

Comparison of AC, HCF, & MC Cables

	Armored Cable Type AC (ACTHH)	HCF Type AC (ACTHH)	Metal Clad Cable Type MC	Metal Clad Cable Type MC/IG®
U.L. Mfg. Standard	U.L. 4	U.L. 4	U.L. 1569	U.L. 1569
NEC References	Article 320, 645	Articles 320, 517, 518, 645	Articles 330, 518, 645	Articles 330, 518, 645
Conductors	Copper	Copper	Copper	Copper
Conductor Insulation	THHN 90° C	THHN 90° C	THHN 90° C	THHN 90° C
Voltage Rating	600V	600V	600V	600V
Conductor Covering	Paper wrap on each	Paper wrap on each	Polypropylene assembly tape overall	Polypropylene assembly tape overall
No. of Conductors	2-4 Circuit conductors	2-4 Circuit conductors plus ground	One or more with grounding conductor	One or more with two grounding conductors
Sizes Manufactured	14 AWG - 1 AWG	14 AWG - 1 AWG	18 AWG - 250 KCMIL	12 AWG & 10 AWG
Armor	Interlocked steel or aluminum	Interlocked steel or aluminum	Interlocked steel or aluminum	Interlocked steel
Insulated Bushings	Required	Required	Optional	Optional
Cable Tray Rated	Yes	Yes	Yes	Yes
Fire Wall Rated	Yes; 1, 2 and 3 hour rated for through penetrations	Yes; 1, 2 and 3 hour rated for through penetrations	Yes; 1, 2 and 3 hour rated for through penetrations	Yes; 1, 2 and 3 hour rated for through penetrations
Min. Bend Radius	5 times cable O.D.	5 times cable O.D.	7 times cable O.D.	7 times cable O.D.
Identification Method	Indent on armor	Indent on armor	Marker tape under armor or indent on armor	Marker tape under armor or indent on armor
Grounding Means	Combined armor/bond wire = 1 equipment	Combined armor/bond wire plus green grounding conductor = 2 grounding means	One green insulated or bare copper grounding conductor	Two insulated grounding conductors; green; green/yellow conductor
Environmental Air Ceilings	Yes; 300.22 (C)	Yes; 300.22 (C)	Yes; 300.22 (C)	Yes; 300.22 (C)
Applications	Branch circuits and feeders in both exposed and concealed work; embedded in plaster finish on brick or other masonry (except damp or wet locations); fished or run in air voids of masonry block or tile walls.	Branch circuits and feeders in hospitals, nursing homes and medical centers (areas of patient care); where redundancy of grounding is required; where an isolated or dedicated ground is required (e.g., computer power circuits).	Branch circuits, feeders and service for power, lighting, control, and signal circuits. Exposed or concealed, in any approved raceway. As open runs of cable or aerial cable on a messenger. In hazardous conditions as permitted in NEC Articles 501, 502, and 503.	Branch circuits, feeders and service for power, lighting, control, and signal circuits. Exposed or concealed, in any approved raceway. As open runs of cable or aerial cable on a messenger. In hazardous conditions as permitted in NEC Articles 501, 502, and 503.



Includes Copper grounding conductors