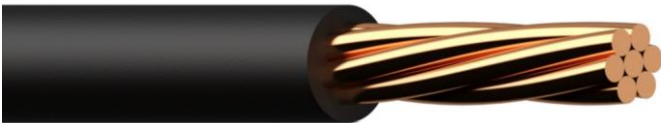


Environmental Product Declaration

Prysmian Low Voltage Thermoset Copper Building Wire

UNICON® BRAND UL Type USE-2/RHH/RHW-2 600V
UL Type RHH/RHW-2/USE-2 High Speed (HS) 600V or 1000V
UL Type SIS/XHHW-2 High Speed (HS) 600V
CSA Type RW90 High Speed (HS) 600V
CSA Type RWU90 High Speed (HS) 1000V



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 know-how 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, and connectivity systems for voice, video, and 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.



Prysmian's Thermoset Copper Building Wire line consists of Types USE-2/RHH/RHW-2 and SIS/XHHW-2, and Canadian constructions such as RW90 and RWU90. Our high-quality copper building wire is manufactured in the U.S. and delivers long-term, reliable performance in many building applications.



Environmental Product Declaration




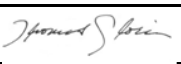
According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

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, ADDRESS, LOGO, AND WEBSITE	ASTM International 100 Barr Harbor Drive West Conshohocken, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	ASTM General Program Instructions. Version 8.0. April 29, 2020.
MANUFACTURER NAME AND ADDRESS	Prysmian Group 4 Tesseneer Road Highland Heights, KY 41076
DECLARATION NUMBER	EPD840
DECLARED PRODUCT & FUNCTIONAL UNIT OF DECLARED UNIT	Prysmian Low Voltage Thermoset Copper Building Wire Functional Unit = To transmit energy expressed for 1A over a distance of 1km during 40 years and a 100% use rate, in accordance with the relevant standards shown in the product technical data sheets. Lifetime and use rate correspond to the application of energy distribution network as defined in the table given in Appendix 6.1. of the specific rules for wire, cables and accessories. over a 75 year building lifetime
REFERENCE PCR AND VERSION NUMBER	Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021. PEP ecopassport Program: Product Specific Rules for Wires, Cables and Accessories, v4.0, 2022.
DESCRIPTION OF PRODUCT APPLICATION/USE	Prysmian cable products are primarily used in building applications.
PRODUCT RSL DESCRIPTION	40 Years
MARKETS OF APPLICABILITY	North America
DATE OF ISSUE	December 13, 2024
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 v10.7.0.183
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 with ISO 14025: 2006. The "PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021." based on EN 15804:2012+A2:2019, serves as the core PCR. The supporting PSR is the "PEP ecopassport Program: Product Specific Rules for Wires, Cables and Accessories, v4.0, 2022."	 Timothy S Brooke
<input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	
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 the 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.

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

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

Product Names: UNICON® BRAND USE-2/RHH/RHW-2 and RHH/RHW-2 High Speed (HS)

Characteristic: Wire and Cable

Prysmian's UNICON® USE-2/RHH/RHW-2 and RHH/RHW-2 cables are produced with annealed bare copper conductor, Insulated with Flame-retardant Cross-linked Polyethylene (XLPE), black.

Additional features include:

- Meet Cold bend test at -25°C
- Rated at 90°C wet or dry
- High Speed low friction technology for easy cable pulling, for 8 AWG and larger

Product Names: XHHW-2 AI High Speed (HS)

Characteristic: Wire and Cable

Prysmian's XHHW-2 AL cables are produced with annealed tinned copper conductor, Insulated with Flame-retardant Cross-linked Polyethylene (XLPE)

Additional features include:

- Meet Cold bend and Cold impact test at -25°C
- Rated at 90°C wet or dry
- High Speed low friction technology for easy cable pulling, for 8 AWG and larger

Product Names: RW90 and RWU90 High Speed (HS)

Characteristic: Wire and Cable

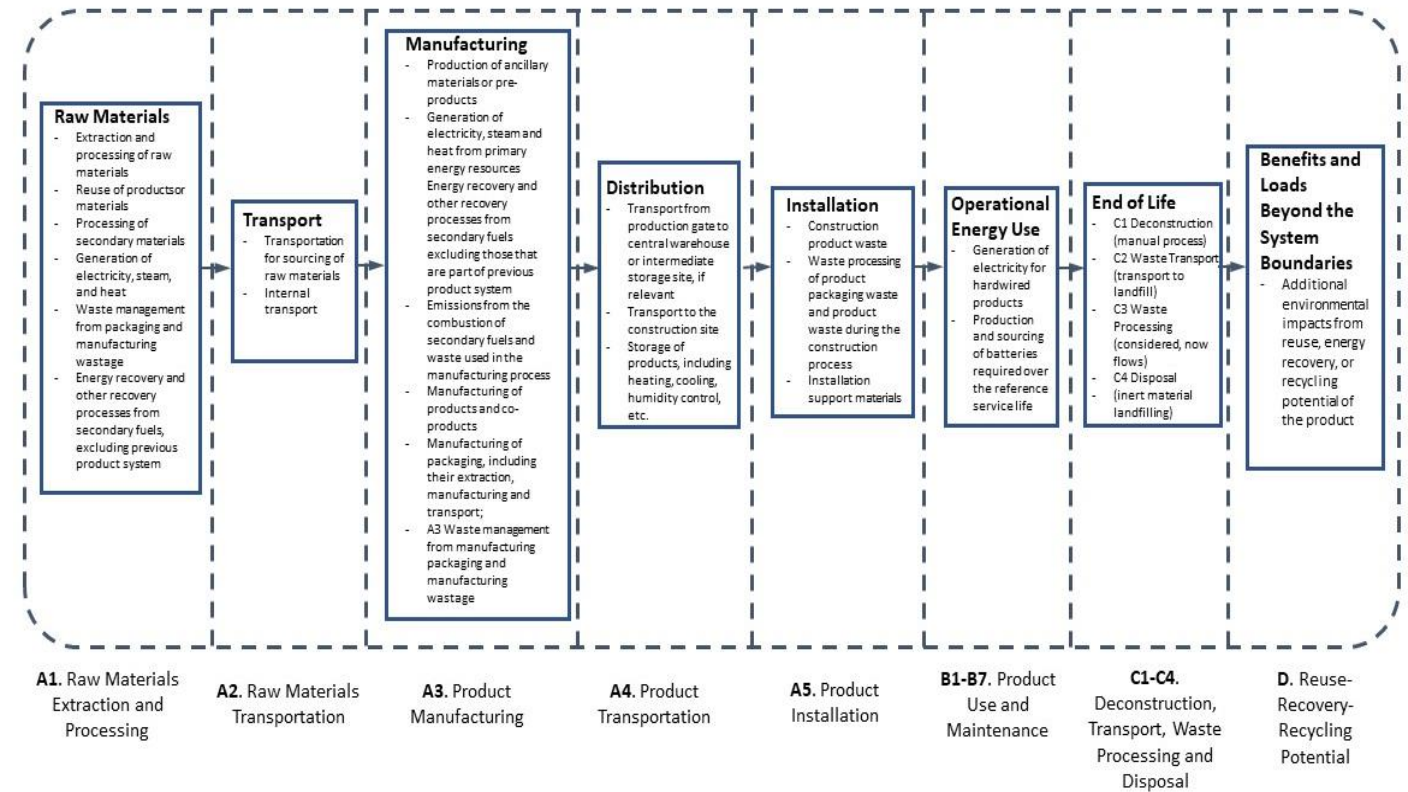
Prysmian's RW90 and RWU90 cables are produced with bare copper conductor, covered with heat- and moisture-resistant, low-temperature cross-linked Polyethylene (XLPE), Type RW90

Additional features include:

- Meet Cold bend and Cold impact test at -40°C
- Rated at 90°C wet or dry
- High Speed low friction technology for easy cable pulling, for 8 AWG and larger

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

Flow Diagram



Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

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 UNICON® USE-2/RHH/RHW-2 and RHH/RHW-2 cables is ideal for a wide range of applications, including but not limited to use in a broad range of commercial, industrial and utility applications where reliability is a major concern, where maximum performance will be demanded and where space is limited. In free air, raceways or direct burial in accordance with NEC.

Prysmian XHHW-2 AL cables is ideal for a wide range of applications, including but not limited to use in power and control circuits in switchboards, control panels and raceways in applications not exceeding 600 volts. Acceptable for use in OSHA-regulated installations.

Prysmian RW90 and RWU90 cables is ideal for a wide range of applications in accordance with Canadian Electrical Code (CEC), Part 1, as example for wiring exposed to the weather black color (all sizes), skim coat colors (8AWG and larger), for use in raceways in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC). Refer to CEC, Table 19 for conditions of use.

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 Unicon® Copper XHHW-2 350 kcmil 3-Conductor cable is as follows:

Material	Percentage in mass (%)
	Maximum
Colorant	0.67%
Conductor	85.81%
Insulation	13.43%
Other	0.09%
Total	100.00%

Environmental Product Declaration



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

Prysmian Low Voltage Thermoset Copper Building Wire
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	Annealed bare copper compressed Class B stranding per ASTN B8, tinned, annealed copper per ASTM B33, annealed Class B Compact stranded soft drawn bare copper, or solid bare copper
Insulation	Flame-retardant Cross-linked Polyethylene (XLPE) or Heat-and moisture-resistant, low-temperature Cross-linked Polyethylene (XLPE), Type RW90, -40°C, Sunlight Resistant (8 AWG and larger)

XHHW-2 VW-1 High Speed (HS)¹

XLPE, Control and Low-Voltage Power

600 V, UL Type SIS/XHHW-2, VW-1 Rated, Single Conductor, Copper

Product Construction:**Conductor:**

- 18 AWG thru 1000 kcmil tinned, annealed copper per ASTM B33
- Class B stranding per ASTM B8

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE)

Print:**For 18 AWG and 16 AWG:**

- GENERAL CABLE® (PLANT OF MFG) 1C SIZE AWG COPPER XLPE SIS TYPE (UL) 600 V 90°C YEAR

For 14 AWG thru 4 AWG:

- GENERAL CABLE® (PLANT OF MFG) 1C SIZE AWG COPPER XLPE TYPE SIS/XHHW-2 VW-1 (UL) 600 V 90°C YEAR

¹ Sizes 8 AWG and larger would include HIGH SPEED**For 2 AWG and larger:**

- GENERAL CABLE (PLANT OF MFG) 1C SIZE AWG (SIZE MM²) HIGH SPEED TYPE XHHW-2 VW-1 (UL) 600 V 90°C SUN RES FOR CT USE MONTH/YEAR SEQUENTIAL FOOTAGE MARK

[†] Sizes smaller than 1/0 AWG do not include "FOR CT USE"**Applications:**

- For use in power and control circuits in switchboards, control panels and raceways in applications not exceeding 600 volts
- Acceptable for use in OSHA-regulated installations

Features:

- Rated at 90°C wet or dry
- UL Listed as SIS/XHHW-2[†] and XHHW-2^{xx} for general power or control wiring in accordance with the National Electrical Code, Section 310.15, Tables 310.15(B)16 or 310.15(B)17
- Sizes 1/0 and larger listed "SUN RES FOR CT USE"
- Excellent flame resistance
- Excellent physical, thermal and electrical properties
- High Speed (HS) cable features a specially designed XLPE insulation that allows for fast and easy cable pulls - 8 AWG and larger
- Meets cold bend and cold impact tests at -25°C

Compliances:**Industry Compliances:**

- UL Type SIS 18 AWG and 16 AWG
- UL Type SIS/XHHW-2[†] - 600 V
- UL File #E90494
- UL Type XHHW-2^{xx} - 600 V
- ICEA S-95-658/NEMA WC70
- 1/0 and larger are listed "SUN RES FOR CT USE" in accordance with NEC

Flame Test Compliances:

- UL 44 VW-1

Other Compliances:

- EPA 40 CPR, Part 261 for leachable lead content per TCLP method
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material to be shipped on spools or non-returnable wood reels

[†] UL Type SIS/XHHW-2 for sizes 14 AWG thru 4 AWG^{xx} UL Type XHHW-2 for sizes 2 AWG thru 1000 kcmil

CATALOG NUMBER	COND. SIZE (AWG/kcmil)	NO. OF WIRES	NOM. COND. DIAMETER		MIN. AVG. INSULATION THICKNESS		NOM. CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT		AMPACITY (1) 30°C AMBIENT	
			IN	mm	IN	mm	IN	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	@75°C	@90°C
18 AWG - 1000 kcmil CONDUCTORS														
381500*	18	7	0.05	1.27	0.030	0.76	0.11	2.79	5	7	9	13	-	14
381510*	16	7	0.06	1.52	0.030	0.76	0.12	3.05	8	12	13	19	-	18
381520*	14	7	0.07	1.78	0.030	0.76	0.13	3.30	13	19	19	28	20	25
381530*	12	7	0.09	2.29	0.030	0.76	0.15	3.81	20	30	27	40	25	30
381540*	10	7	0.11	2.79	0.030	0.76	0.18	4.57	32	48	41	61	35	40
381550*	8	7	0.14	3.56	0.045	1.14	0.24	6.10	51	76	69	103	50	55
381560*	6	7	0.18	4.57	0.045	1.14	0.28	7.11	81	121	103	153	65	75
381570*	4	7	0.23	5.84	0.045	1.14	0.32	8.13	129	192	156	232	85	95
06591.210200*	2	7	0.29	7.37	0.045	1.14	0.38	9.65	205	305	239	356	115	130
06591.215100*	1/0	19	0.36	9.14	0.055	1.40	0.48	12.19	326	485	373	555	150	170
06591.215200*	2/0	19	0.41	10.41	0.055	1.40	0.52	13.21	411	612	464	691	175	195
06591.215300*	3/0	19	0.46	11.68	0.055	1.40	0.57	14.48	518	771	579	862	200	225
06591.215400*	4/0	19	0.51	12.95	0.055	1.40	0.63	16.00	653	972	722	1074	230	260
06591.216000*	250	37	0.56	14.22	0.065	1.65	0.70	17.78	772	1149	860	1280	255	290
06591.216200*	350	37	0.66	16.76	0.065	1.65	0.80	20.32	1081	1609	1185	1763	310	350
06591.216500*	500	37	0.79	20.07	0.065	1.65	0.93	23.62	1544	2298	1669	2484	380	430
06591.217000*	750	61	0.97	24.64	0.080	2.03	1.14	28.96	2316	3447	2520	3750	475	535
06591.217500*	1000	61	1.13	28.70	0.080	2.03	1.30	33.02	3086	4592	3283	4886	545	615

Dimensions and weights are nominal; subject to industry tolerances.

* Non-stock item: minimum runs apply. Please consult Customer Service for price and delivery.

(1) Allowable ampacities shown are for general use as specified by the National Electric Code.

Adjustment and corrections may apply.

RHH/RHW-2 High Speed

XLPE, Low-Voltage Power, 600 V or 1000 V

UL Type RHH/RHW-2/USE-2, Single Conductor, Copper



Product Construction:

Conductor:

- 14 AWG thru 1000 kcmil annealed bare copper compressed Class B stranding per ASTM B8

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE), black

Options:

- 2 kV version
- Tinned copper conductor
- Class C stranding
- FREP® — flame-retardant Ethylene Propylene Rubber (EPR) insulation
- Black only

Applications:

- Ideally suited for use in a broad range of commercial, industrial and utility applications where reliability is a major concern, where maximum performance will be demanded and where space is limited
- In free air, raceways or direct burial in accordance with NEC

Features:

- High Speed low friction technology for easy cable pulling
- Rated at 90°C wet or dry
- Smaller cable O.D.
- Excellent electrical, thermal and physical properties
- Sunlight-resistant
- Excellent resistance to moisture
- Excellent resistance to crush, compression cuts and heat deformation
- Excellent flame resistance
- Excellent low temperature cold bend characteristics
- Meets cold bend test at -25°C

Compliances:

Industry Compliances:

- National Electrical Code (NEC)
- ICEA S-95-658/NEMA WC70
- "FOR CT USE" on 1/0 AWG and larger in accordance with NEC
- UL 44 Type RHH/RHW-2, UL File # E90494
- UL 854 Type USE-2, UL File # E514203

Flame Test Compliances:

- For 1/0 AWG and larger: IEEE 383, IEEE 1202/CSA FT4, UL 1685

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

Catalog Number	Cond. Size (AWG Or kcmil)	Number of Wires	Nominal Conductor Diameter		Minimum Average Insulation Thickness		Nominal Cable Diameter		Copper Weight		Net Weight		Ampacity (1)
			Inches	mm	Inches	mm	Inches	mm	Lbs/ 1000 Ft	kg/km	Lbs/ 1000 Ft	kg/km	90°C

14 AWG - 1000 kcmil CONDUCTORS

5255.008	8	7	0.15	3.81	0.060	1.52	0.27	6.86	51	76	71	106	55
5255.006	6	7	0.18	4.57	0.060	1.52	0.31	7.87	81	121	103	154	75
5255.004	4	7	0.23	5.84	0.060	1.52	0.36	9.14	129	192	154	230	95
5255.002	2	7	0.29	7.37	0.060	1.52	0.42	10.67	205	305	231	344	130
5255.110	1/0	19	0.37	9.40	0.080	2.03	0.53	13.46	326	485	374	557	170
5255.210	2/0	19	0.41	10.41	0.080	2.03	0.58	14.73	411	612	465	692	195
5255.310	3/0	19	0.46	11.68	0.080	2.03	0.63	16.00	518	771	572	852	225
5255.410	4/0	19	0.52	13.21	0.080	2.03	0.69	17.53	653	972	713	1062	260
5255.250	250	37	0.56	14.22	0.095	2.41	0.77	19.56	772	1149	855	1273	290
5255.350	350	37	0.67	17.02	0.095	2.41	0.87	22.10	1081	1609	1172	1745	350
5255.500	500	37	0.80	20.32	0.095	2.41	1.00	25.40	1542	2295	1625	2419	430
5255.600	600	61	0.87	22.10	0.110	2.79	1.11	28.19	1883	2802	1974	2938	475
5255.750	750	61	0.98	24.89	0.110	2.79	1.22	30.99	2316	3447	2450	3646	535
5255.1000*	1000	61	1.13	28.70	0.110	2.79	1.37	31.80	3088	4595	3294	4902	615

Dimensions and weights are nominal; subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

(1) Temperature, size and ampacity per National Electric Code, 2011 NEC Sections 110.14(c)(1) (a) & (b).

90°C – Wet or dry locations. For ampacity derating purposes.

Dwelling – For dwelling units, conductors shall be permitted as listed ampacities at 120/240-volt, 3-wire, single-phase services and feeders.



Made in America



Phone: 888-593-3355
www.generalcable.com

RW90 High Speed

XLPE, Low-Voltage Power

600 V, CSA Type RW90, Single Conductor, Copper

Product Construction:

Conductor:

- 14 AWG thru 10 AWG annealed Class B Compressed stranded soft drawn bare copper
- 8 AWG thru 750 kcmil annealed Class B Compact stranded soft drawn bare copper
- 14 AWG thru 10 AWG solid bare copper

Insulation:

- Heat- and moisture-resistant, low-temperature Cross-linked Polyethylene (XLPE), Type RW90, -40°C, Sunlight Resistant (8 AWG and larger)
- Color code: 14 AWG, 12 AWG, 10 AWG – black, white, red, blue, green, yellow, orange, brown; solid colors only; 8 AWG thru 750KCM– black solid color; white, red, blue, green skim coat colors;

Print:

14 AWG through 10 AWG, all colors:

- PRYSMIAN GROUP (PLANT OF MFG) (MM/YEAR) RW90 XLPE (SIZE) (SIZE MM2) 600V (-40°C) CSA

14 AWG through 10 AWG, black:

- PRYSMIAN GROUP (PLANT OF MFG) (MM/YEAR) RW90 XLPE (SIZE) (SIZE MM2) 600V (-40°C) SR CSA

8 AWG and larger, all colors:

- PRYSMIAN GROUP (PLANT OF MFG) (MM/YEAR) HIGH SPEED RW90 XLPE (SIZE) (SIZE MM2) 600V (-40°C) SR CSA

Options:

- For 1000 volt applications, use RWU90
- PVC jacket (FT1 rating)

Applications:

- In accordance with Canadian Electrical Code (CEC), Part 1
- For wiring exposed to the weather black color (all sizes), skim coat colors (8AWG and larger)
- For use in raceways in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC)
- Refer to CEC, Table 19 for conditions of use

Features:

- Rated at 90°C wet or dry
- Meets cold bend and cold impact tests at -40°C
- Sunlight-resistant, black (14AWG - 10AWG); all colors (8AWG and larger)
- High Speed cable features a specially designed XLPE insulation that allows for fast and easy cable pulls (8AWG and larger)

Compliances:

- CSA Standard C22.2 No. 38
- CSA Approval File Number 155503 or 156400

Packaging:

- Available in various standard putups in multiples of 300 meters, contact sales



CATALOG NUMBER	COND. SIZE (AWG/ kcmil)	COND. STRAND**	NOMINAL COND. O.D.		MIN. AVG. INS. THICKNESS		NOM. DIAMETER (OVER) INS.		COPPER WEIGHT		NET WEIGHT		AMPACITY (1) 30°C AMBIENT	
			IN	mm	IN	mm	IN	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km	@75°C	@90°C
14 AWG - 1000 kcmil CONDUCTORS														
388540	14	1	0.06	1.52	0.030	0.76	0.12	3.05	12	18	16	24	20	25
388550	14	7	0.07	1.78	0.030	0.76	0.13	3.30	12	18	16	24	20	25
388560	12	1	0.08	2.03	0.030	0.76	0.14	3.56	20	30	24	36	25	30
388570	12	7	0.09	2.29	0.030	0.76	0.15	3.81	20	30	25	37	25	30
388580	10	1	0.10	2.54	0.030	0.76	0.16	4.06	31	46	36	54	35	45
388590	10	7	0.11	2.79	0.030	0.76	0.17	4.32	32	48	38	57	35	45
386082	8	7	0.13	3.30	0.045	1.14	0.23	5.84	51	76	61	91	50	55
386062	6	7	0.17	4.32	0.045	1.14	0.27	6.86	81	121	93	138	65	75
386042	4	7	0.21	5.33	0.045	1.14	0.31	7.87	129	192	142	212	85	95
386032	3	7	0.24	6.10	0.045	1.14	0.33	8.38	163	243	177	264	100	115
386022	2	7	0.27	6.86	0.045	1.14	0.36	9.14	205	305	221	329	115	130
386012	1	19	0.30	7.62	0.055	1.40	0.42	10.67	259	385	281	418	130	145
386112	1/0	19	0.34	8.64	0.055	1.40	0.45	11.43	326	485	351	522	150	170
386212	2/0	19	0.38	9.65	0.055	1.40	0.49	12.45	411	612	437	651	175	195(2)
386312	3/0	19	0.42	10.67	0.055	1.40	0.54	13.72	518	771	548	815	200	225
386412	4/0	19	0.47	11.94	0.055	1.40	0.59	14.99	653	972	687	1023	230	260
386252	250	37	0.52	13.21	0.065	1.65	0.66	16.76	772	1149	812	1208	255	290
386302	300	37	0.57	14.48	0.065	1.65	0.71	18.03	925	1377	966	1438	285	320
386352	350	37	0.62	15.75	0.065	1.65	0.76	19.30	1080	1607	1122	1670	310	350
386402*	400	37	0.66	16.76	0.065	1.65	0.80	20.32	1236	1839	1310	1950	335	380
386502	500	37	0.74	18.80	0.065	1.65	0.88	22.35	1542	2295	1590	2366	380	430
386602	600	61	0.81	20.57	0.080	2.03	0.98	24.89	1850	2753	1909	2841	420	475
386752	750	61	0.91	23.11	0.080	2.03	1.08	27.43	2316	3447	2390	3556	475	535

Dimensions and weights are nominal; subject to industry tolerances.

The number of wires may be reduced as follows:

- 1AWG - 4/0AWG - 18 Wires Minimum
- 250kcmil - 500kcmil - 35 Wires Minimum
- 600kcmil - 1000kcmil - 58 Wires Minimum

(1) Based on CEC Part 1, Table 2 for three conductors in raceway (conduit). For underground installations, refer to CEC, Rule 4-004 for ampacity rating.

(2) For 3 wires, 120/240 V and 120/208 V residential services or subservices, the allowable ampacity for 2/0 AWG shall be 200A. In this case, the 5% adjustment of Rule 8-106(1) cannot be applied.

COLOR CODE CHART

COLOR CODE	COLOR
01	Black
02	White
03	Red
04	Orange
05	Yellow
06	Green
07	Blue
08	Brown

PACKAGING CODE CHART

PACKAGING CODE	PACKAGING
95	300 Meters
60	600 Meters
97	900 Meters
98	1200 Meters
99	1500 Meters
90	3000 Meters
96	6000 Meters

RWU90 High Speed

XLPE, Low-Voltage Power

1000 V, CSA Type RWU90, Single Conductor, Copper



CATALOG NUMBER	COND. SIZE (AWG/ kcmil)	COND. STRAND**	NOMINAL COND. O.D.		MIN. AVG. INS. THICKNESS		NOM. DIAMETER (OVER) INS.		COPPER WEIGHT		NET WEIGHT		AMPACITY (1) 30°C AMBIENT	
			IN	mm	IN	mm	IN	mm	LBS/1000 FT	kg/km	LBS/1000 FT	kg/km	@75°C	@90°C
14 AWG - 1000 kcmil CONDUCTORS														
389570	14	7	0.07	1.78	0.060	1.52	0.19	4.83	12	18	23	34	20	25
389580	12	7	0.09	2.29	0.060	1.52	0.21	5.33	20	30	32	48	25	30
389590	10	7	0.11	2.79	0.060	1.52	0.23	5.84	32	48	46	68	35	45
392082	8	7	0.13	3.30	0.080	2.03	0.30	7.62	51	76	74	110	50	55
392062	6	7	0.17	4.32	0.080	2.03	0.34	8.64	81	121	107	159	65	75
392042	4	7	0.21	5.33	0.080	2.03	0.38	9.65	129	192	159	236	85	95
392032	3	7	0.24	6.10	0.080	2.03	0.41	10.41	163	243	195	290	100	115
392022	2	7	0.27	6.86	0.080	2.03	0.44	11.18	205	305	240	357	115	130
392012	1	19	0.30	7.62	0.095	2.41	0.50	12.70	259	385	305	454	130	145
392112	1/0	19	0.34	8.64	0.095	2.41	0.54	13.72	326	485	377	561	150	170
392212	2/0	19	0.38	9.65	0.095	2.41	0.58	14.73	411	612	466	693	175	195(2)
392312	3/0	19	0.42	10.67	0.095	2.41	0.62	15.75	518	771	578	860	200	225
392412	4/0	19	0.47	11.94	0.095	2.41	0.68	17.27	653	972	721	1073	230	260
392252	250	37	0.52	13.21	0.110	2.79	0.75	19.05	772	1149	851	1267	255	290
392302	300	37	0.57	14.48	0.110	2.79	0.80	20.32	925	1377	1028	1530	285	320
392352	350	37	0.62	15.75	0.110	2.79	0.85	21.59	1080	1607	1168	1738	310	350
392402*	400	37	0.66	16.76	0.110	2.79	0.89	22.61	1236	1839	1357	2020	335	380
392502	500	37	0.74	18.80	0.110	2.79	0.97	24.64	1542	2295	1642	2443	380	430
392602	600	61	0.81	20.57	0.125	3.18	1.07	27.18	1850	2753	1967	2927	420	475
392752	750	61	0.91	23.11	0.125	3.18	1.17	29.72	2316	3447	2453	3650	475	535

Dimensions and weights are nominal; subject to industry tolerances.

The number of wires may be reduced as follows:

1AWG - 4/OAWG - 18 Wires Minimum

250kcmil - 500kcmil - 35 Wires Minimum

600kcmil - 1000kcmil - 58 Wires Minimum

(1) Based on CEC Part 1, Table 2 for three conductors in raceway (conduit). For underground installations, refer to CEC, Rule 4-004 for ampacity rating.

(2) For 3 wires, 120/240 V and 120/208 V residential services or subservices, the allowable ampacity for 2/0 AWG shall be 200A. In this case, the 5% adjustment of Rule 8-106(1) cannot be applied.

COLOR CODE CHART

COLOR CODE	COLOR
01	Black
02	White
03	Red
04	Orange
05	Yellow
06	Green
07	Blue
08	Brown

PACKAGING CODE CHART

PACKAGING CODE	PACKAGING
95	300 Meters
60	600 Meters
97	900 Meters
98	1200 Meters
99	1500 Meters
90	3000 Meters
96	6000 Meters

Product Construction:

Conductor:

- 14 AWG thru 10 AWG annealed Class B Compressed stranded soft drawn bare copper
- 8 AWG thru 750 kcmil annealed Class B Compact stranded soft drawn bare copper

Insulation:

- Heat- and moisture-resistant, lowtemperature Cross-linked Polyethylene (XLPE), Type RWU90, -40°C, Sunlight Resistant (8AWG and larger)
- Color code: 14 AWG – thru 10 AWG – black, white, red, blue, green solid colors only; 8 AWG thru 750KCM – black solid color; white, red, blue, green skim coat colors;

Print:

- **14 AWG through 10 AWG, all colors:**
 - PRYSMIAN GROUP (PLANT OF MFG) (MM/YEAR) RWU90 XLPE (SIZE) (SIZE MM2) 600V (-40°C) CSA
- **14 AWG through 10 AWG, black:**
 - PRYSMIAN GROUP (PLANT OF MFG) (MM/YEAR) RWU90 XLPE (SIZE) (SIZE MM2) 600V (-40°C) SR CSA
- **8 AWG and larger, all colors:**
 - GENERAL CABLE® (PLANT OF MFG) 1C (SIZE) (SIZE MM²) HIGH SPEED CU XLPE 1000 V RWU90 CSA (-40°C) (MM) (YYYY)
- **8 AWG and larger, all colors:**
 - PRYSMIAN GROUP (PLANT OF MFG) (MM/YEAR) HIGH SPEED RWU90 XLPE (SIZE) (SIZE MM2) 600V (-40°C) SR CSA

Option:

- PVC jacket (FT1 rating)

Applications:

- In accordance with Canadian Electrical Code (CEC), Part 1
- For wiring exposed to the weather black color (all sizes), skim coat colors (8AWG and larger)
- For use in raceways in dry, damp or wet locations in accordance with Canadian Electrical Code (CEC)
- Approved for direct burial per CEC Rule 12-012
- For service entrance below ground
- Refer to CEC, Table 19 for conditions of use

Features:

- Rated at 90°C wet or dry
- Meets cold bend and cold impact tests at -40°C
- Sunlight-resistant, black (14AWG - 10AWG); all colors (8AWG and larger)
- High Speed cable features a specially designed XLPE insulation that allows for fast and easy cable pulls - 8 AWG and larger

Compliances:

- CSA Standard C22.2 No. 38
- CSA Approval File Number 155503 or 156400

Packaging:

- Available in various standard putups in multiples of 300 meters, contact sales

Unicon® XLPE High Speed

XLPE, Low-Voltage Power

600 V, UL Type RHH/RHW-2/USE-2, Single Conductor, Copper



Product Construction:

Conductor:

- 14 AWG thru 1000 kcmil annealed bare copper compressed Class B stranding per ASTM B8

Insulation:

- Flame-retardant Cross-linked Polyethylene (XLPE), black

Options:

- 2 kV version
- Tinned copper conductor
- Class C stranding
- Various colors available
- Unicon® FREP® — flame-retardant Ethylene Propylene Rubber (EPR) insulation
- Other constructions available upon request

Applications:

- Ideally suited for use in a broad range of commercial, industrial and utility applications where reliability is a major concern, where maximum performance will be demanded and where space is limited
- In free air, raceways or direct burial in accordance with NEC

Features:

- High Speed low friction technology for easy cable pulling
- Rated at 90°C wet or dry
- Smaller cable O.D.
- Excellent electrical, thermal and physical properties
- Sunlight-resistant
- Excellent resistance to moisture
- Excellent resistance to crush, compression cuts and heat deformation
- Excellent flame resistance
- Excellent low temperature cold bend characteristics
- Meets cold bend test at -25°C

Compliances:

Industry Compliances:

- National Electrical Code (NEC)
- ICEA S-95-658/NEMA WC70
- "FOR CT USE" on 1/0 AWG and larger in accordance with NEC
- UL 44 Type RHH/RHW-2, UL File # E90494
- UL 854 Type USE-2, UL File # E90499

Flame Test Compliances:

- UL 1581 VW-1
- For 1/0 AWG and larger: IEEE 383, IEEE 1202/CSA FT4, ICEA T-29-520

Other Compliances:

- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

Packaging:

- Material cut to length and shipped on non-returnable wood reels

CATALOG NUMBER	COND. SIZE (AWG or kcmil)	NUMBER OF WIRES	NOMINAL COND. DIAMETER		MINIMUM AVG. INSULATION THICKNESS		NOMINAL CABLE DIAMETER		COPPER WEIGHT		NET WEIGHT		AMPACITY (1)
			INCHES	mm	INCHES	mm	INCHES	mm	LBS/ 1000 FT	kg/km	LBS/ 1000 FT	kg/km	90°C
14 AWG - 1000 kcmil CONDUCTORS													
364830*	14	7	0.07	1.78	0.045	1.14	0.17	4.32	13	19	24	36	25
364840*	12	7	0.09	2.29	0.045	1.14	0.19	4.83	20	30	33	49	30
364850*	10	7	0.12	3.05	0.045	1.14	0.21	5.33	32	48	48	71	40
16602.210800	8	7	0.15	3.81	0.060	1.52	0.27	6.86	50	75	78	116	55
16602.210600	6	7	0.18	4.57	0.060	1.52	0.31	7.87	81	121	114	170	75
16602.210400	4	7	0.23	5.84	0.060	1.52	0.36	9.14	129	192	169	252	95
16602.210200	2	7	0.29	7.37	0.060	1.52	0.42	10.67	205	305	254	378	130
16602.215100	1/0	19	0.37	9.40	0.080	2.03	0.53	13.46	326	485	403	600	170
16602.215200	2/0	19	0.41	10.41	0.080	2.03	0.58	14.73	411	612	501	746	195
16602.215400	4/0	19	0.52	13.21	0.080	2.03	0.69	17.53	653	972	760	1131	260
16602.216000	250	37	0.56	14.22	0.095	2.41	0.77	19.56	772	1149	906	1349	290
16602.216200	350	37	0.67	17.02	0.095	2.41	0.87	22.10	1081	1609	1237	1841	350
16602.216500	500	37	0.80	20.32	0.095	2.41	1.00	25.40	1542	2295	1730	2575	430
16602.217000	750	61	0.98	24.89	0.110	2.79	1.22	30.99	2316	3447	2576	3834	535
16602.217500*	1000	61	1.13	28.70	0.110	2.79	1.37	31.80	3086	4593	3405	5068	615

Dimensions and weights are nominal; subject to industry tolerances.

* Non-stock item; minimum runs apply. Please consult Customer Service for price and delivery.

(1) Temperature, size and ampacity per National Electric Code, 2011 NEC Sections 110.14(c)(1) (a) & (b).

90°C – Wet or dry locations. For ampacity derating purposes.

Dwelling – For dwelling units, conductors shall be permitted as listed ampacities at 120/240-volt, 3-wire, single-phase services and feeders.



RoHS Compliant
Directive 2011/65/EU



Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

Placing on the Market / Application Rules

The standards that can be applied for UNICON® USE-2/RHH/RHW-2 and RHH/RHW-2 are:

- UL 44 Type RHH/RHW-2
- UL 854 Type USE-2
- ICEA S-95-658/NEMA WC70
- National Electrical Code (NEC)
- UL 1581 VW-1
- "FOR CT USE" on 1/0 AWG and larger in accordance with NEC
- IEEE 383, IEEE 1202/CSA FT4, UL 1685, for sizes 1/0 AWG and larger
- EPA 40 CFR, Part 261 for leachable lead content per TCLP
- OSHA Acceptable
- RoHS Compliant

The standards that can be applied for XHHW-2 AL are:

- UL Type SIS, for sizes 18 AWG and 16 AWG
- UL Type SIS/XHHW-2, for sizes 14 AWG thru 4 AWG
- UL Type XHHW-2, for sizes 2 AWG thru 1000 kcmil
- ICEA S-95-658/NEMA WC70
- 1/0 and larger are listed "SUN RES FOR CT USE" in accordance with NEC
- UL 44 VW-1
- EPA 40 CPR, Part 261 for leachable lead content per TCLP method
- OSHA Acceptable
- RoHS Compliant

The standards that can be applied for RW90 and RWU90 are:

- CSA Standard C22.2 No. 38
- CSA Approval File Number 155503 or 156400

Properties of Declared Product as Shipped

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

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

Methodological Framework

Functional Unit

Name	Value	Unit
Functional unit	To transmit energy expressed for 1A over a distance of 1km during 40 years and a 100% use rate, in accordance with the relevant standards shown in the product technical data sheets. Lifetime and use rate correspond to the application of energy distribution network as defined in the table given in Appendix 6.1. of the specific rules for wire, cables and accessories.	
Maximum Mass	5385	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:

Product Stage			Construction Process Stage		Use Stage							End of Life Stage*				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	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	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.

Reference Service Life

The reference service life of a properly installed Prysmian Unicon® Copper XHHW-2 350 kcmil, 3-Conductor cable is 40 years.

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

Industrial and Construction Cables

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.

Environmental Product Declaration



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

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

Estimates and Assumptions

End of Life

In the End of Life phase, copper is assumed to have a 60% recycling rate in accordance with the PEP PCR.

Units

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

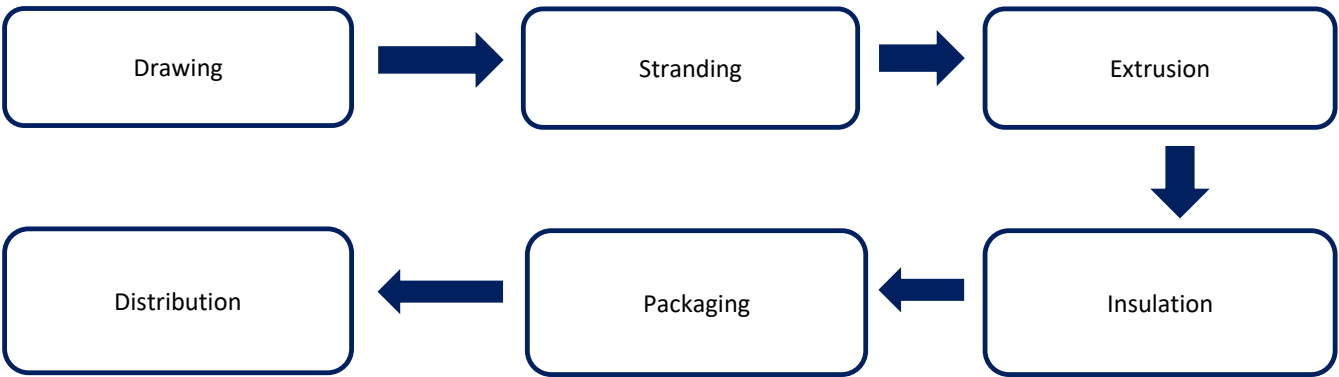
Additional Environmental Information

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 five 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.



Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

Industrial and Construction Cables

Packaging

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

Material	Quantity (% By Weight)
	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	Diesel	
Liters of fuel	38	l/100km
Transport distance	800	km
Capacity utilization (including empty runs)	85	%
Gross density of products transported	-	kg/m ³
Weight of products transported	5385	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 team will all be trained on the HSE plan prior to installation.

Installation into the building (A5)		
Name	Max	Unit
Water consumption	-	m ³
Other energy carriers	-	MJ
Product loss per functional unit	2.69E+02	kg
Waste materials at construction site	2.75E+02	kg
Output substance (recycle)	1.39E+02	kg
Output substance (landfill)	1.30E+02	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	3.82E+02	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	-

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

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:

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

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	6.17	kWh
Other energy carriers	-	MJ
Equipment output	-	kW
Direct emissions to ambient air, soil, and water	-	kg

Disposal

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

End of life (C1-C4)		
Name	Max	Unit
Collected separately	2.77E+03	kg
Collected as mixed construction waste	2.61E+03	kg
Reuse	0.00E+00	kg
Recycling	2.77E+03	kg
Landfilling	2.61E+03	kg
Incineration with energy recovery	0.00E+00	kg
Removals of biogenic carbon	-	kg

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire
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:

Product Stage			Construction Process Stage		Use Stage							End of Life Stage*				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	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	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.

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

Industrial and Construction Cables

LCA Results - Maximum Impact - Results for Unicon® Copper XHHW-2 350 kcmil 3-Conductor

Please see the system boundary diagram above for an explanation of the A1-D life cycle stages. The below results all represent the Low Voltage Thermoset Copper Building Wire with the highest impact, which is the Unicon Copper XHHW-2 350 KCMIL 3-Conductor Cable. For all other cables in this product series, please see the scaling factors below to calculate their impacts.

Results shown below were calculated using TRACI 2.1 Methodology.

TRACI 2.1 Impact Assessment											
Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
GWP	Global warming potential	kg CO ₂ -Eq.	2.14E+04	4.00E+02	1.72E+03	1.53E+01	2.22E-07	0.00E+00	2.73E+01	-8.58E+03	2.36E+04
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	2.88E-07	1.51E-08	3.41E-08	1.83E-12	8.38E-18	0.00E+00	1.48E-12	-8.54E-10	3.37E-07
AP Air	Acidification potential for air emissions	kg SO ₂ -Eq.	1.47E+02	2.40E+00	1.02E+01	2.15E-02	1.33E-09	0.00E+00	1.69E-01	-1.32E+02	1.60E+02
EP	Eutrophication potential	kg N-Eq.	5.81E+00	1.33E-01	5.13E-01	1.69E-03	7.38E-11	0.00E+00	7.48E-03	-2.98E+00	6.47E+00
SP	Smog formation potential	kg O ₃ -Eq.	1.46E+03	6.61E+01	1.49E+02	3.01E-01	3.66E-08	0.00E+00	3.22E+00	-5.07E+02	1.68E+03
FFD	Fossil Fuel Depletion	MJ-surplus	2.97E+04	7.07E+02	2.42E+03	1.81E+01	3.92E-07	0.00E+00	4.68E+01	-8.67E+03	3.29E+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 Impact Assessment											
Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
GWP	Global warming potential	kg CO ₂ -Eq.	2.16E+04	4.01E+02	1.80E+03	1.54E+01	2.22E-07	0.00E+00	2.63E+01	-8.55E+03	2.39E+04
ODP	Depletion potential of the stratospheric ozone layer	kg CFC-11 Eq.	2.92E-07	1.51E-08	3.41E-08	1.01E-10	8.37E-18	0.00E+00	8.31E-11	-5.05E-08	3.41E-07
AP Air	Acidification potential for air emissions	kg SO ₂ -Eq.	1.55E+02	1.97E+00	1.00E+01	2.01E-02	1.09E-09	0.00E+00	1.58E-01	-1.50E+02	1.67E+02
EP	Eutrophication potential	kg(PO ₄) ³ -Eq.	9.92E+00	3.51E-01	1.10E+00	2.21E-03	1.95E-10	0.00E+00	1.80E-02	-3.72E+00	1.14E+01
POCP	Formation potential of tropospheric ozone photochemical oxidants	kg ethane-Eq.	7.70E+00	2.30E-01	8.06E-01	1.50E-03	1.28E-10	0.00E+00	1.18E-02	-7.04E+00	8.75E+00
ADPE	Abiotic depletion potential for non-fossil resources	kg Sb-Eq.	5.87E+00	1.66E-07	2.93E-01	1.55E-06	9.21E-17	0.00E+00	8.46E-06	-7.59E+00	6.16E+00
ADPF	Abiotic depletion potential for fossil resources	MJ	2.73E+05	5.10E+03	2.04E+04	1.95E+02	2.83E-06	0.00E+00	3.58E+02	-8.37E+04	2.99E+05

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

Environmental Product Declaration



According to

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

Prysmian Low Voltage Thermoset Copper Building Wire

Industrial and Construction Cables

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

Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
GWP-total	Climate change - total	kg CO ₂ -Eq.	2.16E+04	4.02E+02	2.00E+03	2.84E+00	2.23E-07	8.91E+02	2.81E+01	-5.09E+03	2.49E+04
GWP-fossil	Climate change - fossil	kg CO ₂ -Eq.	2.20E+04	4.02E+02	1.62E+03	2.84E+00	2.23E-07	8.91E+02	2.79E+01	-5.04E+03	2.49E+04
GWP-biogenic	Climate change - biogenic	kg CO ₂ -Eq.	-3.82E+02	0.00E+00	3.82E+02	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 CO ₂ -Eq.	3.70E+00	0.00E+00	2.11E-01	2.89E-04	0.00E+00	2.32E-02	1.66E-01	-4.43E+01	4.10E+00
ODP	Ozone depletion	kg CFC-11 Eq.	1.61E-07	1.04E-08	2.15E-08	1.63E-11	5.77E-18	3.66E-11	7.53E-11	1.34E-08	1.93E-07
AP	Acidification	mol H ⁺ Eq.	2.03E+02	2.66E+00	1.32E+01	3.83E-03	1.47E-09	1.44E-01	1.99E-01	-1.76E+02	2.19E+02
EP-freshwater	Eutrophication aquatic freshwater	kg P-Eq.	1.00E-01	1.14E-04	1.08E-02	1.57E-06	6.34E-14	1.38E-05	6.61E-05	1.95E-02	1.11E-01
EP-marine	Eutrophication aquatic marine	kg N Eq.	2.51E+01	1.02E+00	2.43E+00	8.49E-04	5.67E-10	3.07E-02	5.15E-02	-3.04E+00	2.87E+01
EP-terrestrial	Eutrophication terrestrial	mol N Eq.	2.74E+02	1.12E+01	2.61E+01	9.17E-03	6.19E-09	6.58E-01	5.66E-01	-2.53E+01	3.13E+02
POCP	Photochemical ozone formation	NMVOE Eq.	7.81E+01	3.01E+00	7.51E+00	2.48E-03	1.67E-09	8.52E-02	1.56E-01	-1.60E+01	8.88E+01
ADP-minerals&metals	Depletion of abiotic resources - minerals and metals	kg Sb Eq.	5.88E+00	0.00E+00	2.94E-01	2.73E-07	0.00E+00	2.53E-06	1.82E-06	-9.13E+00	6.17E+00
ADP-fossil	Depletion of abiotic resources - fossil fuels	mol N Eq.	3.47E+05	5.14E+03	2.41E+04	4.72E+01	2.85E-06	4.31E+02	3.69E+02	-1.27E+04	3.78E+05
WDP	Water use	m ³ world Eq. deprived	9.16E+03	0.00E+00	4.57E+02	5.60E-01	0.00E+00	6.96E+01	3.18E+00	-4.44E+03	9.69E+03
PM	Particulate matter emissions	Disease incidence	3.40E-03	1.05E-05	1.81E-04	3.55E-08	5.82E-15	1.62E-06	2.49E-06	-4.01E-04	3.60E-03
IRP	Ionizing radiation, human health	kBq U235 Eq.	1.15E+03	9.04E-17	5.45E+01	3.90E-01	5.01E-26	6.56E-01	4.46E-01	4.36E+02	1.21E+03
ETP-fw	Ecotoxicity (freshwater)	CTUe	1.60E+05	7.45E+03	1.79E+04	7.55E+00	4.13E-06	4.25E+02	2.49E+02	-7.25E+04	1.86E+05
HTP-c	Human toxicity, cancer effects	CTUh	3.03E-05	1.08E-07	1.66E-06	3.76E-10	6.00E-17	1.13E-08	5.04E-09	6.03E-06	3.21E-05
HTP-nc	Human toxicity, non-cancer effects	CTUh	1.46E-03	7.37E-06	8.28E-05	6.40E-09	4.09E-15	1.01E-06	1.94E-07	4.95E-04	1.55E-03
SQP	Land use related impacts/Soil quality	dimensionless	2.18E+04	0.00E+00	1.05E+03	5.24E+00	0.00E+00	3.87E+01	1.01E+02	-1.77E+05	2.30E+04

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

Resource Use											
Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
RPR _E	Renewable primary energy as energy carrier	MJ	2.24E+04	0.00E+00	1.04E+03	7.47E+01	0.00E+00	0.00E+00	6.02E+01	-2.71E+04	2.36E+04
RPR _M	Renewable primary energy resources as material utilization	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	0.00E+00
NRPR _E	Nonrenewable primary energy as energy carrier	MJ	3.06E+05	5.14E+03	2.21E+04	2.74E+02	2.85E-06	0.00E+00	3.70E+02	-8.37E+04	3.34E+05
NRPR _M	Nonrenewable primary energy as material utilization	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	0.00E+00
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	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	0.00E+00
NRSF	Use of nonrenewable 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	0.00E+00
RE	Energy recovered from disposed waste	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	0.00E+00
FW	Use of net fresh water	m ³	2.16E+02	0.00E+00	1.08E+01	1.14E-01	0.00E+00	0.00E+00	9.34E-02	-8.19E+01	2.27E+02

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

Environmental Product Declaration



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

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

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

Output Flows and Waste Categories											
Parameter	Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
HWD	Hazardous waste disposed	kg	7.17E-03	0.00E+00	3.58E-04	-8.64E-09	0.00E+00	0.00E+00	8.05E-09	-2.55E-05	7.53E-03
NHWD	Non-hazardous waste disposed	kg	6.97E+02	0.00E+00	2.53E+02	8.79E-02	0.00E+00	0.00E+00	1.85E+03	5.88E+03	2.80E+03
HLRW	High-level radioactive waste	kg	1.23E+01	0.00E+00	5.97E-01	2.81E-02	0.00E+00	0.00E+00	4.21E-03	2.64E-02	1.29E+01
ILLRW	Intermediate- and low-level radioactive waste	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
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	0.00E+00
MR	Materials for recycling	kg	0.00E+00	0.00E+00	1.39E+02	0.00E+00	0.00E+00	0.00E+00	2.77E+03	0.00E+00	2.91E+03
MER	Materials for energy recovery	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EE	Recovered energy exported from system	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	0.00E+00

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

Biogenic Carbon Content										
Parameter	Unit	A1-A3	A4	A5	B6	C2	C3	C4	D	Total
Biogenic Carbon Content in Product	kg C	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic Carbon Content in Accompanying Packaging	kg C	1.40E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E+03

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

Environmental Product Declaration



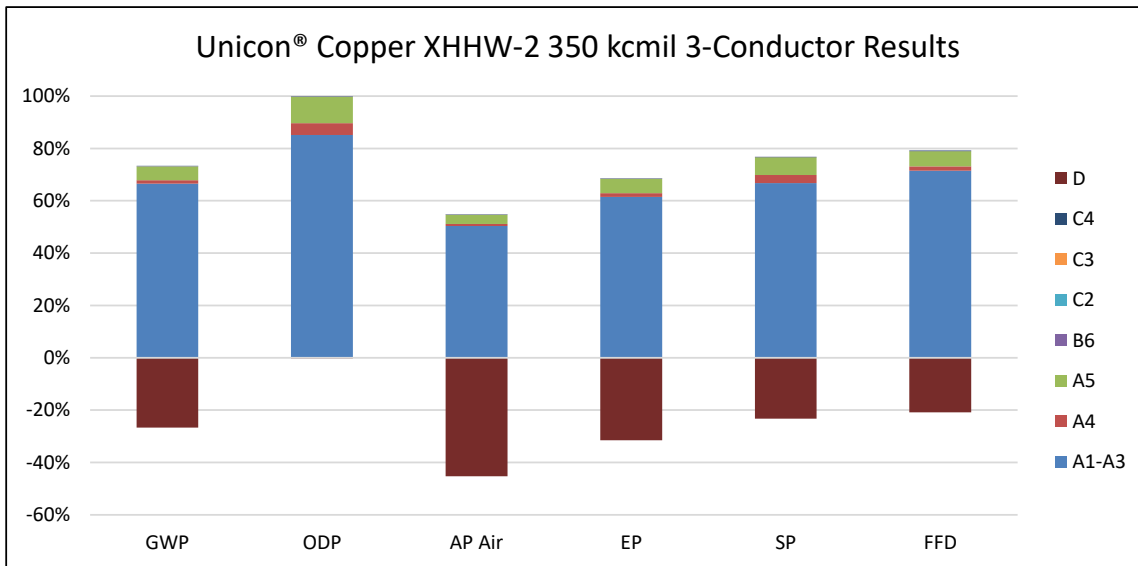
According to

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

Prysmian Low Voltage Thermoset Copper Building Wire
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:

Product Stage			Construction Process Stage		Use Stage							End of Life Stage*				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	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	X	X	X	X	X	X	X	X	X	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.

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 GWP impact came from the A1-A3 stage of the product shown 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
14 AWG XHHW-2 Stranded Copper	4.36E-03	*	2.14E+04	=	9.32E+01

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 stage of the product shown below, you would follow the equation below:

	Scaling Factor	*	Results	*	Amperage- squared	=	Final GWP
14 AWG XHHW-2 Stranded Copper	2.62E+01	*	1.53E+01	*	100 ²	=	4.01E+06

Environmental Product Declaration



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

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

	A1 - A3							A4	A5	B6	C2 - D
	GWP	ODP	AP	EP	PCOP	FFD/ADP	Resources				
14 AWG XHHW-2 Stranded Copper	4.36E-03	3.97E-03	4.01E-03	3.81E-03	4.18E-03	4.50E-03	4.55E-03	5.07E-03	5.07E-03	2.62E+01	5.07E-03
10 AWG XHHW-2 Stranded Copper	1.01E-02	1.00E-02	9.84E-03	9.33E-03	1.01E-02	9.51E-03	9.56E-03	1.09E-02	1.09E-02	3.63E+01	1.09E-02
8 AWG XHHW-2 Stranded Copper	1.63E-02	1.61E-02	1.64E-02	1.54E-02	1.67E-02	1.72E-02	1.71E-02	1.77E-02	1.77E-02	4.37E+01	1.77E-02
6 AWG XHHW-2 Stranded Copper	2.49E-02	2.52E-02	2.54E-02	2.38E-02	2.58E-02	2.56E-02	2.53E-02	2.65E-02	2.65E-02	6.12E+01	2.65E-02
4 AWG XHHW-2 Stranded Copper	3.82E-02	3.97E-02	3.96E-02	3.72E-02	4.00E-02	3.77E-02	3.71E-02	4.01E-02	4.01E-02	9.21E+01	4.01E-02
3 AWG XHHW-2 Stranded Copper	4.78E-02	5.02E-02	4.99E-02	4.68E-02	5.02E-02	4.63E-02	4.55E-02	4.94E-02	4.94E-02	1.15E+02	4.94E-02
2 AWG XHHW-2 Stranded Copper	5.95E-02	6.31E-02	6.25E-02	5.86E-02	6.28E-02	5.68E-02	5.57E-02	6.13E-02	6.13E-02	1.72E+02	6.13E-02
1 AWG XHHW-2 Stranded Copper	7.47E-02	7.92E-02	7.85E-02	7.36E-02	7.89E-02	7.14E-02	7.00E-02	7.69E-02	7.69E-02	3.41E+02	7.69E-02
1/0 AWG XHHW-2 Stranded Copper	1.03E-01	1.00E-01	1.03E-01	9.68E-02	1.04E-01	1.03E-01	9.91E-02	1.19E-01	1.19E-01	3.42E+00	1.19E-01
2/0 AWG XHHW-2 Stranded Copper	1.29E-01	1.28E-01	1.30E-01	1.22E-01	1.31E-01	1.27E-01	1.22E-01	1.47E-01	1.47E-01	2.56E+00	1.47E-01
3/0 AWG XHHW-2 Stranded Copper	1.58E-01	8.17E-04	2.21E-02	1.18E-02	1.03E-02	1.53E-01	1.47E-01	1.77E-01	1.77E-01	1.85E+00	1.77E-01

Environmental Product Declaration



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

Prysmian Low Voltage Thermoset Copper Building Wire
Industrial and Construction Cables

	A1 - A3							A4	A5	B6	C2 - D
	GWP	ODP	AP	EP	PCOP	FFD/ADP	Resources				
4/0 AWG XHHW-2 Stranded Copper	1.99E-01	1.02E-03	2.75E-02	1.47E-02	1.28E-02	1.90E-01	1.82E-01	2.20E-01	2.20E-01	1.46E+00	2.20E-01
250 kcmil XHHW-2 Stranded Copper	2.36E-01	2.37E-01	2.40E-01	2.26E-01	2.41E-01	2.28E-01	2.18E-01	2.64E-01	2.64E-01	1.40E+00	2.64E-01
300 kcmil XHHW-2 Stranded Copper	2.80E-01	1.43E-03	3.87E-02	2.07E-02	1.81E-02	2.68E-01	2.56E-01	3.10E-01	3.10E-01	1.17E+00	3.10E-01
350 kcmil XHHW-2 Stranded Copper	3.24E-01	1.63E-03	4.42E-02	2.36E-02	2.06E-02	3.05E-01	2.92E-01	3.55E-01	3.55E-01	1.00E+00	3.55E-01
400 kcmil XHHW-2 Stranded Copper	3.67E-01	1.84E-03	4.98E-02	2.66E-02	2.33E-02	3.44E-01	3.29E-01	4.00E-01	4.00E-01	8.75E-01	4.00E-01
500 kcmil XHHW-2 Stranded Copper	4.52E-01	2.25E-03	6.09E-02	3.25E-02	2.84E-02	4.19E-01	4.01E-01	4.88E-01	4.88E-01	6.89E-01	4.88E-01
600 kcmil XHHW-2 Stranded Copper	5.45E-01	2.73E-03	7.37E-02	3.94E-02	3.44E-02	5.09E-01	4.86E-01	5.91E-01	5.91E-01	5.70E-01	5.91E-01
750 kcmil XHHW-2 Stranded Copper	6.79E-01	3.37E-03	9.11E-02	4.87E-02	4.26E-02	6.27E-01	5.98E-01	7.31E-01	7.31E-01	4.75E-01	7.31E-01
1000 kcmil XHHW-2 Stranded Copper	8.91E-01	9.52E-01	9.36E-01	9.05E-01	9.30E-01	8.17E-01	7.98E-01	8.87E-01	8.87E-01	3.46E-01	8.87E-01
4/0 AWG UNICON XHHW-2 Stranded Copper	2.04E-01	2.03E-01	2.03E-01	2.04E-01	2.03E-01	2.06E-01	2.07E-01	2.06E-01	2.06E-01	1.46E+00	2.06E-01
350 kcmil UNICON XHHW-2 Stranded Copper	3.33E-01	3.33E-01	3.33E-01	3.33E-01	3.33E-01	3.33E-01	3.33E-01	3.36E-01	3.36E-01	1.00E+00	3.36E-01
350 kcmil/3C UNICON XHHW-2 Stranded Copper	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.01E+00	1.01E+00	1.00E+00	1.01E+00
8 AWG RHH/RHW-2 Stranded Copper	1.72E-02	8.89E-05	2.40E-03	1.28E-03	1.12E-03	1.94E-02	1.95E-02	1.93E-02	1.93E-02	1.72E+02	1.93E-02
6 AWG RHH/RHW-2 Stranded Copper	2.60E-02	1.31E-04	3.54E-03	1.89E-03	1.65E-03	2.83E-02	2.83E-02	2.84E-02	2.84E-02	6.12E+01	2.84E-02
4 AWG RHH/RHW-2 Stranded Copper	3.95E-02	1.95E-04	5.27E-03	2.82E-03	2.46E-03	4.08E-02	4.05E-02	4.22E-02	4.22E-02	9.21E+01	4.22E-02
2 AWG RHH/RHW-2 Stranded Copper	6.09E-02	2.93E-04	7.93E-03	4.24E-03	3.70E-03	6.04E-02	5.96E-02	6.36E-02	6.36E-02	1.72E+02	6.36E-02
2/0 AWG RHH/RHW-2 Stranded Copper	1.38E-01	7.58E-04	2.05E-02	1.10E-02	9.58E-03	1.44E-01	1.38E-01	1.64E-01	1.64E-01	2.56E+00	1.64E-01
4/0 AWG RHH/RHW-2 Stranded Copper	2.09E-01	1.11E-03	3.01E-02	1.61E-02	1.40E-02	2.10E-01	2.01E-01	2.41E-01	2.41E-01	1.46E+00	2.41E-01
250 kcmil RHH/RHW-2 Stranded Copper	2.50E-01	1.35E-03	3.65E-02	1.95E-02	1.70E-02	2.55E-01	2.45E-01	2.93E-01	2.93E-01	1.40E+00	2.93E-01
350 kcmil RHH/RHW-2 Stranded Copper	3.11E-01	1.48E-03	4.00E-02	2.14E-02	1.87E-02	2.90E-01	2.82E-01	3.21E-01	3.21E-01	1.00E+00	3.21E-01
500 kcmil RHH/RHW-2 Stranded Copper	4.36E-01	2.06E-03	5.57E-02	2.98E-02	2.60E-02	4.00E-01	3.87E-01	4.47E-01	4.47E-01	6.89E-01	4.47E-01

Environmental Product Declaration



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

Prysmian Low Voltage Thermoset Copper Building Wire
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	A1 - A3							A4	A5	B6	C2 - D
	GWP	ODP	EP	AP	PCOP	FFD/ADP	Resources				
14 AWG RW90 Solid Copper	4.96E-03	3.94E-03	4.13E-03	4.01E-03	4.56E-03	6.27E-03	6.73E-03	5.48E-03	5.48E-03	2.62E+01	5.48E-03
14 AWG RW90 Stranded Copper	5.19E-03	3.97E-03	4.22E-03	4.11E-03	4.71E-03	6.79E-03	7.32E-03	5.80E-03	5.80E-03	2.62E+01	5.80E-03
12 AWG RW90 Solid Copper	7.30E-03	6.27E-03	6.41E-03	6.18E-03	6.91E-03	8.49E-03	9.01E-03	7.84E-03	7.84E-03	2.92E+01	7.84E-03
12 AWG RW90 Stranded Copper	7.62E-03	6.32E-03	6.54E-03	6.32E-03	7.12E-03	9.23E-03	9.84E-03	8.29E-03	8.29E-03	2.92E+01	8.29E-03
12 AWG RWU90 Stranded Copper	1.03E-02	6.34E-03	7.32E-03	7.28E-03	8.71E-03	1.60E-02	1.76E-02	1.22E-02	1.22E-02	2.92E+01	1.22E-02
10 AWG RW90 Stranded Copper	1.09E-02	9.97E-03	9.99E-03	9.59E-03	1.06E-02	1.18E-02	1.24E-02	1.15E-02	1.15E-02	3.63E+01	1.15E-02

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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

References

- PCR PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021.
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- ISO 14040 ISO 14040:2009-11, Environmental management — Life cycle assessment — Principles and framework.
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Environmental Product Declaration



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Prysmian Low Voltage Thermoset Copper Building Wire
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>
- Contact our sustainability team:

LCA Practitioner



Sustainable Solutions Corporation
155 Railroad Plaza, Suite 203
Royersford, PA 19468 USA
(+1) 610 569-1047
info@sustainablesolutionscorporation.com
www.sustainablesolutionscorporation.com