

Duraclad®

Type AC



14 AWG through 2 AWG Copper Type ACTHH (THHN Singles). 16 AWG Aluminum Bond Wire. UL Listed. 600 Volts. Rated VW-1. Galvanized Steel Interlocking Armor.

APPLICATIONS

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

- Branch, feeder and service power distribution in commercial, industrial, institutional, and multi-residential buildings.
- 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(D)(2).

STANDARDS & REFERENCES

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

- UL 4
- UL 83
- UL Online Product Guide Info - Metal-Clad Cable (PJAZ) (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
- REACH/RoHS-2 (Chemical Limit) Compliant

CONSTRUCTION

Southwire Duraclad® Type AC Cable is constructed with soft-drawn copper, Type THHN insulated conductors which are individually wrapped with a moisture-resistant, flame-retardant paper covering. Steel interlocking armor is applied over the assembly. A 16 AWG aluminum bond wire is placed inside the armor, runs longitudinally, and is in intimate contact with the armor for its entire length.



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One Southwire Drive, Carrollton, GA 30119, USA

Duraclad® Type AC - Lightweight Steel Armor

CONDUCTOR SIZE AND COLORS	GROUNDING SIZE AND COLOR	STOCK NUMBER		WEIGHT (LBS/1000')	OVERALL DIAMETER (INCHES)
		COIL	REEL		
SOLID CONDUCTOR COLORS 120/208V					
14-2 SOLID (BLACK/WHITE)	16 SOLID ALUMINUM	55-27-83-01 (250')	55-27-83-02 (1000')	185	.46
14-3 SOLID (BLACK/WHITE/RED)	16 SOLID ALUMINUM	55-27-85-01 (250')	55-27-85-02 (1000')	209	.485
14-4 SOLID (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM	55-31-84-01 (250')	55-31-84-02 (1000')	237	.517
12-2 SOLID (BLACK/WHITE)	16 SOLID ALUMINUM	55-27-49-01 (250')	55-27-49-02 (1000')	213	.498
12-3 SOLID (BLACK/WHITE/BLUE)	16 SOLID ALUMINUM	55-27-50-01 (250')	55-27-50-02 (1000')	246	.521
12-4 SOLID (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM	55-27-57-01 (250')	55-27-57-02 (1000')	283	.557
10-2 SOLID (BLACK/WHITE)	16 SOLID ALUMINUM	55-27-82-01 (250')	55-27-82-03 (1000')	2664	.56
10-3 SOLID (BLACK/WHITE/RED)	16 SOLID ALUMINUM	55-27-56-01 (250')	55-27-56-02 (1000')	312	.588
10-4 SOLID (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM	55-27-89-01 (250')	55-27-89-03 (1000')	366	.632
STRANDED CONDUCTOR COLORS 120/208V					
8-2 STRANDED (BLACK/WHITE)	16 SOLID ALUMINUM	55-33-69-01 (200')	55-33-69-03 (500')	365	.686
8-3 STRANDED (BLACK/WHITE/RED)	16 SOLID ALUMINUM		55-27-84-03 (500')	556	.834
8-4 STRANDED (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM		55-33-71-03 (500')	653	.895
6-2 STRANDED (BLACK/WHITE)	16 SOLID ALUMINUM	55-33-67-01 (100')	55-33-67-03 (500')	574	.868
6-3 STRANDED (BLACK/WHITE/RED)	16 SOLID ALUMINUM	55-27-59-02 (125')	55-27-59-03 (500')	696	.912
6-4 STRANDED (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM	55-33-68-01 (100')	55-33-68-03 (500')	830	.981
4-3 STRANDED (BLACK/WHITE/RED)	16 SOLID ALUMINUM	55-28-03-01 (100')	55-28-03-03 (500')	948	1.07
4-4 STRANDED (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM		55-33-66-03 (500')	1150	1.15
2-3 STRANDED (BLACK/WHITE/RED)	16 SOLID ALUMINUM		55-27-93-03 (500')	1265	1.19
2-4 STRANDED (BLACK/WHITE/RED/BLUE)	16 SOLID ALUMINUM		55-33-65-03 (500')	1559	1.293
Refer to NEC Table 310.15 for ampacity ratings.					

FEATURES

- An armor assembly (combination of the interlocked armor & bonding strip) that is recognized as an equipment grounding/bonding conductor per NEC 250.118(8).
- 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.
- Cable reverse wound on reel for ease of pulling and installation. When pulling from coils, pull from inside to ensure ease of installation.

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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
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.

Table is reprinted from NFPA 70-2014, the National Electric Code, © 2013 National Fire Protection Association, Quincy, Massachusetts 02269. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject, which is represented only by the standard in its entirety.



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