

AAC - All Aluminum Conductor

APPLICATION: Stranded 1350-H19 aluminum conductors are used for primary and secondary transmission and distribution.

Class AA is for bare conductors used in overhead lines.

Class A is for conductors to be covered with weather-resistant materials and for bare conductors where greater flexibility is required. Class is an indication of relative conductor flexibility, AA being the least flexible.

SPECIFICATIONS: AAC bare conductors meet or exceed the following ASTM specifications:

B-230 Aluminum 1350-H19 Wire for Electrical Purposes.

B-231 Concentric-Lay-Stranded Aluminum 1350 Conductors.

Code Word	Conductor Size	Stranding		Diameter		Cross Sectional Area	Weight	Rated Breaking Strength	Resistance**		Ampacity*
		No. of Wires	Class	Individual Strand	Complete Cable				DC @ 20°C	AC @ 75°C	
	AWG/kcmil			Inches	Inches	Sq. In.	lbs/kft	lbs	Ohms/kft	Ohms/kft	amps
Peachbell	6	7	A	0.0612	0.184	0.0206	25	563	0.6580	0.8050	103
Rose	4	7	A	0.0772	0.232	0.0328	39	881	0.4140	0.5060	138
Iris	2	7	AA,A	0.0974	0.292	0.0522	62	1,350	0.2600	0.3180	185
Pansy	1	7	AA,A	0.1093	0.328	0.0657	79	1,640	0.2070	0.2520	214
Poppy	1/0	7	AA,A	0.1228	0.368	0.0829	99	1,990	0.1640	0.2000	247
Aster	2/0	7	AA,A	0.1379	0.414	0.1045	125	2,510	0.1300	0.1590	286
Phlox	3/0	7	AA,A	0.1548	0.464	0.1318	158	3,040	0.1030	0.1260	331
Oxlip	4/0	7	AA,A	0.1739	0.522	0.1663	199	3,830	0.0817	0.0999	383
Sneezewart	250	7	AA	0.1890	0.567	0.1964	235	4,520	0.0691	0.0846	425
Valerian	250	19	A	0.1147	0.574	0.1964	235	4,660	0.0691	0.0846	425
Daisy	266.8	7	AA	0.1953	0.586	0.2095	251	4,830	0.0648	0.0793	443
Laurel	266.8	19	A	0.1185	0.593	0.2095	251	4,970	0.0648	0.0793	444
Peony	300	19	A	0.1257	0.629	0.2358	281	5,480	0.0578	0.0706	478
Tulip	336.4	19	A	0.1331	0.666	0.2644	316	6,150	0.0514	0.0630	513
Daffodil	350	19	A	0.1357	0.679	0.2749	329	6,390	0.0494	0.0605	526
Canna	397.5	19	AA,A	0.1447	0.724	0.3122	373	7,110	0.0435	0.0534	570
Goldentuft	450	19	AA	0.1539	0.769	0.3534	422	7,890	0.0384	0.0472	616
Cosmos	477	19	AA	0.1584	0.793	0.3746	448	8,360	0.0362	0.0445	639
Syringa	477	37	A	0.1135	0.795	0.3746	448	8,690	0.0362	0.0445	639
Zinnia	500	19	AA	0.1622	0.811	0.3927	469	8,760	0.0346	0.0425	658
Hyacinth	500	37	A	0.1162	0.813	0.3924	469	9,110	0.0346	0.0425	658
Dahlia	556.5	19	AA	0.1711	0.856	0.4371	522	9,750	0.0311	0.0382	703
Mistletoe	556.5	37	A	0.1226	0.858	0.4371	522	9,940	0.0311	0.0382	704
Meadowsweet	600	37	AA,A	0.1273	0.891	0.4712	563	10,700	0.0288	0.0355	738
Orchid	636.0	37	AA,A	0.1311	0.918	0.4995	597	11,400	0.0272	0.0335	765
Heuchera	650	37	AA	0.1326	0.928	0.5105	610	11,600	0.0266	0.0328	775

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		No. of Wires	Class	Individual Strand	Complete Cable				DC @ 20°C	AC @ 75°C	
	AWG/kcmil			Inches	Inches	Sq. In.	lbs/kft	lbs	Ohms/kft	Ohms/kft	amps
Verbena	700.0	37	AA	0.1375	0.963	0.5498	657	12,500	0.0247	0.0305	812
Flag	700	61	A	0.1071	0.964	0.5498	657	12,900	0.0247	0.0305	812
Violet	715.5	37	AA	0.1391	0.974	0.5623	672	12,800	0.0242	0.0299	823
Nasturtium	716	61	A	0.1083	0.975	0.5619	672	13,100	0.0242	0.0299	823
Petunia	750.0	37	AA	0.1424	0.997	0.5893	705	13,100	0.0230	0.0286	847
Cattail	750	61	A	0.1109	0.998	0.5892	704	13,500	0.0230	0.0286	847
Arbutus	795.0	37	AA	0.1466	1.026	0.6245	746	13,900	0.0217	0.0271	878
Lilac	795	61	A	0.1142	1.028	0.6248	746	14,300	0.0217	0.0270	879
Cockscomb	900.0	37	AA	0.1560	1.092	0.7072	845	15,400	0.0192	0.0239	948
Snapdragon	900	61	A	0.1215	1.094	0.7073	845	15,900	0.0192	0.0239	948
Magnolia	954.0	37	AA	0.1606	1.124	0.7495	896	16,400	0.0181	0.0226	982
Goldenrod	954	61	A	0.1251	1.126	0.7498	896	16,900	0.0181	0.0226	983
Hawkweed	1000.0	37	AA	0.1644	1.151	0.7854	939	17,200	0.0173	0.0216	1010
Camellia	1000	61	A	0.1280	1.152	0.7849	939	17,700	0.0173	0.0216	1011
Bluebell	1033.5	37	AA	0.1671	1.170	0.8114	970	17,700	0.0167	0.0210	1031
Larkspur	1034	61	A	0.1302	1.172	0.8122	970	18,300	0.0167	0.0210	1032
Marigold	1113.0	61	AA,A	0.1351	1.216	0.8744	1045	19,700	0.0155	0.0195	1079
Hawthorn	1193	61	AA,A	0.1398	1.258	0.9366	1119	21,100	0.0145	0.0183	1124
Narcissus	1272.0	61	AA,A	0.1444	1.300	0.9990	1194	22,000	0.0136	0.0173	1169
Columbine	1352	61	AA,A	0.1489	1.340	1.0610	1269	23,400	0.0128	0.0163	1212
Carnation	1431.0	61	AA,A	0.1532	1.379	1.1244	1343	24,300	0.0121	0.0155	1253
Gladiolus	1511	61	AA,A	0.1574	1.417	1.1869	1418	25,600	0.0144	0.0147	1294
Coreopsis	1590.0	61	AA	0.1614	1.454	1.2490	1493	27,000	0.0109	0.0141	1333
Jessamine	1750	61	AA	0.1694	1.525	1.3748	1643	29,700	0.0099	0.0129	1408
Cowslip	2000.0	91	A	0.1482	1.630	1.5710	1877	34,200	0.0086	0.0115	1518
Sagebrush	2250	91	A	0.1572	1.729	1.7670	2131	37,500	0.0078	0.0105	1612
Lupine	2500.0	91	A	0.1657	1.823	1.9640	2370	41,900	0.0070	0.0097	1706
Bitterroot	2750	91	A	0.1739	1.913	2.1600	2607	46,100	0.0064	0.0090	1793
Trillium	3000.0	127	A	0.1537	1.998	2.3564	2844	50,300	0.0058	0.0083	1874
Bluebonnet	3500	127	A	0.1660	2.158	2.7490	3350	58,700	0.0050	0.0076	2024

All values are nominal and subject to correction

* Current ratings are based on 75°C conductor temperature, 25°C ambient, 2ft/s wind, in sun, .05 coefficients of emissivity and absorption.

** Resistance is calculated using ASTM standard increments of stranding and metal conductivity of 61.2% IACS, AC resistance at 60 Hz.