Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

ZERAMIC EXTREM

from

REVESTIMIENTOS TÉCNICOS SOSTENIBLES (RTS)

Programme:	The International EPD System, www.environdec.com
Programme operator:	EPD International AB
Type of EPD:	EPD of multiple products from a company, based on a representative product
EPD registration number:	EPD-IES-0025982
Version date:	2025-12-11
Validity date:	2030-12-11
	An EPD may be updated or depublished if conditions change. To find the latest version of the EPD and to confirm its validity, see www.environdec.com

the list of products is included in the product information section of the EPD in the page 05

GENERAL INFORMATION

Programme Information	
Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	support@environdec.com

Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR)**:** Construction products, PCR 2019:14. Version 2.0.1 2025.06.05, valid until 2030.04.07. c-PCR-005 Thermal Insulation products (EN 16783:2017) v1.0.0
PCR review was conducted by the Technical Committee of the International EPD System. See www.environdec.com for a list of members Review chairs: Rob Rouwette (chair), Noa Meron (co-chair). The review panel may be contacted via support@environdec.com
c-PCR, if applicable: c-PCR-005 Thermal Insulation products (EN 16783:2017) v1.0.0

Third-party Verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: ☒ Individual EPD verification without a pre-verified LCA/EPD tool Third-party verifier: *CERTINALIA S.L.U.* Accredited by: ENAC nº125/C-PR283 accreditation
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 published in different EPD programmes, may not be comparable. For two EPDs to be comparable, they shall be based on the same PCR (including the same first-digit 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 identical scope in terms of included life-cycle stages (unless the excluded life-cycle stage is demonstrated to be insignificant); apply identical impact assessment methods (including the same version of characterisation factors); and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

INFORMATION ABOUT EPD OWNER

Owner of the EPD: Revestimientos Técnicos Sostenibles (RTS)
Address: Polígono Industrial el Torno C/ Alfareros 13-15 CP 41710 Utrera (Sevilla).
Contact: 955.27.01.07 // 672.19.65.26 info@rts-spain.com
Address and contact information of the LCA practitioner commissioned by the EPD owner:
INTEGRA Consultoría y Sostenibilidad (calidad@integrasostenibilidad.com)
C. Industrial la Palmera, 49, 41703 Dos Hermanas, Sevilla, España
Description of the organisation: It was in 2006 that RTS began to develop, when the R&D&I department was set up. Once they had all the technical documentation and products tested on site, the company Revestimientos Técnicos Sostenibles S.L. was set up in March 2015, a company founded by professionals from the construction and chemical manufacturing sectors.

Currently the catalogue includes products manufactured with Natural Cork, Hollow Ceramic Microspheres, Hollow Glass Microspheres and Aerogel.

RTS is dedicated to the manufacture of low-thickness thermal insulation and products for the elimination of capillary and saltpetre dampness, which can be applied in the most suitable way for each sector, such as roller, brush, airless, trowel, flat trowel or spray applications.

Today, RTS has full coverage in the national market and has an international presence in countries of the European Union, Africa, America and Asia.

Product-related or management system-related certifications: In terms of quality and environment, RTS is recently ISO 9001 and ISO 14001 certified by OCA GLOBAL, as can be seen in the attached certificates below:

PRODUCT INFORMATION

Product name: ZERAMIC EXTREM

Visual representation of the product

Product identification: The technical characteristics of ZERAMIC EXTREM are shown below:

PROPERTY	VALUE	UNIT	NORM
Density	≈ 1	kg/l	
Yield	0,4-1,5	kg/m^2	
Temperature resistance	-10 a 300	°C	
Zeramic Thermal Conductivity Coefficient	0,00125-0,02	W/m*k	
Surface temperatures under radiation	-8	Degrees	UNE-EN ISO 12543-4:2011
Reaction to fire	B-S1.d0 Does not spread fire		UNE-EN ISO 11925-2:2011 / UNE EN 13823:2012
Direct tensile adhesion	Media 1,87	N/mm^2	UNE-EN 1542:2000
Liquid water permeability	0,0235	kg/m^2*h0.5	UNE-EN 1062-3:2008
Water vapor transmission	16,65 V	(g/m^2*día)	UNE-EN ISO 7783:2012
	1,24 SD	m	
CO2 permeability (anti-carbonation)	SD = 120 ± 15	m	UNE-EN 1062-6:2003

Table 1. General technical characteristics of the family

UN CPC code: According to the UN-CPC product classification system, the code corresponding to the product manufactured by RTS is as follows CPC 3511 – “Paints and varnishes and related products”.

Product description: Elastic, low-thickness thermal insulation, whose application gives the substrate insulating properties, Climalit effect, while correcting impact, echo and reverberation noise. It is made from hollow liquid ceramic microspheres, titanium dioxide and acrylic emulsions, elastic and photoreticulable.

ZERAMIC EXTREM is a membrane with unusual qualities. It is composed of liquid ceramic microspheres, which once the film is dry, allows to have uniform, continuous and seamless surfaces.

Among other applications we can highlight:

- Thermal rehabilitation of interior walls and ceilings.
- Thermal rehabilitation of façades
- Acoustic insulation for impact noise in the exterior envelope.

In addition to the properties mentioned above, the ZERAMIC EXTREM product has other properties in terms of its applications, such as those described below:

- Protection and elimination of micro-cracks in façades. As it is elastic, it withstands the expansion and contraction of the substrate.
- Elimination of condensation dampness.
- Renovation and decoration of façades
- Self-cleaning
- Avoids the cold feet and hot head effect by achieving a more homogeneous distribution of heat.
- Creates comfortable and healthy environments for the health of its occupants.

The attached table shows the plastic paints and coatings included in the study for the environmental product declaration, which are classified by type of products associated with their respective family.

ZERAMIC EXTREM	
Family	**Product**
TITANIUM	BZ-200 Pintura Térmica
	BZ-300 Thermal Paint
	BZ-301 Thermal Pain Antibacteriano
	BZ-500 Thermal Coating
	BZ-600 Thermal Paint
	BZR-500 Rubber Atifisuras Térmico
	Zeramic Extreme Thermo Rubber Antifisuras
	MTZ-501 Membrana Térmica
	BZ-1000 Thermal Coating
	BZ-1500 Thermal Covers
	Zeramic Extreme Titanium Plus
	Zeramic Extreme Titanium Plus Antibacteriano
W	Zeramic Extrem W Soportes Verticales
	Zeramic Extrem W Masilla térmica extrafina
	Zeramic Extrem W Soportes Horizontales
	Zeramic Extrem W Imper-Cubiertas
	Zeramic Extrem W Translúcido
	Zeramic Extrem W Max Fachadas
	Zeramic Extrem W Metallum

Table 2. List of products covered by the EPD

Name and location of production site(s): Utrera (Sevilla, España)
References to any relevant websites for more information or explanatory materials:
www.rts-spain.com

CONTENT DECLARATION

- The mass (weight) of one unit of a product, as purchased or per declared unit: 0,4 kg/m^2 of ZERAMIC EXTREM
- The mass and the content of distribution and/or consumer packaging: The product is packaged in a plastic container (0,02 kg) with a steel handle (0,002 kg).

Product content	Mass, kg	Post-consumer recycled material, mass-% of product	Biogenic material, mass-% of product	Biogenic material, kg C/product or declared unit
Diluent (water)	0,1-0,15	0%	0%	0
Loads	0,05-0,1	0%	0%	0
Resins	0,15-0,2	0%	0%	0
Additives	0,025-0,05	0%	0%	0
TOTAL	**0,4**	0%	0%	0

The data assigned in the table above corresponds to the specific composition of ZERAMIC EXTREM TITANIUM PLUS, the representative product of the range.

Packaging materials	Mass, kg	Mass-% (versus the product)	Biogenic material, kg C/product or declared unit
Polyprpylene container	0,02	5%	0
Steel metal handle	0,002	0,5%	0
TOTAL	**0,022**	**5,5%**	0

The products tested do not contain biogenic carbon, except for secondary packaging (wooden pallets). Because their weight does not exceed the threshold of 5% of the total mass of the product, biogenic carbon is not required to be declared as per EN 15804:2012+A2.

None of the substances included in the List of Substances of Very High Concern (SVHC) that are candidates for authorisation under the REACH Regulation are present in ZERAMIC EXTREM plastic paints manufactured by RTS either above the threshold for registration with the European Chemicals Agency or above 0.1 % (w/w).

LCA INFORMATION

Declared unit: 1 m² of ZERAMIC EXTREM TITANIUM PLUS product for a specific yield value RD = 0.4 kg/m² and a density of 0.8 kg/l.

Conversion factor to mass if mass is not used as functional/declared unit: RD = 0,4 kg/m^2
Reference service life: The ZERAMIC EXTREM product guarantees a service life for a maximum period of 10 years depending on support and geographical location.
Time representativeness: The collection of factory data (primary data) corresponds to the period 01/01/2024 to 12/31/2024; the full year 2024. The electricity mix corresponds to the year 2024. In this study, no data sets older than 10 years have been used.
Geographical scope: The geographic coverage of this EPD is global.
Database(s) and LCA software used: All data used to model the process and obtain the Life Cycle Inventory are specific data and are representative of the different processes implemented during the manufacturing process for the year 2023. The data has been measured directly in the production plant. In addition, Ecoinvent 3.10, the most comprehensive and highest quality European life cycle inventory database, has been used, as this database contains the most extensive and up-to-date information and its scope coincides with the geographical, technological and temporal scope of the present project. The LCA has been modeled with Simapro 10.2.0.3. and the LCA methods used comply with EN 15804:A2.

Description of system boundaries:
This EPD is to be performed from Cradle to Grave and module D, therefore the complete modules A, B, C and D are included.

- Cut-off rules

As a rule of thumb, inventory data shall cover at least 99% of the material and energy use of the product life cycle, as well as at least 95% of the consumption of raw materials and energy per module.

Based on our own experience and reference standards, the following processes have not been considered, as their impact is considered negligible (less than 1% impact for each stage of the life cycle):

- Manufacturing of production equipment, buildings and other capital equipment.
- Business travel of personnel.
- Staff travel to and from work.
- Long-term emissions
- Non-hazardous waste (paper and cardboard, plastics and empty plastic packaging)

1. **Product stage:** A1 - A3

It includes the supply of all materials, products and energy, as well as waste treatment during this stage, which includes the following modules:

- A1: Extraction and processing of raw materials, taking into account the electricity consumption invested in the process, specifically through the two commercialisation companies IBERELECTRICA y REPSOL.

- A2: External transportation of raw materials to the production plant.

- A3: Manufacturing. Insulation is manufactured by mixing and dispersing the necessary raw materials. The production process is described below.

    - Phase 1 - Start: incorporation of water and additives.
    - Phase 2 - Incorporation of fillers: in the diluter, add the talc and calcium carbonate and mix for minutes until reaching fineness.

- Phase 3 - Discharge of emulsions: After beating for a few minutes, add the emulsions and the siloxane additive.
- Phase 4 - Final: add the additives again and beat for 20 minutes, until it is at rest.

Once the manufacturing process is finished, the product is presented in 15 Litres and 4 Litres containers, with a yield of 35 m^2 and 10 m^2, respectively.

- Packaging phase:

The operator in charge of packaging the manufactured product must have the necessary containers ready and suitably labelled and must check that the container and the label correspond to the manufactured product, and that the manufacturing batch is affixed.

It is important to note that the packaging is made of polypropylene and has a galvanised steel handle.

2. **Construction process stage**: A4 - A5

- A4: Transport from the production gate to the installation site

SCENARIO INFORMATION	VALE/DESCRIPTION
Type of vehicle used for transport	Lorry 7,5-16 Tn EURO 5 Container ship
Fuel consumption	25 L / 100 km
Distance to construction site (on average)	573,12 km
Capacity utilization (including return transport without load)	% asummed in Ecoinvent
Volume capacity utilization factor	1

Table 3. Transport to the construction site

- A5: The TITANIUM PLUS product is composed of liquid ceramic microspheres, which once the film is dry, allows to have uniform, continuous surfaces without joints. It can be applied by brush, roller or hot air turbine. Once applied, we will have a continuous surface, without joints, waterproof, breathable and prepared to thermally insulate surfaces, either from cold or heat.

  It is important to note that the product must be diluted before application, specifically to a 10% dilution with water.

STAGE INFORMATION	VALUE/DESCRIPTION
Auxiliary materials for installation	Not required
Use of water	0,04 L
Use of other resources	Not required

Quantitative description of the type of energy and consumption during the preparation and installation process.	Not used
Waste materials at the construction site generated by the installation of the product	Not generated
Output materials as a result of waste processing at the construction site	Product waste (packaging and steel) 0,022 kg

Table 4. Installation

3. **Stage of use:** B1 – B7

Once installed, the product does not require any energy input for its use. Throughout its lifetime, the product does not need any repair or replacement. This is why module B has a value of zero.

4. **End of life:** C1 – C4

- C1: Deconstruction/demolition
  At the end of its useful life, the product will be removed during demolition. In the context of the demolition of a building, the impacts attributable to the removal of the product are negligible. The impact is considered to be 0.

- C2: Transport
  The product residues are transported by truck 50 km to their destination.

- C3: Waste management for reuse, recovery and recycling
  It is considered that there is no recycling or reuse at the end of the product's useful life because, during the demolition of buildings, there is no selective separation of materials in the great majority of cases. Consequently, the impact is 0.

- C4: Disposal
  An end-of-life scenario has been considered that is in line with the management of construction waste at the European level for the year 2018 (env_wastrt EUROSTAT, 2022). Although according to statistics, part of the construction waste goes to incineration and energy recovery, this management represents less than 1%, so it is considered not relevant.

SCENARIO INFORMATION	VALUE	UNITS
Collection process, specified by type	0	Kg collected separately
	0,4	Kg collected with mixed construction waste
Recovery system specified by type	0	Kg destined for reuse
	0	Kg destined for recycling
	0	Kg for energy recovery

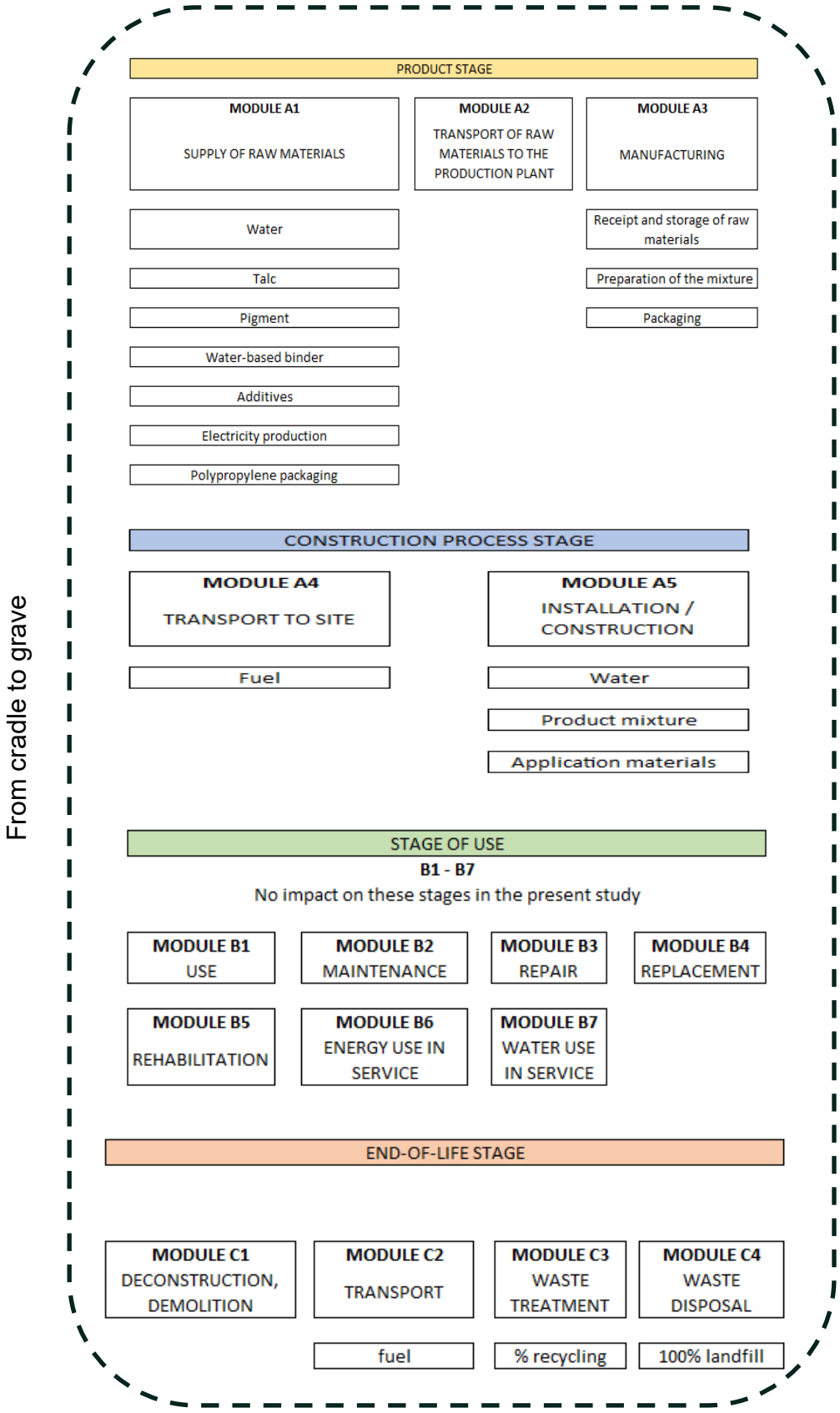
Disposal specified by type	100% Disposal to landfill	
Assumptions for scenario development	A range of size class 16-32 gross metric tons and Euro V emission class Diesel fuel consumption: 30 L/100 Km	
Transport distance to the manager	50	km

Table 5. Disposal

5. Potential environmental benefits and burdens beyond the system boundary (D)

Due to the characteristics of the product and its corresponding application in buildings in the construction sector it is determined that there are no environmental benefits beyond the system boundary, therefore the value of modulus D is 0.

Process flow diagram:



More information:

- The electricity mix used in the manufacturing plant has been obtained from the supplier REPSOL COMERCIALIZADORA DE ELECTRICIDAD Y GAS, S.L.U, with the following energy sources: renewable (75,2%), high-efficiency cogeneration (0,6%), natural gas CC (8,3%), coal (2,5%), fuel/gas (0,5%), nuclear (10,3%) and other non-renewable sources (2,6%). 1 kW/h = 0.074 kg CO2 eq
- Also, from the supplier IBERELECTRICA, S.L, with the following energy sources: renewable (4,7%), high-efficiency cogeneration (1,8%), natural gas CC (32%), coal (9,5%), fuel/gas (2,3%), nuclear (39,6%) and other non-renewable sources (10,1%). 1 kW/h = 0,283 kg CO2 eq
- The study covers at least 95% of the materials and energy per module and at least 99% of the total use of materials and energy for each process unit.
- More information about the product is available at: www.rts-spain.com

Modules declared, geographical scope, share of primary data (in GWP-GHG results) and data variation (in GWP-GHG results):

	Product stage			Distribution/ installation stage		Use stage							End-of-life stage				Beyond product life cycle
	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	RER	RER	ES	RER	RER	-	-	-	-	-	-	-	-	RER	-	RER	-
Share of primary data	28,52%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	+102 / -13 % of the representative ZERAMIC EXTREM TITANIUM PLUS			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

The share of primary data is calculated in accordance with the GWP-GHG results. The quality data assessment has been conducted in conformity with the requirements of the applicable PCR and has been developed in an external calculation file.

Process	Source type	Source	Reference year	Data category	Share of primary data, of GWP-GHG results for A1-A3
Electricity generation (power mix)	Collected data	EPD owner	2024	Primary data	5,4%
	Database	Ecoinvent v3.10			
Transport	Collected data	EPD owner	2024	Primary data	23,12%
	Database	Ecoinvent v3.10			
Total share of primary data, of GWP-GHG results for A1-A3					28,52%

For the background data the Ecoinvent v.3.10 database is used. Raw materials and packaging, energy and water consumption and waste data are collected from RTS. The most relevant considered data are European or specific from supplier. Generic and producer specific data are not more than 10 and 5 years old respectively (according to EN 15804 6.3.8.2. “Data quality requirements”).

The share of primary data is calculated based on GWP-GHG results. It is a simplified indicator for data quality that supports the use of more primary data, to increase the representativeness of and comparability between EPDs.

Note that the indicator does not capture all relevant aspects of data quality and is not comparable across product categories

ENVIRONMENTAL PERFORMANCE

LCA results of the product(s) - main environmental performance results

The product TITANIUM PLUS has been taken as a reference point, as it is the most representative product within the range of insulating Zeramic Extrem.

A disclaimer is included to discourage the use of the results of modules A1 to A3 without taking into account the results of module C. The estimated impact results are only relative statements, which do not indicate the end point of impact categories, upper limit values, safety margins and/or risks.

Mandatory impact category indicators according to EN 15804

Results per functional or declared unit																
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-total	kg CO_2 eq.	7,14 E-01	5,24 E-02	1,19 E-02	0	0	0	0	0	0	0	0	3,88 E-03	0	3,79E-02	0
GWP-fossil	kg CO_2 eq.	7,10 E-01	5,24 E-02	1,19 E-02	0	0	0	0	0	0	0	0	3,87 E-03	0	3,79E-02	0
GWP-biogenic	kg CO_2 eq.	3,87 E-03	3,05 E-05	1,96 E-06	0	0	0	0	0	0	0	0	2,65 E-06	0	1,92E-05	0
GWP-luluc	kg CO_2 eq.	4,76 E-04	1,65 E-05	2,70 E-07	0	0	0	0	0	0	0	0	1,27 E-06	0	2,33E-06	0
ODP	kg CFC 11 eq.	1,81 E-08	1,04 E-09	1,40 E-11	0	0	0	0	0	0	0	0	7,70 E-11	0	1,29E-10	0
AP	mol H^+ eq.	6,96 E-03	1,60 E-04	6,31 E-06	0	0	0	0	0	0	0	0	1,21 E-05	0	3,00E-05	0
EP-freshwater	kg P eq.	2,11 E-04	3,42 E-06	7,35 E-08	0	0	0	0	0	0	0	0	2,58 E-07	0	4,22E-07	0
EP-marine	kg N eq.	6,25 E-04	5,33 E-05	3,57 E-05	0	0	0	0	0	0	0	0	4,08 E-06	0	1,16E-05	0
EP-terrestrial	mol N eq.	6,17 E-03	5,80 E-04	2,92 E-05	0	0	0	0	0	0	0	0	4,44 E-05	0	1,26E-04	0
POCP	kg NMVOC eq.	3,18 E-03	2,49 E-04	9,63 E-06	0	0	0	0	0	0	0	0	1,90 E-05	0	5,38E-05	0
ADP-minerals&metals*	kg Sb eq.	6,56 E-06	1,66 E-07	1,84 E-09	0	0	0	0	0	0	0	0	1,24 E-08	0	8,88E-09	0
ADP-fossil*	MJ	1,33 E+01	7,30 E-01	9,96 E-03	0	0	0	0	0	0	0	0	5,44 E-02	0	9,78E-02	0
WDP*	m^3	4,73 E-01	2,77 E-03	5,21 E-04	0	0	0	0	0	0	0	0	2,23 E-04	0	-3,96E-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 on these results are high or as there is limited experienced 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 results of the end-of-life stage (modules C1-C4) should be considered when using the results of the product stage (modules A1-A3)." For services, "A1-A3" shall be replaced by "A1-A5.

Additional mandatory and voluntary impact category indicators

Results per functional or declared unit															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
GWP-GHG[1]	kg CO_2 eq.	7,14 E-01	5,24 E-02	1,19 E-02	0	0	0	0	0	0	0	0	3,88 E-03	0	3,79 E-02	0

Resource use indicators

Results per functional or declared unit																
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
PERE	MJ	9,13 E-01	1,41 E-02	2,73 E-04	0	0	0	0	0	0	0	0	9,22 E-04	0	1,53 E-03	0
PERM	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0	0	0	0	0	0	0	0	0,00 E+00	0	0,00 E+00	0
PERT	MJ	9,13 E-01	1,41 E-02	2,37 E-04	0	0	0	0	0	0	0	0	9,22 E-04	0	1,53 E-03	0
PENRE	MJ	1,41 E+01	7,76 E-01	1,06 E-02	0	0	0	0	0	0	0	0	5,78 E-02	0	1,04 E-01	0
PENRM	MJ	1,76 E+00	0,00 E+00	8,80 E-01	0	0	0	0	0	0	0	0	0,00 E+00	0	0,00 E+00	0
PENRT	MJ	1,59 E+01	7,76 E-01	8,91 E-01	0	0	0	0	0	0	0	0	5,78 E-02	0	1,04 E-01	0
SM	kg	0,00 E+00	0,00 E+00	0,00 E+00	0	0	0	0	0	0	0	0	0,00 E+00	0	0,00 E+00	0
RSF	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0	0	0	0	0	0	0	0	0,00 E+00	0	0,00 E+00	0
NRSF	MJ	0,00 E+00	0,00 E+00	0,00 E+00	0	0	0	0	0	0	0	0	0,00 E+00	0	0,00 E+00	0
FW	m^3	1,21 E-02	0,00 E+00	0,00 E+00	0	0	0	0	0	0	0	0	0,00 E+00	0	0,00 E+00	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															

[1] This 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 CO_2 is set to zero.

Waste indicators

Results per functional or declared unit															
Indicator	**Unit**	**A1-A3**	**A4**	**A5**	**B1**	**B2**	**B3**	**B4**	**B5**	**B6**	**B7**	**C1**	**C2**	**C3**	**C4**	**D**
Hazardous waste disposed	kg	1,42 E-04	4,89 E-06	7,62 E-08	0	0	0	0	0	0	0	0	3,66 E-07	0	6,73 E-07	0
Non-hazardous waste disposed	kg	1,95 E-01	2,92 E-02	1,21 E-02	0	0	0	0	0	0	0	0	2,58 E-03	0	4,01 E-01	0
Radioactive waste disposed	kg	1,74 E-05	2,79 E-07	4,28 E-09	0	0	0	0	0	0	0	0	1,73 E-08	0	2,99 E-08	0

Output flow indicators

Results per functional or declared unit															
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	3,39 E-04	0	2E-02	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

Additional LCA results (other environmental performance results) of the product(s)

Variation in the environmental performance of the ZERAMIC EXTREM family depending on the representative product:

The difference in GWP-GHG results for modules A1-A3 between the representative product and the most and least favourable products is reported as a percentage below:

Impact category	Data variation	
	Max	Min
GWP-GHG	102	13

The LCA results show the environmental impacts associated with the representative product, which is the best-selling product in the range.

The reason for the deviations arises from the declared unit used to analyse the results, based on the performance per square metre of each of them. In the case of the reference product and the least favourable product in the range, the performance per square metre is the same, while for the most unfavourable product, it has a much higher performance, this product being the one that generates the most impact.

LCA result of one declared unit product (A-C)	Unit	Min	Representative/ Average	Max
GWP-fossil	kg CO2 eq.	6,93E-01	8,16E-01	4,77E+00
GWP-biogenic	kg CO2 eq.	4,20E-03	3,92E-03	3,70E-02
GWP-luluc	kg CO2 eq.	3,88E-04	4,96E-04	3,05E-03
GWP-total	kg CO2 eq.	6,97E-01	8,20E-01	4,81E+00
GWP-GHG	kg CO2 eq	6,97E-01	8,20E-01	4,81E+00
ODP	kg CFC 11 eq.	1,51E-08	1,93E-08	9,55E-08
AP	mol H+ eq.	8,31E-03	7,17E-03	7,05E-02
EP-freshwater	kg P eq.	1,82E-04	2,15E-04	1,45E-03
EP- marine	kg N eq.	6,62E-04	7,30E-04	4,72E-03
EP-terrestrial	mol N eq.	6,20E-03	6,95E-03	4,33E-02
POCP	kg NMVOC eq.	3,04E-03	3,51E-03	2,15E-02
ADP-minerals&metals*	kg Sb eq.	5,19E-06	6,75E-06	3,30E-05
ADP-fossil*	MJ.	1,07E+01	1,42E+01	7,29E+01
WDP*	m^3.	4,38E-01	4,37E-01	3,91E+00
PM	Incidence of disease	4,55E-08	4,62E-08	3,48E-07
IRP	kBq U235 eq	7,71E-02	1,08E-01	5,38E-01
ETP-fw	CTUe	8,71E-01	1,14E+00	5,52E+00
HTP-c	CTUh	3,40E-09	4,22E-09	2,12E-08
HTP-nc	CTUh	1,30E-08	2,10E-08	1,04E-07
SQR	Pt	3,71E+00	3,88E+00	2,71E+01

ADDITIONAL SOCIAL AND ECONOMIC INFORMATION

The technical data sheets of the different products can be found on the website www.rts-spain.com or, if applicable, please contact: info@rts-spain.com

INFORMATION RELATED TO SECTOR EPD

This is not a sectoral EPD

ABBREVIATIONS

Abbreviation	Definition
General Abbreviations	
EN	European Norm (Standard)
EF	Environmental Footprint
ES	Spain
EPD	Enviromental Product Declaration
ISO	International Organization for Standardization
CEN	European Committee for Standardization
CPC	Central product classification
LCA	Life Cycle Assessment
PCR	Product Category Rules
RER	Rest of Europe
SVHC	Substances of Very High Concern

REFERENCES

a) General Programme Instructions of the International EPD® System. Version 5.0.1

b) ISO 14020:2000 Environmental labels and declarations-General principles.

c) ISO 14025:2010 Environmental labels and declarations-Type III Environmental Declarations-Principles and procedures.

d) ISO 14040:2006 Environmental Management-Life Cycle Assessment-Principles and framework.

e) ISO 14044:2006 Environmental Management-Life Cycle Assessment-Requirements and guidelines.

f) PCR 2019:14 Construction products (EN 15804: A2) version 2.0.1

g) EN 15804:2012+A2:2019 Sustainability of construction works-Environmental Product Declarations-Core rules for the product category of construction products EF 3.1

h) PCR-005 Thermal Insulation products (EN 16783:2017) v1.0.0

VERSION HISTORY

Original Version of the EPD, 2025-12-11

VERIFICATION STATEMENT CERTIFICATE

CERTIFICADO DE DECLARACIÓN DE VERIFICACIÓN

Certificate No. / Certificado nº: EPD13801

CERTINALIA, S.L.U., confirms that independent third-party verification has been conducted of the Environmental Product Declaration (EPD) on behalf of:
CERTINALIA, S.L.U., confirma que se ha realizado verificación de tercera parte independiente de la Declaración Ambiental de Producto (DAP) en nombre de:

REVESTIMIENTOS TECNICOS SOSTENIBLES (RTS), S.L.
Pol. Ind. El Torno
C/Alfareros nº13
41710 Utrera (Sevilla) - SPAIN

for the following products:
para los siguientes productos:

ZERAMIC EXTREM Thermal Insulation
Aislante Térmico ZERAMIC EXTREM

with registration number **EPD-IES-0025982** in the International EPD® System *(www.environdec.com)*
*con número de registro **EPD-IES-0025982** en el Sistema International EPD® (www.environdec.com)*

it´s in conformity with:
es conforme con:

- **ISO 14025:2010 Environmental labels and declarations. Type III environmental declarations.**
- **General Programme Instructions for the International EPD® System v5.**
- **PCR 2019:14 Construction products (EN 15804:A2) version 2.0.**
- **c-PCR-005 Thermal Insulation products (EN 16783:2017) v1.0.**
- **UN CPC 3511 Paints and varnishes and related products.**

Issued date / *Fecha de emisión:*	10/12/2025
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Carlos Nazabal Alsua
Manager

The validity of this certificate is subject to the validity of its related EPD.
La validez de este certificado está sujeta a la vigencia de su correspondiente EPD.

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