Environmental Product Declaration Prysmian Low Voltage Thermoset Aluminum Building Cable

STABILOY® Brand UL Type XHHW-2 High Speed (HS), 600V
STABILOY® Brand USE-2/RHH/RHW-2, 600V
STABILOY® Brand Zephyr2000 UL Type RHH/RHW-2, 2000V
NUAL® Brand CSA Type RW90/RWU90 High Speed (HS), 600V
SunGen® Photovoltaic Wire CSA Type RPV90, 600V, 1000V, 2000V, Type RPVU90, 1000V, 2000V
STABILOY® Brand Mobile Home Feeder Cable UL Type USE-2/RHH/RHW-2, 600V







Prysmian's Low Voltage Thermoset Aluminum Building Cable line consists of UL Type XHHW-2, USE-2/RHH/RHW-2, PV and Canadian constructions such as RW90, RWU90 and RPV90, RPVU90. Our high-quality aluminum building wire is manufactured in the U.S. and delivers long-term, reliable performance in many building applications.

With 150 years of experience in over 50 countries around the globe, Prysmian is the world leader in the energy and telecom cable industry. Prysmian offers the broadest range of services and knowhow in the industry. Each year, Prysmian manufactures thousands of miles of underground and submarine cables and systems for power transmission and distribution, as well as medium and low voltage cables for the construction and infrastructure sectors. The company produces a comprehensive range of optical fibers, copper cables, connectivity systems for voice, video, data transmission for the telecommunication sector.

Prysmian is a leader in the industry and a pioneer in sustainability initiatives. The company has adopted a science-based approach and adheres to EPA standards to achieve net-zero emission targets for Scope 1 and 2 by 2035 and Scope 3 by 2050. Scan the QR code below to learn more about Prysmian's sustainability initiatives.



) prysmian

According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable

Industrial and Construction Cables

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025 and 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.	1	
ADDRESS, LOGO, AND WEBSITE		
GENERAL PROGRAM INSTRUCTIONS AND VERSION		
NUMBER		
NOMBER	Davis and Cassian	
	Prysmian Group	
MANUFACTURER NAME AND ADDRESS	4 Tesseneer Road	
	Highland Heights, KY 410	76
DECLARATION NUMBER		
		ermoset Aluminum Building Cable
		mit energy expressed for 1A over a distance of 1km during
DECLARED PRODUCT & FUNCTIONAL UNIT OF	40 years and a 100% use	rate, in accordance with the relevant standards shown in the
	product technical data she	eets.
DECLARED UNIT	Lifetime and use rate corr	espond to the application of energy distribution network as
		in Appendix 6.1. of the specific rules for wire, cables and
	accessories.	,
	Product Category Rules for	or Electrical, Electronic and HVAC-R Products, v4.0, 2021.
REFERENCE PCR AND VERSION NUMBER		n: Product Specific Rules for Wires, Cables and Accessories,
	v4.0, 2022.	,
DESCRIPTION OF PRODUCT APPLICATION/USE		oducts are primarily used in building applications.
PRODUCT REFERENCE SERVICE LIFE (RSL)	40 Years	, , , , , , , , , , , , , , , , , , ,
MARKETS OF APPLICABILITY	North America	
DATE OF ISSUE	June 13, 2025	
PERIOD OF VALIDITY	5 Years	
EPD TYPE	Product Specific	
DATASET VARIABILITY	N/A	
EPD SCOPE	Cradle-to-Grave	
YEAR(S) OF REPORTED PRIMARY DATA	2023	
LCA SOFTWARE & VERSION NUMBER	LCA for Experts v10.7.0.1	83
LCI DATABASE(S) & VERSION NUMBER	Sphera Managed Content	: & USLCI v2.0
LCIA METHODOLOGY & VERSION NUMBER	TRACI 2.1; CML 4.1	
The sub-category PCR review was conducted by:		
This declaration was independently verified in accordance wit	h ISO 14025: 2006. The	
"PEP ecopassport Program: Product Category Rules for Elec		
R Products, v4.0, 2021." based on EN 15804:2012+A2:2019,		
The supporting PSR is the "PEP ecopassport Program: Produ		
Wires, Cables and Accessories, v4.0, 2022."		
INTERNAL	EXTERNAL	
This life cycle assessment was conducted in accordance with		21 101:
reference PCR by:	To IT and the	Thomas Storie
This life cycle assessment was independently verified in acco	rdance with ISO 14044 and	Thomas P Gloria Ph D
the reference PCR by:	.aaoo waa loo labaa allu	Industrial Ecology Consultants
and reference receiving.		madothar 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

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.



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

General Information

Description of Company/Organization

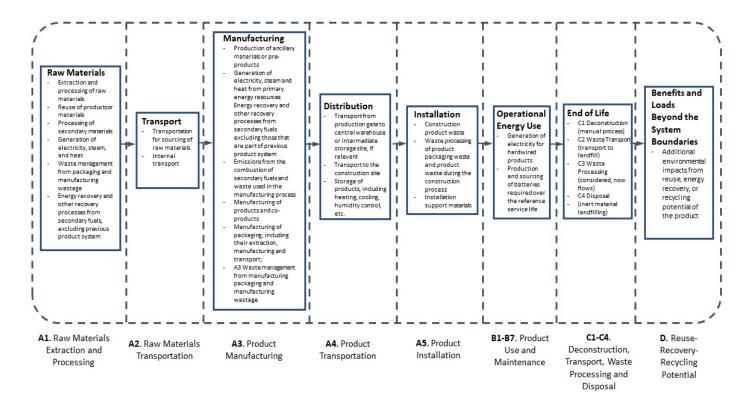
Prysmian, a global provider of cabling solutions, is leading the charge in the energy transition and digital transformation. With 150 years of experience in over 50 countries around the globe, the company's business strategy is a testament to its understanding of market dynamics, focusing on the development of resilient, high-performing, sustainable, and innovative cable solutions across the Transmission, Power Grid, Electrification, and Digital Solutions segments.

Product Description

Prysmian's Low Voltage Thermoset Aluminum Building Cables are made with STABILOY® Brand AA-8000 aluminum alloy conductors which are lightweight and provide increased flexibility for easy installation. The conductors are insulated with cross-linked polyethylene with varying levels of flame-retardant. All products have similar features:

- Rated 90°C wet or dry locations
- Oil Resistant PRI/PRII
- Gas and Oil Res GRI/GRII
- UV/sunlight-resistant, moisture-resistant and flame-retardant insulation
- Meets cold bend and cold impact tests at -40°C
- · Excellent electrical, thermal and physical properties
- · Resistant to crush, compression cuts and heat deformation
- High Speed (HS) cable features a specially designed XLPE insulation that allows for fast and easy cable pulls

Flow Diagram





According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

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, use, maintenance, disposal, and potential benefits and loads following the end of life disposal. Manufacturing data were gathered directly from company personnel. For EPDs with product groups, an impact assessment was completed for each product and the highest impacts were reported as representations of the product group. The rest of the products in each group are represented through scaling factor tables and can be independently calculated.

Application

Prysmian's STABILOY® Brand UL Type XHHW-2 High Speed (HS) cable is a general purpose building wire for use primarily in conduit or other recognized raceways as specified in the National Electric Code® (NEC®). Maximum operating temperature not to exceed 90°C in wet or dry locations. 600 V approved for use as specified by the NEC®.

Prysmian's STABILOY® Brand Type USE-2/RHH/RHW-2 cable is designed for use in residential, commercial and industrial building applications, and also in underground power distribution and network systems. The cable is also listed for RHH or RHW-2 and is suitable for installation on both sides of service-point. Triple-Rated (USE-2 or RHH or RHW-2 URD) conductors can be used as Type USE-2 direct-buried underground service entrance cable, but are also listed as RHH and RHW-2, making them suitable for interior and exterior applications in raceways for general purpose lighting and power circuits covered under the National Electrical Code®. 600 V approved for use as specified by the NEC®.

Prysmian's STABILOY® Brand Zephyr2000™ is the aluminum conductor solution for wind power generation, from the turbine to the stepup transformer. Installed in raceways in accordance with the requirements of the NEC® and may be used in cable trays when marked "FOR CT USE". Suitable for use in special applications such as wind power generation.

Prysmian's NUAL® Brand CSA Type RW90/RWU90 High Speed (HS) cable is in accordance with Canadian Electrical Code (CEC), Part 1. RW90/RWU90 cable can be used for wiring exposed to the weather, or used in raceways (except cable trays) in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC). For termination and splicing of aluminum conductors, refer to CEC Rule 12-118. Type RW90 XPLE is certified to be pulled into underground ducts. Standard RW90 XLPE is not approved for direct burial in the earth.

Prysmian's SunGen® Photovoltaic Wire UL Type PV cable is sunlight-resistant, direct burial photovoltaic wire rated at 90°C wet or dry, 1000 V or 2000 V, for interconnection wiring of grounded and ungrounded photovoltaic power systems described in NEC® Article 690. SunGen® Photovoltaic Wire CSA Type RPV90/RPVU90 cable is rated at 90°C wet or dry for interconnection wiring of grounded and ungrounded photovoltaic power systems described in CSA 22.2 No. 271.

Prysmian's STABILOY® Brand mobile home feeder cable is listed for direct burial applications and approved for use in raceways and underground installations in accordance with the requirements of the National Electrical Code®.

Material Composition

The primary product components and/or materials must be indicated as a percentage mass to enable the user of the EPD to understand the composition of the product in delivery status.

The average composition of a Prysmian Nual® Aluminum RW90 FPLX 500 kcmil, 4-Conductor cable is as follows:

	Percentage in mass (%)	
Material	Maximum	
Colorant	0.90%	
Conductor	74.07%	
Insulation	25.03%	
Jacketing	0.00%	
Total	100.00%	



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Technical Details

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

Technical Data General Specifications				
Conductor	Class B stranded aluminum alloy (8000 Series) per ASTM B800 and ASTM B801 or compact stranded SIW aluminum alloy (8000 Series) per ASTM B800, ASTM B801, and ASTM B836			
Insulation	Cross-linked polyethylene (XLPE) with varying flame retardant			



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Placing on the Market / Application Rules

The standards that can be applied for STABILOY® Brand UL Type XHHW-2 are:

- UL 44 Type XHHW-2
- UL 2556 Horizontal Burn, VW-1
- CT UL 1685
- National Electrical Code (NEC®)

The standards that can be applied for STABILOY® Brand UL Type USE-2/RHH/RHW-2 are:

- UL 854 Type USE-2
- UL 44 for Types RHH and RHW-2
- UL 2556 Horizontal Burn
- National Electrical Code (NEC®)

The standards that can be applied for STABILOY® Brand Zephyr2000 UL Type RHH/RHW-2 are:

- UL 44 for Types RHH and RHW-2
- UL 2556 Horizontal Burn, VW-1
- CT UL 1685
- National Electrical Code (NEC®)

The standards that can be applied for NUAL® Brand CSA Type RW90/RWU90 High Speed (HS) cable are:

- ASTM B800, ASTM B801, ASTM B836
- CSA C22.2 No. 38 Type RW90, RWU90
- Canadian Electrical Code (CEC)

The standards that can be applied for SunGen® Photovoltaic Wire UL Type PV are:

- ASTM B800, ASTM B801, ASTM B836
- UL 4703 Type PV
- UL 44 Type RHH or RHW-2
- UL 2556 Horizontal Burn, VW-1
- CT UL 1685, RHH/RHW-2
- National Electrical Code (NEC®)

The standards that can be applied for SunGen® Photovoltaic Wire CSA Type RPV90, RPVU90 are:

- ASTM B800, ASTM B801, ASTM B836
- CSA 22.2 No. 271
- CSA 22.2 No. 2556
- Canadian Electrical Code (CEC)

The standards that can be applied for STABILOY® Brand Mobile Home Feeder Cable UL Type USE-2/RHH/RHW-2 are

- ASTM B800, ASTM B801, ASTM B836
- UL 854 Type USE-2/RHH/RHW-2
- UL 44 for Types RHH and RHW-2
- UL 2556 Horizontal Burn
- National Electrical Code (NEC®)

All prodcuts meet:

- OSHA Acceptable
- RoHS Compliant



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Properties of Declared Product as Shipped

Prysmian Low Voltage Thermoset Aluminum Building Wire are cut on standard lengths, packed in no-returnable coils and delivered as a complete product.

Methodological Framework

Functional Unit

Name	Value	Unit
Functional unit	over a disand a 100 with the rodu Lifetime a application network a Appendix	mit energy expressed for 1A stance of 1km during 40 years 0% use rate, in accordance elevant standards shown in act technical data sheets. and use rate correspond to the on of energy distribution as defined in the table given in (6.1. of the specific rules for les and accessories.
Maximum Mass	4023	kg
Conversion factor to 1 kg	0.0002	-

System Boundary

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

Pro	Product Stage		Construction Process Stage		Use Stage			ı	End of	Life Sta	age*	Benefits and Loads Beyond the System Boundaries				
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	esn	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	В3	В4	B5	B6	В7	C1	C2	C3	C4	D
X	Χ	Χ	Х	Х	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	Х

Description of the System Boundary Stages Corresponding to the PCR

(X = Included; MND = Module Not Declared)

*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.



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Reference Service Life

The reference service life of a properly installed Prysmian 500 4C RWFPLX EG BRBWNGD 600M is 40 years.

Allocation

Allocation of manufacturing was determined by mass, in kilogram per kilometer.

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 that a documented assumption is admissible.

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 Prysmian. Secondary data from the Sphera 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). The data used for primary data are based on direct information sources of the 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 2023.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15805+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.



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Estimates and Assumptions

End of Life

In the End of Life phase, aluminum is assumed to have a 70% recycling rate in accordance with the PEP PCR.

Units

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

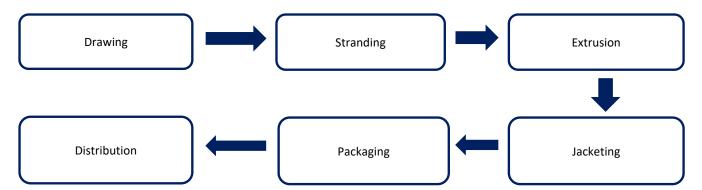
Additional Environmental Information

Background data

For life cycle modeling of the considered products, the LCA for Experts Software System for Life Cycle Engineering, developed by Sphera, is used. The Sphera database contains consistent and documented datasets which are documented online. To ensure comparability of results in the LCA, the basic data of the Sphera database were used for energy, transportation, and auxiliary materials.

Manufacturing

This study includes the impacts from six of Prysmian's manufacturing facilities which produce building wire. Conductor materials come either pre-drawn or go through a drawing process at the manufacturing site. The conductor then goes through a stranding process. Jacketing is extruded to size and applied to cables as appropriate along with any insulation or additional cable components. The cables are packaged on reels and sent to customer.





According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Packaging

All packaging is fully recyclable. The packaging material is composed primarily of a wooden or steel reel.

	Quantity (% By Weight)
Material	Maximum
Paper	0.00%
Metal	0.00%
Plastic	0.00%
Wood	100.00%
Total	100.00%

Transportation

Transport to Building Site (A4)		
Name	Max	Unit
Fuel type	Die	esel
Liters of fuel	38	l/100km
Transport distance	800	km
Capacity utilization (including empty runs)	85	%
Gross density of products transported	-	kg/m³
Weight of products transported	4023	kg
Volume of products transported	-	m ³

Product Installation

Prysmian has established guidelines in HSE for installation processes, beginning with the development of a HSE plan. The HSE plan will be developed with specific site Environmental and Health concerns that might arise during installation process. Management and

Installation into the building (A5)					
Name	Max	Unit			
Water consumption	-	m ³			
Other energy carriers	-	MJ			
Product loss per functional unit	2.01E+02	kg			
Waste materials at construction site	4.03E+03	kg			
Output substance (recycle)	2.09E+03	kg			
Output substance (landfill)	1.94E+03	kg			
Output substance (incineration)	0.00E+00	kg			
Packaging waste (recycle)	0.00E+00	kg			
Packaging waste (landfill)	3.12E+00	kg			
Packaging waste (incineration)	3.12E+00	kg			
Direct emissions to ambient air*, soil, and water	1.01E+01	kg CO ₂			
VOC emissions	-	kg			

^{*}CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	Value	Unit
Reference Service Life	40	years
Replacements	0	1



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Product Use

No cleaning, maintenance, repair, or refurbishment is required.

Operational energy use was modeled as use phase losses determined by the IEC 61156-5 standard. The maximum loss values for each cable category are detailed in the table below and were used in the B6 stage.

The operational energy use is presented under the assumption that the cable experiences a current of 1 Amp, but certain Prysmian products have an E3X coating that results in an energy saving effect at higher amperages. It is assumed that the use of E3X will reduce energy losses by 5%. The equation used to calculate the use phase is:

$$E = Z * l^2 * \Delta t$$

Where:

Z = linear resistivity of the cable in Ω /km, provided by Prysmian

L = current in A, assumption is 1 A

 Δt = use time in seconds, assumption is 40 years

Operational Energy Use (B6)					
Name	Max	Unit per RSL			
Water consumption (from tap, to sewer)	-	m ³			
Electricity consumption	41.88	kWh			
Other energy carriers	-	MJ			
Equipment output	-	kW			
Direct emissions to ambient air, soil, and water	-	kg			

Disposal

The product can be mechanically dissembled to separate the different materials. The majority of components are disposed of through recycling, incineration, or landfill, in accordance with the PCR.

Name	Max	Unit
Collected separately	2.09E+03	kg
Collected as mixed construction waste	1.94E+03	kg
Reuse	0.00E+00	kg
Recycling	2.09E+03	kg
Landfilling	1.94E+03	kg
Incineration with energy recovery	0.00E+00	kg
Removals of biogenic carbon	-	kg



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Re-use Phase

Re-use of the product is not common, but a large amount of the metals in this material will be recycled.

Re-Use, recovery, And/Or Recycling Potential (D)						
Name	Max	Unit				
Net energy benefit from energy recovery from waste treatment declared as exported energy in C3 (R>0.6)	0.00	MJ				
Net energy benefit from thermal energy due to treatment of waste declared as exported energy in C4 (R<0.6)	0.00	MJ				
Net energy benefit from material flow declared in C3 for energy recovery	0.00	MJ				
Process and conversion efficiencies	-					
Further assumptions for scenario development (e.g. further processing technologies, assumptions on correction factors);	These products are almost entirely metals and the recycling rate from the PCR and the benefit for module D is calculated by the benefit of recycling product at the end of life.					

System Boundary

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

Pro	duct St	tage		struction ess Stage			Use	e Stage	ı			!	End of	Life Sta	age*	Benefits and Loads Beyond the System Boundaries
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling potential
A1	A2	A3	A4	A5									C4	D		
X	Х	Х	Х	Χ	X	Χ	Х	Х	Χ	Х	Х	Χ	Х	Х	X	X

Description of the System Boundary Stages Corresponding to the PCR

(X = Included; MND = Module Not Declared)

^{*}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.



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

LCA Results - Maximum Impact - Results for Nual® Aluminum RW90 FPLX 500 kcmil, 4-Conductor Cable

Results shown below were calculated using TRACI 2.1 Methodology.

TRACI 2.1 Ir	mpact Assessment										
Parameter	Parameter	Unit	A1-A3	A4	A5	В6	C2	C3	C4	D	Total
GWP	Global warming potential	kg CO ₂ -Eq.	2.52E+04	2.99E+02	1.73E+03	1.89E+01	1.59E-03	1.20E+03	1.33E+01	-2.17E+04	2.85E+04
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	2.65E-05	1.13E-08	1.34E-06	2.20E-12	6.00E-14	9.82E-13	7.18E-13	4.05E-09	2.79E-05
AP Air	Acidification potential for air emissions	kg SO ₂ -Eq.	1.72E+02	1.79E+00	1.05E+01	2.40E-02	9.52E-06	3.53E-01	8.28E-02	-6.64E+01	1.85E+02
EP	Eutrophication potential	kg N-Eq.	3.50E+00	9.94E-02	3.27E-01	1.99E-03	5.28E-07	9.89E-03	3.68E-03	-3.95E+00	3.94E+00
SP	Smog formation potential	kg O ₃ -Eq.	1.64E+03	4.94E+01	1.32E+02	3.49E-01	2.62E-04	2.40E+00	1.55E+00	-1.26E+03	1.82E+03
FFD	Fossil Fuel Depletion	MJ-surplus	2.68E+04	5.28E+02	2.04E+03	2.03E+01	2.80E-03	5.83E+01	2.26E+01	-1.87E+04	2.94E+04

^{*}Stages B1 through B7 and C1 through C4 have been considered and only those with non-zero values have been reported

Results shown below were calculated using CML 2001 - April 2013 Methodology.

CML 4.1 li	mpact Assessment										
Parameter	Parameter	Unit	A1-A3	A4	A5	В6	C2	C3	C4	D	Total
GWP	Global warming potential	kg CO ₂ -Eq.	2.51E+04	2.99E+02	1.74E+03	1.91E+01	1.59E-03	1.20E+03	1.34E+01	-2.17E+04	2.83E+04
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	2.60E-05	1.13E-08	1.31E-06	1.30E-10	5.99E-14	5.81E-11	4.25E-11	-1.76E-07	2.73E-05
AP Air	Acidification potential for air emissions	kg SO₂-Eq.	1.82E+02	1.47E+00	1.07E+01	2.30E-02	7.82E-06	2.95E-01	7.72E-02	-6.12E+01	1.94E+02
EP	Eutrophication potential	kg(PO₄)³-Eq.	9.25E+00	2.62E-01	8.71E-01	2.54E-03	1.39E-06	2.57E-02	8.68E-03	-7.59E+00	1.04E+01
POCP	Formation potential of tropospheric ozone photochemical oxidants	kg ethane-Eq.	1.12E+01	1.72E-01	9.09E-01	1.99E-03	9.14E-07	9.96E-03	6.25E-03	-5.05E+00	1.23E+01
ADPE	Abiotic depletion potential for non- fossil resources	kg Sb-Eq.	4.12E-03	1.24E-07	2.07E-04	2.31E-06	6.59E-13	9.49E-06	4.13E-06	-9.12E-03	4.35E-03
ADPF	Abiotic depletion potential for fossil resources	MJ	3.28E+05	3.81E+03	2.14E+04	2.30E+02	2.02E-02	5.52E+02	1.71E+02	-2.05E+05	3.54E+05

^{*}Stages B1 through B7 and C1 through C4 have been considered and only those with non-zero values have been reported



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable

Industrial and Construction Cables

Results below contain the resource use throughout the life cycle of the product.

EN15804+A	2										
Parameter	Parameter	Unit	A1-A3	A4	A5	В6	C2	C3	C4	D	Total
GWP-total	Climate change - total	kg CO ₂ -Eq.	2.54E+04	3.00E+02	1.65E+03	1.93E+01	1.59E-03	1.20E+03	1.35E+01	-2.18E+04	2.85E+04
GWP-fossil	Climate change - fossil	kg CO ₂ -Eq.	2.54E+04	3.00E+02	1.64E+03	1.93E+01	1.59E-03	1.20E+03	1.34E+01	-2.18E+04	2.85E+04
GWP-biogenic	Climate change - biogenic	kg CO ₂ -Eq.	-1.01E+01	0.00E+00	1.01E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
GWP-luluc	Climate change - land use and land use change	kg CO₂-Eq.	3.76E-01	0.00E+00	3.83E-02	1.96E-03	0.00E+00	3.13E-02	8.03E-02	-4.22E+00	5.28E-01
ODP	Ozone depletion	kg CFC-11 Eq.	2.63E-05	7.77E-09	1.32E-06	1.10E-10	4.13E-14	4.93E-11	3.61E-11	-1.49E-07	2.76E-05
AP	Acidification	mol H ⁺ Eq.	2.08E+02	1.99E+00	1.25E+01	2.60E-02	1.06E-05	1.94E-01	9.51E-02	-7.42E+01	2.23E+02
EP-freshwater	Eutrophication aquatic freshwater	kg P-Eq.	1.16E-02	8.54E-05	4.88E-03	1.07E-05	4.53E-10	1.86E-05	3.05E-05	-3.01E-02	1.67E-02
EP-marine	Eutrophication aquatic marine	kg N Eq.	2.63E+01	7.65E-01	2.07E+00	5.76E-03	4.06E-06	4.14E-02	2.45E-02	-2.01E+01	2.92E+01
EP-terrestrial	Eutrophication terrestrial	mol N Eq.	2.87E+02	8.34E+00	2.23E+01	6.22E-02	4.43E-05	8.88E-01	2.70E-01	-2.19E+02	3.19E+02
POCP	Photochemical ozone formation	NMVOC Eq.	8.84E+01	2.25E+00	6.86E+00	1.68E-02	1.20E-05	1.15E-01	7.49E-02	-5.62E+01	9.77E+01
ADP- minerals&metals	Depletion of abiotic resources - minerals and metals	kg Sb Eq.	7.17E-04	0.00E+00	3.54E-05	1.85E-06	0.00E+00	3.41E-06	8.68E-07	-2.08E-03	7.59E-04
ADP-fossil	Depletion of abiotic resources - fossil fuels	mol N Eq.	3.40E+05	3.84E+03	2.20E+04	3.20E+02	2.04E-02	5.81E+02	1.77E+02	-2.50E+05	3.67E+05
WDP	Water use	m ³ world Eq. deprived	4.70E+02	0.00E+00	2.29E+01	3.80E+00	0.00E+00	9.39E+01	1.53E+00	-3.65E+03	5.92E+02
PM	Particulate matter emissions	Disease incidence	3.09E-03	7.84E-06	1.61E-04	2.41E-07	4.16E-11	2.19E-06	1.19E-06	-1.62E-03	3.27E-03
IRP	Ionizing radiation, human health	kBq U235 Eq.	2.12E+02	6.75E-17	8.18E+00	2.64E+00	3.59E-22	8.85E-01	2.14E-01	-1.68E+03	2.24E+02
ETP-fw	Ecotoxicity (freshwater)	CTUe	1.53E+05	5.57E+03	1.50E+04	5.13E+01	2.96E-02	5.72E+02	1.18E+02	-5.93E+04	1.74E+05
HTP-c	Human toxicity, cancer effects	CTUh	2.60E-06	8.09E-08	2.38E-07	2.55E-09	4.29E-13	1.52E-08	2.40E-09	-1.67E-05	2.94E-06
HTP-nc	Human toxicity, non-cancer effects	CTUh	1.58E-04	5.50E-06	1.53E-05	4.34E-08	2.92E-11	1.36E-06	9.28E-08	-1.92E-04	1.80E-04
SQP	Land use related impacts/Soil quality	dimensionless	1.15E+03	0.00E+00	3.12E+01	3.55E+01	0.00E+00	5.22E+01	4.86E+01	-5.20E+04	1.32E+03

Results below contain the resource use throughout the life cycle of the product.

Resource U	lse										
Parameter	Parameter	Unit	A1-A3	A4	A5	В6	C2	C3	C4	D	Total
RPR _E	Renewable primary energy as energy carrier	MJ	2.22E+03	0.00E+00	5.32E+01	8.26E+01	0.00E+00	3.68E+01	3.08E+01	-1.64E+05	2.42E+03
RPR _M	Renewable primary energy resources as material utilization	MJ	0.00E+00	0.00E+00							
NRPR _E	Nonrenewable primary energy as energy carrier	MJ	3.40E+05	3.84E+03	2.20E+04	3.20E+02	2.04E-02	5.81E+02	1.77E+02	-2.50E+05	3.67E+05
NRPR _M	Nonrenewable primary energy as material utilization	MJ	0.00E+00	0.00E+00							
SM	Use of secondary material	kg	0.00E+00	0.00E+00							
RSF	Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00							
NRSF	Use of nonrenewable secondary fuels	MJ	0.00E+00	0.00E+00							
RE	Energy recovered from disposed waste	MJ	0.00E+00	0.00E+00							
FW	Use of net fresh water	m ³	1.40E+01	0.00E+00	6.64E-01	1.16E-01	0.00E+00	2.20E+00	4.68E-02	-1.12E+02	1.70E+01

^{*}All use phase and disposal stages have been considered and only those with non-zero values have been reported



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

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Results below contain the output flows and wastes throughout the life cycle of the product.

Output Flov	ws and Waste Categorie	S									
Parameter	Parameter	Unit	A1-A3	A4	A5	В6	C2	C3	C4	D	Total
HWD	Hazardous waste disposed	kg	4.09E-05	0.00E+00	1.93E-06	1.86E-07	0.00E+00	9.90E-08	4.40E-08	-1.78E-04	4.32E-05
NHWD	Non-hazardous waste disposed	kg	3.19E+02	0.00E+00	1.78E+02	9.18E-02	0.00E+00	1.05E+02	8.95E+02	-9.87E+03	1.50E+03
HLRW	High-level radioactive waste	kg	2.56E+00	0.00E+00	1.13E-01	3.20E-02	0.00E+00	1.02E-02	1.85E-03	-1.65E+01	2.72E+00
ILLRW	Intermediate- and low-level radioactive waste	kg	0.00E+00	0.00E+00							
CRU	Components for re-use	kg	0.00E+00	0.00E+00							
MR	Materials for recycling	kg	2.09E+03	0.00E+00	1.04E+02	0.00E+00	0.00E+00	0.00E+00	2.09E+03	0.00E+00	4.28E+03
MER	Materials for energy recovery	kg	0.00E+00	0.00E+00							
EE	Recovered energy exported from system	MJ	0.00E+00	0.00E+00							

^{*}All use phase and disposal stages have been considered and only those with non-zero values have been reported

Biogenic Carbon Contents														
Parameter	Unit	A1-A3	A4	A5	В6	C2	C3	C4	D	Total				
Biogenic Carbon Content in Product	kg C	0.00E+00												
Biogenic Carbon Content in Accompanying Packaging	kg C	3.71E+01	0.00E+00	3.71E+01										

^{*}All use phase and disposal stages have been considered and only those with non-zero values have been reported

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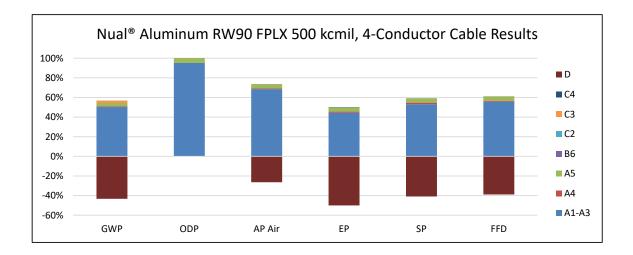
According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

LCA Interpretation - Maximum Impact

The production life cycle stage (A1-A3) dominates the impacts across all impact categories. This is due to the upstream production of raw materials used in the product, along with energy use in the manufacturing of the product. The D reuse, recovery, and recycling potential stage shows as a negative value and accounts for the benefit of energy recovery during incineration, and the benefit from recycling material at the end-of-life for a product. Though the energy use (B6) phase does not have a large impact, this is due to the functional unit of 1 AMP, lifetime use may be larger than 1 AMP.



System Boundary

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

Pro	duct St	age		struction ess Stage			Use	e Stage	ı			ı	End of	Life Sta	age*	Benefits and Loads Beyond the System Boundaries
Raw material supply	Transport	Manufacturing	Transport from gate to the site	Construction/ installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction /demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling potential
A1	A2	A3	A4	A5	B1	B2	В3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	Х	Χ	X	Χ	X	X	Х	X	Χ	X	X	Χ	Χ	X	X	X

Description of the System Boundary Stages Corresponding to the PCR (X = Included; MND = Module Not Declared)

^{*}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.



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Scaling Factor Tables

For EPDs with product groups, an impact assessment was completed for each product and the highest impacts were reported as representations of the product group. The rest of the products in each group are represented through scaling factor tables and can be independently calculated. Please see page 10 for a guide on the system boundary and the life cycle phases used below.

To use these scaling factors, you will need the result from the tables in section 'LCA Results - Maximum Impact' and the chosen cable you are investigating. The scaling factors multiplied by the results above will be the results for that particular cable. For example, if you wanted to know how much A1-A3 GWP impact came from the product listed below, you would follow the equation below. This equation can be used for all steps of the life cycle, where the scaling factor from each stage is multiplied by the results shown in this study in order to get any of the results.

Scaling Factor * Results = Final GWP

STABILOY® AL XHHW-2 6
AWG

1.34E-02 * 2.52E+04 = 3.39E+02

This equation can be used for all steps of the life cycle, where the scaling factor from each stage is multiplied by the results shown in this study in order to get any of the results. The scaling factors below are split into A1-A3 factors, which have each main impact category distinct from the others. This is due to the fact that the manufacturing site and the raw materials used in each cable can vary tremendously in these category. The A4-D categories are mostly based on weight of the cable, the individual impact category does not have as much variability and can be assumed to be the same. C2-D will all have the same scaling factor, and therefore, the scaling factor for these can be used in the equation above for any individual category. These scaling factors can be used for each methodology, including the TRACI 2.1 impacts, CML 4.1 impacts and EN15804+A2 impacts, from the results section.

To adjust for more operational energy use than one amp, you will need the result from the tables in section 'LCA Results - Maximum Impact', the chosen cable you are investigating, and your expected amperage over 40 years. The scaling factors multiplied by the results above will be the operational use results for that particular cable, multiplied by the squared amperage. For example, if you wanted to know how much 100 Amps would increase the B6 GWP for the product below, you would follow the equation below:

Scaling Factor * Results * Amperagesquared = Final GWP

STABILOY® AL XHHW-2 6
AWG

2.20E+00 * 1.89E+01 * 100² = 4.16E+05

				A1 - A3					45	BC.	63.0
	GWP	ODP	AP	EP	PCOP	FFD/ADP	Resources	A4	A5	В6	C2 - D
STABILOY® AL XHHW-2 6 AWG	1.34E-02	1.23E-02	1.26E-02	1.34E-02	1.30E-02	1.66E-02	1.67E-02	1.47E-02	1.47E-02	2.20E+00	1.47E-02
STABILOY® AL XHHW-2 4 AWG	2.12E-02	1.96E-02	1.99E-02	2.08E-02	2.03E-02	2.46E-02	2.46E-02	2.23E-02	2.23E-02	1.38E+00	2.23E-02
STABILOY® AL XHHW-2 2 AWG	3.13E-02	3.12E-02	3.12E-02	3.14E-02	3.13E-02	3.15E-02	3.15E-02	3.13E-02	3.13E-02	1.00E+00	3.13E-02
STABILOY® AL XHHW-2 1 AWG	4.02E-02	3.93E-02	3.95E-02	4.00E-02	3.97E-02	4.19E-02	4.19E-02	4.07E-02	4.07E-02	7.38E-01	4.07E-02
STABILOY® AL XHHW-2 1/0 AWG	4.94E-02	4.96E-02	4.95E-02	4.95E-02	4.94E-02	4.82E-02	4.82E-02	4.87E-02	4.87E-02	6.81E-01	4.87E-02
STABILOY® AL XHHW-2 CT 1/0 AWG	5.26E-02	4.96E-02	5.00E-02	5.32E-02	5.04E-02	5.39E-02	5.40E-02	5.05E-02	5.05E-02	6.81E-01	5.05E-02
STABILOY® AL XHHW-2 CT 2/0 AWG	6.50E-02	6.25E-02	6.28E-02	6.58E-02	6.29E-02	6.37E-02	6.38E-02	6.14E-02	6.14E-02	5.10E-01	6.14E-02



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

				A1 - A3							
	GWP	ODP	AP	EP	РСОР	FFD/ADP	Resources	A4	A5	В6	C2 - D
STABILOY® AL XHHW-2 3/0 AWG	7.67E-02	7.88E-02	7.82E-02	7.71E-02	7.73E-02	6.93E-02	6.91E-02	7.29E-02	7.29E-02	3.69E-01	7.29E-02
STABILOY® AL XHHW-2 CT 3/0 AWG	8.07E-02	7.88E-02	7.89E-02	8.16E-02	7.85E-02	7.63E-02	7.63E-02	7.51E-02	7.51E-02	3.69E-01	7.51E-02
STABILOY® AL XHHW-2 4/0 AWG	9.57E-02	9.94E-02	9.84E-02	9.63E-02	1.01E-01	8.29E-02	8.26E-02	9.01E-02	9.01E-02	2.91E-01	9.01E-02
STABILOY® AL XHHW-2 CT 4/0 AWG	1.00E-01	9.94E-02	9.92E-02	1.02E-01	9.83E-02	9.14E-02	9.14E-02	9.22E-02	9.22E-02	2.91E-01	9.22E-02
STABILOY® AL XHHW-2 250 kcmil	1.15E-01	1.17E-01	1.17E-01	1.15E-01	1.15E-01	1.04E-01	1.03E-01	1.09E-01	1.09E-01	2.79E-01	1.09E-01
STABILOY® AL XHHW-2 CT 250 kcmil	1.20E-01	1.17E-01	1.17E-01	1.21E-01	1.17E-01	1.12E-01	1.12E-01	1.11E-01	1.11E-01	2.79E-01	1.11E-01
STABILOY® AL XHHW-2 300 kcmil	1.39E-01	1.44E-01	1.43E-01	1.40E-01	1.40E-01	1.20E-01	1.19E-01	1.29E-01	1.29E-01	2.35E-01	1.29E-01
STABILOY® AL XHHW-2 CT 300 kcmil	1.45E-01	1.44E-01	1.44E-01	1.47E-01	1.42E-01	1.32E-01	1.32E-01	1.33E-01	1.33E-01	2.35E-01	1.33E-01
STABILOY® AL XHHW-2 350 kcmil	1.58E-01	1.65E-01	1.63E-01	1.59E-01	1.64E-01	1.34E-01	1.33E-01	1.47E-01	1.47E-01	2.00E-01	1.47E-01
STABILOY® AL XHHW-2 CT 350 kcmil	1.65E-01	1.65E-01	1.64E-01	1.67E-01	1.62E-01	1.47E-01	1.47E-01	1.50E-01	1.50E-01	2.00E-01	1.50E-01
STABILOY® AL XHHW-2 400 kcmil	1.73E-01	1.80E-01	1.78E-01	1.74E-01	1.75E-01	1.48E-01	1.48E-01	1.61E-01	1.61E-01	1.74E-01	1.61E-01
STABILOY® AL XHHW-2 CT 400 kcmil	1.81E-01	1.80E-01	1.79E-01	1.83E-01	1.77E-01	1.63E-01	1.63E-01	1.66E-01	1.66E-01	1.74E-01	1.66E-01
STABILOY® AL XHHW-2 500 kcmil	2.28E-01	2.40E-01	2.37E-01	2.30E-01	2.32E-01	1.88E-01	1.87E-01	2.08E-01	2.08E-01	1.38E-01	2.08E-01
STABILOY® AL XHHW-2 CT 500 kcmil	2.38E-01	2.40E-01	2.39E-01	2.41E-01	2.35E-01	2.05E-01	2.05E-01	2.14E-01	2.14E-01	1.38E-01	2.14E-01
STABILOY® AL XHHW-2 600 kcmil	2.76E-01	2.88E-01	2.85E-01	2.78E-01	2.80E-01	2.32E-01	2.31E-01	2.54E-01	2.54E-01	1.14E-01	2.54E-01
STABILOY® AL XHHW-2 CT 600 kcmil	2.86E-01	2.88E-01	2.87E-01	2.90E-01	2.83E-01	2.50E-01	2.49E-01	2.59E-01	2.59E-01	1.14E-01	2.59E-01
STABILOY® AL XHHW-2 700 kcmil	3.20E-01	3.37E-01	3.32E-01	3.23E-01	3.25E-01	2.65E-01	2.64E-01	2.93E-01	2.93E-01	1.01E-01	2.93E-01
STABILOY® AL XHHW-2 750 kcmil	3.56E-01	3.61E-01	3.58E-01	3.60E-01	3.52E-01	3.06E-01	3.06E-01	3.21E-01	3.21E-01	9.47E-02	3.21E-01
STABILOY® AL XHHW-2 CT 750 kcmil	3.56E-01	3.61E-01	3.58E-01	3.60E-01	3.52E-01	3.06E-01	3.06E-01	3.21E-01	3.21E-01	9.47E-02	3.21E-01
STABILOY® AL XHHW-2 900 kcmil	4.06E-01	4.29E-01	4.23E-01	4.09E-01	4.13E-01	3.28E-01	3.27E-01	3.68E-01	3.68E-01	7.85E-02	3.68E-01
STABILOY® AL XHHW-2 1000 kcmil	4.43E-01	4.71E-01	4.64E-01	4.47E-01	4.52E-01	3.51E-01	3.49E-01	3.99E-01	3.99E-01	6.89E-02	3.99E-01
STABILOY® AL XHHW-2 FPLX 2 AWG/3C	9.53E-02	9.36E-02	9.39E-02	9.48E-02	9.85E-02	9.80E-02	9.80E-02	9.67E-02	9.67E-02	1.00E+00	9.67E-02
STABILOY® AL XHHW-2 FPLX 1 AWG/3C + 4 AWG GRD	1.47E-01	1.43E-01	1.44E-01	1.46E-01	1.45E-01	1.56E-01	1.56E-01	1.50E-01	1.50E-01	7.38E-01	1.50E-01
STABILOY® AL XHHW-2 FPLX 1/0 AWG/3C + 4 AWG GRD	1.78E-01	1.75E-01	1.76E-01	1.77E-01	1.76E-01	1.81E-01	1.81E-01	1.78E-01	1.78E-01	6.81E-01	1.78E-01
STABILOY® AL XHHW-2 FPLX 2/0 AWG/3C + 4 AWG GRD	2.16E-01	2.15E-01	2.15E-01	2.15E-01	2.14E-01	2.10E-01	2.10E-01	2.11E-01	2.11E-01	5.10E-01	2.11E-01
STABILOY® AL XHHW-2 FPLX 250 kcmil/4C	4.79E-01	4.88E-01	4.86E-01	4.78E-01	4.79E-01	4.36E-01	4.35E-01	4.56E-01	4.56E-01	2.79E-01	4.56E-01
STABILOY® AL USE-2/RHH/RHW-2 6 AWG	1.45E-02	1.23E-02	1.28E-02	1.43E-02	1.37E-02	2.08E-02	2.10E-02	1.72E-02	1.72E-02	2.20E+00	1.72E-02
STABILOY® AL USE-2/RHH/RHW-2 4 AWG	2.18E-02	1.96E-02	2.01E-02	2.16E-02	2.09E-02	2.78E-02	2.79E-02	2.42E-02	2.42E-02	1.38E+00	2.42E-02
STABILOY® AL USE-2/RHH/RHW-2 2 AWG	3.24E-02	3.12E-02	3.15E-02	3.24E-02	3.20E-02	3.61E-02	3.62E-02	3.41E-02	3.41E-02	1.00E+00	3.41E-02



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

industrial and Constituction Co				A1 - A3							
								A4	A5	В6	C2 - D
	GWP	ODP	AP	EP	PCOP	FFD/ADP	Resources				
STABILOY® AL USE-2/RHH/RHW-2, 1 AWG	4.18E-02	3.93E-02	3.99E-02	4.17E-02	4.10E-02	4.96E-02	4.98E-02	4.55E-02	4.55E-02	7.38E-01	4.55E-02
STABILOY® AL USE-2/RHH/RHW-2,	5.17E-02	4.96E-02	5.01E-02	5.17E-02	5.11E-02	5.83E-02	5.84E-02	5.48E-02	5.48E-02	6.81E-01	5.48E-02
1/0 AWG STABILOY® AL USE-2/RHH/RHW-2	6.40E-02	6.25E-02	6.29E-02	6.40E-02	6.35E-02	6.83E-02	6.84E-02	6.59E-02	6.59E-02	5.10E-01	6.59E-02
2/0 AWG STABILOY® AL USE-2/RHH/RHW-2											
4/0 AWG	9.85E-02	9.94E-02	9.92E-02	9.89E-02	9.89E-02	9.54E-02	9.54E-02	9.70E-02	9.70E-02	2.91E-01	9.70E-02
STABILOY® AL USE-2/RHH/RHW-2 250 kcmil	1.17E-01	1.17E-01	1.17E-01	1.18E-01	1.18E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	2.79E-01	1.17E-01
STABILOY® AL USE-2/RHH/RHW-2 350 kcmil	1.62E-01	1.65E-01	1.64E-01	1.63E-01	1.63E-01	1.52E-01	1.52E-01	1.57E-01	1.57E-01	2.00E-01	1.57E-01
STABILOY® AL USE-2/RHH/RHW-2	2.33E-01	2.40E-01	2.39E-01	2.35E-01	2.36E-01	2.09E-01	2.08E-01	2.21E-01	2.21E-01	1.38E-01	2.21E-01
500 kcmil STABILOY® AL USE-2/RHH/RHW-2	2.332 01	2.402 01	2.552 01	2.552 01	2.502 01	2.032 01	2.002 01	2.212 01	2.212 01	1.502 01	2.212 01
750 kcmil	3.48E-01	3.61E-01	3.57E-01	3.50E-01	3.52E-01	3.07E-01	3.06E-01	3.28E-01	3.28E-01	9.47E-02	3.28E-01
STABILOY® AL Mobile Home Feeder 2 AWG/3C + 4 AWG	1.25E-01	1.18E-01	1.19E-01	1.24E-01	1.22E-01	1.45E-01	1.46E-01	1.34E-01	1.34E-01	1.00E+00	1.34E-01
STABILOY® AL Mobile Home Feeder 2 AWG/2C + 4 AWG + 6 AWG	1.06E-01	9.81E-02	9.99E-02	1.05E-01	1.03E-01	1.28E-01	1.28E-01	1.15E-01	1.15E-01	1.00E+00	1.15E-01
STABILOY® AL Mobile Home Feeder 4/0 AWG/3C + 2/0 AWG	3.76E-01	3.75E-01	3.75E-01	3.76E-01	3.75E-01	3.75E-01	3.75E-01	3.75E-01	3.75E-01	2.91E-01	3.75E-01
STABILOY® AL Mobile Home Feeder 4/0 AWG/2C + 2/0 AWG + 4 AWG	2.96E-01	2.92E-01	2.93E-01	2.95E-01	2.94E-01	3.02E-01	3.03E-01	2.98E-01	2.98E-01	2.91E-01	2.98E-01
NUAL® AL RW90 6 AWG	1.50E-02	1.23E-02	1.30E-02	1.48E-02	1.52E-02	2.44E-02	2.46E-02	1.99E-02	1.99E-02	2.20E+00	1.99E-02
NUAL® AL RW90 4 AWG	2.24E-02	1.96E-02	2.04E-02	2.22E-02	2.17E-02	3.23E-02	3.25E-02	2.74E-02	2.74E-02	1.38E+00	2.74E-02
NUAL® AL RW90 3 AWG	2.75E-02	2.47E-02	2.54E-02	2.73E-02	2.77E-02	3.74E-02	3.76E-02	3.26E-02	3.26E-02	1.00E+00	3.26E-02
NUAL® AL RW90 2 AWG	3.39E-02	3.12E-02	3.19E-02	3.38E-02	3.33E-02	4.37E-02	4.39E-02	3.89E-02	3.89E-02	1.00E+00	3.89E-02
NUAL® AL RW90 1 AWG	4.36E-02	3.93E-02	4.04E-02	4.30E-02	4.23E-02	5.79E-02	5.81E-02	5.06E-02	5.06E-02	7.38E-01	5.06E-02
NUAL® AL RW90 1/0 AWG	5.31E-02	4.96E-02	5.05E-02	5.29E-02	5.23E-02	6.60E-02	6.62E-02	5.96E-02	5.96E-02	6.81E-01	5.96E-02
NUAL® AL RW90 2/0 AWG	6.56E-02	6.25E-02	6.34E-02	6.55E-02	6.93E-02	7.69E-02	7.71E-02	7.21E-02	7.21E-02	5.10E-01	7.21E-02
NUAL® AL RW90 3/0 AWG	8.13E-02	7.88E-02	7.95E-02	8.13E-02	8.61E-02	9.10E-02	9.11E-02	8.72E-02	8.72E-02	3.69E-01	8.72E-02
NUAL® AL RW90 4/0 AWG	1.01E-01	9.94E-02	9.98E-02	1.01E-01	1.01E-01	1.08E-01	1.08E-01	1.05E-01	1.05E-01	2.91E-01	1.05E-01
NUAL® AL RW90 250 kcmil	1.21E-01	1.17E-01	1.18E-01	1.21E-01	1.25E-01	1.33E-01	1.33E-01	1.28E-01	1.28E-01	2.79E-01	1.28E-01
NUAL® AL RW90 300 kcmil NUAL® AL RW90 350 kcmil	1.46E-01 1.66E-01	1.44E-01 1.65E-01	1.45E-01 1.65E-01	1.46E-01 1.66E-01	1.46E-01 1.66E-01	1.55E-01 1.73E-01	1.55E-01 1.74E-01	1.51E-01 1.70E-01	1.51E-01 1.70E-01	2.35E-01 2.00E-01	1.51E-01 1.70E-01
NUAL® AL RW90 400 kcmil	1.82E-01	1.80E-01	1.80E-01	1.82E-01	1.82E-01	1.73E-01 1.91E-01	1.91E-01	1.87E-01	1.70E-01 1.87E-01	1.74E-01	1.87E-01
NUAL® AL RW90 500 kcmil	2.39E-01	2.40E-01	2.40E-01	2.40E-01	2.40E-01	2.36E-01	2.36E-01	2.38E-01	2.38E-01	1.38E-01	2.38E-01
NUAL® AL RW90 600 kcmil	2.90E-01	2.88E-01	2.89E-01	2.90E-01	2.90E-01	2.97E-01	2.97E-01	2.94E-01	2.94E-01	1.14E-01	2.94E-01
NUAL® AL RW90 750 kcmil	3.58E-01	3.61E-01	3.60E-01	3.59E-01	3.60E-01	3.53E-01	3.53E-01	3.56E-01	3.56E-01	9.47E-02	3.56E-01
NUAL® AL RW90 1000 kcmil	4.63E-01	4.71E-01	4.69E-01	4.65E-01	4.67E-01	4.43E-01	4.43E-01	4.54E-01	4.54E-01	6.89E-02	4.54E-01
NUAL® AL RW90 FPLX 6 AWG/3C + 8 AWG	5.91E-02	4.70E-02	5.01E-02	5.75E-02	5.54E-02	9.97E-02	1.00E-01	7.90E-02	7.90E-02	2.20E+00	7.90E-02
NUAL® AL RW90 FPLX 2 AWG/3C + 6 AWG GRD	1.23E-01	1.10E-01	1.13E-01	1.21E-01	1.19E-01	1.67E-01	1.68E-01	1.45E-01	1.45E-01	1.00E+00	1.45E-01
NUAL® AL RW90 FPLX 1 AWG/3C + 4 AWG GRD	1.60E-01	1.43E-01	1.47E-01	1.58E-01	1.55E-01	2.17E-01	2.18E-01	1.88E-01	1.88E-01	7.38E-01	1.88E-01
NUAL® AL RW90 FPLX 1 AWG/4C + 4 AWG GRD	2.06E-01	1.84E-01	1.89E-01	2.03E-01	1.99E-01	2.77E-01	2.78E-01	2.41E-01	2.41E-01	7.38E-01	2.41E-01
NUAL® AL RW90 FPLX 1/0 AWG/3C	1.67E-01	1.55E-01	1.58E-01	1.66E-01	1.64E-01	2.10E-01	2.11E-01	1.89E-01	1.89E-01	6.81E-01	1.89E-01
NUAL® AL RW90 FPLX 1/0 AWG/4C	2.24E-01	2.06E-01	2.11E-01	2.22E-01	2.18E-01	2.83E-01	2.84E-01	2.53E-01	2.53E-01	6.81E-01	2.53E-01
NUAL® AL RW90 FPLX 2/0 AWG/3C	2.06E-01	1.95E-01	1.98E-01	2.05E-01	2.03E-01	2.45E-01	2.45E-01	2.25E-01	2.25E-01	5.10E-01	2.25E-01



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

				A1 - A3							
	GWP	ODP	AP	EP	РСОР	FFD/ADP	Resources	A4	A5	В6	C2 - D
NUAL® AL RW90 FPLX 2/0 AWG/3C + 4 AWG GRD	2.31E-01	2.15E-01	2.19E-01	2.29E-01	2.26E-01	2.82E-01	2.83E-01	2.56E-01	2.56E-01	5.10E-01	2.56E-01
NUAL® AL RW90 FPLX 3/0 AWG/3C + 4 AWG GRD	2.80E-01	2.66E-01	2.70E-01	2.78E-01	2.76E-01	3.27E-01	3.27E-01	3.03E-01	3.03E-01	3.69E-01	3.03E-01
NUAL® AL RW90 FPLX 3/0 AWG/4C + 4 AWG GRD	3.66E-01	3.48E-01	3.53E-01	3.63E-01	3.60E-01	4.24E-01	4.25E-01	3.94E-01	3.94E-01	3.69E-01	3.94E-01
NUAL® AL RW90 FPLX 4/0 AWG/3C	3.17E-01	3.10E-01	3.12E-01	3.16E-01	3.15E-01	3.42E-01	3.42E-01	3.29E-01	3.29E-01	2.91E-01	3.29E-01
NUAL® AL RW90 FPLX 4/0 AWG/4C	4.24E-01	4.13E-01	4.16E-01	4.22E-01	4.21E-01	4.59E-01	4.59E-01	4.41E-01	4.41E-01	2.91E-01	4.41E-01
NUAL® AL RW90 FPLX 4/0 AWG/4C + 2 AWG GRD	4.60E-01	4.46E-01	4.50E-01	4.58E-01	4.55E-01	5.06E-01	5.07E-01	4.82E-01	4.82E-01	2.91E-01	4.82E-01
NUAL® AL RW90 FPLX 250 kcmil/3C	3.79E-01	3.66E-01	3.70E-01	3.78E-01	3.75E-01	4.22E-01	4.23E-01	4.00E-01	4.00E-01	2.79E-01	4.00E-01
NUAL® AL RW90 FPLX 250 kcmil/3C + 2 AWG GRD	4.16E-01	3.99E-01	4.03E-01	4.13E-01	4.10E-01	4.72E-01	4.73E-01	4.44E-01	4.44E-01	2.79E-01	4.44E-01
NUAL® AL RW90 FPLX 250 kcmil/4C	5.06E-01	4.88E-01	4.93E-01	5.04E-01	5.01E-01	5.67E-01	5.68E-01	5.36E-01	5.36E-01	2.79E-01	5.36E-01
NUAL® AL RW90 FPLX 250 kcmil/4C + 2 AWG GRD	5.42E-01	5.21E-01	5.26E-01	5.39E-01	5.36E-01	6.14E-01	6.15E-01	5.77E-01	5.77E-01	2.79E-01	5.77E-01
NUAL® AL RW90 FPLX 300 kcmil/3C	4.59E-01	4.50E-01	4.52E-01	4.58E-01	4.57E-01	4.90E-01	4.90E-01	4.74E-01	4.74E-01	2.35E-01	4.74E-01
NUAL® AL RW90 FPLX 350 kcmil/3C	5.20E-01	5.14E-01	5.15E-01	5.19E-01	5.18E-01	5.42E-01	5.42E-01	5.31E-01	5.31E-01	2.00E-01	5.31E-01
NUAL® AL RW90 FPLX 350 kcmil/4C	6.95E-01	6.85E-01	6.87E-01	6.93E-01	6.92E-01	7.27E-01	7.27E-01	7.10E-01	7.10E-01	2.00E-01	7.10E-01
NUAL® AL RW90 FPLX 400 kcmil/3C	5.67E-01	5.61E-01	5.63E-01	5.67E-01	5.66E-01	5.89E-01	5.89E-01	5.78E-01	5.78E-01	1.74E-01	5.78E-01
NUAL® AL RW90 FPLX 400 kcmil/4C	7.58E-01	7.48E-01	7.51E-01	7.57E-01	7.55E-01	7.90E-01	7.90E-01	7.73E-01	7.73E-01	1.74E-01	7.73E-01
NUAL® AL RW90 FPLX 500 kcmil/3C	7.49E-01	7.50E-01	7.50E-01	7.49E-01	7.50E-01	7.47E-01	7.46E-01	7.48E-01	7.48E-01	1.38E-01	7.48E-01
NUAL® AL RW90 FPLX 500 kcmil/4C	1.00E+00	1.00E+00	1.00E+00	1.38E-01	1.00E+00						
SUNGEN® AL PV 500 kcmil	2.37E-01	2.39E-01	2.39E-01	2.38E-01	2.38E-01	2.30E-01	2.30E-01	2.33E-01	2.33E-01	1.38E-01	2.33E-01
SUNGEN® AL PV 600 kcmil	2.86E-01	2.88E-01	2.88E-01	2.87E-01	2.87E-01	2.76E-01	2.76E-01	2.81E-01	2.81E-01	1.14E-01	2.81E-01
SUNGEN® AL PV 750 kcmil	3.54E-01	3.61E-01	3.59E-01	3.55E-01	3.56E-01	3.28E-01	3.28E-01	3.41E-01	3.41E-01	9.47E-02	3.41E-01
CU THHN/THWN2/T90 3/0 AWG Stranded	3.54E-01	3.61E-01	3.59E-01	3.55E-01	3.56E-01	3.28E-01	3.28E-01	3.41E-01	3.41E-01	9.47E-02	3.41E-01
AL XHHW CTRATED 2/0 AWG Stranded	6.41E-02	7.20E-02	6.94E-02	1.17E+00	4.76E-01	4.05E-02	4.20E-02	6.54E-02	6.54E-02	5.40E-01	6.54E-02
AL XHHW CTRATED 600 KCMIL stranded	2.78E-01	3.13E-01	3.01E-01	3.67E+00	1.55E+00	1.74E-01	1.80E-01	2.68E-01	2.68E-01	1.14E-01	2.68E-01
AL XHHW CTRATED 250 KCMIL Stranded	1.17E-01	1.31E-01	1.26E-01	1.88E+00	7.78E-01	7.35E-02	7.61E-02	1.17E-01	1.17E-01	2.79E-01	1.17E-01
AL XHHW2/FEEDERPLEX/RW90 8 AWG Stranded	7.18E-03	7.97E-03	7.74E-03	3.82E-01	1.46E-01	4.71E-03	4.88E-03	1.00E-02	1.00E-02	2.10E+00	1.00E-02
AL XHHW2/FEEDERPLEX/RW90 4 AWG Stranded	2.09E-02	2.35E-02	2.26E-02	5.66E-01	2.24E-01	1.33E-02	1.37E-02	2.33E-02	2.33E-02	1.73E+00	2.33E-02
AL XHHW2/FEEDERPLEX/RW90 8 AWG Stranded	7.18E-03	7.97E-03	7.74E-03	3.82E-01	1.46E-01	4.71E-03	4.88E-03	1.00E-02	1.00E-02	2.10E+00	1.00E-02
AL USE2/RHH/RHW2 2 AWG Stranded	3.20E-02	3.59E-02	3.46E-02	9.56E-01	3.77E-01	2.02E-02	2.09E-02	3.66E-02	3.66E-02	1.05E+00	3.66E-02
AL USE2/RHH/RHW2 4/0 AWG Stranded	1.02E-01	1.14E-01	1.10E-01	2.17E+00	8.72E-01	6.42E-02	6.64E-02	1.07E-01	1.07E-01	3.31E-01	1.07E-01
AL USE2/RHH/RHW2 400 KCMIL Stranded	1.86E-01	2.09E-01	2.01E-01	3.48E+00	1.42E+00	1.18E-01	1.22E-01	1.91E-01	1.91E-01	1.74E-01	1.91E-01
AL PV 4 AWG Stranded	2.13E-02	2.35E-02	2.28E-02	1.17E+00	4.50E-01	1.42E-02	1.47E-02	3.03E-02	3.03E-02	6.99E-01	3.03E-02
AL PV 500 KCMIL Stranded	5.26E-01	5.92E-01	5.70E-01	5.46E+00	2.38E+00	3.28E-01	3.40E-01	4.92E-01	4.92E-01	1.38E-01	4.92E-01
AL PV 1/0 AWG Stranded	5.40E-02	6.00E-02	5.81E-02	2.16E+00	8.39E-01	3.54E-02	3.67E-02	6.80E-02	6.80E-02	6.99E-01	6.80E-02



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable

Industrial and Construction Cables

	A1 - A3							A4	A5	В6	C2 - D
	GWP	ODP	AP	EP	PCOP	FFD/ADP	Resources	A4	AS	Во	CZ - D
AL Mobile Home Feeder 2-3 AWG Stranded	5.33E-02	5.93E-02	5.77E-02	3.60E+00	1.37E+00	3.46E-02	3.58E-02	8.23E-02	8.23E-02	5.40E-01	8.23E-02
AL Mobile Home Feeder 4/0-3 AWG Stranded	1.67E-01	1.86E-01	1.80E-01	8.06E+00	3.10E+00	1.08E-01	1.12E-01	2.24E-01	2.24E-01	3.31E-01	2.24E-01
AL Mobile Home Feeder 2/0-3 AWG Stranded	1.01E-01	1.13E-01	1.09E-01	3.22E+00	1.26E+00	6.43E-02	6.65E-02	1.18E-01	1.18E-01	5.40E-01	1.18E-01
AL XHHW CTRATED 2/0 AWG Stranded	6.41E-02	7.20E-02	6.94E-02	1.17E+00	4.76E-01	4.05E-02	4.20E-02	6.54E-02	6.54E-02	5.40E-01	6.54E-02
AL XHHW2/FEEDERPLEX/RW90 8 AWG Stranded	7.18E-03	7.97E-03	7.74E-03	3.82E-01	1.46E-01	4.71E-03	4.88E-03	1.00E-02	1.00E-02	2.10E+00	1.00E-02
AL USE2/RHH/RHW2 350 KCMIL Stranded	1.63E-01	1.84E-01	1.77E-01	3.34E+00	1.35E+00	1.03E-01	1.06E-01	1.70E-01	1.70E-01	2.00E-01	1.70E-01



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Additional Environmental Information

Environmental and Health During Manufacturing

Prysmian has an established HSE Management System in place at its manufacturing sites. Site programs ensure that OSHA and environmental requirements are met or exceeded to help ensure the safety and health of all employees, contractors, and guests.

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

None

Water

None

Mechanical Destruction

None

Delayed Emissions

Global warming potential is calculated using the TRACI 2.1 and CML 4.1 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Prysmian North America manufacturing sites strive to meet or exceed all applicable federal, state, and local environmental regulations. All manufacturing sites are ISO 14001:2015 Certified.

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

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

These certificates can be downloaded from our company website here: https://www.prysmian.com/en

Further Information

Prysmian Group 4 Tesseneer Road Highland Heights, KY 41076



According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

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 for Wires, Cables and Accessories, v4.0, 2022.
	LCA for Experts ISO 14025	Sphera Solutions GmbH. LCA for Experts Software System and Database for Life Cycle Engineering. Version 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 EN 15804+A2 ULE 2013	ISO 14044:2006-10, Environmental management — Life cycle assessment — Requirements and guidelines. EN 15804:2012+A2:2019/AC:2021 - Sustainability of construction works - Environmental Product Declarations - UL Environment, General Program Instructions, 2013.
-	ASTM 2020	ASTM International General Program Instructions v8.0, April 29, 2020
-	ISO 21930: 2017	ISO 21930:2017, Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products and services.
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According to

ISO 14025, EN 15804+A2, ISO 14040, ISO 14044

Prysmian Low Voltage Thermoset Aluminum Building Cable Industrial and Construction Cables

Contact Information

Study Commissioner



- For more information, visit our website at https://www.prysmian.com/en
- Technical Support for product technical questions at https://www.prysmian.com/en/contact-us
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LCA Practitioner



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