

ROME RHW-2 / PVC JACKET, VW-1 Rome FR-EPR Insulation, PVC Jacket, 600 Volts

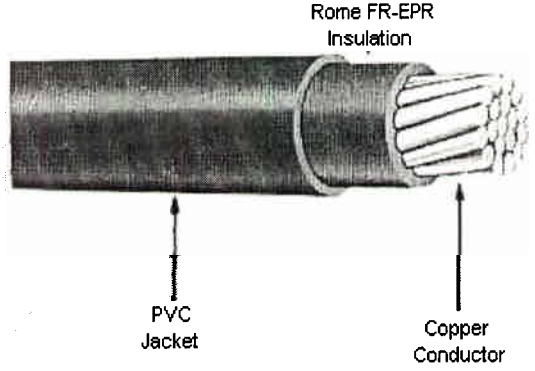
APPLICATION:

- General purpose wiring for lighting and power - residential, commercial, industrial buildings in accordance with National Electric Code and for other general purpose wiring applications. Suitable for use in circuits not exceeding 600 volts at conductor temperatures not exceeding 90°C in wet or dry locations. May be installed in raceway, cable tray direct burial and aerial installations.

STANDARDS:

- Listed by Underwriters Laboratories as Type RHW-2/ PVC jacket per UL Standard 44.
- All sizes carry the VW-1 flame test designation.
- Cables are UL listed as Sunlight Resistant (1/0 AWG and larger, black only).
- Size 1/0 AWG and larger UL listed For CT Use.
- Cables conform to ICEA S-95-658/NEMA WC70.

CONSTRUCTION: Annealed copper conductor, Rome FR-EPR (flame retardant ethylene-propylene-rubber) insulation, polyvinyl chloride jacket, surface printed.



The diagram shows a cross-section of the cable. It consists of an outer PVC Jacket, an inner Rome FR-EPR Insulation layer, and a central Copper Conductor. Arrows point from the labels to the corresponding parts of the cable.

| Size AWG or kcmil | No. of Strands | Thickness Mils | | Nom. Diameter Inches | Copper Conductor | |
|-------------------|----------------|----------------|--------|----------------------|------------------|-------------------------|
| | | Insulation | Jacket | | Ampacity* 90°C | Approx. Wt. Lb./1000Ft. |
| Solid | | | | | | |
| 14 | Solid | 45 | 15 | .19 | 25 ¹ | 25 |
| 12 | Solid | 45 | 15 | .21 | 30 ¹ | 34 |
| 10 | Solid | 45 | 15 | .23 | 40 ¹ | 48 |
| Stranded | | | | | | |
| 14 | 7 | 45 | 15 | .20 | 25 ¹ | 29 |
| 12 | 7 | 45 | 15 | .22 | 30 ¹ | 38 |
| 10 | 7 | 45 | 15 | .24 | 40 ¹ | 52 |
| 8 | 7 | 60 | 15 | .30 | 55 | 81 |
| 6 | 7 | 60 | 30 | .37 | 75 | 126 |
| 4 | 7 | 60 | 30 | .41 | 95 | 181 |
| 2 | 7 | 60 | 30 | .53 | 130 | 201 |
| 1 | 19 | 80 | 45 | .58 | 150 | 362 |
| 1/0 | 19 | 80 | 45 | .62 | 170 | 439 |
| 2/0 | 19 | 80 | 45 | .67 | 195 | 536 |
| 3/0 | 19 | 80 | 45 | .72 | 225 | 647 |
| 4/0 | 19 | 80 | 45 | .78 | 260 | 790 |
| 250 | 37 | 95 | 65 | .89 | 290 | 978 |
| 300 | 37 | 95 | 65 | .91 | 320 | 1135 |
| 350 | 37 | 95 | 65 | .99 | 350 | 1321 |
| 400 | 37 | 95 | 65 | 1.04 | 380 | 1485 |
| 500 | 37 | 95 | 65 | 1.12 | 430 | 1871 |
| 600 | 61 | 110 | 65 | 1.23 | 475 | 2186 |
| 750 | 61 | 110 | 65 | 1.33 | 535 | 2676 |
| 1000 | 61 | 110 | 65 | 1.48 | 615 | 3394 |

* Ampacity in accordance with NEC for not more than three conductors in raceway at the conductor temperature indicated, in wet or dry locations, 30°C ambient temperature.

¹ The over current protection shall not exceed 15 amperes for 14 AWG and 20 amperes for 12 AWG and 30 amperes for 10 AWG copper.

Information on this sheet subject to change without notice.

Specification

ROME RHW-2 / PVC JACKET, VW-1
Rome FR-EPR Insulation, PVC Jacket, 600 Volts

1. SCOPE

- 1.1 This specification describes single conductor Rome RHW-2 / PVC Jacket, a general purpose building wire insulated with flame retardant ethylene-propylene-rubber (FR-EPR), jacketed with polyvinyl chloride (PVC), intended for lighting and power circuits at 600 volts or less, in residential, commercial and industrial buildings. The wire may be operated at 90°C maximum continuous conductor temperature in wet or dry locations and is listed by Underwriters Laboratories for use 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. Sizes 1/0 and larger are marked "Sunlight Resistant" and "For CT Use" employing black PVC jacket.

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 Thermoset-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 Conductors shall be solid or Class B stranded annealed bare copper per UL Standard 44.

4. SEPARATOR

- 4.1 A suitable separator over the conductor may be used at the option of the manufacturer.

5. INSULATION

- 5.1 Each conductor shall be insulated with Rome FR-EPR, an ethylene-propylene-rubber complying with the physical and electrical requirements of UL Standard 44 for Type RHW-2.
- 5.2 The average thickness of insulation, for a given conductor size, shall be as specified in UL Standard 44 for Type RHW-2. 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.

6. JACKET

- 6.1 A PVC jacket shall be applied directly over the insulation. The jacket shall meet the requirements of UL 44 and Table 4-1 of ICEA S-95-658/ NEMA WC70. The average thickness of the jacket shall be as specified in UL 44 and Table 4-2 of ICEA S-95-658/ NEMA WC70. The minimum thickness at any point shall not be less than 80% of the specified thickness.

7. IDENTIFICATION

- 7.1 The wire shall be identified by surface marking indicating manufacturer's identification, conductor size and metal, voltage rating, UL Symbol, VW-1, RHW-2 / PVC Jacket, Sunlight Resistant and For CT USE (1/0 and larger).

8. TESTS

- 8.1 Wire shall be tested in accordance with the requirements of UL Standard 44 for Type RHW-2 with PVC jacket.

9. LABELS

- 9.1 The wire shall bear the Underwriters Laboratories Label for Type RHW-2.