ENVIRONMENTAL PRODUCT DECLARATION

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

Owner of the Declaration	STARK Group A/S
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-STR-20250509-CBA1-EN
Issue date	13.03.2026
Valid to	12.03.2031

Porcelain Tile

KERMOS A/S

Institut Bauen und Umwelt e.V.

ECO PLATFORM EPD VERIFIED

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

General Information

KERMOS A/S

Programme holder

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

Declaration number

EPD-STR-20250509-CBA1-EN

This declaration is based on the product category rules:

Ceramic tiles and panels, 01.08.2021
(PCR checked and approved by the SVR)

Issue date

13.03.2026

Valid to

12.03.2031

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

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

Porcelain Tile

Owner of the declaration

STARK Group A/S
C.F. Richs Vej 115
2000 Frederiksberg
Denmark

Declared product / declared unit

1 m² porcelain tile

Scope:

The EPD applies to 1 m² of glazed and unglazed porcelain tiles, produced by KERMOS A/S, in Turkey and the final commissioning takes place in Germany, Osterweddingen.
The results presented correspond to an representative EPD of the KERMOS A/S. The LCA data refer to the annual average from the year 2024.
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

Erik Poppe,
(Independent verifier)

Product

Product description/Product definition

Porcelain tiles contain inorganic materials such as clay, kaolin, calcite and feldspar, but they may also include other raw materials. KERMOS A/S porcelain tiles comes in glazed and non-glazed porcelain tiles with non-glazed matt. Glossy or anti-slip surface options, in the dimensions of 10 x 10 cm, 10 x 60 cm, 15 x 60 cm, 20 x 20 cm, 30 x 30 cm, 40 x 40 cm, 30 x 60 cm, 60 x 60 cm, 45 x 45 cm, 45 x 90 cm, 80 x 80 cm, 20 x 120 cm, 24 x 151 cm, 25 x 150 cm, 30 x 120 cm, 60 x 120 cm, 100 x 100 cm, 120 x 120 cm, 120 x 260 cm and 120 x 280 cm allow the designer to meet the requirements of projects, thanks to the superior technical characteristics, as well as colours and patterns.
Porcelain tiles are fully vitrified ceramic tiles with water absorption of less than 0.5 %.
The EPD covers the manufacturing of porcelain tiles with thicknesses ranging from 6 to 15 mm in Turkey and the final commissioning takes place in Germany, Osterweddingen. UN CPC code for porcelain tiles is 3731.
The assessment is based on the most produced tile type within the product range for 1 m² of porcelain tile. (EU) Directive No. 305/2011 (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 *EN 14411:2012*, Ceramic tiles – Definition, classification, characteristics, evaluation of conformity and marking. The respective national regulations apply for usage.

Application

Ceramic porcelain tiles are used for inside and outside applications. Thanks to its superior technical characteristics, the product may be utilized in the following areas: commercial buildings, residential areas, public buildings education and cultural buildings, floors, walls and exterior facades; and floors of outdoor facilities such as gardens, terraces, pool sides and recreational areas.

Technical Data

The following section outlines details on product performance in terms of their essential characteristics in accordance with *EN 14411*, where included and specified in the Declaration of Performance.

Constructional data

Name	Value	Unit
Water absorption acc. to EN ISO 10545-3	≤0.5 % (w/w)	mg
Break load acc. to DIN EN ISO 10545-4	>1300 N for thickness ≥ ,5 mm >700 N for thickness < 7,5 mm	N
Flexural strength acc. to DIN EN ISO 10545-4	35	N/mm^2
Resistance to chemicals and staining acc. to DIN EN ISO 10545-13 (optional)	min. Class 3 (for glazed tiles)	-
Resistance to household chemicals, pool salts acc. to EN ISO 10545-13	min. Class B	
Non-slip propertie (class A, B oder C) acc. to DIN 51130 (only floor coverings)	PEI I–V (for glazed tiles)	-
Resistance to deep abrasion acc. to DIN EN ISO 10545-6 (unglazed floor coverings)	175 mm3 (for unglazed tiles)	-
Resistance to surface wear (class) acc. to DIN EN ISO 10545-7 (only floor coverings)	R9 – R13 (DIN 51130) A, B, C (DIN 51097)	-

All other technical structural data in accordance with PCR Part B were not listed as it is not of relevance for the declared product in practice and/or do not correspond with the technical structural characteristics. Product performance values in line with the Declaration of Performance in terms of its essential characteristics in accordance with *EN 14411:2012*: Ceramic tiles – Definition,
classification, characteristics, evaluation of conformity, marking and national requirements. Voluntary information on the product: dependent on area of application in accordance with *EN 16165*.

Base materials/Ancillary materials

Main raw materials for porcelain tiles:

Name	Value	Unit
Clay	35 - 40 %	kg/m²
Calcite	5 - 10 %	kg/m²
Kaolin	10 - 15 %	kg/m²
Feldpar	20 - 30 %	kg/m²
Ceramic Waste	0 - 15 %	kg/m²
Others	< 1 %	kg/m²

Auxiliary substances/additives:
- Dispersant
- Pigment
- Binder
- Rheological additives

This product contains substances listed in the candidate list (date: 24.04.2025) exceeding 0.1 percentage by mass: no.

Reference service life

The reference service life for ceramic tiles is generally significantly longer than 50 years, as confirmed by a list of service lives for components issued by the *BNB* (BNB 2017). The disclosure of this service life is not based on *ISO 15686*.

Manufacturing

Porcelain tiles include several different products with different recipes. According to the recipe, raw materials are loaded into the mills for wet grinding and to form a slurry. The slurry then is

spray dried to form granules and after the sieving process stored in the press-feeding silos ready for dry compaction. Hydraulic presses are used for dry compaction to form green tile. Green tiles are then dried in fast vertical-drying units to remove the excess humidity before glazing applications or might remain unglazed. Within the glazing unit printing and other surface design applications are performed. Tiles are then fired at high temperatures to form hard body. After quality checks, tiles are packed for dispatch.

The manufacturer is subject to initial, internal and external monitoring in accordance with the *Construction Products Regulation ((EU) Regulation No. 305/2011)*.Internal monitoring is performed on the basis of a quality management system (QMS) in accordance with or based on *EN 14411*, *ISO 9001* and *ISO 50001*. External monitoring is performed by independent certification agencies (notified bodies).

Product Processing/Installation
Porcelain tiles are fixed to the floor and walls using tile cement and subsequently the seams are filled with mortar.

Packaging
The tiles are packed in cardboard boxes, wrapped with polyethylene film and plastic straps and stacked on wooden pallets. The amount of packaging material can vary according to the tile size.
The packaging end of life phase can include (according to Eurostat 2019):
· Paper: recycling, energy recovery, disposal;
· Plastic: recycling, energy recovery, disposal;
· Wood: reuse, energy recovery, landfill. The end of the service life may involve various disposal or recycling options, which can be applied depending on the country-specific systems within Europe.

Reuse Phase
Depending on the quantity and material, tiles can be reused in line with their original application when buildings are deconstructed in a targeted manner. Likewise, tiles can remain on the surface and be glued over. Single-variety element residue can be taken back by fireclay manufacturers and reused in ground form as leaning agents in production. This practice has been applied with broken products for decades. The possibilities of further use involve aggregates for crushed brick concrete, as filling or bulk material in the area of road-making and civil engineering.

Disposal
Where the recycling options indicated above are not practical, element residue, broken product and product residue incurred on the building site are easy to dispose of and do not pose any risks for the environment. Waste key: *EWC 17 01 17* (tiles and ceramic).
Owing to the chemically neutral, inert and immobile performance of ceramic tiles, they can be stored in class 0 and 1 landfills in accordance with the TA Siedlungsabfall (Technical Guideline on Domestic Waste).

LCA: Calculation rules

Declared Unit
The product declared here is a tile from Stark GmbH with the designation Porcelain Tile, as a representative of the Stark GmbH tile portfolio. The declared unit refers to 1 m² of the product. The packaging is also included in the calculation, with a weight of 0.7899 kg per declared unit. This EPD covers the manufacture of 6–15 mm thick porcelain tiles.

Declared unit and mass reference

Name	Value	Unit
Declared unit	1	m^2
Grammage	19.64	kg/m^2

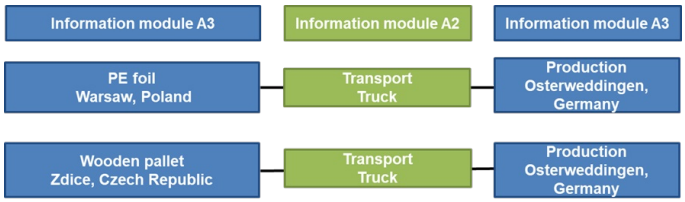
System boundary
Type of EPD: From the cradle to the factory gate with modules C1-C4 and module D. The following information modules are defined as system boundaries in this study:

Production stage (A1- A3):
• A1, Raw material,
• A2, Transport to the manufacturer,
• A3, Production.

End of life (C1- C4):
C1, Dismantling/demolition,
C2, Transport,
C3, Waste treatment,
C4, Disposal.

Reuse, recovery and recycling potential (D)

A total of eight information modules are taken into account in order to accurately record the indicators and environmental impacts of the declared unit. Information module A1 uses EPD No. *EPD-IES-0017747*, which contains 12.42% secondary material and part of the packaging. Information modules A2 to A3 cover transport to the production site, packaging, and the production processes of the product itself. 100% of the electricity requirement is covered by the German electricity mix (DE: residual grid mix *Sphera* with a GWP of 0.879 kg CO2eq. per 3.6 MJ).
The intermediate products are sourced from Turkey and the EU and transported by truck. The following flow charts illustrate the underlying production process.



Information modules C1 to C4 deal with the dismantling or demolition of the product from the building, transport to waste disposal, waste treatment, and final disposal of the product. In addition, information module D deals with the possibilities of reuse, recovery, and recycling. For the EoL scenario, the approach of 30% landfill and 70% material recycling was adopted, where the ceramic tiles are crushed and used as a mineral substitute material in road and civil engineering, thereby replacing natural gravel.

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

lifespan: Europe

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. The databases Sphera *LCA for Experts* v.2025.2 and *Ecoinvent* v3.11 were used. The EPD *EPD-IES-0017747* for Module A1 used the *Ecoinvent* database v3.10 and the LCA software *SimaPro* v9.6.

LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

No renewable raw materials are used; therefore, the biogenic carbon is reported as zero. However, the packaging contains the following raw material that includes biogenic carbon.

Information on describing the biogenic carbon content at factory gate

Name	Value	Unit
Biogenic carbon content in accompanying packaging	4.48	kg C
biogenic carbon content of upstream packaging	0.038	kg C

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

End of life (C1-C4)

The removal of the tiles from the building is considered in information module C1. Demolition is carried out using an electric chisel, with an energy consumption of 0.5 MJ per declared unit. Electricity consumption is based on the European electricity mix.

The construction waste generated is transported by truck over a distance of 50 km to the nearest waste processing plant.
The C3 information module models the waste treatment of waste generated during the demolition of the building from the declared unit. The RER: Construction Waste Treatment Plant is used as the background data set.

The modeling assumes a material loss of approximately 3% during treatment, which goes to landfill. Subsequently, 30% of the remaining material is landfilled and 70% is recycled in accordance with the end-of-life scenario.

Name	Value	Unit
Collected separately Mineral Waste	19.64	kg
Recycling	13.34	kg
Landfilling	5.71	kg
Recycling loss (landfilling)	0.59	kg

Reuse, recovery and/or recycling potentials (D), relevant scenario information

For information module D, it is stated that 70% of the product is sent for material recycling. Only the net flow was taken into account, i.e. the amount of material that is actually available for recycling after deducting losses in end-of-life treatment.The recycling credit is based on the data set RER: Gravel 2/32 *Sphera*.

Name	Value	Unit
Net Flow	10.90	kg

LCA: Results

Calculation template for EPD results in accordance with *EN 15804:2012+A2:2019*
(EF 3.1)The results can be scaled based on the weight per square meter. Differences in tile formats are considered negligible and are not expected to have a significant impact on the results.

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	MND	MND	MND	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 m² porcelain tile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total)	kg CO_2 eq	1.25E+01	6.93E-02	9.89E-02	5.45E-02	8.8E-02	-2.18E-02
Global Warming Potential fossil fuels (GWP-fossil)	kg CO_2 eq	1.23E+01	6.92E-02	9.49E-02	5.38E-02	8.74E-02	-2.2E-02
Global Warming Potential biogenic (GWP-biogenic)	kg CO_2 eq	2E-01	4.48E-05	4.02E-03	1.74E-04	2.45E-04	4.08E-04
Global Warming Potential luluc (GWP-luluc)	kg CO_2 eq	5.94E-03	3.62E-05	9.75E-06	4.64E-04	3.58E-04	-1.33E-04
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC11 eq	1.51E-07	8.6E-13	1.46E-14	1.06E-13	2.45E-13	-1.67E-13
Acidification potential of land and water (AP)	mol H^+ eq	3.98E-02	1.03E-04	4.67E-04	2.73E-04	6.18E-04	-1.14E-04
Eutrophication potential aquatic freshwater (EP-freshwater)	kg P eq	6.52E-04	1.9E-08	2.4E-08	1.35E-07	1.3E-07	-5.55E-08
Eutrophication potential aquatic marine (EP-marine)	kg N eq	1.61E-02	2.79E-05	2.27E-04	1.27E-04	1.62E-04	-4.11E-05
Eutrophication potential terrestrial (EP-terrestrial)	mol N eq	1.75E-01	3.04E-04	2.5E-03	1.38E-03	1.76E-03	-4.49E-04
Formation potential of tropospheric ozone photochemical oxidants (POCP)	kg NMVOC eq	4.59E-02	7.83E-05	4.68E-04	3.38E-04	4.83E-04	-1.08E-04
Abiotic depletion potential for non fossil resources (ADPE)	kg Sb eq	2.52E-05	5.09E-09	2.83E-09	5.47E-08	5.42E-09	-2.39E-09
Abiotic depletion potential for fossil resources (ADPF)	MJ	1.72E+02	1.26E+00	1.31E+00	9.95E-01	1.15E+00	-3.31E-01
Water use (WDP)	m^3 world eq deprived	3.81E-01	3.82E-03	2.48E-04	9.58E-03	9.42E-03	-2.41E-03

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 m² porcelain tile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Renewable primary energy as energy carrier (PERE)	MJ	2.47E+01	2.09E-01	9.44E-03	9.76E-02	2.22E-01	-1.2E-01
Renewable primary energy resources as material utilization (PERM)	MJ	1.21E+01	0	0	0	0	0
Total use of renewable primary energy resources (PERT)	MJ	3.68E+01	2.09E-01	9.44E-03	9.76E-02	2.22E-01	-1.2E-01
Non renewable primary energy as energy carrier (PENRE)	MJ	1.71E+02	1.26E+00	1.31E+00	9.95E-01	1.15E+00	-3.31E-01
Non renewable primary energy as material utilization (PENRM)	MJ	1.04E+00	0	0	0	0	0
Total use of non renewable primary energy resources (PENRT)	MJ	1.72E+02	1.26E+00	1.31E+00	9.95E-01	1.15E+00	-3.31E-01
Use of secondary material (SM)	kg	2.44E+00	0	0	0	0	1.09E+01
Use of renewable secondary fuels (RSF)	MJ	0	0	0	0	0	0
Use of non renewable secondary fuels (NRSF)	MJ	0	0	0	0	0	0
Use of net fresh water (FW)	m^3	6.07E-02	2.48E-04	1.03E-05	2.6E-04	2.76E-04	-9.71E-05

RESULTS OF THE LCA – WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 m² porcelain tile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD)	kg	8.15E-03	2.51E-10	4.96E-11	1.37E-10	2.52E-10	-1.96E-10
Non hazardous waste disposed (NHWD)	kg	1.84E+00	3.18E-04	1.16E-04	2.51E-04	5.72E+00	-4.53E-01
Radioactive waste disposed (RWD)	kg	3.28E-04	1.59E-04	2.19E-06	1.26E-05	1.2E-05	-2.19E-05
Components for re-use (CRU)	kg	0	0	0	0	0	0
Materials for recycling (MFR)	kg	0	0	0	1.33E+01	0	0
Materials for energy recovery (MER)	kg	0	0	0	0	0	0
Exported electrical energy (EEE)	MJ	0	0	0	0	0	0
Exported thermal energy (EET)	MJ	0	0	0	0	0	0

RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional: 1 m² porcelain tile

Parameter	Unit	A1-A3	C1	C2	C3	C4	D
Incidence of disease due to PM emissions (PM)	Disease incidence	ND	ND	ND	ND	ND	ND
Human exposure efficiency relative to U235 (IR)	kBq U235 eq	ND	ND	ND	ND	ND	ND

Comparative toxic unit for ecosystems (ETP-fw)	CTUe	ND	ND	ND	ND	ND	ND
Comparative toxic unit for humans (carcinogenic) (HTP-c)	CTUh	ND	ND	ND	ND	ND	ND
Comparative toxic unit for humans (noncarcinogenic) (HTP-nc)	CTUh	ND	ND	ND	ND	ND	ND
Soil quality index (SQP)	SQP	ND	ND	ND	ND	ND	ND

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

EN 15804
EN 15804:2012+A2:2019+AC:2021, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

DIN EN ISO 14025
DIN EN /ISO 14025:2011, Environmental labels and declarations - Type III Environment
Declarations - Principles and Procedures

DIN EN ISO 14025
DIN EN /ISO 14025:2011-10/, Environmental labels and declarations - Type III Environment
Declarations - Principles and Procedures

DIN EN ISO 14044
DIN EN ISO 14044:2006-10, Environmental management - Life cycle assessment - Requirements and guidance (ISO 14044:2006); German and English version EN ISO 14044:2006

EN 16165:2021 – Determination of slip resistance of pedestrian surfaces – Methods of evaluation European Committee for Standardization (CEN) (Hrsg.) Determination of slip resistance of pedestrian surfaces – Methods of evaluation (2021)

DIN 51130
DIN 51130:2014-02
Testing of floor coverings - Determination of the anti-slip property - Workrooms and fields of activities with slip danger - Walking method - Ramp test

EN 14411: 2012
DIN EN 14411: 2012, Ceramic tiles – Definition, classification, characteristics evolution of conformity and marking.

EN 14411: 2016
DIN EN 14411:2016-12
Ceramic tiles - Definition, classification, characteristics, evaluation of conformity and marking

EN/TR 15941
CEN/TR 15941:2010-03: Sustainability of Buildings – Environmental Product Declarations- M
methods for the selection and use of generic data; German version CEN/TR

ISO 9001
DIN EN ISO 9001: 2015-11
Quality management - Requirements

ISO 10545-3
DIN EN ISO 10545-3: 2018-06
Ceramic tiles - Determination of water absorption, apparent porosity, apparent relative density and bulk density

ISO 10545-4
DIN EN ISO 10545-4:2019-06
Ceramic tiles - Part 4: Determination of modulus of rupture and breaking strength (ISO 10545-4:2019); German version EN ISO 10545-4:2019

ISO 10545-6
DIN EN ISO 10454-6:1995-11
Ceramic tiles - Part 6: Determination of resistance to deep abrasion for unglazed tiles

ISO 10545-7
DIN EN ISO 10545-7: 1999-03
Ceramic tiles - Part 7: Determination of resistance to surface abrasion for glazed tiles (ISO 10545-7:1996); German version EN ISO 10545-7:1999

ISO 10545-13
DIN EN ISO 10545-13:1997-12
Ceramic tiles - Part 13: Determination of chemical resistance (ISO 10545-13:1995); German version EN ISO 10545-13:1997

ISO 50001
DIN EN ISO 50001:2018-12
Environmental management systems - Requirements with guidance for use: Specifications for systematic energy management **Other literature:**

BNB 2017
BBSR Table 'Nutzungsdauern von Bauteilen zur Lebenszyklusanalyse nach BNB' (Useful life of components for life cycle assessments in accordance with the Sustainable Building assessment system (BNB)), Federal Ministry of Transport, Building and Urbal Development (BBSR), Presentation II on Sustainable Building; available online at https://www.nachhaltigesbauen.de/fileadmin/pdf/Nutzungsdauer_Bautei 2-24.pdf; last revised February 2017

ecoinvent 3.11:
Hintergrunddatenbank: ecoinvent 3.11
Zürich: ecoinvent (Hrsg.)
http://www.ecoinvent.org
(15.11.2024)

EPD
EPD International AB
VitrA Karo
EPD registration number: EPD-IES-0017747

EUROSTAT 2019

Eurostat data 2019. Packaging waste by waste management operations.
https://ec.europa.eu/eurostat/databrowser/view/ENV_WASPAC__custom_344983/default/table?ang=en

EWC
European Waste Catalogue in accordance with the Ordinance governing the European List of Wastes (List of Wastes – AVV)

EU) Directive No. 305/2011
(EU) Directive No. 305/2011 of the European Parliament and Council dated 9 March 2011 establishing harmonised conditions for marketing construction products and replacing Council Guideline 89/106/EEC of significance for the EWR

IBU 2021
Institut Bauen und Umwelt e.V.: General instructions for the EPD program of the Institut Bauen und Umwelt e.V., Version 2.0, Berlin: Institut Bauen und Umwelt e.V., 2021 www.ibu-epd.com

Product Category Rules Construction Products Part A
Product Category Rules for Construction Products and Services - Calculation Rules for Ecology and Requirements for the Background Report V1.4, Institut Bauen und Umwelt e.V., 15.04.2024.

Product Category Rules Part B
Ceramic tiles and panels, 01.08.2021

Sphera
LCA for Experts: Holistic balancing
Leinfelden-Echterdingen; Sphera Solution GmbH (Hrsg.)
Product Sustainability Data Search | Sphera (GaBi) (19.05.2025)

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