# HCF MC AP Type MC

#### **All Purpose Hospital Care Facility**

Green Lightweight Aluminum Interlocked Armor. 600 Volt. Copper THHN Insulated Conductors and Green Insulated Ground Conductor, Full-Sized Aluminum Equipment Grounding/Bonding Conductor. Sizes 12 AWG through 10 AWG. UL Listed. Rated VW-1

Green Insulated THHN Copper Type THHN Lightweight Green Aluminum Interlocked Armor Copper Grounding **Circuit Conductors** Conductor Special Markings on the Equipment Grounding Conductor = Combined Interlocked Armor Grounded Circuit (Neutral) Conductor and Full-Sized Bare Aluminum Grounding/Bonding Conductor

#### **APPLICATIONS**

Southwire HCF MC AP Type MC Cable - "All Purpose" is suitable for use as follows:

- Branch-circuit wiring for general purpose, non-essential electrical systems in patient care areas of hospitals, medical and other heath care facilities. Such areas include nursing homes, dental offices, and outpatient facilities.
- Use in hazardous anesthetizing areas and essential electrical system circuits are prohibited, except where permitted per 2008 NEC® 517.30(C)(3)(3).
- Applications requiring redundant, dedicated or isolated grounding paths.
- Environmental air-handling spaces per NEC® 300.22(C); Dry locations; fished or embedded in plaster.
- Places of Assembly per NEC® 518.4 and theaters per NEC® 520.5.
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC® 645.5(D) & 645.5(D)(2).
- Multiple neutral and multi-circuit cables totaling more than 4 current-carrying conductors are now possible.

**STANDARDS & REFERENCES**Southwire HCF MC AP Type MC Cable fully meet or exceede the following requirements

- UL 83, 1569 and 1063
- NFPA 70
- National Electrical Code
- 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

CONSTRUCTION

Southwire HCF MC AP 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 an 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 covering and has the same lay as the insulated conductors. Green Aluminum interlocked armor is snugly wrapped around the conductor assembly. To insure proper cable termination, refer to the installation instructions provided with every reel and coil.



green (Spec **RoHS** Compliant



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Size/ Number of		Green Ground	Solid Aluminum	Nominal Diameter	Weight per 1000'		Ampacity-	<b>F</b>	Standard Package
Conductors		(AWG)	Bonding (AWG)	(in)	Pounds	60° C	75° C	90° C	Code
14/2	Solid	14 Solid	12	0.406	96	15	15	15	A,B
14/3	Solid	14 Solid	12	0.436	115	15	15	15	A,B
14/4	Solid	14 Solid	12	0.466	134	15	15	15	A,B
12/2	Solid	12 Solid	10	0.455	110	20	20	20	A,B
12/3	Solid	12 Solid	10	0.480	134	20	20	20	A,B
12/4	Solid	12 Solid	10	0.515	180	20	20	20	A,B
10/2	Solid	10 Solid	8	0.520	162	30	30	30	A,B
10/3	Solid	10 Solid	8	0.565	202	30	30	30	A,C
10/4	Solid	10 Solid	8	0.670	266	30	30	30	A,C
12/2	Stranded	12 Stranded	10	0.450	135	20	20	20	A,B
12/3	Stranded	12 Stranded	10	0.515	165	20	20	20	A,B
12/4	Stranded	12 Stranded	10	0.540	194	20	20	20	A,D
10/2	Stranded	10 Stranded	8	0.565	189	30	30	30	A,D
10/3	Stranded	10 Stranded	8	0.645	232	30	30	30	A,C
10/4	Stranded	10 Stranded	8	0.678	268	30	30	30	A,C
Section 310. Unless the of following per 60° C When t	.15 and 240.4 equipment is r NEC 110.14 erminated to e	4(D). marked for υ 4(C). equipment for	use at higher circuits rated	temperature	by the Nation s, the conduct less marked for or marked for	ctor ampacition	es shall be li	mited to the	Package Code A- 250 Coil B- 1000' Reel C- 500'

90° C For ampacity adjustment purposes using NEC Section 310.15

The ampacity of a 4 conductor cable shall be reduced to 80% when the neutral is used as a current carrying conductor per NEC Section 310.15(B)(2)(A).

Reel

D- 750' Reel







Southwire Company

## **HCF MC-AP Type MC All Purpose Hospital Care Facility**

			M	CAP HCF M	lultiple Ne	utral				
Size/ Number	Conductor Type	Ground		Solid Aluminum	Nominal Diameter			Ampacity +		Standard Package
of Conductors		(AWG)	Number	Bonding (AWG)	(in)	1000' (lbs)	60° C	75° C	90° C	Code
12/2	Solid	12	12/2	10	.516	188	20	20	20	A,B
12/3	Solid	12	12/3	10	.553	233	20	20	20	A,B
12/4	Solid	12	12/4	10	.635	290	20	20	20	A,B
10/2	Solid	10	10/2	8	.995	343	30	30	30	A,B
10/3	Solid	10	10/3	8	1.081	394	30	30	30	A,B
10/4	Solid	10	10/4	8	1.273	130	30	30	30	A,B
12/2	Stranded	12	12/2	10	.544	194	20	20	20	A,B
12/3	Stranded	12	12/3	10	.584	248	20	20	20	A,B
12/4	Stranded	12	12/4	10	.672	311	20	20	20	A,B

+ Allowble ampacities shown are for general use as specified by the National Electrical Code, 2011 Edition, Section 310.15 and 240.4(D).

Unless the equipment is marked for use at higher temperatures, the conductor ampacities shall be limited to the following per NEC 110.14(C).

60° C When terminated to equipment for circuits rated 100 ampers or less marked for 14 - 1 AWG conductors.

75° C When terminated to equipment for circuits rated over 100 ampers or marked for conductors larger than 1 AWG.

90° C For ampacity adjustment purposes using NEC Section 310.15

The ampacity of a 4 conductor cable shall be reduced to 80% when the neutral is used as a current carrying conductor per NEC Section 310.15(B)(2)(A).

NUMBER OF CONDUCTORS	COLOR SEQUENCE 120/208Y					
2	black, white					
2	blue, white					
2	red, white					
3	black, white, red					
4	black, white, red, blue					
Grounding Conductor	bare aluminum					

NUMBER OF CONDUCTORS	brown, grey orange, grey				
2					
2					
2	yellow, grey				
2	purple, grey				
3	brown, yellow, grey				
3	brown, orange, grey				
4	brown, orange, yellow, grey				
4	brown, yellow, purple, grey				
Grounding Conductor	bare aluminum				

#### **FEATURES**

- Redundant ground paths for patient care areas per NEC® 517.13(A) & (B)
- Installation instructions included with every reel and coil.
- 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,







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Package

B- 1000'

C- 500'

D- 750'

A- 250 Coil

Code

Reel

Reel

Reel

### **HCF MC-AP Type MC All Purpose Hospital Care Facility**

- 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.



