

SECTION 3
NOMINAL AREAS AND DIMENSIONS OF ROUND
BARE CONDUCTORS. HALF AWG SIZES. VALUES
AT 20°C.

AWG SIZE	BARE WIRE DIAMETER		CROSS SECTIONAL AREA			AWG SIZE
	(inches)	mm	(A) CIRC. MILS	(B) SQ. mm	(B) SQ. MILS	
1-1/2	0.2730	6.934	74529	37.76	58535	1-1/2
2-1/2	0.2431	6.175	59098	29.95	46568	2-1/2
3-1/2	0.2165	5.499	46872	23.74	36950	3-1/2
4-1/2	0.1931	4.905	37288	18.9	29286	4-1/2
5-1/2	0.1720	4.369	29584	14.99	23235	5-1/2
6-1/2	0.1532	3.891	23470	11.89	18430	6-1/2
7-1/2	0.1364	3.464	18605	9.429	14610	7-1/2
8-1/2	0.1215	3.086	14762	7.48	11590	8-1/2
9-1/2	0.1082	2.748	11707	5.931	9190	9-1/2
10-1/2	0.0962	2.443	9254	4.689	7268	10-1/2
11-1/2	0.0856	2.174	7327	3.713	5755	11-1/2
12-1/2	0.0763	1.938	5822	2.95	4572	12-1/2
13-1/2	0.0679	1.725	4610	2.336	3621	13-1/2
14-1/2	0.0605	1.537	3660	1.855	2875	14-1/2
15-1/2	0.0539	1.369	2905	1.472	2282	15-1/2
16-1/2	0.0480	1.219	2304	1.167	1810	16-1/2
17-1/2	0.0427	1.085	1823	0.9239	1432	17-1/2
18-1/2	0.0380	0.965	1444	0.7317	1134	18-1/2
19-1/2	0.0339	0.861	1149	0.5823	902.6	19-1/2
20-1/2	0.0302	0.767	912	0.4621	716.3	20-1/2
21-1/2	0.0269	0.683	723.60	0.366700	568.3	21-1/2
22-1/2	0.0239	0.607	571.20	0.289400	448.6	22-1/2
23-1/2	0.0213	0.541	453.70	0.229900	356.3	23-1/2
24-1/2	0.0190	0.483	361.00	0.182900	283.5	24-1/2
25-1/2	0.0169	0.429	285.60	0.144700	224.3	25-1/2
26-1/2	0.0150	0.381	225.00	0.114000	176.7	26-1/2
27-1/2	0.0134	0.34	179.60	0.090980	141	27-1/2
28-1/2	0.0119	0.302	141.60	0.071630	111.2	28-1/2
29-1/2	0.0106	0.269	112.40	0.056930	88.25	29-1/2
30-1/2	0.0095	0.241	90.25	0.045730	70.88	30-1/2

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AWG SIZE	BARE WIRE DIAMETER		CROSS SECTIONAL AREA			AWG SIZE
	(inches)	mm	(A) CIRC. MILS	(B) SQ. mm	(B) SQ. MILS	
31-1/2	0.0084	0.213	70.56	0.035750	55.42	31-1/2
32-1/2	0.0075	0.19	56.25	0.028500	44.18	32-1/2
33-1/2	0.0067	0.17	44.89	0.022750	35.26	33-1/2
34-1/2	0.0059	0.15	34.81	0.017640	27.34	34-1/2
35-1/2	0.0053	0.135	28.09	0.014230	22.06	35-1/2
36-1/2	0.0047	0.119	22.09	0.011190	17.35	36-1/2
37-1/2	0.0042	0.107	17.64	0.008938	13.85	37-1/2
38-1/2	0.0037	0.094	13.69	0.006937	10.75	38-1/2
39-1/2	0.0033	0.084	10.89	0.005518	8.553	39-1/2
40-1/2	0.0030	0.076	9.00	0.00456	7.069	40-1/2

FOOTNOTES:

(A) Circular Mil Area = D^2

(B) Square Mil Area = $\frac{\pi}{4} D^2 = 0.7854D^2$

Where D = Diameter of the bare conductor in mils.
To convert to square inches, multiply by 10^{-6} .