



Environmental Product Declaration

UNE-EN ISO 14025:2010 UNE-EN 15804:2012+A2:2020/ AC 2021

AENOR

Metatray® insulating cable tray systems, supports and accessories.

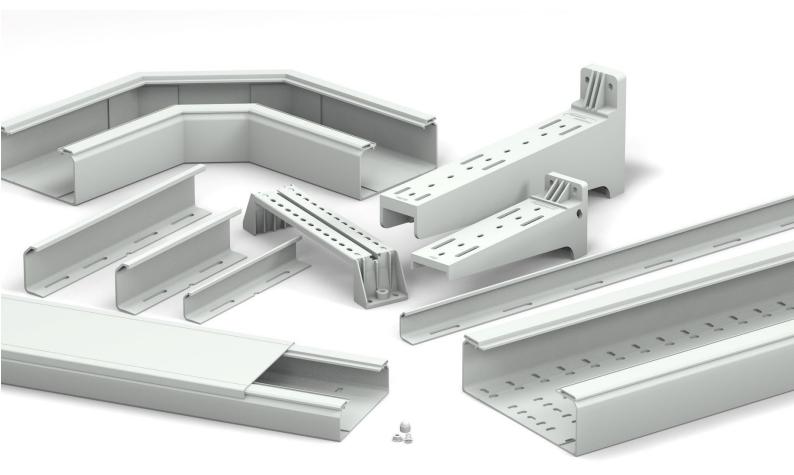
Issue Date: 2025-11-14
Revision Date: 2025-11-26
Expiration Date: 2030-11-13

Declared validity is subject to registration and publication at www.aenor.com

Registration Code: GlobalEPD EN15804-175 rev1



PEMSA CABLE MANAGEMENT S.A.



The holder of this Declaration is responsible for its content, as well as for keeping, throughout its validity period, the supporting documentation that substantiates the data and statements included.



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LCA study

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AENOR is a founding member of ECO Platform, the European Association of EPD Programme Operators.

The European Standard UNE-EN 15804:2012+A2:2020 serves as the basis for the PCR

Independent verification of the declaration and data, according to EN ISO 14025:2010

□ Internal
☑ External

Verification body

AENOR

Product certification body accredited by ENAC (Accreditation No 1/C-PR468).





1. General information.

1.1. The Organisation.

Pemsa Cable Management has specialised in cable management systems since 1969. It is a leader in the Spanish market and has achieved wide international expansion thanks to its high quality, innovation, and product development.

Pemsa's in-depth knowledge of the industry enables it to meet current and future needs by adapting to market demands.

The company is headquartered in Madrid, Spain, and operates subsidiaries in the United Kingdom, France, Portugal, and Colombia, being present in over 50 countries worldwide.

Pemsa owns four manufacturing centres equipped with proprietary automation systems.

Its numerous certifications endorse its commitment to quality, safety, and sustainability. Pemsa's products are designed and manufactured under rigorous quality controls. Its quality and environmental management systems are certified in accordance with UNE-EN-ISO 9001:2015 and UNE-EN-ISO 14001:2015, respectively.

Furthermore, its wide range of products complies with the safety requirements of European Directive 2014/35/EU for low-voltage installations, European Directive 2015/863 on the restriction of hazardous substances (RoHS), and REACH Regulation (EC) No. 1907/2006 concerning the restriction of chemical substances.

1.2. Scope of the Declaration.

The scope of this EPD covers the environmental information related to the product's life cycle, including modules: A1–A5 (from raw material extraction to product installation on site), B1–B7 (use phase: use, maintenance, repair, replacement, refurbishment, energy and water consumption in the building), C1–C4 (end-of-life phase), and module D (benefits and loads beyond the system boundary).

The purpose of the product system under study is to be used as insulating cable trays and trunkings for protecting, guiding and supporting electrical installations in the building and tertiary sectors.

1.3. Life Cycle and Conformity.

This EPD has been developed and verified in accordance with:

- UNE-EN ISO 14025:2010.
- UNE-EN ISO 14040:2006/A1:2021.
- UNE-EN ISO 14044:2006/A1:2021.
- UNE-EN 15804:2012+A2:2020 / AC 2021.

Table 1. Product Category Rule.

Títle	Sustainability in construction. Environmental Product Declarations. Core Product Category Rules for construction products.
Registration /versión	UNE-EN 15804:2012+A2:2020 / AC 2021
Issue Date	2021
Administrator	AENOR



This EPD includes the life cycle stages shown in Table 1-2. It is a cradle-to-grave declaration (A1–D).

Table 1-2. System boundaries. Considered information modules.

	A1	Raw material supply	Х
Product	A2	Transport to factory	Х
Pro sta	А3	Manufacturing	Х
s- ion	A4	Transport to site	X
Cons- tructio	A5	Installation / construction	Х
	B1	Use	X
	B2	Maintenance	Х
0	В3	Repair	Х
Jse stage	В4	Replacement	Х
Ns	B5	Refurbishment	Х
	В6	Operational energy use	Х
	В7	Operational water use	X
Ф	C1	Deconstruction / demolition	Х
of life	C2	Transport	X
End of life	СЗ	Waste processing	Х
	C4	Disposal	Х
	D	Potential for reuse, recovery and/or recycling	Х
X =	Modu	ule included in the LCA	

This EPD may not be comparable with those developed under other programmes or according to different reference documents; in particular, it may not be comparable with declarations not developed and verified in accordance with the UNE-EN 15804 Standard.

Similarly, EPDs may not be comparable if the data sources differ (for example, databases), if not all relevant information modules are included, or if they are not based on the same scenarios.

The comparison of construction products should be made based on the same function, using the same declared unit, and at the building level (or architectural / engineering work), that is, including the product's performance throughout its entire life cycle, as well as the specifications of section 6.7.2 of the UNE-EN ISO 14025 Standard.

1.4. Differences from previous versions of this EPD.

This EPD is modified, to include images of the process in **2.3. Product performance** and adjust the text, incorporate adjustments in the wording of section **3.3. Declared unit** and add **Table 2-2.**Distribution packaging.



2. The Product.

2.1. Product Identification.

This Environmental Product Declaration (EPD) applies to the Metatray insulating tray systems, supports, and accessories in PVC, manufactured by PEMSA CABLE MANAGEMENT, S.A.

CPC Code: 36980.

2.2. Product Composition.

The manufacturer declares the following composition for 1 kg of product:

Table 2-1. Composition of Metatray insulating tray, supports, and accessories.

	% by weight
Thermoplastic based on PVC	92 -95 %
Additives	5 - 8 %

The raw material used is an insulating thermoplastic material based on PVC.

During the product's life cycle, no hazardous substances listed in the Candidate List of Substances of Very High Concern (SVHC) for Authorisation are used in concentrations greater than 0.1 % by weight of the product.

The study considers the primary packaging used in the distribution of the product.

Table 2-2. Distribution Packaging.

	kg/ declared unit
Cardboard box	6,95E-02
Adhesive Label	2,38E-04

2.3. Product Performance.

Solid. perforated cable trav and accessories made of insulating material Grey RAL 7035 colour for the support, protection and conduction of cables. Maximum functionality and adaptation to different spaces and environments. Excellent performance in corrosive environments, weathering and exposure to UV radiation. Wide range of accessories with multiple applications

Products comply with the European Low Voltage Directive (2014/35/EU) and with the applicable European and International product standards for cable tray systems (EN/IEC 61537) and protective trunking systems (EN 50085).



Metatray insulating tray



3. Life Cycle Assessment Information.

3.1. Life Cycle Analysis.

The Life Cycle Assessment (LCA) report for the EPD of the Metatray insulating tray, supports, and accessories manufactured by PEMSA CABLE MANAGEMENT, S.A., dated October 2025, was prepared by Abaleo S.L. using the databases Ecoinvent 3.11 (March 2025) and Environmental Footprint 3.1 (March 2023), and the software SimaPro 10.2.0.0, which was the most updated version available at the time of the study.

The study was based on data from the production plant in Mejorada del Campo (Madrid, Spain).

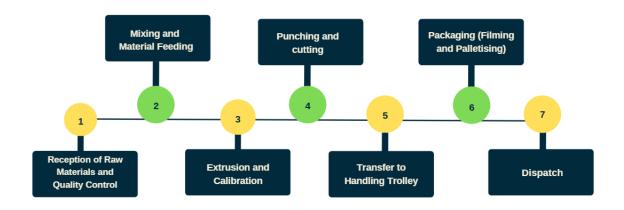
The LCA follows the recommendations and requirements of ISO 14040:2006, ISO 14044:2006, and UNE-EN 15804:2012 +A2:2020 / AC 2021.

3.2. Study Scope.

The scope of this EPD covers the cradle-tograve (A1–D) production of the Metatray insulating tray system, supports, and accessories manufactured by PEMSA CABLE MANAGEMENT, S.A., for use as protective cable management components in building and tertiary applications.

The following diagram represents the processes included in the study scope for the Metatray insulating cable tray, supports, and accessories.

Figure 3-1. Process diagram.







 Reception of Raw Materials and Quality Control:

Raw-material sacks are received according to predefined technical specifications. An initial quality check is carried out to ensure compliance with applicable standards and requirements, guaranteeing the technical properties of the materials.

Mixing and Material Feeding:

Raw-material components are placed into a mixing hopper before extrusion to prepare the base material. The blended material is then fed into the integrated hopper of the extrusion line.

• Extrusion and Calibration:

The final shaping of the product is carried out through an extrusion process, depending on the different tray sizes and dimensions available in the product range. Subsequently, the final shaping of the product is completed using a vacuum forming and cooling process.

• Punching and Cutting:

The extruded product enters a punching machine that makes the required perforations and holes according to design. A cutting unit then trims each straight tray section, typically 3 metres long.

- Transfer to Handling Trolley:
 After extrusion punching ar
 - After extrusion, punching, and cutting, each 3 m section is placed onto a trolley for stacking prior to the final production steps. Periodic in-line inspections and random sampling verify dimensional tolerances.
- Packaging (Filming and Palletising):
 Once quality control is passed, the product is packed using recyclable packaging materials designed to protect it during handling and transport, ensuring surface and structural integrity until delivery.

Dispatch:

Products are labelled and organised for distribution according to demand.

The specific manufacturing process data come from the Mejorada del Campo plant – Madrid (Spain), corresponding to the year 2024, which is considered a representative average year.

Exclusions from the LCA:

- Auxiliary installation components (such as plugs and screws), as they are not manufactured or marketed by PEMSA CABLE MANAGEMENT, S.A.
- Equipment with a service life greater than 3 years.
- Construction of factory buildings and other capital goods.
- Staff business travel and commuting.
- Research and development activities.

3.3. Declared Unit.

The declared unit is 1 kilogram (1 kg) of Metatray insulating cable tray, supports, and accessories.

3.4. Allocation Criteria.

In accordance with the reference standard, allocation by mass has been applied for system inputs and outputs (auxiliary materials, energy consumption, and waste).

Economic allocation was used between the main product and co-products based on their relative sales values in 2024.

3.5. Cut off Rule.

In accordance with the criteria of the reference standard, the gross weight/volume of all materials used in the manufacturing process has been included in the LCA, so that at least 99% of the weight of the product unit is obtained.



No exclusions of raw materials or energy inputs have been made.

3.6. Data Representativeness and Quality.

To model the manufacturing process of the Metatray insulating tray, supports, and accessories produced by PEMSA CABLE MANAGEMENT, S.A., production data from the factory corresponding to the year 2024 have been used, a period considered representative of average production. From this factory, data on: raw-material and energy consumption, transport distances from suppliers and waste generation and management.

When necessary, the Ecoinvent 3.11 (March 2025) and Environmental Footprint 3.1 (March 2023) databases have been used, which are the latest versions available at the time of conducting the LCA. For inventory data, LCA modelling, and calculating the environmental impact categories required by the reference standard, the SimaPro 10.2.0.0 software has been employed, which is the most upto-date version available at the time of the study.

The following criteria have been applied for the selection of the most representative processes:

- That the data are representative of the technological development actually applied in the manufacturing processes. If information is not available, a value representative of an average technology has been selected.
- That the data are geographically as close as possible (European) and, where applicable, regionally averaged.
- That the data are as up-to-date as possible.

To assess the quality of the primary data for the production of the studied products, the semi-quantitative data quality evaluation criteria proposed by the European Union in its Environmental Footprint Guide for Products and Organisations have been applied. The results obtained are as follows:

- Very good completeness. Score 1.
- Good methodological suitability and consistency. Score 2.
- Very good temporal representativeness. Score 1.
- Good technological representativeness. Score 2.
- Very good geographical representativeness. Score 1.
- Low data uncertainty. Score 2.

According to the above data, the Data Quality Rating (DQR) has the following value: 9/6 = 1.5, indicating that the data quality is excellent.

To better understand the data quality assessment carried out, it should be noted that the score for each criterion ranges from 1 to 5 (the lower the score, the higher the quality), and the final score is obtained using the following table:

Table 3-1. Data quality.

Overall data quality rating (DQR)	Overall data quality level
≤ 1,5	Excellent quality
1,5 a 2,0	Very good quality
2,0 a 3,0	Good quality
3 a 4,0	Fair quality
> 4	Insufficient quality



4. System boundaries, scenarios, and additional technical information.

The product system studied in the Life Cycle Assessment of the Metatray insulating tray, supports, and accessories produced by PEMSA CABLE MANAGEMENT, S.A., is cradle-to-grave.

Module A1: Raw material production.

This module includes the raw material production process, in which the following is considered:

- The extraction of resources and the production of raw materials.
- Transport to the raw material processing/production facilities.
- Energy and fuel consumption during raw material production.
- Consumption of other resources (such as water) during raw material production.
- Generation of waste and emissions to air, water, and soil during raw material production.
- Production of the electricity used in the manufacturing process.

Module A2: Transport.

Truck transport of all raw materials from the production sites (suppliers) to the PEMSA CABLE MANAGEMENT, S.A., plant in Mejorada del Campo – Madrid (Spain) has been considered. The transport distances for the raw materials have been calculated based on data provided by the purchasing and sales departments of PEMSA CABLE MANAGEMENT, S.A.

Module A3: Manufacturing.

This module considers the production of auxiliary materials for manufacturing, the production of the packaging required for product distribution to the customer, and its transport to the plant; the transport and management of the waste generated during this stage of the life cycle.

The transport distances for the waste have been calculated based on the locations provided by PEMSA CABLE MANAGEMENT. S.A.

Module A4. Transport to the installation/site.

This module considers all environmental impacts associated with the transport of the finished product (including packaging) to the customer or the construction site where it will be installed. It includes distance, transport mode, fuel type, and transport-related emissions.

Module A5. On-site installation.

This module covers the impacts arising from the installation activities of the product at its final location. It includes: energy use, transport and management of waste generated during the installation process (scrap and packaging waste), and production of installation waste.

Module B1-B7. Use stage.

The Metatray insulating tray, supports, and accessories from PEMSA CABLE MANAGEMENT, S.A., do not require maintenance work, nor do they need to be repaired, replaced, or refurbished during their service life under normal use, provided they are correctly installed and used. They also do not consume materials or energy during their service life. Therefore, the environmental impacts in life cycle stages B1 to B7 are zero.



Module C1 – Deconstruction / demolition.

The LCA considers a typical scenario in which the Metatray insulating tray, supports, and accessories are manually dismantled, without the need for machinery or complex procedures.

Module C2: Transport to the waste treatment/recovery facility.

It is assumed that, at the end of its service life, the Metatray insulating tray, supports, and accessories are transported by road to the nearest waste management facility, located at an average distance of 100 km. For this transport, trucks with a load capacity of 16–32 tonnes, compliant with EURO6 standards, are used.

Module C3 - Waste treatment, and Module C4 - Waste disposal.

The waste scenario considered assumes that 32% of the PVC in the studied product is sent for recycling. Non-recycled waste is sent to landfill.

Table 4-1. Parameters of module C1–C4 corresponding to the Metatray insulating tray, supports, and accessories.

Parameters	Value (per declared unit)
Demolition	0 MJ
Recovery	0 kg for reuse.
system, specified by	0,32 kg for recycling.
type	0 kg for energy recovery.
Disposal, specified by type	0,68 kg for final disposal (landfill).
Assumptions for scenario development (transport)	Transport of waste to the facility: EURO 6 truck, 100 km

Module D – Benefits and burdens beyond the system boundary.

Module D includes the potential for reuse and recycling, expressed as net burdens and benefits related to the secondary material recovered at the exit of the product system, calculating material substitution effects only for the net output flow from the product stage; secondary material used as input in the product stage (A1–A3) has been excluded, considering only the percentage of non-secondary raw material that reaches waste status.



Table 4-2. Life Cycle Stages and Information Modules for Building Assessment.

Life Cycle Information – UNE EN 15804.

Additional information

Α	1 - 3			A4 -	- A5			B1 - B7	,				C1 -	- C4			D
Produ	uct sta	age	C	prod	ruction cess ige		U	se stag	je			E	End of li	ife stag	e		Benefits and burdens beyond the system
A1	A2	А3		A4	A5	B1	B2	В3	B4	В5	(1	C2	C3	C4		D
Х	Х	X		Х	Х	X	Х	Х	Х	Х		X	Х	Х	Х		Х
Raw material supply	Transport	Manufacturing		Transport	Construction / installation process	Use	Maintenance	Repair	Replacement	Refurbishment	:	Deconstruction, demolition	Transport	Waste treatment	Waste disposal	re re	Potential for euse, ecovery, and ecycling
				cen- rio	Scen- ario	Scen- ario	Scen- ario	Scen- ario	Scen- ario	Scen -ario	Sc -a	en	Scen -ario	Scen -ario	Scen -ario		
			a	110	ano		peratio				-α	10	ano	ano	ano		
						Scena	ario		Х								

X: Evaluated module

B7. Operational water use Scenario



5. Declaration of the environmental parameters of the LCA and the LCI.

The estimated impact results are relative and do not indicate the final value of the impact categories, nor do they refer to threshold values, safety margins, or risks.

Environmental impact parameters for 1 kg of Metatray insulating cable tray, supports, and accessories

Table 5-1. Environmental impact parameters defined in the UNE-EN 15804 Standard.

						Met	atray insi	ulating ca	ble tray,	supports,	and acce	ssories							
								Dec	clared Uni	it: 1 kg									
Parameter	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	С3	C4	D
GWP-total	kg CO ₂ eq	2,64E+00	6,02E-02	-1,32E-01	2,56E+00	6,51E-02	9,18E-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	1,50E- 02	5,62E- 02	2,30E- 01	-3,91E-01
GWP-fossil	kg CO ₂ eq	2,61E+00	6,02E-02	7,91E-02	2,75E+00	6,51E-02	6,77E-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	1,50E-02	5,61E-02	2,29E-01	-3,90E-01
GWP- biogenic	kg CO ₂ eq	2,63E-02	2,16E-06	-2,12E-01	-1,86E-01	2,30E-06	2,40E-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	5,21E-07	1,19E-05	3,97E-05	-3,83E-04
GWP-luluc	kg CO ₂ eq	1,77E-03	9,83E-07	6,38E-04	2,41E-03	1,14E-06	4,74E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	2,37E-07	2,86E-05	9,68E-06	-2,63E-04
ODP	kg CFC-11 eq	1,27E-06	1,41E-09	2,34E-09	1,28E-06	1,43E-09	2,87E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,41E-10	1,24E-10	7,14E-10	-2,80E-07
AP	mol H+ eq	1,40E-02	7,65E-05	3,34E-04	1,45E-02	2,60E-04	2,42E-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	1,86E-05	6,82E-05	1,16E-04	-1,17E-03
EP- freshwater	kg P eq	9,03E-05	3,84E-08	5,37E-06	9,57E-05	4,13E-08	2,07E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,26E-09	5,75E-07	5,48E-07	-1,38E-05
EP-marine	kg N eq	1,78E-03	1,70E-05	1,43E-04	1,94E-03	6,29E-05	4,02E-04	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	4,18E-06	2,35E-05	4,64E-05	-2,26E-04
EP-terrestrial	mol N eq	2,35E-02	1,85E-04	1,18E-03	2,49E-02	6,95E-04	4,84E-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	4,56E-05	2,46E-04	4,16E-04	-2,92E-03
POFP	kg NMVOC eq	9,58E-03	1,50E-04	3,71E-04	1,01E-02	2,82E-04	2,29E-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	3,65E-05	7,59E-05	1,56E-04	-1,48E-03
ADP- minerals&me tals ²	kg Sb eq	9,95E-07	1,62E-09	4,33E-08	1,04E-06	1,59E-09	1,35E-07	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	3,91E-10	4,04E-08	1,71E-08	1,33E-09
ADP-fossil ²	MJ, v.c.n.	6,42E+01	8,27E-01	1,30 E+00	6,63 E+01	8,59 E-01	1,48E+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	1,99 E-01	1,53 E-01	3,69 E-01	-1,06E+01
WDP ²	m³ eq	2,10E+00	2,64E-04	4,89E-02	2,15E+00	2,76E-04	4,14E-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	6,37E-05	3,23E-03	8,44E-03	-3,32E-01

GWP - total: Global warming potential; **GWP - fossil**: Global warming potential from fossil fuels; **GWP - biogenic**: Biogenic global warming potential; **GWP - luluc**: Global warming potential from land use and land-use change; **ODP**: Ozone depletion potential; **AP**: Acidification potential, accumulated exceedance; **EP-freshwater**: Eutrophication potential, fraction of nutrients reaching the freshwater compartment; **EP-marine**: Eutrophication potential, fraction of nutrients reaching the marine compartment; **EP-terrestrial**: Eutrophication potential, accumulated exceedance; **POFP**: Photochemical ozone formation potential; **ADP-minerals&metals**: Abiotic depletion potential for non-fossil resources; **APD-fossil**: Abiotic depletion potential for fossil resources; **WDP**: Water deprivation potential (user), weighted water deprivation consumption.



Table 5-2. Additional environmental impact parameters defined in the UNE-EN 15804 Standard.

						Metat	ray insula	_	-	pports, a	nd access	ories							
								Decla	red Unit:	1 kg									
Parameter																C4	D		
PM	Human health impact	6,65E-08	4,68E-09	3,47E-09	7,47E-08	3,68E-09	1,96E-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	8,98E-10	1,25E-09	1,37E-09	-6,09E-09
IRP ¹	kBq U235 eq	2,47E-01	7,94E-05	2,80E-03	2,50E-01	8,10E-05	3,56E-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	1,91E-05	4,73E-04	7,84E-04	-1,77E-02
ETP-fw ²	CTUe	1,23E+01	3,32E-02	6,05E-01	1,29E+01	3,06E-02	2,59E+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	7,18E-03	1,84E-01	1,53E+01	- 1,79E+00
HTP-c ²	CTUh	3,80E-09	3,99E-12	7,99E-11	3,89E-09	4,53E-12	8,40E-10	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	9,27E-13	2,46E-11	5,05E-11	-7,69E-10
HTP-nc ²	CTUh	8,95E-09	5,12E-10	9,21E-10	1,04E-08	4,06E-10	2,67E-09	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,00E-10	3,10E-10	6,98E-10	-8,61E-10
SQP ²	Pt	4,07E+00	1,05E-03	7,71E+00	1,18E+01	1,09E-03	1,34E+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	2,53E-04	2,65E-02	3,75E-01	-2,89E-01

PM: Potential incidence of diseases caused by particulate matter emissions; **IRP**: Human exposure efficiency relative to U-235 (Ionising Radiation Potential); **ETP-fw**: Comparative Toxic Unit Potential for freshwater ecosystems; **HTP-c**: Comparative Toxic Unit Potential for ecosystems – non-carcinogenic effects; **SQP**: Soil Quality Potential Index.

Note 1. This impact category primarily addresses the potential effects of low dose ionising radiation exposure on human health associated with the nuclear fuel cycle. It does not consider effects arising from potential nuclear accidents or occupational exposure due to the disposal of radioactive waste in underground facilities. The potential for ionising radiation in soil caused by radon emissions or by certain building materials is also not measured by this indicator.

Note 2. Results for this environmental impact indicator should be interpreted with caution, as the level of uncertainty is high and practical experience with this parameter remains limited.



Resource Use for 1 kg of Metatray insulating cable tray, supports, and accessories

Table 5-3. Parameters describing resource use.

						Met	atray insi	ulating ca	ble tray, clared Uni	• •	and acce	ssories							
Parameter	Unit	A1	A2	А3	A1-A3	Α4	A5	B1	B2	B3	B4	B5	В6	В7	C1	C2	СЗ	C4	D
PERE	MJ, v.c.n.	3,22E+00	2,03E-03	1,33E+00	4,55E+00	2,07E-03	8,83E-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	4,90E- 04	1,77E- 02	3,49E- 02	-4,71E- 01
PERM	MJ, v.c.n.	0,00E+00	0,00E+00	2,01E+00	2,01E+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
PERT	MJ, v.c.n.	3,22E+00	2,03E-03	3,34E+00	6,56E+00	2,07E-03	8,83E-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	4,90E-04	1,77E-02	3,49E-02	-4,71E-01
PENRE	MJ, v.c.n.	6,42E+01	8,27E-01	1,30E+00	6,64E+01	8,59E-01	1,48E+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	1,99E-01	1,53E-01	3,69E-01	- 1,06E+01
PENRM	MJ, v.c.n.	3,68E+01	0,00E+00	0,00E+00	3,68E+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
PENRT	MJ, v.c.n.	1,01E+02	8,27E-01	1,30E+00	1,03E+02	8,59E-01	1,48E+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	1,99E-01	1,53E-01	3,69E-01	- 1,06E+01
SM	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	0,00E+00	0,00E+00	0,00E+00
RSF	MJ, v.c.n.	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	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ, v.c.n.	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	0,00E+00	0,00E+00	0,00E+00
FW	m^3	6,98E-02	1,60E-05	1,49E-03	7,13E-02	1,66E-05	1,28E-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	3,86E-06	1,24E-04	3,21E-03	-8,89E-03

PERE: Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM: Use of renewable primary energy used as raw materials; PERRE: Use of non-renewable primary energy resources used as raw materials; PENRM: Use of non-renewable primary energy used as raw materials; PENRM: Use of non-renewable primary energy used as raw materials; PENRT: Total use of non-renewable primary energy; SM: Use of secondary materials; RSF: Use of renewable secondary fuels; RSF: Use of non-renewable secondary fuels; FW: Net use of fresh water resources.



Waste Categories for 1 kg of Metatray insulating cable tray, supports, and accessories

Table 5-4. Parameters describing waste generation.

	Metatray insulating cable tray, supports, and accessories																		
	Declared Unit: 1 kg																		
Parameter	rameter Unit A1 A2 A3 A1-A3 A4 A5 B1 B2 B3 B4 B5 B6 B7 C1 C2 C3 C4 D															D			
HWD	WD kg 1,37E-03 5,50E-06 9,18E-06 1,38E-03 5,58E-06 3,18E-04 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 1,33E-06 9,03E-07 8,51E-06 -2,96E-0															-2,96E-04			
NHWD	kg	1,92E-01	2,78E-05	3,21E-03	1,95E-01	2,78E-05	6,89E-02	0,00E+00	6,71E-06	1,02E-02	6,02E-01	8,11E-04							
RWD	kg	1,71E-04	4,99E-08	2,23E-06	1,73E-04	5,04E-08	2,75E-05	0,00E+00	1,20E-08	3,75E-07	5,71E-07	-1,48E-05							

HWD: Hazardous waste disposed; NHWD: Non-hazardous waste disposed; RWD: Radioactive waste disposed.

Output flows for 1 kg of Metatray insulating cable tray, supports, and accessories

Table 5-5. Parameters describing the output flows.

	Metatray insulating cable tray, supports, and accessories Declared Unit: 1 kg																		
Parameter	arameter Unit A1 A2 A3 A1-A3 A4 A5 B1 B2 B3 B4 B5 B6 B7 C1 C2 C3 C4															D			
CRU	kg	0,00E+00																	
MFR	MFR kg 0,00E+00 0,00E+00 2,47E-04 2,47E-04 0,00E+00 6,63E-02 0,00E+00 0,00E															0,00E+00			
MER	kg	0,00E+00																	
EEE	MJ	0,00E+00																	
EET	MJ	0,00E+00																	

CRU: Components for Reuse; MFR: Materials for Recycling; MER: Materials for Energy Recovery; EE: Exported Energy; EET: Exported Thermal Energy.

Information on Biogenic Carbon Content

Metatray insulating cable tray, Supports, and Accessories	Units	Results per declared unit
Product biogenic carbon content - KgC	Kg C	0
Packaging biogenic carbon content - KgC	Kg C	5,83E-02





6. Additional Environmental Information.

6.1. Other Indicators.

The production of the Metatray insulating cable tray, supports, and accessories does not generate any co-products.

6.2. Indoor Air Emissions.

The manufacturer declares that the Metatray insulating cable tray, supports, and accessories do not generate any indoor air emissions during their service life.

6.3. Soil and Water Emissions.

The manufacturer declares that the Metatray insulating cable tray, supports, and accessories do not generate any emissions to soil or water during their service life.

6.4. Biogenic Carbon Content.

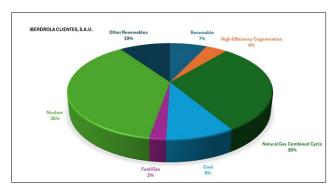
The manufacturer declares that the packaging of the Metatray insulating cable

tray, supports, and accessories does contain materials with biogenic content.

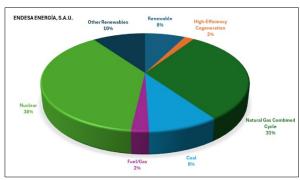
The biogenic carbon content of the packaging corresponds to the wood and paper used for palletizing the product for distribution.

6.5. Electricity Mix Used.

The electricity mix used for the characterization of electricity for the year 2024 includes the Spanish electricity suppliers Iberdrola Clientes S.A.U. and Endesa Energía, S.A.U., with information obtained from the 2024 Annual Report of the National Commission on Markets and Competition, which was available at the time of the study. The carbon footprint of the electricity mix is 0,277 kgCO₂e/kWh.



Electricity Mix of Iberdrola Clientes, S.A.U., period 2024.



Electricity Mix of Endesa Energía, S.A.U., period 2024.





References

- [1] General Instructions of the GlobalEPD Program, 3rd Revision, 09-10-2023.
- [2] UNE-EN 15804:2012+A2:2020/AC:2021 Standard. Sustainability in Construction. Environmental Product Declarations. Core Product Category Rules for Construction Products.
- [3] UNE-EN ISO 14025:2010 Standard. Environmental Labels and Declarations. Type III Environmental Declarations. Principles and Procedures (ISO 14025:2006).
- [4] UNE-EN ISO 14040:2006/A1:2021 Standard. Environmental Management. Life Cycle Assessment. Principles and Framework. Amendment 1 (ISO 14040:2006/Amd 1:2020).
- [5] UNE-EN ISO 14044:2006/A1:2021 Standard. Environmental Management. Life Cycle Assessment. Requirements and Guidelines. Amendment 2 (ISO 14044:2006/Amd 2:2020).
- [6] National Commission on Markets and Competition (CNMC). (n.d.). Annual Report.

- [7] United Nations, Department of Economic and Social Affairs (2015). Central Product Classification (CPC), Version 2.1. Statistical Papers, Series M, No. 77, Version 2.1. United Nations, New York.
- [8] Commission Recommendation (EU) 2021/2279 of 15 December 2021 on the use of common methods to measure and communicate the environmental performance of products and organizations throughout their life cycle (Published in OJEC on 30/12/2021).
- [9] Ecoinvent 3.11 Database (March 2025) and Environmental Footprint 3.1 (March 2023).
- [10] Environmental impact assessment methodologies applied using SimaPro 10.2.0.0.
- [11] Life Cycle Analysis Report for the Environmental Product Declarations of metatray® insulating tray system supports and accessories, CLH corrugated and RLH rigid halogen-free conduit system and RPVC conduits. Abaleo S.L. October 2025. V_01.

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Una declaración ambiental verificada

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