



# **ENVIRONMENTAL PRODUCT DECLARATION**

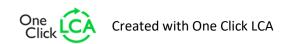
IN ACCORDANCE WITH EN 15804+A2 & ISO 14025 / ISO 21930

Cable Management - Tray - Pre-Galv
Unitrunk Group (incorporating Unitrunk Ltd & Vantrunk Ltd)



## EPD HUB, HUB-2097

Published on 06.10.2024, last updated on 06.10.2024, valid until 06.10.2029.









# **GENERAL INFORMATION**

#### **MANUFACTURER**

Manufacturer	Unitrunk Group (incorporating Unitrunk Ltd & Vantrunk Ltd)
Address	Unitrunk Ltd. Blaris Industrial Estate Altona Road Lisburn BT27 5QB
Contact details	epdunitrunk@unitrunk.co.uk
Website	https://unitrunk.co.uk/ & https://vantrunk.com/

## **EPD STANDARDS, SCOPE AND VERIFICATION**

Program operator	EPD Hub, hub@epdhub.com
Reference standard	EN 15804+A2:2019 and ISO 14025
PCR	EPD Hub Core PCR Version 1.1, 5 Dec 2023
Sector	Construction product
Category of EPD	Third party verified EPD
Scope of the EPD	Cradle to gate with options, A4-A5, and modules C1-C4, D
EPD author	Unitrunk Group (Incorporating Unitrunk Ltd & Vantrunk Ltd)
EPD verification	Independent verification of this EPD and data, according to ISO 14025:  ☐ Internal verification ☑ External verification
EPD verifier	Imane Uald lamkaddam, as an authorized verifier acting for EPD Hub Limited

The manufacturer has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programs may not be comparable. EPDs of construction products may not be comparable if

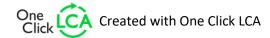
they do not comply with EN 15804 and if they are not compared in a building context.

#### **PRODUCT**

Product name	Cable Management - Tray - Pre- Galv
Additional labels	Steel framing, Tray, Support System, Cable Management System
Product reference	-
Place of production	United Kingdom
Period for data	2022
Averaging in EPD	No averaging
Variation in GWP-fossil for A1-A3	%

#### **ENVIRONMENTAL DATA SUMMARY**

Declared unit	1 kg
Declared unit mass	1 kg
GWP-fossil, A1-A3 (kgCO₂e)	2,39E+00
GWP-total, A1-A3 (kgCO₂e)	2,39E+00
Secondary material, inputs (%)	37.4
Secondary material, outputs (%)	83.7
Total energy use, A1-A3 (kWh)	8.31
Net freshwater use, A1-A3 (m³)	0.02







# PRODUCT AND MANUFACTURER

#### **ABOUT THE MANUFACTURER**

An internationally renowned manufacturer of engineered cable management products and associated support systems. The company has established itself as a leader in the development of proven and innovative cable management solutions.

#### PRODUCT DESCRIPTION

Cable Management System - Pre-Galv Tray

Further information can be found at https://unitrunk.co.uk/ & https://vantrunk.com/.

#### PRODUCT RAW MATERIAL MAIN COMPOSITION

Raw material category	Amount, mass %	Material origin
Metals	100	EU
Minerals	-	-
Fossil materials	-	-
Bio-based materials	-	-

#### **BIOGENIC CARBON CONTENT**

Product's biogenic carbon content at the factory gate

Biogenic carbon content in product, kg C	0
Biogenic carbon content in packaging, kg C	0

#### **FUNCTIONAL UNIT AND SERVICE LIFE**

Declared unit	1 kg
Mass per declared unit	1 kg
Functional unit	
Reference service life	

## **SUBSTANCES, REACH - VERY HIGH CONCERN**

The product does not contain any REACH SVHC substances in amounts greater than 0,1 % (1000 ppm).





# PRODUCT LIFE-CYCLE

#### **SYSTEM BOUNDARY**

This EPD covers the life-cycle modules listed in the following table.

Pro	duct st	tage		mbly age			U	se sta	ge			E	nd of l	ife sta	ge	Beyond the system boundaries			
A1	A2	А3	A4	A5	B1	B2	В3	В4	В5	В6	В7	C1	C2	С3	C4				
×	×	×	×	×	MND	MND	MND	MN	MN	MND	MND	×	×	×	×		×		
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction/ demolition	Transport	Waste processing	Disposal	Reuse	Recovery	Recycling	

Modules not declared = MND. Modules not relevant = MNR

### **MANUFACTURING AND PACKAGING (A1-A3)**

The environmental impacts considered for the product stage cover the manufacturing of raw materials used in the production as well as packaging materials and other ancillary materials. Also, fuels used by machines, and handling of waste formed in the production processes at the manufacturing facilities are included in this stage. The study also considers the material losses occurring during the manufacturing processes as well as losses during electricity transmission.

The steel materials are cut and formed to the required specification. Hydraulic oils and other lubrication oils are used during the process to reduce the wear of machines and to ensure stable cutting conditions. The products are packaged for shipping. The manufacturing process requires electricity and fuels for the different equipment. The steel waste produced at the plant is directed to recycling. The loss of material is considered. A securing strap is used as a packaging material for transporting the product from the factory gate.

## **TRANSPORT AND INSTALLATION (A4-A5)**

Transportation impacts occurred from final products delivery to construction site (A4) cover fuel direct exhaust emissions, environmental impacts of fuel production, as well as related infrastructure emissions.

The transportation distance is defined according to the PCR. Average distance of transportation from production plant to building site is assumed and the transportation method is assumed to be lorry. Vehicle capacity utilization volume factor is assumed to be 100% which means full load. In reality, it may vary but as role of transportation emissions in total results is small, the variety in load is assumed to be negligible. To be conservative, empty returns are included in this study as implemented through an average load factor in the Ecoinvent transport datapoints. Transportation does not cause losses as product are packaged properly.

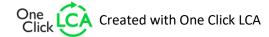
## **PRODUCT USE AND MAINTENANCE (B1-B7)**

This EPD does not cover the use phase.

Air, soil, and water impacts during the use phase have not been studied.

## PRODUCT END OF LIFE (C1-C4, D)

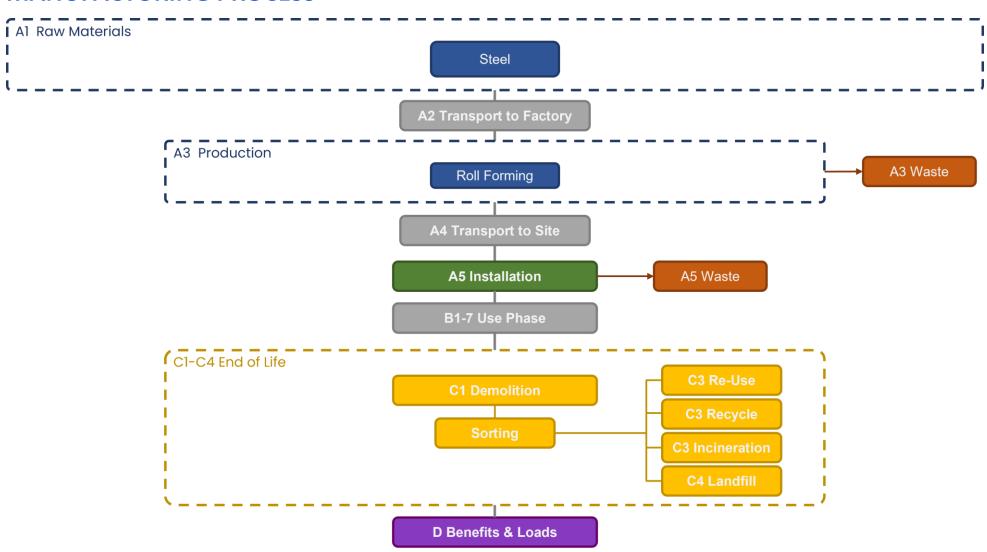
It is assumed that 100% of the waste is collected and transported to the waste treatment centre. Transportation distance to treatment is assumed as 50 km and the transportation method is assumed to be lorry (C2). Approximately 90% of steel is assumed to be recycled based on World Steel Association, 2020 (C3). It is assumed that the remaining 10% of steel is taken to landfill for final disposal (C4).







# **MANUFACTURING PROCESS**







# LIFE-CYCLE ASSESSMENT

#### **CUT-OFF CRITERIA**

The study does not exclude any modules or processes which are stated mandatory in the reference standard and the applied PCR. The study does not exclude any hazardous materials or substances. The study includes all major raw material and energy consumption. All inputs and outputs of the unit processes, for which data is available for, are included in the calculation. There is no neglected unit process more than 1% of total mass or energy flows. The module specific total neglected input and output flows also do not exceed 5% of energy usage or mass.

### **ALLOCATION, ESTIMATES AND ASSUMPTIONS**

Allocation is required if some material, energy, and waste data cannot be measured separately for the product under investigation. All allocations are done as per the reference standards and the applied PCR. In this study, allocation has been done in the following ways:

Data type	Allocation
Raw materials	No allocation
Packaging material	Not applicable
Ancillary materials	Allocated by mass or volume
Manufacturing energy and waste	Allocated by mass or volume

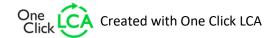
#### **AVERAGES AND VARIABILITY**

Type of average	No averaging
Averaging method	Not applicable
Variation in GWP-fossil for A1-A3	%

There is no average result considered in this study since this EPD refers to one specific product produced.

#### LCA SOFTWARE AND BIBLIOGRAPHY

This EPD has been created using One Click LCA EPD Generator. The LCA and EPD have been prepared according to the reference standards and ISO 14040/14044. The EPD Generator uses Ecoinvent v3.8, Plastics Europe, Federal LCA Commons and One Click LCA databases as sources of environmental data.





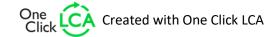


# **ENVIRONMENTAL IMPACT DATA**

## CORE ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

Impact category	Unit	A1	A2	A3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	B7	C1	C2	С3	C4	D
GWP – total <sup>1)</sup>	kg CO₂e	2,19E+00	1,35E-01	5,97E-02	2,39E+00	2,41E-02	2,38E-02	MND	2,38E-02	4,50E-03	1,97E-02	5,27E-04	-1,14E+00						
GWP – fossil	kg CO₂e	2,19E+00	1,35E-01	5,96E-02	2,39E+00	2,41E-02	2,37E-02	MND	2,37E-02	4,50E-03	1,97E-02	5,27E-04	-1,14E+00						
GWP – biogenic	kg CO₂e	0,00E+00	0,00E+00	8,13E-05	8,13E-05	9,73E-06	3,28E-05	MND	3,28E-05	0,00E+00	0,00E+00	0,00E+00	-2,13E-04						
GWP – LULUC	kg CO₂e	1,23E-03	9,40E-05	8,16E-05	1,41E-03	9,37E-06	3,27E-05	MND	3,27E-05	1,75E-06	2,58E-05	4,97E-07	-1,81E-04						
Ozone depletion pot.	kg CFC-11e	1,07E-07	2,73E-08	4,56E-09	1,39E-07	5,67E-09	1,63E-09	MND	1,63E-09	1,06E-09	2,44E-09	2,13E-10	-4,42E-08						
Acidification potential	mol H⁺e	9,26E-03	4,00E-03	1,97E-04	1,35E-02	7,85E-05	8,30E-05	MND	8,30E-05	1,46E-05	2,50E-04	4,95E-06	-4,66E-03						
EP-freshwater <sup>2)</sup>	kg Pe	1,02E-04	5,49E-07	1,24E-06	1,04E-04	2,04E-07	5,10E-07	MND	5,10E-07	3,81E-08	1,06E-06	5,52E-09	-4,69E-05						
EP-marine	kg Ne	1,83E-03	9,82E-04	4,15E-05	2,85E-03	1,73E-05	1,66E-05	MND	1,66E-05	3,22E-06	5,29E-05	1,71E-06	-9,55E-04						
EP-terrestrial	mol Ne	2,12E-02	1,09E-02	4,96E-04	3,26E-02	1,92E-04	2,00E-04	MND	2,00E-04	3,57E-05	6,11E-04	1,89E-05	-1,11E-02						
POCP ("smog") <sup>3</sup> )	kg NMVOCe	9,43E-03	2,84E-03	1,38E-04	1,24E-02	7,42E-05	4,97E-05	MND	4,97E-05	1,38E-05	1,68E-04	5,48E-06	-5,69E-03						
ADP-minerals & metals <sup>4</sup> )	kg Sbe	2,79E-05	2,01E-07	3,09E-07	2,85E-05	5,87E-08	2,72E-07	MND	2,72E-07	1,09E-08	2,65E-06	1,21E-09	-2,18E-05						
ADP-fossil resources	MJ	2,38E+01	1,74E+00	1,58E+00	2,72E+01	3,78E-01	6,23E-01	MND	6,23E-01	7,04E-02	2,67E-01	1,44E-02	-9,88E+00						
Water use <sup>5)</sup>	m³e depr.	8,77E-01	5,48E-03	1,36E-02	8,96E-01	1,69E-03	5,43E-03	MND	5,43E-03	3,14E-04	5,18E-03	4,58E-05	-2,06E-01						

<sup>1)</sup> GWP = Global Warming Potential; 2) EP = Eutrophication potential. Required characterisation method and data are in kg P-eq. Multiply by 3,07 to get PO4e; 3) POCP = Photochemical ozone formation; 4) ADP = Abiotic depletion potential; 5) EN 15804+A2 disclaimer for Abiotic depletion and Water use and optional indicators except Particulate matter and Ionizing radiation, human health. The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.







## ADDITIONAL (OPTIONAL) ENVIRONMENTAL IMPACT INDICATORS – EN 15804+A2, PEF

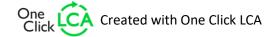
Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	С3	C4	D
Particulate matter	Incidence	1,58E-07	5,33E-09	1,02E-09	1,64E-07	2,74E-09	4,28E-10	MND	4,28E-10	5,11E-10	3,27E-09	9,97E-11	-7,56E-08						
Ionizing radiation <sup>6)</sup>	kBq U235e	1,56E-01	8,04E-03	5,40E-02	2,18E-01	1,81E-03	2,17E-02	MND	2,17E-02	3,37E-04	2,98E-03	6,53E-05	4,12E-02						
Ecotoxicity (freshwater)	CTUe	6,48E+01	1,16E+00	8,30E-01	6,68E+01	3,36E-01	3,81E-01	MND	3,81E-01	6,27E-02	1,21E+00	9,42E-03	-4,07E+01						
Human toxicity, cancer	CTUh	1,70E-08	7,76E-11	1,74E-11	1,71E-08	8,22E-12	1,02E-11	MND	1,02E-11	1,53E-12	3,71E-11	2,35E-13	9,68E-09						
Human tox. non-cancer	CTUh	5,08E-08	8,01E-10	5,57E-10	5,21E-08	3,23E-10	3,04E-10	MND	3,04E-10	6,03E-11	1,66E-09	6,16E-12	-2,73E-08						
SQP <sup>7)</sup>	-	7,33E+00	4,55E-01	5,81E-01	8,37E+00	4,34E-01	2,76E-01	MND	2,76E-01	8,10E-02	5,37E-01	3,09E-02	-3,57E+00						

<sup>6)</sup> EN 15804+A2 disclaimer for lonizing radiation, human health. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator; 7) SQP = Land use related impacts/soil quality.

#### **USE OF NATURAL RESOURCES**

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	С3	C4	D
Renew. PER as energy <sup>8)</sup>	MJ	2,43E+00	1,29E-02	3,49E-01	2,79E+00	4,25E-03	1,34E-01	MND	1,34E-01	7,93E-04	4,74E-02	1,25E-04	-8,31E-01						
Renew. PER as material	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						
Total use of renew. PER	MJ	2,43E+00	1,29E-02	3,49E-01	2,79E+00	4,25E-03	1,34E-01	MND	1,34E-01	7,93E-04	4,74E-02	1,25E-04	-8,31E-01						
Non-re. PER as energy	MJ	2,38E+01	1,74E+00	1,56E+00	2,71E+01	3,78E-01	6,23E-01	MND	6,23E-01	7,05E-02	2,67E-01	1,44E-02	-9,89E+00						
Non-re. PER as material	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						
Total use of non-re. PER	MJ	2,38E+01	1,74E+00	1,56E+00	2,71E+01	3,78E-01	6,23E-01	MND	6,23E-01	7,05E-02	2,67E-01	1,44E-02	-9,89E+00						
Secondary materials	kg	3,74E-01	7,57E-04	1,31E-04	3,75E-01	1,05E-04	6,07E-05	MND	6,07E-05	1,95E-05	2,97E-04	3,03E-06	6,59E-01						
Renew. secondary fuels	MJ	2,40E-04	2,46E-06	1,73E-06	2,44E-04	1,06E-06	4,67E-07	MND	4,67E-07	1,97E-07	1,55E-05	7,93E-08	-1,05E-04						
Non-ren. secondary fuels	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						
Use of net fresh water	m³	2,05E-02	1,25E-04	3,22E-04	2,10E-02	4,87E-05	1,29E-04	MND	1,29E-04	9,09E-06	1,57E-04	1,58E-05	-2,38E-03						

<sup>8)</sup> PER = Primary energy resources.







## **END OF LIFE – WASTE**

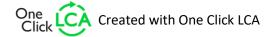
Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	B7	C1	C2	С3	C4	D
Hazardous waste	kg	9,28E-01	2,36E-03	3,40E-03	9,33E-01	4,97E-04	1,37E-03	MND	1,37E-03	9,28E-05	1,82E-03	0,00E+00	-3,81E-01						
Non-hazardous waste	kg	4,30E+00	2,16E-02	4,92E-02	4,37E+00	8,16E-03	2,08E-02	MND	2,08E-02	1,52E-03	5,79E-02	1,00E-01	-1,86E+00						
Radioactive waste	kg	5,98E-05	1,22E-05	1,37E-05	8,57E-05	2,54E-06	5,45E-06	MND	5,45E-06	4,75E-07	1,57E-06	0,00E+00	3,29E-06						

## **END OF LIFE – OUTPUT FLOWS**

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	СЗ	C4	D
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						
Materials for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	9,00E-01	0,00E+00	0,00E+00						
Materials for energy rec	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						
Exported energy	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	MND	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00						

## **ENVIRONMENTAL IMPACTS – EN 15804+A1, CML / ISO 21930**

Impact category	Unit	A1	A2	А3	A1-A3	A4	A5	B1	B2	В3	B4	B5	В6	B7	C1	C2	С3	C4	D
Global Warming Pot.	kg CO₂e	2,12E+00	1,34E-01	5,89E-02	2,31E+00	2,39E-02	2,35E-02	MND	2,35E-02	4,45E-03	1,94E-02	5,16E-04	-1,08E+00						
Ozone depletion Pot.	kg CFC-11e	7,89E-08	2,16E-08	3,97E-09	1,05E-07	4,49E-09	1,44E-09	MND	1,44E-09	8,38E-10	1,97E-09	1,69E-10	-4,95E-08						
Acidification	kg SO₂e	6,53E-03	3,20E-03	1,57E-04	9,89E-03	6,37E-05	6,65E-05	MND	6,65E-05	1,19E-05	2,02E-04	3,74E-06	-3,77E-03						
Eutrophication	kg PO <sub>4</sub> ³e	3,23E-03	3,60E-04	5,26E-05	3,64E-03	1,39E-05	2,22E-05	MND	2,22E-05	2,60E-06	6,67E-05	8,07E-07	-1,94E-03						
POCP ("smog")	kg C <sub>2</sub> H <sub>4</sub> e	8,92E-04	8,29E-05	7,68E-06	9,83E-04	2,93E-06	3,21E-06	MND	3,21E-06	5,47E-07	7,65E-06	1,57E-07	-6,50E-04						
ADP-elements	kg Sbe	2,05E-05	1,97E-07	3,09E-07	2,10E-05	5,70E-08	2,71E-07	MND	2,71E-07	1,06E-08	2,65E-06	1,19E-09	-2,17E-05						
ADP-fossil	MJ	2,25E+01	1,74E+00	1,58E+00	2,58E+01	3,78E-01	6,23E-01	MND	6,23E-01	7,04E-02	2,67E-01	1,44E-02	-9,88E+00						







## **VERIFICATION STATEMENT**

#### VERIFICATION PROCESS FOR THIS EPD

This EPD has been verified in accordance with ISO 14025 by an independent, third-party verifier by reviewing results, documents and compliancy with reference standard, ISO 14025 and ISO 14040/14044, following the process and checklists of the program operator for:

- This Environmental Product Declaration
- The Life-Cycle Assessment used in this EPD
- The digital background data for this EPD

Why does verification transparency matter? Read more online This EPD has been generated by One Click LCA EPD generator, which has been verified and approved by the EPD Hub.

#### THIRD-PARTY VERIFICATION STATEMENT

I hereby confirm that, following detailed examination, I have not established any relevant deviations by the studied Environmental Product Declaration (EPD), its LCA and project report, in terms of the data collected and used in the LCA calculations, the way the LCA-based calculations have been carried out, the presentation of environmental data in the EPD, and other additional environmental information, as present with respect to the procedural and methodological requirements in ISO 14025:2010 and reference standard.

I confirm that the company-specific data has been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity and legal compliance.

I confirm that I have sufficient knowledge and experience of construction products, this specific product category, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

I confirm my independence in my role as verifier; I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

Imane Uald lamkaddam, as an authorized verifier acting for EPD Hub Limited 06.10.2024



