

TYPE MC - VERTICAL RUN - COPPER CONDUCTOR - STEEL ARMOR - 600V THHN/THWN-2 INNERS

ENGINEERING SPECIFICATIONS

Standards

Underwriters Laboratories Standards UL-83, UL-1569, UL-1581, UL-2556 for type MC; Federal Specification A-A59544; NEMA RV 1-2014; UL 1685 Method 2/FT4/IEEE 1202 (70,000 Btu/hr) Vertical Flame Test; NFPA 70 (NEC®) Article 330; ARRA 2009 Section 1605 "Buy American" Compliant; RoHS Compliant; MasterSpec Division 26 Sections 260519, 260523; UL Listing #E-301130



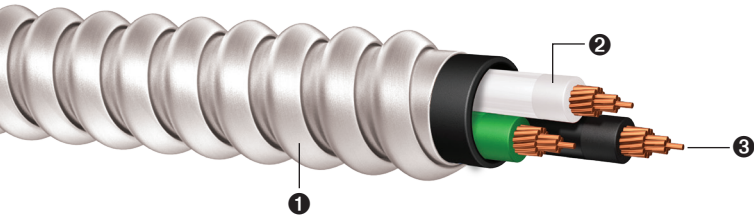
CONSTRUCTION

Available in sizes 14 AWG through 750 KCMIL, Encore's Metal-Clad Cable is constructed with soft-drawn copper, Type THHN/THWN-2 conductors rated 90°C dry locations. Sizes 14 AWG through 1 AWG contains a green insulated grounding conductor. Larger sizes are supplied with a bare ground conductor. All conductors are cabled together with separator tape containing the identification print legend to form the cable core and a thick, polymeric binder material is applied under the armor. Interlocked galvanized lightweight steel armor is applied over the entire assembly.

APPLICATIONS

Type MC cable shall be permitted as follows:

- Permitted use for services, feeders, and branch circuits in residential, commercial, industrial, and non-patient care spaces of health care facilities;
- Acceptable for power, lighting, control, and signal circuits;
- Allowable in concealed or exposed systems;
- Permitted use in dry locations and embedded in plaster finish on brick or other masonry except in damp or wet locations;
- Utilized for environmental air-handling spaces (NEC 300.22)(C)(1)) as well as allowable in assembly occupancies (NEC 518.4);
- Permissible in theaters, audience areas of motion pictures, television studios, and similar locations (NEC 520.5);
- Allowable installations in approved raceways and cable trays (NEC 392);
- Suitable for installation under raised floors for IT equipment (NEC 645.5(E));
- Permitted in Class I Div. 2, Class II Div. 2, and Class III Div. 1 Hazardous Locations;
- Listed for use with UL 1479 - 1, 2, and 3 Hour Through-Penetration Firestop Systems.



- ① Interlocked Galvanized Lightweight Steel Armor
- ② Separator Tape
- ③ THHN/THWN-2 Copper Conductors

Conductors			Inner Binder Thickness (in)	Outside Diameter Over Jacket (in)	Outside Diameter Over Steel Armor (in)	Approximate Net Weight (lbs/1000 ft)	Allowable Ampacity (Amps) ¹		Standard Packaging (ft)
AWG/No.	Type	Ground					75°C	90°C	
1/0-3	Stranded	6 AWG Green Insulated	0.080	1.206	1.453	1,861.55	150	170	1000' Reels
1/0-4	Stranded	6 AWG Green Insulated	0.080	1.348	1.595	2,292.60	150	170	1000' Reels
2/0-3	Stranded	6 AWG Green Insulated	0.080	1.292	1.539	2,169.35	175	195	1000' Reels
2/0-4	Stranded	6 AWG Green Insulated	0.080	1.447	1.694	2,693.74	175	195	1000' Reels
3/0-3	Stranded	4 AWG Green Insulated	0.080	1.419	1.666	2,612.90	200	225	1000' Reels
3/0-4	Stranded	4 AWG Green Insulated	0.080	1.590	1.837	3,252.25	200	225	1000' Reels
4/0-3	Stranded	4 AWG Green Insulated	0.080	1.529	1.776	3,063.46	230	260	1000' Reels
4/0-4	Stranded	4 AWG Green Insulated	0.110	1.775	2.072	4,194.49	230	260	1000' Reels
250-3	Stranded	4 AWG Green Insulated	0.080	1.634	1.881	3,519.87	255	290	1000' Reels
250-4	Stranded	4 AWG Green Insulated	0.110	1.895	2.192	4,812.24	255	290	1000' Reels
300-3	Stranded	3 AWG Green Insulated	0.110	1.806	2.103	4,443.09	285	320	1000' Reels
300-4	Stranded	3 AWG Green Insulated	0.110	2.025	2.322	5,564.59	285	320	1000' Reels
350-3	Stranded	3 AWG Green Insulated	0.110	1.907	2.204	4,984.23	310	350	1000' Reels
350-4	Stranded	3 AWG Green Insulated	0.110	2.129	2.426	6,263.80	310	350	1000' Reels
400-3	Stranded	3 AWG Green Insulated	0.110	2.002	2.299	5,515.45	335	380	1000' Reels
400-4	Stranded	3 AWG Green Insulated	0.110	2.228	2.525	6,951.97	335	380	1000' Reels
500-3	Stranded	2 AWG Green Insulated	0.110	2.176	2.473	6,545.33	380	430	1000' Reels
500-4	Stranded	2 AWG Green Insulated	0.110	2.424	2.721	8,284.57	380	430	1000' Reels
600-3	Stranded	2 AWG Green Insulated	0.110	2.444	2.741	7,711.74	420	475	1000' Reels
600-4	Stranded	2 AWG Green Insulated	0.110	2.713	3.010	9,790.04	420	475	1000' Reels
750-3	Stranded	1 AWG Green Insulated	0.110	2.661	2.958	9,376.20	475	535	1000' Reels
750-4	Stranded	1 AWG Green Insulated	0.110	3.019	3.316	12,159.18	475	535	1000' Reels

¹ Ampacity of conductors are based on NFPA 70 (NEC) Table 310.15(B)(16). See 110.14(C), 240.4(D) and 310.15(B) for other limitations where applicable.

For equipment marked for use at higher temperatures, the conductor ampacity shall be limited to the following per NEC 110.14(C):

75°C when terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90°C for ampacity derating purposes.

When the neutral is considered current-carrying conductor, the ampacity of 4/C cables shall be reduced by a factor of 0.80 per NEC 310.15(B)(3)(a).

The above data is approximate and subject to normal manufacturing tolerances.

PRINT LEGEND: ENCORE WIRE CORP (SIZE) TYPE MC 600 VOLTS (UL) TYPE THHN OR THWN INSULATED CONDUCTORS FOR USE IN CABLE TRAYS DATE TIME OPERATOR QC

FEATURES

Installation costs reduced up to 50% over raceway and wire. Insulating anti-short bushings are supplied with each reel or coil, but not required per Section 330.40 of the NEC. For ease of installation and pulling, cable is reverse wound on reels.

Standard Conductor Color Coding

No.	120V/208V/240V	No.	277V/480V
2	Black/White	2	Brown/Gray
3	Black/Red/White	3	Brown/Orange/Gray
4	Black/Red/Blue/White	4	Brown/Orange/Yellow/Gray
Ground	Bare	Ground	Bare

Additional colors available subject to ERO