

ACSS/TW

Aluminum Conductor, Steel Supported. Trapezoidal Shaped Aluminum Strands. Bare.

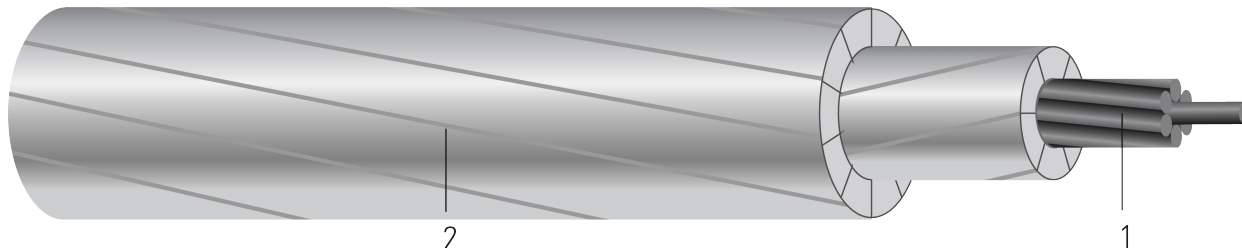


Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Core:** Steel strands form the central core of the conductor with one or more layers of 63% minimum average conductivity aluminum 1350-0 wire stranded around it.
2. **Stranding:** ACSS is a composite concentric-lay-stranded conductor.
 - The steel core carries most or all of the mechanical load of the conductor due to the "0" (fully annealed or soft) temper aluminum.
 - Zinc-5% aluminum-mischmetal alloy coating.
 - High strength steel core, aluminized, and aluminum clad steel core is also available.

APPLICATIONS AND FEATURES:

Southwire's ACSS/TW is designed for overhead distribution and transmission lines. It is designed to operate continuously at elevated temperatures up to 250°C without loss of strength, it sags less under emergency electrical loadings than ACSR/TW, excellent self-damping properties, and its final sags are not affected by long-term creep of aluminum. Southwire's ACSS/TW is available in equal area and equal diameter design. The equal area design allows equal ampacity in a smaller diameter conductor when compared with a standard ACSS conductor. The equal diameter design allows more ampacity in an equal diameter conductor when compared with a standard ACSS conductor. ACSS/TW also provides many design opportunities for new line construction: i.e., reduced tower cost, decreased sag, increased self-damping properties, increased operating temperature and improved corrosion resistance.

SPECIFICATIONS:

- ASTM B500 Metallic Coated Stranded Steel Core for use in overhead Electrical Conductors
- ASTM B609 Standard Specification for Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes
- ASTM B802 Zinc-5% Aluminum-Mischmetal Alloy-Coated Steel Core Wire for Aluminum Conductors, Steel Reinforced (ACSR).
- ASTM B803 High-Strength Zinc-5% Aluminum Mischmetal Alloy-Coated Steel Core Wire for Use in Overhead Electrical Conductors
- ASTM B857 Shaped Wire Compact Concentric-Lay-Stranded Aluminum Conductors, Coated-Steel Supported (ACSS/TW)



Area Equal to Standard ACSR Sizes - Weights and Measurements

Code Word	Size	Type No.	AL Cross Sectional Area	Total Cross Sectional Area	Layers of AL	No. of AL Wires	No. x Dia Individual Steel Wire	Steel Core Dia	Overall OD	AL Weight	Steel Weight	Overall Weight
	(AWG or kcmil)		inch sq.	inch sq.				inch	inch	lbs/ 1,000'	lbs/ 1,000'	lbs/ 1,000'
Partridge/ACSS/TW	266.8	16	0.2094	0.2435	2	14	7 x 0.0788	0.2364	0.595	250.5	115.6	366.1
Linnet/ACSS/TW	336.4	16	0.2641	0.3070	2	16	7 x 0.0885	0.2655	0.667	316.1	145.8	461.9
Oriole/ACSS/TW	336.4	23	0.2642	0.3258	2	16	7 x 0.1059	0.3177	0.692	318.2	209.2	527.4
Flicker/ACSS/TW	477.0	13	0.3747	0.4233	2	18	7 x 0.0940	0.2820	0.776	447.8	164.5	612.3
Hawk/ACSS/TW	477.0	16	0.3746	0.4356	2	18	7 x 0.1054	0.3162	0.790	448.7	206.4	655.1
Hen/ACSS/TW	477.0	23	0.3747	0.4621	2	20	7 x 0.1261	0.3783	0.820	451.1	296.6	747.8
Parakeet/ACSS/TW	556.5	13	0.4371	0.4937	2	18	7 x 0.1015	0.3045	0.835	522.4	191.8	714.2
Dove/ACSS/TW	556.5	16	0.4371	0.5083	2	20	7 x 0.1138	0.3414	0.850	523.4	241.1	764.5
Rook/ACSS/TW	636.0	13	0.4995	0.5643	2	20	7 x 0.1085	0.3255	0.893	597.0	219.2	816.2
Grosbeak/ACSS/TW	636.0	16	0.4995	0.5808	2	20	7 x 0.1216	0.3648	0.909	601.5	275.8	877.3
Scoter/ACSS/TW	636.0	23	0.4995	0.6160	2	22	7 x 0.1456	0.4368	0.942	600.5	394.7	995.2
Tern/ACSS/TW	795.0	7	0.6244	0.6675	2	17	7 x 0.0886	0.2658	0.960	745.2	146.1	891.3
Puffin/ACSS/TW	795.0	11	0.6244	0.6919	2	18	7 x 0.1056	0.3168	0.980	745.9	228.5	974.4
Condor/ACSS/TW	795.0	13	0.6244	0.7053	2	20	7 x 0.1213	0.3639	0.993	746.3	273.9	1020.0
Drake/ACSS/TW	795.0	16	0.6244	0.7261	2	20	7 x 0.1360	0.4080	1.010	747.0	344.3	1091.3
Canary/ACSS/TW	900.0	13	0.7069	0.7983	2	20	7 x 0.1291	0.3873	1.055	844.8	310.9	1155.7
Phoenix/ACSS/TW	954.0	5	0.7493	0.7876	3	30	7 x 0.0837	0.2511	1.044	897.7	130.4	1028.0
Rail/ACSS/TW	954.0	7	0.7493	0.8011	3	32	7 x 0.0971	0.2913	1.061	898.6	175.5	1074.1
Cardinal/ACSS/TW	954.0	13	0.7493	0.8464	2	20	7 x 0.1329	0.3987	1.080	895.5	328.8	1224.3
Snowbird/ACSS/TW	1033.5	5	0.8117	0.8534	3	30	7 x 0.0871	0.2613	1.089	972.5	141.2	1114.0
Ortolan/ACSS/TW	1033.5	7	0.8117	0.8678	3	32	7 x 0.1010	0.3030	1.102	972.5	189.9	1162.0
Curlew/ACSS/TW	1033.5	13	0.8117	0.9169	2	22	7 x 0.1383	0.4149	1.132	970.1	356.1	1326.2
Avocet/ACSS/TW	1113.0	5	0.8742	0.9191	3	30	7 x 0.0904	0.2712	1.129	1047.0	152.1	1199.0
	1113.0	7	0.8742	0.9347	3	33	7 x 0.1049	0.3147	1.143	1048.0	204.8	1253.0



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Code Word	Size	Type No.	AL Cross Sectional Area	Total Cross Sectional Area	Layers of AL	No. of AL Wires	No. x Dia Individual Steel Wire	Steel Core Dia	Overall OD	AL Weight	Steel Weight	Overall Weight
	(AWG or kcmil)		inch sq.	inch sq.				inch	inch	lbs/ 1,000'	lbs/ 1,000'	lbs/ 1,000'
Bluejay/ACSS/TW												
Finch/ACSS/TW	1113.0	13	0.8743	0.9852	3	38	19 x 0.0862	0.4310	1.185	1051.0	376.1	1427.0
Oxbird/ACSS/TW	1192.5	5	0.9366	0.9848	3	30	7 x 0.0936	0.2808	1.170	1122.9	163.1	1286.0
Bunting/ACSS/TW	1192.5	7	0.9366	1.0013	3	34	7 x 0.1085	0.3255	1.181	1123.2	219.6	1342.8
Grackle/ACSS/TW	1192.5	13	0.9366	1.0554	3	38	19 x 0.0892	0.4460	1.225	1127.8	402.9	1530.7
Scissortail/ACSS/TW	1272.0	5	0.9991	1.0505	3	30	7 x 0.0967	0.2901	1.203	1197.0	174.0	1371.0
Bittern/ACSS/TW	1272.0	7	0.9990	1.0681	3	38	7 x 0.1121	0.3363	1.224	1197.6	234.9	1432.5
Pheasant/ACSS/TW	1272.0	13	0.9990	1.1256	3	39	19 x 0.0921	0.4605	1.260	1201.0	429.5	1630.5
Dipper/ACSS/TW	1351.5	7	1.0615	1.1348	3	35	7 x 0.1155	0.3465	1.256	1273.0	248.3	1521.0
Martin/ACSS/TW	1351.5	13	1.0615	1.1959	3	42	19 x 0.0949	0.4745	1.300	1276.1	456.0	1732.1
Bobolink/ACSS/TW	1431.0	7	1.1236	1.2017	3	36	7 x 0.1189	0.3567	1.291	1347.0	263.1	1611.0
Plover/ACSS/TW	1431.0	13	1.1239	1.2664	3	44	19 x 0.0977	0.4885	1.337	1351.0	483.2	1834.0
Lapwing/ACSS/TW	1590.0	7	1.2488	1.3351	3	36	7 x 0.1253	0.3759	1.358	1497.6	292.3	1789.9
Falcon/ACSS/TW	1590.0	13	1.2488	1.4071	3	42	19 x 0.1030	0.5150	1.410	1502.8	537.2	2040.0
Chukar/ACSS/TW	1780.0	8	1.3986	1.5126	3	38	19 x 0.0874	0.4370	1.445	1680.6	386.8	2067.4
Bluebird/ACSS/TW	2156.0	8	1.6933	1.8309	4	64	19 x 0.0961	0.4805	1.608	2045.0	467.5	2512

1) Data based on a nominal cable manufactured in accordance with ASTM B 857.

2) Resistance and ampacity based on an aluminum conductivity of 63% IACS at 20°C and a steel conductivity of 8% IACS at 20°C.

3) Ampacity based on referenced conductor temperature, 25°C ambient temperature, 2 ft/sec wind, in sun, with an emissivity of 0.5 and a coefficient of solar absorption of 0.5, at sea level.

4) Rated breaking strength for standard core based on Class A Galfan coated steel core wire in accordance with ASTM B 802.

5) Rated strength for high strength core based on Class A Galfan coated high strength steel core wire in accordance with ASTM B 803.

6) The final design of a shaped wire compact conductor is contingent upon several factors such as: layer diameter, wire width and wire thickness. The actual configuration of a given size may vary between manufacturers. This may result in a slight variation in the number of wires, number of layers and dimensions of individual wires from that shown in the chart.



Area Equal to Standard ACSR Sizes - Electrical and Engineering Data

Code Word	Size	Rated Strength	High Strength	HS285 Strength	DC Resistance @ 20°C	AC Resistance @ 75°C	Ampacity @ 75°C	Ampacity @ 100°C	Ampacity @ 150°C	Ampacity @ 200°C	Ampacity @ 250°C
	(AWG or kcmil)	lbs	lbs	lbs	Ohms/Mile	Ohms/Mile	Amps	Amps	Amps	Amps	Amps
Partridge/ACSS/TW	266.8	8,880	9,730	11,400	0.3262	0.4009	454	553	692	795	880
Linnet/ACSS/TW	336.4	11,200	12,300	14,400	0.2588	0.3181	523	638	801	921	1021
Oriole/ACSS/TW	336.4	14,800	16,300	19,100	0.2565	0.3151	533	650	816	940	1043
Flicker/ACSS/TW	477.0	13,000	14,200	16,400	0.1831	0.2255	648	793	998	1151	1279
Hawk/ACSS/TW	477.0	15,600	17,100	19,800	0.1825	0.2247	652	799	1005	1159	1289
Hen/ACSS/TW	477.0	21,000	22,700	26,700	0.1809	0.2225	663	813	1024	1181	1315
Parakeet/ACSS/TW	556.5	15,200	16,600	19,100	0.1569	0.1935	713	874	1102	1271	1415
Dove/ACSS/TW	556.5	18,200	19,900	23,100	0.1564	0.1928	719	881	1111	1282	1427
Rook/ACSS/TW	636.0	17,300	19,000	21,900	0.1373	0.1696	775	951	1200	1386	1544
Grosbeak/ACSS/TW	636.0	20,700	22,400	26,000	0.1369	0.1689	781	958	1210	1398	1557
Scoter/ACSS/TW	636.0	27,400	29,700	35,000	0.1356	0.1672	795	976	1234	1427	1591
Tern/ACSS/TW	795.0	14,200	15,200	17,400	0.1105	0.1373	878	1080	1366	1580	1762
Puffin/ACSS/TW	795.0	17,700	19,200	22,000	0.1101	0.1365	886	1090	1378	1595	1778
Condor/ACSS/TW	795.0	21,700	23,300	26,900	0.1098	0.1361	890	1095	1386	1604	1789
Drake/ACSS/TW	795.0	25,900	28,000	32,600	0.1095	0.1355	896	1103	1396	1616	1803
Canary/ACSS/TW	900.0	24,600	26,400	30,500	0.0970	0.1205	962	1185	1501	1739	1942
Phoenix/ACSS/TW	954.0	14,200	15,200	17,100	0.0927	0.1187	967	1189	1503	1740	1940
Rail/ACSS/TW	954.0	16,700	18,000	20,400	0.0926	0.1183	972	1196	1512	1750	1953
Cardinal/ACSS/TW	954.0	26,000	28,000	32,300	0.0915	0.1138	997	1229	1558	1806	2016
Snowbird/ACSS/TW	1033.5	15,400	16,400	18,500	0.0856	0.1098	1016	1251	1584	1834	2048
Ortolan/ACSS/TW	1033.5	18,100	19,500	22,000	0.0854	0.1095	1021	1257	1592	1843	2058
Curlew/ACSS/TW	1033.5	28,200	30,300	35,000	0.0845	0.1053	1048	1293	1641	1903	2126
Avocet/ACSS/TW	1113.0	16,300	17,500	19,500	0.0794	0.1022	1063	1310	1661	1925	2150
	1113.0	19,500	21,000	23,800	0.0793	0.1019	1068	1317	1669	1935	2161



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Code Word	Size	Rated Strength	High Strength	HS285 Strength	DC Resistance @ 20°C	AC Resistance @ 75°C	Ampacity @ 75°C	Ampacity @ 100°C	Ampacity @ 150°C	Ampacity @ 200°C	Ampacity @ 250°C
	(AWG or kcmil)	lbs	lbs	lbs	Ohms/Mile	Ohms/Mile	Amps	Amps	Amps	Amps	Amps
Bluejay/ACSS/TW											
Finch/ACSS/TW	1113.0	30,400	33,200	38,700	0.0789	0.1010	1084	1336	1695	1965	2196
Oxbird/ACSS/TW	1192.5	17,500	18,700	20,900	0.0741	0.0957	1108	1367	1735	2013	2249
Bunting/ACSS/TW	1192.5	20,900	22,500	25,400	0.0740	0.0954	1114	1374	1744	2023	2261
Grackle/ACSS/TW	1192.5	32,600	35,500	41,500	0.0737	0.0944	1130	1395	1771	2055	2298
Scissortail/ACSS/TW	1272.0	18,700	20,000	22,300	0.0695	0.0900	1152	1423	1807	2098	2346
Bittern/ACSS/TW	1272.0	22,300	24,000	27,100	0.0694	0.0897	1159	1431	1817	2110	2360
Pheasant/ACSS/TW	1272.0	34,100	37,300	43,000	0.0691	0.0887	1176	1452	1846	2143	2398
Dipper/ACSS/TW	1351.5	23,700	25,500	28,800	0.0653	0.0847	1202	1485	1888	2194	2455
Martin/ACSS/TW	1351.5	36,200	39,600	45,600	0.0650	0.0837	1220	1508	1918	2228	2494
Bobolink/ACSS/TW	1431.0	25,100	27,000	30,500	0.0617	0.0802	1243	1538	1958	2276	2549
Plover/ACSS/TW	1431.0	38,400	41,900	48,300	0.0614	0.0793	1263	1562	1989	2313	2590
Lapwing/ACSS/TW	1590.0	27,900	29,600	33,500	0.0555	0.0727	1324	1640	2092	2435	2730
Falcon/ACSS/TW	1590.0	42,600	46,600	53,700	0.0553	0.0717	1346	1668	2127	2477	2777
Chukar/ACSS/TW	1780.0	35,300	38,200	43,900	0.0495	0.0652	1421	1764	2255	2630	2952
Bluebird/ACSS/TW	2156.0	42,100	45,500	51,700	0.0412	0.0543	1601	1999	2573	3014	3396

1) Data based on a nominal cable manufactured in accordance with ASTM B 857.

2) Resistance and ampacity based on an aluminum conductivity of 63% IACS at 20°C and a steel conductivity of 8% IACS at 20°C.

3) Ampacity based on referenced conductor temperature, 25°C ambient temperature, 2 ft/sec wind, in sun, with an emissivity of 0.5 and a coefficient of solar absorption of 0.5, at sea level.

4) Rated breaking strength for standard core based on Class A Galfan coated steel core wire in accordance with ASTM B 802.

5) Rated strength for high strength core based on Class A Galfan coated high strength steel core wire in accordance with ASTM B 803.

6) The final design of a shaped wire compact conductor is contingent upon several factors such as: layer diameter, wire width and wire thickness. The actual configuration of a given size may vary between manufacturers. This may result in a slight variation in the number of wires, number of layers and dimensions of individual wires from that shown in the chart.



Diameter Equal to Standard ACSR Sizes - Weights and Measurements

Code Word	Size	Type No.	AL Cross Sectional Area	Total Cross Sectional Area	Layers of AL	No. of AL Wires	No. x Dia Individual Steel Wire	Steel Core Dia	Overall OD	AL Weight	Steel Weight	Overall Weight
	(AWG or kcmil)		inch sq.	inch sq.				inch	inch	lbs/ 1,000'	lbs/ 1,000'	lbs/ 1,000'
Mohawk/ACSS/TW	571.7	13	0.4490	0.5074	2	18	7 x 0.1030	0.3090	0.850	537.0	197.5	734.5
Calumet/ACSS/TW	565.3	16	0.4439	0.5162	2	20	7 x 0.1146	0.3438	0.860	531.2	244.5	775.7
Mystic/ACSS/TW	666.6	13	0.5236	0.5914	2	20	7 x 0.1244	0.3732	0.913	630.4	230.3	860.7
Oswego/ACSS/TW	664.8	16	0.5221	0.6072	2	20	7 x 0.1244	0.3732	0.927	628.7	288.7	917.4
Maumee/ACSS/TW	768.2	13	0.6034	0.6819	2	20	7 x 0.1195	0.3585	0.977	721.1	265.9	987.0
Wabash/ACSS/TW	762.8	16	0.5992	0.6966	2	20	7 x 0.1331	0.3993	0.990	716.7	329.8	1046.5
Kettle/ACSS/TW	957.2	7	0.7518	0.8038	3	32	7 x 0.0973	0.2919	1.060	901.6	176.2	1078.0
Fraser/ACSS/TW	946.7	10	0.7436	0.8168	3	35	7 x 0.1154	0.3462	1.077	892.6	247.9	1141.0
Columbia/ACSS/TW	966.2	13	0.7589	0.8573	2	21	7 x 0.1338	0.4014	1.092	906.9	333.2	1240.0
Suwannee/ACSS/TW	959.6	16	0.7537	0.8762	2	22	7 x 0.1493	0.4479	1.110	901.6	415.0	1316.6
Cheyenne/ACSS/TW	1168.1	5	0.9175	0.9646	3	30	7 x 0.0926	0.2778	1.155	1099.0	159.6	1259.0
Genesee/ACSS/TW	1158.0	7	0.9095	0.9733	3	34	7 x 0.1078	0.3234	1.165	1092.0	216.0	1308.0
Hudson/ACSS/TW	1158.4	13	0.9098	1.0281	2	24	7 x 0.1467	0.4401	1.196	1087.3	400.7	1488.0
Catawba/ACSS/TW	1272.0	5	0.9991	1.0505	3	30	7 x 0.0967	0.2901	1.203	1197.0	174.0	1371.0
Nelson/ACSS/TW	1257.1	7	0.9874	1.0557	3	35	7 x 0.1115	0.3345	1.213	1184.0	231.4	1415.0
Yukon/ACSS/TW	1233.6	13	0.9689	1.0925	3	38	19 x 0.0910	0.4550	1.245	1166.7	419.3	1586.0
Truckee/ACSS/TW	1372.5	5	1.0780	1.1334	3	30	7 x 0.1004	0.3012	1.248	1292.0	187.6	1479.0
Mackenzie/ACSS/TW	1359.7	7	1.0679	1.1418	3	36	7 x 0.1159	0.3477	1.259	1281.0	250.0	1531.0
Thames/ACSS/TW	1334.6	13	1.0480	1.1809	3	38	19 x 0.0944	0.4720	1.290	1260.1	451.2	1711.3
St. Croix/ACSS/TW	1467.8	5	1.1529	1.2124	3	33	7 x 0.1041	0.3123	1.292	1381.0	201.7	1583.0
Miramichi/ACSS/TW	1455.3	7	1.1430	1.2222	3	36	7 x 0.1200	0.3600	1.302	1372.0	268.0	1640.0
Merrimack/ACSS/TW	1433.6	13	1.1250	1.2677	3	39	19 x 0.0978	0.4890	1.340	1355.8	484.3	1840.1
Platte/ACSS/TW	1569.0	5	1.2323	1.2957	3	33	7 x 0.1074	0.3222	1.334	1478	215.0	1693
	1557.4	7	1.2232	1.3079	3	36	7 x 0.1241	0.3723	1.350	1466.9	288.1	1755



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	(AWG or kcmil)		inch sq.	inch sq.				inch	inch	lbs/ 1,000'	lbs/ 1,000'	lbs/ 1,000'
Potomac/ACSS/TW												
Rio Grande/ACSS/TW	1533.3	13	1.2043	1.3571	3	38	19 x 0.1012	0.5060	1.380	1449.0	519.0	1968.0
Schuykill/ACSS/TW	1657.4	7	1.3020	1.3920	3	36	7 x 0.1280	0.3840	1.386	1563	305.0	1868
Pecos/ACSS/TW	1622.0	13	1.2739	1.4429	3	39	19 x 0.1064	0.5320	1.420	1533.7	573.2	2106.9
Pee Dee/ACSS/TW	1758.6	7	1.3810	1.4770	3	38	7 x 0.1319	0.3957	1.427	1656.4	323.9	1980.3
James/ACSS/TW	1730.6	13	1.3590	1.5314	3	34	19 x 0.1075	0.5375	1.470	1636	585.0	2221
Athabaska/ACSS/TW	1949.6	7	1.5312	1.6377	3	44	7 x 0.1392	0.4176	1.504	1836	360.7	2197
Cumberland/ACSS/TW	1926.9	13	1.5134	1.7049	3	42	19 x 0.1133	0.5665	1.550	1821	650.0	2471
Powder/ACSS/TW	2153.8	8	1.6912	1.8290	4	64	19 x 0.0961	0.4805	1.602	2042.5	396.1	2438.6
Santee/ACSS/TW	2627.3	8	2.0630	2.2268	4	64	19 x 0.1062	0.5310	1.761	2491.5	571.1	3062.6

1) Data based on a nominal cable manufactured in accordance with ASTM B 857.

2) Resistance and ampacity based on an aluminum conductivity of 63% IACS at 20°C and a steel conductivity of 8% IACS at 20°C.

3) Ampacity based on referenced conductor temperature, 25°C ambient temperature, 2 ft/sec wind, in sun, with an emissivity of 0.5 and a coefficient of solar absorption of 0.5, at sea level.

4) Rated breaking strength for standard core based on Class A Galfan coated steel core wire in accordance with ASTM B 802.

5) Rated strength for high strength core based on Class A Galfan coated high strength steel core wire in accordance with ASTM B 803.

6) The final design of a shaped wire compact conductor is contingent upon several factors such as: layer diameter, wire width and wire thickness. The actual configuration of a given size may vary between manufacturers. This may result in a slight variation in the number of wires, number of layers and dimensions of individual wires from that shown in the chart.



Diameter Equal to Standard ACSR Sizes - Electrical and Engineering Data

Code Word	Size	Rated Strength	High Strength	HS285 Strength	DC Resistance @ 20°C	AC Resistance @ 75°C	Ampacity @ 75°C	Ampacity @ 100°C	Ampacity @ 150°C	Ampacity @ 200°C	Ampacity @ 250°C
	(AWG or kcmil)	lbs	lbs	lbs	Ohms/Mile	Ohms/Mile	Amps	Amps	Amps	Amps	Amps
Mohawk/ACSS/TW	571.7	15,600	17,100	19,700	0.1527	0.1884	725	889	1121	1294	1441
Calumet/ACSS/TW	565.3	18,400	20,200	23,500	0.1540	0.1898	725	890	1122	1295	1442
Mystic/ACSS/TW	666.6	18,200	19,900	22,900	0.1310	0.1619	798	980	1238	1431	1595
Oswego/ACSS/TW	664.8	21,700	23,400	27,200	0.1309	0.1616	802	985	1244	1439	1604
Maumee/ACSS/TW	768.2	21,000	23,000	26,500	0.1137	0.1407	872	1072	1356	1569	1750
Wabash/ACSS/TW	762.8	24,900	26,800	31,200	0.1141	0.1411	873	1074	1359	1573	1755
Kettle/ACSS/TW	957.2	16,800	18,100	20,400	0.0922	0.1180	973	1197	1514	1753	1955
Fraser/ACSS/TW	946.7	21,100	22,900	26,200	0.0930	0.1187	974	1199	1517	1756	1959
Columbia/ACSS/TW	966.2	26,400	28,300	32,800	0.0904	0.1124	1005	1239	1571	1822	2035
Suwannee/ACSS/TW	959.6	30,700	33,100	38,600	0.0907	0.1127	1008	1243	1576	1828	2042
Cheyenne/ACSS/TW	1168.1	17,200	18,300	20,500	0.0757	0.0979	1095	1350	1712	1986	2219
Genesee/ACSS/TW	1158.0	20,500	22,100	25,000	0.0762	0.0981	1094	1350	1712	1985	2218
Hudson/ACSS/TW	1158.4	31,100	33,500	38,800	0.0754	0.0943	1124	1389	1766	2051	2295
Catawba/ACSS/TW	1272.0	18,700	20,000	22,300	0.0695	0.0900	1152	1423	1807	2098	2346
Nelson/ACSS/TW	1257.1	22,100	23,800	26,900	0.0702	0.0907	1150	1420	1804	2094	2342
Yukon/ACSS/TW	1233.6	33,200	36,300	41,900	0.0712	0.0914	1154	1425	1810	2101	2350
Truckee/ACSS/TW	1372.5	20,200	21,500	24,000	0.0644	0.0838	1206	1491	1896	2203	2466
Mackenzie/ACSS/TW	1359.7	23,900	25,700	29,000	0.0649	0.0842	1206	1490	1895	2202	2465
Thames/ACSS/TW	1334.6	35,800	39,100	45,100	0.0658	0.0847	1210	1495	1902	2209	2472
St. Croix/ACSS/TW	1467.8	21,600	23,100	25,800	0.0602	0.0787	1256	1554	1979	2302	2578
Miramichi/ACSS/TW	1455.3	25,600	27,100	30,700	0.0607	0.0790	1269	1573	2007	2338	2577
Merrimack/ACSS/TW	1433.6	38,400	42,000	48,400	0.0613	0.0791	1277	1584	2021	2354	2595
Platte/ACSS/TW	1569.0	23,100	24,600	27,500	0.0564	0.0740	1319	1637	2092	2439	2692
	1557.4	27,300	29,000	32,800	0.0567	0.0741	1321	1639	2094	2441	2694



Southwire

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Code Word	Size	Rated Strength	High Strength	HS285 Strength	DC Resistance @ 20°C	AC Resistance @ 75°C	Ampacity @ 75°C	Ampacity @ 100°C	Ampacity @ 150°C	Ampacity @ 200°C	Ampacity @ 250°C
	(AWG or kcmil)	lbs	lbs	lbs	Ohms/Mile	Ohms/Mile	Amps	Amps	Amps	Amps	Amps
Potomac/ACSS/TW											
Rio Grande/ACSS/TW	1533.3	41,200	45,000	51,900	0.0573	0.0742	1329	1650	2108	2456	2710
Schuylkill/ACSS/TW	1657.4	29,100	30,900	34,900	0.0533	0.0700	1370	1702	2177	2539	2805
Pecos/ACSS/TW	1622.0	45,000	49,300	56,900	0.0541	0.0703	1377	1710	2187	2551	2816
Pee Dee/ACSS/TW	1758.6	30,900	32,800	37,100	0.0502	0.0663	1418	1763	2259	2637	2916
James/ACSS/TW	1730.6	46,400	50,800	58,500	0.0508	0.0663	1430	1778	2277	2657	2937
Athabaska/ACSS/TW	1949.6	34,300	36,500	41,300	0.0453	0.0595	1505	1873	2403	2808	3157
Cumberland/ACSS/TW	1926.9	51,600	56,400	65,000	0.0456	0.0600	1508	1875	2400	2802	3148
Powder/ACSS/TW	2153.8	42,100	45,500	51,700	0.0412	0.0543	1599	1996	2569	3009	3391
Santee/ACSS/TW	2627.3	51,300	55,600	63,100	0.0338	0.0459	1784	2237	2894	3403	3846

1) Data based on a nominal cable manufactured in accordance with ASTM B 857.

2) Resistance and ampacity based on an aluminum conductivity of 63% IACS at 20°C and a steel conductivity of 8% IACS at 20°C.

3) Ampacity based on referenced conductor temperature, 25°C ambient temperature, 2 ft/sec wind, in sun, with an emissivity of 0.5 and a coefficient of solar absorption of 0.5, at sea level.

4) Rated breaking strength for standard core based on Class A Galvan coated steel core wire in accordance with ASTM B 802.

5) Rated strength for high strength core based on Class A Galvan coated high strength steel core wire in accordance with ASTM B 803.

6) The final design of a shaped wire compact conductor is contingent upon several factors such as: layer diameter, wire width and wire thickness. The actual configuration of a given size may vary between manufacturers. This may result in a slight variation in the number of wires, number of layers and dimensions of individual wires from that shown in the chart.

