



## ENGINEERING SPECIFICATIONS:

### Standards:

ASTM-B3 for soft-drawn solid copper wire  
 ASTM-B8 for soft-drawn concentric lay stranded copper wire  
 ASTM-B787 for 19-wire combination unilay stranded wire  
 ARRA 2009; Section 1605 "Buy American" Compliant



## CONSTRUCTION:

Soft-Drawn Solid or Stranded, Annealed Bare Copper

### Applications:

Copper conductors are used in overhead electrical transmission and distribution systems for grounding electrical systems, and where high-conductivity and flexibility are required for equipment and circuit grounding.

### Features:

Highest conductivity per unit area of all common commercial metals. Excellent corrosion resistance. Flexible; easily worked and formed into place. Packaged on non-returnable spools for easy transportation to job sites and to provide adequate footage for mass installations. Good fatigue-resistance; not subject to breaks due to nicks or cuts when terminating. Totally recyclable with high scrap value. Contact your local representative for information on the Encore Wire Scrap Purchase Program.

Soft-Drawn Bare Conductors

| Size<br>(AWG or<br>KCMIL) | Number of<br>Strands | Outside Diameter |        | Area<br>(cmils) | Soft-Drawn (Annealed)   |  | Approximate<br>Net Weight<br>(lbs/1000 ft) | Standard Packaging<br>(ft)        |
|---------------------------|----------------------|------------------|--------|-----------------|-------------------------|--|--|-----------------------------------|
|                           |                      | (mm)             | (in)   |                 | Rated<br>Strength (lbs) | DC Resistance<br>(Ohms/1000 ft @ 20°C) |  |                                   |
| 14                        | Solid                | 1.63             | 0.0641 | 4,110           | 124                     | 2.5700                                 | 12.4                                       | 2000' reels                       |
| 12                        | Solid                | 2.05             | 0.0808 | 6,530           | 197                     | 1.6200                                 | 19.8                                       | 1250' reels                       |
| 10                        | Solid                | 2.59             | 0.1019 | 10,380          | 314                     | 1.0190                                 | 31.4                                       | 800' reels                        |
| 8                         | Solid                | 3.26             | 0.1285 | 16,510          | 479                     | 0.6407                                 | 50.0                                       | 500' 1000' 2500' 5000' reels      |
| 6                         | Solid                | 4.12             | 0.1620 | 26,240          | 762                     | 0.4031                                 | 79.5                                       | 315' 500' 1000' 2500' 5000' reels |
| 4                         | Solid                | 5.19             | 0.2043 | 41,740          | 1,214                   | 0.2535                                 | 126.4                                      | 200' 500' 1000' 2500' 5000' reels |
| 2                         | Solid                | 6.54             | 0.2576 | 66,360          | 1,930                   | 0.1594                                 | 212.8                                      | 125' 500' 1000' 5000' reels       |
| 8                         | 7                    | 3.71             | 0.1460 | 16,510          | 498                     | 0.6408                                 | 51   | 500' 1000' 2500' 5000' reels      |
| 6                         | 7                    | 4.67             | 0.1840 | 26,240          | 795                     | 0.4030                                 | 81   | 315' 500' 1000' 2500' 5000' reels |
| 4                         | 7                    | 5.89             | 0.2320 | 41,740          | 1,320                   | 0.2530                                 | 129  | 200' 500' 1000' 2500' 5000' reels |
| 3                         | 7                    | 6.60             | 0.2600 | 52,620          | 1,670                   | 0.2010                                 | 162  | 500' 1000' 5000' reels            |
| 2                         | 7                    | 7.42             | 0.2920 | 66,360          | 2,110                   | 0.1590                                 | 205  | 125' 500' 1000' 2500' 5000' reels |
| 1                         | 19                   | 8.33             | 0.3280 | 83,690          | 2,552                   | 0.1270                                 | 258  | 500' 1000' 5000' reels            |
| 1/0*                      | 19                   | 9.14             | 0.3600 | 105,600         | 3,221                   | 0.1022                                 | 326  | 500' 1000' 2500' 5000' reels      |
| 2/0*                      | 19                   | 10.26            | 0.4040 | 133,100         | 4,060                   | 0.08108                                | 411  | 500' 1000' 2500' 5000' reels      |
| 3/0*                      | 19                   | 11.53            | 0.4540 | 167,800         | 5,118                   | 0.06431                                | 518  | 500' 1000' 2500' 5000' reels      |
| 4/0*                      | 19                   | 12.95            | 0.5100 | 211,600         | 6,459                   | 0.05099                                | 653  | 500' 1000' 2500' 5000' reels      |
| 250                       | 37                   | 13.77            | 0.5420 | 250,000         | 7,942                   | 0.0423                                 | 772  | 500' 1000' 2500' 4000' reels      |
| 300                       | 37                   | 15.09            | 0.5940 | 300,000         | 9,164                   | 0.0353                                 | 926  | 500' 1000' 3500' reels            |
| 350                       | 37                   | 16.28            | 0.6410 | 350,000         | 10,685                  | 0.0302                                 | 1081                                       | 500' 1000' 3000' reels            |
| 400                       | 37                   | 17.40            | 0.6850 | 400,000         | 13,435                  | 0.0264                                 | 1235                                       | 500' 1000' 3000' reels            |
| 500                       | 37                   | 19.46            | 0.7660 | 500,000         | 15,242                  | 0.0212                                 | 1544                                       | 500' 1000' 2500' reels            |
| 600                       | 61                   | 22.68            | 0.8930 | 600,000         | 18,300                  | 0.01798                                | 1883                                       | 500' 1000' 2000' reels            |
| 750                       | 61                   | 25.35            | 0.9980 | 750,000         | 22,894                  | 0.01438                                | 2316                                       | 500' 1000' 1500' reels            |
| 1000                      | 61                   | 29.26            | 1.1520 | 1,000,000       | 30,500                  | 0.01079                                | 3088                                       | 500' reels                        |

The above data is approximate and subject to normal manufacturing tolerances.  
 \*Note: 1/0 - 4/0 Bare Copper available in 7/w construction.