Environmental Product Declaration

In accordance with ISO 14025:2010 and EN 15804:2012+A2:2019/AC:2021 for:

Tiles made from recycled plastic - Telerazzo

from

NOVAVITA DESIGN s.r.o.

Programme:	"National Environmental Labeling Program" - Czech Republic (NPEZ)
Programme operator:	Ministry of the Environment of the Czech Republic, CENIA, Czech Environmental Information Agency, executive function of the NPEZ Agency
EPD registration number:	**7250011**
Publication date:	2025-11-11
Valid until:	2030-11-10

An EPD should provide current information and may be updated if conditions change.

Company information

Owner of the EPD: NOVAVITA DESIGN s.r.o.

Contact:
Martina Zachrlová

Description of the organisation:
NOVAVITA DESIGN s.r.o. is a materials laboratory based in Brno, specializing in the production and supply of panel boards and tiles made from 100% recycled plastic. It was founded in 2022 with the aim of providing sustainable solutions in the field of building materials. Production is located in Česká Třebová, and the company fulfills orders across Europe.

Product-related or management system-related certifications:
The product is not certified during the LCA analysis and EPD certification process.

Name and location of production site(s):
Moravská 1078, Česká Třebová 560 02, Areál Sintex

Product information

Product name: Tiles made from recycled plastic - Telerazzo

Product identification:
During the LCA analysis and EPD certification process, the product is not certified according to a harmonized European standard or European assessment document.

Product description:
Plastic cladding panels are made from 100% recycled plastic waste, mainly from post-consumer and industrial sources. Thanks to an advanced technological process, the materials are thoroughly crushed and pressed into final panels without the need for binders, resins, or other chemical additives. The resulting material is extremely resistant to moisture, mold, and common chemicals, making it a suitable alternative to traditional ceramic tiles. Our goal is to offer a fully-fledged ecological replacement for traditional ceramic tiles, while our panels can also be used in other areas of interior design. Thanks to their strength and versatility, they can also be used as table tops, furniture cladding, or decorative panels. Each piece is unique—the color and texture depend on the composition of the recycled material used, giving each project a unique visual character.

Product types:
1. Telerazzo – PS plastic
2. Onyx – a combination of PP plastic and coffee waste
3. Travertine – PP plastic

This EPD applies only to the Telerazzo type.

UN CPC code: 36910 - Floor coverings of plastics, in rolls or in the form of tiles; wall or ceiling coverings of plastics

Geographical scope:
The generic data used from the database available in the OneClick LCA program (Ecoinvent 3.11, OneClick LCA database, and EPD products) are used with validity for the Czech Republic (e.g., energy inputs), and if data for the Czech Republic are not available, data valid for the EU are used. Based on the evaluation according to EN 15804+A2, Annex E, tab. E.1 the generic data used meet the quality level - medium.

LCA information

Functional unit / declared unit:

The declared unit is 1 m^2 of the average manufactured product – Tiles made from recycled plastic – Telerazzo

Designation	Unit	Value
Declared unit	m^2	1
Conversion factor to 1 kg	kg	9

Reference service life:
The estimated reference service life (RSL) of panels made from 100% recycled plastic depends on several factors, such as specific conditions of use, maintenance, and the environment in which the panels are installed. We do not declare an RSL; however, if the panels are properly installed and maintained, their lifespan is commonly estimated to be 20 to 30 years.

Time representativeness:
For specific data, manufacturer data collected for the production of PS – Telerazzo cladding panels is used. The data corresponds to the period from June 2024 to June 2025. For generic data, data from databases that are part of the OneClick LCA program (Ecoinvent database version 3.11, OneClick LCA database, and others) is used. Based on the evaluation according to EN 15804+A2, Annex E, tab. E.1 the generic data used meet the quality level – good - very good.

Database(s) and LCA software used:
The OneClick LCA tool and database (EPD Hub Core PCR version 1.2, March 24, 2025) was used to assess the processes. The OneClick LCA database represents the latest available data in the form of EPDs complying with EN 15804 and data from Ecoinvent 3.11.
The GWP-GHG of electricity is 0,71 kg CO_2e/kWh (mix CZE)

Description of system boundaries:

Cradle to gate with modules C1–C4 and module D (A1–A3 + C + D)

The production phase includes the following modules:

- **A1** - extraction and processing of raw materials and production of packaging from input raw materials
- **A2** - transport of input raw materials from the supplier to the manufacturer, waste removal
- **A3** - manufacture of products, manufacture of auxiliary materials and semi-finished products, energy consumption, including waste treatment until it ceases to be waste or after the removal of the last material residues during the production phase. The results of A1-A3 include a "balancing report" of biogenic CO2 from packaging released in module A5, as module A5 is not fully included. In accordance with the "polluter pays" principle, the costs/benefits of further handling of this packaging are also included in this module.

The end-of-life phase includes modules:

- **C1,** deconstruction, demolition; product from a building, including its dismantling or demolition, including initial sorting of materials at the construction site. Decomposition and/or dismantling of the product is carried out by mechanical separation from the substrate, as its subsequent processing is assumed - 100% recycling of the product.
- **C2,** transport to the waste processing site; transport of discarded products as part of waste processing, e.g., to a recycling site, and transport of waste, e.g., to a final disposal site. Transport from the dismantled building is carried out by a truck with a load capacity of 7.5–16

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	ND	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x
Geography	CZ EU	CZ EU	CZ EU	EU									EU	EU	EU	EU	GLO, EU
Specific data used	> 95 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – products	< 10 %					-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	0 %					-	-	-	-	-	-	-	-	-	-	-	-

The data used to calculate the EPD conforms to the following principles:

Technological point of view: Data corresponding to the current production of individual types of partial products of the plant and corresponding to the current state of the technologies used are used. Based on the evaluation according to EN 15804+A2, Annex E, tab. E.1 the generic data used meet the quality level - very good.

The aspect of completeness and completeness: Most of the input data is based on consumption balances, which are precisely recorded in the manufacturer's information system. The reliability of the source of specific data is determined by the uniformity of the collection methodology of the information system.

Consistency point of view: Uniform points of view are used throughout the report (allocation rules, age of data, technological scope of validity, temporal scope of validity, geographical scope of validity). Credibility aspect: All important data were checked for adherence to cross-comparison of mass balances.

NOVAVIA VITAVAON

Results of the environmental performance indicators

Mandatory impact category indicators according to EN 15804:2012+A2:2019/AC:2021

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-fosil	kg CO_2 ekv.	2,11E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,12E-02	2,42E-02	4,71E+00	0,00E+00	0,00E+00
GWP-biogenic	kg CO_2 ekv.	-2,57E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	7,96E-06	5,49E-06	2,84E-01	0,00E+00	0,00E+00
GWP- luluc	kg CO_2 ekv.	2,67E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	3,03E-08	1,08E-05	6,69E-03	0,00E+00	0,00E+00
GWP - total	kg CO_2 ekv.	1,86E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,12E-02	2,42E-02	5,00E+00	0,00E+00	0,00E+00
ODP	kg CFC 11 ekv.	1,08E-06	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,71E-09	3,58E-10	5,27E-08	0,00E+00	0,00E+00
AP	mol H^+ ekv.	1,00E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,81E-05	8,26E-05	1,59E-02	0,00E+00	0,00E+00
EP-freshwater	kg P ekv.	4,97E-03	ND	ND	ND	ND	ND	ND	ND	ND	ND	9,13E-08	1,89E-06	2,30E-03	0,00E+00	0,00E+00
EP- marine	kg N ekv.	2,52E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,21E-06	2,71E-05	4,01E-03	0,00E+00	0,00E+00
EP - terrestrial	mol N ekv.	2,68E-01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,82E-05	2,95E-04	3,07E-02	0,00E+00	0,00E+00
POCP	kg NMVOC ekv.	7,37E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,22E-05	1,22E-04	9,90E-03	0,00E+00	0,00E+00
ADP- minerals& metals*	kg Sb ekv.	8,54E-05	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,52E-09	6,76E-08	3,34E-05	0,00E+00	0,00E+00
ADP-fosil*	MJ	2,34E+03	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,47E-01	3,51E-01	5,89E+01	0,00E+00	0,00E+00
WDP*	m^3	-2,74E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	5,59E-02	1,74E-03	1,60E+00	0,00E+00	0,00E+00

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

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	3,71E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,39E-04	4,82E-03	1,39E+01	0,00E+00	0,00E+00
PERM	MJ	2,20E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	5,91E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	6,39E-04	4,82E-03	1,39E+01	0,00E+00	0,00E+00
PENRE	MJ	3,42E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,49E-01	3,51E-01	-3,26E+02	0,00E+00	0,00E+00
PENRM	MJ	2,85E+01	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	3,85E+02	0,00E+00	0,00E+00
PENRT	MJ	3,71E+02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,49E-01	3,51E-01	5,89E+01	0,00E+00	0,00E+00
SM	kg	9,86E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,50E-04	1,25E-02	0,00E+00	0,00E+00
RSF	MJ	3,05E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	1,90E-06	1,89E-04	0,00E+00	0,00E+00
NRSF	MJ	2,33E+00	ND	ND	ND	ND	ND	ND	ND	ND	ND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	7,67E-02	ND	ND	ND	ND	ND	ND	ND	ND	ND	1,30E-03	5,20E-05	3,59E-02	0,00E+00	0,00E+00
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														

Other environmental performance indicators

None

Additional environmental information

None

Differences versus previous versions

This is the first version of the EPD.

a) *Note: If EN 15804 is not used as the PCR, it is necessary to specify the basic valid PCR according to which the EPD was prepared.*

Independent verification of the declaration and data according to EN ISO 14025:2010			
CEN standard EN 15804+A2:2019 serves as the core PCR[a)]			
☐	internal	☒	external
Third party verifier [b]:			
Elektrotechnický zkušební ústav, s. p. Pod lisem 129/2, Troja, 182 00 Praha 8 Czech Republic ezú elektrotechnický zkušební ústav		Mgr. Miroslav Sedláček *Head of the Certification Body*	
Elektrotechnický zkušební ústav, s.p., the Certification Body No. 3018 accredited by Czech Accreditation Institute, o.p.s. according to ČSN EN ISO/IEC 17065:2013			
[a] *Products category rules* [b] *Optional for business-to-business communication, mandatory for business-to-consumer communication (see ISO 14025:2010, 9.4).*			

This document is a translation of the EPD issued in Czech.in cause of doubt use the Czech version of this EPD as a reference.

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