# Alumaflex™ Riser MC™ THHN/THWN-2 Aluminum Conductor Feeder Cable

AlumaFlex<sup>™</sup> THHN/THWN-2 Insulated Singles with 8000 series Triple E<sup>™</sup> Aluminum Alloy. Bare AlumaFlex<sup>™</sup> Aluminum Alloy Grounding Conductor. UL Listed. 600 Volts. Binder Sheath for Continuous Conductor Support. Lightweight Aluminum Interlocked Armor.

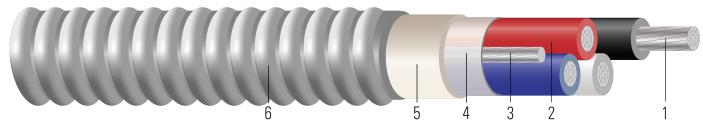


Image not to scale. See Table 1 for dimensions.

#### **CONSTRUCTION:**

- 1. Conductor: Class B compact stranded 8000 Series aluminum per ASTM B800 and ASTM B801 or B836
- 2. Insulation: All phases are insulated with Polyvinyl Chloride with Nylon Sheath Type THHN/THWN-2
- 3. Ground: Bare aluminum ground
- 4. Binder: Mylar tape
- 5. Polymeric Binder: Polymeric binder sheath under armor for continuous conductor support
- 6. Armor: Aluminum Interlocked Armor

#### **APPLICATIONS AND FEATURES:**

Southwire Armorlite® Type MC Riser Feeder cable is suitable for use as follows:

- Riser cable, vertical applications
- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- 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.
- Installation in cable tray and approved raceways, or as aerial cable on a messenger.
- Under raised floors for information technology equipment conductors and cables per NEC 645.5.
- Class I Div. 2, Class II Div 2, & Class III Div. 1 Hazardous Locations.
- Conductors are Type THHN/THWN-2 rated 90°C Wet and Dry. Unjacketed MC cables are not rated for wet locations.

Southwire Armorlite® Type MC Riser Feeder Cable - meets or exceeds the following requirements:

- UL Online Product Guide Info Metal-Clad Cable (PJAZ) ( www.ul.com )
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 330
- Listed for use in UL 1, 2 and 3 Hour Through Penetration Firestop Systems

#### **SPECIFICATIONS:**

- ASTM B800 8000 Series Aluminum Alloy Wire
- ASTM B801 Concentric-Lay-Stranded Conductors of 8000 Series Aluminum Alloy



Southwire Company, LLC | One Southwire Drive, Carrollton, GA 30119 | www.southwire.com

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- ASTM B836 Compact Rounded Stranded Aluminum Conductors
- UL 83 Thermoplastic Insulated Wires and Cables
- UL 1569 Metal-Clad Cables
- UL 1479 Standard for Safety Fire Tests of Penetration Firestops
- UL 1685 FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- IEEE 1202 FT4 Flame Test (70,000) BTU/hr Vertical Tray Test
- Buy American: Compliant with Buy American Requirements, found in 49 U.S.C. § 5323(j); specify "Made in the USA Only!" when ordering to ensure your project receives American made products.

### **SAMPLE PRINT LEGEND:**

{SQFTG} SOUTHWIRE {UL} X/C XX AWG COMPACT 8000 AL. --- TRIPLE E ALLOY AA8176 THHN/THWN-2 CDRS 600V GW 1 X X AWG 3E AL TYPE MC FOR CT USE.

### Table 1 – Weights and Measurements

Stock Number	Cond. Size	Conductor Number	Color	Diameter Over Conductor	Conductor Stranding	Insulation Thickness	Ground Size	Diameter Over Armor	Overall Weight
	AWG/ Kcmil			inch		mils	No. x AWG	inch	lbs/1000ft
646549◊	300	3	BN/OE/ YW	0.569	35	70	1x1 GG	2.093	1858

All dimensions are nominal and subject to normal manufacturing tolerances

 $\Diamond$  Cable marked with this symbol is a standard stock item

\* Strand count meets minimum number per ASTM

## **Table 2 – Electrical and Engineering Data**

Cond. Size	Conductor Number	Min. Bend Radius	Max Pull Tension	DC Resistance at 25°C	AC Resistance at 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity Raceway 60°C	Allowable Ampacity Raceway 75°C	Allowable Ampacity Raceway 90°C
AWG/ Kcmil		Inches	Lbs	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
300	3	13.7	5400	0.059	0.071	0.041	195	230	260

\* Ampacities based upon 2023 NEC Table 310.16. See NEC sections 310.15 and 110.14(C) for additional requirements.

\* Ampacities have been adjusted for more than Three Current-Carrying Conductors.

