



TO: To Whom It May Concern

FROM: Paul W Abernathy- Codes and Standards

DATE: 9/21/2023

RE: Metal-Clad Cable Transitions

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As Leaders in the Codes and Standards World, Encore's C & S Team gets questions from time to time that warrant a uniformed response to help assist building officials, electrical inspectors, and electrical engineers to better understand the acceptable, and in many cases vital information to the safe and compliant use of an Encore Wire product.

One frequent question asked is "Can the armor be stripped off the "MC Cable" and transition the inner conductors into other raceways, such as Electrical Metallic Tubing (EMT)?

Let us start by understanding the marking requirements in UL 1569, Section 6 for Metal-Clad Cable.

1. In terms of the "cable", itself the required markings, such as conductor voltage, and manufacturer information, can be on an outer surface, such as PVC Jacketed MC, or on marking tape located inside of the MC Cable, or even on the internal conductors themselves. These markings will be every 24 inches, regardless of surface markings or a marking tape inside the cable assembly.

When a licensed electrician makes a "transition", using a *listed* transition fitting, from traditional interlocked MC Cable to EMT, the individual conductors "**May or May Not**" be individually marked as referenced in 310.8(A) of the 2023 *National Electrical Code[NEC]*. This can cause those charged with approving (AHJ – Authority Having Jurisdiction) an installation to be concerned when there are no markings on the individual conductors. Thankfully, the *NEC* has the installer covered as 310.8(B)(2) permits internal "marking tape" to contain all the relevant information about the actual internal conductors.

Typically, when you transition from MC Cable to a raceway like EMT, the electrician would remove all the binder material, and of course the marking tape as well. At this point, it is your responsibility, as the installer, to show the inspection authority that the conductors don't require individual markings because UL 1569 does not require it, and the *NEC* permits the marking tape to serve the identifying requirement as noted in 310.8(B)(2). However, the inspection authority may demand to see the marking tape or product information that establishes its validity.

The effort of this technical document is to help express that Encore Wire Metal-Clad Cable does contain the "marking tape" with the pertinent information when individual conductors are not specifically marked. For more information on Encore Wire Products please contact your local Encore Wire Representative and of course feel free to reach out to us here at Codes and Standards via email at [Codes@encorewire.com](mailto:Codes@encorewire.com)

Best regards,

A handwritten signature in black ink, appearing to read "Paul W. Abernathy".

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