

Duraclad®

Type AC-HCF Steel Armor Health Care Facility



14 AWG through 10 AWG Copper Type ACTHH (THHN Singles). Green Copper Grounding Conductor. 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VW-1. Galvanized Steel Interlocked Armor. This product is a non-stock item and subject to minimum run quantities.

APPLICATIONS

Southwire Duraclad® Type AC-HCF Cable is suitable for use as follows:

- Branch and feeders for general purpose, non-essential electrical systems in patient care areas of hospitals, medical and other types of healthcare facilities. Such areas include nursing homes, dental offices, and outpatient facilities.
- Power, lighting, control, and signal circuits
- Dry locations only.
- Fished or embedded in plaster.
- Concealed or exposed installations.
- Environmental air-handling spaces per NEC 300.22 (C).
- Installation in cable tray and approved raceways.
- Under raised floors for information technology equipment conductors and cables per NEC 645.5(D) & 645.5(E)(2).

STANDARDS & REFERENCES

Southwire Armorlite® Type AC Cable meets or exceeds the following requirements:

- UL 4, 83, 1581, 2556
- UL Online Product Guide Info - Armored Cable (AWEZ) (www.ul.com)
- Federal Specification A-A59544 (formerly J-C-30B)
- NFPA 70 (National Electrical Code), Article 320
- Listed for use in UL 1, 2, and 3 Hour Through-Penetration Firestop Systems UL 1479
- REACH/RoHS-2 (Chemical Limit) Compliant

CONSTRUCTION

Southwire Duraclad® Type AC-HCF Cable is constructed with soft-drawn copper, Type THHN insulated conductors which are individually wrapped with a moisture-resistant, flame-retardant paper covering. A green insulated copper grounding conductor is also included. Lightweight galvanized steel interlocking armor is applied over the assembly. A 16 AWG bare aluminum bond wire is placed inside the armor, runs longitudinally, and is in intimate contact with the armor for its entire length. Galvanized green steel armor available on request and subject to minimum run quantities.



FEATURES

- An armor assembly (combination of the interlocked armor & bonding strip) that is recognized as an equipment grounding conductor per the NEC 250.118(8) and 517.13(A).
- An insulated equipment grounding conductor sized per NEC 517.13(B) and Table 250.122.
- Reduces installation costs up to 50% over pipe and wire.
- 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.
- Anti-short/insulating bushings supplied with every reel or coil.

CONDUCTOR SIZE AND COLORS	GROUNDING SIZE		STOCK NUMBER		WEIGHT (LBS/1000')	OVERALL DIAMETER (INCHES)
	INSULATED GROUND	BONDING GROUND	COIL (250')	REEL (1000')		
SOLID CONDUCTOR COLORS 120/208V						
12-2 SOLID (BLACK/WHITE)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-27-55-01	55-27-55-02	225	.52
12-2 SOLID (RED/WHITE)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-28-04-01		225	.52
12-2 SOLID (BLUE/WHITE)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-28-05-01		225	.52
12-3 SOLID (BLACK/WHITE/RED)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-27-79-01	55-27-79-02	261	.557
12-4 SOLID (BLACK/WHITE/RED/BLUE)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-27-80-01	55-27-80-02	299	.598
10-2 SOLID (BLACK/WHITE)	10 SOLID (GREEN)	16 SOLID ALUMINUM	55-27-99-01	55-27-99-03	288	.588
10-3 SOLID (BLACK/WHITE/RED)	10 SOLID (GREEN)	16 SOLID ALUMINUM	55-32-15-01	55-32-15-02	340	.632
SOLID CONDUCTOR COLORS 277/480V						
12/2 SOLID (ORANGE/GRAY)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-33-38-01	55-33-38-02	225	.520
12/2 SOLID (YELLOW/GRAY)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-33-41-01	55-33-41-02	225	.520
12/3 SOLID (BROWN/ORANGE/GRAY)	12 SOLID (GREEN)	16 SOLID ALUMINUM	55-33-42-01	55-33-42-02	261	.557

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
	COPPER		
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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