

# Armorlite®

## Type AC



14 AWG through 2 AWG THHN/THWN Insulated Singles Wrapped in Moisture-Resistant, Flame-Retardant Paper. 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VW-1. Lightweight Aluminum Interlocked Armor.

### APPLICATIONS

Southwire Armorlite® Type AC Cable is suitable for use as follows:

- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- Dry locations only.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Environmental air-handling spaces per NEC 300.22(C).
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC 645.5(D) & 645.5(D)(2).

### STANDARDS & REFERENCES

Southwire Armorlite® Type AC Cable meets or exceeds the following requirements:

- UL 4
- UL 83
- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) ( [www.ul.com](http://www.ul.com) )
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 320
- Listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems
- REACH/RoHS-2 (Chemical Limit) Compliant

### CONSTRUCTION

Southwire Armorlite® Type AC Cable is constructed with soft-drawn copper, Type THHN insulated conductors which are individually wrapped with a moisture-resistant, flame-retardant paper covering. Aluminum interlocking armor is applied over the assembly. A 16 AWG aluminum bond wire is placed inside the armor, runs longitudinally and is in intimate contact with the armor for its entire length.



The Power of Connections.™



Southwire®

| CONDUCTOR SIZE AND COLORS                      | GROUNDING/BONDING CONDUCTOR SIZE | STOCK NUMBER       |                     | WEIGHT (LBS/1000') | OVERALL DIAMETER (INCHES) |
|------------------------------------------------|----------------------------------|--------------------|---------------------|--------------------|---------------------------|
|                                                |                                  | COIL               | REEL                |                    |                           |
| <b>SOLID CONDUCTOR COLORS 120/208V</b>         |                                  |                    |                     |                    |                           |
| 14-2 SOLID (BLACK/WHITE)                       | 16 SOLID ALUMINUM                | 61-02-93-01 (250') | 61-02-93-02 (1000') | 86                 | .464                      |
| 14-3 SOLID (BLACK/WHITE/RED)                   | 16 SOLID ALUMINUM                | 61-02-94-01 (250') | 61-02-94-02 (1000') | 105                | .484                      |
| 14-4 SOLID (BLACK/WHITE/RED/BLUE)              | 16 SOLID ALUMINUM                | 61-02-96-01 (250') | 61-02-96-02 (1000') | 124                | .517                      |
| 12-2 SOLID (BLACK/WHITE)                       | 16 SOLID ALUMINUM                | 61-02-31-01 (250') | 61-02-31-02 (1000') | 106                | .498                      |
| 12-3 SOLID (BLACK/WHITE/RED)                   | 16 SOLID ALUMINUM                | 61-02-32-01 (250') | 61-02-32-02 (1000') | 132                | .521                      |
| 12-4 SOLID (BLACK/WHITE/RED/BLUE)              | 16 SOLID ALUMINUM                | 61-02-97-01 (250') | 61-02-97-02 (1000') | 161                | .557                      |
| 10-2 SOLID (BLACK/WHITE)                       | 16 SOLID ALUMINUM                | 61-02-98-01 (250') | 61-02-98-01 (1000') | 141                | .56                       |
| 10-3 SOLID (BLACK/WHITE/RED)                   | 16 SOLID ALUMINUM                | 61-02-99-01 (250') | 61-02-99-02 (1000') | 182                | .588                      |
| 10-4 SOLID (BLACK/WHITE/RED/BLUE)              | 16 SOLID ALUMINUM                | 61-03-00-01 (250') | 61-03-00-02 (1000') | 225                | .632                      |
| <b>STRANDED CONDUCTOR COLORS 120/208V</b>      |                                  |                    |                     |                    |                           |
| 8-2 STRANDED (BLACK/WHITE)                     | 16 SOLID ALUMINUM                | 89-06-07-01 (200') | 89-06-07-02 (500')  | 211                | .686                      |
| 8-3 STRANDED (BLACK/WHITE/RED)                 | 16 SOLID ALUMINUM                | 89-06-08-01 (200') | 89-06-08-02 (500')  | 319                | .834                      |
| 8-4 STRANDED (BLACK/WHITE/RED/BLUE)            | 16 SOLID ALUMINUM                | 89-06-90-03 (200') | 89-06-90-02 (500')  | 395                | .895                      |
| 6-2 STRANDED (BLACK/WHITE)                     | 16 SOLID ALUMINUM                | 89-06-91-01 (125') | 89-06-91-02 (500')  | 326                | .868                      |
| 6-3 STRANDED (BLACK/WHITE/RED)                 | 16 SOLID ALUMINUM                | 89-06-92-04 (100') | 89-06-92-02 (500')  | 432                | .912                      |
| 6-4 STRANDED (BLACK/WHITE/RED/BLUE)            | 16 SOLID ALUMINUM                | 89-06-93-01 (100") | 89-06-93-02 (500')  | 543                | .981                      |
| 4-3 STRANDED (BLACK/WHITE/RED)                 | 16 SOLID ALUMINUM                | 89-06-95-02 (100') | 89-06-95-01 (500')  | 633                | 1.061                     |
| 4-4 STRANDED (BLACK/WHITE/RED/BLUE)            | 16 SOLID ALUMINUM                |                    | 89-06-96-01 (500')  | 806                | 1.15                      |
| 3-3 STRANDED (BLACK/WHITE/RED)                 | 16 SOLID ALUMINUM                | 55-32-75-01 (100') | 55-32-75-02 (500')  | 754                | 1.121                     |
| 3-4 STRANDED (BLACK/WHITE/RED/BLUE)            | 16 SOLID ALUMINUM                | 55-32-78-01 (100') | 55-32-78-02 (500')  | 965                | 1.216                     |
| 2-3 STRANDED (BLACK/WHITE/RED)                 | 16 SOLID ALUMINUM                | 89-06-98-02 (100') | 89-06-98-01 (500')  | 906                | 1.190                     |
| 2-4 STRANDED (BLACK/WHITE/RED/BLUE)            | 16 SOLID ALUMINUM                | 89-06-99-01 (100') | 89-06-99-03 (500')  | 1164               | 1.293                     |
| For allowable ampacities, refer to NEC 310.15. |                                  |                    |                     |                    |                           |



## FEATURES

- An armor assembly (combination of the interlocked armor & bonding strip) that is recognized as an equipment grounding conductor per NEC 250.118(8).
- Reduces installation costs up to 50% over pipe and wire.
- Lightweight aluminum armor--as much as 45% lighter than steel AC Cable.
- UL Classified 1, 2, and 3 hour Through Penetration Firestop Systems: W-J-3037, W-L-3110, W-L-3113, W-L-3117, W-L-3120, W-L-3121, W-L-3160, C-AJ-3115, C-AJ-3140, C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038.
- Anti-short/insulating bushings supplied with every reel or coil.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.

NEC TABLE 310.15(B)(16)- ALLOWABLE AMPACITY FOR 600V CONDUCTORS

| SIZE<br>AWG OR<br>KCMIL                                                                                                                            | TEMPERATURE RATING OF CONDUCTOR |                                                     |                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|                                                                                                                                                    | 60°C<br>(140°F)                 | 75°C (167°F)                                        | 90°C (194°F)                                                                                            |
|                                                                                                                                                    | Types:<br>TW, UF                | Types: RHW,<br>THHW, THW,<br>THWN, XHHW,<br>USE, ZW | Types: TBS, SA, SIS,<br>RHH, RHW-2, THHN,<br>THHW, THW-2, THWN-<br>2, USE-2, XHH, XHHW,<br>XHHW-2, ZW-2 |
| <b>COPPER</b>                                                                                                                                      |                                 |                                                     |                                                                                                         |
| 18                                                                                                                                                 | -                               | -                                                   | 14                                                                                                      |
| 16                                                                                                                                                 | -                               | -                                                   | 18                                                                                                      |
| 14                                                                                                                                                 | 15                              | 20                                                  | 25                                                                                                      |
| 12                                                                                                                                                 | 20                              | 25                                                  | 30                                                                                                      |
| 10                                                                                                                                                 | 30                              | 35                                                  | 40                                                                                                      |
| 8                                                                                                                                                  | 40                              | 50                                                  | 55                                                                                                      |
| 6                                                                                                                                                  | 55                              | 65                                                  | 75                                                                                                      |
| 4                                                                                                                                                  | 70                              | 85                                                  | 95                                                                                                      |
| 3                                                                                                                                                  | 85                              | 100                                                 | 115                                                                                                     |
| 2                                                                                                                                                  | 95                              | 115                                                 | 130                                                                                                     |
| 1                                                                                                                                                  | 110                             | 130                                                 | 145                                                                                                     |
| 1/0                                                                                                                                                | 125                             | 150                                                 | 170                                                                                                     |
| 2/0                                                                                                                                                | 145                             | 175                                                 | 195                                                                                                     |
| 3/0                                                                                                                                                | 165                             | 200                                                 | 225                                                                                                     |
| 4/0                                                                                                                                                | 195                             | 230                                                 | 260                                                                                                     |
| 250                                                                                                                                                | 215                             | 255                                                 | 290                                                                                                     |
| 300                                                                                                                                                | 240                             | 285                                                 | 320                                                                                                     |
| 350                                                                                                                                                | 260                             | 310                                                 | 350                                                                                                     |
| 400                                                                                                                                                | 280                             | 335                                                 | 380                                                                                                     |
| 500                                                                                                                                                | 320                             | 380                                                 | 430                                                                                                     |
| 600                                                                                                                                                | 350                             | 420                                                 | 475                                                                                                     |
| 700                                                                                                                                                | 385                             | 460                                                 | 520                                                                                                     |
| 750                                                                                                                                                | 400                             | 475                                                 | 535                                                                                                     |
| 800                                                                                                                                                | 410                             | 490                                                 | 555                                                                                                     |
| 900                                                                                                                                                | 435                             | 520                                                 | 585                                                                                                     |
| 1000                                                                                                                                               | 455                             | 545                                                 | 615                                                                                                     |
| 1250                                                                                                                                               | 495                             | 590                                                 | 665                                                                                                     |
| 1500                                                                                                                                               | 525                             | 625                                                 | 705                                                                                                     |
| 1750                                                                                                                                               | 545                             | 650                                                 | 735                                                                                                     |
| 2000                                                                                                                                               | 555                             | 665                                                 | 750                                                                                                     |
| Per NEC 310.15(B)(5), the ampacity of 4/C cables shall be reduced by a factor of 0.80 when the neutral is considered a current-carrying conductor. |                                 |                                                     |                                                                                                         |

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| For allowable ampacities, refer to NEC 310.15. |                                  |                    |                     |                    |                           |



## FEATURES

- An armor assembly (combination of the interlocked armor & bonding strip) that is recognized as an equipment grounding conductor per NEC 250.118(8).
- Reduces installation costs up to 50% over pipe and wire.
- Lightweight aluminum armor--as much as 45% lighter than steel AC Cable.
- UL Classified 1, 2, and 3 hour Through Penetration Firestop Systems: W-J-3037, W-L-3110, W-L-3113, W-L-3117, W-L-3120, W-L-3121, W-L-3160, C-AJ-3115, C-AJ-3140, C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038.
- Anti-short/insulating bushings supplied with every reel or coil.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.

NEC TABLE 310.15(B)(16)- ALLOWABLE AMPACITY FOR 600V CONDUCTORS

| SIZE<br>AWG OR<br>KCMIL                                                                                                                            | TEMPERATURE RATING OF CONDUCTOR |                                                     |                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------|
|                                                                                                                                                    | 60°C<br>(140°F)                 | 75°C (167°F)                                        | 90°C (194°F)                                                                                            |
|                                                                                                                                                    | Types:<br>TW, UF                | Types: RHW,<br>THHW, THW,<br>THWN, XHHW,<br>USE, ZW | Types: TBS, SA, SIS,<br>RHH, RHW-2, THHN,<br>THHW, THW-2, THWN-<br>2, USE-2, XHH, XHHW,<br>XHHW-2, ZW-2 |
| <b>COPPER</b>                                                                                                                                      |                                 |                                                     |                                                                                                         |
| 18                                                                                                                                                 | -                               | -                                                   | 14                                                                                                      |
| 16                                                                                                                                                 | -                               | -                                                   | 18                                                                                                      |
| 14                                                                                                                                                 | 15                              | 20                                                  | 25                                                                                                      |
| 12                                                                                                                                                 | 20                              | 25                                                  | 30                                                                                                      |
| 10                                                                                                                                                 | 30                              | 35                                                  | 40                                                                                                      |
| 8                                                                                                                                                  | 40                              | 50                                                  | 55                                                                                                      |
| 6                                                                                                                                                  | 55                              | 65                                                  | 75                                                                                                      |
| 4                                                                                                                                                  | 70                              | 85                                                  | 95                                                                                                      |
| 3                                                                                                                                                  | 85                              | 100                                                 | 115                                                                                                     |
| 2                                                                                                                                                  | 95                              | 115                                                 | 130                                                                                                     |
| 1                                                                                                                                                  | 110                             | 130                                                 | 145                                                                                                     |
| 1/0                                                                                                                                                | 125                             | 150                                                 | 170                                                                                                     |
| 2/0                                                                                                                                                | 145                             | 175                                                 | 195                                                                                                     |
| 3/0                                                                                                                                                | 165                             | 200                                                 | 225                                                                                                     |
| 4/0                                                                                                                                                | 195                             | 230                                                 | 260                                                                                                     |
| 250                                                                                                                                                | 215                             | 255                                                 | 290                                                                                                     |
| 300                                                                                                                                                | 240                             | 285                                                 | 320                                                                                                     |
| 350                                                                                                                                                | 260                             | 310                                                 | 350                                                                                                     |
| 400                                                                                                                                                | 280                             | 335                                                 | 380                                                                                                     |
| 500                                                                                                                                                | 320                             | 380                                                 | 430                                                                                                     |
| 600                                                                                                                                                | 350                             | 420                                                 | 475                                                                                                     |
| 700                                                                                                                                                | 385                             | 460                                                 | 520                                                                                                     |
| 750                                                                                                                                                | 400                             | 475                                                 | 535                                                                                                     |
| 800                                                                                                                                                | 410                             | 490                                                 | 555                                                                                                     |
| 900                                                                                                                                                | 435                             | 520                                                 | 585                                                                                                     |
| 1000                                                                                                                                               | 455                             | 545                                                 | 615                                                                                                     |
| 1250                                                                                                                                               | 495                             | 590                                                 | 665                                                                                                     |
| 1500                                                                                                                                               | 525                             | 625                                                 | 705                                                                                                     |
| 1750                                                                                                                                               | 545                             | 650                                                 | 735                                                                                                     |
| 2000                                                                                                                                               | 555                             | 665                                                 | 750                                                                                                     |
| Per NEC 310.15(B)(5), the ampacity of 4/C cables shall be reduced by a factor of 0.80 when the neutral is considered a current-carrying conductor. |                                 |                                                     |                                                                                                         |

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