


## ROME UNCOATED SOLID COPPER WIRE

STANDARDS:										
1. Conforms to ASTM B-1 for Hard Drawn, ASTM B-2 for Medium Hard Drawn, and ASTM B-3 for Soft or Annealed Copper Wire. 2. Conforms to Federal Standard QQ-W-343. 3. Conforms to National Bureau of Standards Handbook 100. 4. Breaking strength and resistance are calculated in accordance with ASTM B-258.										
Size AWG	Nominal Diameter Inches	Cross Section Area Circular Mills	Approx. Net Wt. Lb./1000 Ft.	Hard Drawn		Medium Hard Drawn			Annealed (Soft Drawn)	
				Minimum Breaking Strength Lb.	Max. d-c Resistance @20 C (Ohms/1000 Ft.)	Minimum Breaking Strength Lb.	Maximum Breaking Strength Lb.	Max. d-c Resistance @20 C (Ohms/1000 Ft.)	Maximum Breaking Strength Lb.	Max. d-c Resistance @20 C (Ohms/1000 Ft.)
34	0.0063	39.7	0.120	-	272	-	-	270	-	261
33	0.0071	50.4	0.153	-	214	-	-	213	-	206
32	0.0080	64.0	0.194	-	168	-	-	168	-	162
31	0.0089	79.2	0.240	-	136	-	-	135	-	131
30	0.0100	100	0.303	-	108	-	-	107	-	104
29	0.0113	128	0.387	-	8405	-	-	84.0	-	81.2
28	0.0126	159	0.481	-	67.9	-	-	67.6	-	65.3
27	0.0142	202	0.610	-	53.5	-	-	53.2	-	51.4
26	0.0159	253	0.765	-	42.7	-	-	42.4	-	41.0
25	0.0179	320	0.970	-	33.7	-	-	33.5	-	32.4
24	0.0201	404	1.22	-	26.7	-	-	26.6	-	25.7
23	0.0226	511	1.55	-	21.1	-	-	21.0	15	20.3
22	0.0253	640	1.94	-	16.9	-	-	16.8	19	16.2
21	0.0285	812	2.46	-	13.3	-	-	13.2	24	12.8
20	0.0320	1,020	3.10	-	10.5	-	-	10.5	31	10.1
19	0.0359	1,290	3.90	-	8.37	-	-	8.32	39	8.05
18	0.0403	1,620	4.92	85	6.64	67	76	6.61	49	6.39
17	0.0453	2,050	6.21	108	5.26	84	96	5.23	62	5.05
16	0.0508	2,580	7.81	135	4.18	106	120	4.16	73	4.02
15	0.0571	3,260	9.87	170	3.31	133	151	3.29	98	3.18
14	0.0641	4,110	12.4	214	2.63	167	189	2.61	124	2.5
13	0.0720	5,180	15.7	268	2.09	209	237	2.07	157	2.00
12	0.0808	6,530	19.8	337	1.65	262	297	1.64	197	1.59
11	0.0907	8,230	24.9	423	1.31	327	372	1.30	249	1.26
10	0.1019	10,380	31.43	529	1.039	410	467	1.033	314	.9988
9	0.1144	13,090	39.62	660	.8241	513	585	.8199	380	.7925
8	0.1285	16,510	49.98	826	.6532	644	734	.6498	479	.6281
7	0.1443	20,820	63.03	1030	.5180	806	921	.5153	605	.4981
6	0.1620	26,240	79.44	1280	.4110	1010	1154	.4088	762	.3952
5	0.1819	33,090	100.2	1590	.3260	1265	1446	.3243	961	.3134
4	0.2043	41,740	126.3	1970	.2584	1584	1814	.2571	1213	.2485
3	0.2294	52,620	159.3	-	-	1984	1173	.2039	1529	.1971
2	0.2576	66,360	200.9	-	-	2450	2814	.1617	1928	.1563

Tinned copper wire is available through and including size 2 AWG.

Information on this sheet subject to change without notice.

## Specification

### ROME UNCOATED SOLID COPPER WIRE

#### 1. SCOPE

- 1.1 This specification describes solid uncoated copper wire in hard, medium hard or soft annealed tempers for all applicable uses.

#### 2. STANDARDS

- 2.1 American Society for Testing Materials. ASTM Specifications B-1 for hard temper, B-2 for medium hard temper, and B-3 for soft or annealed temper copper wire.
- 2.2 Federal Specification QQ-W-343E or latest issue, Wire, Electrical, Uninsulated.
- 2.3 United States Department of Commerce Handbook 100, Copper Wire Tables.

#### 3. CONDUCTOR

- 3.1 Conductors shall meet all the requirements of the ASTM standards for physical and electrical properties.

#### 4. TESTS

- 4.1 Conductors shall be tested to insure conformance to the ASTM or federal standards. Certified test reports may be furnished if requested prior to manufacture.

#### 5. PACKAGING

- 5.1 Conductors shall be packaged in accordance with standard commercial practice.