**Rome Cable**
CORPORATION

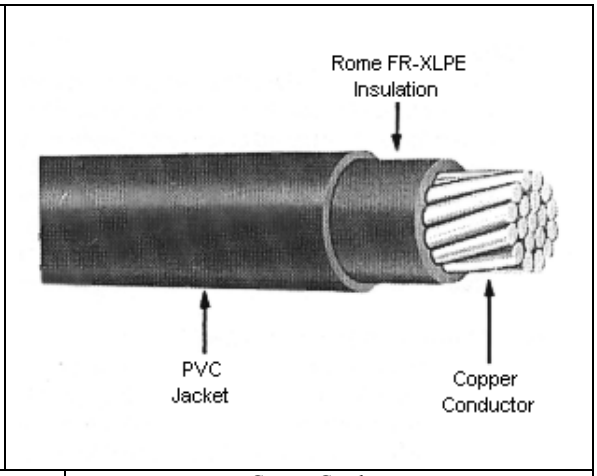
**SPEC 2115**
January 1, 2003

# ROME VW-1, XHHW-2 / PVC JACKET
# Rome FR-XLPE Insulation, 600 Volts

APPLICATION:
1. General purpose wiring for lighting and power - residential, commercial, industrial buildings in accordance with National Electric Code, maximum conductor temperature of 90°C in wet or dry locations, 600 volts, for installation in conduit or other recognized raceways where a cable having superior flame retardance is required.

STANDARDS:
1. Listed by Underwriters Laboratories as Type XHHW-2 per UL Standard 44.
2. All sizes carry the VW-1 flame test designation.
3. Cables are UL listed as Sunlight Resistant (1/0 AWG and larger, black only).
4. Size 1/0 AWG and larger UL listed For CT Use.
5. Cables conform to ICEA S-95-658/NEMA WC70, utilizing Column B insulation thickness.

CONSTRUCTION: Annealed copper conductor, Rome FR-XLPE thermosetting flame retardant chemically crosslinked polyethylene insulation, polyvinyl chloride jacket, surface printed.




| 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 | 30 | 15 | .16 | 25[1] | 23 |
| 12 | Solid | 30 | 15 | .18 | 30[1] | 34 |
| 10 | Solid | 30 | 15 | .21 | 40[1] | 48 |
| **Stranded** | | | | | | |
| 14 | 7 | 30 | 15 | .17 | 25[1] | 25 |
| 12 | 7 | 30 | 15 | .19 | 30[1] | 36 |
| 10 | 7 | 30 | 15 | .22 | 40[1] | 50 |
| 8 | 7 | 45 | 15 | .27 | 55 | 78 |
| 6 | 7 | 45 | 30 | .34 | 75 | 122 |
| 4 | 7 | 45 | 30 | .39 | 95 | 183 |
| 2 | 7 | 45 | 30 | .45 | 130 | 266 |
| 1 | 19 | 55 | 45 | .54 | 150 | 349 |
| 1/0 | 19 | 55 | 45 | .58 | 170 | 428 |
| 2/0 | 19 | 55 | 45 | .62 | 195 | 522 |
| 3/0 | 19 | 55 | 45 | .67 | 225 | 631 |
| 4/0 | 19 | 55 | 45 | .73 | 260 | 787 |
| 250 | 37 | 65 | 65 | .84 | 290 | 921 |
| 300 | 37 | 65 | 65 | .88 | 320 | 1085 |
| 350 | 37 | 65 | 65 | .94 | 350 | 1295 |
| 400 | 37 | 65 | 65 | .98 | 380 | 1453 |
| 500 | 37 | 65 | 65 | 1.07 | 430 | 1792 |
| 600 | 61 | 80 | 65 | 1.17 | 475 | 2170 |
| 750 | 61 | 80 | 65 | 1.28 | 535 | 2668 |
| 1000 | 61 | 80 | 65 | 1.43 | 615 | 3482 |

* 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 VW-1 XHHW-2 / PVC JACKET
Rome FR-XLPE Insulation, 600 Volts

## 1. SCOPE

1.1 This specification describes single conductor Rome XHHW-2 / PVC Jacket, a general purpose building wire insulated with flame retardant crosslinked polyethylene (FR-XLPE), 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 90ºC 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-XLPE, a crosslinked polyethylene complying with the physical and electrical requirements of UL Standard 44 for Type XHHW-2.

5.2 The average thickness of insulation, for a given conductor size, shall be as specified in UL Standard 44 for Type XHHW-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 and Table 4-1 of ICEA S-95-658/ NEMA WC70. The average thickness of the jacket shall be as specified in UL 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, XHHW-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 for Type XHHW-2 with PVC jacket.

## 9. LABELS

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