified as A1 (non-combustible) in accordance with *EN 13501-1*. It is designed for use in thermal insulation of walls, ceilings, and roofs, particularly in systems requiring fire safety, breathability, and eco-compatibility. (EU) *Directive No. 2024/3110 (CPR)* applies for placing the product on the market in the *European Union/European Free Trade Association (EU/EFTA) (with the exception of Switzerland)*. The product requires a Declaration of Performance taking consideration of the *ETA- 05/0093* vom 30.10.2024, Multipor Mineraldämmplatte and CE marking. Use is governed by the respective national regulations.

Application

It can be used for renovation and new buildings:

• Internal and external insulation of exterior walls
• Insulation of underground garage, basement, passageway ceilings
• Rooftop insulation of inclined and flat roofs, and parking floors
• In External Thermal Insulation Composite System (ETICS) as a system component
• Double walls
• Insulation of cavity in the walls
• Ventilated facades
• Insulation under screed

Technical Data

See the Declaration of Performance for the respective product. The following table includes general data.

Technical data

Name	Value	Unit
Gross density acc. EN 1602	75 - 125	kg/m^3
Compressive strength acc. EN 826	0.15 - 0.35	N/mm^2
Tensile strength acc. EN 1607	0.08	N/mm^2
Moisture content at 23 °C, 80% acc. ISO 12571	<6	M.-%
Thermal conductivity acc. to EN 12667	0.04 - 0.047	W/(mK)
Water vapour diffusion resistance factor acc. to EN 12806	2 - 5	-

The product's performance values correspond with the Declaration of Performance in terms of its essential properties in accordance with *ETA-05/0093*, 30.10.2024

Delivery Status

Masonry units acc. to *EN 771-4*.

Length = 350 - 1000 mm
Width= 200 - 750 mm
Thickness= 40 to 300 mm

Base materials/Ancillary materials

Content Declaration

Name	Value	Unit
Milled Sand	25 - 40	% by mass
Mineral aggregate	10 - 20	% by mass
Cement (CEM I)	25 - 50	% by mass
Unhydrated lime	5- 25	% by mass
Anhydrite / Gypsum	3 - 7	% by mass
Aluminium as pore forming substance	0.6 - 0.8	% by mass

90-120 % water by mass (with reference to the solid materials) is also used.

Sand: The sand used is a natural raw material which contains quartz (SiO_2) as a primary mineral as well as natural minor and trace minerals. It is an essential base material for the hydrothermal reaction during steam curing.

Mineral aggregate: Insulation board flour comes from the processing of the insulation boards themselves / aerated concrete flour comes from the processing of autoclaved aerated concrete and/or ground limestone as an additional mineral component.

Cement: In accordance with *EN 197-1*; cement serves as a binding agent and is largely manufactured from lime marl or a mixture of lime and clay. The natural raw materials are burned before being ground.

Lime: In accordance with *EN 459-1*; lime serves as a binding agent and is manufactured by burning natural lime.

Gypsum: In accordance with *EN 13279-1*; the sulphate agent used serves towards influencing the curing time for the AAC and originates from natural reserves or is produced technically.

Aluminium: Aluminium paste serves as a pore-forming agent. Metallic aluminium reacts in the alkaline environment, whereby gaseous hydrogen is formed which generates the pores and then vents after the expansion process.

Water: The availability of water is a fundamental basis for the hydraulic reaction undergone by the binding agents. Water is also required for manufacturing a homogeneous suspension.

Mould oil: Mould oil is used as a release agent between the mould and the raw AAC mixture. PAC (polycyclic aromatic carbons) are used – free mineral oils plus long-chain additives for increasing viscosity. This prevents it from running down in the mould and permits economical application.

The product at least one partial product contains substances from the ECHA list of candidates of Substances of Very High Concern (SVHC) exceeding 0.1 % by mass:
No
The product at least one partial product contains other carcinogenic, mutagenic, reprotoxic (CMR) substances in categories 1A or 1B which are not on the candidate list, exceeding 0.1 % by mass in at least one partial product:
No
Biocide products were added to this construction product, or it has been treated with biocide products (this then concerns a treated product as defined by the (EU) *Regulation on Biocide Products No. 528/2012)*:
No

Reference service life

When used as intended, the service life of Multipor mineral insulation boards is ≥ 50 years according to the BBSR table 'Service life of building components for life cycle analysis according to BNB'.

Manufacturing

The production of Multipor mineral insulation boards begins with the preparation of a homogenous mixture of natural raw materials, primarily sand, lime, cement, gypsum, and water. These materials are precisely dosed and mixed to form a slurry, into which a small amount of aluminum is added. This addition initiates a chemical reaction, releasing hydrogen gas and causing the mixture to expand into a lightweight, porous structure. The resulting aerated mixture is poured into large molds, where it undergoes a controlled pre-curing phase to stabilize the structure before cutting.
Once the semi-solid material reaches sufficient strength, it is demolded and cut into the desired board dimensions using precision wire-cutting systems. The cut boards are then transferred into an autoclave, where they are cured under high-pressure steam (at approximately 180–200°C) for several hours. This autoclaving process imparts the final mineral crystalline structure, giving Multipor its high dimensional stability, and thermal performance. After autoclaving, the boards are dried, subjected to quality control inspections, and finally palletized and packaged for delivery. The entire process ensures a sustainable, non-combustible, and high-performance insulation product suitable for modern energy-efficient construction.

Installation

Multipor mineral insulation boards are installed manually and can be cut to the required dimensions using band saws or, alternatively, hand tools such as carbide saws or cutters. The boards are adhered to the application surface using a specially formulated mineral lightweight mortar in accordance with *EN 998-1*, typically applied at a rate of approximately 4.5 kg/m². Mechanical fixings may also be used as needed, depending on the specific installation requirements.
Once installed, the surface of Multipor boards can be finished with plaster, paint, or interior cladding panels. Standard occupational health and safety regulations apply during installation, and no special environmental protection measures are required during the processing of the product.

Packaging

Stretch hood, cardboard, euro pallet, shrink and foam are used as packaging materials. Plastic-based and wooden-based materials have to be collected separately at site. For the purposes of this assessment, plastic-based materials are conservatively assumed to be disposed of via landfill, while pallets are assumed to be reused multiple times.

Environment and health during use

In accordance with the current state of knowledge, Multipor mineral insulation boards do not emit any harmful substances such as VOC etc.
Use condition

The Multipor mineral insulation board is mainly composed of tobermorite. It also includes non-reactive starting materials, primarily quartz and, in some cases, carbonates. Even after autoclaving, the material continues to undergo recarbonation for decades, without negatively impacting its performance characteristics.

Extraordinary effects

In the event of a fire, no toxic gases or vapours can arise.
Water
When exposed to water, autoclaved aerated concrete reacts slightly alkaline. No substances are washed out which could be hazardous to water.

Mechanical destruction
Not of relevance.

LCA: Calculation rules

Declared Unit
The declared unit is 1 m³ Multipor mineral insulation board with a mean gross density of 108 kg/m³. The average gross density was determined by averaging the 2024 production data of the factory.

Declared unit and mass reference

Name	Value	Unit
Declared unit	1	m^3
Gross density	108	kg/m^3
conversion factor	0.0093	-

System boundary
Type of EPD: cradle to gate, with options

Description of the life cycle phases;

A1–A3 (Product stage – Cradle to gate)
These modules cover all processes from raw material extraction to the finished AAC blocks at the factory gate including;
- Extraction, processing, and supply of raw materials, including cement, lime, gypsum, sand, and aluminum powder etc.
- Transport of raw materials to the manufacturing facilities
- Multipor production processes, including mixing, casting, pre-curing, autoclaving, cutting, packaging, and storage. This module includes all energy and water consumption, as well as auxiliary materials.

The climate change GWP-GHG impact of the electricity grid mix is 0.91 kg CO_2 eq./kWh.

A4-A5 (Construction process stage)
- Transport of Mutipor blocks from the manufacturing plant to the construction site or distribution point. Calculated transport distances and vehicle types (e.g., >16 t truck) are applied.
- Installation of AAC blocks at the construction site, including the use of mortar and any installation-related material losses. Waste transport and disposal, as well as energy and water use during construction, are included. Offcuts were not taken into account, as they strongly depend on the building context.

B1 (Use stage)
Recarbonation of reactive product components (e.g. CaO) in cement and lime. A recarbonation rate of 95% is assumed (Walther, 2022) over the reference service life.

C1-C4 (End- of -life stage)
- Module C1; diesel consumption due to the use of building machinery is assumed.
- Module C2; transport by truck to waste processing (80 km) with 50% utilization rate. Transport distance can be adjusted at

building level if necessary.
- Module C3/1; recycling scenario of the multipor product involves the use of electricity and diesel for machinery.
- Module C4/1; Impacts of landfilling of multipor product.

D/1 (Benefits and loads beyond the system boundaries)
Module D/1 reports the potential benefits from the recovery of Multipor board waste for use as recycled aggregate in construction applications. The recycled fraction is assumed to substitute natural aggregates on a mass-for-mass basis. Environmental benefits are calculated as the avoided impacts of producing equivalent virgin aggregate, including extraction, processing, and transport. No further processing benefits are claimed beyond aggregate substitution.

Assumptions and Estimates
The product system does not rely on any significant assumptions or estimations that could influence the interpretation of the LCA results. A limited number of auxiliary materials, representing in total less than 1% of the system's mass, were modelled using upstream processes deemed technologically equivalent to the actual materials.

Cut-off criteria
The criteria for exclusion were set so that individual input flows less than 1% of the total, with a cumulative limit of less than 5%, could be omitted. This was contingent upon confirming that these excluded flows did not significantly alter the reported data, with 'significant' defined as affecting the total by less than 5%.

Background Data
SimaPro software v.10 and Ecoinvent v.11 database is used in the analysis.

Geographic Representativeness
Land or region in which the declared product system is manufactured: Türkiye.

Allocation
In addition to Multipor mineral insulation boards, autoclaved aerated concrete blocks are also produced at the Çatalca plant. Raw and auxiliary materials are allocated by mass, taking the recipe into account for 2024.

Geographic Representativeness
Land or region, in which the declared product system is manufactured, used or handled at the end of the product´s lifespan: Turkey

Comparability
Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to *EN 15804* and the building context, respectively the product-specific characteristics of performance, are taken into account.

LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon
The product itself does not have biogenic carbon content. The only biogenic carbon content is sourced due to the use of packaging mostly pallets. The analysis consider 7 kg of pallet and 0.6 kg of corrugated box use per declared unit.

Information on describing the biogenic carbon content at factory gate

Name	Value	Unit
Biogenic carbon content in product	-	kg C
Biogenic carbon content in accompanying packaging	3.57	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO_2.

The following technical information serves as the basis for the declared modules and may also be used to develop specific scenarios for building assessments in cases where certain modules are not declared (MND)

Transport to the building site (A4)

Name	Value	Unit
Transport distance (per declared unit)	88.4	km
Capacity utilization (including empty runs)	50	%
Gross density of the products transported	108	kg/m3

Installation into the building (A5)
In this stage, the impacts associated with the use of mortar and packaging disposal are included. For the installation of 1 m^2 of Multipor, an average of 10 kg of mortar is assumed. The end-of-life treatment of packaging materials is also considered within this stage. A conservative approach has been applied in the modeling: no credits have been allocated to the D module or elsewhere for potential recovery or recycling of packaging materials.

Name	Value	Unit
Mortar use	10	kg/m2

Use of the installed product (B1)

Name	Value	Unit
Recarbonation rate (Walther 2022)	95	%

Reference service life

Name	Value	Unit
Life Span (BBSR Table)	≥ 50	year

End of life (C1-C4)
Two alternative scenarios, considered the most representative and realistic, are reported in the EPD: C3/1, in which entireproduct is sent to recycling, and C4/1, in which the product is disposed of in landfill.

Name	Value	Unit
Diesel consumption for building machinery (Module C1)	1.08	kWh per declared unit
Transport distance for the discarded product (Module C2)	80	km
Recycled amount (Module C3/1)	108	kg
Landfilling (Module C4/1)	108	kg

Reuse, recovery and/or recycling potentials (D/1), relevant scenario information
It is assumed that the recycled fraction (recycling scenario) substitutes natural gravel in equivalent applications.

Name	Value	Unit
Crushed gravel	108	kg

YTONG

LCA: Results

The environmental impacts of 1 m³ Multipor mineral insulation board with a gross density of 108 kg/m³ are outlined below. The modules marked 'x' in accordance with EN 15804 in the overview are addressed; the modules marked 'MND' (Module not declared) do not form a component of the analysis. The following tables depict the results of the indicators concerning impact estimates, use of resources as well as the waste and other output flows with reference to the declared unit.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	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	X	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m3 Multipor mineral insulation board (108 kg/m3)

Parameter	Unit	A1-A3	A4	A5	B1	C1	C2	C3/1	C4/1	D/1
GWP-total	kg CO_2 eq	1.18E+02	1.68E+01	1.26E+01	-3.57E+01	3.68E-01	2.55E+00	2.78E-01	2.95E-01	-1.58E+00
GWP-fossil	kg CO_2 eq	1.28E+02	1.68E+01	1.68E+00	-3.57E+01	3.68E-01	2.42E+00	2.77E-01	1.07E-04	-4.35E-03
GWP-biogenic	kg CO_2 eq	-1.08E+01	3.52E-03	1.09E+01	0	1.84E-05	8.28E-04	2.84E-04	1.73E-05	-8.41E-04
GWP-luluc	kg CO_2 eq	4.68E-01	5.58E-03	6.6E-04	0	1.52E-05	1.29E-01	9.66E-04	2.95E-01	-1.58E+00
ODP	kg CFC11 eq	1.2E-06	3.66E-07	6.4E-09	0	5.6E-09	1.11E-07	3.14E-09	4.23E-09	-1.56E-08
AP	mol H^+ eq	3.42E-01	5.4E-02	5.52E-03	0	3.4E-03	9.64E-03	2.1E-03	2.65E-03	-9.47E-03
EP-freshwater	kg P eq	3.25E-03	1.23E-04	1.92E-05	0	3.46E-07	9.77E-06	1.49E-05	8.28E-06	-3.37E-04
EP-marine	kg N eq	7.76E-02	1.8E-02	1.72E-03	0	1.6E-03	5.16E-03	7.22E-04	1.21E-03	-2.93E-03
EP-terrestrial	mol N eq	8.54E-01	1.98E-01	1.94E-02	0	1.76E-02	4.46E-02	7.92E-03	1.33E-02	-3.15E-02
POCP	kg NMVOC eq	3.2E-01	8.19E-02	5.32E-03	0	5.24E-03	1.43E-02	2.38E-03	4.02E-03	-9.9E-03
ADPE	kg Sb eq	1.06E-05	5.66E-05	2.84E-06	0	1.29E-08	3.15E-07	1.01E-08	9.81E-09	-1.58E-07
ADPF	MJ	1.13E+03	2.38E+02	8.75E+00	0	4.81E+00	3.19E+01	3.41E+00	3.77E+00	-2.06E+01
WDP	m^3 world eq deprived	3.66E+01	1.21E+00	4.84E-01	0	6.06E-03	2.5E-01	3.56E-02	5.26E-03	-1.56E+00

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential)

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m3 Multipor mineral insulation board (108 kg/m3)

Parameter	Unit	A1-A3	A4	A5	B1	C1	C2	C3/1	C4/1	D/1
PERE	MJ	1.93E+02	3.88E+00	1.22E+02	0	1.05E-02	3.5E-01	5.54E-01	1.77E-02	-1.12E+00
PERM	MJ	1.21E+02	0	-1.21E+02	0	0	0	0	0	0
PERT	MJ	3.13E+02	3.88E+00	1.56E+00	0	1.05E-02	3.5E-01	5.54E-01	1.77E-02	-1.12E+00
PENRE	MJ	1.07E+03	2.38E+02	7.5E+01	0	4.81E+00	3.28E+01	3.41E+00	3.77E+00	-2.06E+01
PENRM	MJ	6.63E+01	0	-6.63E+01	0	0	0	0	0	0
PENRT	MJ	1.13E+03	2.38E+02	8.75E+00	0	4.81E+00	3.28E+01	3.41E+00	3.77E+00	-2.06E+01
SM	kg	0	0	0	0	0	0	0	8.54E-06	-2.15E-03
RSF	MJ	0	0	0	0	0	0	0	1.42E-06	-1E-05
NRSF	MJ	0	0	0	0	0	0	0	0	0
FW	m^3	8.97E-01	2.98E-02	1.15E-02	0	1.46E-04	5.84E-03	9.9E-04	1.27E-04	-3.69E-02

PERE = Use of renewable primary energy excluding renewable primary energy resources 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 resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 m3 Multipor mineral insulation board (108 kg/m3)

Parameter	Unit	A1-A3	A4	A5	B1	C1	C2	C3/1	C4/1	D/1
HWD	kg	3.81E+00	3.42E-01	5.06E-02	0	5.05E-04	2.7E-02	8.52E-03	1.32E-03	-2.39E-02
NHWD	kg	1.79E+02	7.33E+00	3.16E+00	0	1.73E-02	8.89E-02	6.68E-01	1.08E+02	-5.04E-01
RWD	kg	7.24E-04	7.01E-05	5.01E-06	0	2.24E-07	6.29E-07	2.31E-07	1.85E-07	-7.43E-06
CRU	kg	0	0	0	0	0	0	0	0	0

MFR	kg	0	0	0	0	0	0	1.08E+02	0	0
MER	kg	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0
EET	MJ	0	0	0	0	0	0	0	0	0

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:
1 m3 Multipor mineral insulation board (108 kg/m3)

Parameter	Unit	A1-A3	A4	A5	B1	C1	C2	C3/1	C4/1	D/1
PM	Disease incidence	2.58E-06	1.34E-06	5.38E-08	0	9.79E-08	2.75E-07	4.09E-08	7.52E-08	-1.39E-07
IR	kBq U235 eq	9.52E-01	1.03E-01	7.38E-03	0	4E-04	1.69E-03	3.96E-04	8.88E-04	-1.02E-01
ETP-fw	CTUe	1.33E+02	3.17E+01	2.51E+00	0	1.38E-01	1.2E+01	3.22E-01	1.44E-01	-2.46E+00
HTP-c	CTUh	3.17E-08	2.87E-09	3.09E-10	0	1.97E-11	2.46E-10	2.35E-11	2.04E-11	-4E-10
HTP-nc	CTUh	5.48E-07	1.49E-07	1.29E-08	0	3.63E-10	1.76E-08	9.51E-10	3.91E-10	-7.71E-09
SQP	SQP	1.04E+03	1.41E+02	1.23E+01	0	8.17E-03	1.19E+01	1.35E-01	4.45E+00	-7.35E+00

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. 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 or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

References

BBSR Table
Service life of building components for life cycle analysis according to BNB, Informationsportal Nachhaltiges Bauen des BMI, status 24.02.2017.

Biocidal Products Regulation, BPR
European Parliament and Council. (2012). Regulation (EU) No 528/2012 of 22 May 2012 concerning the making available on the market and use of biocidal products. Official Journal of the European Union, L167, 1–123.

CPR
Regulation (EU) 2024/3110 of the European Parliament and of the Council of 27 November 2024 laying down harmonised rules for the marketing of construction products and repealing Regulation (EU) No 305/2011.

Decision 2003/33/EC
Decision 2003/33//EC: Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of Annexe II to Directive 1999/31/EC.

Directive 2008/98/EC
Directive 2008/98/EC of the European Parliament and Council dated 19 November 2008 on waste; published on 19 November 2008.

ECHA list
Candidate list of Substances of Very High Concern (SVHC) for authorisation (published in accordance with Article 59, paragraph 10 of the REACH Directive), https://echa.europa.eu/de/candidate-list-table; last amended on 13 December 2021.

Ecoinvent
ecoinvent Association. ecoinvent Database, Version 3.11. Zurich, Switzerland: ecoinvent Association, 2025.

EN 197-1
EN 197-1:2011; Cement - Part 1: Composition, specifications and conformity criteria for common cements

EN 459-1
EN 459-1:2015; Building lime – Part 1: Definitions, specifications and conformity criteria.

EN 680
EN 680:2005; Determination of the drying shrinkage of autoclaved aerated concrete.

EN 771-4
EN 771-4:2011+A1:2015; Specification for masonry units - Part 4: Autoclaved aerated concrete masonry units.

EN 826
EN 826:2013; Thermal insulating products for building applications - Determination of compression behavior.

EN 998-1
EN 998-1:2016; Specification for mortar for masonry - Part 1: Rendering and plastering mortar

EN 1602
EN 1602:2013; Thermal insulating products for building applications - Determination of the apparent density.

EN 1607
EN 1607:2013; Thermal insulating products for building applications - Determination of tensile strength perpendicular to faces.

EN 1745
EN 1745:2020; Masonry and masonry products - Methods for

determining thermal properties.

EN 12086
EN 12086:2013; Thermal insulating products for building applications - Determination of water vapour transmission properties.

EN 12667 EN 12664:2001
Thermal performance of building materials and products - Determination of thermal resistance by means of guarded hot plate and heat flow meter methods - Products of high and medium thermal resistance.

EN 13279-1
EN 13279-1:2008; Gypsum binders and gypsum plasters – Part 1: Definitions and requirements.

EN 13501-1
EN 13501-1:2018; Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests.

PCR Part A
Institut Bauen und Umwelt e.V., Berlin (pub.): Product CategoryRules for Construction Products from the rangeofEnvironmental Product Declarations of Institut BauenundUmwelt (IBU), Part A: Calculation Rules for the LifeCycleAssessment and Requirements on theBackgroundReport. version 1.4, valid from 30/04/2024, www.ibu-epd.com .

ETA-05/0093
ETA-05/0093, 30.10.2024, Multipor Mineraldämmplatte.

ISO 12571
ISO 12571:2021; Hygrothermal performance of building materials and products - Determination of hygroscopic sorption properties.

ISO 14025
ISO 14025:2006-07 Environmental labels and declarations – Type III Environmental Declarations – Principles and processes.

PCR Part B
PRequirements on the EPD for Aerated Concrete, 01.08.2021.Berlin. [www.ibu-epd.com] .

SimaPro software
PRé Sustainability. SimaPro, Version 10.2. Amersfoort, Netherlands: PRé Sustainability, 2025.

Walther 2022
Walther, H.B.:CO_2 absorption during the use phase of autoclaved aerated concrete by recarbonation, AAC worldwide, 1/2022, pp.18-29.

Walther 2023
Walther, H.B.: Calculation of EPD for individual AAC product classes, ce papers 6/2023, pp. 210-214.

YTONG

Publisher

Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

+49 (0)30 3087748- 0
info@ibu-epd.com
www.ibu-epd.com

Programme holder

Institut Bauen und Umwelt e.V.
Hegelplatz 1
10117 Berlin
Germany

+49 (0)30 3087748- 0
info@ibu-epd.com
www.ibu-epd.com

Author of the Life Cycle Assessment

Metsims Sustainability Consulting
Sanayi Mah. Hümeyra Sokak NEF09 B Blok 7/46-47
34415 4.Levent, Istanbul
Turkey

+90 212 281 13 33
info@metsims.com
www.metsims.com

Owner of the Declaration

Türk Ytong San. A.S.
Aydinevler Mahallesi, Inönü Caddesi, Gökçe Sokak
Maltepe No:3
34854 Istanbul
Turkey

+ 90 216 396 66 00
ytong@ytong.com.tr
www.ytong.com.tr