

# PVC Jacketed HCF MC<sup>AP</sup> Type MC All Purpose Hospital Care Facility



14 AWG through 8 AWG Copper THHN Insulated Conductors and Green Insulated Ground Conductor. Full-Sized Aluminum Equipment Grounding/Bonding Conductor. UL Listed. 600 Volts. Rated VW-1. Green Lightweight Aluminum Interlocked Armor is Part of Equipment Bonding/Grounding Path. Sunlight Resistant, Direct Burial Overall PVC Jacket.

## APPLICATIONS

Southwire PVC Jacketed HCF MC<sup>AP</sup> Type MC Cable is suitable for use as follows:

- Branch-circuit wiring for patient care areas of hospitals, medical centers, and other health care facilities (when installed in accordance with NEC<sup>®</sup> Articles 517 and 330, and mechanically protected per Article 300.4). Such areas include nursing homes, dental offices, clinics, and outpatient facilities. Use in hazardous anesthetizing areas is prohibited.
- Applications requiring redundant, dedicated or isolated grounding paths.
- Suitable for Wet Location per NEC 330.10(11)
- Direct burial applications, embedded in concrete, and where exposed to cinder fills, strong chlorides, caustic alkalis, or vapors of chlorine or of hydrochloric acids.
- Fished or embedded in plaster.
- Places of Assembly per NEC<sup>®</sup> 518.4 and theaters per NEC<sup>®</sup> 520.5.
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC<sup>®</sup> 645.5(D) & 645.5(D)(2).
- Use with UL Listed MCI-A fittings.

## STANDARDS & REFERENCES

Southwire PVC Jacketed HCF MC<sup>AP</sup> Type MC Cable fully meets or exceeds the following requirements:

- UL 83, 1569 and 1063
- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) ( [www.ul.com](http://www.ul.com) )
- NFPA 70 (National Electrical Code), Article 330
- Federal Specification A-A59544 (formerly J-C-30B)
- IEEE 1202 (70,000 Btu/hr) Vertical Cable Tray Flame Test
- Listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems
- REACH/RoHS-2 (Chemical Limit) Compliant

## CONSTRUCTION

Southwire PVC Jacketed HCF MC<sup>AP</sup> Type MC Cable is constructed with solid soft-drawn copper Type THHN circuit conductors (rated 90°C dry), redundant grounding provided by an armor assembly comprised of interlocked armor with a bare aluminum grounding/ bonding conductor, and a green insulated copper grounding conductor. The insulated circuit and grounding conductors are cabled together and wrapped with a binder tape bearing the print legend. The bare aluminum grounding/bonding conductor is located outside the binding tape and has the same lay as the insulated conductors. Green Aluminum interlocked armor is snugly wrapped around the conductor assembly. A black sunlight resistant, flame retardant PVC jacket is applied over the armor. Print legend is included on the binder tape as well as the overall PVC jacket.



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## FEATURES

- Meets UL Product Category PJAZ (Metal-Clad Cable) and provides redundant equipment grounding conductors (as defined in NEC<sup>®</sup> 250.118) as required in NEC<sup>®</sup> 517.13(A) & (B).
- Simplified armored product application and installation.
- Reduces installation costs up to 50% over pipe and wire.
- Increased labor savings compared to Type AC HCF.
- Easy to identify green armor.
- UL Classified 1, 2, and 3 hour Through Penetration Firestop Systems: W-J-3037, W-L-3110, W-L-3113, W-L-3117, W-L-3120, W-L-3121, W-L-3160, C-AJ-3115, C-AJ-3140, C-AJ-3142, C-AJ-3145, C-AJ-3173, C-AJ-3202, C-AJ-4065, C-AJ-4066, F-C-3038.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.
- Armor ground path is approximately 3.5 times better than Type AC HCF Cable and is equivalent to a green insulated copper grounding conductor.



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NEC TABLE 310.15(B)(16)- ALLOWABLE AMPACITY FOR 600V CONDUCTORS

SIZE AWG OR KCMIL	TEMPERATURE RATING OF CONDUCTOR		
	60°C (140°F)	75°C (167°F)	90°C (194°F)
	Types: TW, UF	Types: RHW, THHW, THW, THWN, XHHW, USE, ZW	Types: TBS, SA, SIS, RHH, RHW-2, THHN, THHW, THW-2, THWN- 2, USE-2, XHH, XHHW, XHHW-2, ZW-2
<b>COPPER</b>			
18	-	-	14
16	-	-	18
14	15	20	25
12	20	25	30
10	30	35	40
8	40	50	55
6	55	65	75
4	70	85	95
3	85	100	115
2	95	115	130
1	110	130	145
1/0	125	150	170
2/0	145	175	195
3/0	165	200	225
4/0	195	230	260
250	215	255	290
300	240	285	320
350	260	310	350
400	280	335	380
500	320	380	430
600	350	420	475
700	385	460	520
750	400	475	535
800	410	490	555
900	435	520	585
1000	455	545	615
1250	495	590	665
1500	525	625	705
1750	545	650	735
2000	555	665	750
Per NEC 310.15(B)(5), the ampacity of 4/C cables shall be reduced by a factor of 0.80 when the neutral is considered a current-carrying conductor.			

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