

Lightweight Aluminum Interlocked Armor

600 Volt

Copper Power Conductors

THHN/THWN Insulated Singles

Green Insulated Grounding Conductor

Sizes 14 AWG through 2 AWG

Rated VW-1

# ARMORLITE® TYPE MC

## A P P L I C A T I O N S Suitable for use as follows:

- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings
- · Power, lighting, control, and signal circuits
- · Fished or embedded in plaster
- Concealed or exposed installations
- Environmental air-handling spaces per NEC 300.22(C)
- Places of Assembly per NEC 518.4 and theaters per NEC 520.5
- As aerial cable on a messenger
- 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)
- Class I Div. 2, Class II Div. 2, & Class III Div. 1 Hazardous Locations

#### STANDARDS & REFERENCES

- Southwire Armorlite® Type MC Cable meets or exceeds the requirements of UL Standard 83, UL Standard 1063, UL Standard 1569 for Type MC, Federal Specification A-A59544 (formerly J-C-30B), IEEE 1202 (70,000 BTU/hr) Vertical Cable Tray Flame Test, and the National Electrical Code
- Southwire Armorlite® Type MC Cable is listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems

## CONSTRUCTION

- Southwire Armorlite® Type MC Cable is constructed with soft-drawn copper, Type THHN/ THWN conductors rated 90°C dry/ 75°C wet, available in sizes 14 AWG through 750 kcmil, and a green insulated grounding conductor (sizes 1/0 AWG and larger furnished with bare grounding conductor)
- The conductors are cabled together and a binder tape bearing the print legend is wrapped around the assembly
- Aluminum interlocked armor is applied over the assembly. Refer to color chart for conductor color sequence

#### FEATURES

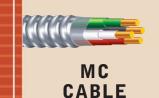
- Reduces installation costs up to 50% over pipe and wire
- Lightweight aluminum armor—as much as 45% lighter than steel MC Cable
- UL Classified 1, 2, and 3 Hour Through-Penetration Firestop Systems: W-J-3037,
   W-L-3110,W-L-3113,W-L-3117,W-L-3120,W-L-3121,W-L-3160,C-AJ-3115,C-AJ-3140,C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038
- Cable reverse wound on reel for ease of pulling and installation; when pulling from coils, pull from inside to ensure ease of installation

<sup>&</sup>lt;sup>1</sup> 2005 Edition.









| WEIGHTS, MEASUREMENTS AND PACKAGING |          |                           |                      |                 |                  |      |      |                  |             |
|-------------------------------------|----------|---------------------------|----------------------|-----------------|------------------|------|------|------------------|-------------|
| CONDUCTOR                           |          |                           | OVERALL              | WEIGHT          | AMPACITY (AMPS)† |      |      | STANDARD PACKAGE |             |
| SIZE*<br>(AWG)                      | TYPE     | CONDUCTOR<br>SIZE (AWG)** | DIAMETER<br>(inches) | (lbs./1000 ft.) | 60°C             | 75°C | 90°C | COIL (feet)      | REEL (feet) |
| 14/2                                | Solid    | 14                        | .439                 | 78              | 15               | 15   | 15   | 250              | 1000        |
| 14/3                                | Solid    | 14                        | .464                 | 96              | 15               | 15   | 15   | 250              | 1000        |
| 14/4                                | Solid    | 14                        | .494                 | 114             | 15               | 15   | 15   | 250              | 1000        |
| 12/2                                | Stranded | 12                        | .494                 | 110             | 20               | 20   | 20   | 250              | 1000        |
| 12/2                                | Solid    | 12                        | .475                 | 105             | 20               | 20   | 20   | 250              | 1000        |
| 12/3                                | Stranded | 12                        | .527                 | 137             | 20               | 20   | 20   | 250              | 1000        |
| 12/3                                | Solid    | 12                        | .505                 | 131             | 20               | 20   | 20   | 250              | 1000        |
| 12/4                                | Stranded | 12                        | .564                 | 164             | 20               | 20   | 20   | 250              | 750         |
| 12/4                                | Solid    | 12                        | .539                 | 157             | 20               | 20   | 20   | 250              | 750         |
| 10/2                                | Stranded | 10                        | .566                 | 159             | 30               | 30   | 30   | 250              | 750         |
| 10/2                                | Solid    | 10                        | .542                 | 152             | 30               | 30   | 30   | 250              | 750         |
| 10/3                                | Solid    | 10                        | .580                 | 193             | 30               | 30   | 30   | 250              | 500         |
| 10/4                                | Stranded | 10                        | .653                 | 243             | 30               | 30   | 30   | 250              | 500         |
| 10/4                                | Solid    | 10                        | .623                 | 233             | 30               | 30   | 30   | 250              | 500         |
| 8/2                                 | Stranded | 10                        | .678                 | 234             | 40               | 50   | 55   | 200              | 500         |
| 8/3                                 | Stranded | 10                        | .678                 | 298             | 40               | 50   | 55   | 200              | 500         |
| 8/4                                 | Stranded | 10                        | .732                 | 370             | 40               | 50   | 55   | 125              | 500         |
| 6/2                                 | Stranded | 8                         | .716                 | 332             | 55               | 65   | 75   | 125              | 500         |
| 6/3                                 | Stranded | 8                         | .756                 | 433             | 55               | 65   | 75   | 125              | 500         |
| 6/4                                 | Stranded | 8                         | .819                 | 536             | 55               | 65   | 75   | 100              | 500         |
| 4/3                                 | Stranded | 8                         | .986                 | 635             | 70               | 85   | 95   | 100              | 500         |
| 4/4                                 | Stranded | 8                         | 1.077                | 799             | 70               | 85   | 95   | 100              | 500         |
| 3/3                                 | Stranded | 6                         | 1.053                | 785             | 85               | 100  | 110  | 100              | 500         |
| 3/4                                 | Stranded | 6                         | 1.152                | 987             | 85               | 100  | 110  | 100              | 500         |
| 2/3                                 | Stranded | 6                         | 1.130                | 933             | 95               | 115  | 130  | 100              | 500         |
| 2/4                                 | Stranded | 6                         | 1.239                | 1182            | 95               | 115  | 130  | 100              | 500         |

Note: Ampacities are based on Table 310.16 of the NEC, 2005 Edition.

†Allowable ampacities shown are for general use as specified by the National Electrical Code, 2005 Edition, Section 310.15.

If the equipment is marked for use at higher temperatures, the conductor ampacity shall be limited to the following per NEC 110.14(C):

60°C - When terminated to equipment for circuits rated 100 amperes or less or marked for size 14 through 1 AWG conductors. 75°C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than size 1 AWG.

90°C - For ampacity derating purposes.

Per NEC 310.15(B)(2)(a), the ampacity of 4/C cables shall be reduced by a factor of 0.80 when the neutral is considered a current-carrying conductor. \*Available in sizes up to 750 kcmil.

<sup>\*\*</sup>All grounding conductors 8 AWG and larger will be stranded.

| ORS  | COLOR CODING            |  |  |  |  |
|--|-------------------------|--|--|--|--|
| 0 F CONDUCTORS  3 3 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6            | 120/208Y  white, black  |  |  |  |  |
| 3 3  | white, black, red       |  |  |  |  |
| 5<br>5<br>6  | white, black, red, blue |  |  |  |  |
| # Grounding Conductor  | green                   |  |  |  |  |
| Other special colors are available subject to economic order quantity. |                         |  |  |  |  |

# **ONLINE CERTIFICATIONS & TOOLS**

- UL Online Certification Directory ( www.ul.com )
- UL Online Product Guide Info Metal-Clad Cable (PJAZ) ( www.ul.com )

COLOR CODING 277/480Y 2 brown, grey 2 orange, grey 2 yellow, grey 2 purple, grey 3 brown, yellow, grey 3 brown, orange, grey 4 brown, orange, yellow, grey 4 brown, yellow, purple, grey Grounding green Conductor