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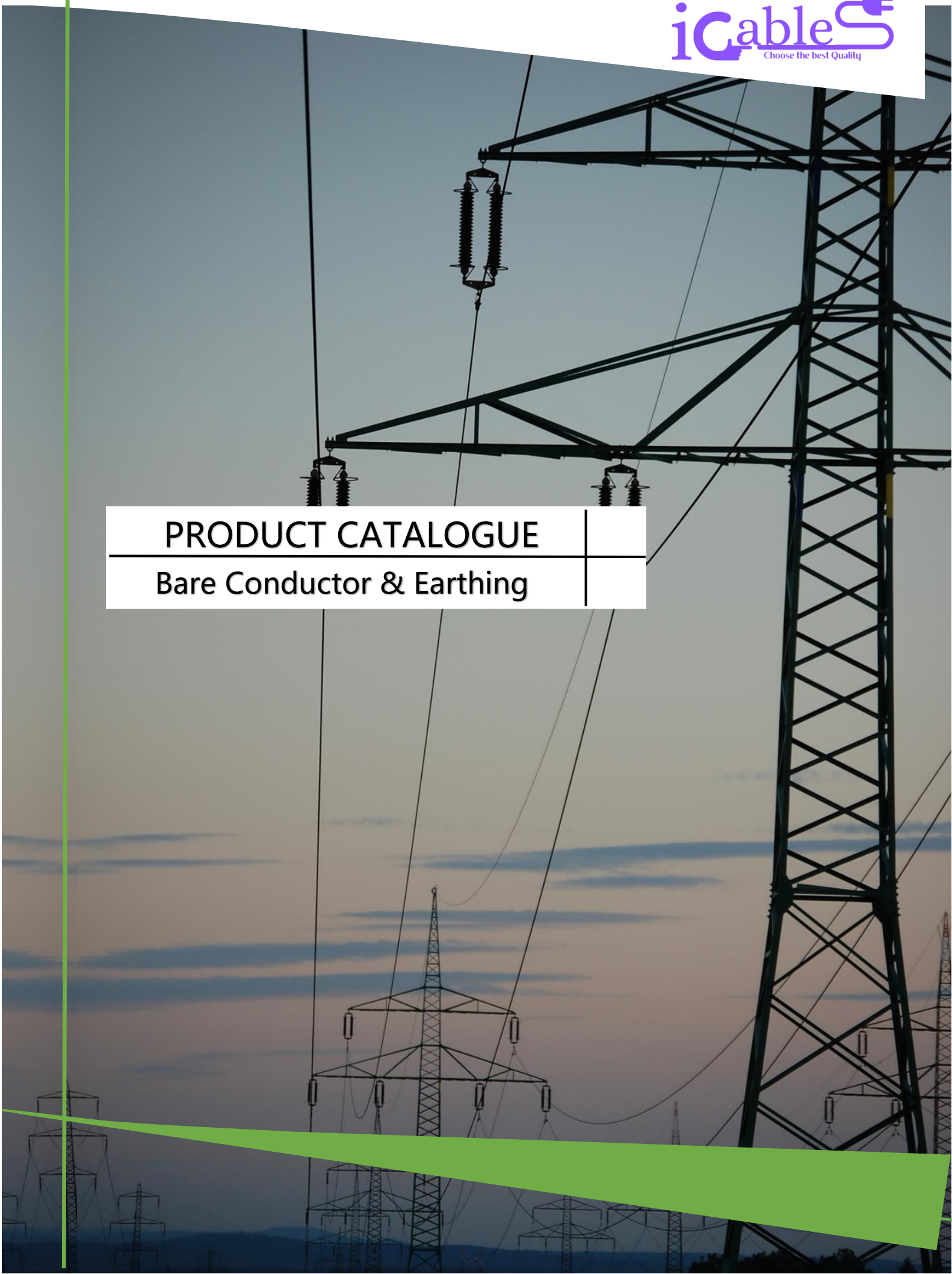


PRODUCT CATALOGUE

Bare Conductor & Earthing

Contents

Bare Conductor & Earthing Material.

- AAC Conductor.
- AAAC Conductor.
- ACSR Conductor.
- AACSR Conductor
- ACSR/AW, ACSR/AC Conductor.
- AACSR/AW Conductor.
- ACAR Conductor.
- Bare Copper Conductor/Copper Earth Wire.
- Galvanized(Zinc-Coated) Steel Wire(GSW)/
- Stay Wire/Earth Wire.
- Aluminum Clad Steel Wire(ACS).
- Copper Clad Steel Wire (CCS).

Bare Conductor & Earthing Material: -

AAC Conductor

AAAC Conductor

ACSR Conductor

AACSR Conductor

ACSR/AW, ACSR/AC Conductor

AACSR/AW Conductor

Bare Copper Conductor/Copper Earth Wire

Galvanized (Zinc-Coated)/Steel Wire (GSW)

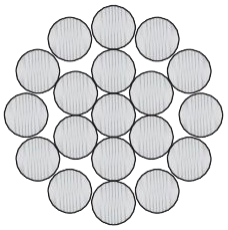
All Aluminum Conductors (AAC)

Standards

- ✓ AS 1531
- ✓ IEC 61089

Application

AAC conductor is widely used in power transmission lines with various voltage levels. Since they have such good characteristics as simple structure, convenient installationand maintenance, low cost for the line, large transmission capacity and are also suitable for laying across rivers and valleys where special geographical features exist.



AS 1531

- Aluminum 1350 Wire

		Stranding	Section	Overall Diameter	Conductor Weight	Breaking Load	Electrical Resistance
Code Name	No.	mm	mm²	mm	kg/km	kN	DC.20°C
							0/km
LEO	7	2.50	34.36	7.50	94.3	5.71	0.833
LEONIDS	7	2.75	41.58	8.25	113.0	6.72	0.689
LIBRA	7	3.00	49.48	9.00	135.0	7.98	0.579
MARS	7	3.75	77.28	11.30	211.0	11.80	0.37
MERCURY	7	4.50	111.30	13.50	304.0	16.90	0.258
MOON	7	4.75	124.00	14.30	339.0	18.90	0.232
NEPTUNE	19	3.25	157.60	16.30	433.0	24.70	0.183
ORION	19	3.50	182.80	17.50	503.0	28.70	0.157
PLUTO	19	3.75	209.80	18.80	576.0	31.90	0.137
SATURN	37	3.00	261.60	21.00	721.0	42.20	0.11
SIRIUS	37	3.25	307.00	22.80	845.0	48.20	0.094
TAURUS	19	4.75	336.70	23.80	924.0	51.30	0.0857
TRITON	37	3.75	408.50	26.30	1120.0	62.20	0.0706
URANUS	61	3.25	506.10	29.30	1400.0	75.20	0.0572
URSULA	61	3.50	586.90	31.50	1620.0	87.30	0.0493
VENUS	61	3.75	673.40	33.80	1860.0	97.20	0.0429

IEC 61089

- Hard Drawn Aluminum Wire A1

		Stranding	Section	Overall Diameter	Conductor Weight	Rated Strength	Electrical Resistance
Code Name	No.	mm	mm²	mm	kg/km	kN	DC.20°C Ω/km
10	7	1.35	10.02	4.05	27.4	1.95	2.8633
16	7	1.71	16.08	5.12	43.8	3.04	1.7896
25	7	2.13	24.94	6.40	68.4	4.50	1.1453
40	7	2.70	40.08	8.09	109.4	6.80	0.7158
63	7	3.39	63.18	10.20	172.3	10.39	0.4545
100	19	2.59	100.10	12.90	274.8	17.00	0.2877
125	19	2.89	124.63	14.50	343.6	21.25	0.2302
160	19	3.27	159.57	16.40	439.8	26.40	0.1798
200	19	3.66	199.90	18.30	549.7	32.00	0.1439
250	19	4.09	249.63	20.50	687.1	40.00	0.1151
315	37	3.29	314.55	23.00	867.9	51.97	0.0916
400	37	3.71	399.98	26.00	1102.0	64.00	0.0721
450	37	3.94	451.11	27.50	1239.8	72.00	0.0641
500	37	4.15	500.48	29.00	1377.6	80.00	0.0577
560	37	4.39	560.04	30.70	1542.9	89.60	0.0515
630	61	3.63	631.30	32.60	1738.3	100.80	0.0458
710	61	3.85	710.14	34.60	1959.1	114.60	0.0407
800	61	4.09	801.43	36.80	2207.4	128.00	0.0361
900	61	4.33	898.25	39.00	2483.3	144.00	0.0321
1000	61	4.57	1000.58	41.10	2759.2	160.00	0.0289
1120	91	3.96	1120.78	43.50	3093.5	179.20	0.0258
1250	91	4.18	1248.77	46.00	3452.6	200.00	0.0231
1400	91	4.43	1402.62	48.70	3866.9	224.00	0.0207
1500	91	4.58	1499.21	50.40	4143.1	240.00	0.0193

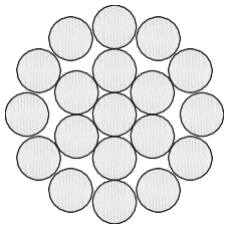
All Aluminum Alloy Conductors (AAAC)

Standards

- AS 1531
- IEC 61089

Application

AAAC is widely used in power transmission lines with various voltage levels, and alsoused in power lines across great rivers, heavy ice area, and other places of special geographical characteristics. The conductor has excellent advantages of high strength, large current carrying capacity and good catenary property as well as wear-resistance, anti-crush and corrosion-proof with simple structure, convenientinstallation and maintenance, low cost for the line, large transmission capacity.



AS 1531

- Aluminum Alloy 1120/6201

	Stranding		Section	Overall Diameter	Conductor Weight	Breaking Load	Electrical Resistance
Code Name	No.	Φmm	mm^2	mm	kg/km	kN	DC.20°C Q/km
AAAC/1120							
CHLORINE	7	2.50	34.4	7.5	94.3	8.18	0.864
CHROMIUM	7	2.75	41.6	8.3	113.0	9.91	0.713
FLUORINE	7	3.00	49.5	9.0	135.0	11.80	0.599
HELIUM	7	3.75	77.3	11.3	211.0	17.60	0.383
HYDROGEN	7	4.50	111.0	13.5	304.0	24.30	0.266
LODINE	7	4.75	124.0	14.3	339.0	27.10	0.239
KRYPTON	19	3.25	158.0	16.3	433.0	37.40	0.189
LUTETIUM	19	3.50	183.0	17.5	503.0	41.70	0.163
NEON	19	3.75	210.0	18.8	576.0	47.80	0.142
NITROGEN	37	3.00	262.0	21.0	721.0	62.20	0.114
NOBELIUM	37	3.25	307.0	22.8	845.0	72.80	0.0973
OXYGEN	19	4.75	337.0	23.8	924.0	73.60	0.0884
PHOSPHORUS	37	3.75	409.0	26.3	1120.0	93.10	0.0731
SELENIUM	61	3.25	506.0	29.3	1400.0	114.00	0.0592
SILICON	61	3.50	587.0	31.5	1620.0	127.00	0.0511
SULPHUR	61	3.75	674.0	33.8	1860.0	145.00	0.0444
AAAC/6201							
DIAMOND	7	2.50	34.4	7.5	94.3	9.64	0.967
DOLOMITE	7	2.75	41.6	8.3	113.0	11.60	0.799
EMERALD	7	3.00	49.5	9.0	135.0	13.90	0.671
GARNET	7	3.75	77.3	11.3	211.0	21.70	0.430
JADE	7	4.50	111.0	13.5	304.0	31.20	0.298
JASPER	7	4.75	124.0	14.3	339.0	34.80	0.268
OPAL	19	3.25	158.0	16.3	433.0	44.20	0.212

PATRONITE	19	3.50	183.0	17.5	503.0	51.30	0.183
PEARL	19	3.75	210.0	18.8	576.0	58.80	0.159
RUBY	37	3.00	262.0	21.0	721.0	73.50	0.128
RUTHENIUM	37	3.25	307.0	22.8	845.0	86.10	0.109
RUTILE	19	4.75	337.0	23.8	924.0	94.40	0.0991
SAPPHIRE	37	3.75	409.0	26.3	1120.0	115.00	0.0819
SPINEL	61	3.25	506.0	29.3	1400.0	135.00	0.0662
TANTALUM	61	3.50	587.0	31.5	1620.0	156.00	0.0572
TOPAZ	61	3.75	674.0	33.8	1860.0	179.00	0.0498

IEC 61089

- Aluminum Alloy Wire

	Stranding		**Section**	**Overall Diameter**	**Conductor Weight**	**Rated Strength**	**Electrical Resistance**
Code Number	No.	Φmm	mm²	mm	kg/km	kN	DC.20°C Ω/km
Type A2							
16	7	1.83	18.4	5.49	50.4	5.43	1.7896
25	7	2.29	28.8	6.86	78.7	8.49	1.1453
40	7	2.89	46.0	8.68	125.9	13.58	0.7158
63	7	3.63	72.5	10.90	198.3	21.39	0.4545
100	19	2.78	115.0	13.90	316.3	33.95	0.2877
125	19	3.10	144.0	15.50	395.4	42.44	0.2302
160	19	3.51	184.0	17.60	506.1	54.32	0.1798
200	19	3.93	230.0	19.60	632.7	67.91	0.1439
250	19	4.39	288.0	22.00	790.8	84.88	0.1151
315	37	3.53	363.0	24.70	998.9	106.95	0.0916
400	37	3.98	460.0	27.90	1268.4	135.81	0.0721
450	37	4.22	518.0	29.60	1426.9	152.79	0.0641
500	37	4.45	575.0	31.20	1585.5	169.76	0.0577
560	61	3.67	645.0	33.00	1778.4	190.14	0.0516
630	61	3.89	725.0	35.00	2000.7	213.90	0.0458
710	61	4.13	817.0	37.20	2254.8	241.07	0.0407
800	61	4.38	921.0	39.50	2540.6	271.62	0.0361
900	91	3.81	1036.0	41.80	2861.1	305.58	0.0321
1000	91	4.01	1151.0	44.10	3179.0	339.53	0.0289
1120	91	4.25	1289.0	46.70	3560.5	380.27	0.0258
1250	91	4.49	1439.0	49.40	3973.7	424.41	0.0231
Type A3							
16	7	1.84	18.6	5.52	50.8	6.04	1.7896
25	7	2.30	29.0	6.90	79.5	9.44	1.1453
40	7	2.91	46.5	8.72	127.1	15.10	0.7158
63	7	3.65	73.2	10.90	200.2	23.06	0.4545
100	19	2.79	116.0	14.00	319.3	37.76	0.2877
125	19	3.12	145.0	15.60	399.2	47.20	0.2302
160	19	3.53	186.0	17.60	511.0	58.56	0.1798
200	19	3.95	232.0	19.70	638.7	73.20	0.1439

250	19	4.41	290.0	22.10	798.4	91.50	0.1151
315	37	3.55	366.0	24.80	1008.4	115.29	0.0916
400	37	4.00	465.0	28.00	1280.5	146.40	0.0721
450	37	4.24	523.0	29.70	1440.5	164.70	0.0641
500	37	4.47	581.0	31.30	1600.6	183.00	0.0577
560	61	3.69	651.0	33.20	1795.3	204.96	0.0516
630	61	3.91	732.0	35.20	2019.8	230.58	0.0458
710	61	4.15	825.0	37.30	2276.2	259.86	0.0407
800	61	4.40	930.0	38.60	2564.8	292.80	0.0361
900	91	3.83	1046.0	42.10	2888.3	329.40	0.0321
1000	91	4.03	1162.0	44.40	3209.3	366.00	0.0289
1120	91	4.27	1301.0	46.90	3594.4	409.92	0.0258

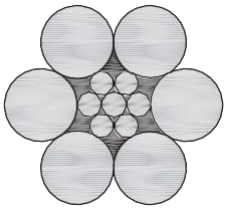
Aluminum Conductors Steel Reinforced (ACSR)

Standards

- AS 3607
- IEC 61089

Application

ACSR is widely used in power transmission lines with various voltage levels, with suchgood characteristics as simple structure, convenient installation and maintenance, low cost and large transmission capacity. ACSR is also suitable for laying across rivers andvalleys and the places where special geographical features exist.



AS 3607

- Galvanized Steel Wire
- Aluminum 1350 Wire

	Stranding		Section	Overall Diameter	Conductor Weight	Rated Strength	Electrical Resistance
Code Name	Aluminum	Steel	mm²	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
ALMOND	6/2.50	1/2.50	34.4	7.5	119	10.5	0.975
APRICOT	6/2.75	1/2.75	41.6	8.3	144	12.6	0.805
APPLE	6/3.00	1/3.00	49.5	9.0	171	14.9	0.677
BANANA	6/3.75	1/3.75	77.3	11.3	268	22.7	0.433
CHERRY	6/4.75	7/1.60	120.0	14.3	402	33.4	0.271
GRAPE	30/2.50	7/2.50	182.0	17.5	677	63.5	0.196
LEMON	30/3.00	7/3.00	262.0	21.0	973	90.4	0.136
LYCHEE	30/3.25	7/3.25	307.0	22.8	1140	105.0	0.116
LIME	30/3.50	7/3.50	356.0	24.5	1320	122.0	0.1
MANGO	54/3.00	7/3.00	431.0	27.0	1440	119.0	0.0758
ORANGE	54/3.25	7/3.25	506.0	29.3	1690	137.0	0.0646

OLIVE	54/3.50	7/3.50	587.0	31.5	1960	159.0	0.0557
PAWPAW	54/3.75	19/2.25	672.0	33.8	2240	178.0	0.0485
QUINCE	3/1.75	4/1.75	16.8	5.3	95	12.7	3.25
RAISIN	3/2.50	4/2.50	34.4	7.5	195	24.4	1.59
SULTANA	4/3.00	3/3.00	49.5	9.0	243	28.3	0.897
WALNUT	4/3.75	3/3.75	77.3	11.3	380	43.9	0.573

IEC 61089

- Galvanized Steel Wire
- Aluminum Wire

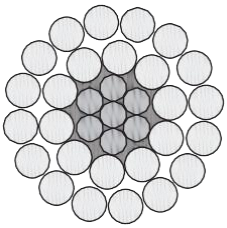
Code Name		**Stranding**	**Section**	**Overall Diameter**	**Conductor Weight**	**Rated Strength**	**Electrical Resistance**
	Aluminum	Steel	mm^2	mm	kg/km	kN	DC.20°C Ω/km
	No. x Φ mm						
16	6/1.84	1/1.84	18.7	5.53	64.6	6.08	1.7934
25	6/2.30	1/2.30	29.2	6.91	100.9	9.13	1.1478
40	6/2.91	1/2.91	46.7	8.74	161.5	14.40	0.7174
63	6/3.66	1/3.66	73.5	11.0	254.4	21.63	0.4555
100	6/4.61	1/4.61	117.0	13.80	403.8	34.33	0.2869
125	18/2.97	1/2.97	132.0	14.90	397.9	29.17	0.2304
125	26/2.47	7/1.92	145.0	15.70	503.9	45.69	0.231
160	18/3.36	1/3.36	169.0	16.80	508.3	36.18	0.18
160	26/2.80	7/2.18	186.0	17.70	644.9	57.69	0.1805
200	18/3.76	1/3.76	211.0	18.80	636.7	44.22	0.144
200	26/3.13	7/2.43	233.0	19.80	806.2	70.13	0.1444
250	22/3.8	7/2.11	275.0	21.60	880.6	68.72	0.1154
250	26/3.5	7/2.72	291.0	22.20	1007.7	87.67	0.1155
315	45/2.99	7/1.99	337.0	23.90	1039.6	79.03	0.0917
315	26/3.93	7/3.05	366.0	24.90	1269.7	106.83	0.0917
400	45/3.36	7/2.24	428.0	26.90	1320.1	98.36	0.0722
400	54/3.07	7/3.07	452.0	27.60	1510.3	123.04	0.0723
450	45/3.57	7/2.38	481.0	28.50	1485.2	107.47	0.0642
450	54/3.26	7/3.26	508.0	29.30	1699.1	138.42	0.0643
500	45/3.76	7/2.51	535.0	30.10	1650.2	119.41	0.0578
500	54/3.43	7/3.43	565.0	30.90	1887.9	153.80	0.0578
560	45/3.98	7/2.65	599.0	31.80	1848.2	133.74	0.0516
560	54/3.63	19/2.18	631.0	32.70	2103.4	172.59	0.0516
630	45/4.22	7/2.81	674.0	33.80	2079.2	150.45	0.0459
630	54/3.85	19/2.31	710.0	34.70	2366.3	191.77	0.0459
710	45/4.48	7/2.99	759.0	35.90	2343.2	169.56	0.0407
710	54/4.09	19/2.45	800.0	36.80	2666.8	216.12	0.0407
800	72/3.76	7/2.51	835.0	37.60	2480.2	167.41	0.0361
800	84/3.48	7/3.48	867.0	38.30	2732.7	205.33	0.0362
800	54/4.34	19/2.61	901.0	39.10	3004.9	243.52	0.0362
900	72/3.99	7/2.66	939.0	39.90	2790.2	188.33	0.0321

900	84/3.69	7/3.69	975.0	40.60	3074.2	226.50	0.0322
1000	72/4.21	7/2.80	1043.0	42.10	3100.3	209.26	0.0289
1120	72/4.45	19/1.78	1167.0	44.50	3464.9	234.53	0.0258
1120	84/4.12	19/2.47	1211.0	45.30	3811.5	283.17	0.0258
1250	84/4.35	19/2.61	1352.0	47.90	4253.9	316.04	0.0232
1250	72/4.70	19/1.88	1303.0	47.00	3867.1	261.75	0.0231

Aluminum Alloy Conductors Steel Reinforced (AACSR)

Standards

- AS/NZS 1531 / IEC 61089



Application

AACSR is used as bare overhead transmission cable and as primary and secondary distribution cable. AACSR offers optimal strength for line design, and variable steel core stranding enables desired strength to be achieved without sacrificing ampacity.

AS/NZS 1531/ IEC 61089

- Galvanized Steel Wire
- Aluminum Alloy Wire

	Stranding		Section	Overall Diameter	Conductor Weight	Rated Strength	Electrical Resistance
Code Name	Aluminum Alloy	Steel	mm^2	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
16	6/1.98	1/1.98	21.5	5.9	74.4	9.02	1.7934
25	6/2.47	1/2.47	33.6	7.4	116.2	13.96	1.1478
40	6/3.13	1/3.13	53.7	9.4	185.9	22.02	0.7174
63	6/3.92	1/3.92	84.6	11.8	292.8	34.68	0.4555
100	18/2.85	1/2.85	121.0	14.3	366.4	41.24	0.288
125	18/3.19	1/3.19	152.0	16.0	458.0	51.23	0.2304
125	26/2.65	7/2.06	167.0	16.8	579.9	69.86	0.231
160	18/3.61	1/3.61	294.0	18.0	586.2	65.58	0.18
160	26/3.00	7/2.34	214.0	19.0	742.3	88.52	1.1805
200	18/4.04	1/4.04	243.0	20.2	732.8	81.97	0.144
200	26/3.36	7/2.61	268.0	21.3	927.9	110.64	0.1444
250	22/4.08	7/2.27	316.0	23.1	1013.5	117.09	0.1154
250	26/3.75	7/2.92	335.0	23.8	1159.8	138.31	0.1155
315	45/3.20	7/2.14	388.0	25.6	1196.5	136.28	0.0917
315	26/4.21	7/3.28	422.0	26.7	1461.4	171.90	0.0917
400	45/3.61	7/2.41	492.0	28.9	1519.4	172.10	0.0722
400	54/3.29	7/3.29	520.0	29.7	1738.3	201.46	0.0723
450	45/3.83	7/2.55	554.0	30.6	1709.3	193.61	0.0642

450	54/3.49	7/3.49	585.0	31.5	1955.6	226.64	0.0643
500	45/4.04	7/2.69	615.0	32.3	1899.3	215.12	0.0578
500	54/3.68	7/3.68	650.0	33.2	2172.9	251.82	0.0578
560	45/4.27	7/2.85	690.0	34.2	2127.2	240.93	0.0516

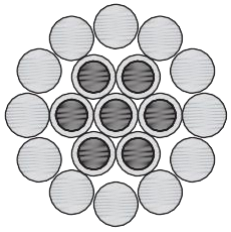
Aluminum Conductors Aluminum Clad Steel Reinforced (ACSR/AW, ACSR/AC)

Standards

- AS 3607
- IEC 61089

Application

Aluminium clad steel is a high strength steel, covered by a thick coating of pure aluminium. The aluminium clad steel wires, in comparison with galvanized steel wires of same size, have the same tensile characteristics, but a lower weight and a consider- ably higher electrical conductivity and corrosion resistance. This last property is specially important in the construction of the finished conductor, where the aluminiumwires are in contact with the aluminium clad steel wires of the reinforcing core, thus avoiding the possibility of galvanic corrosion between cores and surrounding layers of aluminium.



AS 3607

- Aluminum Clad Steel Wire
- Aluminum 1350 Wire

	Stranding		**Section**	**Overall Diameter**	**Conductor Weight**	**Rated Strength**	**Electrical Resistance**
Code Name	Aluminum	Aluminum Clad Steel	mm²	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
ANGLING	6/2.50	1/2.50	34.4	7.5	113	10.6	0.923
AQUATICS	6/2.75	1/2.75	41.6	8.3	137	12.7	0.763
ARCHERY	6/3.00	1/3.00	49.5	9.0	163	15.1	0.641
BASEBALL	6/3.75	1/3.75	77.3	11.3	254	22.3	0.41
BOWLS	6/4.75	7/1.60	120.0	14.3	385	32.7	0.259
CRICKET	30/2.50	7/2.50	182.0	17.5	636	64.4	0.182
DARTS	30/3.00	7/3.00	262.0	21.0	913	91.6	0.126
DICE	30/3.25	7/3.25	307.0	22.8	1070	106.0	0.108
DIVING	30/3.50	7/3.50	356.0	24.5	1240	122.0	0.0928
GOLF	54/3.00	7/3.00	431.0	27.0	1380	120.0	0.0726
GYMNASTICS	54/3.25	7/3.25	506.0	29.3	1620	139.0	0.0619
HURDLES	54/3.50	7/3.50	587.0	31.5	1880	159.0	0.0533
LACROSSE	54/3.75	19/2.25	672.0	33.8	2150	180.0	0.0465

SKATING	3/1.75	4/1.75	16.8	5.3	83	12.3	2.75
SOCCER	3/2.50	4/2.50	34.4	7.5	171	24.9	1.34
SWIMMING	4/3.00	3/3.00	49.5	9.0	218	28.9	0.807
TENNIS	4/3.75	3/3.75	77.3	11.3	340	42.6	0.517

IEC 61089

- Aluminum Clad Steel Wire
- Aluminum Wire

	Stranding		Section	Overall Diameter	Conductor Weight	Rated Strength	Electrical Resistance
Code Name	Aluminum	Aluminum Clad Steel	mm²	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
16	6/1.81	1/1.81	17.6	5.43	59.0	5.91	1.7923
25	6/2.26	1/2.26	28.0	6.78	92.1	9.00	1.1471
40	6/2.85	1/2.85	44.4	8.55	147.4	14.21	0.7169
63	6/3.58	1/3.58	70.1	10.70	232.2	21.17	0.4552
100	6/4.51	1/4.51	112.0	13.50	368.6	31.84	0.2868
125	18/2.95	1/2.95	130.0	14.80	384.3	29.18	0.2304
125	26/2.43	7/1.89	140.0	15.40	460.8	44.49	0.2308
160	18/3.34	1/3.34	167.0	16.70	491.9	36.38	0.18
160	26/2.74	7/2.13	179.0	17.40	589.8	56.18	0.1803
200	18/3.74	1/3.74	208.0	18.70	614.9	43.62	0.144
200	26/3.07	7/2.39	223.0	19.40	737.2	69.27	0.1443
250	32/3.76	7/2.09	268.0	21.30	830.9	67.80	0.1153
250	26/3.43	7/2.67	279.0	21.70	921.5	86.58	0.1154
315	45/2.96	7/1.97	331.0	23.70	996.4	78.33	0.0917
315	26/3.75	7/2.99	352.0	24.40	1161.1	107.58	0.0916
400	45/3.34	7/2.22	420.0	26.70	1265.3	97.50	0.0722
400	54/3.02	7/3.02	437.0	27.20	1402.9	124.20	0.0723
450	45/3.54	7/2.36	483.0	28.30	1423.4	107.48	0.0642
450	54/3.21	7/3.21	493.0	28.90	1578.2	139.72	0.0642
500	45/3.73	7/2.49	526.0	29.80	1581.6	119.42	0.0578
500	54/3.78	7/3.38	547.0	30.40	1753.6	153.99	0.0578
560	45/3.95	7/2.63	588.0	31.60	1771.4	133.75	0.0516
560	54/3.58	19/2.15	612.0	32.20	1956.3	169.36	0.0516
630	45/4.19	7/2.79	662.0	33.50	1992.8	150.47	0.0458
630	54/3.79	19/2.28	688.0	34.20	2200.9	190.52	0.0459
710	45/4.44	7/2.96	746.0	35.60	2245.8	169.57	0.0407
710	54/4.03	19/2.42	775.0	36.30	2480.3	214.72	0.0407
800	72/3.74	7/2.49	825.0	37.40	2412.8	167.67	0.0361
800	84/3.45	7/3.45	849.0	37.90	2598.9	206.37	0.0362
800	54/4.28	19/2.57	873.0	38.50	2794.7	241.94	0.0361
900	72/3.97	7/2.65	929.0	39.70	2714.4	188.63	0.0321
900	84/3.66	7/3.66	956.0	40.20	2923.8	224.82	0.0321
1000	72/4.18	7/2.79	1032.0	41.80	3016.0	209.59	0.0289
1120	72/4.43	19/1.77	1155.0	44.30	3372.6	233.48	0.0258

1120	84/4.08	19/2.45	1187.0	44.90	3628.4	282.88	0.0258
1250	72/4.68	19/1.87	1289.0	46.80	3764.1	260.58	0.0231
1250	84/4.31	19/2.59	1325.0	47.40	4049.5	315.72	0.0231

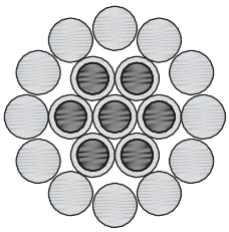
Aluminum Alloy Conductors Aluminum Clad Steel Reinforced (AACSR/AW)

Standards

AS/NZS 1531/ IEC 61089

Application

Aluminium clad steel is a high strength steel, covered by a thick coating of pure aluminium. The aluminium clad steel wires, in comparison with galvanized steel wires of same size, have the same tensile characteristics, but a lower weight and a consider-ably higher electrical conductivity and corrosion resistance. This last property is specially important in the construction of the finished conductor, where the alumini- um alloy wires are in contact with the aluminium clad steel wires of the reinforcing core, thus avoiding the possibility of galvanic corrosion between cores and surround- ing layers of aluminium alloy.



AS/NZS 1531/ IEC 61089

Aluminum Clad Steel WireAluminum Alloy Wire

	Stranding		Section	Overall Diameter	Conductor Weight	Rated Strength	Electrical Resistance
Code Name	Aluminum	Aluminum Clad Steel	mm²	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
A2/SA 1A							
16	6/1.93	1/1.93	20.5	5.79	67.5	8.70	1.7694
25	6/2.41	1/2.41	32.0	7.23	105.4	13.59	1.1324
40	6/3.05	1/3.05	51.2	9.15	168.7	21 .74	0.7077
63	6/3.83	1/3.83	80.7	11.50	265.6	33.09	0.4494
100	6/4.83	1/4.83	128.0	14.50	421.6	50.70	0.2831
125	18/3.16	1/3.16	149.0	15.80	441.4	51.21	0.2293
125	26/2.59	7/2.02	160.0	16.40	527.2	67.40	0.2279
160	18/3.58	1/3.58	191.0	17.90	565.0	64.94	0.1792
160	26/2.93	7/2.28	205.0	18.60	674.8	86.27	0.1781
200	18/4.00	1/4.00	239.0	20.0	706.2	80.67	0.1433
200	26/3.28	7/2.55	256.0	20.80	843.5	107.84	0.1425
250	22/4.02	7/2.24	307.0	22.80	952.9	115.53	0.1144
250	26/3.67	7/2.85	320.0	23.20	1054.4	134.79	0.1140
315	45/3. 17	7/2.11	380.0	25.40	1143.9	134.36	0.0912
315	26/4.12	7/3.2	403.0	26.10	1328.5	169.84	0.0904
400	45/3.57	7/2.38	483.0	28.60	1452.5	170.62	0.0718

400	54/3.23	7/3.23	501.0	29.10	1606.8	199.94	0.0715
450	45/3.79	7/2.53	543.o	30.30	1634.1	191.94	0.0638
450	54/3.43	7/3.43	564.0	30.90	1807.7	223.64	0.0636
500	45/4.00	7/2.66	603.0	32.00	1815.7	213.27	0.0574
500	54/3.62	7/3.62	627.0	32.60	2008.5	245.62	0.0572
560	45/4.23	7/2.82	676.0	33.80	2033.6	238.86	0.0513
560	54/3.83	19/2.30	701.0	34.50	2241.0	277.95	0.0511
630	45/4.49	7/2.99	760.0	35.90	2287.8	268.72	0.0456
630	54/4.06	19/2.44	788.0	36.50	2521 .1	312.69	0.0454
710	45/4.76	7/3.17	857.0	38.10	2578.3	302.84	0.0405
710	54/4.31	19/2.59	888.0	38.80	2841.3	352.39	0.0403
800	72/4.01	7/2.67	949.0	40.10	2772.7	315.46	0.0360
800	84/3.69	7/3.69	974.0	40.60	2982.3	347.72	0.0359
800	54/4.58	19/2.75	1001 .0	41.20	3201.5	397.06	0.0358
900	72/4.25	7/2.84	1067.0	42.50	3119.3	354.89	0.0320
900	84/3.92	7/3.92	1096.0	43.10	3355.1	391.18	0.0319
1000	72/4.48	7/2.99	1186.0	44.80	3465.9	394.32	0.0288
1120	72/4.75	19/1.90	1327.0	47.50	3875.8	440.26	0.0257
1120	84/4.37	19/2.62	1362.0	48.10	4164.0	494.70	0.0257
1250	72/5.01	19/2.01	1482.0	50.10	4325.6	491.36	0.0231
1250	84/4.62	19/2.77	1520.0	50.80	4647.3	552.12	0.0230

IEC 61089

- Aluminum Clad Steel Wire
- Aluminum Alloy Wire

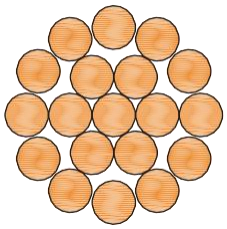
	Stranding		**Section**	**Overall Diameter**	**Conductor Weight**	**Rated Strength**	**Electrical Resistance**
Code Name	Aluminum	Aluminum Clad Steel	mm^2	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
16	6/1.94	1/1.94	20.7	5.82	68.1	9.31	1.7691
25	6/2.42	1/2.42	32.3	7.26	106.4	14.54	1.1323
40	6/3.07	1/3.07	51.7	9.21	170.2	23.27	0.7077
63	6/3.85	1/3.85	81.4	11.60	268.0	34.79	0.4493
100	6/4.85	1/4.85	129.0	14.60	425.5	53.38	0.2831
125	18/3.18	1/3.18	151.0	15.90	445.5	55.97	0.2293
125	26/2.61	7/2.03	161.0	16.50	532.0	72.17	0.2279
160	18/3.60	1/3.60	193.0	18.00	570.3	69.21	0.1792
160	26/2.95	7/2.29	206.0	18.70	680.9	92.38	0.1781
200	18/4.02	1/4.02	241.0	20.10	712.8	86.00	0.1433
200	26/3.30	7/2.56	258.0	20.90	851.2	115.47	0.1424
250	22/4.04	7/2.25	310.0	22.90	961.7	122.25	0.1144
250	26/3.69	7/2.87	323.0	23.40	1064.0	141.57	0.1140
315	45/3.19	7/2.12	384.0	25.50	1154.6	146.38	0.0912
315	26/4.14	7/3.22	406.0	26.20	1340.6	178.38	0.0904
400	45/3.59	7/2.39	487.0	28.70	1466.1	181.32	0.0718
400	54/3.25	7/3.25	506.0	29.30	1621.6	215.22	0.0715
450	45/3.81	7/2.54	548.0	30.50	1649.4	203.99	0.0638

450	54/3.45	7/3.45	569.0	31.00	1824.3	240.81	0.0636
500	45/4.01	7/2.68	609.0	32.10	1832.6	226.65	0.0574
500	54/3.63	7/3.63	632.0	32.70	2027.0	259.07	0.0572
560	45/4.25	7/2.83	682.0	34.00	2052.6	253.85	0.0513
560	54/3.85	19/2.31	707.0	34.60	2261.6	293.05	0.0511
630	45/4.51	7/3.00	767.0	36.10	2309.1	285.58	0.0456
630	54/4.08	19/2.45	795.0	36.70	2544.3	329.68	0.0454
710	45/4.78	7/3.19	865.0	38.30	2602.3	321.85	0.0405
710	54/4.33	19/2.60	896.0	39.00	2867.4	371.55	0.0403
800	72/4.03	7/2.69	958.0	40.30	2798.8	336.79	0.0360
800	84/3.71	7/3.71	983.0	40.80	3010.0	369.11	0.0359
800	54/4.60	19/2.76	1010.0	41.40	3230.9	418.64	0.0358
900	72/4.27	7/2.85	1077.0	42.70	3148.6	378.89	0.0320
900	84/3.93	7/3.93	1106.0	43.20	3386.3	415.24	0.0319
1000	72/4.50	7/3.00	1197.0	45.00	3498.5	420.99	0.0288
1120	72/4.77	19/1.91	1340.0	47.70	3912.3	470.12	0.0257
1120	84/4.39	19/2.63	1375.0	48.30	4202.7	524.73	0.0257
1250	72/5.04	19/2.01	1495.0	50.40	4366.4	524.68	0.0231
1250	84/4.64	19/2.78	1535.0	51.00	4690.5	585.64	0.0230

Bare Copper Conductor/Copper Earth Wire

Standards

- AS 1746



Application

Stranded bare copper conductors are suitable for overhead transmission, earthing system and distribution applications. Stranded conductor of greater flexibility are suitable for uninsulated hook up, jumpers, and grounds in electrical construction. SoftDrawn copper is unilay construction.

	Stranding		**Section**	**Overall Diameter**	**Conductor Weight**	**Rated Strength**	**Electrical Resistance**
Code Name	Aluminum	Aluminum Clad Steel	mm^2	mm	kg/km	kN	DC.20°C
	No. x Φ mm						Ω/km
7	1.00	3	5.50	8.68	49.3	2.32	3.25
7	1.25	3.75	8.59	13.60	76.9	3.59	2.09
7	1.75	5.25	16.84	26.60	151.0	6.89	1.06
7	2.00	6.00	21.99	34.70	197.0	8.89	0.815
7	2.75	8.25	41.58	65.30	375.0	16.20	0.433
19	1.75	8. 75	45.70	71.70	413.0	18.30	0.395
19	2.00	10.00	59.70	93.60	538.0	23.60	0.303
7	3.50	10.50	67.35	106.00	607.0	25.40	0.268
7	3.75	11.30	77.28	121.00	696.0	28.80	0.233
37	1.75	12.30	88.99	139.00	806.0	35.60	0.203
19	2.75	13.80	112.90	177.00	1020.0	43.10	0.16
19	3.00	15.00	134.30	211.00	1210.0	50.80	0.134

37	2.50	17.50	181.60	284.00	1640.0	70.30	0.0996
37	2.75	19.30	219.80	344.00	1990.0	83.90	0.0823
37	3.00	21.00	261.60	409.00	2370.0	98.90	0.0691
61	2.75	24.80	362.30	566.00	3290.0	138.00	0.0500

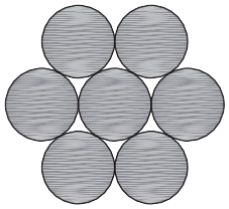
Galvanized (Zinc Coated) Steel Wire (GSW) Stay Wire/Earth Wire

Standards

- AS 1222.1

Application

Galvanized Steel Conductor is used as overhead ground wire or static wire on trans-mission lines, as pole or structure guy wires, and as messenger cable, fields and pastures division.



AS 1222.1

- Zinc-Coated Steel Wire

Section	Stranding		Overall Diameter	Conductor Weight	Breaking load
mm²	No.	Φ mm	mm	kg/km	kN
9.43	3	2.00	4.31	74	11.7
17.82	3	2.75	5.93	140	26.2
21.99	7	2.00	6.00	173	26.0
41.58	3	2.75	8.25	328	49.0
58.07	7	3.25	9.75	458	68.7
77.28	7	3.75	11.30	609	91.3
59.70	19	2.00	10.00	473	70.5
112.90	19	2.75	13.80	894	133.0
157.60	19	3.25	16.30	1250	186.0

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