

Topic: Types of Flexible Metal Enclosures for Electrical Conductors

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For more information, contact the Technical Service Department at 866-209-2404.

This is to clarify some of the electrical trade terminology used for certain types of flexible metal enclosures sometimes encountered in firestopping.

Armored Cable: Type AC

2002 NFPA 70 "National Electric Code" ARTICLE 320
1999 NFPA 70; Article 333

Definition**Armored Cable, Type AC** – A fabricated assembly of insulated conductors in a flexible metallic enclosure.
ConstructionType AC cable shall have an armor of flexible metal tape and shall have an internal bonding strip of copper or aluminum in intimate contact with the armor for its entire length.
Also Known As**"BX"** was a trade name for Type AC cable and is now used interchangeably with the NEC designation.

Metal-Clad Cable: Type MC

2002 NFPA 70 "National Electric Code" ARTICLE 330
1999 NFPA 70; Article 334

Definition**Metal Clad Cable, Type MC** – A factory assembly of one or more insulated circuit conductors with or without optical fiber members enclosed in an armor of interlocking metal tape, or a smooth or corrugated metallic sheath.

Flexible Metal Conduit: Type FMC

2002 NFPA 70 "National Electric Code" ARTICLE 348
1999 NFPA 70; Article 350

Definition**Flexible Metal Conduit (FMC)** – A raceway of circular cross section made of helically wound, formed, interlocked metal strip.
Also Known As**"Greenfield"** was a manufacturer of flexible metal conduit.

Notes: These are the NEC type designations for these materials. For each of these types, there may be variations in construction or use based on manufacturer or application. Often tradesmen use jargon to refer to these materials, see the Also Known As points for some of these jargon terms.

Cable enclosures are installed with the conductors in place. *Conduit* enclosures are installed empty, with conductors pulled through later. Some jurisdictions prefer the use of conduit enclosures to cable enclosures. For firestopping purposes, cables (Types AC and MC) are listed under Category XHEZ in the UL Firestopping directory, primarily in systems numbers from 3000-3999, but may also be included in systems with numbers from 4000-4999 or 8000-8999. Conduits (Type FMC) are listed under Category XHEZ in the UL Firestopping directory, primarily in systems numbers from 1000-1999, but may also be included in systems with numbers from 3000-3999, 4000-4999 or 8000-8999. Manufacturers of UL Classified through-penetrating products are listed under the Through-Penetrating Products (XHLY) category in the UL Fire Resistance Directory, Vol 2.