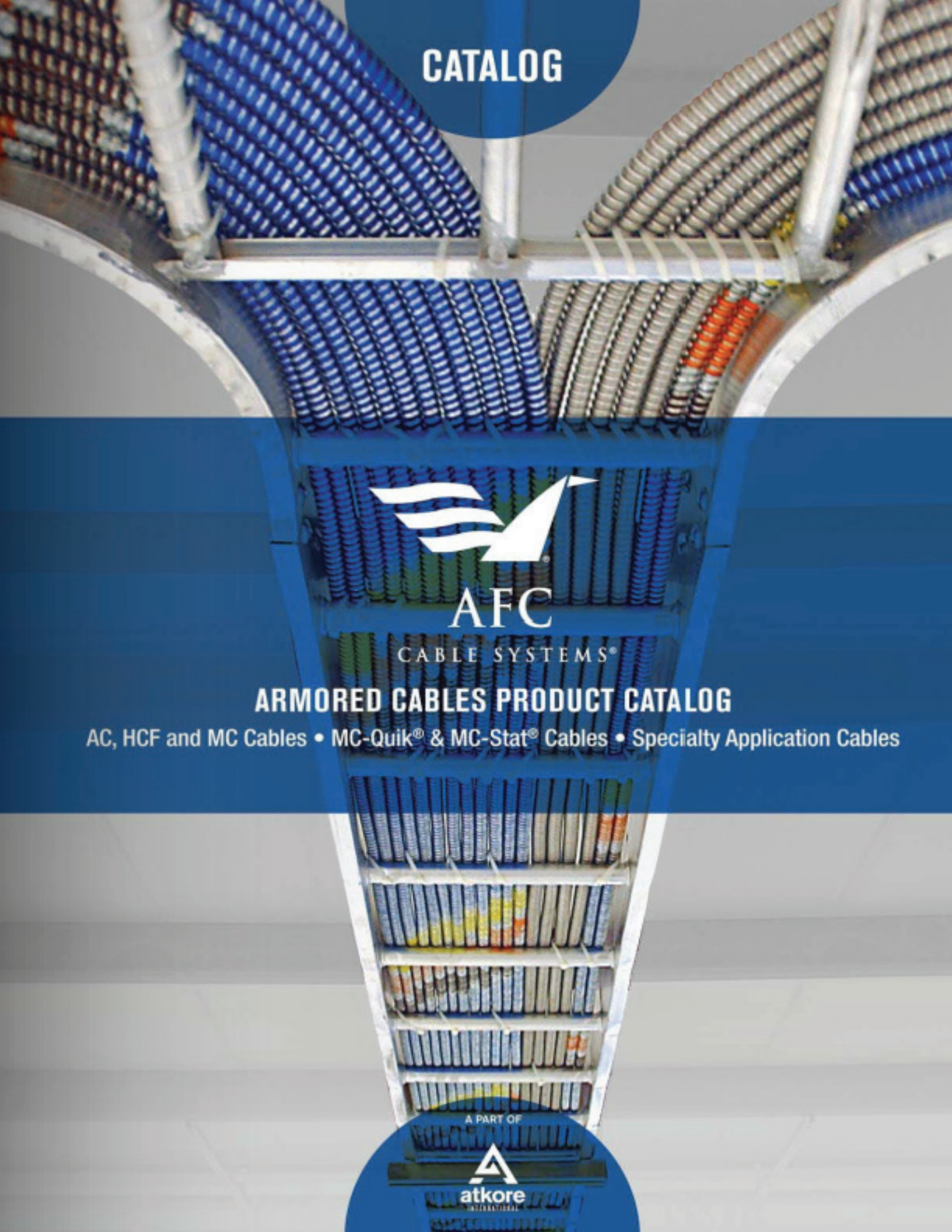
CATALOG



AFC

CABLE SYSTEMS®

ARMORED CABLES PRODUCT CATALOG

AC, HCF and MC Cables • MC-Quik® & MC-Stat® Cables • Specialty Application Cables

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AFC Cable Systems: the Cable Industry Leader for Over 80 Years

AFC Cable Systems, Inc, is proud to announce the launch of two new Type MC cables, MC-Quik and MC-Stat. These two new cables offer the fastest installation times, the least post-installation clean up, and color coding for safety and quick cable identification.

"It's a Snap Without the Wrap" because MC-Quik and MC-Stat feature a polypropylene covering around each insulated conductor, versus the traditional overall wrap around the entire conductor bundle.
The protective covering also replaces the paper wrap found in standard Type AC cables. This change along with the introduction of a full-sized aluminum ground wire plus armor equipment grounding means has brought to the electrical industry the latest technological advances to Type MC cable design.

MC-Quik may be used anywhere traditional Type MC cables have been used, installed to NEC® 330 and manufactured to UL 1569. This cable has a unique purple color denoting that it is MC-Quik with an armor-full sized ground wire equipment grounding means (MCI-A). The additional color bands on the cable armor display the phase and neutral colors of the conductors inside. As we've said for years, "the outside colors tell you the inside story" - that has never been more true than now with the inclusion of neutral conductor colors on the armor.

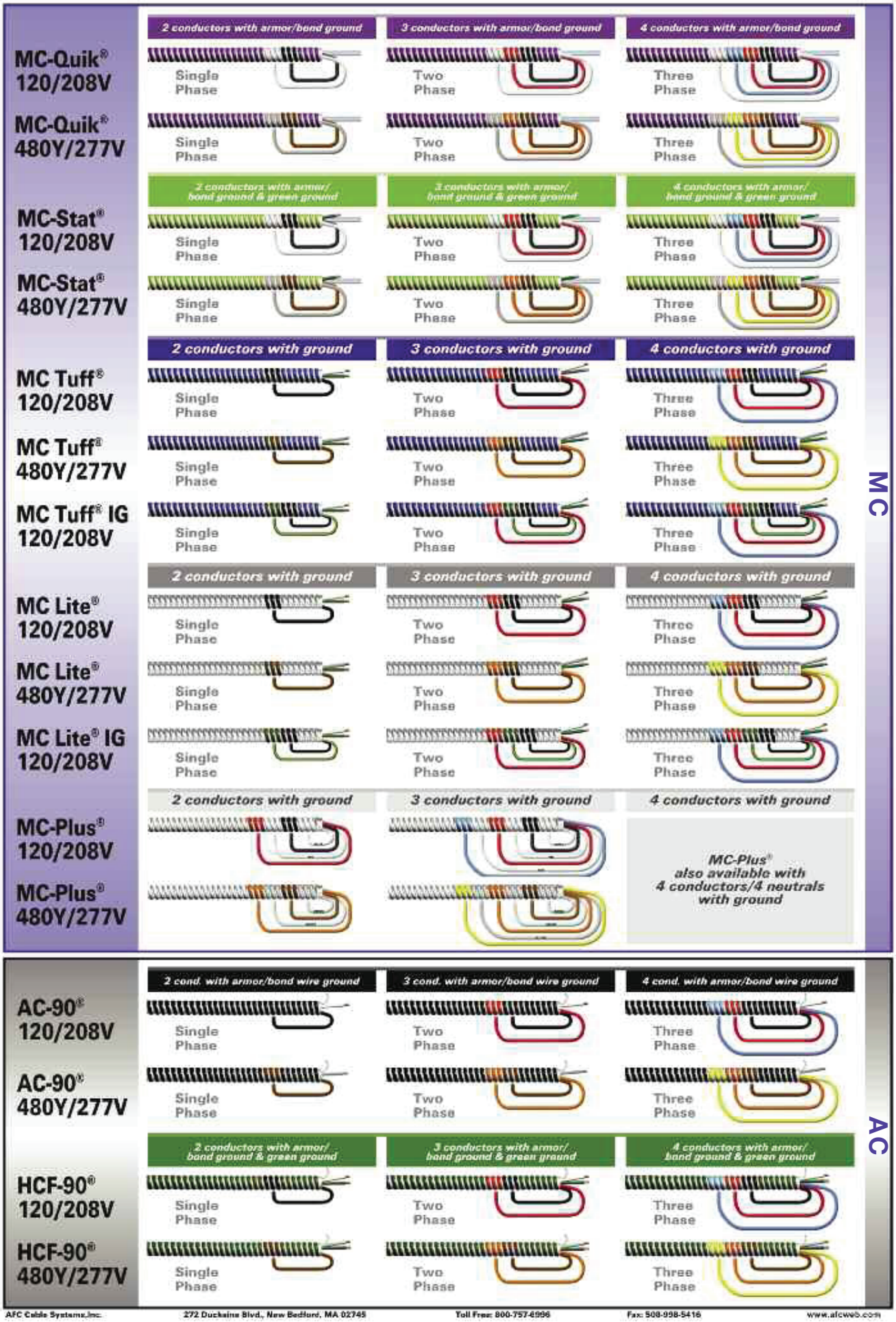
MC-Stat is our new Type MC cable for health care wiring applications. MC-Stat may be used anywhere traditional Type HCF cables have been used. Within areas of patient care as noted in NEC® 517, MC-Stat qualifies for sensitive installations with an armor and full sized aluminum ground wire combination, plus a full sized green insulated grounding conductor for the second path to equipment grounding. MC-Stat is the right prescription with a bright green color coding denoting health care wiring and additional color bands for phase and neutral identification.

The new AFC cable catalog brings you all the installation instructions you need for either MCI-A (MC-Quik and MC-Stat) cables or traditional Type MC and Type AC cables. And, this new catalog has the complete ordering information you need, as well as a MSDS sheet and NEC® and UL references and specifications.

AFC Cable Systems, Inc. where the union of tradition, technology and innovation blend with the art and science of manufacturing -
your electrical industry partner for over 80 years!

Call us at 800-757-6996 or at www.afcweb.com

AFC ColorSpec® ID System



AFC ColorSpec® ID System

AFC Cable Systems, Inc. 272 Duchaine Blvd., New Bedford, MA 02745 Toll Free: 800-757-6996 Fax: 508-998-5416 www.afcweb.com

Other Brands to Serve You

Conduit Systems

Steel Conduit
- Rigid (GRC)
- IMC

Aluminum Conduit
- Rigid
- Aluminum Elbows
- Aluminum Couplings

Steel EMT
- True Color™ EMT
- Fire Alarm™ & Blue EMT
- E-Z Pull™ EMT

Kwik Products
- Kwik-Fit™ EMT (built-in set-screw coupling)
- Kwik-Couple™ IMC/GRC (built-in 3 piece rotating coupling)
- Kwik-Fit™ Compression EMT (built-in compression fitting)

PVC
- Rigid PVC
- Schedule - 40 & 80 Products
- EB/DB Duct
- Fittings, Spacers & Accessories

Columbia-MBF™

Cable Systems

AC & MC Cable
- MC TUFF™ Lightweight Steel (MC) Cable
- MC TUFF™ IG (MC) Cable with Isolated Ground
- MC Lite™ Metal Clad Aluminum (MC) Cable
- MC-Quik™ (MC) Cable
- MC-Stat™ (MC) Cable
- MC-Plus™ (MC) Cable
- HCF-90™ & HCF-Lite™
- AC-90™ & AC-Lite™
- Fire Alarm™ Cable
- Home Run Cable™
- Parking Deck/Lot Cable™
- Super Neutral Cable™

Flexible Conduit
- LIQUID-TUFF™ Liquid-Tight Flexible Conduit
- Full and Reduced Wall Flexible Metal Conduit

Fittings
- EMT Steel Compression & Set-Screw Fittings
- Liquid-Tight Metallic & Non-Metallic Fittings
- MC/AC Cable Connectors

AFC Accessories
- Light, Power, & Appliance Whips
- Temp-Lites™
- Bare Armored Ground

ACS/Uni-Fab™

Framing Systems

Channel
- Steel Channel
- Aluminum Channel
- Stainless Steel Channel
- Fiberglass Channel
- Junior Channel

Fittings & Accessories
- Channel Brackets
- Channel Fittings
- Pipe Clamps
- Threaded Rods
- Fiberglass Fittings
- Junior Channel Fittings
- Concrete Inserts
- Slotted Angles

Finishes
- Pre-Galvanized Channel
- Green Channel
- Hot-Dip Galv. Channel
- Gold Channel

Solar Products

UNISTRUT®

Cable Tray Systems

Aluminum Tray
- Aluminum Ladder Tray
- Aluminum Hat Tray
- Aluminum Trof Tray
- Aluminum Channel
- Aluminum Fittings

Steel Tray
- Steel Ladder Tray
- Steel Hat Tray
- Steel Trof Tray
- Steel Channel
- Steel Fittings

I-Beam™ Cable Tray
- I-BEAM™ Aluminum Tray
- I-BEAM™ Accessories

Fiberglass Tray
- Cope-glas™ Fiberglass Tray
- Fiberglass Fittings

Center Hung Tray
- Centipede™ Tray
- Centipede™ Accessories

Other Cope Products
- Cable Channel

ACROBA™

Conduit Systems Canada

All items listed above, **except** for the following:
- IMC
- Kwik-Couple IMC
- PVC

Modular Wiring Systems

ACS/Uni-Fab
- Modular Lighting Systems
- Raised Floor Assemblies
- Pre-Fab Assemblies

Framing Systems

All items listed above, **plus** the following:

Gratings
Roof Walks
Solar Products
Telestrut™ Telescoping Strut System
UniPier® Rooftop Supports

Basket Tray Systems

Acroba Wire Basket
- Wire Basket Tray
- Wire Basket Accessories

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www.columbia-mbf.ca

www.afcweb.com

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www.acroba.com

AFC CABLE SYSTEMS®

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Table of Contents

Note: Made in USA of US and/or imported materials

AFC products Type AC, Type HCF, Type MC, Liquid-tight and Flexible Metal Conduits, are fabricated in the continental US to the applicable UL standards.

Cables are manufactured in compliance with UL standards: Type MC cables are UL listed and manufactured in compliance with UL 1569, listing file E 80042. Type AC cables are UL listed and manufactured in compliance with UL 4, listing file E 7330.

Liquid-tight products that are UL listed are manufactured in compliance with UL standards, UL 360 for metallic products and UL 1660 for non-metallic products. Metallic conduits that are UL listed are included in listing file E26540. Non-metallic conduits that are UL listed are listing file E 123464, and CSA certified under file LL69271.

Flexible Metal Conduits that are UL listed are manufactured in compliance with UL 1 and listing under UL File E 11831 and CSA File Number 15035.

AFC's Fittings products are not manufactured in the continental US but are manufactured at an AFC UL certified facility to the applicable standard UL 514-B.

Our US manufacturing facilities are located in New Bedford, Massachusetts; Byesville and Cambridge, Ohio; Largo, Florida and Fullerton, California.

For technical questions contact -
TechnicalServices@afcmail.com or call 508-985-1277 or 877-843-4870

AFC Cable Systems
272 Duchaine Blvd, New Bedford, MA 02745
Tel: 508-998-1131
800-757-6996
Fax: 508-998-1447

www.afcweb.com

Introduction
Type MC Cables

Type MC Metal Clad Cables – Uses Permitted:

The uses permitted for MC cable are governed by NEC® Article 330 and any applicable local codes. Please refer to NEC® Article 330 and your local authority having jurisdiction for additional information.

- **Where not subject to physical damage; For services, feeders and branch circuits**
- **For power, lighting, control and signal circuits**
- **Indoors, exposed or concealed**
- **Outdoors or in wet locations where the armor has an overall outer moisture resistant PVC jacket and the conductors are wet rated (Parking Deck/Lot Cable™)**
- **Direct buried or in concrete encasement where identified for such use (Parking Deck/Lot Cable™)**
- **Under raised floors, above suspended ceilings and in other environmental air-handling spaces per NEC® 300.22(C)**
- **In Places of Assembly**
- **In cable tray or as open runs**
- **In locations classified as hazardous as permitted in NEC® Articles 501, 502, 503, 504, 505, and 530**
- **As aerial cable on a messenger**
- **MC-Stat® (only) NEC® 517**
- **Aluminum armored cables are RoHS Compliant**
- **Made in USA of US and/or imported materials**

Type MC Cables – Uses Not Permitted:

- **Where exposed to destructive corrosive conditions unless the metallic sheath is suitable for the conditions or is protected by material suitable for the conditions**

For more information about the proper use and application of AC & MC cables, visit AFC University at www.afcweb.com/afcu .

UL standard 1569 governs the manufacturing of Type MC cables. The standard was updated to include Type MC cables with a ground fault path consisting of an armor and full-sized bare aluminum ground wire, known as MCI-A cables (metal-clad interlocking ground cable). These cables are required to be terminated using connectors UL listed and marked for MCI-A cables (UL 514-B).

AFC's NEW MC-Quik® and MC-Stat® cables are Type MC designed as MCI-A cables. The grounding means of these Type MC cables is the armor plus the full-sized bare aluminum ground wire. MC-Stat also contains a full sized green insulated copper grounding conductor as required by NEC® 517 for areas of patient care. MC-Quik and MC-Stat contain insulated copper circuit conductors with thermoplastic insulation and individual protective coverings versus an overall polypropylene tape. It is available in either galvanized steel or aluminum interlocking armor.

Type MC cables of traditional design will include one or more copper grounding conductors. The armor of these Type MC cables is not an approved equipment grounding means. Traditional Type MC cables consist of copper circuit and grounding conductors with thermoplastic insulation, an overall polypropylene assembly tape and an outer galvanized steel or aluminum interlocking metal armor.

Type MC cables should be cut with an armored cable rotary cutting tool which helps eliminate nicking and cutting of the conductors and removes the metal armor quickly and safely.

AFC's Type MC cables, including the new MCI-A styles and traditional MC styles, display the ColorSpec ID System for fast cable and system voltage identification.

MC-Quik® Steel Cable

MCI-A steel armor - Metal Clad Cable (Patent Pending)
New Type MC cable without an overall assembly tape featuring ColorSpec®

Features & Benefits

- Interlocking galvanized steel or aluminum armor
- Purple armor for easy cable identification
- Armor plus full-sized aluminum ground wire is the equipment grounding means
- Protective covering over each insulated copper conductor
- MCI-A listed connectors required
- UL Classified for Through-Wall Penetrations
- Made in USA of US and/or imported materials

Applications

Commercial, industrial, multi-residential branch circuits for power, lighting, control and signal circuit.
Exposed or concealed, dry locations, fished, surface mounted, embedded in plaster, environmental air handling spaces, in hazardous locations to Class I & II, Div 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530), Places of Assembly per NEC® Article 518.

Product Specifications

MC-Quik® Steel Metal Clad Cable (120/208V colors) & (480Y/277V colors) Refer to page: 10

MC-Quik® Lite Aluminum Cable

MCI-A aluminum armor - Metal Clad Cable (Patent Pending)
New Type MC cable without an overall assembly tape featuring ColorSpec®

Features & Benefits

- Interlocking galvanized steel or aluminum armor
- Purple armor for easy cable identification
- Armor plus full-sized aluminum ground wire is the equipment grounding means
- Protective covering over each insulated copper conductor
- MCI-A listed connectors required
- UL Classified for Through-Wall Penetrations
- Made in USA of US and/or imported materials

Applications

Commercial, industrial, multi-residential branch circuits for power, lighting, control and signal circuit.
Exposed or concealed, dry locations, fished, surface mounted, embedded in plaster, environmental air handling spaces, in hazardous locations to Class I & II, Div 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530), Places of Assembly per NEC® Article 518.

Product Specifications

MC-Quik® Aluminum Metal Clad Cable (120/208V colors) & (480Y/277V colors) Refer to page: 11

MC-Stat® Cable

MCI-A steel armor - Metal Clad Cable (Patent Pending)
New type MC cable for health care applications featuring ColorSpec®

Features & Benefits
- Interlocking galvanized steel armor
- Green armor for easy cable identification in health care applications
- Armor plus full-sized aluminum ground wire is the equipment grounding mean, second equipment grounding means is full sized insulated copper grounding conductor
- MCI-A listed connectors required
- UL Classified for Through-Wall Penetrations
- Made in USA of US and/or imported materials

Applications
Branch circuits in areas of patient care in hospitals, nursing homes, outpatient facilities, dental offices, clinics and medical centers (other than emergency, life safety or critical care locations), Places of Assembly, under raised floors, above suspended ceilings, environmental air-handling spaces, exposed or concealed dry locations, surface mounted, fished, any application requiring isolated or redundant grounding, normal or general purpose power in health care settings. Places of Assembly as per NEC® Article 518, and in Patient Care Areas of Patient Care as per NEC® Article 517.

Product Specifications Refer to page:
MC-Stat® Steel Metal Clad Cable (120/208V colors) & (480Y/277V colors) 12

MC-Stat® Lite Cable

MCI-A aluminum armor - Metal Clad Cable (Patent Pending)
New type MC cable for health care applications featuring ColorSpec®

Features & Benefits
- Interlocking galvanized aluminum armor
- Green armor for easy cable identification in health care applications
- Armor plus full-sized aluminum ground wire is the equipment grounding mean, second equipment grounding means is full sized insulated copper grounding conductor
- MCI-A listed connectors required
- UL Classified for Through-Wall Penetrations
- Made in USA of US and/or imported materials

Applications
Branch circuits in areas of patient care in hospitals, nursing homes, outpatient facilities, dental offices, clinics and medical centers (other than emergency, life safety or critical care locations), Places of Assembly, under raised floors, above suspended ceilings, environmental air-handling spaces, exposed or concealed dry locations, surface mounted, fished, any application requiring isolated or redundant grounding, normal or general purpose power in health care settings. Places of Assembly as per NEC® Article 518, and in Patient Care Areas of Patient Care as per NEC® Article 517.

Product Specifications Refer to page:
MC-Stat® Lite Aluminum Metal Clad Cable (120/208V colors) & (480Y/277V colors) 12

MC-Stat® Plus Cable

MCI-A steel or aluminum armor - Metal Clad Cable (Patent Pending)
For health care applications featuring ColorSpec®

Features & Benefits
- A neutral per phase Type MCI-A cable designed for multi-wire branch circuit applications
- Addresses harmonics distortions in power distribution systems and meets the requirements of NEC® 210.4(B) Disconnecting Means
- Eliminates shared neutrals, and allows electrical systems to continue to operate
- Decreases the time it takes to identify a faulty circuit because only the affected single-phase breaker will trip thus, reducing the length of unnecessary outages
- Type MCI-A cable with a green insulated copper grounding conductor
- Made in USA of US and/or imported materials

Applications
Branch circuit wiring for a variety of power distribution systems from lighting, to devices and receptacles. Branch circuit to computers and other electronic equipment where additive harmonics currents from non-linear switching loads may be present

Product Specification Refer to page:
MC-Stat® Plus Cable (120/208V colors) 13
MC-Stat® Plus Lite Cable (120/208V colors) 13

MC TUFF® Steel MC Cable

Lightweight Steel Metal Clad Cable

High Strength, Lightweight Galvanized Steel Armor featuring ColorSpec®

Features & Benefits

- High strength, lightweight interlocking steel armor
- Blue armor for easy identification
- May be used with set-screw connectors UL listed for use with MC Cable
- Superior EMI shielding versus aluminum armor
- UL Classified for Through-Wall Penetrations
- MC TUFF is a traditional Type MC cable containing one or more copper grounding conductors; the armor is not an equipment grounding means.
- Made in USA of US and/or imported materials

Applications

Commercial, industrial, multi-residential branch circuits and feeder wiring-services for power, lighting, control and signal circuits, exposed or concealed, fished, surface mounted, embedded in plaster, environmental air-handling spaces, open or messenger supported aerial runs, dry locations, hazardous locations to Class I & II Div. 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530), Places of Assembly, and applications requiring superior EMI shielding

Product Specifications

Type MC Steel Metal Clad Cable (8 AWG-2 – 4/0 AWG-4)

Galvanized Steel Armor

Features & Benefits

- Galvanized interlocking steel armor
- May be used with set-screw connectors UL listed for use with MC Cable
- Superior EMI shielding versus aluminum armor
- UL Classified for Through-Wall Penetrations
- Type MC Steel Metal Clad Cable is a traditional Type MC cable containing one or more copper grounding conductors; the armor is not an equipment grounding means.
- Made in USA of US and/or imported materials

Applications

Commercial, industrial, multi-residential branch circuits and feeder wiring-services for power, lighting, control and signal circuits. Exposed or concealed, fished, surface mounted, embedded in plaster, environmental air-handling spaces, open or messenger supported aerial runs, dry locations, in hazardous locations to Class I & II Div. 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530), Places of Assembly, and applications requiring superior EMI shielding

Product Specifications

MC Lite® Metal Clad Cable

Aluminum Interlocking Armor featuring ColorSpec®

Features & Benefits

Aluminum armor with Phase/Circuit Stripes

UL Classified for Through-Wall Penetrations

MC Lite is a traditional Type MC cable containing one or more copper grounding conductors; the armor is not an equipment grounding means

Aluminum armored cables are RoHS Compliant

Made in USA of US and/or imported materials

Applications

Commercial, industrial, multi-residential branch circuits and feeder wiring, services for power, lighting, control and signal circuits. Exposed or concealed, fished, surface mounted, embedded in plaster, environmental air-handling spaces, open or messenger supported aerial runs, dry locations, in hazardous locations to Class I & II Div. 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530), and in Places of Assembly

Product Specification

MC TUFF® IG & MC Lite® IG – Isolated Ground Cable

MC Tuff® Lightweight Blue Interlocking Steel Armored Isolated Ground Cable

MC Lite® Interlocking Silver Aluminum Armored Isolated Ground Cable

Aluminum Armored Cables are RoHS Compliant

Features & Benefits

Ideal where isolated or dedicated grounding is required

High strength, lightweight steel or aluminum armor

Features 2 green grounds, 1 solid green, 1 with yellow stripe

Blue or silver armor with additional green stripe for easy identification

UL Classified for Through-Wall Penetrations

MC TUff IG & MC Lite IG are traditional Type MC cables; the armor is not an equipment grounding means.

Aluminum armored cables are RoHS Compliant

Made in USA of US and/or imported materials

Applications

Commercial, industrial, multi-residential branch circuits and feeder wiring approved for MC cable requiring isolated, redundant or dedicated grounding conductors, services for power, lighting, control and signal circuits, exposed or concealed, fished, surface mounted, embedded in plaster, environmental air-handling spaces, open or messenger supported aerial runs, dry locations, in hazardous locations to Class I & II Div. 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530), and in Places of Assembly

Product Specifications

* U.S. Patent #38,345 (reissue), 6,825,418 (Phase ID)

MC-Plus® and MC-Plus® Lite Cable

Galvanized Interlocking Steel and/or Aluminum Armor

Features & Benefits

A neutral per phase Type MC cable designed for multi-wire branch circuit applications

Addresses harmonics distortions in power distribution systems and meets the requirements of NEC® 210.4(B) Disconnecting Means

Eliminates shared neutrals, and allows electrical systems to continue to operate

Designed to meet NEC® 210.4(B)

Decreases the time it takes to identify a faulty circuit because only the affected single-phase breaker will trip thus, reducing the length of unnecessary outages

Traditional Type MC cable with a green insulated copper grounding conductor

Aluminum armored cables are RoHS compliant

Made in USA of US and/or imported materials

Applications

Branch circuit wiring for a variety of power distribution systems from lighting, to devices and receptacles. Branch circuit to computers and other electronic equipment where additive harmonics currents from non-linear switching loads may be present

Product Specification Refer to page:

MC-Plus® Cable 24

Super Neutral Cable®

Galvanized Interlocking Steel or (optional) Aluminum Armor

Features & Benefits

Designed to minimize the effects of harmonic currents on the neutral conductors generated by non-linear loads

Features oversized neutral conductor

Cable designs and conductor color schemes compatible with most modular office furniture

UL Classified for Through-Wall Penetrations

Optional Aluminum armored cables are RoHS Compliant

Made in USA of US and/or imported materials

Applications

Branch circuit and feeder wiring for computers, programmable controllers, electronic discharge lighting, office machines and other electronic equipment that introduce additive harmonic currents from non-linear switching loads, compatible with most modular office furniture, under raised floors, above suspended ceilings, environmental air-handling spaces, and applications requiring superior EMI shielding (steel armor only)

Product Specification Refer to page:

Super Neutral Cable® 25

Home Run Cable®

Galvanized Steel Armor

Features & Benefits

Home Run Cable® is a traditional Type MC cable containing one or more copper grounding conductors; the armor is not an equipment grounding means

Versatile multi-conductor cable Phase identified by color code with separate marking for circuit identification

UL Classified for Through-Wall Penetrations

Made in USA of US and/or imported materials

Applications

Multi-conductor runs from panel board to junction box for power, lighting, control and signal circuits, also used in repetitive home runs in multi-story hotels, dormitories, commercial office buildings and warehouse applications. Conductors must be derated per NEC® Table 310.15(B)(3)(a), exposed, concealed, or fished, in cable trays and environmental air-handling spaces.

Product Specification Refer to page:

Home Run Cable® 27

Fire Alarm® Control Cable

Galvanized Interlocking Steel Armor Color Coded Red featuring ColorSpec®

Features & Benefits

RED armor identifies Fire Alarm Cable

Type FPLP or Dual-Rated Type MC/FPLP is plenum rated

Available with twisted shielded pairs

Superior EMI Shielding versus aluminum armor

UL Classified for Through-Wall Penetrations

Fire Alarm/Control Cable is a traditional Type MC cable containing one or more copper grounding conductors; the armor is not an equipment grounding means

Made in USA of US and/or imported materials

Applications

Fire alarm wiring or remote control hook-up connecting main fire alarm control panel with pull stations, smoke detectors and alarms, remote control circuits from magnetic motor starters, contractor, relays and signals, exposed, concealed, in cable trays, ducts, plenums or other environmental air-handling spaces, FPLP, in hazardous locations up to Class I & II, Div. 2 and Class III, Div. 1 & 2 (per NEC® Articles 501, 502, 503, 530).

Product Specification Refer to page:

Fire Alarm® Control Cable 28
Fire Alarm® Control Cable Performance Chart 29

Parking Deck / Lot Cable™ – PVC Jacketed MC Cable

Galvanized Steel Armor with PVC Jacket

Features & Benefits

Galvanized steel armor with PVC jacket
UL listed for direct burial in earth or concrete encasement

Listed for -40˚C low temperature use

UL1569, 70,000 BTU and FT4 vertical tray flame listed

Sunlight and oil resistant with direct plow-in capability

Made in USA of US and/or imported materials

Applications

Branch circuit and feeder wiring for lighting, control and signal circuits in wet, dirty or oily locations, buried directly in earth or concrete, surface mounted or trenched for use in parking deck or parking lot applications, golf courses, ski mountains, docks, marinas, pumping stations and stadium lighting. Also used in continuous runs to outdoor or underground swimming pool motors, pumps and related equipment (per NEC® 680), fished, exposed or concealed cable trays, direct sunlight and hazardous locations up to Class I & II, Div. 2 and Class III, Div. 1 & 2 (NEC® Articles 501, 502, 503, 530).

Product Specification Refer to page:

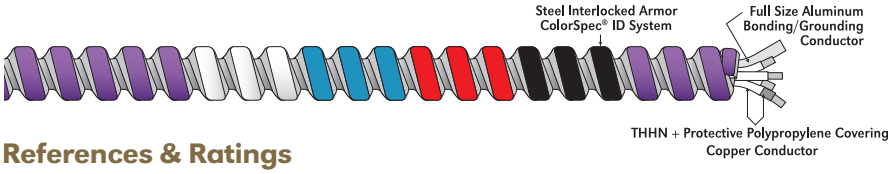
Parking Deck/Lot Cable™ PVC Jacketed Metal Clad Cable 26

MC-Quik® Steel Armor Cable –

MCI-A Cables (120/208V & 480Y/277V) Technical Specifications

Specification Description

Specification	MC-Quik®
Armor	Galvanized Interlocking Steel Strip (purple striped)
Conductors	Solid/Stranded Copper
Conductor Insulation	Type THHN with protective polypropylene covering on each insulated conductor (no messy assembly tape)
Maximum Temperature Rating	90°C (dry)
Grounding	One grounding means - armor PLUS full-sized aluminum ground/bond conductor NEC® 250.118(10)(b)
Neutral Conductor	White 120/208V - Gray 277/480V
Maximum Voltage Rating	600V



References & Ratings

- UL 1569, UL 83, UL 1479, UL 1581, UL 2556, E80042
- Federal spec A-A-59544 (formerly J-C-30B)
- NEC® 330, 300.22(C), 230.43, 250.118, 392, 396, 501, 502, 503, 530, 518, 520, 645, 690.31(E)
- Permitted for use in Cable Trays
- Meets all OSHA and HUD requirements
- May be surface mounted, fished and/or embedded in plaster
- UL Classified 1, 2, and 3 hour through (Fire) penetration product, R-14141
- NEC® 300.22(C) Environmental Air Handling Spaces
- Cable Tray Rated, install per NEC®
- Patent Pending
- Made in USA of US and/or imported materials

Product Codes, Trade Sizes, Conductors, Packaging & Weights

Product Code No. 250' Coil	Product Code No. 1000' Reel	Trade Size AWG	Copper Cond. Type	Conductor Colors	Bare Alum. Bonding/Bond Cond. AWG	Cable Nominal O.D. (in)	Approx. Weight 1000 Ft. (lbs.)
MC-Quik® Cable							
120/208V solid							
7701-42-00	7701-60-00	14/2	Solid	(black,white)	12	0.422	93
7702-42-00	7702-60-00	14/3	Solid	(black,red, white)	12	0.467	120
7703-42-00	7703-60-00	14/4	Solid	(black, red, blue, white)	12	0.503	144
7704-42-00	7704-60-00	12/2	Solid	(black, white)	10	0.463	122
7704-42-04	7704-60-04	12/2	Solid	(red, white)	10	0.463	122
7704-42-05	7704-60-05	12/2	Solid	(blue, white)	10	0.463	122
7705-42-00	7705-60-00	12/3	Solid	(black, red, white)	10	0.523	159
7705-42-04	7705-42-04	12/3	Solid	(red, blue, white)	10	0.523	159
7705-42-05	7705-60-05	12/3	Solid	(black, blue, white)	10	0.523	159
7706-42-00	7706-60-00	12/4	Solid	(black, red, blue, white)	10	0.565	208
7707-42-00	7707-60-00	10/2	Solid	(black, white)	8	0.525	182
7707-42-04	7707-60-04	10/2	Solid	(red, white)	8	0.525	182
7707-42-05	7707-60-05	10/2	Solid	(blue, white)	8	0.525	182
7708-42-00	7708-60-00	10/3	Solid	(black, red, white)	8	0.601	240
7708-42-04	7708-60-04	10/3	Solid	(red, blue, white)	8	0.601	240
7708-42-05	7708-60-05	10/3	Solid	(blue, black, white)	8	0.601	240
7709-42-00	7709-60-00	10/4	Solid	(black, red, blue, white)	8	0.651	309
120/208V Stranded							
7758-42-00	7758-60-00	12/2	Stranded	(black, white)	10	0.482	127
7759-42-00	7759-60-00	12/3	Stranded	(black, red, white)	10	0.539	166
277/480V Solid							
7704-42-01	7704-60-01	12/2	Solid	(brown, gray)	10	0.463	122
7704-42-02	7704-60-02	12/2	Solid	(orange, gray)	10	0.463	122
7704-42-03	7704-60-03	12/2	Solid	(yellow, gray)	10	0.463	122
7704-42-07	7704-60-07	12/2	Solid	(purple, gray)	10	0.463	122
7705-42-01	7705-60-01	12/3	Solid	(brown, orange, gray)	10	0.523	159
7705-42-02	7705-60-02	12/3	Solid	(orange, yellow, gray)	10	0.523	159
7706-42-01	7706-60-01	12/4	Solid	(brown, orange, yellow, gray)	10	0.565	208
7707-42-01	7707-60-01	10/2	Solid	(brown, gray)	8	0.525	182
7707-42-02	7707-60-02	10/2	Solid	(orange, gray)	8	0.525	182
7707-42-03	7707-60-03	10/2	Solid	(yellow, gray)	8	0.525	182
7707-42-07	7707-60-07	10/2	Solid	(purple, gray)	8	0.525	182
7708-42-01	7708-60-01	10/3	Solid	(brown, orange, gray)	8	0.601	240
7708-42-02	7708-60-02	10/3	Solid	(orange, yellow, gray)	8	0.601	240
7708-42-03	7708-60-03	10/3	Solid	(yellow, brown, gray)	8	0.601	240
7708-42-07	7708-60-07	10/3	Solid	(purple, brown, gray)	8	0.601	240
7709-42-01	7709-60-01	10/4	Solid	(brown, orange, yellow, gray)	8	0.651	309
7709-42-07	7709-60-07	10/4	Solid	(purple, brown, yellow, gray)	8	0.651	309

NOTE: All dimensions and weights are subject to normal manufacturing tolerances.

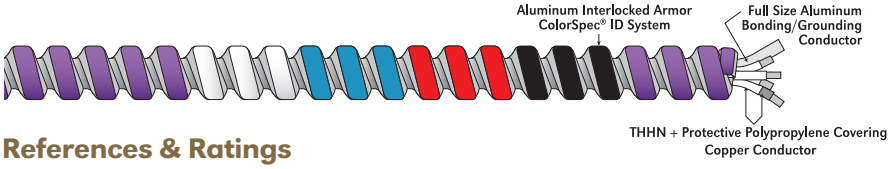
SEE CONNECTOR MCI-A CROSS-REFERENCE GUIDE FOR ASSISTANCE IN SELECTING AN MCI-A LISTED CONNECTOR.

MC-Quik® Lite Aluminum Armored Cable –

MCI-A Cables (120/208V & 480Y/277V) Technical Specifications

Specification Description

Specification	MC-Quik® Lite
Armor	Interlocked Aluminum Strip (purple striped)
Conductors	Solid/Stranded Copper
Conductor Insulation	Type THHN with protective polypropylene covering on each insulated conductor (no messy assembly tape)
Maximum Temperature Rating	90°C (dry)
Grounding	One grounding means - armor PLUS full-sized aluminum ground/bond conductor NEC® 250.118(10)(b)
Neutral Conductor	White 120/208V - Gray 277/480V
Maximum Voltage Rating	600V



References & Ratings

- UL 1569, UL 83, UL 1479, UL 1581, UL 2556, E80042
- Federal spec A-A-59544 (formerly J-C-30B)
- NEC® 330, 300.22(C), 230.43, 250.118, 392, 396, 501, 502, 503, 530, 518, 520, 645, 690.31(E)
- Permitted for use in Cable Trays
- Meets all OSHA and HUD requirements
- May be surface mounted, fished and/or embedded in plaster
- UL Classified 1, 2, and 3 hour through (Fire) penetration product, R-14141
- NEC® 300.22(C) Environmental Air Handling Spaces
- Cable Tray Rated, install per NEC®
- Patent Pending
- Made in USA of US and/or imported materials

Product Codes, Trade Sizes, Conductors, Packaging & Weights

Product Code No. 250' Coil	Product Code No. 1000' Reel	Trade Size AWG	Copper Cond. Type	Conductor Colors	Bare Alum. Bonding/Bond Cond. AWG	Cable Nominal O.D. (in)	Approx. Weight 1000 Ft. (lbs.)
MC-Quik® Lite Cable							
120/208V Solid							
3101-42-00	3101-60-00	14/2	Solid	(black,white)	12	0.422	66
3102-42-00	3102-60-00	14/3	Solid	(black,red, white)	12	0.467	88
3103-42-00	3103-60-00	14/4	Solid	(black, red, blue, white)	12	0.503	109
3104-42-00	3104-60-00	12/2	Solid	(black, white)	10	0.463	90
3104-42-04	3104-60-04	12/2	Solid	(red, white)	10	0.463	90
3104-42-05	3104-60-05	12/2	Solid	(blue, white)	10	0.463	90
3105-42-00	3105-60-00	12/3	Solid	(black, red, white)	10	0.523	122
3105-42-04	3105-60-04	12/3	Solid	(red, blue, white)	10	0.523	122
3105-42-05	3105-60-05	12/3	Solid	(black, blue, white)	10	0.523	122
3106-42-00	3106-60-00	12/4	Solid	(black, red, blue, white)	10	0.565	151
3107-42-00	3107-60-00	10/2	Solid	(black, white)	8	0.525	131
3108-42-00	3108-60-00	10/3	Solid	(black, red, white)	8	0.601	178
3109-42-00	3109-60-00	10/4	Solid	(black, red, blue, white)	8	0.651	242
277/480V Solid							
3104-42-01	3104-60-01	12/2	Solid	(brown, gray)	10	0.463	90
3104-42-02	3104-60-02	12/2	Solid	(orange, gray)	10	0.463	90
3104-42-03	3104-60-00	12/2	Solid	(yellow, gray)	10	0.463	90
3104-42-07	3104-60-07	12/2	Solid	(purple, gray)	10	0.463	90
3105-42-01	3105-60-01	12/3	Solid	(brown, orange, gray)	10	0.523	122
3106-42-01	3106-60-01	12/4	Solid	(brown, orange, yellow, gray)	10	0.565	151
3107-42-01	3107-60-01	10/2	Solid	(brown, gray)	8	0.525	131
3107-42-02	3107-60-02	10/2	Solid	(orange, gray)	8	0.525	131
3107-42-03	3107-60-03	10/2	Solid	(yellow, gray)	8	0.525	131
3107-42-07	3107-60-07	10/2	Solid	(purple, gray)	8	0.525	131
3108-42-01	3108-60-01	10/3	Solid	(brown, orange, gray)	8	0.601	178
3108-42-02	3108-60-02	10/3	Solid	(orange, yellow, gray)	8	0.601	178
3108-42-03	3108-60-03	10/3	Solid	(yellow, brown, gray)	8	0.601	178
3108-42-07	3108-60-07	10/3	Solid	(purple, brown, gray)	8	0.601	178
3109-42-01	3109-60-01	10/4	Solid	(brown, orange, yellow, gray)	8	0.651	242
3109-42-07	3109-60-07	10/4	Solid	(purple, brown, yellow, gray)	8	0.651	242
120/208V Stranded							
3158-42-00	3158-60-00	12/2	Stranded	(black, white)	10	0.482	94
3158-42-04	3158-60-04	12/2	Stranded	(red, white)	10	0.482	94
3158-42-05	3158-60-05	12/2	Stranded	(blue, white)	10	0.482	94
3159-42-00	3159-60-00	12/3	Stranded	(black, red, white)	10	0.523	126
3160-42-00	3160-60-00	12/4	Stranded	(black, red, blue, white)	10	0.585	158
3161-42-00	3161-60-00	10/2	Stranded	(black, white)	8	0.552	151
3162-42-00	3162-60-00	10/3	Stranded	(black, red, white)	8	0.625	202
3163-42-00	3163-60-00	10/4	Stranded	(black, red, blue, white)	8	0.680	261
277/480V Stranded							
3158-42-01	3158-60-01	12/2	Stranded	(brown, gray)	10	0.482	94
3158-42-02	3158-60-02	12/2	Stranded	(orange, gray)	10	0.482	94
3158-42-03	3158-60-03	12/2	Stranded	(yellow, gray)	10	0.482	94
3159-42-01	3159-60-01	12/3	Stranded	(brown, orange, gray)	10	0.539	126
3159-42-02	3159-60-02	12/3	Stranded	(orange, yellow, gray)	10	0.539	126
3159-42-03	3159-60-03	12/3	Stranded	(yellow, brown gray)	10	0.539	126
3160-42-01	3160-60-01	12/4	Stranded	(brown, orange, yellow, gray)	10	0.585	158
3161-42-01	3161-60-01	10/2	Stranded	(brown, gray)	8	0.552	151
3162-42-01	3162-60-01	10/3	Stranded	(brown, orange, gray)	8	0.625	202
3163-42-01	3163-60-01	10/4	Stranded	(brown, orange, yellow, gray)	8	0.680	260

NOTE: All dimensions and weights are subject to normal manufacturing tolerances.

SEE CONNECTOR MCI-A CROSS-REFERENCE GUIDE FOR ASSISTANCE IN SELECTING AN MCI-A LISTED CONNECTOR.

WM TAO & ASSOCIATES
CONSULTING ENGINEERS

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: August 8, 2016

Attention: **stl-cac@cannondesign.com**

Contact Person / WTA Field Inspector: Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Bill Shaw

Project No. WT 14127.01

☐ UPS ☐ Courier ☒ **Email**

Copies	No.	Description
1 PDF	261200E01	(Submittal No.'s) (R&B CxSRC - None)
		(Cannon #261200-003) - (Paric #15051-) – (WES #607)
		• **Wiring 600 Volts or Less**

Remarks:

c: **Kelvin Patel**
Kpatel@cannondesign.com

☒ **Furnish as Submitted** ☐ Furnish as Noted

☐ Rejected ☐ Revise & Resubmit

☐ Reviewed ☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

WTASHOP - Webster ISB - 26 1200-003

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, WTASHOP <wtashop@wmtao.com>
Date: 8/2/2016 2:48 PM
Subject: Webster ISB - 26 1200-003
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>
Attachments: 261200-003 Wiring 600V or Less Product Data.pdf

Attached for review.

Melissa Pirtle
Construction Admin
CANNONDESIGN
1100 Clark Ave
St. Louis, Missouri 63102
T 314.425.8797 • M
cannondesign.com

CANNONDESIGN

SUBMITTAL IDENTIFICATION SHEET

To be completed by Contractor/CM

WEBSTER UNIVERSITY ISB
PROJECT NAME

8274 BIG BEND BLVD
ADDRESS

NUMBER

WEBSTER UNIVERSITY
OWNER

CANNON DESIGN
ARCHITECT / ENGINEER

Joe Voypick
SUBMITTED BY

261200-003
CONTRACTOR / CM SUBMITTAL NO.

CANNON DESIGN SUBMITTAL NO.

DRAWING / DETAIL REFERENCE

261200
SPECIFICATION SECTION / PARAGRAPH

Guarantee Electrical
MANUFACTURER / SUPPLIER

ITEM / PRODUCT ID

REQUIRED DATE

PRIORITY

◯ CRITICAL

ITEM BEING SUBMITTED (check only one)

- ◯ Shop Drawings
- ◯ Samples (_____ copies)
- ◯ LEED Submittal
- ◯ Certification / Qualifications
- ◯ Record Documents
- ◉ Product Data
- ◯ Coordination Drawing
- ◯ Calculations
- ◯ Schedules
- ◯ O&M Manuals
- ◯ Other _____

ITEM BEING SUBMITTED FOR (check only one)

◉ Action ◯ Information Only ◯ Record

REMARKS OR DEVIATIONS

CONTRACTOR / CM CERTIFICATION
(SUBMITTALS NOT CERTIFIED WILL BE RETURNED WITHOUT REVIEW)

PARIC

PARIC CORPORATION
SUBMITTAL STAMP

THIS SHOP DRAWING HAS BEEN REVIEWED BY PARIC CORPORATION

Subcontractor remains responsible for dimensions, quantities, coordination with other trades and compliance with contract documents.

By:
Devin D. Gates

Joe Voypick
REVIEWED BY

8/2/16
DATE

To be completed by Reviewer

26 1200-003
CANNON DESIGN SUBMITTAL NUMBER

8/2/16
RECEIVED DATE

- ◯ A. No Exceptions Taken
  No further review of submittal is required.
- ◯ B. Make Corrections Noted
  Incorporate corrections in work; resubmission is not required.
- ◯ C. Revise and Resubmit
  Revise as noted, and resubmit for review.
- ◯ D. Rejected
  Submittal is not in compliance with Contract Documents; provide new submittal.
- ◯ E. For Record / Information Only
  Submittal was reviewed for Record / Information purposes only.
- ◯ F. Not Required for Review
  Submittal is not required by Contract Documents and has not been reviewed.

Review is for conformance with the design concept of this project and for general compliance with contract documents. Contractor is responsible for quantities, dimensions and compliance with contract documents and for information that pertains to fabrication processes, construction techniques and coordination of this work with all trades which will be affected thereby. This review is null and void if submittal deviates from contract documents and does not indicate or note deviations.

A/E COMMENTS ◯ See attached sheet(s) for additional comments

REVIEWED BY

DATE

77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0167

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 08/02/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Wiring 600V or Less Product Data

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☑ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	**SENT VIA:**	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☑ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	*Package*	*Code*	*Rev.*	*Copies*	*Date*	*Description*	*Status*
Submittal		261200-003	1		08/02/2016	Wiring 600V or Less Product Data	Submitted

NOTES:

CC:

Signed: _____

Devin Gates

GUARANTEE
ELECTRICAL CONSTRUCTION

3415 Bent Avenue
St. Louis, MO 63116
Phone: (314) 772-5400
Fax: (314) 772-2526

Transmittal

To Paric Corporation

Date 8/1/16

Job Number 11317

Job Name Webster Univ. ISB Building

Attention Devin Gates

Transmittal Number 11317-013

We are sending you:

- X Attached
- ___ Under separate cover, the following:
- ___ Preliminary Drawings
- ___ Samples
- ___ Construction Drawings
- ___ Copy of Letter
- ___ Specifications
- ___ Other

Quantity	Drawing #	Date/Revision	Description
1			Submittal for Wire 600V or Less - Spec
			Section 26 12 00

These are transmitted as checked:

- X For Your Review & Comment
- X For Approval
- ___ For Your File
- ___ As Requested
- ___ Approved As Noted
- ___ Returned For Corrections
- ___ Approved As Submitted
- ___

Copy: Transmittal Enclosure

___ ___

___ ___

___ ___

Rick Branstetter

Signed: Rick Branstetter, Project Manager