



Shaped Wire Concentric-Lay Compact Aluminum Conductors Steel Supported (ACSS/TW)

ACCSS/TW (Diameter Equal to Standard ACSR Sizes)

Code Word	Size (kcmil)	Cross Sectional Area Square Inches		Type No.	Stranding			Diameter		Weight /1000 ft			Rated Breaking strength		Resistance	
		Alum.	Total		No. of Layers of Alum.	No. of Alum. Wires	No. & Dia. Individual Steel Wire	Complete Cable in	Steel core in	Total lb	Alum. lb	steel lb	Standard Strength ib	High Strength ib	DC@ 20°C Ω/1000ft	AC@ 75°C Ω/1000ft
Flicker/ACSS/TW	477.0	0.3747	0.4233	13	2	18	7 x 0.0940	0.776	0.2820	612.8	448.4	164.4	13,000	14,200	0.0348	0.0427
Hawk/ACSS/TW	477.0	0.3746	0.4356	16	2	18	7 x 0.1053	0.789	0.3159	655.0	448.7	206.3	15,600	17,100	0.0346	0.0426
Parakeet/ACSS/TW	556.5	0.4371	0.4937	13	2	18	7 x 0.1015	0.835	0.3045	714.9	523.2	191.7	15,200	16,600	0.0297	0.0366
Dove/ACSS/TW	556.5	0.4371	0.5083	16	2	20	7 x 0.1138	0.852	0.3414	764.5	523.5	241.0	18,200	19,900	0.0296	0.0365
Rook/ACSS/TW	636.0	0.4995	0.5643	13	2	20	7 x 0.1085	0.890	0.3255	816.0	597.9	219.1	17,300	19,000	0.0260	0.0321
Grosbeak/ACSS/TW	636.0	0.4995	0.5808	16	2	20	7 x 0.1216	0.908	0.3648	873.5	598.4	275.1	20,700	22,400	0.0259	0.0320
Tern/ACSS/TW	795.0	0.6244	0.6675	7	2	17	7 x 0.0886	0.960	0.2658	892.0	745.9	146.1	14,200	15,200	0.0209	0.0260
Puffin/ACSS/TW	795.0	0.6244	0.6919	10	2	18	7 x 0.1108	0.980	0.3324	975.3	746.9	228.4	18,900	20,600	0.0209	0.0259
Condor/ACSS/TW	795.0	0.6244	0.7053	13	2	20	7 x 0.1213	0.993	0.3639	1021.0	747.2	273.8	21,700	23,300	0.0208	0.0258
Drake/ACSS/TW	795.0	0.6244	0.7261	16	2	20	7 x 0.1360	1.010	0.4080	1092.0	747.8	344.2	25,900	28,000	0.0207	0.0257
Phoenix/ACSS/TW	954.0	0.7493	0.7876	5	3	30	7 x 0.0837	1.044	0.2511	1032.0	901.6	130.4	14,200	15,200	0.0176	0.0219
Rail/ACSS/TW	954.0	0.7493	0.8011	7	3	32	7 x 0.0971	1.061	0.2913	1075.0	900.0	175.0	16,700	18,000	0.0175	0.0219
Cardinal/ACSS/TW	954.0	0.7493	0.8464	13	2	20	7 x 0.1329	1.084	0.3987	1226.0	897.3	328.7	26,000	28,000	0.0173	0.0216
Snowbird/ACSS/TW	1033.5	0.8117	0.8534	5	3	30	7 x 0.0871	1.089	0.2613	1115.0	973.8	141.2	15,400	16,400	0.0162	0.0203
Ortolan/ACSS/TW	1033.5	0.8117	0.8678	7	3	32	7 x 0.1010	1.102	0.3030	1165.0	975.2	189.8	18,100	19,500	0.0162	0.0202
Curlew/ACSS/TW	1033.5	0.8117	0.9169	13	2	20	7 x 0.1383	1.129	0.4149	1327.0	971.1	355.9	28,200	30,300	0.0160	0.0199
Avocet/ACSS/TW	1113.0	0.8742	0.9191	5	3	30	7 x 0.0904	1.129	0.2712	1201.0	1048.9	152.1	16,300	17,500	0.0150	0.0189
Bluejay/ACSS/TW	1113.0	0.8742	0.9347	7	3	33	7 x 0.1049	1.143	0.3147	1257.0	1052.2	204.8	19,500	21,000	0.0150	0.0189
Finch/ACSS/TW	1113.0	0.8742	0.9851	13	3	38	19 x 0.0862	1.185	0.4310	1429.0	1052.6	376.4	30,400	33,200	0.0149	0.0187
Oxbird/ACSS/TW	1192.5	0.9366	0.9848	5	3	30	7 x 0.0936	1.167	0.2808	1286.0	1123.0	163.0	17,500	18,700	0.0140	0.0177
Bunting/ACSS/TW	1192.5	0.9366	1.0013	7	3	33	7 x 0.1085	1.181	0.3255	1343.0	1124.0	219.0	20,900	22,500	0.0140	0.0177
Grackle/ACSS/TW	1192.5	0.9366	1.0554	13	3	38	19 x 0.0892	1.225	0.4460	1530.0	1127.0	403.0	32,600	35,500	0.0140	0.0175
Scissortail/ACSS/TW	1272.0	0.9991	1.0505	5	3	30	7 x 0.0967	1.203	0.2901	1372.0	1198.0	174.0	18,700	20,000	0.0132	0.0167
Bittern/ACSS/TW	1272.0	0.9990	1.0681	7	3	35	7 x 0.1121	1.220	0.3363	1433.0	1199.0	234.0	22,300	24,000	0.0131	0.0166
Pheasant/ACSS/TW	1272.0	0.9990	1.1256	13	3	39	19 x 0.0921	1.264	0.4605	1632.0	1202.0	430.0	34,100	37,300	0.0131	0.0164
Dipper/ACSS/TW	1351.5	1.0615	1.1348	7	3	35	7 x 0.1155	1.256	0.3465	1522.0	1274.0	248.0	23,700	25,500	0.0124	0.0157
Martin/ACSS/TW	1351.5	1.0615	1.1959	13	3	39	19 x 0.0949	1.300	0.4745	1734.0	1278.0	456.0	36,200	39,600	0.0123	0.0155
Bobolink/ACSS/TW	1431.0	1.1236	1.2017	7	3	36	7 x 0.1189	1.291	0.3567	1613.0	1350.0	263.0	25,100	27,000	0.0117	0.0149
Plover/ACSS/TW	1431.0	1.1239	1.2664	13	3	37	19 x 0.0977	1.337	0.4885	1836.0	1353.0	483.0	38,400	41,900	0.0116	0.0147
Lapwing/ACSS/TW	1590.0	1.2488	1.3351	7	3	36	7 x 0.1253	1.358	0.3759	1791.0	1499.0	292.0	27,900	29,600	0.0105	0.0135
Falcon/ACSS/TW	1590.0	1.2488	1.4071	13	3	42	19 x 0.1030	1.408	0.5150	2040.0	1503.0	537.0	42,600	46,600	0.0105	0.0133
Chukar/ACSS/TW	1780.0	1.3986	1.5120	8	3	37	19 x 0.0874	1.445	0.4370	2063.0	1676.0	387.0	35,300	38,200	0.0094	0.0121
Bluebird/ACSS/TW	2156.0	1.0934	1.8321	8	4	64	19 x 0.0961	1.608	0.4805	2515.0	2047.0	468.0	42,100	45,500	0.0780	0.0103



Shaped Wire Concentric-Lay Compact Aluminum Conductors Steel Supported (ACSS/TW)

ACSS/TW (Area Equal to Standard ACSR Sizes)

Code Word	Size (kcmil)	Cross Sectional Area Square Inches		Type No.	Stranding			Diameter		Weight /1000 ft			Rated Breaking strength		Resistance	
		Alum.	Total		No. of Layers of Alum.	No. of Alum. Wires	No. & Dia. Individual Steel Wire	Complete Cable in	Steel core in	Total lb	Alum. lb	steel lb	Standard Strength ib	High Strength ib	DC@ 20°C Ω/1000ft	AC@ 75°C Ω/1000ft
Mohawk/ACSS/TW	571.7	0.4490	0.5074	13	2	18	7 x 0.1030	0.846	0.3090	734.7	537.3	197.4	15,600	17,100	0.0289	0.0357
Calumet/ACSS/TW	565.3	0.4439	0.5165	16	2	20	7 x 0.1146	0.860	0.3438	775.7	531.2	244.5	18,400	20,200	0.0292	0.0359
Mystic/ACSS/TW	666.6	0.5236	0.5914	13	2	20	7 x 0.1111	0.913	0.3330	856.3	626.6	229.7	18,200	19,900	0.0248	0.0307
Oswego/ACSS/TW	664.8	0.5221	0.6072	16	2	20	7 x 0.1244	0.927	0.3732	913.4	625.4	288.0	21,700	23,400	0.0248	0.0306
Maumee/ACSS/TW	768.2	0.6034	0.6819	13	2	20	7 x 0.1195	0.977	0.3585	987.8	722.1	265.7	21,000	23,000	0.0215	0.0266
Wabash/ACSS/TW	762.8	0.5992	0.6966	16	2	20	7 x 0.1331	0.990	0.3993	1047.0	717.0	330.0	24,900	26,800	0.0216	0.0267
Kettle/ACSS/TW	957.2	0.7518	0.8038	7	3	32	7 x 0.0973	1.060	0.2919	1079.0	902.8	176.2	16,800	18,100	0.0175	0.0218
Fraser/ACSS/TW	946.7	0.7436	0.8168	10	3	35	7 x 0.1150	1.077	0.3462	1142.0	894.0	248.0	21,100	22,900	0.0176	0.0220
Columbia/ACSS/TW	966.2	0.7589	0.8573	13	2	21	7 x 0.1338	1.092	0.4014	1241.0	908.0	333.0	26,400	28,300	0.0178	0.0213
Suwannee/ACSS/TW	959.6	0.7537	0.8762	16	2	22	7 x 0.1493	1.108	0.4479	1318.0	903.0	415.0	30,700	33,100	0.0172	0.0213
Cheyenne/ACSS/TW	1168.1	0.9175	0.9646	5	2	30	7 x 0.0926	1.155	0.2778	1260.0	1100.4	159.6	17,200	18,300	0.0143	0.0181
Genesee/ACSS/TW	1158.0	0.9095	0.9733	7	3	33	7 x 0.1078	1.165	0.3234	1308.0	1092.0	216.0	20,500	22,100	0.0144	0.0182
Hudson/ACSS/TW	1158.4	0.9098	1.0281	13	3	26	7 x 0.1467	1.196	0.4401	1489.0	1089.0	400.0	31,100	33,500	0.0143	0.0179
Catawba/ACSS/TW	1272.0	0.9991	1.0505	5	2	30	7 x 0.0967	1.203	0.2901	1372.0	1198.0	174.0	18,700	20,000	0.0132	0.0167
Nelson/ACSS/TW	1257.1	0.9874	1.0557	7	3	35	7 x 0.1115	1.213	0.3345	1417.0	1185.7	231.3	22,100	23,800	0.0133	0.0168
Yukon/ACSS/TW	1233.6	0.9689	1.0925	13	3	38	19 x 0.9100	1.245	0.4550	1586.0	1166.5	419.5	33,200	36,300	0.0135	0.0169
Truckee/ACSS/TW	1372.5	1.0780	1.1334	5	3	30	7 x 0.1004	1.248	0.3012	1481.0	1293.4	187.6	20,200	21,500	0.0122	0.0155
Mackenzie/ACSS/TW	1359.7	1.0679	1.1418	7	3	36	7 x 0.1159	1.259	0.3477	1530.0	1280.0	250.0	23,900	25,700	0.0123	0.0156
Thames/ACSS/TW	1334.6	1.0480	1.1809	13	3	39	19 x 0.0944	1.290	0.4720	1713.0	1261.6	451.4	35,800	39,100	0.0125	0.0157
St.Croix/ACSS/TW	1467.8	1.1529	1.2124	5	3	33	7 x 0.1041	1.292	0.3123	1585.0	1383.0	202.0	21,600	23,100	0.0114	0.0146
Miramichi/ACSS/TW	1455.3	1.1430	1.2220	7	3	36	7 x 0.1200	1.302	0.3600	1640.0	1372.0	268.0	25,600	27,100	0.0115	0.0146
Merrimack/ACSS/TW	1433.6	1.1250	1.2677	13	3	39	19 x 0.0978	1.340	0.4890	1840.0	1356.0	434.0	38,400	42,000	0.0116	0.0147
Platte/ACSS/TW	1569.0	1.2323	1.2957	5	3	33	7 x 0.1074	1.334	0.3222	1693.0	1478.0	215.0	23,100	24,600	0.0107	0.0137
Potomac/ACSS/TW	1557.4	1.2232	1.3079	7	3	36	7 x 0.1241	1.345	0.3723	1755.0	1468.0	287.0	27,300	29,000	0.0107	0.0138
Rio Grande/ACSS/TW	1533.3	1.2043	1.3571	13	3	39	19 x 0.1012	1.382	0.5060	1968.0	1449.0	519.0	41,200	45,000	0.0109	0.0138
Schuykill/ACSS/TW	1657.4	1.3020	1.3920	7	3	36	7 x 0.1280	1.386	0.3840	1868.0	1563.0	305.0	29,100	30,900	0.0101	0.0130
Pecos/ACSS/TW	1622.0	1.2739	1.4429	13	3	39	19 x 0.1064	1.424	0.5320	2107.0	1533.0	574.0	45,000	49,300	0.0102	0.0130
Pee Dee/ACSS/TW	1758.6	1.3810	1.4770	7	3	37	7 x 0.1319	1.427	0.3957	1982.0	1658.0	324.0	30,900	32,800	0.0095	0.0123
James/ACSS/TW	1730.6	1.3590	1.5314	13	3	34	19 x 0.1075	1.470	0.5375	2221.0	1636.0	585.0	46,400	50,800	0.0096	0.0123
Athabaska/ACSS/TW	1949.6	1.5312	1.6377	7	3	42	7 x 0.1392	1.504	0.4176	2199.0	1838.0	361.0	34,300	36,500	0.0086	0.0112
Cumberland/ACSS/TW	1926.9	1.5134	1.7049	13	3	42	19 x 0.1133	1.545	0.5665	2471.0	1821.0	650.0	51,600	56,400	0.0107	0.0135
Powder/ACSS/TW	2153.8	1.6912	1.8290	8	4	64	19 x 0.0961	1.602	0.4805	2498.0	2030.0	468.0	42,100	45,500	0.0078	0.0103
Santee/ACSS/TW	2627.3	2.0630	2.2268	8	4	64	19 x 0.1062	1.762	0.5310	3048.0	2477.0	571.0	51,300	55,600	0.0064	0.0087