

Aluminium Conductor Steel Supported (ACSS/RW - GA(X) or MA(X))

ACSS/RW (GA(X) or MA(X) (ASTM B856))

Code Name	Strands No.		Diameter (mm)			Area (mm ²)			Weight of Conductor (kg/km)			Rated Strength (by type and coating of steel wires) (kN)					Resistance (Ω/km)			Coefficient of Linear Expansion *10 ⁻⁶ (1/°C)	Modulus of Elasticity (final) (kg/mm ²)	Creep Temp. EST. (°C)
	Al.	St.	Al.	St.	Total	Al.	St.	Total	Al.	St.	Total	GA2 or MA2	GA3 or MA3	GA4 or MA4	GA5 or MA5	DC at 20 °C	AC at 25 °C	AC at 75 °C				
Petrel	12	7	2.34	2.34	11.70	51.58	30.09	81.66	143.00	235.00	378.00	45.37	50.71	56.93	60.05	0.5102	0.5206	0.6229	15.41	11430.53	17.97	
Minorca	12	7	2.44	2.44	12.20	56.15	32.76	88.91	155.69	255.86	411.55	49.37	55.16	61.83	65.39	0.4686	0.4782	0.5721	15.41	11430.53	17.97	
Leghorn	12	7	2.69	2.69	13.45	68.19	39.78	107.97	189.06	310.70	499.77	60.05	66.72	75.17	79.17	0.3859	0.3939	0.4713	15.41	11430.53	17.97	
Guinea	12	7	2.92	2.92	14.62	80.55	46.99	127.54	223.34	367.03	590.37	70.72	79.17	88.96	93.41	0.3267	0.3336	0.3992	15.41	11430.53	17.97	
Dotterel	12	7	3.08	3.08	15.42	89.61	52.27	141.88	248.46	408.31	656.77	78.73	86.29	96.97	102.30	0.2936	0.2999	0.3588	15.41	11430.53	17.97	
Dorking	12	7	3.20	3.20	16.01	96.68	56.40	153.08	268.07	440.54	708.61	84.96	92.96	104.53	110.31	0.2722	0.2780	0.3326	15.41	11430.53	17.97	
Brahma	16	19	2.86	2.48	18.13	102.97	91.89	194.86	285.50	719.23	1004.72	135.66	151.68	170.36	180.14	0.2452	0.2506	0.2995	14.40	13009.88	18.17	
Cochin	12	7	3.37	3.37	16.85	107.07	62.46	169.53	296.86	487.86	784.73	94.30	102.75	115.65	122.32	0.2458	0.2512	0.3006	15.41	11430.53	17.97	
Junco	30	7	2.40	2.40	16.77	135.17	31.54	166.71	375.70	246.37	622.06	52.04	57.82	64.05	67.61	0.2049	0.2095	0.2511	17.97	8686.49	18.93	
Partridge	26	7	2.57	2.00	16.30	135.19	22.02	157.21	374.82	172.03	546.86	39.50	43.28	48.04	50.71	0.2065	0.2112	0.2532	18.96	7934.80	19.31	
Ostrich	26	7	2.73	2.12	17.27	151.96	24.73	176.69	421.33	193.17	614.49	44.48	48.48	53.82	56.93	0.1837	0.1881	0.2255	18.96	7932.80	19.31	
Linnet	26	7	2.89	2.25	18.30	170.31	27.78	198.09	472.20	216.99	689.20	49.82	54.71	60.49	64.05	0.1639	0.1681	0.2016	18.95	7937.06	19.31	
Oriole	30	7	2.69	2.69	18.83	170.47	39.78	210.25	473.81	310.70	784.52	65.83	72.50	80.95	84.96	0.1625	0.1667	0.1997	17.97	8686.49	18.93	
Lbis	26	7	3.14	2.44	19.89	201.26	32.82	234.08	558.02	256.39	814.41	57.82	63.16	70.28	73.39	0.1387	0.1423	0.1706	18.95	7936.83	19.31	
Lark	30	7	2.92	2.92	20.46	201.38	46.99	248.37	559.71	367.03	926.75	77.84	85.85	95.63	100.52	0.1376	0.1411	0.1691	17.97	8686.49	18.93	
Brant	24	7	3.27	2.18	19.61	201.42	26.11	227.54	558.48	203.95	762.43	48.93	53.82	59.16	62.72	0.1393	0.1429	0.1713	19.53	7546.89	19.50	
Hawk	26	7	3.44	2.67	21.78	241.52	39.33	280.85	669.65	307.19	976.84	69.39	76.06	84.07	88.07	0.1156	0.1188	0.1425	18.96	7933.89	19.31	
Hen	30	7	3.20	3.20	22.42	241.71	56.40	298.11	671.81	440.54	1112.35	93.41	100.97	112.53	118.76	0.1146	0.1182	0.1416	17.97	8686.49	18.93	
Flicker	24	7	3.58	2.39	21.49	241.77	31.34	273.11	670.32	244.80	915.12	57.82	63.16	69.83	72.95	0.1160	0.1193	0.1431	19.53	7546.89	19.50	
Dove	26	7	3.72	2.89	23.54	281.97	45.93	327.91	781.80	358.79	1140.59	80.95	88.52	98.30	102.75	0.0990	0.1021	0.1224	18.96	7934.64	19.31	
Eagle	30	7	3.46	3.46	24.22	281.98	65.80	347.78	783.73	513.94	1297.67	108.98	117.87	131.66	138.33	0.0982	0.1013	0.1214	17.97	8686.49	18.93	
Parakeet	24	7	3.87	2.58	23.21	282.07	36.54	318.61	782.07	285.42	1067.49	67.61	73.84	81.40	84.96	0.0995	0.1026	0.1230	19.53	7545.86	19.50	
Squabe	26	7	3.87	3.01	24.53	306.38	49.89	356.27	849.47	389.70	1239.17	87.63	96.52	106.75	111.64	0.0911	0.0943	0.1131	18.96	7933.93	19.31	
Wood Duck	30	7	3.61	3.61	25.25	306.51	71.52	378.03	851.91	558.64	1410.55	115.65	125.88	140.56	148.12	0.0904	0.0936	0.1121	17.97	8686.49	18.93	
Teal	30	19	3.61	2.16	25.25	306.51	69.88	376.39	851.91	546.96	1398.86	118.32	130.33	130.33	154.35	0.0905	0.0936	0.1122	18.04	8632.57	18.96	
Peacock	24	7	4.03	2.68	24.17	306.66	39.40	346.06	850.25	307.78	1158.03	73.39	80.06	80.06	92.52	0.0915	0.0947	0.1136	19.55	7533.19	19.50	
Scoter	30	7	3.70	3.70	25.89	322.25	75.19	397.44	895.65	587.33	1482.97	121.88	132.11	147.67	155.68	0.0860	0.0890	0.1067	17.97	8686.49	18.93	
Egret	30	19	3.70	2.22	25.89	322.25	73.54	395.79	895.65	575.57	1471.22	124.54	137.44	152.57	162.80	0.0860	0.0891	0.1067	18.03	8634.69	18.96	
Grosbeak	26	7	3.97	3.09	25.16	322.25	52.45	374.69	893.48	409.66	1303.13	92.07	99.64	110.31	115.65	0.0866	0.0897	0.1075	18.96	7932.93	19.31	
Rook	24	7	4.14	2.76	24.81	322.30	41.75	364.06	893.63	326.15	1219.77	76.95	84.51	84.51	97.41	0.0870	0.0901	0.1081	19.53	7545.93	19.50	
Gannet	26	7	4.07	3.16	25.75	337.68	54.98	392.65	936.25	429.43	1365.68	96.52	104.08	115.65	121.43	0.0827	0.0860	0.1031	18.96	7933.62	19.31	
Flamingo	24	7	4.23	2.82	25.40	337.93	43.78	381.71	936.95	341.97	1278.92	80.95	88.52	97.41	101.86	0.0830	0.0864	0.1036	19.53	7545.95	19.50	
Redwing	30	19	3.92	2.35	27.46	362.38	82.73	445.11	1007.19	647.49	1654.68	137.44	151.68	168.58	177.03	0.0765	0.0796	0.0954	18.03	8635.57	18.96	
Starling	26	7	4.21	3.28	26.69	362.59	59.02	421.61	1005.31	461.04	1466.35	103.64	112.09	124.10	130.33	0.0770	0.0801	0.0960	18.96	7933.32	19.31	
Stilt	24	7	4.39	2.92	26.32	362.69	46.99	409.68	1005.61	367.03	1372.65	86.74	94.74	104.53	109.42	0.0774	0.0805	0.0965	19.53	7545.98	19.50	
Condor	54	7	3.08	3.08	27.73	402.59	52.19	454.77	1116.22	407.64	1523.86	96.52	103.64	114.31	119.65	0.0697	0.0729	0.0875	19.53	7546.89	19.50	
Tern	45	7	3.38	2.25	27.01	402.72	27.84	430.57	1116.60	217.48	1334.08	63.16	67.61	73.39	77.40	0.0703	0.0736	0.0882	20.85	6780.02	19.81	

Aluminium Conductor Steel Supported (ACSS/RW - GA(X) or MA(X))

ACSS/RW (GA(X) or MA(X) (ASTM B856))																						
Code Name	Strands No.		Diameter (mm)			Area (mm ²)			Weight of Conductor (kg/km)			Rated Strength (by type and coating of steel wires) (kN)					Resistance (Ω/km)			Coefficient of Linear Expansion *10 ⁻⁶ (1/°C)	Modulus of Elasticity (final) (kg/mm ²)	Creep Temp. EST. (°C)
	Al.	St.	Al.	St.	Total	Al.	St.	Total	Al.	St.	Total	GA2 or MA2	GA3 or MA3	GA4 or MA4	GA5 or MA5	DC at 20 °C	AC at 25 °C	AC at 75 °C				
Cuckoo	24	7	4.62	3.08	27.73	402.81	52.19	455.00	1116.84	407.64	1524.48	96.52	103.64	114.31	119.65	0.0697	0.0729	0.0874	19.53	7546.03	19.50	
Mallard	30	19	4.14	2.48	28.95	402.88	91.89	494.77	1119.76	719.23	1838.98	152.57	168.58	187.26	197.05	0.0688	0.0720	0.0863	18.04	8633.52	18.96	
Macaw	42	7	3.50	1.94	26.79	402.93	20.70	423.63	1117.18	161.71	1278.89	52.49	56.04	60.49	63.16	0.0704	0.0737	0.0884	21.32	6538.19	19.89	
Drake	26	7	4.44	3.45	28.13	402.99	65.60	468.60	1117.35	512.43	1629.78	115.20	124.54	137.89	145.00	0.0693	0.0725	0.0869	18.96	7933.37	19.31	
Ruddy	45	7	3.59	2.40	28.74	455.89	31.54	487.43	1264.00	246.37	1510.36	70.28	75.62	82.29	85.40	0.0621	0.0655	0.0785	20.85	6780.68	19.81	
Canary	54	7	3.28	3.28	29.51	456.03	59.11	515.14	1264.39	461.75	1726.14	109.42	117.43	129.44	135.66	0.0615	0.0649	0.0778	19.53	7546.89	19.50	
Canvasback	30	19	4.53	2.72	31.70	483.25	110.22	593.47	1343.13	862.67	2205.80	182.81	201.94	224.62	236.19	0.0574	0.0605	0.0725	18.04	8633.44	18.96	
Cardinal	54	7	3.38	3.38	30.38	483.27	62.65	545.91	1339.92	489.33	1829.26	115.65	124.54	137.44	143.67	0.0581	0.0612	0.0734	19.53	7546.89	19.50	
Rail	45	7	3.70	2.47	29.59	483.37	33.44	516.81	1340.20	261.21	1601.42	74.28	80.06	87.18	90.74	0.0586	0.0617	0.0741	20.85	6780.66	19.81	
Redbird	24	7	5.06	3.38	30.39	483.51	62.65	546.16	1340.59	489.33	1829.93	115.65	124.54	137.44	143.67	0.0580	0.0612	0.0734	19.53	7546.11	19.50	
Towhee	48	7	3.58	2.79	29.85	483.53	42.68	526.21	1340.65	333.40	1674.05	87.63	94.74	103.64	108.09	0.0584	0.0615	0.0738	20.39	7031.85	19.72	
Ortolan	45	7	3.85	2.57	30.78	523.34	36.18	559.52	1451.02	282.62	1733.64	80.51	86.74	94.30	97.86	0.0541	0.0575	0.0690	20.85	6780.02	19.81	
Curlew	54	7	3.51	3.51	31.62	523.34	67.84	591.18	1451.02	529.91	1980.93	125.43	134.77	148.56	155.68	0.0536	0.0570	0.0683	19.53	7546.89	19.50	
Snowbird	42	7	3.99	2.21	30.55	523.89	26.91	550.80	1452.55	210.18	1662.73	68.50	72.95	78.73	82.29	0.0542	0.0576	0.0691	21.32	6537.93	19.89	
Bluejay	45	7	4.00	2.66	26.63	564.18	38.96	603.13	1564.25	304.28	1868.53	86.74	93.41	101.41	105.86	0.0502	0.0539	0.0646	20.85	6778.85	19.81	
Finch	54	19	3.65	2.19	32.82	564.22	71.37	635.59	1572.00	558.58	2130.57	135.22	147.67	162.35	172.14	0.0500	0.0537	0.0644	19.59	7509.12	19.51	
Grackle	54	19	3.77	2.27	33.98	604.19	76.60	680.79	1683.37	599.52	2282.90	145.00	157.90	173.92	184.59	0.0467	0.0501	0.0601	19.59	7512.61	19.51	
Bunting	45	7	4.14	2.76	33.08	604.32	41.75	646.07	1675.55	326.15	2001.70	92.96	100.08	108.98	112.98	0.0468	0.0503	0.0603	20.85	6779.45	19.81	
Bittern	45	7	4.27	2.85	34.16	644.31	44.57	688.88	1786.42	348.15	2134.57	99.19	106.75	116.09	120.54	0.0439	0.0477	0.0572	20.85	6780.57	19.81	
Pheasant	54	19	3.90	2.34	35.09	644.70	81.66	726.36	1796.22	639.14	2435.36	151.68	165.91	182.81	191.26	0.0437	0.0475	0.0570	19.59	7511.24	19.51	
Martin	54	19	4.02	2.41	36.16	684.78	86.70	771.48	1907.90	678.59	2586.49	161.02	176.14	193.93	202.83	0.0412	0.0453	0.0543	19.59	7510.60	19.51	
Dipper	45	7	4.40	2.93	35.21	684.78	47.32	732.10	1898.65	369.59	2268.24	151.68	165.91	182.81	191.26	0.0413	0.0449	0.0538	20.85	6779.49	19.81	
Bobolink	45	7	4.53	3.02	36.23	724.87	50.14	775.01	2009.79	391.67	2401.46	111.64	120.10	130.77	135.66	0.0390	0.0430	0.0515	20.85	6780.54	19.81	
Plover	54	19	4.14	2.48	37.22	725.18	91.89	817.08	2020.47	719.23	2739.69	170.80	186.37	205.50	214.84	0.0389	0.0428	0.0513	19.59	7511.87	19.51	
Parrot	54	19	4.25	2.55	38.22	764.91	96.85	861.76	2131.16	758.01	2889.17	179.70	196.60	216.62	226.85	0.0369	0.0411	0.0493	19.59	7510.63	19.51	
Nuthatch	45	7	4.65	3.10	37.22	765.26	52.88	818.14	2121.77	413.04	2534.81	117.87	124.99	136.11	141.45	0.0370	0.0413	0.0495	20.85	6779.52	19.81	
Falcon	54	19	4.36	2.62	39.23	805.70	102.13	907.83	2244.80	799.37	3044.17	189.48	207.28	228.63	238.86	0.0350	0.0391	0.0468	19.59	7512.43	19.51	
Lapwing	45	7	4.78	3.18	38.20	805.88	55.69	861.57	2234.42	434.97	2669.38	124.10	131.66	143.23	149.01	0.0351	0.0392	0.0470	20.85	6779.53	19.81	
Ratite	42	7	4.94	2.75	37.89	805.90	41.45	847.34	2234.45	323.75	2558.20	104.08	111.20	119.65	124.10	0.0352	0.0393	0.0471	21.32	6538.88	19.89	
Chukar	84	19	3.70	2.22	33.28	902.29	73.37	975.66	2513.92	574.25	3088.17	157.01	169.91	185.04	195.27	0.0315	0.0357	0.0428	20.55	6941.34	19.75	
Mockingbird	72	7	4.27	2.85	34.16	1030.89	44.57	1075.46	2872.21	348.15	3220.37	120.99	128.55	137.89	142.34	0.0277	0.0326	0.0391	21.55	6424.50	19.92	
Roadrunner	76	19	4.18	1.95	34.82	1042.05	56.78	1098.84	2903.32	444.42	3347.74	141.00	150.79	162.35	170.36	0.0274	0.0322	0.0386	21.23	6581.16	19.87	
Bluebird	84	19	4.07	2.44	36.62	1092.32	88.91	1181.23	3043.36	695.86	3739.22	187.26	202.38	220.62	229.96	0.0260	0.0312	0.0374	20.55	6942.36	19.75	
Kiwi	72	7	4.41	2.94	35.26	1098.19	47.48	1145.67	3059.71	370.87	3430.58	128.99	137.00	146.78	151.68	0.0260	0.0312	0.0374	21.55	6424.49	19.92	
Thrasher	76	19	4.43	2.07	36.92	1171.25	63.79	1235.04	3263.29	499.26	3762.55	158.35	169.47	182.37	191.26	0.0243	0.0298	0.0358	21.23	6580.75	19.87	
Joree	76	19	4.62	2.16	38.50	1274.16	69.39	1343.55	3550.00	543.11	4093.11	172.14	184.15	198.38	208.17	0.0224	0.0280	0.0336	21.23	6580.74	19.87	