

# Solid Bare & Tinned Copper

## APPLICATION:

Solid Bare & Tinned copper conductors are used in overhead electrical transmission and distribution for grounding electrical systems where high conductivity and flexibility is required. Suitable for numerous other applications.

## CONDUCTORS:

- Solid bare copper conductors available in soft, medium-hard, or hard temper. Solid tin coated copper conductors available in soft temper only.

## TIN COATING:

- Where applicable, a soft drawn conductor is either hot dipped or electroplated with tin. This process significantly improves corrosion resistance.



## STANDARDS:

- ASTM B-1 Hard-drawn copper wire
- ASTM B-2 Medium-hard-drawn copper wire
- ASTM B-3 Soft or annealed copper wire
- ASTM B-8 Concentric-lay stranded copper conductors: hard, medium-hard, or soft
- ASTM B-33 Tinned soft or annealed copper wire
- ASTM B-258
- Federal Sepc QQ-W-343

Size	Hard-Drawn		Medium-Hard Drawn		Soft-Drawn		Overall Diameter	Net Weight	Allowable Ampacity*
	Rated Strength	DC Resistance @ 20°C	Rated Strength	DC Resistance @ 20°C	Rated Strength	DC Resistance @ 20°C			
AWG/kcmil	lbs.	Ohms/1000'	lbs.	Ohms/1000'	lbs.	Ohms/1000'	inches	lbs/1000'	
20	53.35	10.5600	42.62	10.4400	31.0	10.0700	0.032	3.1	11
18	85.46	6.6600	67.6	6.6100	49.1	6.3900	0.040	4.9	16
16	135	4.1800	106	4.1600	62.1	5.0500	0.051	7.81	22
14	213.5	2.6260	166.6	2.6130	124.2	2.5250	0.064	12.43	32
12	336.9	1.6520	261.2	1.6430	197.5	1.5880	0.081	19.77	41
10	529.2	1.0390	410.4	1.0330	314	0.9990	0.102	31.43	68
8	826	0.6530	643.9	0.6500	479.8	0.6280	0.129	49.98	95
6	1,280	0.4110	1,010	0.4090	762.9	0.3950	0.162	79.46	125
4	1,970	0.2580	1,584	0.2570	1,213	0.2490	0.204	126.4	170
3	2,439	0.2050	1,984	0.2040	1,530	0.1970	0.229	159.3	195
2	3,003	0.1630	2,450	0.1620	1,929	0.1560	0.258	200.9	225
1	3,688	0.1290	3,024	0.1280	2,432	0.1240	0.289	253.3	260
1/0	4,518	0.1022	3,731	0.1016	2,985	0.0983	0.325	319.4	300
2/0	5,519	0.08021	4,599	0.07980	3,763	0.07793	0.365	402.8	350
3/0	6,720	0.06362	5,666	0.06330	4,744	0.06182	0.410	507.8	405
4/0	8,143	0.05045	6,980	0.05019	5,983	0.04901	0.460	640.5	470

All values are nominal and subject to correction.

\*Ampacity based on 75°C conductor temperature; 25°C ambient temperature; 2ft./sec. wind in sun.