

AAC – ASTM – B

All Aluminium Conductor

Overhead cable

CJDL Cable



➤ APPLICATION

AAC conductor is also known as aluminium stranded conductor. It is manufactured from electrolytically refined aluminium, with a minimum purity of 99.7%. AAC is used mainly in urban areas where the spacing is short and the supports are close. All aluminium conductors are made up of one or more strands of aluminium wire depending on the end usage. AAC is also used extensively in coastal regions because it has a high degree of corrosion resistance.

➤ CONSTRUCTION

Conductor

Hard drawn aluminium conductor as per EN 60889 Type AL1

➤ STANDARDS

ASTM B231, TS IEC 1089, DIN 48201, BS 215, UNE 21.018

➤ CABLE LABORATORY

We have state-of-the-art laboratory facilities and cutting-edge testing equipment, supported by a strict quality control protocol throughout the entire production process. Every production batch undergoes comprehensive technical tests prior to shipment. Only products that meet the most stringent quality standards are approved for distribution. This ensures our products deliver outstanding stability, reliability and durability, fully complying with customers' technical specifications and requirements.

➤ DEDICATION TO SUSTAINABILITY

At CJDL Cable, we are fully committed to ecological transition and environmental protection. We actively push forward decarbonization goals, steadily moving toward a zero-emission business model.

To this end, we keep pursuing technological innovation to improve energy efficiency and cut pollutant emissions. Meanwhile, we optimize manufacturing processes to reduce environmental impact, securing sound, responsible and sustainable long-term growth for the company.

DIMENSIONS

ASTM - B 231

CODE	SIZE AWG-MCM	STRANDING No. x mm	SECTION mm ²	OVERALL DIAMETER mm	CABLE WEIGHT kg/km	RATED STRENGTH kN	ELECTRICAL RESISTANCE DC ohms/km	CURRENT CARRYING CAPACITY (1) A
PEACHBELL	6	7 x 1.55	13.21	4.65	36.6	2.5	1.1702	110
ROSE	4	7 x 1.96	21.12	5.88	58.3	3.92	1.3638	145
IRIS	2	7 x 2.47	33.54	7.41	92.7	6.01	0.0857	195
PANSY	1	7 x 2.78	42.49	8.34	116.8	7.3	0.6801	225
POPPY	1/0	7 x 3.12	53.52	9.36	147.5	8.86	0.539	260
ASTER	2/0	7 x 3.5	67.34	10.5	185.9	11.17	0.4275	305
PHLOX	3/0	7 x 3.93	84.91	11.79	234.4	13.35	0.3392	350
OXLIP	4/0	7 x 4.42	107.4	13.26	295.6	17.05	0.2689	410
SNEEZEWORTH	250	7 x 4.8	127.6	14.4	349.3	20.12	0.2273	455
VALERIAN	250	17 x 2.91	126.4	14.55	349.3	20.74	0.2273	455
DAISY	266.8	7 x 4.96	135.3	14.88	327.8	21.5	0.2133	475
LAUREL	266.8	19 x 3.01	135.2	15.05	327.8	22.12	0.2133	475
PEONY	300	19 x 3.19	151.9	15.95	419.1	24.38	0.1897	515
TULIP	336.4	19 x 3.38	170.5	16.9	470	27.37	0.1691	555
DAFFODIL	350	19 x 3.45	177.6	17.25	489	28.45	0.1626	565
CANNA	397.5	19 x 3.68	202.1	18.4	55.4	31.64	0.1431	615
GOLDENTUFT	450	19 x 3.91	228.1	19.55	682.6	35.11	0.1264	665
COSMOS	477	19 x 4.02	241.2	20.1	666.4	37.2	0.1193	690
SYRINGA	477	37 x 2.88	241	20.16	666.4	38.67	0.1193	690
ZINNIA	500	19 x 4.12	253.3	20.6	698.6	38.98	0.1138	715
HYACINTH	500	37 x 2.95	252.9	20.65	698.6	40.54	0.1138	715
DAHLIA	556.5	19 x 4.35	282.4	21.75	777.4	43.39	0.1022	765
MISTLETOE	556.5	37 x 3.11	281.1	21.77	777.4	44.25	0.1022	765
MEADOWSWEET	600	37 x 3.23	303.2	22.61	838.1	47.62	0.09482	800
ORCHID	636	37 x 3.33	322.2	23.31	888.4	50.73	0.08947	835
HEUCHERA	650	37 x 3.37	330	23.59	908.1	51.84	0.08747	855
VERBANA	700	37 x 3.49	354	24.43	977.9	55.63	0.08123	880
FLAG	700	61 x 2.72	354.5	24.48	977.9	57.42	0.08123	900
VIOLET	715	37 x 3.53	362.1	24.71	999.6	56.96	0.07953	900
NASTURTIUM	715.5	61 x 2.75	362.35	24.73	999.6	58.3	0.07953	900
PETUNNIA	750	37 x 3.62	380.8	25.34	1047.7	58.3	0.07587	922
CATTAIL	750	61 x 2.82	381	25.38	1047.7	60.08	0.07585	922
ARBUTIUS	795	37 x 3.72	402.1	26.04	1110.6	61.86	0.07156	960
ULAC	795	61 x 2.9	402.9	26.1	1110.6	63.65	0.07156	960
FUCHSIA	800	37 x 3.75	408.7	26.25	1115.2	62.3	0.07116	960
HELIOTROPE	800	61 x 2.92	408.7	26.28	1115.2	64.08	0.07116	960
ANEMONE	874.5	37 x 3.91	444.3	27.37	1221.8	66.75	0.06506	1020
CROCUS	874.5	61 x 3.04	442.8	27.36	1221.8	70.31	0.06506	1020
COCKCOMB	900	37 x 3.96	455.7	27.72	1257.4	68.53	0.06332	1040
SNAPDRAGON	900	61 x 3.09	457.4	27.81	1257.4	70.76	0.06332	1040
MAGNOLIA	954	37 x 4.08	483.7	28.56	1332.8	75.215	0.05965	1080
GOLDENROD	954	61 x 3.18	484.5	28.62	1332.8	75.215	0.05965	1080
HAWKWEEED	1000	37 x 4.17	505.3	29.19	1397	76.54	0.05689	1110
CAMELLIA	1000	61 x 3.25	506	29.25	1397	78.77	0.05689	1110
BLUEBELL	1033.5	37 x 4.24	522.4	29.68	1443.8	78.77	0.05505	1135
LARKSPUR	1035.5	61 x 3.31	524.9	29.79	1443.8	81.45	0.05505	1135

CODE	SIZE AWG-MCM	STRANDING N2 X Q mm	SECTION mm ²	OVERALL DIAMETER mm	CABLE WEIGHT kg/km	RATED STRENGTH kN	ELECTRICAL RESISTANCE DC ohms/km	CURRENT CARRYING CAPACITY (1) A
MARIGOLD	1113	61 x 3.43	563.6	30.87	1555.2	87.67	0.05112	1190
HAWTHORN	1192.5	61 x 3.55	603.8	31.95	1665.3	93.9	0.0477	1240
NARCISSUS	1272	61 x 3.67	645.3	33.03	1776.9	97.9	0.04472	1290
COLIMBINE	1351.5	61 x 3.78	684.5	34.02	1888.5	104.13	0.04209	1340
CARNATION	1431	61 x 3.89	72	35.01	1998.6	108.14	0.03976	1390
GLADIOLUS	1510.5	61 x 4	766.5	36	2110.3	113.92	0.03766	1430
COREOPSIS	1590	61 x 4.1	805.4	36.9	2222	120.15	0.03579	1480
JESSANINE	1750	61 x 4.3	885.8	38.7	2445.1	132.17	0.03251	1565
COWSLIP	2000	91 x 3.76	1010.4	41.36	2793.3	152.19	0.02845	1695
SAGEBRUSH	2250	91 x 3.99	1137.8	43.89	3174.3	167.77	0.02829	1810
PIGWEEED	2300	61 x 4.93	1164.4	44.37	3239.8	173.56	0.02473	1830
LUPINE	2500	91 x 4.21	1266.8	46.31	3527	186.46	0.02298	1920
BITTERROOT	2750	91 x 4.41	1390	48.51	3879.8	205.15	0.0207	2020
TRILLIUM	3000	127 x 3.9	1517	50.7	4232.4	223.84	0.01915	2120
BLUEBONNET	3500	127 x 4.22	1776.3	54.86	4985.4	261.22	0.01657	2295

ASTM-B 231

CODE	SIZE AWG or kcmil	STRANDING		DIAMETER ins		CROSS SECTIONAL AREA sq ins	WEIGHT PER 1000FT lbs	RATED STRENGTH lbs	RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY Amps
		No. of cores	Class	Individual Wire	Complete Cable				DC at 20°C	AC at 75°C	
PEACHBELL	6	7	A	0.0612	0.184	0.0206	25	563	0.658	0.805	103
ROSE	4	7	A	0.0772	0.232	0.0328	39	881	0.414	0.506	138
IRIS	2	7	AA.A	0.0974	0.292	0.0521	62	1350	0.26	0.318	185
PANSY	1	7	AA.A	0.1093	0.328	0.0657	78	1640	0.207	0.252	214
POPPY	1/0	7	AA.A	0.1228	0.368	0.0829	99	1990	0.164	0.2	247
ASTER	2/0	7	AA.A	0.1379	0.414	0.1045	125	2510	0.13	0.159	286
PHOLOX	3/0	7	AA.A	0.1548	0.464	0.1318	157	3040	0.103	0.126	331
OXLIP	4/0	7	AA.A	0.1739	0.522	0.1662	198	6830	0.0817	0.0999	393
SNEEZEVORT	250	7	A	0.189	0.567	0.1964	234	4520	0.0691	0.846	425
VALERIAN	250	19	A	0.1147	0.574	0.1964	234	4660	0.0691	0.0846	425
DAISY	266.8	7	AA	0.1953	0.586	0.2095	250	4830	0.0648	0.0793	443
LAUREL	266.8	19	A	0.1185	0.593	0.2095	250	4970	0.0648	0.0793	444
PEONY	300	19	A	0.1257	0.629	0.2356	281	5480	0.0576	0.0706	478
TULIP	336.4	19	A	0.1331	0.666	0.2642	316	6150	0.0514	0.063	513
DAFFRODIL	350	19	A	0.1357	0.679	0.2749	328	6390	0.0494	0.0605	526
CANNA	397.5	19	AA.A	0.1447	0.724	0.3122	373	7110	0.0435	0.0534	570
GOLDENTUFT	450	19	AA	0.1538	0.769	0.3534	422	7890	0.0384	0.0427	616
COSMOS	477	19	AA	0.1584	0.793	0.3746	447	8360	0.0362	0.0455	639
SYRINGA	477	37	A	0.1135	0.795	0.3746	447	8690	0.0362	0.0445	639
ZINNIA	500	19	AA	0.1622	0.811	0.3927	469	8760	0.0346	0.0425	658
HYACINTH	500	37	A	0.1162	0.813	0.3927	468	9110	0.0346	0.0425	958
DAHLIA	556.5	19	AA	0.1711	0.856	0.4371	521	9750	0.0311	0.0382	703
MISTLETOE	556.5	37	AA.A	0.1226	0.858	0.4372	521	9940	0.0311	0.0382	704
MEADOWSWEET	600	37	AA.A	0.1273	0.891	0.4712	562	10700	0.0288	0.0355	738
ORCHID	636	37	AA.A	0.1311	0.918	0.4995	596	11400	0.0272	0.0355	765
HEUCHERA	650	37	AA	0.1326	0.928	0.5105	610	11600	0.0266	0.0328	775
VERBENA	700	37	AA	0.1375	0.963	0.5498	656	12500	0.0247	0.0305	812

CODE	SIZE AWG or kcmil	STRANDING		DIAMETER ins		CROSS SECTIONAL AREA sq ins	WEIGHT PER 1000FT lbs	RATED STRENGTH lbs	RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY Amps
		No. of cores	Class	Individual Wire	Complete Cable				DC at 20°C	AC at 75°C	
FLAG	700	61	A	0.1071	0.964	0.5499	656	12400	0.0247	0.0305	812
VIOLET	715.5	37	AA	0.1391	0.974	0.562	671	12800	0.0242	0.0299	823
NASTURTIUM	715.5	61	A	0.1083	0.975	0.5621	671	13100	0.0242	0.0299	823
PETUNNIA	750	37	AA	0.1424	0.997	0.5891	703	13100	0.023	0.0286	847
CATTAIL	750	61	A	0.1109	0.998	0.5891	703	13500	0.023	0.0286	847
ARBUTUS	795	37	AA	0.1466	1.026	0.6244	745	13900	0.0217	0.027	878
ULAC	795	61	A	0.1142	1.028	0.6244	746	14300	0.0217	0.027	879
COCKCOB	900	37	AA	0.156	1.093	0.7069	844	15400	0.0192	0.0239	948
SNAPDRAGON	900	61	A	0.1215	1.094	0.7069	844	15900	0.0192	0.0239	948
MAGNOLIA	954	37	AA	0.1606	1.124	0.7493	895	16400	0.0181	0.0226	982
GOLDENROD	954	61	A	0.1251	1.126	0.7493	895	16900	0.0181	0.0226	983
HAWKWEED	1000	37	AA	0.1644	1.15	0.7854	937	17200	0.0173	0.0216	1010
CAMELIA	1000	61	A	0.128	1.152	0.7854	937	17700	0.0173	0.0216	1011
BLUEBELL	1033.5	37	AA	0.1671	1.17	0.8117	968	17700	0.0167	0.021	1031
LARKSPUR	1033.5	61	A	0.1302	1.172	0.8117	969	18300	0.0167	0.021	1032
MARIGOLD	1113	61	AA.A	0.1351	1.216	0.8742	1044	19700	0.0155	0.0195	1079
HAWTHORN	1192.5	61	AA.A	0.1398	1.258	0.9366	1117	21100	0.0145	0.0183	1124
NARCISSUS	1272	61	AA.A	0.1444	1.3	0.999	1192	22000	0.0136	0.0173	1169
COLUMBINE	1351.5	61	AA.A	0.1489	1.34	1.061	1266	23400	0.0128	0.0163	1212
CARNATION	1431	61	AA.A	0.1532	1.379	1.124	1342	24300	0.0121	0.0155	1253
GLADIOLUS	1510.5	61	AA.A	0.1574	1.417	1.186	1416	25600	0.0144	0.0147	1294
COREOPSIS	1590	61	AA	0.1614	1.454	1.249	1489	27000	0.0109	0.0141	1333
JESSAMINE	1750	61	AA	0.1694	1.525	1.374	1641	29700	0.0988	0.0129	1408
COWSLIP	2000	91	A	0.1482	1.63	1.571	1873	34200	0.00864	0.0115	1518
SAGEBRUSH	2250	91	A	0.1572	1.729	1.767	2128	37500	0.00776	0.0105	1612
LUPINE	2500	91	A	0.1657	1.823	1.964	2365	41900	0.00698	0.00969	1706
BITTERROOT	2750	91	A	0.1739	1.913	2.16	2602	46100	0.00635	0.009	1793
TRILLIUM	3000	127	A	0.1537	1.996	2.356	2687	50300	0.00582	0.00834	1874
BLUEBONNET	3500	127	A	0.166	2.158	2.749	3344	58700	0.00499	0.00756	2024

ASTM-B 231

SIZE AWG or kcmil	STRANDING		DIAMETER ins		CROSS SECTIONAL AREA sq ins	WEIGHT PER 1000FT lbs	RATED STRENGTH lbs	RESISTANCE ohms/1000ft		ALLOWABLE AMPACITY Amps
	No. of cores	Class	Individual Wire	Complete Cable				DC at 20°C	AC at 75°C	
6	7	B	0.0612	0.184	0.0206	25	583	0.658	0.805	103
4	7	B	0.0772	0.232	0.328	39	881	0.414	0.506	138
3	7	B	0.0867	0.26	0.0413	49	1090	0.328	0.401	160
2	7	B	0.0974	0.292	0.0521	62	1350	0.26	0.318	185
1	19	B	0.0664	0.332	0.0657	79	1740	0.207	0.252	214
1/0	19	B	0.0745	0.373	0.0829	99	2160	0.164	0.2	248
2/0	19	B	0.0837	0.419	0.1045	125	2670	0.13	0.159	287
3/0	19	B	0.094	0.47	0.1318	157	3310	0.103	0.126	332
4/0	19	B	0.1055	0.528	0.1662	198	4020	0.0817	0.0999	384
250	37	B	0.0822	0.575	0.1964	234	4910	0.0691	0.0846	426
300	37	B	0.09	0.63	0.2356	281	5890	0.0576	0.0706	478
350	37	B	0.0973	0.681	0.2749	328	6760	0.0494	0.0605	527
400	37	B	0.104	0.728	0.3142	375	7440	0.0432	0.053	573
450	37	B	0.1103	0.772	0.3524	422	8200	0.0384	0.0472	616
500	37	B	0.1162	0.813	0.3927	468	9110	0.0346	0.0425	658
550	61	B	0.095	0.855	0.432	516	10500	0.0314	0.0387	699
600	61	B	0.0992	0.893	0.4721	563	11500	0.0288	0.0355	738
650	61	B	0.1032	0.929	0.5105	609	11900	0.0266	0.0328	776
700	61	B	0.1071	0.964	0.5498	656	12900	0.0247	0.0305	812
750	61	B	0.1109	0.998	0.5891	703	13500	0.023	0.0286	847
800	61	B	0.1145	1.031	0.6283	750	14400	0.0216	0.0268	882
900	61	B	0.1215	1.094	0.7069	844	15900	0.0192	0.0239	948
1000	61	B	0.128	1.154	0.7854	937	17700	0.0173	0.0216	1011
1100	61	B	0.1099	1.209	0.8669	1030	20000	0.0157	0.0198	1071
1200	91	B	0.1148	1.263	0.9425	1124	21400	0.0144	0.0182	1129
1250	91	B	0.1172	1.289	0.9818	1172	22300	0.0138	0.0175	1157
1300	91	B	0.1195	1.315	1.021	1218	23200	0.0133	0.0169	1184
1400	91	B	0.124	1.364	1.1	1311	24500	0.0123	0.0158	1237
1500	91	B	0.1284	1.412	1.178	1406	26200	0.0155	0.0148	1288
2	19	C	0.0591	0.296	0.0521	62	1410	0.26	0.318	185
2/0	37	C	0.06	0.42	0.1045	125	2760	0.13	0.159	287
3/0	37	C	0.0673	0.471	0.1318	157	3.41	0.1030	0.126	332
4/0	37	C	0.0756	0.529	0.1662	198	4.23	0.0817	0.0999	384
250	61	C	0.064	0.576	0.1964	234	5.03	0.0691	0.0846	427
300	61	C	0.0701	0.631	0.2356	281	5.93	0.0576	0.0706	478
350	61	C	0.0757	0.681	0.2749	328	6.92	0.0494	0.0605	527
400	61	C	0.081	0.729	0.3142	375	7.78	0.0432	0.053	573
450	61	C	0.0859	0.773	0.3534	422	8.75	0.0384	0.0472	617
500	61	C	0.0905	0.815	0.3927	468	9.54	0.0346	0.0425	659
550	91	C	0.0777	0.855	0.432	515	10.8	0.0314	0.0387	699
600	91	C	0.0812	0.893	0.4712	562	11.5	0.0288	0.0355	738
650	91	C	0.0845	0.93	0.5105	609	12.5	0.0266	0.0328	776
700	91	C	0.0877	0.964	0.5498	656	13.5	0.0247	0.0305	812
750	91	C	0.0908	0.999	0.5891	703	14.2	0.023	0.0286	848
800	91	C	0.0938	1.032	0.6283	750	15.1	0.0216	0.0247	882
900	91	C	0.0994	1.093	0.7069	843	17.1	0.0192	0.0239	948
1000	91	C	0.1048	1.153	0.7854	937	18.2	0.0173	0.0216	1011

TS IEC 1089

CODE AL mm ²	CANADA STANDARD		AREAS		NO. OF WIRES	DIAMETER OF WIRES mm	CONDUCTOR DIAMETER mm	RATED STRENGTH kg	DC RESISTANCE AT 20°C ohms/km	UNIT WEIGHT kg/km	PACKING OF REELS		
	Type	Section AWG	Total mm ²	Copper Equivalent mm ²							Reel type	In one reel	
												Lengths m	Net weight kg
21	ROSE	4	21.14	13.3	7	1.96	5.88	416	1.3558	57.8	R-100	10000	578
27	LILY	3	26.6	16.73	7	2.2	6.6	514	1.0776	72.8	R-100	8000	583
34	IRIS	2	33.53	21.09	7	2.47	7.41	637	0.8537	91.8	R-100	6400	588
42	PANSY	1	42.49	26.72	7	2.78	8.34	777	0.6743	116.8	R-100	5000	582
53	POPPY	1/0	53.48	33.63	7	3.12	9.36	941	0.5354	146.4	R-100	4000	586
67	ASTER	2/0	67.14	42.22	7	3.5	10.5	1185	0.4254	184.4	R-100	3000	554
85	PHLOX	3/0	84.91	53.4	7	3.93	11.79	1435	0.3372	232.5	R-100	2400	558
107	OXLIP	4/0	107.38	67.53	7	4.42	13.26	1814	0.2662	294	R-100	1900	559
126	VALERIAN	250000	126.38	79.46	19	2.91	14.55	2261	0.2277	347.5	R-100	1600	556
135	DAISY	266800	135.28	85.07	19	3.01	15.05	2421	0.2127	372.1	R-100	1500	556
152	PEONY	300000	151.28	95.47	19	3.19	15.95	2671	0.1896	417.7	R-120	1750	731

DIN 48201

CODE	SECTION mm ²	STRANDING		OVERALL DIAMETER mm	RATED STRENGTH N	ELECTRICAL RESISTANCE ohms/km	CABLE WEIGHT kg/km	CURRENT CARRYING CAPACITY (1) Amps
		No	Q mm					
16	15.89	7	1.7	5.1	2840	1.8018	44	110
25	24.25	7	2.1	6.3	4170	1.1808	67	145
35	34.46	7	2.5	7.5	5740	0.8332	94	180
50	49.48	7	3	9	7950	0.5786	135	225
50	48.36	19	1.8	9	8440	0.595	133	225
70	65.82	19	2.1	10.5	11250	0.4371	181	270
95	93.27	19	2.5	12.5	15650	0.3085	256	340
120	117	19	2.8	14	18750	0.2459	322	390
150	147.1	37	2.25	15.7	25250	0.1961	406	455
185	181.6	37	2.5	17.5	30450	0.1587	501	520
240	242.5	61	2.25	20.2	39350	0.1192	670	625
300	299.4	61	2.5	22.5	47550	0.0965	827	710
400	400.1	61	2.89	26	60700	0.0722	1105	855
500	499.8	61	3.23	29.1	74500	0.0578	1381	990
625	626.3	91	2.96	32.6	95000	0.0462	1733	1140
800	802.1	91	3.35	36.8	118200	0.0361	2219	1340
1000	999.7	91	3.74	41.1	145500	0.029	2766	1540

BS 215

CODE	SECTION mm ²		STRANDING		OVERALL DIAMETER mm	RATED STRENGTH N	ELECTRICAL RESISTANCE ohms/km	CONDUCTOR WEIGHT kg/km
	Nominal	Teorical	No	Q mm				
MIDGE	22	23.33	7	2.06	6.18	3990	1.227	64
ANT	50	52.83	7	3.1	9.3	8280	0.5419	145
FLY	60	63.55	7	3.4	10.2	9900	0.4505	174
WASP	100	106	7	4.39	13.17	16000	0.2702	290
HORNET	150	157.6	19	3.25	16.25	25700	0.1825	434
CHARFER	200	213.2	19	3.78	18.9	35400	0.1349	587
COCKROACH	250	265.7	19	4.22	21.1	40400	0.1083	731
BUTTERFLY	300	322.7	19	4.65	23.25	48750	0.08916	888
CENTIPEDE	400	415.2	37	3.78	26.46	63100	0.06944	1145

Basic Technical Data of Stranded Conductors

NO. OF WIRES AL	FINAL MODULES OF ELASTICITY		COEFICIENT OF LINEAR EXPANSION	
	Nominal	Teorical	1/°C	1/F°
7	6000	8.5 x 10 ⁶	23 × 10 ⁻⁶	12.8 x 10 ⁻⁶
19	5700	8.1 x 10 ⁶		
37	5700	8.1 x 10 ⁶		
61	5500	7.8 x 10 ⁶		
91	5500	7.8 x 10 ⁶		

The information contained within this datasheet is for guidance only and is subject to change without notice or liability. All the information is provided in good faith and is believed to be correct at the time of publication. When selecting cable accessories, please note that actual cable dimensions may vary due to manufacturing tolerances.