Electric Utility Overhead Conductors

## **Covered Overhead Conductor — Line Wire**

Single Conductor LLDPE or XLPE Covered Line Wire



#### **Product Construction:**

### **Complete Cable:**

Weatherproof line wire consists of single conductor covered with either Linear Low-Density Polyethylene (LLDPE) or Cross-linked Polyethylene (XLPE). Conductors may be compact or concentric strand of ACSR, A1 or A2 or solid, compact or concentric strand copper. Weatherproof line wire meets the requirements of CSA C68.9 and the ANSI/ICEA S-70-547 specification, as applicable.

#### **Conductors:**

Different conductor types are available. Solid or stranded MHD copper, compact or concentric HD aluminum, aluminum alloy, or ACSR are all options that are available.

The conductors meet the requirements of CSA C49.2, CAN/CSA C61089, ASTM B3, B8, B231,B232, B400, or B496 as applicable. For aluminum and ACSR conductors, the direction of lay of the outer layer of the strand is right-hand. For copper conductors, the direction of lay of the outer layer of the strand is left-hand.

For products manufactured with aluminum conductors, the product is available with conductor corrosion-resistant inhibitor treatment.

## Complete Cable (cont'd.):

#### Covering:

Black, Linear Low-Density Polyethylene (LLDPE) or black extruded Cross-linked Polyethylene (XLPE) coverings are available.

There is no voltage rating.

#### **Features and Benefits:**

The covering provides mechanical protection to the conductor and is resistant to weathering and chemicals. If the conductors accidentally come into contact due to high winds, falling tree limbs, or other disturbances, the covering resists short circuits and the tendency for conductors to weld together.

### **Applications:**

Weatherproof line wire is used for overhead transmission and distribution lines. Covered line wire is not an electrically insulated cable. Therefore, it should be installed on insulators, and users should treat line wire as bare conductor for personal safety.

#### **Options:**

- Medium-Density Polyethylene (MDPE)
- High-Density Cross-linked Polyethylene (HDXLPE)
- Annealed (soft drawn) copper for transformer drop and covered ground wire
- · Conductor corrosion-resistant inhibitor treatment
- · Sequential print marking

For other conductor sizes, designs and/or specific installation requirements not shown in the tables, contact your General Cable sales representative or e-mail infoca@generalcable.com.





# **Covered Overhead Conductor — Line Wire**

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COVERED ACSR ALUMINUM CONDUCTOR, STEEL-REINFORCED, COMPACT-LAY-STRANDED												
	CONDUCTO	R SIZE					NOM	IINAL MASS KO	G/KM		AMPACITY	
0005			NO OF	CONDUCTOR	COVER	CABLE		TO <sup>-</sup>	ΓAL	RATED		
CODE WORD (1)	AWG or kcmil	mm²	NO. OF Wires	0.D. (mm)	THKN. (mm)	0.D. (mm)	AL	PE	XLPE	STRENGTH kn	PE (2)	XLPE (3)
Gum	#6	13.3	6/1	4.62	0.76	6.15	36.5	67.1	67.1	5.19	95	110
Solah	#6	13.3	6/1	4.90	0.76	6.43	36.5	85.3	85.3	7.67	95	115
-none-	#6	13.3	6/1	5.28	0.76	6.81	36.5	106.9	106.9	10.7	100	120
Teak	#4	21.2	6/1	5.82	0.76	7.34	57.7	102.4	102.4	8.15	125	145
-none-	#4	21.2	6/1	6.17	0.76	7.70	57.7	131.0	131.0	12.1	130	155
-none-	#4	21.2	6/1	6.71	0.76	8.23	57.7	164.9	164.9	16.4	130	160
Ebony	#2	33.6	6/1	7.37	1.14	9.65	92.0	167.9	167.9	12.4	160	190
-none-	#2	33.6	6/1	7.82	1.14	10.1	92.0	215.6	215.6	18.4	170	205
-none-	#2	33.6	6/1	8.41	1.14	10.7	92.0	268.0	268.0	25.7	175	210
Liana	#1	42.4	6/1	8.28	1.14	10.6	116.3	207.6	207.6	15.5	185	220
-none-	#1	42.4	6/1	8.79	1.14	11.1	116.3	265.2	265.2	23.0	195	240
Bamboo	1/0	53.5	6/1	9.27	1.52	12.3	146.6	267.1	267.1	18.9	210	250
-none-	1/0	53.5	6/1	9.86	1.52	12.9	146.6	339.8	339.8	28.8	225	275
Corypha	2/0	67.4	6/1	10.4	1.52	13.5	185.0	329.2	329.2	23.5	240	290
Mahogany	3/0	85.0	6/1	11.7	1.52	14.8	232.9	407.0	407.0	29.6	275	325
Eucalyptus	4/0	107.2	6/1	13.1	1.52	16.2	293.7	504.1	504.1	37.3	310	370
-none-	266.8	135.2	18/1	14.2	1.52	17.2	372.1	503.0	503.0	31.2	385	425
-none-	336.4	170.5	18/1	16.0	1.52	19.0	470.3	623.0	623.0	39.4	445	550

COVERED ACSR ALUMINUM CONDUCTOR, STEEL-REINFORCED, CONCENTRIC-LAY-STRANDED													
	CONDUCTOR SIZE						NOMINAL MASS KG/KM				AMPACITY		
CODE			NO. OF	CONDUCTOR O.D.	COVER THKN.	CABLE		TO	TAL	RATED STRENGTH			
WORD (1)	AWG or kcmil	mm²	WIRES	(mm)	(mm)	(mm)	AL	PE	XLPE	KN	PE (2)	XLPE (3)	
Walnut	#6	13.3	6/1	5.04	0.762	6.60	36.5	69.8	69.8	5.19	95	115	
Butternut	#4	21.1	6/1	6.36	0.762	7.92	57.7	106.1	106.1	8.14	125	150	
Hickory	#4	21.1	7/1	6.53	0.762	8.10	57.7	121.1	121.1	10.2	125	150	
Pignut	#2	33.6	6/1	8.01	1.14	10.3	92.0	174.4	174.4	12.4	165	195	
Chestnut	#1	42.4	6/1	9.00	1.14	11.3	116.3	214.1	214.1	15.5	190	225	
Almond	1/0	53.5	6/1	10.1	1.52	13.1	146.6	274.6	274.6	18.9	215	255	
Pecan	2/0	67.4	6/1	11.3	1.52	14.3	185.0	337.7	337.7	23.5	245	295	
Filbert	3/0	85	6/1	12.8	1.52	15.7	232.9	416.8	416.8	29.6	280	335	
Buckeye	4/0	107.2	6/1	14.3	1.52	17.3	293.7	515.7	515.7	37.3	320	395	
Hackberry	266.8	135.2	18/1	15.5	1.52	18.5	371.1	516.4	516.4	31.2	395	475	
Redbud	266.8	135.2	18/1	15.5	2.03	19.6	371.1	546.2	546.2	31.2	395	475	
Mockernut	336.4	170.5	18/1	17.4	1.52	20.4	470.3	640.0	640.0	39.6	455	545	
Aspen	336.4	170.5	18/1	17.4	2.03	21.5	470.3	672.7	672.7	39.6	455	545	





<sup>(1)</sup> Code words shown are for PE covered products. Add the suffix "/XLP" to the code word name to identify the code word for XLPE products. Example Walnut/XLP.
(2) The ampacity rating is based on a conductor temperature of 75°C at 60 Hz and the following conditions, 32°C ambient temperature, 1.98 ft/sec (0.6 m/sec) crosswind (90° to conductor), 0.91 coefficient of emissivity, 0.95 coefficient of absorptivity, 42° northern latitude, sea level elevation, 90° azimuth of line (East-West), clear atmosphere, and a date and time of noon on July 1 (resulting in 95.0 W/ft² of solar and sky radiated heat). Actual ampacity will differ based on local conditions. For specific ampacities, please contact your General Cable sales representative.

(3) The ampacity rating is based on a conductor temperature of 90°C at 60 Hz and the following conditions, 32°C ambient temperature, 1.98 ft/sec (0.6 m/sec) crosswind (90° to conductor), 0.91 coefficient of emissivity, 0.95

coefficient of absorptivity, 42° northern latitude, sea level elevation, 90° azimuth of line (East-West), clear atmosphere, and a date and time of noon on July 1 (resulting in 95.0 W/ft² of solar and sky radiated heat). Actual

ampacity will differ based on local conditions. For specific ampacities, please contact your General Cable sales representative.

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.

# **Covered Overhead Conductor — Line Wire**

Single Conductor LLDPE or XLPE Covered Line Wire

COVERED ASC ALUMINUM CONDUCTOR, CONCENTRIC-LAY-STRANDED												
	CONDUCTO	CONDUCTOR SIZE					NOMINAL MASS KG/KM (2)				AMPACITY	
CODE			NO. OF	CONDUCTOR O.D.	COVER THKN.	CABLE		TOTAL		RATED		
WORD (1)	AWG or kcmil	mm²	WIRES	(mm)	(mm)	0.D. (mm)	AL	PE	XLPE	STRENGTH kn	PE (2)	XLPE (3)
Apple	#6	13.3	1	4.11	0.76	5.69	36.5	49.7	49.7	2.18	95	110
Plum	#6	13.3	7	4.68	0.76	6.22	36.5	51.5	51.5	2.61	95	110
Pear	#4	21.1	1	5.19	0.76	6.76	57.7	74.9	74.9	3.47	125	150
Apricot	#4	21.1	7	5.88	0.76	7.44	57.7	77.4	77.4	4.12	125	150
Cherry	#2	33.6	1	6.54	1.14	8.89	92.0	123.8	123.8	5.38	165	200
Peach	#2	33.6	7	7.41	1.14	9.75	92.0	128.1	128.1	6.21	165	200
Nectarine	#1	42.4	7	8.34	1.14	10.7	116.3	157.0	157.0	7.44	185	215
Quince	1/0	53.5	7	9.36	1.52	12.5	146.6	201.7	201.7	9.10	220	260
Orange	2/0	67.4	7	10.5	1.52	13.6	185.0	246.4	246.4	11.4	260	310
Fig	3/0	85.0	7	11.8	1.52	14.9	232.9	302.3	302.3	14.0	295	350
Olive	4/0	107.2	7	13.3	1.52	16.4	293.7	371.0	371.0	17.7	340	405
Mulberry	266.8	135.2	19	15.1	1.52	18.2	372.1	456.9	456.9	23.0	390	470
Silverbelt	266.8	135.2	19	15.1	2.03	19.2	372.1	485.2	485.2	23.0	390	470
Anona	336.4	170.5	19	16.9	1.52	20.0	470.3	564.0	564.0	29.0	450	545
Crabapple	336.4	170.5	19	16.9	2.03	21.1	470.3	595.3	595.3	29.0	445	535
Chinquapin	350	177.4	19	17.3	1.52	20.4	488.7	584.9	584.9	30.2	460	555
Ginko	350	177.4	19	17.3	2.03	21.4	488.7	616.1	616.1	30.2	460	555
Molles	397.5	201.4	19	18.4	2.03	22.5	553.1	690.5	690.5	34.2	495	595
Ash	400	202.7	19	18.5	2.03	22.6	559.1	695.0	695.0	34.5	495	600
Huckleberry	477	241.7	37	20.2	2.03	24.4	665.5	815.5	815.5	42.2	555	670
Paw Paw	556.5	282.0	37	21.8	2.03	26.0	781.0	939.1	939.1	48.1	605	735
Breadfruit	636	322.3	61	23.3	2.41	28.3	891.1	1088	1088	57.8	650	790
Persimmon	795	402.8	61	26.1	2.41	31.0	1117	1333	1333	70.5	743	918
Grapefruit	1033.5	523.7	61	29.8	2.41	34.7	1455	1700	1700	89.2	800	980
Mango	1590	805.7	61	36.9	2.79	42.6	2233	2588	2588	133	1110	1370

COVERED ASC ALUMINUM CONDUCTOR, COMPACT-LAY-STRANDED												
	CONDUCTO	R SIZE					NOMINAL MASS KG/KM (2)				AMPACITY	
CODE			NO. OF	CONDUCTOR O.D.	COVER THKN.	CABLE O.D.		TO	TAL	RATED STRENGTH		
WORD (1)	AWG or kcmil	mm²	WIRES	(mm)	(mm)	(mm)	AL	PE	XLPE	kN	PE (2)	XLPE (3)
Bay	#6	13.3	7	4.28	0.76	5.81	36.5	55.8	55.8	2.59	95	110
Нор	#4	21.1	7	5.41	0.76	6.93	57.7	82.0	82.0	4.12	125	145
Sloe	#2	33.6	7	6.81	1.14	9.10	92.0	121.7	121.7	6.22	165	195
Alder	#1	42.4	7	7.59	1.14	9.90	116.3	149.3	149.3	7.42	190	225
Aspen	1/0	53.5	7	8.53	1.52	11.6	146.6	193.6	193.6	9.10	215	255
Thorn	2/0	67.4	7	9.55	1.52	12.6	185.0	236.9	236.9	11.4	255	305
Barwood	3/0	85.0	7	10.7	1.52	13.8	232.9	291.2	291.2	14.0	285	340
Camwood	3/0	85.0	18	10.7	1.52	13.8	232.9	292.3	292.3	15.7	285	340
Dogwood	4/0	107.2	7	12.1	1.52	15.1	293.7	359.0	359.0	17.7	330	395
Oakwood	4/0	107.2	18	12.1	1.52	15.1	293.7	360.4	360.4	18.8	330	395
-none-	250	126.7	7	13.2	1.52	16.3	346.3	418.2	418.2	20.9	365	440
Redwood	266.8	135.2	7	13.6	1.52	16.7	371.1	440.5	440.5	22.2	385	460
Corkwood	266.8	135.2	18	13.6	1.52	16.7	372.1	442.0	442.0	22.3	385	460
Hornbeam	300	152.0	18	14.5	1.52	17.5	419.0	492.6	492.6	25.8	410	480
Ironwood	336.4	170.5	18	15.3	1.52	18.4	468.8	546.2	546.2	29.0	440	530
Beachwood	397.5	201.4	18	16.7	1.52	19.8	555.1	638.4	638.4	33.2	490	590
Buttonwood	477	241.7	18	18.3	2.03	22.4	665.2	790.2	790.2	39.9	540	650
-none-	500	253.4	18	18.7	2.03	22.8	698.0	824.5	824.5	41.8	555	670

Dimensions and weights not designated minimum or maximum are nominal values and subject to manufacturing tolerances. In this context, weight means mass.





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ampacity will differ based on local conditions. For specific ampacities, please contact your General Cable sales representative.

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# **Covered Overhead Conductor — Line Wire**

Single Conductor LLDPE or XLPE Covered Line Wire

COVERED MHD COPPER CONDUCTOR, CONCENTRIC-LAY-STRANDED												
	CONDUCTOR SIZE						NOMINAL MASS KG/KM				AMP	ACITY
CODE	AWG OR		NO. OF	CONDUCTOR O.D.	COVER THKN.	CABLE O.D.		TOTAL		RATED		
WORD (1)	kcmil	mm²	WIRES	(mm)	(mm)		CU	PE	XLPE	STRENGTH KN	PE (2)	XLPE (3)
	MEDIUM HARD DRAWN COPPER											
-none-	4	21.1	7	5.89	0.76	7.42	189.9	210.4	210.4	7.4	160	190
-none-	2	33.6	7	7.42	1.14	9.70	302.4	339.8	339.8	11.6	210	250
-none-	1/0	53.5	7	9.35	1.52	12.4	481.7	538.1	538.1	18.2	275	330
-none-	2/0	67.4	19	10.6	1.52	13.7	606.6	671.5	671.5	23.7	320	380
-none-	4/0	107.2	19	13.4	1.52	16.4	965.0	1048	1048	37.0	425	510

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