

Duraclad®

Type AC



14 AWG through 2 AWG Copper Type ACTHH (THHN Singles). 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VW-1. Galvanized Steel Interlocking Armor.

APPLICATIONS

Southwire Duraclad® 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)
- 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 Duraclad® 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. Steel 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®

©2016 Southwire Company, LLC. All rights reserved. ®Registered Trademark of Southwire Company, LLC.
One Southwire Drive, Carrollton, GA 30119, USA

Duraclad® Type AC - Lightweight Steel Armor

| CONDUCTOR SIZE AND COLORS | GROUNDING SIZE AND COLOR | STOCK NUMBER | | WEIGHT (LBS/1000') | OVERALL DIAMETER (INCHES) |
|-------------------------------------------------|--------------------------|--------------------|---------------------|--------------------|---------------------------|
| | | COIL | REEL | | |
| SOLID CONDUCTOR COLORS 120/208V | | | | | |
| 14-2 SOLID (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-27-83-01 (250') | 55-27-83-02 (1000') | 185 | .46 |
| 14-3 SOLID (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-27-85-01 (250') | 55-27-85-02 (1000') | 209 | .485 |
| 14-4 SOLID (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-31-84-01 (250') | 55-31-84-02 (1000') | 237 | .517 |
| 12-2 SOLID (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-27-49-01 (250') | 55-27-49-02 (1000') | 213 | .498 |
| 12-3 SOLID (BLACK/WHITE/BLUE) | 16 SOLID ALUMINUM | 55-27-50-01 (250') | 55-27-50-02 (1000') | 246 | .521 |
| 12-4 SOLID (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-27-57-01 (250') | 55-27-57-02 (1000') | 283 | .557 |
| 10-2 SOLID (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-27-82-01 (250') | 55-27-82-03 (1000') | 2664 | .56 |
| 10-3 SOLID (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-27-56-01 (250') | 55-27-56-02 (1000') | 312 | .588 |
| 10-4 SOLID (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-27-89-01 (250') | 55-27-89-03 (1000') | 366 | .632 |
| STRANDED CONDUCTOR COLORS 120/208V | | | | | |
| 8-2 STRANDED (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-33-69-01 (200') | 55-33-69-03 (500') | 365 | .686 |
| 8-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | | 55-27-84-03 (500') | 556 | .834 |
| 8-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | | 55-33-71-03 (500') | 653 | .895 |
| 6-2 STRANDED (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-33-67-01 (100') | 55-33-67-03 (500') | 574 | .868 |
| 6-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-27-59-02 (125') | 55-27-59-03 (500') | 696 | .912 |
| 6-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-33-68-01 (100') | 55-33-68-03 (500') | 830 | .981 |
| 4-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-28-03-01 (100') | 55-28-03-03 (500') | 948 | 1.07 |
| 4-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | | 55-33-66-03 (500') | 1150 | 1.15 |
| 2-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | | 55-27-93-03 (500') | 1265 | 1.19 |
| 2-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | | 55-33-65-03 (500') | 1559 | 1.293 |
| Refer to NEC Table 310.15 for ampacity ratings. | | | | | |

FEATURES

- An armor assembly (combination of the interlocked armor & bonding strip) that is recognized as an equipment grounding/bonding conductor per NEC 250.118(8).
- Reduces installation costs up to 50% over pipe and wire.
- 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.

The Power of Connections.™



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

| SIZE AWG OR KCMIL | TEMPERATURE RATING OF CONDUCTOR | | |
|-------------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| | 60°C (140°F) | 75°C (167°F) | 90°C (194°F) |
| | Types: TW, UF | Types: RHW, THHW, THW, THWN, XHHW, USE, ZW | Types: TBS, SA, SIS, RHH, RHW-2, THHN, THHW, THW-2, THWN- 2, USE-2, XHH, XHHW, XHHW-2, ZW-2 |
| COPPER | | | |
| 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.

Table is reprinted from NFPA 70-2014, the National Electric Code, © 2013 National Fire Protection Association, Quincy, Massachusetts 02269. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject, which is represented only by the standard in its entirety.



Duraclad®

Type AC



14 AWG through 2 AWG Copper Type ACTHH (THHN Singles). 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VW-1. Galvanized Steel Interlocking Armor.

APPLICATIONS

Southwire Duraclad® 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)
- 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 Duraclad® 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. Steel 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®

©2016 Southwire Company, LLC. All rights reserved. ®Registered Trademark of Southwire Company, LLC.
One Southwire Drive, Carrollton, GA 30119, USA

Duraclad® Type AC - Lightweight Steel Armor

| CONDUCTOR SIZE AND COLORS | GROUNDING SIZE AND COLOR | STOCK NUMBER | | WEIGHT (LBS/1000') | OVERALL DIAMETER (INCHES) |
|-------------------------------------------------|--------------------------|--------------------|---------------------|--------------------|---------------------------|
| | | COIL | REEL | | |
| SOLID CONDUCTOR COLORS 120/208V | | | | | |
| 14-2 SOLID (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-27-83-01 (250') | 55-27-83-02 (1000') | 185 | .46 |
| 14-3 SOLID (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-27-85-01 (250') | 55-27-85-02 (1000') | 209 | .485 |
| 14-4 SOLID (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-31-84-01 (250') | 55-31-84-02 (1000') | 237 | .517 |
| 12-2 SOLID (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-27-49-01 (250') | 55-27-49-02 (1000') | 213 | .498 |
| 12-3 SOLID (BLACK/WHITE/BLUE) | 16 SOLID ALUMINUM | 55-27-50-01 (250') | 55-27-50-02 (1000') | 246 | .521 |
| 12-4 SOLID (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-27-57-01 (250') | 55-27-57-02 (1000') | 283 | .557 |
| 10-2 SOLID (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-27-82-01 (250') | 55-27-82-03 (1000') | 2664 | .56 |
| 10-3 SOLID (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-27-56-01 (250') | 55-27-56-02 (1000') | 312 | .588 |
| 10-4 SOLID (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-27-89-01 (250') | 55-27-89-03 (1000') | 366 | .632 |
| STRANDED CONDUCTOR COLORS 120/208V | | | | | |
| 8-2 STRANDED (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-33-69-01 (200') | 55-33-69-03 (500') | 365 | .686 |
| 8-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | | 55-27-84-03 (500') | 556 | .834 |
| 8-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | | 55-33-71-03 (500') | 653 | .895 |
| 6-2 STRANDED (BLACK/WHITE) | 16 SOLID ALUMINUM | 55-33-67-01 (100') | 55-33-67-03 (500') | 574 | .868 |
| 6-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-27-59-02 (125') | 55-27-59-03 (500') | 696 | .912 |
| 6-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | 55-33-68-01 (100') | 55-33-68-03 (500') | 830 | .981 |
| 4-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | 55-28-03-01 (100') | 55-28-03-03 (500') | 948 | 1.07 |
| 4-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | | 55-33-66-03 (500') | 1150 | 1.15 |
| 2-3 STRANDED (BLACK/WHITE/RED) | 16 SOLID ALUMINUM | | 55-27-93-03 (500') | 1265 | 1.19 |
| 2-4 STRANDED (BLACK/WHITE/RED/BLUE) | 16 SOLID ALUMINUM | | 55-33-65-03 (500') | 1559 | 1.293 |
| Refer to NEC Table 310.15 for ampacity ratings. | | | | | |

FEATURES

- An armor assembly (combination of the interlocked armor & bonding strip) that is recognized as an equipment grounding/bonding conductor per NEC 250.118(8).
- Reduces installation costs up to 50% over pipe and wire.
- 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.

The Power of Connections.™



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

| SIZE AWG OR KCMIL | TEMPERATURE RATING OF CONDUCTOR | | |
|-------------------------|---------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| | 60°C (140°F) | 75°C (167°F) | 90°C (194°F) |
| | Types: TW, UF | Types: RHW, THHW, THW, THWN, XHHW, USE, ZW | Types: TBS, SA, SIS, RHH, RHW-2, THHN, THHW, THW-2, THWN- 2, USE-2, XHH, XHHW, XHHW-2, ZW-2 |
| COPPER | | | |
| 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.

Table is reprinted from NFPA 70-2014, the National Electric Code, © 2013 National Fire Protection Association, Quincy, Massachusetts 02269. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject, which is represented only by the standard in its entirety.

