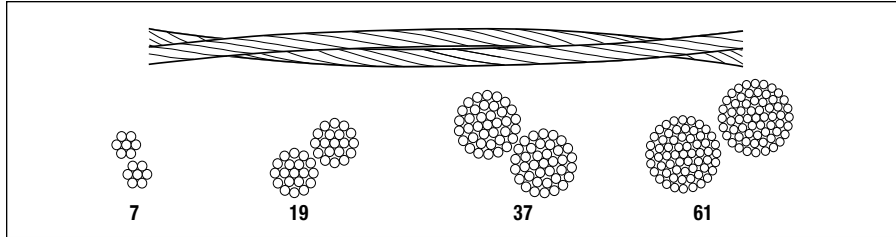


# TransPowr® AAC/T-2® Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded Twisted Pair



## Product Construction:

### Complete Conductor:

AAC/T-2® is a twisted pair of stranded aluminum conductors twisted around each other at nine-foot intervals. AAC/T-2 conductors are manufactured in accordance with the requirements of the latest issues of ASTM B230, B231 and B911, as applicable. The sizes and strandings listed on the following pages are those most frequently used for overhead lines. Additional sizes and strandings are available.

## Features and Benefits:

The AAC/T-2 conductor design effectively resists wind-induced motion in two ways. First, the constantly varying diameter prevents buildup of resonant vibration in the line. Second, the low torsional stiffness reduces motion-causing wind forces to ineffective levels. These mechanical properties eliminate galloping, reduce aeolian vibration and control subconductor oscillation. AAC/T-2 can reduce structural costs by permitting higher conductor tensions, resulting in less sag and longer spans. Also, right-of-way cost may be reduced by utilizing compact line designs. Electrically, AAC/T-2 operates at lower temperatures and has a lower AC resistance than a single conventional conductor with the same aluminum area. AAC/T-2 can be installed with many of the same methods and equipment used for standard round conductors.

## Applications:

AAC/T-2 conductors are used for overhead distribution and transmission lines which are subject to wind-induced motion damage.

## Options:

- E3X® surface coating (/E3X)
- High-conductivity aluminum (/HC) (62.2% IACS)

# TransPowr® AAC/T-2® Bare Overhead Conductor

## All-Aluminum 1350 Conductor Concentric-Lay-Stranded Twisted Pair

### AAC/T-2, CONCENTRIC-LAY-STRANDED (MECHANICAL PROPERTIES)

CODE WORD	SIZE AWG OR kcmil	COMPONENT		OUTER AREA SQ. INCHES	OVERALL DIMENSIONS INCHES	EQUIV. DIA. INCHES	APPROX. WEIGHT LB/KFT	RATED STRENGTH LBS
		AWG OR kcmil	STRANDING NO. X DIA. INCHES					
T-2 Lily	105.2	#3	7x0.0867	0.0826	0.260 x 0.520	0.426	98.0	2180
T-2 Iris	132.7	#2	7x0.0974	0.1043	0.292 x 0.584	0.478	123.6	2700
T-2 Pansy	167.4	#1	7x0.1093	0.1314	0.328 x 0.656	0.537	155.7	3280
T-2 Poppy	211.2	1/0	7x0.1228	0.1658	0.368 x 0.736	0.603	196.5	3980
T-2 Aster	266.2	2/0	7x0.1379	0.2091	0.414 x 0.828	0.677	247.8	5020
T-2 Phlox	335.6	3/0	7x0.1548	0.2635	0.464 x 0.928	0.760	312.3	6070
T-2 Oxlip	423.2	4/0	7x0.1739	0.3325	0.522 x 1.044	0.854	394.1	7660
T-2 Daisy	533.6	266.8	7x0.1952	0.4190	0.586 x 1.172	0.959	496.5	9650
T-2 Laurel	533.6	266.8	19x0.1185	0.4191	0.592 x 1.184	0.970	498.8	9940
T-2 Tulip	672.8	336.4	19x0.1331	0.5287	0.666 x 1.332	1.089	629.3	12300
T-2 Daffodil	700.0	350.0	19x0.1357	0.5496	0.678 x 1.356	1.111	654.1	12800
T-2 Canna	795.0	397.5	19x0.1446	0.6240	0.723 x 1.446	1.184	742.7	14200
T-2 Cosmos	954.0	477.0	19x0.1584	0.7488	0.792 x 1.584	1.297	891.3	16700
T-2 Syringa	954.0	477.0	37x0.1135	0.7487	0.794 x 1.588	1.301	894.1	17400
T-2 Zinnia	1000.0	500.0	19x0.1622	0.7852	0.811 x 1.622	1.328	934.5	17500
T-2 Hyacinth	1000.0	500.0	37x0.1162	0.7848	0.813 x 1.626	1.332	937.1	18200
T-2 Dahlia	1113.0	556.5	19x0.1711	0.8737	0.856 x 1.712	1.400	1040	19500
T-2 Mistletoe	1113.0	556.5	37x0.1226	0.8736	0.858 x 1.716	1.405	1043	19900
T-2 Day Lily	1192.0	596.0	19x0.1771	0.9361	0.886 x 1.772	1.450	1114	20900
T-2 Meadowsweet	1200.0	600.0	37x0.1273	0.9418	0.891 x 1.782	1.459	1125	21400
T-2 Orchid	1272.0	636.0	37x0.1311	0.9989	0.918 x 1.836	1.502	1193	22700
T-2 Violet	1431.0	715.5	37x0.1391	1.1250	0.974 x 1.948	1.594	1343	25600
T-2 Nasturtium	1431.0	715.5	61x0.1083	1.1240	0.975 x 1.950	1.596	1348	26300
T-2 Petunia	1500.0	750.0	37x0.1424	1.1790	0.997 x 1.994	1.632	1407	26300
T-2 Arbutus	1590.0	795.0	37x0.1466	1.2490	1.026 x 2.052	1.680	1492	27800
T-2 Lilac	1590.0	795.0	61x0.1142	1.2500	1.028 x 2.056	1.683	1499	28700
T-2 Fuchsia	1600.0	800.0	37x0.1470	1.2560	1.029 x 2.058	1.684	1500	28000
T-2 Heliotrope	1600.0	800.0	61x0.1145	1.2560	1.031 x 2.062	1.687	1507	28800
T-2 Anemone	1749.0	874.5	37x0.1537	1.3730	1.076 x 2.152	1.761	1640	30000
T-2 Crocus	1749.0	874.5	61x0.1197	1.3730	1.077 x 2.154	1.764	1646	31500
T-2 Magnolia	1908.0	954.0	37x0.1606	1.4990	1.124 x 2.248	1.840	1790	32700
T-2 Goldenrod	1908.0	954.0	61x0.1251	1.5000	1.126 x 2.252	1.843	1798	33700
T-2 Camellia	2000.0	1000.0	61x0.1280	1.5700	1.152 x 2.304	1.886	1883	35300
T-2 Bluebell	2067.0	1033.5	37x0.1671	1.6230	1.170 x 2.340	1.915	1938	35400
T-2 Larkspur	2067.0	1033.5	61x0.1302	1.6240	1.172 x 2.344	1.918	1948	36500
T-2 Marigold	2226.0	1113.0	61x0.1351	1.7490	1.216 x 2.432	1.990	2097	39300

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

# TransPwr<sup>®</sup> AAC/T-2<sup>®</sup> Bare Overhead Conductor

All-Aluminum 1350 Conductor Concentric-Lay-Stranded Twisted Pair

## AAC/T-2, CONCENTRIC-LAY-STRANDED (ELECTRICAL PROPERTIES)

CODE WORD	SIZE AWG OR kcmil	COMPONENT		OUTER AREA SQ. INCHES	OVERALL DIMENSIONS INCHES	EQUIV. DIA. INCHES	RESISTANCE (1) OHMS/KFT			AMPACITY @75°C (2)		GEOMETRIC MEAN RADIUS FT	INDUCTIVE REACTANCE OHM/KFT (3)	CAPACITIVE REACTANCE MEGAOHM/KFT (3)
		AWG OR kcmil	STRANDING NO. X DIA. INCHES				DC @20°C	AC @25°C	AC @75°C	STD.	E3X <sup>®</sup>			
T-2 Lily	105.2	#3	7x0.0867	0.0826	0.260 x 0.520	0.426	0.163	0.166	0.199	255	280	0.0131	0.0996	0.6545
T-2 Iris	132.7	#2	7x0.0974	0.1043	0.292 x 0.584	0.478	0.129	0.132	0.158	295	325	0.0147	0.0970	0.6362
T-2 Pansy	167.4	#1	7x0.1093	0.1314	0.328 x 0.656	0.537	0.103	0.105	0.125	345	380	0.0165	0.0943	0.6182
T-2 Poppy	211.2	1/0	7x0.1228	0.1658	0.368 x 0.736	0.603	0.0813	0.0830	0.0994	400	440	0.0185	0.0917	0.5999
T-2 Aster	266.2	2/0	7x0.1379	0.2091	0.414 x 0.828	0.677	0.0645	0.0659	0.0789	460	515	0.0208	0.0890	0.5818
T-2 Phlox	335.6	3/0	7x0.1548	0.2635	0.464 x 0.928	0.760	0.0511	0.0523	0.0626	535	600	0.0233	0.0864	0.5637
T-2 Oxlip	423.2	4/0	7x0.1739	0.3325	0.522 x 1.044	0.854	0.0406	0.0415	0.0497	615	695	0.0262	0.0837	0.5454
T-2 Daisy	533.6	266.8	7x0.1952	0.4190	0.586 x 1.172	0.959	0.0322	0.0330	0.0394	715	810	0.0294	0.0810	0.5273
T-2 Laurel	533.6	266.8	19x0.1185	0.4191	0.592 x 1.184	0.970	0.0323	0.0332	0.0397	715	810	0.0304	0.0803	0.5255
T-2 Tulip	672.8	336.4	19x0.1331	0.5287	0.666 x 1.332	1.089	0.0256	0.0264	0.0316	825	945	0.0341	0.0776	0.5073
T-2 Daffodil	700.0	350.0	19x0.1357	0.5496	0.678 x 1.356	1.111	0.0246	0.0254	0.0304	845	970	0.0348	0.0772	0.5043
T-2 Canna	795.0	397.5	19x0.1446	0.6240	0.723 x 1.446	1.184	0.0217	0.0225	0.0268	915	1050	0.0371	0.0757	0.4943
T-2 Cosmos	954.0	477.0	19x0.1584	0.7488	0.792 x 1.584	1.297	0.0181	0.0189	0.0224	1025	1185	0.0406	0.0736	0.4801
T-2 Syringa	954.0	477.0	37x0.1135	0.7487	0.794 x 1.588	1.301	0.0181	0.0190	0.0226	1020	1180	0.0410	0.0734	0.4796
T-2 Zinnia	1000.0	500.0	19x0.1622	0.7852	0.811 x 1.622	1.328	0.0172	0.0180	0.0214	1055	1220	0.0416	0.0731	0.4763
T-2 Hyacinth	1000.0	500.0	37x0.1162	0.7848	0.813 x 1.626	1.332	0.0173	0.0182	0.0216	1050	1220	0.0420	0.0729	0.4759
T-2 Dahlia	1113.0	556.5	19x0.1711	0.8737	0.856 x 1.712	1.400	0.0155	0.0163	0.0194	1125	1305	0.0439	0.0718	0.4680
T-2 Mistletoe	1113.0	556.5	37x0.1226	0.8736	0.858 x 1.716	1.405	0.0155	0.0164	0.0195	1120	1305	0.0443	0.0716	0.4675
T-2 Day Lily	1192.0	596.0	19x0.1771	0.9361	0.886 x 1.772	1.450	0.0145	0.0153	0.0181	1175	1365	0.0454	0.0711	0.4626
T-2 Meadowsweet	1200.0	600.0	37x0.1273	0.9418	0.891 x 1.782	1.459	0.0144	0.0153	0.0181	1175	1370	0.0460	0.0708	0.4616
T-2 Orchid	1272.0	636.0	37x0.1311	0.9989	0.918 x 1.836	1.502	0.0136	0.0145	0.0172	1215	1420	0.0474	0.0701	0.4570
T-2 Violet	1431.0	715.5	37x0.1391	1.1250	0.974 x 1.948	1.594	0.0121	0.0131	0.0154	1305	1530	0.0503	0.0687	0.4477
T-2 Nasturtium	1431.0	715.5	61x0.1083	1.1240	0.975 x 1.950	1.596	0.0121	0.0131	0.0155	1300	1525	0.0505	0.0686	0.4475
T-2 Petunia	1500.0	750.0	37x0.1424	1.1790	0.997 x 1.994	1.632	0.0115	0.0125	0.0147	1340	1575	0.0515	0.0682	0.4440
T-2 Arbutus	1590.0	795.0	37x0.1466	1.2490	1.026 x 2.052	1.680	0.0109	0.0119	0.0140	1390	1635	0.0530	0.0675	0.4395
T-2 Lilac	1590.0	795.0	61x0.1142	1.2500	1.028 x 2.056	1.683	0.0109	0.0120	0.0141	1385	1630	0.0532	0.0674	0.4392
T-2 Fuchsia	1600.0	800.0	37x0.1470	1.2560	1.029 x 2.058	1.684	0.0108	0.0118	0.0139	1395	1640	0.0531	0.0675	0.4390
T-2 Heliotrope	1600.0	800.0	61x0.1145	1.2560	1.031 x 2.062	1.687	0.0109	0.0119	0.0140	1390	1635	0.0534	0.0673	0.4388
T-2 Anemone	1749.0	874.5	37x0.1537	1.3730	1.076 x 2.152	1.761	0.00989	0.0110	0.0128	1470	1730	0.0556	0.0664	0.4321
T-2 Crocus	1749.0	874.5	61x0.1197	1.3730	1.077 x 2.154	1.764	0.00993	0.0110	0.0129	1465	1725	0.0558	0.0663	0.4319
T-2 Magnolia	1908.0	954.0	37x0.1606	1.4990	1.124 x 2.248	1.840	0.00906	0.0102	0.0119	1545	1825	0.0580	0.0654	0.4252
T-2 Goldenrod	1908.0	954.0	61x0.1251	1.5000	1.126 x 2.252	1.843	0.00910	0.0103	0.0120	1540	1820	0.0583	0.0653	0.4249
T-2 Camellia	2000.0	1000.0	61x0.1280	1.5700	1.152 x 2.304	1.886	0.00868	0.00988	0.0115	1580	1870	0.0596	0.0648	0.4214
T-2 Bluebell	2067.0	1033.5	37x0.1671	1.6230	1.170 x 2.340	1.915	0.00837	0.00954	0.0111	1615	1915	0.0604	0.0645	0.4190
T-2 Larkspur	2067.0	1033.5	61x0.1302	1.6240	1.172 x 2.344	1.918	0.00840	0.00963	0.0112	1610	1910	0.0607	0.0644	0.4187
T-2 Marigold	2226.0	1113.0	61x0.1351	1.7490	1.216 x 2.432	1.990	0.00780	0.00908	0.0105	1675	1995	0.0630	0.0635	0.4129

(1) 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 of ohms/km, multiply by 3.281.

(2) 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 for a standard conductor and 0.9 for an E3X coated conductor, 0.5 coefficient of absorptivity for a standard conductor and 0.2 for an E3X coated conductor, 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/R² of solar and radiated heat). Actual ampacity will differ based on local conditions. For specific ampacities, please contact your General Cable sales representative.

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

