ENVIRONMENTAL PRODUCT DECLARATION (EPD)

CommScope® NOVUX™- CSC (Compact Splice Closure) Product

At CommScope, we believe that corporate responsibility and sustainability means making decisions that have a positive impact on our people, planet and bottom line.

CommScope's leaders have adopted a philosophy on corporate responsibility that embraces our core company values and holds us accountable to produce smart solutions that respect our people and our planet:

Meaningful integrity is a decisive personal and company-wide commitment to enable faster, smarter and more sustainable solutions while demonstrating the utmost respect for our human and natural resources.

This philosophy finds form in three pillars:

- Environmental

- Social

- Governance

Our commitment enables us to invest wisely in our future. By utilizing innovative technology, intelligent engineering and energy-efficient designs, we're building sustainable networks that make our customers more agile while also preserving the natural ecosystems from which we source our raw materials.

ASTM INTERNATIONAL

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025, EN 15804 + A2. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc. Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM International, 100 barr harbor drive west conshohocken, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	General Program Instructions. Version 8.0. April 29, 2020
MANUFACTURER NAME AND ADDRESS	CommScope, Inc. 3642 E US Highway 70, Claremont, North Carolina 28610
DECLARATION NUMBER	EPD 1113
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope NOVUX™- Compact Splice Closure (CSC) Functional Unit = One piece of assembled Closure for a reference lifetime of 25 years
REFERENCE PCR AND VERSION NUMBER	PEP ecopassport Program: Part A PCR for Electrical, Electronic and HVAC-R Products and Part B PSR Specific Rules for Wire Cables and Accessories
DESCRIPTION OF PRODUCT APPLICATION/USE	Part of CommScope's next-generation modular FTTX ecosystem, designed for last-mile drop applications in broadband networks.
PRODUCT RSL DESCRIPTION (IF APPL.)	25 Years
MARKETS OF APPLICABILITY	Europe
DATE OF ISSUE	9 February, 2026
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product Specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Grave
YEAR(S) OF REPORTED PRIMARY DATA	2024
LCA SOFTWARE DATABASE(S) & VERSION NUMBER	SimaPro 10.2.0.0 & ecoinvent 3.11
LCIA METHODOLOGY & VERSION NUMBER	CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03
The sub-category PCR review was conducted by:	
This declaration was independently verified in accordance with ISO 14025: 2006. The "PEP ecopassport Program PCR for electrical, electronic and HVAC-R products", v4.0, 2021 based on EN 15804:2012 + A2:2019, serves as the core PCR. ☐ INTERNAL ☒EXTERNAL	Timothy S Brooke ASTM International
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and reference PCR by:	Thomas P. Gloria, Ph. D. Industrial Ecology Consultants

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building. This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of EN 15804:2012+A2:2019 are met. It should be noted that different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

General Information

Description of Company/Organization

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. Corporate responsibility and sustainability drive us to make decisions that benefit people, society, the planet and our bottom line. We enable faster, smarter and more sustainable solutions while respecting human and natural resources. Innovative technology, intelligent engineering and energy-efficient design help us meet our goals. CommScope builds sustainable networks that make our customers more agile, simultaneously helping to preserve the natural ecosystems from which we source components and materials.

Product Description

The CSC (Compact Splice Closure) from CommScope are compact, modular fiber splice closures designed for fast, flexible last-mile FTTX network deployment in residential, enterprise, and venue environments. They are part of the NOVUX ecosystem, optimized for new builds, expansions, and upgrades, and support both splice-only and connectorized applications. The closures feature advanced sealing, easy digital documentation access, and are built for sustainability and installation efficiency.

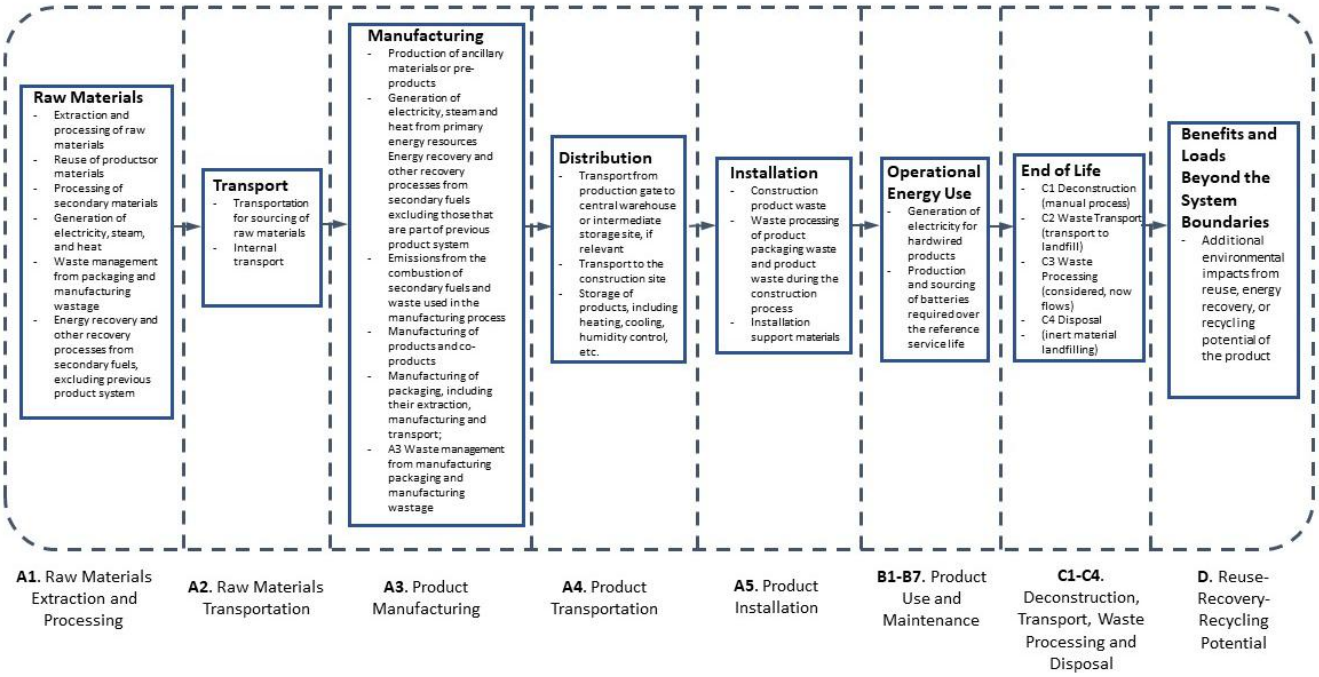
Product Type: Access terminal, non-hardened Closure

Product Characteristics: Modular and scalable design for various FTTX configurations, Compact and lightweight , Tool-less and fast installation with universal mounting, advanced Octopus gel seal for superior environmental protection (IP68), Digital QR code for instant access to guides and records, Reduced material use and paperless documentation for sustainability

This EPD covers the following CSC product variants:

Product detail	CSC 40	CSC 100	CSC 150	CSC 200
Splice/patch capacity	24/8	24/12	72/16	144/24
Splice-only capacity	48	48 or 72 (SC)	72 or 96	144/168
Drops*	4 SC or 8 LC	6 SC or 12 LC	8 SC or 16 LC	12 / 16 SC or 24 LC
Splitter quantity	Up to 2	Up to 2	Up to 3	Up to 3
Feeder ports	2	3	4	4
Feeder Cable size	6-14 mm (0.23-0.55 in)	6-14 mm (0.23-0.55 in)	6-18 mm (0.23-0.71 in)	6-18 mm (0.23-0.71 in)
L x W x H	215 x 117 x 77 mm (8.46 x 4.6 x 3.0 in)	284 x 117 x 77 mm (11.2 x 4.6 x 3.0 in)	357 x 185.4 x 115 mm (14.05 x 7.28 x 4.53 in)	388.2 x 222 x 116 mm (15.28 x 8.74 x 4.56 in)
Colors	Black or gray	Black or gray	Black or gray	Black or gray

Flow Diagram



Manufacturer Specific EPD

This product-specific EPD was developed based on the cradle-to-grave (modules A1-D) Life Cycle Assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, disposal. An impact assessment was completed for all closure product variants; the results shown correspond to the highest-volume variant, which is considered representative of the product family. Other product types are represented through the scaling factor table and can be independently calculated.

Application

The CSC closure is designed for the last mile drop applications and suited for new builds, expansions, and upgrades in residential, enterprise, or venue-based broadband networks.

Material Composition

The primary product and packaging materials are shown below as mass percentages, representing the composition of the product in its delivered state. The composition of the reference CSC Closure is as follows:

	Raw materials weight (g)	CSC-40	CSC-100	CSC-150	CSC-200
Product Materials	PP+GF25	55%	58%	55%	52%
	PC+ABS	8%	10%	13%	15%
	PC	2%	3%	-	-
	Silicone gel	9%	8%	9%	8%
	Silicone rubber	2%	2%	1%	1%
	Stainless steel	6%	9%	4%	3%
	Zinc alloy	3%	-	-	-
Packaging Materials	Cardboard	11%	8%	15%	15%
	Wooden pallet	5%	4%	4%	7%

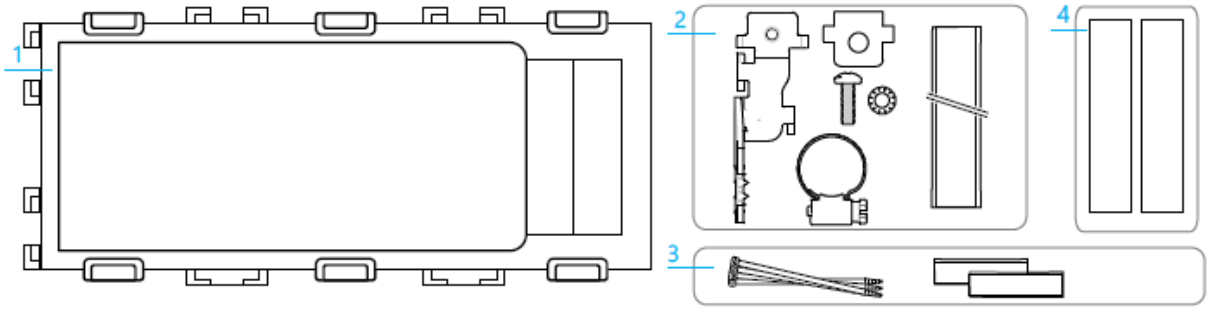
Technical Details

For the declared product of CSC100, the following technical data in the delivery status must be provided with reference to the test standard:

Technical Data	
General Specifications	
Product Type	Access terminal, non-hardened Closure
Product Series	NOVUX- CSC
Cable Ports Quantity	3 round ports + 6 multi-out ports (12 cables)
Cable Sealing Type	Compressed gel
Lock type	Hinged with latches
Closure Style	Single-ended
Colors	Black and Grey
Mounting types	Strand, pole, pedestal or Wall/flat surface
Network Area Type	Drop applications
Connectivity solutions	Splice and Patch
Splicing capacity, maximum	72 (high dense)
Dimensions	Height-284mm, Width-117mm & Depth-77mm
Product & Packaging weight	1.2 kg & 0.156 kg
Material Specifications	
Material Type	Impact-resistant polymer
Environmental Specifications	
Operating Temperature	-40°C to +65°C (-40°F to +149°F)
Water Resistance	IP68, 2m waterhead, 40 kPa (flash test valve at 5 psi)
Qualification Standards	IEC 60529, IEC 61753-1 Ed2 (2018), IEC 61300
Regulatory Compliance	
Quality Management	ISO 9001:2015
Compliance	RoHS, REACH

Properties of Declared Product as Shipped

CommScope CSC closures are delivered as a complete unit of Closure with organizer assembly, gel blocks, Cable termination kit, cable ties with silicon tape.



N°	Description	Qty
1	Closure with organizer	1
2	Feeder and branch cable strain relief kit (1 bracket,1 metal plate, 1 washer, 1 bolt, 1 hose clamp, 1 strip of silicone tape 2,5 cm / 1 Inch width)	3
3	4 cable ties with 2 strips of silicon tape 1,25 cm / 0.5 Inch	3
4	Octopus™ gel blocks	1x2

Methodological Framework

Functional Unit

The declaration refers to the functional unit of one assembled piece of CSC-100 Closure.

Name	Value	Unit
Functional Unit	1	Assembled piece
Mass	1.32	kg

System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Life Cycle Stage	Life Cycle Module	Module	X = Included/ Not Included
Product Stage	Raw Material Supply & Parts manufacturing	A1	X
	Transport	A2	X
	Assembly process	A3	X
Construction Process Stage	Transport from gate to the site	A4	X
	Installation process	A5	X
Use Stage	Use	B1	X
	Maintenance	B2	X
	Repair	B3	X
	Replacement	B4	X
	Refurbishment	B5	X
	Operational energy use	B6	X
	Operational water use	B7	X
End of Life Stage*	Deconstruction/ demolition	C1	X
	Transport	C2	X
	Waste processing	C3	X
	Disposal	C4	X
Benefits and Loads Beyond the System Boundaries	Reuse-Recovery-Recycling potential	D	X

*This includes provision of all materials, products and energy, packaging processing and its transport, as well as waste processing up to the end-of waste state or disposal of final residues.

Notes:

- There are no activities in the Modules B1-B7 and C1 as the values are “0”
- Module D is reported but excluded from the total life cycle results as it falls outside the system boundary

Reference Service Life

The reference service life of the closure is 25 years.

Allocation

Allocation was determined on a per piece basis for the system.

Cut-off Criteria

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected. The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For this, a documented assumption is permissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.
- If the LCI of a hazardous substance is approximated by modeling another substance, documentation will be provided.

This EPD is in compliance with the cut-off criteria. No processes were neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Data Sources

Primary data were collected for every process in the product system under the control of CommScope. Secondary data from the ecoinvent 3.11 database were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

Data Quality

The data sources used are complete and representative of global systems in terms of the geographic and technological coverage and are a recent vintage (i.e. less than ten years old). Primary data are based on direct information from manufacturers. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

Period Under Review

The period under review is the full calendar year of 2024.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15804+A2 Section 6.4.4.

Comparability and Benchmarking

A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to EN 15804 + A2 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be comparable. Full conformance with the PCR allows for EPD comparability only when all stages a product's life cycle have been considered. However, variations and deviations are possible.

Units

The LCA results within this EPD are reported in SI units.

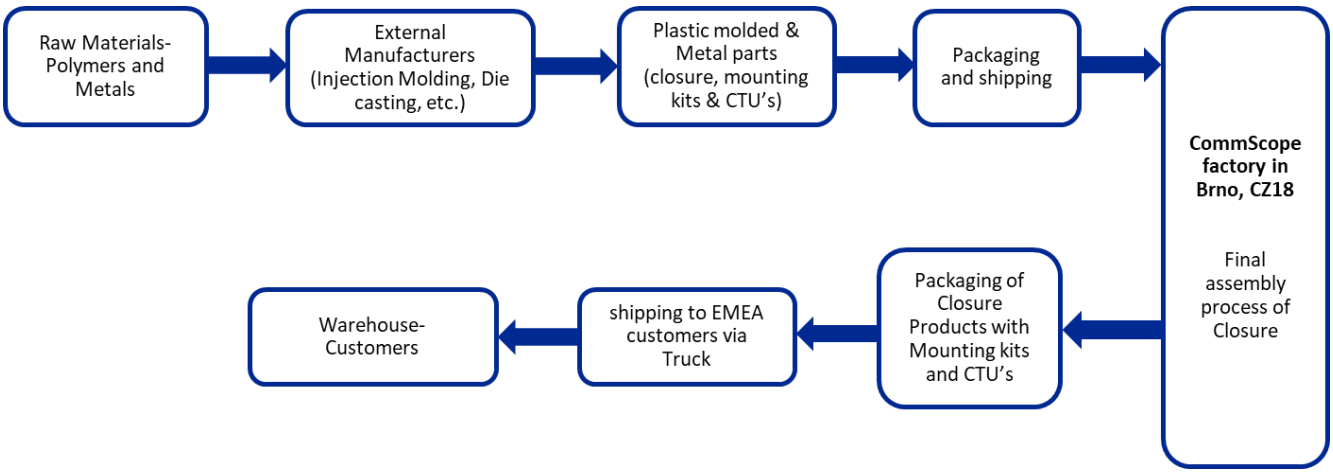
Additional Environmental Information

Background Data

For life cycle modeling of the considered products, SimaPro- LCA software tool, developed by PRé-Sustainability, is used. The ecoinvent database contains consistent and documented datasets which are available online. To ensure comparability of results in the LCA, data from the ecoinvent database were used for materials, energy, transportation, and waste treatment.

Manufacturing

The manufacturing process for this closure product begins with the sourcing of raw materials, primarily polymers and metals, which external manufacturers process through injection molding, die casting, and other methods to produce plastic and metal components. These individual parts are then packaged and shipped to the CommScope factory in Brno, Czech Republic, where the final assembly and packaging take place. Once assembled, the finished closures are packaged again and shipped to customer warehouses for distribution.



Transformation

Transport to Installation Site (A4)		
Description	**Value**	**Unit**
Transport type	Truck/ lorry > 32 metric ton	
Fuel type/ Liters of Fuel	Diesel, compliant with EURO5	
Liters of Fuel	35	l/100 km
Transport Distance (PCR assumption)	3500	km
Capacity Utilization	85	%
Weight of one assembled closure with packaging transported	1.32	kg

Product Installation

CommScope CSC closures are distributed and installed by trained technicians in accordance with applicable local and national standards. Installation involves only the management of packaging waste, as there is no energy consumption, material loss, or use of auxiliary materials during the process. The product is designed for complete manual installation without the need for power tools, resulting in negligible electricity use and no installation scrap.

Installation into the building (A5)		
Name	**Max**	**Unit**
Auxiliary materials	-	kg
Water consumption	-	m^3
Other resources	-	kg
Electricity consumption	-	kWh
Other energy carriers	-	MJ
Product loss per functional unit	0.00E+00	kg
Waste materials at construction site	0.00E+00	kg
Output substance (recycle)	0.00E+00	kg
Output substance (landfill)	0.00E+00	kg
Output substance (incineration)	0.00E+00	kg
Packaging waste (recycle)	0.08E+00	kg
Packaging waste (landfill)	0.05E+00	kg
Packaging waste (incineration)	0.03E+00	kg
Direct emissions to ambient air*, soil, and water	0.00E+00	kg CO_2
VOC emissions	-	kg

*CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	**Value**	**Unit**
Reference Service Life	25	years
Declared product properties (at the gate) and finishes, etc.	-	
Design application parameters (if instructed by the manufacturer), including the references to the appropriate practices and application codes	-	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	-	
Outdoor environment, (for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	-	
Indoor environment (for indoor applications), e.g. temperature, moisture, chemical exposure	-	
Usage conditions, e.g. frequency of use, mechanical exposure	-	
Maintenance e.g. required frequency, type and quality and replacement of components	-	

Product Use

No cleaning, maintenance, repair, replacement or refurbishment is required. There is no operational energy or water use.

Operational Energy Use (B6)		
Name	**Value**	**Unit**
Ancillary materials specified by material	-	kg
Net freshwater consumption	-	m^3
Electricity consumption	-	kWh
Power output of equipment	-	kWh
Characteristic performance	-	-
Further assumptions for scenario development	-	-

Disposal

The product can be manually disassembled to separate different individual parts or materials for disposal. Most of the parts are disposed through waste incineration with energy recovery or landfilled, in accordance with the PCR.

End of Life (C2-C4)		
Name	**Max**	**Unit**
Collected separately	0.12E+00	kg
Collected as mixed waste	1.05E+00	kg
Reuse	0.00E+00	kg
Recycling	0.09E+00	kg
Landfilling	0.55E+00	kg
Incineration with energy recovery	0.53E+00	kg
Energy conversion- Electricity	20	%
Energy conversion- Heat	50	%

Re-use Phase

Re-use of the product is not common. However, energy in the form of heat and electricity has been recovered from the waste processing of packaging materials at the Installation stage (A5) and waste processing of product materials at the end-of-life disposal stage (C2-C4). Energy recovery for the incineration of polymer materials were calculated according to Appendix D of the Part A PCR.

Energy recovery Potential (D)		
Name	**Max**	**Unit**
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of heat	0.24E+00	MJ
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of electricity	0.09E+00	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of heat	6.56E+00	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of electricity	2.62E+00	MJ
Total Net energy benefits of energy recovery in the form of heat	6.80E+00	MJ
Total Net energy benefits of energy recovery in the form of electricity	2.72E+00	MJ

LCA Results – Impact for the Product "CSC-100"

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

CML-IA baseline- Impact Assessment									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Abiotic depletion	kg Sb eq	9.38E-05	9.20E-05	1.37E-06	4.81E-08	3.45E-07	6.06E-08	1.97E-08	-5.07E-07
Abiotic depletion (fossil fuels)	MJ	1.11E+02	1.01E+02	7.00E+00	2.52E-01	1.76E+00	2.28E-01	1.47E-01	-5.74E+00
Global warming (GWP100a)	kg CO2 eq	8.27E+00	6.31E+00	4.85E-01	4.45E-02	1.22E-01	1.26E+00	4.90E-02	-5.14E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	1.07E-04	1.07E-04	8.50E-09	3.02E-10	2.14E-09	3.60E-10	1.30E-10	-2.76E-09
Photochemical oxidation	kg C2H4 eq	1.59E-03	1.48E-03	7.44E-05	8.63E-06	1.88E-05	4.36E-06	8.48E-06	-8.09E-05
Acidification	kg SO2 eq	2.39E-02	2.20E-02	1.22E-03	4.94E-05	3.08E-04	2.02E-04	3.94E-05	-2.13E-03
Eutrophication	kg PO4--- eq	2.23E-02	1.30E-02	3.34E-04	4.26E-04	8.43E-05	1.51E-04	8.24E-03	-1.23E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using TRACI 2.2 V1.00/ US-Canadian 2008 Methodology

TRACI 2.2- Impact Assessment									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Ozone depletion	kg CFC-11 eq	1.07E-04	1.07E-04	1.12E-08	3.99E-10	2.83E-09	4.13E-10	1.71E-10	-3.51E-09
Global warming	kg CO2 eq	8.16E+00	6.22E+00	4.80E-01	3.88E-02	1.21E-01	1.26E+00	4.56E-02	-5.11E-01
Smog	kg O3 eq	3.73E-01	3.20E-01	3.43E-02	1.39E-03	8.64E-03	7.90E-03	1.20E-03	-2.99E-02
Acidification	kg SO2 eq	2.75E-02	2.53E-02	1.43E-03	5.92E-05	3.60E-04	2.66E-04	5.06E-05	-2.21E-03
Freshwater eutrophication	kg P eq	2.81E-03	1.60E-03	2.00E-05	5.85E-05	5.05E-06	1.15E-05	1.12E-03	-1.51E-04
Marine eutrophication	kg N eq	3.81E-03	2.80E-03	2.93E-04	1.97E-05	7.39E-05	7.32E-05	5.42E-04	-2.65E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

EN 15804+A2 (adapted)- Impact Assessment									
Impact category	**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
Acidification	mol H+ eq	2.91E-02	2.67E-02	1.61E-03	6.53E-05	4.07E-04	2.85E-04	5.32E-05	-2.57E-03
Climate change	kg CO2 eq	8.29E+00	6.27E+00	4.88E-01	9.61E-02	1.23E-01	1.26E+00	5.11E-02	-5.80E-01
Climate change - Biogenic	kg CO2 eq	1.80E-04	-8.44E-02	2.98E-04	8.41E-02	7.51E-05	8.96E-05	5.09E-05	0.00E+00
Climate change - Fossil	kg CO2 eq	8.28E+00	6.35E+00	4.87E-01	1.75E-02	1.23E-01	1.26E+00	5.11E-02	-5.14E-01
Climate change - Land use and LU change	kg CO2 eq	7.90E-03	7.66E-03	1.75E-04	6.49E-06	4.41E-05	9.76E-06	4.59E-06	-1.09E-03
Ecotoxicity, freshwater	CTUe	2.14E+02	2.07E+02	8.36E-01	8.27E-01	2.11E-01	2.46E+00	1.98E+00	-1.15E+00
Ecotoxicity, freshwater - inorganics	CTUe	2.09E+02	2.02E+02	8.03E-01	8.25E-01	2.02E-01	2.46E+00	1.98E+00	-1.12E+00
Ecotoxicity, freshwater - organics	CTUe	4.80E+00	4.75E+00	3.33E-02	1.53E-03	8.38E-03	2.20E-03	1.13E-03	-2.40E-02
Particulate matter	Disease.	3.43E-07	2.77E-07	4.93E-08	1.81E-09	1.24E-08	1.50E-09	1.05E-09	-2.38E-08
Eutrophication, marine	kg N eq	7.47E-03	5.52E-03	5.48E-04	4.37E-05	1.38E-04	1.61E-04	1.06E-03	-5.27E-04
Eutrophication, freshwater	kg P eq	2.84E-03	2.79E-03	3.44E-05	1.64E-06	8.67E-06	4.13E-06	1.94E-06	-2.54E-04
Eutrophication, terrestrial	mol N eq	6.35E-02	5.42E-02	5.96E-03	2.43E-04	1.50E-03	1.38E-03	2.08E-04	-5.25E-03
Human toxicity, cancer	CTUh	7.20E-09	6.99E-09	7.96E-11	3.99E-12	2.01E-11	1.05E-10	4.20E-12	-5.89E-11
Human toxicity, cancer - inorganics	CTUh	1.48E-09	1.34E-09	3.42E-11	2.19E-12	8.63E-12	9.19E-11	3.09E-12	-3.92E-11
Human toxicity, cancer - organics	CTUh	5.72E-09	5.65E-09	4.54E-11	1.79E-12	1.14E-11	1.29E-11	1.11E-12	-1.97E-11
Human toxicity, non-cancer	CTUh	8.07E-08	7.04E-08	4.59E-09	2.97E-10	1.16E-09	3.67E-09	5.80E-10	-3.04E-09
Human toxicity, non-cancer - inorganics	CTUh	7.63E-08	6.65E-08	4.31E-09	2.42E-10	1.09E-09	3.66E-09	5.24E-10	-2.95E-09
Human toxicity, non-cancer - organics	CTUh	4.39E-09	3.92E-09	2.85E-10	5.54E-11	7.17E-11	6.93E-12	5.57E-11	-9.12E-11
Ionising radiation	kBq U-235 eq	8.14E-01	8.03E-01	7.99E-03	2.91E-04	2.01E-03	4.02E-04	1.40E-04	-7.20E-02
Land use	Pt	4.44E+01	3.48E+01	7.17E+00	2.70E-01	1.81E+00	6.79E-02	3.25E-01	-9.78E-01
Ozone depletion	kg CFC11 eq	9.57E-05	9.57E-05	1.07E-08	3.79E-10	2.69E-09	3.97E-10	1.62E-10	-3.33E-09
Photochemical ozone formation	kg NMVOC eq	2.63E-02	2.26E-02	2.56E-03	1.08E-04	6.44E-04	3.46E-04	8.09E-05	-1.55E-03
Resource use, fossils	MJ	1.25E+02	1.15E+02	7.13E+00	2.57E-01	1.80E+00	2.35E-01	1.50E-01	-6.89E+00
Resource use, minerals and metals	kg Sb eq	9.37E-05	9.19E-05	1.37E-06	4.81E-08	3.45E-07	6.06E-08	1.97E-08	-5.04E-07
Water use	m3 depriv.	1.55E+00	1.56E+00	3.24E-02	-6.19E-03	8.17E-03	4.07E-02	-8.15E-02	-7.09E-02

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

The results below contain the resource use throughout the life cycle of the product.

EN 15804 +A2- Resource Use										
Parameters		**Unit**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	1.26E+01	1.24E+01	1.10E-01	4.07E-03	2.77E-02	9.68E-03	2.68E-03	1.24E+01
PERM	Use of renewable primary energy resources used as raw materials	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	Total use of renewable primary energy resources	MJ	1.26E+01	1.24E+01	1.10E-01	4.07E-03	2.77E-02	9.68E-03	2.68E-03	1.24E+01
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	1.34E+02	1.23E+02	7.58E+00	2.73E-01	1.91E+00	2.55E-01	1.59E-01	1.23E+02
PENRM	Use of non-renewable primary energy resources used as raw materials	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	Total use of non-renewable primary energy resources	MJ	1.34E+02	1.23E+02	7.58E+00	2.73E-01	1.91E+00	2.55E-01	1.59E-01	1.23E+02
SM	Use of secondary material	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
RSF	Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	Net use of fresh water	m^3	1.58E+00	1.58E+00	3.25E-02	-6.19E-03	8.19E-03	4.04E-02	-8.15E-02	1.58E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

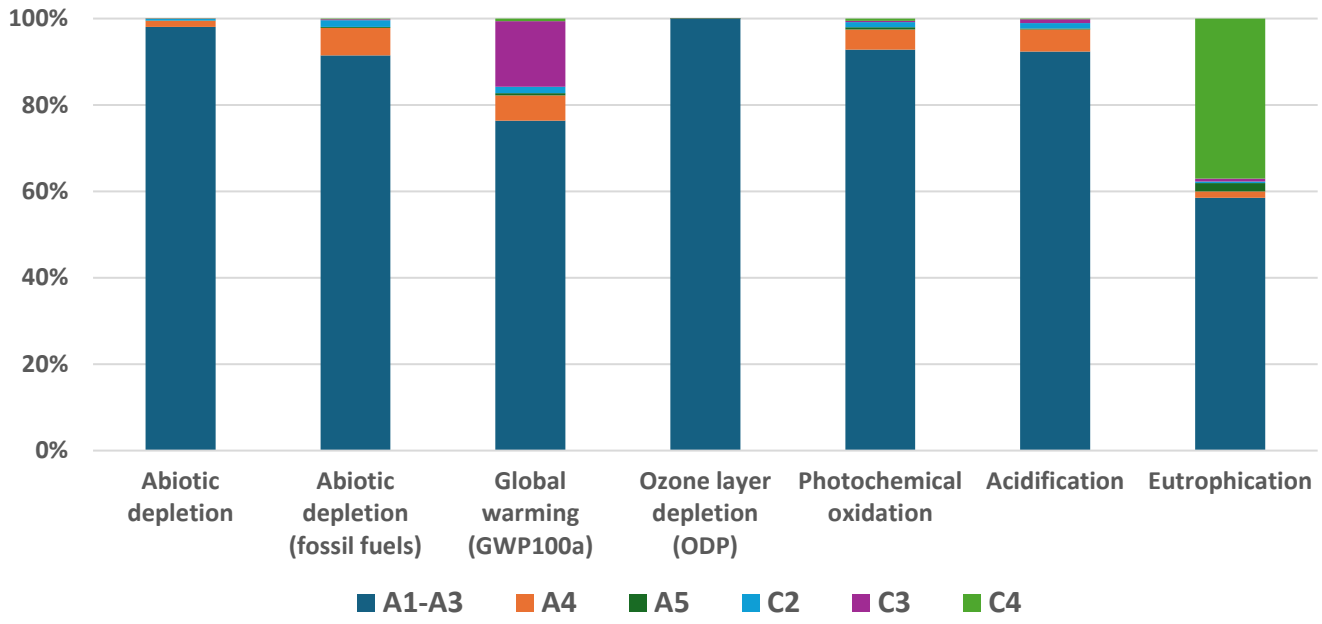
The results below contain the waste and output flows throughout the life cycle of the product.

EN 15804 +A2- Waste Categories and Output Flows										
	Parameters	**Units**	**Total**	**A1-A3**	**A4**	**A5**	**C2**	**C3**	**C4**	**D**
HWD	Hazardous waste disposed	kg	2.41E-02	1.29E-02	2.03E-04	2.46E-04	5.13E-05	0.010744	3.19E-06	1.29E-02
NHWD	Non-hazardous waste disposed	kg	1.87E+00	4.67E-01	6.15E-01	6.79E-02	1.55E-01	1.35E-02	5.49E-01	4.67E-01
RWD	Radioactive waste disposed	kg	2.04E-04	2.01E-04	1.96E-06	7.14E-08	4.95E-07	1.02E-07	3.42E-08	2.01E-04
CRU	Components for re-use	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
MFR	Materials for recycling	kg	9.30E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.30E-02	0.00E+00	0.00E+00
MER	Materials for energy recovery	kg	5.25E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.25E-01	0.00E+00	0.00E+00
EE	Exported energy	MJ	9.18E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.18E+00	0.00E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

LCA Interpretation – Maximum Impact for the Product "CSC-100"

The below LCA results based on CML method indicate that the product stage (A1–A3) is the dominant contributor across all impact categories, including global warming potential (GWP100a), accounting for approximately 75–80% of the total impact. Transport (A4) and construction (A5) stages add minor contributions, while end-of-life stages generally have limited influence. Notably, waste processing (C3) shows a significant share in global warming compared to other end-of-life phases, highlighting the importance of optimizing material recovery and treatment processes. Overall, efforts to reduce environmental impact should focus on raw material sourcing and manufacturing, complemented by improvements in waste management strategies.



Scaling Factor Tables

For EPDs with product groups, an impact assessment was completed for each product, and the impacts for the reference product were reported as representations of the product group. The rest of the products in the group are represented through scaling factor tables and can be independently calculated for the results based on CML method.

The table below presents the scaling factors for the CSC Closure product group. To determine the impact results for these products, multiply the respective scaling factors by the overall Impact results provided in the LCA results section. This approach ensures consistent and transparent calculation of environmental impacts across all products in the group.

Impact assessment method:	Product Types			
CML-IA baseline	CSC100	CSC40	CSC150	CSC200
Impact category	Scaling factor values			
Abiotic depletion	1	1.71	2.18	2.71
Abiotic depletion (fossil fuels)	1	0.87	2.29	2.97
Global warming (GWP100a)	1	0.89	2.28	2.91
Ozone layer depletion (ODP)	1	1.01	2.77	3.13
Photochemical oxidation	1	0.90	2.28	2.94
Acidification	1	0.94	2.21	2.86
Eutrophication	1	0.91	2.20	2.79

The scaling factors are provided for the total impact results covering the complete product life cycle, specifically for stages A1 to C4.

Additional Environmental Information

Environmental and Health During Manufacturing

CommScope values employees' health, safety and well-being. To this end, we maintain a robust company-wide environment, health and safety (EHS) management system. This is an integrated program based on the requirements of the International Standards of ISO45001 and ISO14001. To support this integrated EHS management system, CommScope utilizes a web-based platform, the BSI Entropy™ tool. This tool supports the management of our EHS processes and operations at the corporate and facility level. All EHS management system records (policies, procedures, method statements, health and safety risk assessments, environmental aspect/impact assessments, legal requirements, permits, training, internal and external audits, incidents and implemented CAPA, KPIs, and other records related to EHS) are maintained and managed in Entropy. In addition, 90% of CommScope manufacturing facilities are certified according to the ISO14001 and ISO45001 standards. Our vision and commitments are detailed in our EHS Policy.

CommScope understands the need to address the environmental impacts of its products and services. CommScope engages product development teams in designing innovative and more sustainable solutions across a product's life cycle—from design and manufacturing to product use and end of life.

CommScope is committed to demonstrating a high standard of global product compliance practices. Through this commitment, we actively monitor global environmental trends and emerging regulatory requirements that may affect our products, operations, supply chain, and customer base. We are committed to be compliant with all applicable environmental product related legal and other requirements. To achieve this, we have a global organization comprising environmental specialists, engineers, and product compliance experts who are constantly ensuring our compliance status is maintained. We manage our compliance using a cross-functional approach with our engineers, designers, quality organization, supply chain organization, and production.

CommScope is committed to upholding the human rights of its employees. To ensure our employees are treated with dignity and respect, we follow a well-established Code of Ethics and Business Conduct and Labor Policy that align with recognized standards and guidelines from the International Labor Organization, the United Nations Global Compact, the UN Universal Declaration of Human Rights, SA8000 and applicable laws.

Environmental and Health During Installation

There is no harmful emissive potential. No damage to health or impairment is expected under normal use corresponding to the intended use of the product.

Extraordinary Effects

Fire
No extraordinary effects to the environment can be anticipated during exposure to fire.

Water
Contains no substances that have any impact on water in case of flood.

Mechanical Destruction
No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Our Sustainability Report details CommScope's efforts to operate the business ethically and with integrity; protect the environment; maintain the health, safety and well-being of our workforce; and support the communities in which we operate. To learn more, view our comprehensive Sustainability Report at https://www.commscope.com/corporate-responsibility-and-sustainability/.

CommScope maintains a variety of certifications based on the widely accepted industry standards:

- Quality Management System certification (ISO9001/TL9000)
- Environmental Management System certification (ISO14001)
- Health and Safety Management System certification (ISO45001)

These certificates can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/philosophy/#certifications

Product sustainability certifications including EPDs and Health Product Declarations (HPDs) can be downloaded from our company website:

https://www.commscope.com/corporate-responsibility-and-sustainability/product-sustainability/certifications/

Further Information

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References

-	PCR	PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021.
-	PSR	PEP ecopassport Program Product Specific Rules specific for Wires, Cables and Accessories, v4.0, 2022
-	LCA tool & Databases	Simapro Craft version 10.2.0.0 of LCA software & ecoinvent 3.11, Industry data 2.0 databases.
-	ISO 14025	ISO 14025:2011-10, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.
-	ISO 14040	ISO 14040:2009-11, Environmental management — Life cycle assessment — Principles and framework.
-	ISO 14044	ISO 14044:2006-10, Environmental management — Life cycle assessment — Requirements and guidelines.
-	EN 15804 + A2	EN 15804:2012+A2:2019/AC:2021 - Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products
-	ASTM 2020	ASTM International General Program Instructions v8.0, April 29, 2020
-	Characterization Method	IPCC. 2021. Climate Change 2021. The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson, delmotte, V., et al] Cambridge University Press, Cambridge, UK and New York, NY, USA (http://www.ipcc.ch/report/ar6/wg1/).
-	Characterization Method	Hauschild M.Z., & Wenzel H. Environmental Assessment of Products. Springer, US, Vol. 2, 1998.
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-	Characterization Method	Jenkin M.E., & Hayman G.D. Photochemical ozone creation potentials for oxygenated volatile organic compounds: sensitivity to variations in kinetic and mechanistic parameters. Atmospheric Environment. 1999, 33 (8) pp. 1275-1293.
-	Characterization Method	WMO. 1999. Scientific Assessment of Ozone Depletion: 1998, World Meteorological Organization Global Ozone Research and Monitoring Project - Report No. 44, WMO, Geneva.
-	Characterization Method	Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers- version 1.2, January 2017.

Contact Information

Study Commissioner

For more information, visit our website at https://www.commscope.com/

- Contact customer support for product and technical questions at https://www.commscope.com/contact-us/
- Contact product compliance at productsustainability@commscope.com
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LCA Practitioner

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