



ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for: "EPD of multiple colors (Grey, Ochre, Red and Charcoal), based on the average results of the product group" Weighted Average – 6.09 kg CO₂-eq per m² (18kg)

Mas - Vitrified Floor and Wall Tile

Programme: The International EPD® System, www.environdec.com
Programme operator: EPD International AB
EPD registration number: EPD-IES-0016213
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An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

PROGRAMME INFORMATION

Programme: The International EPD® System
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Accountabilities for PCR, LCA and independent,
third-party verification

PRODUCT CATEGORY RULES (PCR)

CEN standard EN 15804 serves as the Core Product
Category Rules (PCR)

Product Category Rules (PCR):

2019:14 Version 1.3.4. 2025-06-20. Construction Products
and CPC 54 Construction Services.

PCR review was conducted by: The Technical Committee of the
International EPD System. See www.environdec.com for a list of
members. Review chair: Claudia A. Peña, University of Concepción,
Chile. The review panel may be contacted via the Secretariat
www.environdec.com/contact.”

LIFE CYCLE ASSESSMENT (LCA)

LCA accountability: Rohit Panchal, Materials
Processing Institute
(Email: rohit.panchal@mpiuk.com)

Third-party verification

Independent third-party verification of the declaration and data,
according to ISO 14025:2006, via:

EPD verification by individual verifier

Third-party verifier: Jan Weinzettel, Individual EPD verifier,
weinzettel@seznam.cz

Approved by: The International EPD® System

Procedure for follow-up of data during EPD validity involves third
party verifier:

Yes No

The EPD owner has the sole ownership, liability, and responsibility for the EPD.

EPDs within the same product category but registered in different EPD programmes,
or not compliant with EN 15804, may not be comparable. For two EPDs to be
comparable, they must be based on the same PCR (including the same version
number) or be based on fully-aligned PCRs or versions of PCRs; cover products
with identical functions, technical performances and use (e.g. identical declared/
functional units); have equivalent system boundaries and descriptions of data; apply
equivalent data quality requirements, methods of data collection, and allocation
methods; apply identical cut-off rules and impact assessment methods (including
the same version of characterisation factors); have equivalent content declarations;
and be valid at the time of comparison. For further information about comparability,
see EN 15804 and ISO 14025.

COMPANY INFORMATION

Owner of the EPD: Alusid Limited
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WE'RE ALUSID. AND WE'RE ON A MISSION.

Established in 2012, out of the shared mission of our founders to make the best use of the vast waste streams produced by the foundation industries, Alusid transforms what may have traditionally been regarded as low-value material into beautiful tiles and surfaces for commercial architecture and interiors market.

Our vision is to reduce the impact on the built environment by making the world's lowest carbon ceramic and porcelain tiles. Seeking to constantly improve our methods of making, in turn reducing the carbon footprint of our products – all without ever compromising on design, quality or aesthetics – we are pioneers and advocates in supporting and empowering designers to make more responsible material choices.

Discover more about Alusid and our products at
www.alusid.co.uk.



Meet Mas. Dry-pressed ceramic floor & wall tiles, made from 'waste'.

With Alusid being founded on this belief that we should make the most of 'waste' materials, we collaborate with trusted suppliers to bring our mission to life. Ensuring that we use as high a percentage of recycled materials as we possibly can.

The physical embodiment of this is Mas – a collection of floor & wall tiles, made from between 95% and 98.5% recycled materials (depending on the colour).

By transforming an abundant volume of material that would otherwise likely end up in a landfill, we're utilising unwanted, readily available matter, harnessing its practical properties such as durability, and applying our unique manufacturing and design techniques to produce a product that considerately serves both people and the planet.

WHAT MAKES MAS DIFFERENT?

Mas uses by-products aggregated from multiple industries, and from various parts of their production process - both pre and post-fired. Crucially, we avoid spray drying – instead using a unique low-energy dry granulation process. By only adding a small amount of water to the recovered raw materials that have already been processed by other industries, we are able to reduce the use of natural gas and electricity.

WHAT IS SPRAY DRYING?

Spray drying involves blending raw materials in water and milling in large ball mills. The resulting slurry of material is turned into granules by atomising it into droplets by spraying then rapidly evaporating the water from the sprayed droplets to produce hollow spheres using hot air by burning natural gas.

PRODUCT INFORMATION

Product name: Mas

Product identification: Dry-pressed ceramic tiles, with water absorption Eb 0.5% <3%

Product description: Vitrified wall and floor tiles made from between 95 and 98.5% recycled materials

UN CPC code: 3731

Other codes for product classification: BS EN 14411: Group B1b

Geographical scope: A1-C4 – Spain
The geographical scope of this EPD is global.

Name and location of production site(s): Sant Joan De Moro, Castellon, Spain

Summary of technical properties as tested according to ISO 10545:

Water Absorption	0.6%
Modulus of Rupture Average	40 N/mm ²
Frost resistance	Yes
Slip resistance	PTV 36+
Stain resistance	Class 5
Thermal shock resistance:	Yes
Fire rating	Class A1/A1 FI (Non-Combustible)
UV Colour Resistance	Yes - unaffected by UV

For more information please refer to product Declaration of Performance.

LCA INFORMATION

Declared unit: 1 square metre (1 m²) of ceramic floor tile produced in Spain ready to be sold for use as a floor covering in a building for a period of 50 years.

Declared unit mass: 18 kg
Reference service life: Alusid products have a 50-year lifespan

Time representativeness: The data was collected for this research in 2023.

Database(s) and LCA software used: Ecoinvent 3.9.1 and Microsoft Excel

EN 15804 reference package: Environmental Footprint (EF) version 3.1

Electricity Modelling: Specific electricity mixes from an electricity supplier. It is given in the Table below.

ORIGIN OF ENERGY	2023
Renewable	32,6%
High Efficiency cogeneration	2,4%
Natural Gas	25,4%
Coal	4,1%
Fuel/Gas	1,6%
Nuclear	27,9%
Other non-renewables	6,0%

The GWP-GHG indicator for electricity used is 0.33 kg CO₂ eq. per kWh

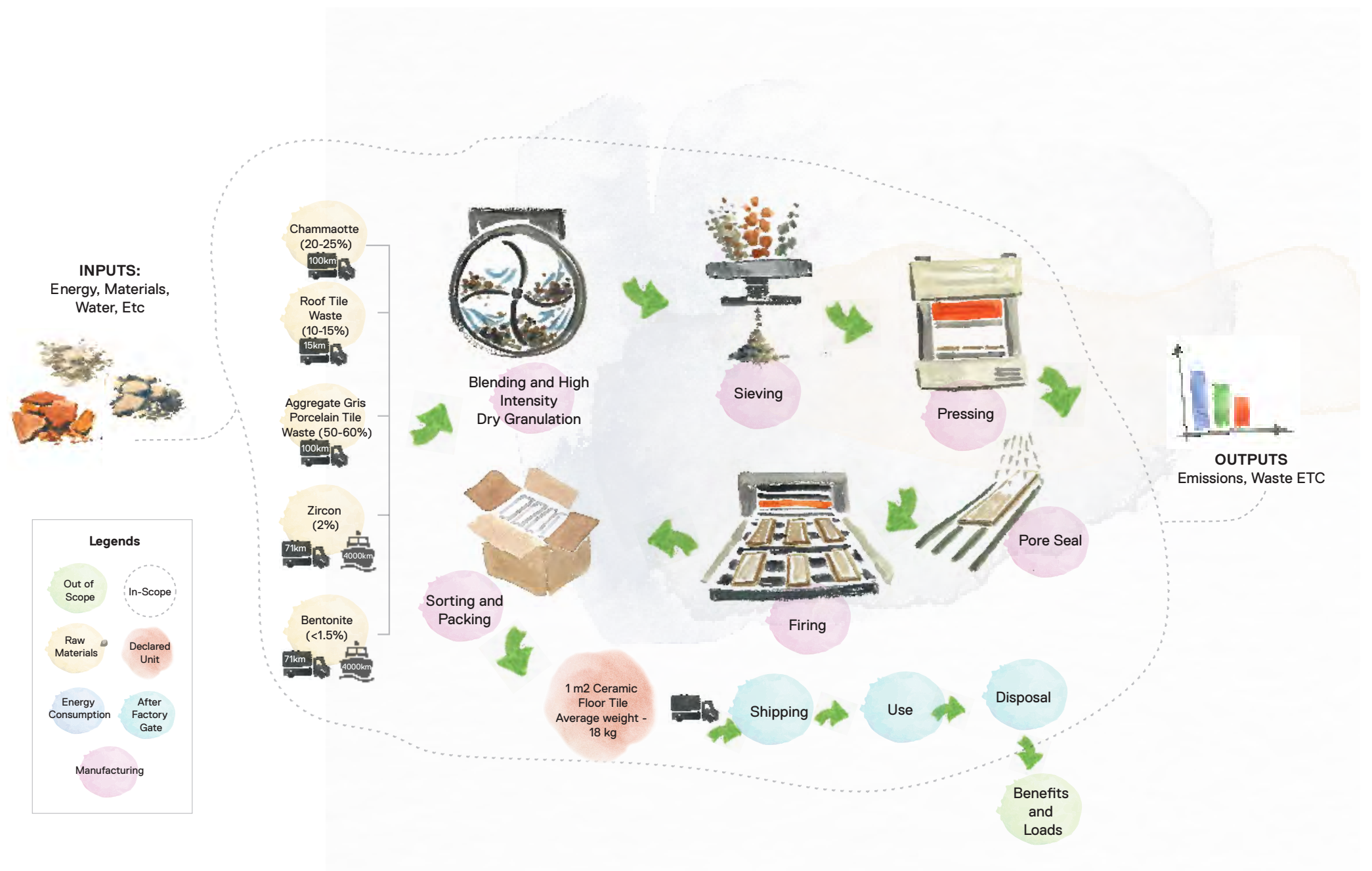
The GWP-GHG indicator for natural gas consumption is estimated to be 4.38 kg CO₂ eq. per square meter

Typical production volume: Grey (60%), Ochre (25%), Red (10%) and Charcoal (15%)

Weighted average = ((Impact category indicator of Grey Colour*0.6) + (Impact category indicator of Ochre Colour*0.15) + (Impact category indicator of Red Colour*0.1) + (Impact category indicator of Charcoal*0.15))

= Emission breakdown key info

- Declared unit: 1m²
- Declared unit mass: 18kg
- Global warming potential (GWP -total) A1-A3 = 6.09 kg CO₂ Eq
- Global warming potential (GWP-fossil) A1-A3 = 6.67 kg CO₂ Eq



MORE INFORMATION:

LCA conducted by:
Rohit Panchal (Materials Processing Institute,
Email – rohit.panchal@mpiuk.com)



HIGH RECYCLED CONTENT

Our Mas floor & wall tiles contain between 95% and 98.5% recycled material.

LOW VOC

All our products are made from stable ceramic and glass materials and do not contain any Volatile Organic Compounds.

LOW CO2

We avoid the use of spray drying, instead using a unique low energy dry granulation process. By adding water to recovered raw materials, the use of natural gas and electric energy used to grind materials is substantially reduced.

ZERO SUBSTANCES OF VERY HIGH CONCERN

Alusid products do not contain any materials of high concern.

ZERO ENVIRONMENTAL IMPACT ALLOCATED TO WASTE

Our tile contains no post-consumer waste material. Recovered waste material is 100% from pre-consumer sources. The economic value of these recovered waste materials is negligible and hence it is considered as zero. According to the “EN 15804” system model producers of waste bear the burden of the waste treatment, based on the “polluter pays” principle. Consumers of recycled products receive them burden-free. Therefore, the waste materials are burden-free and allocated zero environmental impact. In other words, no environmental impact is allocated to the recovered materials that go into our Mas floor tiles. The transportation distances of these recovered materials were accounted for in the model.

DATA QUALITY

Primary data is used in the LCA study. The assumptions were made in the LCA model after the factory gate.

ALLOCATION

There is no allocation done in this LCA study since there is no co-product produced in the ceramic tile production.

CUT-OFF CRITERIA

1% cut-off criteria are applied in the LCA model. The list of excluded processes is given below. These processes are excluded because they are not directly involved in the production of ceramic or floor or wall tile.

LIST OF EXCLUDED PROCESSES

- Research and development
- Employee business travel
- Marketing, and the operation of administrative services
- The production and end-of-life processes of infrastructure or capital goods

DESCRIPTION OF SYSTEM BOUNDARIES:

This EPD considered cradle to grave (A1–C4) system boundaries. The product life cycle stages from cradle to grave (A1–C4) are considered that is from procurement of the raw material, processing and production to packaging up to the point when the product reaches our factory gates and is ready to be shipped to customers. Then the construction process stage, use stage and end of life stage are also considered in the study.

The Mas range is composed of 4 different colours. However, the LCA work completed for this EPD is based on the formulation and processing for the light grey colour. The recycled percentage for other colours varies between 95% and 98.5% and as such so will the environmental product indicators. The description is given below.

(A1–A3) MANUFACTURING AND PACKAGING

Raw Material Supply (A1): It includes raw material extraction and pre-treatment processes.

Transportation (A2): Transportation of raw materials to the production site.

Manufacturing (A3): It includes clay preparation, blending and high-intensity dry granulation, sieving, pressing, drying, glaze & paste preparation, glazing, firing and packaging & storage.

(A4–A5) SHIPPING AND ASSEMBLY

Transport (A4): It includes transportation of tiles to our customers. Our customers are often located at different countries and adopt different methods of transport. We have assumed an average distance of 1000 km for transportation.

Construction – Installation Process (A5): This includes adhesive mortar and water usage for the installation of floor tiles at the construction site. It is assumed that 3.3 kg mortar and 0.8 litre water are used in the installation of 1 m² ceramic tiles.

(B1–B7) PRODUCT USE AND MAINTENANCE

Use (B1): The ceramic floor tiles are inert materials and hence do not cause any emissions into the environment. Hence, it is neglected.

Maintenance (B2): The maintenance of the ceramic tiles includes cleaning with detergent and water. It is assumed that 0.2 ml detergent and 0.1 litre of water are required to clean 1 m² ceramic tile. The maintenance cycle is assumed to be 10 times a year and the reference service life of our tile is 50 years.

Repair (B3): There is no repair required of ceramic tiles therefore the impact in the B3 module is assumed to be zero.

Replacement (B4): There is no replacement required in the use phase therefore the impact in the B4 module is neglected.

Refurbishment (B5): There is no refurbishment required in the use phase therefore the impact in the B5 module is neglected.

Operational energy use (B6): Ceramic tiles do not require any operational energy during the use phase therefore module B6 is assumed to be zero.

Operational water use (B7): There is no water required in the use phase therefore module B7 is assumed to be zero.

(C1–C4, D) DISPOSAL AND END OF LIFE

Deconstruction Demolition (C1): The deconstruction and demolition of the whole building is part of the end of life. The environmental impact associated with 1 m² ceramic tile is negligible and hence can be neglected.

Transport (C2): It includes the transportation of end of life ceramic tiles to landfill sites. Since our customers and their installation buildings are often located in different places. We have assumed an average distance of 50 km for transportation.

Waste Processing (C3): There is no waste processing required and hence it is neglected.

Disposal (C4): It is assumed that the ceramic tile will go to landfill at its end of life for disposal.

Benefits and Loads beyond the system boundary (D): No environmental consequences have been determined in this module.

MODULES DECLARED, GEOGRAPHICAL SCOPE, SHARE OF SPECIFIC DATA (IN GWP-GHG RESULTS) AND DATA VARIATION (IN GWP-GHG RESULTS):

	PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE			RESOURCE RECOVERY STAGE	
	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
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Geography	Spain	Spain	Spain	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO
Specific data used	>90%	>90%	>90%	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	“+6/-2%”			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Description of the system boundary (X = Included in LCA, NR: Not Relevant; MND: Module Not Declared)

Note: The LCA was modelled for specific products at the plant so there is no variation.

Note: All primary data is taken from Production Site: Minercom and Production Site: Hermanos Llansola.

Ecoinvent was used for secondary data.

PRODUCT COMPONENTS	%	POST-CONSUMER MATERIAL, WEIGHT-%
Roof tile waste	10-15%	0
Aggregate Gris porcelain tile waste	50-60%	0
Chammotte	20-25%	0
Recovered Zircon or Stain	<5%	0
Bentonite	<1.5	0
Pore seal Weight	<0.3	0
TOTAL	18	0

PACKAGING MATERIALS	WEIGHT, KG	WEIGHT-% (VERSUS THE PRODUCT)
Cardboard	0.2 kg +/- 5%	1%
Plastic	0.002 kg	0.01%
Wooden Pallet	0.36 kg +/- 5%	1.8%
TOTAL	0.562 kg	2.81

Regarding the packaging used for tile distribution, its mass was less than 5% of the total product mass, so the declaration of packaging biogenic carbon content was omitted. The mass percentage of the packaging used was declared for ceramic floor tile in the above table.

VARIABILITY OF LCIA RESULTS WITH ILLUSTRATION OF WEIGHTED AVERAGE CALCULATION FOR GWP INDICATOR

COLOUR	GWP TOTAL (KGCO2EQ.) (A1-A3)	VARIABILITY WITH THE WEIGHTED RESULT
Grey	5.95	-2%
Ochre	6.30	3%
Red	6.47	6%
Charcoal	6.19	2%
Weighted Average	6.09	

The variability of all indicators aggregated over A1-C4 are given below:

Ozone Depletion Potential: -5% to 22.4%

EP-freshwater: -6% to 22.5%

ADP-mineral&metals: -5% to 11.7%

Water Depletion Potential: -22% to 33%

Secondary Material (SM): -8% to 71.8%

Net use of fresh water (FW): -12.4% to 6.4%

Non-hazardous waste disposed: -13% to 16%

The variability of all other indicators for aggregated value of (A1-C4) is in between -5% to 10%.

RESULTS OF THE ENVIRONMENTAL PERFORMANCE INDICATORS

MANDATORY IMPACT CATEGORY INDICATORS ACCORDING TO EN 15804

RESULTS PER DECLARED UNIT (1 M2)

INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-fossil	kg CO2 eq.	6.67	1.87	1.91	0	0.11	0	0	0	0	0	0	0.09	0	0.17	0
GWP-biogenic	kg CO2 eq.	-0.58	1.36E-03	0.58	0	1.02E-03	0	0	0	0	0	0	4.4E-05	0	5.48E-05	0
GWP- luluc	kg CO2 eq.	4.90E-03	8.79E-04	1.05E-03	0	1.02E-03	0	0	0	0	0	0	6.78E-05	0	7.90E-05	0
GWP -total	kg CO2 eq.	6.09	1.87	1.93	0	0.25	0	0	0	0	0	0	9.36E-02	0	1.73E-01	0
ODP	kg CFC 11 eq.	2.65E-07	4.09E-08	9.15E-09	0	1.08E-08	0	0	0	0	0	0	2.04E-09	0	5.08E-09	0
AP	mol H+ eq.	1.29E-02	6.29E-03	9.25E-03	0	1.30E-03	0	0	0	0	0	0	3.15E-04	0	9.90E-04	0
EP-freshwater	kg P eq.	5.13E-04	1.33E-04	3.39E-04	0	4.90E-05	0	0	0	0	0	0	6.65E-06	0	1.05E-05	0
EP-marine	kg N eq.	8.56E-03	2.30E-02	1.99E-03	0	1.23E-03	0	0	0	0	0	0	1.15E-03	0	4.18E-04	0
EP-terrestrial	mol N eq.	4.02E-02	2.30E-02	2.15E-02	0	4.57E-03	0	0	0	0	0	0	1.15E-03	0	4.48E-03	0
POCP	kg NMVOC eq.	1.77E-02	9.79E-03	6.25E-03	0	6.58E-04	0	0	0	0	0	0	4.90E-04	0	1.71E-03	0
ADP-minerals & metals*	kg Sb eq.	8.31E-06	5.15E-06	6.18E-06	0	1.87E-06	0	0	0	0	0	0	2.58E-07	0	3.27E-07	0
ADP-fossil*	MJ	114	28	13	0	1.3	0	0	0	0	0	0	1.4	0	3.6	0
WDP*	m3	1.06	1.42E-01	1.57E-01	0	0.43	0	0	0	0	0	0	7.08E-03	0	1.77E-02	0

Acronyms

GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals & metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.
The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.
The readers are discouraged to use the results of modules A1-A3 without considering the results of module C.

ADDITIONAL MANDATORY AND VOLUNTARY IMPACT CATEGORY INDICATORS

RESULTS PER DECLARED UNIT (1 M2)

INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-GHG	kg CO2 eq.	6.67	1.87	1.91	0	0.25	0	0	0	0	0	0	0.09	0	0.17	0

Additional voluntary indicators e.g. the voluntary indicators from EN 15804 or the global indicators according to ISO 21930:2017

RESOURCE USE INDICATORS

RESULTS PER DECLARED UNIT (1 M2)

INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	3.48	0.40	1.52	0	5.56	0	0	0	0	0	0	0.02	0	0.09	0
PERM	MJ	7.70	0.00	0	0	0.00	0	0	0	0	0	0	0.00	0	0	0
PERT	MJ	11.17	0.40	1.52	0	5.56	0	0	0	0	0	0	0.02	0	0.09	0
PENRE	MJ	64.66	27.54	13.16	0	1.54	0	0	0	0	0	0	1.38	0	3.63	0
PENREM	MJ	0.45	0.00	0.00	0	0.00	0	0	0	0	0	0	0.00	0	0.00	0
PENRT	MJ	65.10	27.54	13.16	0	1.54	0	0	0	0	0	0	1.38	0	3.63	0
SM	kg	0.24	1.17E-02	6.51E-03	0	1.02E-03	0	0	0	0	0	0	5.85E-04	0	1.10E-03	0
RSF	MJ	0.19	1.49E-04	3.39E-03	0	6.72E-07	0	0	0	0	0	0	7.44E-06	0	2.11E-05	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FW	m3	5.57E-02	3.68E-03	5.09E-03	0	0.05	0	0	0	0	0	0	1.84E-04	0	3.18E-03	0

Acronyms

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 re-sources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

¹This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero.

RESOURCE USE INDICATORS

RESULTS PER DECLARED UNIT (1 M2)																
INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	3.48	0.40	1.52	0	5.56	0	0	0	0	0	0	0.02	0	0.09	0
PERM	MJ	7.70	0.00	0	0	0.00	0	0	0	0	0	0	0.00	0	0	0
PERT	MJ	11.17	0.40	1.52	0	5.56	0	0	0	0	0	0	0.02	0	0.09	0
PENRE	MJ	64.66	27.54	13.16	0	1.54	0	0	0	0	0	0	1.38	0	3.63	0
PENREM	MJ	0.45	0.00	0.00	0	0.00	0	0	0	0	0	0	0.00	0	0.00	0

¹This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero.

WASTE INDICATORS

RESULTS PER DECLARED UNIT (1 M2)																
INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Hazardous waste disposed	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Non-hazardous waste disposed	kg	6.19E-01	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radioactive waste disposed	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

OUTPUT FLOW INDICATORS

RESULTS PER DECLARED UNIT (1 M2)																
INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Components for re-use	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Material for recycling	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Materials for energy recovery	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exported energy, electricity	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exported energy, thermal	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



The launch of our Mas floor & wall tile collection marks a major milestone in our journey. Alusid was founded by Professor David Binns and Dr Alasdair Bremner in 2012, out of a shared desire and resulting exploration into diverting 'waste', low value material from its predetermined end destination to, not only breathe new life into it, but completely transform it into visually beautiful, practically unparalleled architectural surface products.

From our manufacturing facility in Lancashire, this passion spurred the pioneering development of tiles, solid surfaces, tabletops, and wallcoverings for internal and external use - all utilising at least 98% recycled materials. The next logical step was to apply our unique methods to creating floor tiles in collaboration with a manufacturing partner – enabling us to produce product on a larger scale.

Mas floor & wall tiles contain between 95% and 98.5% recycled materials (depending on the colour), and according to our industry research, gathered as part of the creation of this EPD, it's one of the lowest emission floor tiles on the market. And that's something we're extremely proud of.

We will now use the data we've obtained during the development of our product Life Cycle Analysis and the publication of this EPD to learn and make further improvements for our future ranges – such as our current experimentation into crafting tiles made from 100% 'waste'.

Ultimately, these learnings will aid in the continuation of our mission – to manufacture tiles that contribute to the more sustainable, less carbon-intensive built environment that our planet so desperately relies on.

REFERENCES

General Programme Instructions of the International EPD® System. Version 4.0.

BS EN ISO 14044:2006+A1:2018
Environmental management - Life cycle assessment - Requirements and guidelines.

BS EN 15804:2012+A2:2019
Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products

BS EN ISO 14025:2010
Environmental labels and declarations — Type III environmental declarations — Principles and procedures

Product Category Rules (PCR) Construction Products
PCR 2019:14 Version 1.3.4.
The International EPD System.

Iron Oxide Red Pigment (Fe₂O₃).
Institut Bauen und Umwelt e.V. (IBU), <https://ln5.sync.com/dl/045ed1b70/raaxs5v3-6cxrzwp8-f8tvirhy-8pevi9ku>

Ferrochrome. EPD International AB.
<https://ln5.sync.com/dl/422bd41b0/e9vyqibe-dkb6pnyc-y57dt3a6-yrxqnr6i>
Ecovent.org/

The International EPD® System
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