



## TELCOFLEX® L3 Telecom Power Wire and Cable

Limited smoke, Non-halogenated Insulation, 105°C Dry, 60°C Wet



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Class B stranded, tin-coated copper conforming to ASTM B-33
2. **Separator Tape:** Opaque Mylar tape
3. **Insulation:** Limited smoke, non-halogenated, 105°C Dry, 60°C Wet TelcoHyde® 5221. Conforms to UL 44, UL 758, CSA C22.2 No. 210-11, and Telcordia Specification GR-347- CORE. Insulation has a Limiting Oxygen Index of 35%
4. **Separator Tape:** 1 mil Clear Mylar tape on 6 AWG and larger
5. **Cotton Braid:** Overall natural cotton braid conforming to UL 44
6. **Saturant and Colored Finisher:** Moisture resistant, fire retardant saturant and a colored finisher

### APPLICATIONS AND FEATURES:

This specification covers the construction requirements for a limited smoke, non-halogenated power cable insulated with TelcoHyde® 5221 with an overall flame retardant saturated braid. UL listed Type RHH, FT4-ST1 in accordance with the National Electrical Code. Product is for use in Central Office, CATV Head End, Data Center and Cell Tower applications. Cable is suitable for UL "CT USE" (Cable Tray rated) in sizes 1/0 AWG and larger.

### SPECIFICATIONS:

- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- UL 44 Type RHH, FT4-ST1, VW-1, 600 Volts DC or AC
- UL 2731 Telecommunications Central Office Power Cable
- CSA AWM IB 105°C 600V. FT4-ST1
- IEC including 60674 and 60332
- RoHS Compliant Lead-Free, Silicone-Free
- ATIS 0600017.2020 List 3
- Telcordia GR-347-CORE





**SAMPLE PRINT LEGEND:**

SIZES 14 AWG THROUGH 10 AWG:

{SQFTG} SOUTHWIRE AIW{TM} CORD BRAND TELCOFLEX® III ATIS 0600017.2020 L3 NON-HAL (UL) E30117 XX AWG 600 VOLTS RHH VW-1 ST1 FT4 OR AWM 3578 60°C WET --- LL90458 (CSA) AWM I B 105°C 600 VOLTS FT4 {YYYY} {HH:MM} {JULIAN} --- MEETS IEC INCLUDING 60674 & 60332

SIZES 8 AWG THROUGH 2 AWG:

{SQFTG} SOUTHWIRE AIW{TM} CORD BRAND TELCOFLEX® III ATIS 0600017.2020 L3 NON-HAL (UL) E30117 XXX AWG 600 VOLTS RHH VW-1 ST1 FT4 OR AWM 3578 60°C WET --- LL90458 (CSA) AWM I B 105°C 600 VOLTS FT4 {YYYY} {HH:MM} {JULIAN} --- MEETS IEC INCLUDING 60674 & 60332

SIZES 1/0 AWG THROUGH 750 KCMIL:

{SQFTG} SOUTHWIRE AIW{TM} CORD BRAND TELCOFLEX® III ATIS 0600017.2020 L3 NON-HAL {UL} E30117 XXX AWG 600 VOLTS RHH VW-1 ST1 FT4 SR FOR CT USE OR AWM 3578 60°C WET --- LL90458 {CSA} AWM I B 105°C 600 VOLTS FT4 {YYYY} {HH:MM} {JULIAN} --- MEETS IEC INCLUDING 60674 & 60332

NOTE: CABLE SHALL BE PRINTED ON BOTH SIDES USING INK OF CONTRASTING COLOR; SEQUENTIAL FOOTAGE MARKS SHALL BE APPLIED 2 FOOT INTERNALS ON ONE SIDE OF THE CABLE.

**PACKAGING:**

All put-ups one length only unless agreed to otherwise. Maximum lengths per size will be advised. The ends of the cable shall be capped or taped to prevent the entrance of moisture during shipment or storage.

**Table 1 – Physical and Electrical Data**

| Cond. Size | Cond. Strands | Diameter Over Cond. | Insul. Thickness | Approx. OD | Approx. Weight | DC Resistance @ 25°C | Min Bending Radius | Allowable Ampacity 75°C | Allowable Ampacity 90°C |
|------------|---------------|---------------------|------------------|------------|----------------|----------------------|--------------------|-------------------------|-------------------------|
| AWG/ Kcmil | strands       | inch                | mil              | inch       | lb/1000ft      | Ω/1000ft             | inch               | Amp                     | Amp                     |
| 14         | 7             | 0.070               | 45               | 0.214      | 36             | 2.631                | 1.7                | 20                      | 25                      |
| 12         | 7             | 0.088               | 45               | 0.219      | 44             | 1.662                | 1.8                | 25                      | 30                      |
| 10         | 7             | 0.113               | 45               | 0.258      | 61             | 1.040                | 2.1                | 35                      | 40                      |
| 8          | 7             | 0.141               | 60               | 0.328      | 95             | 0.653                | 2.6                | 50                      | 55                      |
| 6          | 7             | 0.177               | 60               | 0.362      | 132            | 0.411                | 2.9                | 65                      | 75                      |
| 4          | 7             | 0.225               | 60               | 0.402      | 184            | 0.258                | 3.2                | 85                      | 95                      |
| 2          | 7             | 0.282               | 60               | 0.475      | 279            | 0.162                | 3.8                | 115                     | 130                     |
| 1          | 19            | 0.322               | 80               | 0.576      | 363            | 0.128                | 4.6                | 130                     | 145                     |
| 1/0        | 19            | 0.361               | 80               | 0.576      | 441            | 0.102                | 4.6                | 150                     | 170                     |
| 2/0        | 19            | 0.405               | 80               | 0.625      | 529            | 0.081                | 5.0                | 175                     | 195                     |
| 4/0        | 19            | 0.512               | 80               | 0.730      | 795            | 0.051                | 5.8                | 230                     | 260                     |
| 350        | 37            | 0.661               | 95               | 0.909      | 1288           | 0.031                | 7.3                | 310                     | 350                     |
| 500        | 37            | 0.789               | 95               | 1.037      | 1783           | 0.022                | 8.3                | 380                     | 430                     |
| 750        | 61            | 0.968               | 110              | 1.246      | 2638           | 0.014                | 10.0               | 475                     | 535                     |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

\* Allowable Ampacity In Raceway per NEC Table 310.15(B)(16)





**TESTING:**

Physical and electrical tests in accordance with the requirements of UL Standard 44, Standard 758, and CSA Standard C22.2 No. 210-11 as AWM.

**LABELS**

UL and CSA tags and labels shall be applied to all packages.

**Stock Numbers and Colors**

| Size (All Items are Braided) | Gray     | Green    | Blue     | Red      |
|------------------------------|----------|----------|----------|----------|
|                              |          |          |          |          |
| 14                           | 57133601 | 57145701 | 57155601 | 57133701 |
| 12                           | 56969501 | 56969601 | 56969401 | 56969701 |
| 10                           | 57051101 | 56968201 | 56968001 | 56968302 |
| 8                            | 57126701 | 56988001 | 57149001 | 56988101 |
| 6                            |          | 56986501 | 56986201 |          |
| 4                            | 56982601 | 56982801 | 56982401 | 56982901 |
| 2                            | 56975701 | 56976001 | 56976101 | 56975801 |
| 1                            | 67957501 |          |          |          |
| 1/0                          | 56966701 | 56966901 | 56966401 | 56967001 |
| 2/0                          | 56977701 | 56977901 | 56977501 | 56978101 |
| 4/0                          | 56984501 | 56984701 | 56984301 | 56984901 |
| 350                          | 56980801 | 57156901 | 57149201 | 56981001 |
| 500                          | 56963301 | 56963501 | 56963001 | 57155501 |
| 750                          | 56961301 | 56961501 | 56961101 | 56961701 |

| Size (All Items are Braided) | Black    | Red - Black Tracer | Blue - Black Tracer | Gray - Black Tracer |
|------------------------------|----------|--------------------|---------------------|---------------------|
|                              |          |                    |                     |                     |
| 14                           | 57133501 |                    |                     |                     |
| 12                           | 56969301 |                    |                     |                     |
| 10                           | 56967901 |                    |                     |                     |
| 8                            | 56987901 |                    |                     |                     |
| 6                            |          |                    |                     | 57141001            |
| 4                            | 57128701 | 56983101           | 56982501            |                     |
| 2                            | 56975901 | 56976201           | 56976301            |                     |
| 1/0                          | 57138401 |                    |                     |                     |
| 2/0                          | 57138301 |                    |                     |                     |
| 4/0                          | 56984201 |                    |                     |                     |
| 350                          | 57138201 |                    |                     |                     |
| 500                          |          |                    |                     |                     |
| 750                          | 58203701 | 57126201           | 56961201            |                     |

