

## Manufacturer's Instructions for Lifeline® MC: Two-Hour Fire Resistive Cables

### Technical Information Sheet #400

**This Technical Information Sheet (TIS) covers Lifeline® MC: UL Certified and Listed Two-Hour Fire Resistive Power Cables.**

#### **Applications**

Lifeline® MC Cables have been qualified and listed to the demanding requirements of UL 2196, Tests for Fire Resistive Cables, and are UL Listed Type MC.

Lifeline® MC Cables meet various industry code requirements of NFPA 70, NFPA 101, and NFPA 72 for fire resistance according to UL Standard 2196 when selected and installed per applicable codes including federal, state, local and municipal rules, laws and regulations as well as Electrical Circuit Integrity System 50 (FHIT 50) and TIS #400 Manufacturer's Instructions. Note that Authorities Having Jurisdiction (AHJ) should be consulted for approval prior to cable purchase and installation.

#### **Requirements**

##### **1) Codes / Laws / Regulations**

Selection and installation compliance is dependent on the applicable issue of any codes or addendums which covers the use of Lifeline® MC, Fire Resistive Cables.

##### **2) UL Electrical Circuit Integrity System #50 (FHIT 50)**

The most current listing details and supporting information applicable to Lifeline® MC Cables' fire resistive rating classification can be obtained from UL's "Online Certification Directory" website by searching for keyword: "FHIT 50".

##### **3) Manufacturer's Instructions - TIS #400**

All Lifeline® MC Cable products are covered by specific datasheets and supporting Technical Information Sheets that provide the user with information to properly select and install Lifeline® MC Cables in a reliable and trouble-free manner. Do not hesitate to contact your Lifeline® MC Cable representative should you have any questions.

#### **Installation Parameters**

##### **1) Cable: Lifeline® MC**

Code compliant cable classified as two-hour fire resistive according to UL 2196 when installed in accordance with FHIT 50, the national electric code and all applicable federal, state, and municipal regulations.

##### **2) Securing and Supporting Spacing**

Code compliant two-hour fire resistive installation in both horizontal and vertical orientations requires the cable be secured and supported at intervals not exceeding four feet (48 inches), at each side cable bends, and within one foot (12 inches) of cable connector terminations. Noted exception: support spacing described above is in lieu support spacing allowed in the National Electric Code and is required for compliant two-hour fire resistive installation.

##### **3) Supports and Fasteners**

Cables shall be secured to supports using steel two-piece single-bolt pipe clamps such as T&B 703 series. Supports shall be steel components or other fire rated components (described in FHIT 50) proven to meet the required fire resistance ratings. No substitute components are allowed.

##### **4) Cable Bending**

The installed bend radius of cables shall not be less than seven times the armor external diameter.

##### **5) Cable Pulling and Handling**

Proper cable pulling and handling techniques are essential ensuring a damage free installation. The Lifeline MC Installation Manual (TIS #401) describes the recommended best practices.

#### **Additional Features Available**

##### **1) Optional Outer Jacket**

A corrosion resistant outer jacket available over copper armor for applications with destructive corrosive conditions.

##### **2) Splices**

A splice is available. See FHIT 50 and contact your Lifeline® MC Cable representative for additional instructions.

