

ROME RHW-2 or RHH, VW-1, 2kV

Rome-EPR, HYPALON® (Composite)

APPLICATION:
For lighting and power applications in accordance with the National Electrical Code and for other general purpose wiring applications. Suitable for use in circuits not exceeding 2000 volts at conductor temperatures not exceeding 90°C in wet or dry locations. May be installed in raceway, duct, cable tray and aerial installations.

STANDARDS:

- Listed by UL as Types RHW-2 (90°C wet or dry) or RHH (90°C dry), 2kV per Standard 44.
- All sizes carry the VW-1 flame test designation.
- Cables are UL listed as Sunlight Resistant (1/0 AWG and larger).
- Size 1/0 AWG and larger pass UL and IEEE-383 ribbon burner flame test and are UL listed For CT Use.
- Conforms to ICEA S-95-658/NEMA WC70.

CONSTRUCTION: Annealed tinned copper conductor, Rome-EPR (ethylene-propylene-rubber) insulation, HYPALON® jacket, surface printed.

The diagram shows a cross-section of a cable. It consists of an outer black jacket labeled 'Hypalon® Jacket'. Inside the jacket is a layer of 'Rome-EPR Insulation'. The center of the cable contains a 'Tinned Copper Conductor' made of multiple strands.

Size AWG or kcmil	No. of Strands	Thickness Mils		Nom. Diam. Inches	Copper Conductor			
		Insulation	Jacket		Approx. Net Wt. Lb./ 1000 Ft.	Ampacity		
						90°C * RHW-2 RHH	75°C ** RHW	90°C *** RHW-2
14	7	45	15	.20	31	25 ^t	20 ^t	
12	7	45	15	.22	42	30 ^t	25 ^t	
10	7	45	15	.25	57	40 ^t	35 ^t	
8	7	55	30	.32	92	55	50	
6	7	55	30	.36	128	75	65	
4	7	55	30	.41	187	95	85	
2	7	55	30	.47	282	130	115	
1	19	65	45	.56	360	150	130	
1/0	19	65	45	.60	436	170	150	169
2/0	19	65	45	.64	540	195	175	195
3/0	19	65	45	.69	660	225	200	228
4/0	19	65	45	.75	815	260	230	263
250	37	75	65	.86	990	290	255	296
350	37	75	65	.96	1340	350	310	371
500	37	75	65	1.09	1840	430	380	455
750	61	90	65	1.30	2700	535	475	664
1000	61	90	65	1.45	3550	615	545	791

* AMPACITY in accordance with NEC for not more than three conductors. As RHW-2: in raceway, 90°C conductor temperature and 30°C ambient in wet or dry locations. As RHH: in raceway, 90°C conductor temperature and 30°C ambient in dry locations.

** AMPACITY in accordance with NEC for not more than three conductors. As RHW: in raceway, 75°C conductor temperature and 30°C ambient in wet or dry locations.

***AMPACITY in accordance with NEC for cables installed in uncovered cable tray without maintained spacing, 90°C conductor temperature and 30°C ambient in wet or dry locations.

t The over current protection shall not exceed 15 amperes for 14 AWG, 20 amperes for 12 AWG and 30 amperes for 10 AWG copper.

NOTES: 1. Jackets available in black only.
2. HYPALON® is a Dupont synthetic rubber.

Specification

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1. SCOPE

1.1 This specification describes single conductor composite Rome-EPR, ethylene-propylene-rubber, HYPALON® insulated cables for use in circuits not exceeding 2000 volts. The cables are listed by UL as Type RHH or RHW-2 for general purpose wiring applications at maximum continuous conductor temperature of 90°C in dry locations (RHH) or 90°C in wet or dry locations (RHW-2) and may be installed in air, conduit or other recognized raceways in accordance with Article 310 of the National Electrical Code. All cables comply with UL's VW-1 (Vertical Wire) Flame Test. Sizes 1/0 AWG and larger may be used in cable tray in accordance with Article 392 of the NEC.

2. APPLICABLE STANDARDS

2.1 The following standards form a part of this specification to the extent specified herein:

2.1.1 Underwriters Laboratories Standard 44 for Rubber-Insulated Wires and Cables.

2.1.2 ICEA Pub. No. S-95-658, NEMA Pub. No. WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.

3. CONDUCTORS

3.1 Conductor shall be Class B stranded annealed tinned copper per UL Standard 44.

4. INSULATION

4.1 Each conductor shall be insulated with Rome-EPR, an ethylene-propylene-rubber complying with the physical and electrical requirements of UL Standard 44 for Types RHW-2 or RHH and Table 3-7, Class E-2 of ICEA.

4.2 The average thickness of insulation for a given conductor size, shall be as specified in UL Standard 44 for 2000 volts composite Type RHH or RHW-2 and Table 3-4, Column B of ICEA. The minimum thickness at any point shall be not less than 90% of the specified average thickness. The insulation shall be applied tightly to the conductor and shall be free-stripping.

5. JACKET

5.1 A HYPALON® insulating-grade jacket shall be applied over the insulation complying with the physical requirements of UL Standard 44 for Class CP.

5.2 The average thickness of the HYPALON® jacket shall be as specified in UL Standard 44 for composite cables rated 2000 volts. The minimum thickness at any point shall be not less than 90% of the specified average thickness.

6. IDENTIFICATION

6.1 The wire shall be identified by surface marking indicating manufacturer's identification, conductor size and metal, voltage rating, UL Symbol, type designations, and optional ratings.

7. TESTS

7.1 Wire shall be tested in accordance with the requirements of UL Standard 44 for Types RHW-2 or RHH and ICEA S-95-658.

8. LABEL

8.1 The wire shall bear the Underwriters Laboratories label for Type RHH or RHW-2.