CERTIFIED
ENVIRONMENTAL PRODUCT DECLARATION
UL.COM/EPD

EPD **Transparency Summary**

COMPANY NAME CONFINDUSTRIA CERAMICA

PRODUCT NAME ITALIAN CERAMIC TILES

PRODUCT DESCRIPTION Wall and floor ceramic tiles and panel made in Italy which are made of natural materials. Inhibit the growth of bacterial load, no VOCs and Radon emissions, durable (75 years), abrasion and load resistant, moult resistant, low maintenance. Fire, frost and thermal shock resistant, recyclable, waterproof and chemical resistant.

PRODUCT CATEGORY RULE (PCR)+ VERSION IBU PCR Part A:2016-18-03 V1.4
IBU PCR Part B:2014-07-04 V1.6

CERTIFICATION PERIOD September 26, 2016 to September 25, 2021

DECLARATION NUMBER 4788420194.101

EPD TYPE ☐ PRODUCT SPECIFIC ☑ INDUSTRY AVERAGE *

DECLARED/ FUNCTIONAL UNIT 1m2 ceramic tile (average)

GREEN BUILDING QUALIFICATIONS
LEED v4 Building Product Disclosure and Optimization - EPDs, Option 1
ASHRAE 189.1 Material Compliance
IgCC Material Compliance
Green Globes 3.5.1.2.1
NAHB Material Selection

REFERENCE SERVICE LIFE (IF APPLICABLE) 1 year [1]

LCA SOFTWARE + VERSION GaBi 7 – DB 2016 SP30

IMPACT ASSESSMENT METHOD + VERSION CML2001 (April 2013), TRACI 2.1.

LIFECYCLE IMPACT CATEGORIES

The environmental impacts listed below were assessed through the product's entire life cycle (cradle to grave impacts).

	ATMOSPHERE			WATER		EARTH	
	Global Warming Potential refers to long-term changes in global weather patterns that are caused by increased concentrations of greenhouse gases in the atmosphere.	**Ozone Depletion Potential** is the destruction of the stratospheric ozone layer, which shields the earth from ultraviolet radiation that's harmful to life, caused by human-made air pollution.	**Photochemical Ozone Creation Potential** happens when sunlight reacts with hydrocarbons, nitrogen oxides, and volatile organic compounds, to produce air pollution known as smog.	**Acidification Potential** is the result of human-made emissions and refers to the decrease in pH and increase in acidity of oceans, lakes, rivers, and streams – polluting groundwater and harming aquatic life.	**Eutrophication Potential** occurs when excessive nutrients cause increased algae growth in lakes, blocking the underwater penetration of sunlight needed to produce oxygen and resulting in the loss of aquatic life.	**Depletion of Abiotic Resources (Elements)** refers to the reduction of available non-renewable resources, such as metals, that are found on the periodic table of elements, due to human activity.	**Depletion of Abiotic Resources (Fossil Fuels)** refers to the decreasing availability of non-renewable carbon-based compounds, such as oil and coal, due to human activity.
TRACI	1.34E+01 kg CO_2-Equiv.	1.45E-09 kg CFC 11-Equiv.	1.51E+00 kg O_3 -Equiv.	7.25E-02 kg SO_2-Equiv.	9.56E-03 kg N-Equiv.	- kg Sb-Equiv.	- MJ
CML	1.38E+01 kg CO_2-Equiv.	5.43E-10 kg R11-Equiv.	2.86E-03 kg Ethene-Equiv.	3.49E-02 kg SO_2-Equiv.	4.33E-03 kg PO_4-Equiv.	1.07E-04 kg Sb-Equiv.	1.82E+02 MJ

Environment

MATERIAL CONTENT

Material content measured to 1%.

COMPONENT	MATERIAL	AVAILABILITY	MASS%	ORIGIN
Body	Clay	Mineral perpetual	42%	Europe
	Sand	Mineral perpetual	13%	Europe
	Feldspar	Mineral perpetual	35%	Europe, Asia
	Rhyolite	Mineral perpetual	4%	Europe
Suface	Glaze components and other additives	Mineral perpetual - Limited	6%	Europe, Asia

Note [1] : The results reported consider the tile's use of 1 year. According U.S. GBC the service life of tiles could be 75 years. Therefore impacts referred to 75 years can be obtained by multiplying only module B2 values (use stage) on the referenced EPD per 75. For example, the GWP impact value for 75 years of product use is: 1.44E+01 kg CO2-Equiv. (TRACI) and 1.45E+01 kg CO2-Equiv. (CML)

ADDITIONAL ENVIRONMENTAL INFORMATION

PRE-CONSUMER RECYCLED CONTENT	VARIES %
POST-CONSUMER RECYCLED CONTENT	VARIES %
VOC EMISSIONS	ZERO/INERT/INORGANIC
WATER CONSUMPTION	0.002 L

ENERGY *

RENEWABLE ENERGY	12.3 %	31.6	MJ
NON-RENEWABLE ENERGY	87.7 %	226	MJ

*Total use of primary energy resources

MANUFACTURER CONTACT INFO

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RECYCLING OR REUSE

Ceramic tile is a very durable material that can last for all the lifetime of the building. It's an inert material made with naturals materials therefore can be recycled in his end of life stage such as in roads and landfills construction. Furthermore Italian ceramic tiles companies reuse 99.5% of production and purification waste within the production cycle and 96% of the process water discharges.

STANDARDS

ISO 13006 international standard for Ceramic tiles: Definitions, classification, characteristics and marking,

ANSI A137.1: American Standard Specifications For Ceramic Tile

ISO 9001, 14001, 50001, OHSAS 18001: standards on quality, environmental and energy management system and occupational health and safety.

INFORMATION

INDUSTRY AVERAGE*

The present Transparency Summary is based on the IBU-UL Mutually Recognized EPD 4788420194.101 corresponding to industry average data representative of Confindustria Ceramica's member companies. Primary data includes 76 companies and 84 plants, that represent 82,6% of the Italian ceramic tiles production.