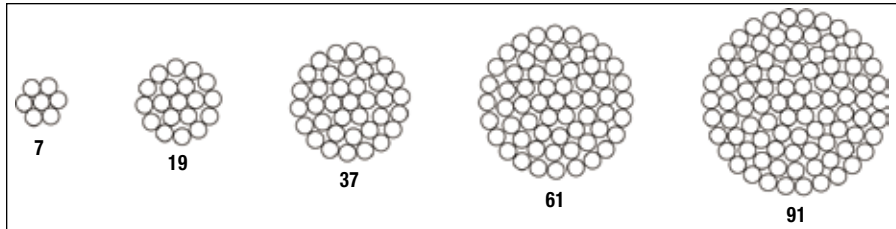


TransPowr[®] AAC Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded



Product Construction:

Complete Conductor:

Bare all-aluminum 1350 conductors (AAC) are concentric-lay-stranded conductors, consisting of one or more layers of wire wrapped helically around a straight round central wire. Each successive layer has six wires more than the layer immediately beneath. Greater flexibility is provided by increasing the number of strands for a specific cross-sectional area. AAC conductors are manufactured in accordance with the requirements of the latest issue of ASTM B231. The more commonly used strandings are 7, 19, 37, 61 and 91. The sizes and strandings listed on the following pages are common examples in overhead lines. Other sizes are also available.

Complete Conductor (cont'd.):

Class AA strandings are used for bare overhead lines. The direction of lay for the outer layer is right-hand and is normally reversed in successive layers. The temper is full hard drawn (H19).

Class A strandings are used primarily for overhead conductors which are to be covered with weather-resistant materials. Greater flexibility than Class AA is provided. The outer layer is right-hand, and the temper generally H19. Successive layers are normally reverse lay.

Features and Benefits:

Optimum economy is provided since the lighter weight means lower unit length costs, easier handling in installation and less-complex fittings.

All-aluminum conductors have an inherent high corrosion resistance due to their homogeneous construction.

Applications:

Stranded bare all-aluminum 1350 conductors (AAC) are used in overhead line installations where design parameters do not require the higher strength or temperature ratings provided by ACSR, ACSS or other type conductors.

Options:

- Compact aluminum strands (ASTM B400)
- Trapezoidal-shaped aluminum strands (/TW)
- High-conductivity aluminum (/HC) (62.2% IACS)
- Non-specular surface finish (/NS)

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

TransPowr® AAC Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded

AAC, ALUMINUM 1350 CONDUCTORS – CONCENTRIC, LAY-STRANDED – (MECHANICAL PROPERTIES)

CODE WORD	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES	CLASS	CROSS-SECTION SQ. INCHES	O.D. INCHES	APPROX. WEIGHT LB/1000 FT	RATED STRENGTH LBS	STANDARD PACKAGES (1)		
								REEL DESIGNATION	WEIGHT LBS	LENGTH FT
Peachbell	6	7x0.0612	A	0.0206	0.184	24.6	560	NR 42.28 NR 36.22 COIL	1400 700 200	56910 28455 8130
Rose	4	7x0.0772	A	0.0328	0.232	39.1	880	NR 42.28 NR 36.22 COIL	1395 700 200	35710 17855 5100
Iris	2	7x0.0974	A, AA	0.0522	0.292	62.2	1350	NR 42.28 NR 36.22 COIL	1400 700 200	22470 11235 3210
Pansy	1	7x0.1093	A, AA	0.0657	0.328	78.4	1640	NR 42.28 NR 36.22 COIL	1400 700 200	17830 8915 2550
Poppy	1/0	7x0.1228	A, AA	0.0829	0.368	99.0	1990	NR 42.28 NR 36.22 COIL	1395 700 200	14130 7065 2020
Aster	2/0	7x0.1379	A, AA	0.1045	0.414	124.8	2510	NR 42.28 NR 36.22	1400 700	11210 5605
Phlox	3/0	7x0.1548	A, AA	0.1317	0.464	157.3	3040	NR 42.28 NR 36.22	1400 700	8890 4445
Oxlip	4/0	7x0.1739	A, AA	0.1663	0.522	198.3	3830	NR 42.28 NR 36.22	1400 700	7050 3525
Daisy	266.8	7x0.1953	AA	0.2095	0.586	250	4830	NR 42.28 NR 36.22	1400 700	5590 2795
Laurel	266.8	19x0.1185	A	0.2095	0.593	250	4970	RM 68.38 NR 66.28 NR 48.28 NR 42.28	3795 3795 1895 1265	15170 15170 7585 5055
Tulip	336.4	19x0.1331	A	0.2644	0.666	315	6150	RM 68.38 NR 66.28 NR 48.28 NR 42.28	3795 3795 1900 1265	12030 12030 6015 4010
Daffodil	350.0	19x0.1357	A	0.2748	0.679	328	6390	RM 68.38 NR 66.28 NR 48.28 NR 42.28	3790 3790 1895 1265	11560 11560 5780 3855
Canna	397.5	19x0.1447	A, AA	0.3120	0.723	373	7110	RM 68.38 NR 66.28 NR 48.28 NR 42.28	3790 3790 1895 1265	10180 10180 5090 3395
Cosmos	477.0	19x0.1584	AA	0.3744	0.792	447	8360	RM 68.38 NR 66.28 NR 48.28 NR 42.28	3795 3795 1895 1265	8490 8490 4245 2830
Syringa	477.0	37x0.1135	A	0.3744	0.795	447	8690	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7385 3695 3695 1850	16530 8265 8265 4135
Zinnia	500.0	19x0.1622	AA	0.3926	0.811	469	8760	RM 68.38	3795	8100
Hyacinth	500.0	37x0.1162	A	0.3924	0.813	469	9110	RMT 84.45 RM 68.38	7380 3690	15760 7880
Dahlia	556.5	19x0.1711	AA	0.4369	0.856	522	9750	RM 68.38 NR 66.28 NR 48.28 NR 42.28	3790 3790 1895 1265	7270 7270 3635 2425
Mistletoe	556.5	37x0.1226	A	0.4368	0.858	522	9940	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7385 3695 3695 1850	14170 7085 7085 3545
Meadowsweet	600.0	37x0.1273	A, AA	0.4709	0.891	562	10700	RMT 84.45 RM 68.38	7385 3690	13140 6570
Orchid	636.0	37x0.1311	A, AA	0.4995	0.918	596	11400	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7390 3695 3695 1850	12400 6200 6200 3100

(1) Weights shown are for conductor only and do not include the reel. Normal length and shipping tolerances apply.

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

TransPwr[®] AAC Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded

AAC, ALUMINUM 1350 CONDUCTORS – CONCENTRIC, LAY-STRANDED – (ELECTRICAL PROPERTIES)

CODE WORD	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES	CLASS	CROSS-SECTION SQ. INCHES	O.D. INCHES	RESISTANCE (2) OHMS/1000 FT			AMPACITY 75°C (3)	GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/1000FT (4)	CAPACITIVE REACTANCE MEGAOHM 1000 FT (4)
						DC @ 20°C	AC @ 25°C	AC @ 75°C				
Peachbell	6	7x0.0612	A	0.0206	0.184	0.659	0.672	0.805	105	0.0056	0.1194	0.7631
Rose	4	7x0.0772	A	0.0328	0.232	0.414	0.423	0.506	140	0.0070	0.1140	0.7268
Iris	2	7x0.0974	A, AA	0.0522	0.292	0.260	0.266	0.318	185	0.0088	0.1087	0.6905
Pansy	1	7x0.1093	A, AA	0.0657	0.328	0.207	0.211	0.252	215	0.0099	0.1060	0.6723
Poppy	1/0	7x0.1228	A, AA	0.0829	0.368	0.164	0.167	0.200	245	0.0111	0.1034	0.6541
Aster	2/0	7x0.1379	A, AA	0.1045	0.414	0.130	0.133	0.159	285	0.0125	0.1007	0.6360
Phlox	3/0	7x0.1548	A, AA	0.1317	0.464	0.103	0.105	0.126	330	0.0140	0.0980	0.6178
Oxlip	4/0	7x0.1739	A, AA	0.1663	0.522	0.0817	0.0835	0.0999	380	0.0158	0.0954	0.5997
Daisy	266.8	7x0.1953	AA	0.2095	0.586	0.0648	0.0663	0.0793	440	0.0177	0.0927	0.5815
Laurel	266.8	19x0.1185	A	0.2095	0.593	0.0648	0.0663	0.0793	445	0.0187	0.0914	0.5797
Tulip	336.4	19x0.1331	A	0.2644	0.666	0.0514	0.0526	0.0630	515	0.0210	0.0888	0.5616
Daffodil	350.0	19x0.1357	A	0.2748	0.679	0.0494	0.0506	0.0605	525	0.0214	0.0883	0.5585
Canna	397.5	19x0.1447	A, AA	0.3120	0.723	0.0435	0.0446	0.0534	570	0.0228	0.0869	0.5485
Cosmos	477.0	19x0.1584	AA	0.3744	0.792	0.0362	0.0373	0.0445	640	0.0250	0.0848	0.5342
Syringa	477.0	37x0.1135	A	0.3744	0.795	0.0362	0.0373	0.0445	640	0.0254	0.0844	0.5337
Zinnia	500.0	19x0.1622	AA	0.3926	0.811	0.0346	0.0356	0.0425	655	0.0256	0.0842	0.5305
Hyacinth	500.0	37x0.1162	A	0.3924	0.813	0.0346	0.0356	0.0425	660	0.0260	0.0838	0.5300
Dahlia	556.5	19x0.1711	AA	0.4369	0.856	0.0311	0.0320	0.0382	705	0.0270	0.0830	0.5221
Mistletoe	556.5	37x0.1226	A	0.4368	0.858	0.0311	0.0320	0.0382	705	0.0275	0.0826	0.5216
Meadowsweet	600.0	37x0.1273	A, AA	0.4709	0.891	0.0288	0.0298	0.0355	735	0.0285	0.0817	0.5157
Orchid	636.0	37x0.1311	A, AA	0.4995	0.918	0.0272	0.0281	0.0335	765	0.0294	0.0811	0.5112

(2) Based on a conductivity of 61.2% (minimum lot average) IACS at 20°C. To convert to ohms/mile, multiply by 5.28. To convert to ohms/km, multiply by 3.281.

(3) Based on a conductor temperature of 75°C at 60 Hz and the following conditions: 25°C ambient temperature, 2 ft/sec crosswind (90° to conductor), 0.5 coefficient of emissivity, 0.5 coefficient of absorptivity, 30° 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 96.0 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.

(4) Values for inductive reactance and capacitive reactance are expressed in terms of a 1 ft radius.



TransPowr® AAC Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded

AAC, ALUMINUM 1350 CONDUCTORS – CONCENTRIC, LAY-STRANDED – (MECHANICAL PROPERTIES)

CODE WORD	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES	CLASS	CROSS-SECTION SQ. INCHES	O.D. INCHES	APPROX. WEIGHT LB/1000 FT	RATED STRENGTH LBS	STANDARD PACKAGES (1)		
								REEL DESIGNATION	WEIGHT LBS	LENGTH FT
Violet	715.5	37x0.1391	AA	0.5623	0.974	671	12800	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7395 3695 3695 1850	11020 5510 5510 2755
Nasturtium	715.5	61x0.1083	A	0.5619	0.975	671	13100	RMT 90.45 RM 68.38	9745 4870	14530 7265
Petunia	750.0	37x0.1424	AA	0.5893	0.997	703	13100	RMT 84.45 RM 68.38 NR 48.28	7390 3695 1850	10510 5255 2630
Arbutus	795.0	37x0.1466	AA	0.6245	1.026	745	13900	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7395 3695 3695 1850	9920 4960 4960 2480
Lilac	795.0	61x0.1142	A	0.6248	1.028	745	14300	RMT 90.45 RM 68.38	9755 4875	13080 6540
Fuchsia	800.0	37x0.1470	AA	0.6287	1.029	750	14000	RMT 84.45 RM 68.38	7385 3695	9855 4930
Heliotrope	800.0	61x0.1145	A	0.6281	1.031	750	14400	RMT 90.45 RM 68.38	9745 4795	13000 6395
Anemone	874.5	37x0.1537	AA	0.6865	1.076	820	15000	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7380 3690 3690 1850	9010 4505 4505 2255
Crocus	874.5	61x0.1197	A	0.6864	1.078	820	15800	RMT 90.45 RM 68.38	9740 4870	11890 5945
Magnolia	954.0	37x0.1606	AA	0.7495	1.124	894	16400	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7390 3695 3695 1845	8260 4130 4130 2065
Goldenrod	954.0	61x0.1251	A	0.7498	1.126	894	16900	RMT 90.45 RM 68.38	9755 4875	10900 5450
Camellia	1000.0	61x0.1280	A	0.7849	1.152	937	17700	RMT 90.45 RM 68.38	9745 4870	10400 5200
Bluebell	1033.5	37x0.1671	AA	0.8114	1.170	969	17700	RMT 84.45 RM 68.38 NR 66.28 NR 48.28	7390 3695 3695 1850	7630 3815 3815 1910
Larkspur	1033.5	61x0.1302	A	0.8122	1.172	969	18300	RMT 90.45 RM 68.38	9750 4875	10060 5030
Marigold	1113.0	61x0.1351	A, AA	0.8744	1.216	1043	19700	RMT 90.45 RM 68.38	9750 4875	9340 4670
Hawthorn	1192.5	61x0.1398	A, AA	0.9363	1.258	1118	21100	RMT 90.45 RM 68.38	10435 4870	9340 4360
Narcissus	1272.0	61x0.1444	A, AA	0.9990	1.300	1192	22000	RMT 90.45 RM 68.38	9740 4870	8170 4085
Columbine	1351.5	61x0.1488	A, AA	1.0608	1.339	1267	23400	RMT 90.45 RM 68.38	9735 4870	7690 3845
Carnation	1431.0	61x0.1532	A, AA	1.1244	1.379	1341	24300	RMT 90.45 RM 68.38	9755 4880	7270 3635
Gladiolus	1510.5	61x0.1574	A, AA	1.1869	1.417	1416	25600	RMT 90.45 RM 68.38	9740 4870	6880 3440
Coreopsis	1590.0	61x0.1614	AA	1.2480	1.453	1490	27000	RMT 90.45 RM 68.38	9740 4870	6540 3270
Jessamine	1750.0	61x0.1694	AA	1.3748	1.525	1640	29700	RMT 90.45	9750	5940
Cowslip	2000.0	91x0.1482	A	1.5697	1.630	1875	34300	RMT 90.45	9085	4850
Sagebrush	2250.0	91x0.1572	A	1.7662	1.729	2130	37700	RMT 90.45	9085	4270
Pigweed	2300.0	61x0.1942	A	1.8069	1.748	2177	39000	RMT 90.45	9080	4170
Lupine	2500.0	91x0.1657	A	1.9623	1.823	2366	42000	RMT 90.45	9080	3840
Bitterroot	2750.0	91x0.1738	A	2.1589	1.912	2603	46100	RMT 90.45	9080	3490
Trillium	3000.0	127x0.1537	A	2.3564	1.998	2839	50300	RMT 90.45	9515	3350
Bluebonnet	3500.0	127x0.1660	A	2.7486	2.158	3345	58700	RMT 90.45	9495	2840

(1) Weights shown are for conductor only and do not include the reel. Normal length and shipping tolerances apply.

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

TransPwr[®] AAC Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded

AAC, ALUMINUM 1350 CONDUCTORS – CONCENTRIC, LAY-STRANDED – (ELECTRICAL PROPERTIES)

CODE WORD	SIZE AWG OR kcmil	STRANDING NO. X DIA. INCHES	CLASS	CROSS-SECTION SQ. INCHES	O.D. INCHES	RESISTANCE (2) OHMS/1000 FT			AMPACITY 75°C (3)	GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/1000 FT (4)	CAPACITIVE REACTANCE MEGAOHM 1000 FT (4)
						DC @ 20°C	AC @ 25°C	AC @ 75°C				
Violet	715.5	37x0.1391	AA	0.5623	0.974	0.0242	0.0251	0.0299	820	0.0311	0.0797	0.5020
Nasturtium	715.5	61x0.1083	A	0.5619	0.975	0.0242	0.0251	0.0299	825	0.0314	0.0796	0.5017
Petunia	750.0	37x0.1424	AA	0.5893	0.997	0.0230	0.0240	0.0286	845	0.0319	0.0792	0.4983
Arbutus	795.0	37x0.1466	AA	0.6245	1.026	0.0217	0.0227	0.0270	875	0.0328	0.0785	0.4937
Lilac	795.0	61x0.1142	A	0.6248	1.028	0.0217	0.0227	0.0270	880	0.0331	0.0784	0.4935
Fuchsia	800.0	37x0.1470	AA	0.6287	1.029	0.0216	0.0225	0.0268	900	0.0329	0.0784	0.4932
Heliotrope	800.0	61x0.1145	A	0.6281	1.031	0.0216	0.0225	0.0268	900	0.0332	0.0783	0.4930
Anemone	874.5	37x0.1537	AA	0.6865	1.076	0.0198	0.0207	0.0246	930	0.0344	0.0774	0.4862
Crocus	874.5	61x0.1197	A	0.6864	1.078	0.0198	0.0207	0.0246	930	0.0347	0.0773	0.4860
Magnolia	954.0	37x0.1606	AA	0.7495	1.124	0.0181	0.0191	0.0226	980	0.0360	0.0764	0.4794
Goldenrod	954.0	61x0.1251	A	0.7498	1.126	0.0181	0.0191	0.0226	980	0.0362	0.0763	0.4792
Camellia	1000.0	61x0.1280	A	0.7849	1.152	0.0173	0.0182	0.0216	1010	0.0371	0.0757	0.4755
Bluebell	1033.5	37x0.1671	AA	0.8114	1.170	0.0167	0.0177	0.0210	1030	0.0374	0.0755	0.4732
Larkspur	1033.5	61x0.1302	A	0.8122	1.172	0.0167	0.0177	0.0210	1030	0.0377	0.0753	0.4730
Marigold	1113.0	61x0.1351	A, AA	0.8744	1.216	0.0155	0.0165	0.0195	1080	0.0391	0.0745	0.4671
Hawthorn	1192.5	61x0.1398	A, AA	0.9363	1.258	0.0145	0.0155	0.0183	1125	0.0405	0.0737	0.4617
Narcissus	1272.0	61x0.1444	A, AA	0.9990	1.300	0.0136	0.0146	0.0173	1170	0.0418	0.0730	0.4567
Columbine	1351.5	61x0.1488	A, AA	1.0608	1.339	0.0128	0.0139	0.0163	1210	0.0431	0.0723	0.4519
Carnation	1431.0	61x0.1532	A, AA	1.1244	1.379	0.0121	0.0132	0.0155	1250	0.0444	0.0716	0.4475
Gladiolus	1510.5	61x0.1574	A, AA	1.1869	1.417	0.0114	0.0126	0.0147	1295	0.0456	0.0710	0.4432
Coreopsis	1590.0	61x0.1614	AA	1.2480	1.453	0.0109	0.0120	0.0141	1330	0.0468	0.0704	0.4392
Jessamine	1750.0	61x0.1694	AA	1.3748	1.525	0.00988	0.0111	0.0129	1405	0.0490	0.0693	0.4317
Cowslip	2000.0	91x0.1482	A	1.5697	1.630	0.00864	0.00994	0.0115	1515	0.0526	0.0677	0.4211
Sagebrush	2250.0	91x0.1572	A	1.7662	1.729	0.00776	0.00914	0.0105	1610	0.0558	0.0663	0.4119
Pigweed	2300.0	61x0.1942	A	1.8069	1.748	0.00759	0.00898	0.0104	1435	0.0562	0.0661	0.4103
Lupine	2500.0	91x0.1657	A	1.9623	1.823	0.00698	0.00844	0.00969	1705	0.0588	0.0651	0.4037
Bitterroot	2750.0	91x0.1738	A	2.1589	1.912	0.00635	0.00789	0.00900	1790	0.0617	0.0640	0.3962
Trillium	3000.0	127x0.1537	A	2.3564	1.998	0.00582	0.00743	0.00843	1875	0.0545	0.0668	0.3893
Bluebonnet	3500.0	127x0.1660	A	2.7486	2.158	0.00504	0.00676	0.00761	2015	0.0589	0.0651	0.3773

(2) Based on a conductivity of 61.2% (minimum lot average) IACS at 20°C. To convert to ohms/mile, multiply by 5.28. To convert to ohms/km, multiply by 3.281.

(3) Based on a conductor temperature of 75°C at 60 Hz and the following conditions: 25°C ambient temperature, 2 ft/sec crosswind (90° to conductor), 0.5 coefficient of emissivity, 0.5 coefficient of absorptivity, 30° 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 96.0 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.

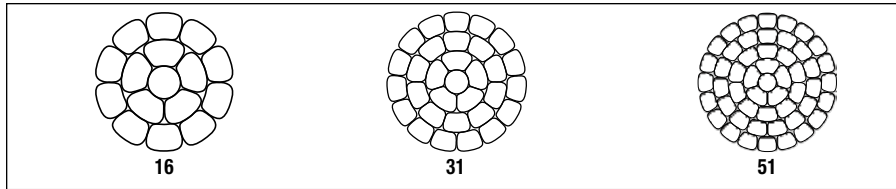
(4) Values for inductive reactance and capacitive reactance are expressed in terms of a 1 ft radius.



Notes

TransPowr[®] AAC/TW Bare Overhead Conductor

Trapezoidal All-Aluminum 1350 Concentric-Lay-Stranded



Product Construction:

Complete Conductor:

TransPowr[®] AAC/TW is a trapezoidal 1350 H19 aluminum (AAC) concentric-lay-stranded conductor. The aluminum strands are trapezoidal in shape. The wedge-shaped aluminum strands enable a more compact alignment of the aluminum wires.

Conductor designs that maintain the same circular mil cross-sectional area of aluminum as a conventional round conductor result in a TW conductor that is 10 to 15 percent smaller in overall diameter.

Conductor designs that maintain the same overall diameter as a conventional round conductor result in a TW conductor that has 20 to 25 percent more aluminum cross-sectional area packed in.

The AAC/TW conductors are manufactured in accordance with the requirements of the latest issue of ASTM B778.

The conductor consists of two, three, four or five layers of aluminum 1350-H19 wires. The sizes and constructions listed on this and the following pages are examples used in overhead lines.

Features and Benefits:

TransPowr AAC/TW has a continuous operating temperature rating of 75°C. Operation of the conductor at elevated temperatures may increase the conductor sag properties and lower the rated tensile strength of the conductor.

AAC/TW conductors constructed of equivalent aluminum circular mil cross-sectional area provide a conductor that is smaller in overall diameter than the equivalent conventional round wire AAC conductor. The reduced conductor diameter is advantageous in reducing the effects of ice and wind loading on the conductor.

AAC/TW conductors constructed to be equivalent overall diameter enable a greater circular mil cross-sectional area of aluminum within the conductor, reducing power loss in the conductor for day-to-day operations as well as allowing a significant increase in conductor current-carrying capacity.

Applications:

Trapezoidal 1350 H19 aluminum conductors (AAC/TW) are used for overhead transmission lines where design parameters do not require the higher strength or temperature ratings provided by ACSR, ACSS or other type conductors.

Electrical Parameters:

The electrical parameters for the trapezoidal AAC equivalent circular mil area and equivalent overall diameter conductors may be found in the last table of this section.

Options:

- High-conductivity aluminum (/HC) (62.2% IACS)
- Non-specular surface finish (/NS)

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



General Cable
info@generalcable.com

TransPowr® AAC/TW Bare Overhead Conductor

Trapezoidal All-Aluminum 1350 Concentric-Lay-Stranded



AAC/TW CONDUCTORS (MECHANICAL PROPERTIES) – EQUIVALENT DIAMETER – CONDUCTORS SIZED TO HAVE EQUIVALENT CIRCULAR MIL AREA TO REGULAR AAC											
CODE WORD	SIZE AWG OR kcmil	NO. OF AL WIRES	EQUIVALENT STRAND WIRE DIA. INCHES	FILL FACTOR	CROSS-SECTION SQ. INCHES	O.D. INCHES	APPROX. WEIGHT LB/1000 FT	RATED STRENGTH LBS	STANDARD PACKAGES (1)		
									REEL DESIGNATION	WEIGHT LBS	LENGTH FT
Tulip/AAC/TW	336.4	16	0.1453	89.8	0.2654	0.61	315	6050	RMT 84.36 NR 60.28	4700 2360	14900 7500
Canna/AAC/TW	397.5	16	0.1579	91.0	0.3135	0.66	373	7000	RMT 84.36 NR 60.28	4690 2350	12600 6300
Cosmos/AAC/TW	477.0	16	0.1730	91.1	0.3760	0.72	447	8390	RMT 84.36 NR 60.28	4690 2370	10500 5300
Zinnia/AAC/TW	500.0	16	0.1771	92.3	0.3940	0.74	469	8790	RMT 84.36 NR 60.28	4690 2340	10000 5000
Mistletoe/AAC/TW	556.5	16	0.1868	92.6	0.4387	0.78	522	9790	RMT 84.36 NR 60.28	4690 2350	9000 4500
Meadowsweet/AAC/TW	600.0	16	0.1940	93.0	0.4729	0.80	562	10500	RMT 84.36 NR 60.28	4720 2360	8400 4200
Orchid/AAC/TW	636.0	16	0.1996	93.4	0.5007	0.83	596	11200	RMT 84.36 RM 68.38	4710 2320	7900 3900
Verbena/AAC/TW	700.0	16	0.2095	93.8	0.5514	0.86	656	12300	RMT 84.36 NR 60.28	4720 2360	7200 3600
Nasturtium/AAC/TW	750.0	16	0.2168	94.0	0.5908	0.89	703	12900	RMT 84.36 NR 60.28	4710 2390	6700 3400
Arbutus/AAC/TW	795.0	16	0.2231	94.1	0.6257	0.92	745	13600	RMT 84.36 NR 60.28	4690 2380	6300 3200
Cockscomb/AAC/TW	900.0	16	0.2376	91.8	0.7092	0.99	844	15400	RMT 84.36 NR 60.28	4720 2360	5600 2800
Magnolia/AAC/TW	954.0	31	0.1756	92.0	0.7509	1.02	894	16400	RMT 96.60 RMT 84.36	9120 4560	10200 5100
Hawkweed/AAC/TW	1000.0	31	0.1798	92.3	0.7868	1.04	937	17200	RMT 96.60 RMT 84.36	9090 4590	9700 4900
Bluebell/AAC/TW	1033.5	31	0.1827	92.5	0.8130	1.06	969	17700	RMT 96.60 RMT 84.36	9110 4550	9400 4700
Marigold/AAC/TW	1113.0	31	0.1897	92.8	0.8759	1.10	1043	19100	RMT 96.60 RMT 84.36	9080 4590	8700 4400
Hawthorn/AAC/TW	1192.5	31	0.1963	93.1	0.9382	1.13	1118	20500	RMT 96.60 RMT 84.36	9170 4580	8200 4100
Narcissus/AAC/TW	1272.0	31	0.2027	93.2	1.0006	1.17	1192	21800	RMT 96.60 RMT 84.36	9060 4530	7600 3800
Columbine/AAC/TW	1351.5	31	0.2090	93.6	1.0634	1.20	1267	23200	RMT 96.60 RMT 84.36	9120 4560	7200 3600
Carnation/AAC/TW	1431.0	31	0.2151	93.7	1.1260	1.24	1341	24000	RMT 96.60 RMT 84.36	9120 4560	6800 3400
Coreopsis/AAC/TW	1590.0	51	0.1767	91.9	1.2508	1.32	1490	27000	RMT 96.60 RMT 90.45	9980 7450	6700 5000
Jessamine/AAC/TW	1750.0	51	0.1853	92.3	1.3760	1.38	1640	29700	RMT 96.60 RMT 90.45	10010 7550	6100 4600
Cowslip/AAC/TW	2000.0	51	0.1981	92.8	1.5720	1.47	1875	33900	RMT 96.60 RMT 90.45	10030 7570	5300 4000
Lupine/AAC/TW	2500.0	71	0.1877	92.1	1.9655	1.65	2366	41900	RMT 108.74 RMT 96.60	19400 10410	8200 4400
Trillium/AAC/TW	3000.0	71	0.2056	92.7	2.3565	1.80	2839	50300	RMT 108.74 RMT 96.60	20070 10320	7000 3600

(1) Weights shown are for conductor only and do not include the reel. Normal length and shipping tolerances apply.

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

TransPwr® AAC/TW Bare Overhead Conductor

Trapezoidal All-Aluminum 1350 Concentric-Lay-Stranded



**AAC/TW CONDUCTORS (ELECTRICAL PROPERTIES) – EQUIVALENT DIAMETER –
CONDUCTORS SIZED TO HAVE EQUIVALENT CIRCULAR MIL AREA TO REGULAR AAC**

CODE WORD	SIZE kcmil	NO. OF AL WIRES	EQUIVALENT STRAND WIRE DIA. INCHES	FILL FACTOR	CROSS-SECTION SQ. INCHES	O.D. INCHES	RESISTANCE (2) OHMS/1000 FT			AMPACITY 75°C (3)	GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/1000 FT (4)	CAPACITIVE REACTANCE MEGAOHM 1000 FT (4)
							DC @ 20°C	AC @ 25°C	AC @ 75°C				
Tulip/AAC/TW	336.4	16	0.1453	89.8	0.2654	0.61	0.0514	0.0526	0.0630	500	0.0193	0.0907	0.5751
Canna/AAC/TW	397.5	16	0.1579	91.0	0.3135	0.66	0.0435	0.0446	0.0534	555	0.0209	0.0889	0.5630
Cosmos/AAC/TW	477.0	16	0.1730	91.1	0.3760	0.72	0.0362	0.0373	0.0445	625	0.0228	0.0869	0.5488
Zinnia/AAC/TW	500.0	16	0.1771	92.3	0.3940	0.74	0.0346	0.0356	0.0425	640	0.0232	0.0865	0.5461
Mistletoe/AAC/TW	556.5	16	0.1868	92.6	0.4387	0.78	0.0311	0.0320	0.0382	685	0.0245	0.0852	0.5380
Meadowsweet/AAC/TW	600.0	16	0.1940	93.0	0.4729	0.80	0.0288	0.0298	0.0355	715	0.0254	0.0844	0.5324
Orchid/AAC/TW	636.0	16	0.1996	93.4	0.5007	0.83	0.0272	0.0281	0.0335	745	0.0261	0.0838	0.5282
Verbena/AAC/TW	700.0	16	0.2095	93.8	0.5514	0.86	0.0247	0.0256	0.0305	790	0.0273	0.0827	0.5210
Nasturtium/AAC/TW	750.0	16	0.2168	94.0	0.5908	0.89	0.0230	0.0240	0.0286	820	0.0282	0.0820	0.5157
Arbutus/AAC/TW	795.0	16	0.2231	94.1	0.6257	0.92	0.0217	0.0227	0.0270	850	0.0291	0.0813	0.5112
Cockscomb/AAC/TW	900.0	16	0.2376	91.8	0.7092	0.99	0.0192	0.0201	0.0239	925	0.0313	0.0796	0.4997
Magnolia/AAC/TW	954.0	31	0.1756	92.0	0.7509	1.02	0.0181	0.0191	0.0226	955	0.0326	0.0787	0.4951
Hawkweed/AAC/TW	1000.0	31	0.1798	92.3	0.7868	1.04	0.0173	0.0182	0.0216	985	0.0333	0.0782	0.4917
Bluebell/AAC/TW	1033.5	31	0.1827	92.5	0.8130	1.06	0.0167	0.0177	0.0210	1005	0.0338	0.0778	0.4892
Marigold/AAC/TW	1113.0	31	0.1897	92.8	0.8759	1.10	0.0155	0.0165	0.0195	1050	0.0350	0.0770	0.4837
Hawthorn/AAC/TW	1192.5	31	0.1963	93.1	0.9382	1.13	0.0145	0.0155	0.0183	1095	0.0362	0.0763	0.4785
Narcissus/AAC/TW	1272.0	31	0.2027	93.2	1.0006	1.17	0.0136	0.0146	0.0173	1135	0.0374	0.0755	0.4736
Columbine/AAC/TW	1351.5	31	0.2090	93.6	1.0634	1.20	0.0128	0.0139	0.0163	1175	0.0384	0.0749	0.4691
Carnation/AAC/TW	1431.0	31	0.2151	93.7	1.1260	1.24	0.0121	0.0132	0.0155	1215	0.0395	0.0742	0.4647
Coreopsis/AAC/TW	1590.0	51	0.1767	91.9	1.2508	1.32	0.0109	0.0120	0.0141	1295	0.0423	0.0727	0.4549
Jessamine/AAC/TW	1750.0	51	0.1853	92.3	1.3760	1.38	0.00988	0.0111	0.0129	1370	0.0443	0.0716	0.4478
Cowslip/AAC/TW	2000.0	51	0.1981	92.8	1.5720	1.47	0.00864	0.00994	0.0115	1475	0.0472	0.0702	0.4377
Lupine/AAC/TW	2500.0	71	0.1877	92.1	1.9655	1.65	0.00698	0.00844	0.00969	1660	0.0531	0.0675	0.4196
Trillium/AAC/TW	3000.0	71	0.2056	92.7	2.3565	1.80	0.00582	0.00743	0.00843	1820	0.0580	0.0654	0.4059

(2) Based on a conductivity of 61.2% (minimum lot average) IACS at 20°C. To convert to ohms/mile, multiply by 5.28. To convert to ohms/km, multiply by 3.281.

(3) Based on a conductor temperature of 75°C at 60 Hz and the following conditions: 25°C ambient temperature, 2 ft/sec crosswind (90° to conductor), 0.5 coefficient of emissivity, 0.5 coefficient of absorptivity, 30° 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 96.0 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.

(4) Values for inductive reactance and capacitive reactance are expressed in terms of a 1 ft radius.

TransPowr® AAC/TW Bare Overhead Conductor

Trapezoidal All-Aluminum 1350 Concentric-Lay-Stranded



AAC/TW CONDUCTORS (MECHANICAL PROPERTIES) – EQUIVALENT DIAMETER – CONDUCTORS SIZED TO HAVE EQUIVALENT CIRCULAR MIL AREA TO REGULAR AAC

CODE WORD	SIZE AWG OR kcmil	NO. OF AL WIRES	EQUIVALENT STRAND WIRE DIA. INCHES	FILL FACTOR	CROSS-SECTION SQ. INCHES	O.D. INCHES	APPROX. WEIGHT LB/1000 FT	RATED STRENGTH LBS	STANDARD PACKAGES (1)		
									REEL DESIGNATION	WEIGHT LBS	LENGTH FT
Logan/AAC/TW	322.5	16	0.1423	89.5	0.2546	0.60	302	5800	RMT 84.36 NR 60.28	4720 2360	15600 7800
- none -	384.5	16	0.1553	91.0	0.3032	0.65	360	6700	RMT 84.36 NR 60.28	4720 2340	13100 6500
Wheeler/AAC/TW	449.4	16	0.1679	91.7	0.3542	0.70	421	7900	RMT 84.36 NR 60.28	4720 2360	11200 5600
- none -	521.7	16	0.1808	92.7	0.4108	0.75	489	9100	RMT 84.36 NR 60.28	4690 2350	9600 4800
Robson/AAC/TW	595.8	16	0.1933	93.0	0.4693	0.80	558	10400	RMT 84.36 NR 60.28	4690 2350	8400 4200
- none -	678.2	16	0.2062	93.8	0.5343	0.85	636	11900	RMT 84.36 NR 60.28	4700 2350	7400 3700
McKinley/AAC/TW	761.5	16	0.2184	94.0	0.5995	0.90	714	13100	RMT 84.36 RM 68.38	4710 2360	6600 3300
- none -	854.2	16	0.2314	94.6	0.6726	0.95	801	14700	RMT 84.36 NR 60.28	4720 2320	5900 2900
Rainier/AAC/TW	918.8	31	0.1723	91.8	0.7227	1.00	861	15800	RMT 96.60 RMT 84.36	9130 4560	10600 5300
- none -	1020.0	31	0.1815	92.5	0.8023	1.05	956	17500	RMT 96.60 RMT 84.36	9080 4590	9500 4800
Helens/AAC/TW	1123.1	31	0.1905	92.8	0.8839	1.10	1053	19300	RMT 96.60 RMT 84.36	9160 4530	8700 4300
- none -	1234.2	31	0.1997	93.3	0.9707	1.15	1157	21200	RMT 96.60 RMT 84.36	9140 4510	7900 3900
Mazama/AAC/TW	1346.8	31	0.2085	93.5	1.0588	1.20	1262	23100	RMT 96.60 RMT 84.36	9090 4540	7200 3600
- none -	1467.9	31	0.2177	93.9	1.1542	1.25	1376	24700	RMT 96.60 RMT 84.36	9080 4540	6600 3300
Hood/AAC/TW	1583.2	31	0.2262	93.6	1.2457	1.30	1484	26600	RMT 96.60 RMT 84.36	9050 4600	6100 3100
- none -	1682.7	51	0.1817	92.3	1.3225	1.35	1577	28500	RMT 96.60 RMT 90.45	9940 7570	6300 4800
Whitney/AAC/TW	1812.7	51	0.1886	92.5	1.4243	1.40	1699	30800	RMT 96.60 RMT 90.45	10020 7480	5900 4400
- none -	1954.3	51	0.1959	92.9	1.5370	1.45	1832	33200	RMT 96.60 RMT 90.45	10070 7510	5500 4100
Powell/AAC/TW	2093.6	51	0.2027	93.0	1.6456	1.50	1982	35500	RMT 96.60 RMT 90.45	9910 7530	5000 3800
- none -	2245.4	51	0.2099	93.5	1.7653	1.55	2125	38100	RMT 96.60 RMT 90.45	9990 7440	4700 3500
Jefferson/AAC/TW	2388.1	51	0.2165	93.2	1.8782	1.60	2260	39700	RMT 96.60 RMT 90.45	9950 7460	4400 3300
- none -	2514.8	71	0.1883	92.4	1.9771	1.65	2380	42200	RMT 108.74 RMT 96.60	19520 10470	8200 4400
Shasta/AAC/TW	2667.2	71	0.1939	92.2	2.0957	1.70	2524	44700	RMT 108.74 RMT 96.60	19690 10350	7800 4100
- none -	2844.5	71	0.2003	92.9	2.2362	1.75	2692	47700	RMT 108.74 RMT 96.60	18850 10500	7000 3900
Adams/AAC/TW	3006.2	71	0.2058	92.7	2.3623	1.80	2873	50400	RMT 108.74 RMT 96.60	20110 10340	7000 3600

(1) Weights shown are for conductor only and do not include the reel. Normal length and shipping tolerances apply.

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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AAC/TW CONDUCTORS (ELECTRICAL PROPERTIES) – EQUIVALENT DIAMETER – CONDUCTORS SIZED TO HAVE EQUIVALENT CIRCULAR MIL AREA TO REGULAR AAC

CODE WORD	SIZE AWG OR kcmil	NO. OF AL WIRES	EQUIVALENT STRAND WIRE DIA. INCHES	FILL FACTOR	CROSS-SECTION SQ. INCHES	O.D. INCHES	RESISTANCE (2) OHMS/1000 FT			AMPACITY 75°C (3)	GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/1000 FT (4)	CAPACITIVE REACTANCE MEGA OHM 1000 FT (4)
							DC @ 20°C	AC @ 25°C	AC @ 75°C				
Logan/AAC/TW	322.5	16	0.1423	89.5	0.2546	0.60	0.0536	0.0549	0.0657	490	0.0189	0.0912	0.5782
- none -	384.5	16	0.1553	91.0	0.3032	0.65	0.0450	0.0461	0.0551	545	0.0205	0.0893	0.5656
Wheeler/AAC/TW	449.4	16	0.1679	91.7	0.3542	0.70	0.0385	0.0395	0.0472	600	0.0221	0.0876	0.5540
- none -	521.7	16	0.1808	92.7	0.4108	0.75	0.0331	0.0341	0.0408	660	0.0237	0.0860	0.5431
Robson/AAC/TW	595.8	16	0.1933	93.0	0.4693	0.80	0.0290	0.0300	0.0358	715	0.0253	0.0845	0.5330
- none -	678.2	16	0.2062	93.8	0.5343	0.85	0.0255	0.0264	0.0315	775	0.0269	0.0831	0.5234
McKinley/AAC/TW	761.5	16	0.2184	94.0	0.5995	0.90	0.0227	0.0236	0.0281	830	0.0285	0.0818	0.5145
- none -	854.2	16	0.2314	94.6	0.6726	0.95	0.0202	0.0212	0.0252	890	0.0300	0.0805	0.5060
Rainier/AAC/TW	918.8	31	0.1723	91.8	0.7227	1.00	0.0188	0.0198	0.0235	935	0.0320	0.0791	0.4979
- none -	1020.0	31	0.1815	92.5	0.8023	1.05	0.0169	0.0179	0.0212	995	0.0336	0.0780	0.4903
Helens/AAC/TW	1123.1	31	0.1905	92.8	0.8839	1.10	0.0154	0.0164	0.0194	1055	0.0352	0.0769	0.4830
- none -	1234.2	31	0.1997	93.3	0.9707	1.15	0.0140	0.0150	0.0177	1115	0.0368	0.0759	0.4760
Mazama/AAC/TW	1346.8	31	0.2085	93.5	1.0588	1.20	0.0128	0.0139	0.0164	1175	0.0384	0.0749	0.4693
- none -	1467.9	31	0.2177	93.9	1.1542	1.25	0.0118	0.0129	0.0151	1235	0.0400	0.0740	0.4629
Hood/AAC/TW	1583.2	31	0.2262	93.6	1.2457	1.30	0.0109	0.0121	0.0141	1290	0.0416	0.0731	0.4567
- none -	1682.7	51	0.1817	92.3	1.3225	1.35	0.0103	0.0115	0.0134	1340	0.0434	0.0721	0.4508
Whitney/AAC/TW	1812.7	51	0.1886	92.5	1.4243	1.40	0.00954	0.0108	0.0125	1395	0.0450	0.0712	0.4452
- none -	1954.3	51	0.1959	92.9	1.5370	1.45	0.00884	0.0101	0.0118	1455	0.0467	0.0704	0.4396
Powell/AAC/TW	2093.6	51	0.2027	93.0	1.6456	1.50	0.00834	0.00966	0.0112	1505	0.0483	0.0697	0.4343
- none -	2245.4	51	0.2099	93.5	1.7653	1.55	0.00777	0.00915	0.0106	1565	0.0498	0.0689	0.4292
Jefferson/AAC/TW	2388.1	51	0.2165	93.2	1.8782	1.60	0.00731	0.00873	0.0100	1615	0.0515	0.0682	0.4242
- none -	2514.8	71	0.1883	92.4	1.9771	1.65	0.00694	0.00841	0.00964	1665	0.0532	0.0674	0.4194
Shasta/AAC/TW	2667.2	71	0.1939	92.2	2.0957	1.70	0.00654	0.00806	0.00921	1715	0.0548	0.0667	0.4146
- none -	2844.5	71	0.2003	92.9	2.2362	1.75	0.00614	0.00770	0.00877	1770	0.0564	0.0661	0.4102
Adams/AAC/TW	3006.2	71	0.2058	92.7	2.3623	1.80	0.00586	0.00746	0.00848	1815	0.0581	0.0654	0.4057

(2) Based on a conductivity of 61.2% (minimum lot average) IACS at 20°C. To convert to ohms/mile, multiply by 5.28. To convert to ohms/km, multiply by 3.281.

(3) Based on a conductor temperature of 75°C at 60 Hz and the following conditions: 25°C ambient temperature, 2 ft/sec crosswind (90° to conductor), 0.5 coefficient of emissivity, 0.5 coefficient of absorptivity, 30° 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 96.0 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.

(4) Values for inductive reactance and capacitive reactance are expressed in terms of a 1 ft radius.

Notes