

# VITALink® MC Power Cable

## FREQUENTLY ASKED QUESTIONS



Omni Cable now stocks RSCC's VITALink® MC power cables. These cables are listed by UL as 2-Hour Fire Rated when installed in accordance with RSCC's installation procedures and system listings. Check out the frequently asked questions (FAQ) about this cable below. If you have additional questions, please contact your Account Manager.

### Do I need a ground wire?

---

Not usually. The armor of VITALink® MC is copper and exceeds the requirements in NEC Table 250.122 Minimum Size Equipment Grounding Conductors. There may be circumstances where oversized grounds are required. Check with your Omni Cable Account Manager to find the grounding value of your specific size.

### Can I run this just like a standard MC cable according to the NEC?

---

Yes, although if you want it to be approved as a 2-Hour Fire Rate Cable, you must install it in accordance with the UL Certification FHIT 120 and RSCC's instructions.

### I thought all 2-Hour Fire Rated Cables were suspended by UL.

---

UL did suspend the listing of all 2-Hour Fire Rated Cables, but RSCC has requalified VITALink® MC as a 2-Hour Fire Rate Cable by UL. RSCC always maintained their status as a 2-Hour Fire Rated Cable with FM.

### Can you run VITALink® MC vertically?

---

Yes, VITALink® MC is approved for use vertically and horizontally. VITALink® is a fully qualified system that can be easily installed using standard installation methods for MC cables.

### The armor is copper, what kind of connectors should I use?

---

RSCC recommends using standard MC connectors which are either brass, stainless, or nickel so there are not concerns for dissimilar metals.

### Three or four conductor 500 MCM are big cables to manage on my job site, is there any way to make it easier?

---

VITALink® comes in single conductors which can be run together in a triangle (3) or square (4) bundle as described in NEC Article 330.80 (B). This also allows for greater current carrying capability.

### Does VITALink® MC come in singles in all sizes?

---

VITALink® MC is available in singles for 1/0 and larger. Smaller sizes are only available in multiple conductor configurations.

### Where can I buy VITALink® MC?

---

Call your local electrical distributor and have them contact Omni Cable. At Omni Cable, we stock sizes to help you complete your project immediately.

# Circuit Integrity Cable (CIC) 2-HR FIRE RATED



VITALink® Cable is designed to support Life and Fire Safety. This cable offers “survivability” for 2 hour in harsh environments while being fully operational in order for safe evacuation of building occupants. It has achieved riser rating (FPLR) and re-certified under the new UL 2196 guidelines for 2-hour fire resistive cables for use in FHIT system 40A.

## Applications

- Emergency Voice-Alarm Communication (EVAC) Smoke and Fire Alarm Systems
- Fireman’s Telephone and Area of Refuge Communication Systems
- Visible Notification Appliances

## How Omni Cable Can Help You!

We can provide training/education on these cables through Omni Cable Lunch and Learns, and we have a dedicated internal resource to help with your questions.



**STANDARDS**

- Certified to ANSI/UL 2196 (Tests for Fire Resistive Cables) per UL FHJR. R27557
- UL listed Type FPLR per UL 1424
- UL Listed Type CMR per UL 444
- UL Listed Type CL3R per UL 13
- Riser rated per UL 1666
- 300V rated per NEC
- Sunlight Resistant and Wet Location Rated
- Low Smoke, Zero Halogen
- California State Fire Marshal Approved

# RUN VERTICALLY

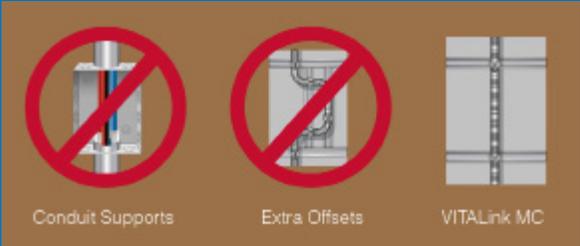
VITALink® MC Power Cable



Are you installing long vertical lengths of large, continuous length feeder cables in high rise buildings? For 2-hour fire rated applications, specify and use the most trusted brand in the market — VITALink® MC.

When cabling a high rise structure, the National Electric Code (NEC) calls out specific installation methods for long vertical runs (per Table 300.19A). The NEC directs the installer to provide supports at specific distances depending on the size of the cables, some as frequently as every 40 feet. It can become labor intensive and costly to install offsets or conductor supports.

Also, the need for installing additional offsets or supports takes away valuable space in the riser where cables are run VITALink® MC Cables are designed with the technology to provide the fire safety for the product because of additional support between the conductors and the armor to prevent cable pull out during long vertical installations. VITALink® MC is UL Listed to UL 2196 for 2 hours and approved for use in your longest vertical runs.



**Conduit Supports**      **Extra Offsets**      **VITALink MC**

*Save time, riser space, and money.*

*Choose VITALink® MC cables.*



Selling Exclusively Through Electrical Distribution Since 1977 | phone: (800) 292-OMNI | website: [omnicable.com](http://omnicable.com)

Atlanta • Boston • Charlotte • Chicago • Denver • Houston • Los Angeles • Philadelphia • San Francisco • Seattle • St. Louis • Tampa

# VITALink® MC Power Cable

## COST COMPARISON



The National Electrical Contractors Association (NECA) publishes labor rates for installation of electrical components. Using the NECA labor rates, we compared the labor units of MC vs. MI and noticed that it takes additional time and cost to install and terminate the MI Cable. Take a look below!

### Labor Comparison

#### Installation

Cable Construction	MC installation labor hrs.*	MI installation labor hrs.*	% more MI labor*
4C 14AWG	20	55	64%
2C 10AWG	21	60	68%
3C 1AWG	24	70	66%

#### Termination

Cable Construction	MC terminated labor hrs.*	MI terminated labor hrs.*	% more MI labor*
4C 14AWG	.06	N/A	N/A
2C 10AWG	.06	.6	90%
3C 1AWG	.06	.7	91%

**Time = Money! See example below.\***

#### MC Cable

##### Installation & Termination Costs

- **Cable cost** - \$30,000
- **Cable install** = 3x20 = 60 hrs.  
x \$100 = \$6,000
- **Connectors** - \$73 x 12 = \$876
- **Termination** - 12 x .7 = .84 hrs.  
x \$100 = \$84

**VITALink®**

**Total - \$36,960**

#### MI Cable

##### Installation & Termination Costs

- **Cable cost** - \$30,000  
MI 3C 10AWG pricing of \$10/ft.  
with 6 runs of 500'
- **Cable install** = 3000' or labor units of  
210 hrs. (3x70) with NYC union  
contractor at \$100/hr. = \$21,000
- **Connectors** - six runs = 12 connections  
.7x12 = 8.4 hrs. x \$100/hr. = \$840
- **Termination** - \$73 x 12 = \$876

**Total - \$52,716**

# VITALink® MC Power Cable

## 2-HR FIRE RATED



VITALink® MC power cable is listed by UL as 2-hour fire rated when installed in accordance with RSCC installation procedures and system listings. This cable meets the requirements of an “Electrical Circuit Protective System” as referred to in Articles 695 and 700 of the 2-Hour National Electrical Code (NEC). The details of this system appear in Electrical Circuit Integrity System (FHIT), System No. 120 of the UL Fire Resistance Directory.

### Applications

The power cable supports the following critical systems:  
Fire Pump Feeders & Emergency Generator Feeders

### Finding Opportunities

- Identify contractors who perform this type of work in your market area.
- See a crane, stop the car!
- Call Omni Cable and have the following handy: project name, general contractor, electrical contractor and bid/buy information.
- We will provide you with pricing/lead time specifications.
- We will provide you with technical resources around specification/design/application.

### How Omni Cable Can Help You!

We can provide training/education on these cables through Omni Cable Lunch and Learns, and we have a dedicated internal resource to help with your questions.



**STANDARDS**

- UL listed, NEC Type MC in accordance with UL Standard 1569
- 2-hour fire rated per UL standard 2196 following ASTM E119 (1,850°F with water hose stream)
- Electrical Circuit Integrity Systems (FHIT) — System No. 120 of the UL Fire Resistance Directory
- Exceeds NEC Article 695 & 700 fire endurance requirements
- Rated FT-4 / IEEE 1202 Vertical Flame test; -ST1, limited smoke
- For use in wet locations to 90°C
- Armored with copper sheath that exceeds the NEC requirement for equipment grounding conductor