Type MC Cable Guide Specifications-Encore Wire Corporation

26 05 19- WIRE AND CABLE TYPE MC CABLE – COPPER CONDUCTORS

PART 1 – GENERAL

1.1 SPECIFICATION INCLUDES

1.1.1 Branch, Feeder and Service Conductors: Type MC Cable for use as branch, feeder and service conductors.

1.1.2 General Applications: Type MC Cable may also be used in the following general applications per based on the National Electrical Code (NEC):

1.1.2.1 For services, feeders and branch circuits.

1.1.2.2 For power and lighting.

1.1.2.3 Indoors.

1.1.2.4 Exposed or concealed.

1.1.2.5 In cable tray where identified for such use.

1.1.2.6 In a raceway(s).

1.1.2.7 In dry locations and embedded in plaster or against other masonry.

1.1.2.8 Jacketed MC Cable may be used in wet locations, either direct burial, in underground conduit, or overhead.

1.2 SUBMITTALS

1.2.1 Product Data: Submit manufacturer’s product data that materials comply with specified requirements and are suitable for intended application.

1.2.2 Installation Instructions: Manufacture’s installation instructions shall be included in submittal. Industry guides may supplement the manufacturer’s instructions.

1.2.3 Manufacturer: Type MC Cables for circuits, feeders and services shall be supplied from a single manufacturer.

1.3 REQUIRMENTS

1.3.1 Underwriters Laboratories: Type MC Cable shall meet the following Underwriters Laboratories (UL) standards and other listed standards where applicable.

1.3.1.1 UL 1569 Standard for Metal-Clad Cables.

1.3.1.2 UL Standard 83 for Thermoplastic-Insulated Wires and Cables or UL Standard 44 for Thermoset Insulated Wires and Cables.

1.3.1.3 UL Standard 1479 Standard for Fire Tests of Through-Penetration Firestops.

1.3.1.4 UL Classified 1, 2, and 3 Hour Through-Penetration Firestop Systems.

1.3.2 ASTM Standards: Inner conductors Type THHN/THWN-2 shall meet all applicable ASTM standards.

1.3.3 Federal Specifications: Type MC Cable shall meet Federal Specification A-A559544.

1.3.4 IEEE 1202 (70,000 Btu/hr) Vertical cable Tray Flame Test.(Optional for UL 44 Standard Products, such as XHHW-2)

1.3.5 Section 1605 “Buy American” Compliant.

PART 2 – PRODUCTS

2.1 MANUFACTURER

2.1.1 Encore Wire Corporation, 1329 Millwood Road, McKinney, Texas 75069. Web: http://www.encorewire.com

2.2 CABLE CONSTRUCTION

2.2.1 Inner Conductor: The conductor shall be soft annealed copper.

2.2.2 Inner Conductor Insulation: The insulation shall be THHN/THWN-2 or XHHW-2.

2.2.3 Outer Sheath: Aluminum or Galvanized Steel metal sheathing.

2.2.4 Smart Color ID: All MC Cable is provided with the Encore Smart Color ID labeling system.

PART 3 – INSTALLATION

3.1 INSTALLATION

3.1.1 Manufacturer’s Instructions: Type MC Cable shall be installed per the manufacturer’s published installation instructions. Industry guides may supplement the manufacture’s instructions.

3.1.2 Field Support: Manufacturer shall provide, when requested, field engineering support for Type MC Cable installations.

3.1.3 Manufacturer: Type MC Cable for all applications specified in Section 1.1.2 shall be supplied from a single manufacturer.

3.1.4 Minimum Bend Radius: Bends in Type MC Cable shall be so made that the cable will not be damaged. The radius of the curve of the inner edge of any bend shall not be less than seven (7) times the external published diameter of the metallic sheath.

3.1.5 Ampacity: The ampacity of Type MC Cable shall be determined in accordance with Section 310.15 and Table 310.16 of the National Electrical Code®. The installation and the inner conductors shall not exceed the temperature ratings of the terminals and equipment.