

STONE ITALIANA

ENVIRONMENTAL PRODUCT DECLARATION **EPD**



Programme: The International EPD® System

www.environdec.com

Programme operator: EPD International AB

Registration No.: **EPD-IES-0020982**

Publication date: 2025/03/24

Revision date: -

Valid until: 2030/03/24

Multiple-product EPD, based on the average results for quartz product groups

In accordance with ISO 14025:2006 and EN 15804:2014

CPC 37310 - Bricks, blocks, tiles and other ceramic goods of siliceous earths

PCR 2019:14 "Construction products", version 1.3.4

Geographical scope: global

An EPD shall provide up-to-date information and may be updated if conditions change. The stated validity is therefore subject to continued registration and publication at www.environdec.com.



Products covered by this EPD:

- **FAMILY 1:** products containing quartz, cristobalite, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm; 3 cm.
- **FAMILY 3:** products containing fine-grained quartz, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm; 3 cm.
- **FAMILY 4:** products containing medium-grained quartz, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm.
- **FAMILY 5:** products containing coarse-grained quartz, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm.
- **FAMILY 6:** products containing quartz, silica sands, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm.
- **FAMILY 7:** products containing quartz, mirrored glass, resin, pigments and additives. Thicknesses: 1 cm; 2 cm.
- **FAMILY 8:** products containing quartz, mother-of-pearl, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm.
- **FAMILY 9:** products containing quartz, recycled recomposed quartz granules, resin, pigments and additives. Thicknesses: 1 cm; 1.3 cm; 2 cm.
- **FAMILY 10:** veined products containing quartz, resin, pigments and additives. Thicknesses: 2 cm; 3 cm.
- **FAMILY 11:** products containing quartz, recycled street-sweeping residues, resin, pigments and additives. Thicknesses: 1 cm.
- **FAMILY 12:** products containing marble, resin, pigments and additives. Thicknesses: 1 cm.



DESCRIPTION OF THE COMPANY AND PRODUCT

THE COMPANY

Stone Italiana was founded in Zimella, in the province of Verona, in 1979 and is now one of the most innovative companies in the recomposed quartz and mineral surfaces sector. It produces slabs in various sizes and thicknesses, suitable for a wide range of applications. Over time, our products have reflected changing approaches to stone and the ways it is used. At Stone Italiana, we like to think that we reinterpret some of nature's qualities: uniqueness, originality and variety. We go beyond nature, creating products with improved performance for an increasingly demanding market.

Stone Italiana explores every aspect of production, from aesthetics to improved performance. We work to increase the mechanical strength of our slabs while minimising thickness and weight; we experiment with new colours and finishes and create bespoke combinations of materials and particle size distributions. We export our knowledge, our history and our materials to more than 80 countries. The international market drives continuous research, the exploration of trends and product renewal. This process draws on our team and the valuable contribution of our relationships with customers, partners, architects, designers and suppliers.

The company has two production plants: its original site in Zimella (Verona) and a second plant in Villesse (Gorizia). The catalogue includes various products, mainly used for kitchen and bathroom tops, worktops, flooring and wall coverings, as well as customised applications.



THE PRODUCT ASSESSED

The product assessed is a recomposed material based mainly on quartz. The production process involves mixing aggregates (quartz) with different particle size distributions, organic dyes and structural polyester resin (approximately 8%-11%). In addition to its binding action, the resin gives the finished product optimal flexural strength, impact resistance and resistance to water absorption. More generally, it allows the mass of the recomposed material to be reconstituted with physical properties and performance superior to those of the original natural material.

This EPD covers twelve possible families of recomposed products manufactured by Stone Italiana for various applications: kitchen tops, worktops, bathroom tops and bespoke fabrication.

The description of each family and the overall list of materials required to produce 1 m² of recomposed quartz are provided below.

Recomposed quartz products can be manufactured and sold in various sizes: this declaration covers an average product. The slabs are packed in wooden or steel A-frame trestles, each holding 6/10/15 slabs (the figure refers to wooden trestles). The number of slabs in each trestle depends on their thickness.

As required by PCR 2019:14 version 1.3.4, Stone Italiana products do not contain substances of very high concern (SVHC) on the ECHA Candidate List at concentrations exceeding 0.1%. The following table presents the technical characteristics of the products and the reference standards.

Characteristics	Applicable standards	Unit	Declared values	
Water absorption	EN 14617-1	%	$W_4 \leq 0,05$	
Flexural strength	EN 14617-2	MPa	$F_4 \geq 40,0$ $25,0 \leq F_3 < 40,0$ (quartz with inclusions)	
Abrasion resistance	EN 14617-4	mm	$A_4 \leq 29,0$ $33,0 \geq A_3 > 29,0$ (micro-grain quartz)	
Chemical resistance	EN 14617-10	min C ₁ max C ₄	C ₄ C ₁ (quartz with calcium carbonate inclusions)	
Reaction to fire (flooring)	EN 13501-1	-	A2 fl-s1	
Slip resistance - Polished - Grain 2.0 - Rocplan 2.0	EN 14231	SRV	DRY 40-47 44-56 69-94	WET 3-8 7-17 35-46



Slip resistance	DIN 51130	R	R9 (Grain 2.0) R10 (Rocplan 2.0)	
Thermal conductivity (tabulated value)	EN 12524	W/(mK)	1,28	
Thermal shock resistance	EN 14617	-	$\Delta m = -0,08\%$	
Coefficient of linear thermal expansion	EN 14617-11	1/°C	$\alpha = 17-26 \times 10^{-6}$	
Electrical resistance	EN 14617-13	Ωm Ω	$\rho \text{ volume} > 10^{12}$ $\rho \text{ surface} > 10^{12}$	
Impact resistance	EN 14617-9	Joule	2	
Dimensional stability (300 x 300 x 10 mm)	EN 14617-12	mm	Class A	
Resistance to dry heat	EN 12722	°C	140°C	
Contact with food. Overall migration	UNI EN 1186	mg/dm ²	Distilled water 3% acetic acid solution 10% ethanol solution Isooctane 95% ethanol	0,2 0,3 0,5 0,9 1,3

EU Regulation No. 305/2011 requires construction works to be designed and built without compromising the safety of people and property. To this end, Stone Italiana ensures that its flooring materials comply with the harmonised European technical standard UNI-EN 15285:2008 for “Modular tiles for flooring and stairs”. The breaking load (breaking load) is determined by the flexural test, which measures the stress the material can withstand before failure. The harmonised European technical standard UNI-EN 15285:2008 sets out the abrasion test method (EN 14617-4). Frost resistance does not apply, as the material is intended for indoor use.

DECLARED UNIT

The LCA underlying this EPD is a “cradle-to-grave” assessment. Material and energy flows were calculated on the basis of the following functional unit:

1 m² of recomposed quartz

In accordance with ISO 15804, a service life of 40 years was estimated.



CONTENT DECLARATION

The percentages of materials in the product and its packaging, declared in accordance with PCR 2019:14, are presented below.

Product components	Weight, kg	Post-consumer recycled material, %
Polymers	0,08	0,00
Aggregates	0,90	0,00
Pigments	0,01	0,00
Other	0,01	0,00
TOTAL	1,00	0,00
Packaging	Weight, kg	Post-consumer recycled material, %
Steel	0,80	0,00
Wood	0,20	0,00
TOTAL	1,00	0,00

SYSTEM BOUNDARIES

The system boundaries define the life cycle stages included in the LCA and the “input” or “output” data that may be omitted. In accordance with PCR 2019:14 version 1.3.4 and EN 15804:2012+A2:2019/AC:2021, the life cycle of quartz materials includes raw material extraction, the production cycle, transport and manufacturing, divided into upstream (A1) and core (A2 and A3) stages, and the delivery, installation and end-of-life stages in the downstream category (A4, A5, B2, C3, C4).

The upstream stage (A1) comprises material acquisition activities, as follows:

- extraction and initial processing of raw materials and recycling of any secondary materials from a previous product system (excluding processes that are part of waste treatment in the previous system);
- generation of electricity from primary energy sources, including extraction, refining and distribution;
- energy recovery from secondary fuels (excluding processes that are part of waste treatment in the previous product system).



The core stage includes the following processes:

- external and internal transport within processes forming part of the core stage (A2);
- product manufacturing, production of ancillary materials and packaging, and management of waste generated during the production process (A3).

The downstream stage includes the following processes:

- transport of the product under study to the construction site (A4);
- installation of the product under study in the building (A5);
- maintenance of the product under study (B2);
- demolition of the product under study (C1);
- transport to the waste treatment facility (C2);
- waste processing - reuse, recovery and recycling (C3);
- disposal (C4).

The results also include Module D, which covers environmental benefits beyond the system boundaries.



	Production			Construction stage		Use stage							End of life				Resource recovery
	Raw material supply	Transport	Manufacturing	Transport	Installation in the building	Raw material supply	Transport	Manufacturing	Transport	Installation in the building	Raw material supply	Transport	Manufacturing	Transport	Installation in the building	Raw material supply	Transport
Modules	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Declared modules	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	IT, TR	IT, TR	IT	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO
Specific data share	1,08%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Product variation	-17%/+4%*			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Site variation	0%**			-	-	-	-	-	-	-	-	-	-	-	-	-	-

* The differences observed between these environmental impact categories are mainly due to variations in the quantities of raw materials used. All products in this EPD are manufactured using the same production cycle.

** The product under study is manufactured exclusively at the Zimella plant (Italy).



DATA QUALITY, CUT-OFF CRITERIA AND EXCLUSIONS

The inventory analysis uses specific Stone Italiana data on raw material and electricity consumption, production and related waste. All specific data supplied by Stone Italiana refer to 2023 and to the Zimella and Villesse sites.

Primary data were also used for the production processes of some raw materials and ancillary materials used in the products, together with selected generic data from international databases (in particular Ecoinvent EN 15804) for other raw materials, electricity generation and distribution, transport vehicles and waste treatment processes associated with production. Land transport distances were calculated using Google Maps and sea transport distances using Sea-Rates.

The quality of the data used can therefore be considered very good. The “other generic” data used in the model concern discs, rollers and an ancillary material used in the purification process; the contribution of proxy data was checked and was always below 1% for all products and all impact categories assessed.

In accordance with PCR 2019:14 and the cut-off rule, flows representing less than 1% of the total inventory were omitted; specifically, the following were excluded from the calculation:

- packaging of raw materials and ancillary materials;
- methane consumption for office heating;
- water for sanitary use;
- workers’ travel to and from the workplace, and the construction of machinery and facilities, as these are not directly related to the product (PCR).

Electricity mix: the electricity used in the production process (stage A1-A3) was modelled using the company’s mix for the period considered. The GWP-GHG of the electricity mix is 0.17 kg CO₂ eq/kWh.



PRODUCT USE AND DISPOSAL

The use, repair and replacement stages of the quartz products (stages B1 and B3 to B7 of PCR 2019:14 v.1.3.4) were not considered in this life cycle assessment. The impacts of selective demolition/deconstruction are negligible (C1). Recovery (C3) is not considered for the product's end of life; for packaging, the shares of recovery (C3) and disposal (C4) are based on statistical data. Transport to the treatment/recovery facility (C2) was considered for both.

COMPARISON OF EPDs WITHIN THE SAME PRODUCT CATEGORY

This EPD meets the requirements of ISO 14025 and EN 15804. EPDs within the same product category that refer to different programmes are not comparable. EPDs for construction products are comparable only if they meet the comparability requirements of EN 15804:2012+A2:2019/AC:2021. The Stone Italiana products described in this document are based on the specifications of PCR 2019:14 version 1.3.4.

VALIDITY OF THE EPD

This EPD has a global geographical scope and remains valid for up to five years from the approval date.



ENVIRONMENTAL PERFORMANCE

The environmental performance of Stone Italiana's recomposed quartz products, presented below, is based on the life cycle assessment (LCA) methodology and is calculated in accordance with ISO 14040 and 14044, the International EPD® System and PCR 2019:14 v.1.3.4. The management and updating of environmental data for EPD products are ensured by dedicated internal procedures within the ISO 14001:2015 environmental management system.

ASSESSMENT METHOD

The calculation method for the LCA study underlying this EPD is described in "General Programme Instructions for an International EPD® System", version 4.0. The characterisation factors used to convert life cycle inventory data into impact categories are described and updated at <https://www.environdec.com/resources/indicators>.

The assessment was carried out using Simapro 9.6.0.1 software and the Ecoinvent EN 15804 database. The results were calculated using the 15804 method based on EF 3.1.

ENVIRONMENTAL PROFILE OF RECOMPOSED QUARTZ PRODUCTS

The following table describes the impact categories for the upstream, core and downstream stages of the overall life cycle of 1 m² of Stone Italiana recomposed quartz, identified by modules A1-A5, B2, C1-C4.



Life cycle environmental impact results for 1 m², average of products

Impact category	Unit	A1-A3	A4 - Distribution	A5 - Installation	B1 - Use	B2 - Maintenance	B3 - Repair	B4 - Replacement	B5 - Refurbishment	B6 - Electricity use	B7 - Water use	C1 - Demolition	C2 - Transport	C3 - Processing for recovery	C4 - Disposal	D
GWP-f	kg CO ₂ eq	4,57E+01	2,17E-01	7,33E-01	3,90E-03	7,94E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,19E-01	0,00E+00	1,11E-01	0,00E+00
GWP-b	kg CO ₂ eq	2,01E+00	1,64E-04	9,71E-02	2,09E-04	4,25E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,85E-04	0,00E+00	3,86E-03	0,00E+00
GWP-luluc	kg CO ₂ eq	6,11E-02	6,76E-06	5,08E-06	2,70E-04	5,50E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,02E-05	0,00E+00	6,03E-06	0,00E+00
GWP total	kg CO ₂ eq	4,78E+01	2,18E-01	8,30E-01	4,38E-03	8,91E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,20E-01	0,00E+00	1,15E-01	0,00E+00
ODP	kg CFC-11 eq	1,01E-06	3,79E-09	7,01E-08	3,76E-10	7,66E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	8,50E-09	0,00E+00	1,76E-09	0,00E+00
AP	mol H ⁺ eq	1,64E-01	3,72E-03	5,04E-03	2,11E-05	4,29E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,82E-04	0,00E+00	1,02E-03	0,00E+00
EP - f	kg P eq	1,01E-02	1,63E-06	8,45E-05	1,32E-06	2,69E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,01E-06	0,00E+00	9,42E-07	0,00E+00
EP - m	kg N eq	3,46E-02	9,24E-04	8,09E-05	5,00E-06	1,02E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,06E-04	0,00E+00	4,78E-04	0,00E+00
EP - t	mol N eq	3,50E-01	1,03E-02	1,58E-04	3,90E-05	7,94E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,15E-03	0,00E+00	5,23E-03	0,00E+00
POCP	kg NMVOC eq	2,03E-01	2,92E-03	3,81E-04	1,24E-05	2,53E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,04E-03	0,00E+00	1,56E-03	0,00E+00
ADP-min&met*	kg Sb eq	2,01E-05	1,17E-08	4,22E-03	4,03E-08	8,21E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,38E-08	0,00E+00	4,60E-09	0,00E+00
ADP-fossil*	MJ	7,79E+02	2,77E+00	1,41E+01	1,58E-01	3,22E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,50E+00	0,00E+00	1,46E+00	0,00E+00
WDP*	m ³ eq	1,66E+01	2,64E-03	9,46E-03	2,29E-02	4,67E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,78E-03	0,00E+00	2,29E-03	0,00E+00
PERE	MJ	5,22E+01	7,83E-03	3,32E-03	8,88E-03	1,81E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,91E-02	0,00E+00	3,49E-02	0,00E+00
PERM	MJ	3,63E+00	0,00E+00	0,00E+00	2,76E-03	5,62E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,59E+01	7,83E-03	3,32E-03	1,16E-02	2,37E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,91E-02	0,00E+00	3,49E-02	0,00E+00
PENR	MJ	7,13E+02	2,77E+00	1,41E+01	1,35E-01	2,74E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,50E+00	0,00E+00	1,46E+00	0,00E+00
PENRM	MJ	6,57E+01	0,00E+00	0,00E+00	2,37E-02	4,83E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00



Impact category	Unit	A1-A3	A4 - Distribution	A5 - Installation	B1 - Use	B2 - Maintenance	B3 - Repair	B4 - Replacement	B5 - Refurbishment	B6 - Electricity use	B7 - Water use	C1 - Demolition	C2 - Transport	C3 - Processing for recovery	C4 - Disposal	D
PENRT	MJ	7,79E+02	2,77E+00	1,41E+01	1,58E-01	3,22E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	5,50E+00	0,00E+00	1,46E+00	0,00E+00
SM	kg	3,96E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m³	3,80E-01	6,59E-05	2,30E-04	5,11E-04	1,04E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,41E-04	0,00E+00	5,70E-05	0,00E+00
HW	kg	8,28E-01	8,07E-07	1,24E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NHW	kg	3,06E+00	1,35E-03	6,22E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,34E-07	0,00E+00	3,98E-08	0,00E+00
RW	kg	1,05E-05	1,01E-08	5,59E-08	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
REUSE	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RECYCLE	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EN-REC	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-EL	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EE-TH	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
GWP-GHG**	kg CO ₂ eq	4,59E+01	2,18E-01	7,78E-01	4,17E-03	8,49E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,19E-01	0,00E+00	1,11E-01	0,00E+00

Global warming potential - fossil (GWP-f); Global warming potential - biogenic (GWP-b); Global warming potential - land transformation (GWP-luluc); TOTAL global warming potential (GWP total); Ozone depletion potential (ODP); Acidification potential (AP); Eutrophication potential - freshwater (EP - freshwater); Eutrophication potential - marine (EP - marine); Eutrophication potential - terrestrial (EP - terrestrial); Photochemical ozone formation potential (POCP); Abiotic depletion potential - minerals and metals (ADP-min&met); Abiotic depletion potential - fossil fuels (ADP-fossil); Water deprivation potential (WDP); Renewable primary energy resources (PERE); Renewable primary energy resources - raw materials (PERM); Renewable primary energy resources - total (PERT); Non-renewable primary energy resources (PENR); Non-renewable primary energy resources



- raw materials (PENRM); Non-renewable primary energy resources - total (PENRT); Secondary materials (SM); Renewable secondary fuels (RSF); Non-renewable secondary fuels (NRSF); Net use of fresh water (FW); Hazardous waste (HW); Non-hazardous waste (NHW); Radioactive waste (RW); Components for reuse (REUSE); Materials for recycling (RECYCLE); Materials for energy recovery (EN-REC); Exported electricity (EE-EL); Exported thermal energy (EE-TH); GWP-GHG (GWP-GHG).

** Disclaimer: the results of this environmental impact indicator should be used with caution, as they involve high uncertainty or because experience with the indicator is limited.*

The results of Modules A1-A3 must be considered together with those of Module C. No responsibility is accepted if the modules are considered separately. The estimated impact results are relative indications only and do not represent impact category endpoints, exceedances of threshold values, safety margins and/or risks.

*** This indicator considers all greenhouse gases included in total GWP. Uptake and emissions of biogenic carbon dioxide, and biogenic carbon stored in the product, are excluded.*

Information on the biogenic content of 1 m² of recomposed quartz

Biogenic carbon content	Unit	Recomposed quartz
Biogenic carbon content in the product	kg	0
Biogenic carbon content in the packaging	kg	5,55E-05



ADDITIONAL INFORMATION

The table shows the range of variation, calculated across all included modules (A to C), for impact categories with deviations exceeding 10%. PCR 2019:14 v.1.3.4 requires this to be declared for multiple-product EPDs.

INDICATOR	Unit	Declared impacts (A1-A3)	Maximum variation
GWP-fossil	kg CO ₂ eq	4,57E+01	211%
GWP-biogenic	kg CO ₂ eq	2,01E+00	201%
GWP-land transformation	kg CO ₂ eq	6,11E-02	322%
TOTAL global warming - GWP total	kg CO ₂ eq	4,78E+01	210%
Ozone layer depletion - ODP	kg CFC-11 eq	1,01E-06	257%
Terrestrial acidification - AP	mol H ⁺ eq	1,64E-01	195%
Freshwater eutrophication - EP - freshwater	kg P eq	1,01E-02	216%
Marine eutrophication - EP - marine	kg N eq	3,46E-02	209%
Terrestrial eutrophication - EP - terrestrial	mol N eq	3,50E-01	207%
Tropospheric ozone formation - POCP	kg NMVOC eq	2,03E-01	223%
Abiotic resource depletion - elements - ADP-min&met	kg Sb eq	2,01E-05	180%
Abiotic resource depletion - fossil fuels - ADP-fossil	MJ	7,79E+02	229%
Water use - WDP	m ³ eq	1,66E+01	150%

The variations observed for these environmental impact categories are mainly due to the quantities of input raw materials. Packaging also varies for the different product thicknesses, as does the product's final destination. All products in this EPD are manufactured using the same production cycle.



OTHER ENVIRONMENTAL INFORMATION

STONE ITALIANA has been ISO 14001 certified since 2012. Through its Business Management System, it designs, plans and controls the following activities for the benefit of the internal and external environment:

- Continuous commitment to detecting substances hazardous to health, identifying all potentially harmful materials released into the environment during the manufacture and preparation of semi-finished and finished products. The solvents used in production processes comply with statutory limits for atmospheric emissions and air quality, both during processing and during use of the finished product. No toxic metallic components are used;
- Close attention to reducing and controlling VOC (Volatile Organic Compounds) emissions: emissions are identified and lasting initiatives are implemented to reduce them during production and/or in the finished product;
- Monitoring and control of emissions as required by law;
- Purchasing substances with a lower VOC content;
- Chemical analyses in the workplace and clinical examinations of workers;
- Using renewable resources instead of non-renewable resources;
- Continuous attention to materials with recycled content: Stone Italiana continually studies solutions for reusing processing waste and creating new, innovative materials for tops, flooring and walls;
- Recycling: initiatives are implemented that contribute to product recycling;
- Labelling, certification and life cycle assessment of every product or material;
- When procuring raw materials, identifying purchased materials according to environmental sustainability or natural resource conservation criteria.



BIBLIOGRAPHY

1. ISO 14040:2021 Environmental management – Life cycle assessment – Principles and framework
2. ISO 14044:2021 Environmental management – Life cycle assessment – Requirements and guidelines for life cycle assessment (LCA)
3. General Programme Instructions for Environmental Product Declarations, version 4.0 dated 2021/03/29.
4. General Programme Instructions for Environmental Product Declarations, version 5.0 dated 2024/06/19.
5. EN15804:2012+A1:2013 Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products
6. PCR 2019:14 Construction products (EN 15804:A2) (version 1.3.4 dated 30/04/2024, valid until 20/06/2025)
7. Valutazione del ciclo di vita di prodotti ricomposti, rev. 00 February 2025

REFERENCES

Stone Italiana S.p.A.

<http://www.stoneitaliana.com>

sistemaqsa@stoneitaliana.com

Ambiente Italia S.r.l.

Simona Canzanelli,

simona.canzanelli@ambienteitalia.it

The International EPD® System

EPD International AB

Box 210 60

SE-100 31 Stoccolma, Svezia

www.environdec.com

info@environdec.com

CERTIFICATION BODY:

CSQA S.r.l.

Via S. Gaetano, 74

36016 - **THIENE** (VI)

VENETO Italia



Programme: The International EPD® System EPD International AB

Address: EPD International AB Box 210 60 - SE-100 31 Stoccolma - Svezia www.environdec.com - info@environdec.com

Product Category Rules (PCR):
CEN EN 15804 is used as the core PCR
PCR 2019:14 Construction products; version 1.3.4
The PCR review was conducted by the Technical Committee of the International EPD System. The list of members is available at www.environdec.com . Review chair: Claudia A. Peña, Università di Concepción, Chile. The review committee can be contacted through the Secretariat (www.environdec.com/contact).
Life Cycle Assessment (LCA)
Study conducted by Ambiente Italia s.r.l.
Third-party verification:
Third-party verification of the declaration and data, in accordance with ISO 14025:2006, through: ☐ independent verifier ☐ EPD certification ☒ EPD process certification CSQA, the accredited certification body responsible for third-party verification. The certification body is accredited by Accredia (Accreditation No. 00070).
Does the data update procedure during the EPD's validity involve a third-party verifier: ☒ Yes ☐ No

The EPD owner has full ownership of, obligations for, and responsibility for the EPD.

EPDs within the same product category but from different programmes may not be comparable. EPDs for construction products may not be comparable if they do not comply with EN 15804:2012+A2:2019.

For further information on comparability, consult EN15804:2012+A2:2019 and ISO 14025:2010.

