

# SOFT-DRAWN BARE - COPPER CONDUCTOR

## 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; RoHS Compliant; MasterSpec Division 26 Sections 260519, 26052



## CONSTRUCTION

### Conductors

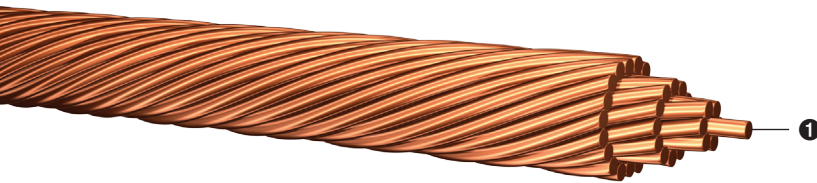
Soft-Drawn Solid or Stranded, Annealed Bare Copper

## APPLICATIONS

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

## 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.



1 Stranded or Solid Copper Conductor  
(Copper purity of 99.95% or higher)

| Size (AWG)       | No. of Strands | Outside Diameter |        | Area (cmils) | Soft-Drawn (Annealed) |                                     | Approximate Net Weight (lbs/1000 ft) | Standard Packaging (ft)           |
|------------------|----------------|------------------|--------|--------------|-----------------------|-------------------------------------|--------------------------------------|-----------------------------------|
|                  |                | (mm)             | (in)   |              | Rated Strength (lbs)  | DC Resistance (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 <sup>1</sup> | 19             | 9.14             | 0.3600 | 105,600      | 3,221                 | 0.1022                              | 326                                  | 500' 1000' 2500' 5000' Reels      |
| 2/0 <sup>1</sup> | 19             | 10.26            | 0.4040 | 133,100      | 4,060                 | 0.07910                             | 411                                  | 500' 1000' 2500' 5000' Reels      |
| 3/0 <sup>1</sup> | 19             | 11.53            | 0.4540 | 167,800      | 5,118                 | 0.06274                             | 518                                  | 500' 1000' 2500' 5000' Reels      |
| 4/0*             | 19             | 12.95            | 0.5100 | 211,600      | 6,459                 | 0.0497                              | 653                                  | 500' 1000' 2500' 5000' Reels      |
| 250              | 37             | 13.77            | 0.5420 | 250,000      | 7,942                 | 0.0421                              | 772                                  | 500' 1000' 2500' 4000' Reels      |
| 300              | 37             | 15.09            | 0.5940 | 300,000      | 9,164                 | 0.0351                              | 926                                  | 500' 1000' 3500' Reels            |
| 350              | 37             | 16.28            | 0.6410 | 350,000      | 10,685                | 0.0300                              | 1081                                 | 500' 1000' 3000' Reels            |
| 400              | 37             | 17.40            | 0.6850 | 400,000      | 13,435                | 0.0263                              | 1235                                 | 500' 1000' 3000' Reels            |
| 500              | 37             | 19.46            | 0.7660 | 500,000      | 15,242                | 0.0210                              | 1544                                 | 500' 1000' 2500' Reels            |
| 600              | 61             | 22.68            | 0.8930 | 600,000      | 18,300                | 0.01754                             | 1883                                 | 500' 1000' 2000' Reels            |
| 750              | 61             | 25.35            | 0.9980 | 750,000      | 22,894                | 0.01436                             | 2316                                 | 500' 1000' 1500' Reels            |
| 1000             | 61             | 29.26            | 1.1520 | 1,000,000    | 30,500                | 0.01059                             | 3088                                 | 500' Reels                        |

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

**PACKAGING:** Available in Encore's Cyclone Barrel Packs, Reel Payoff and Reel Deal.