Rome Cable
CORPORATION

SPEC 3607

January 1, 2002

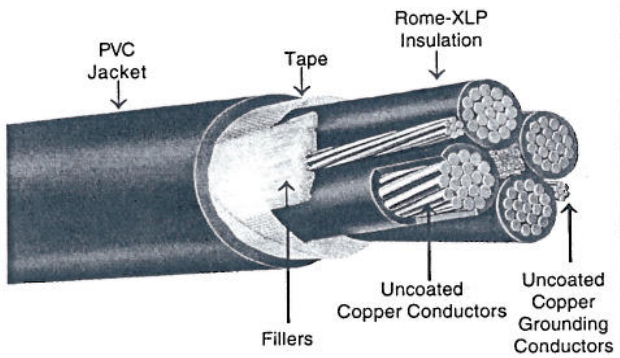
ROME TRAY CABLE, TYPE TC

Rome-XLP XHHW-2 Conductors, PVC Jacket, 600 Volts
Four Conductor with Grounding Conductors

APPLICATION: As flame-retardant four conductor power cables rated 600 volts, 90°C in wet or dry locations. Specifically approved for installation in cable trays per Article 336 of the NEC. Type TC cables are approved for use in Class I and II, Division 2 hazardous locations. Cables may be installed in air, in ducts or conduits, in tray or trough, or direct buried.

STANDARDS:
1. Listed by UL as Type TC per Standard 1277 for Tray Cables.
2. Individual conductors UL listed as Type XHHW-2.
3. Overall jacket UL listed as Sunlight Resistant.
4. Cables pass UL and IEEE-383 ribbon burner flame tests.
5. Cables pass IEEE 1202/ CSA FT4 (70,000 BTU/hr) cable tray flame test (2 AWG and larger).
6. Cables UL listed for Direct Burial.
7. Cables UL listed for Open Wiring.
8. Cables meet requirements of ICEA S-95-658/NEMA WC70.

CONSTRUCTION: Class B stranded uncoated copper conductor, Rome-XLP crosslinked polyethylene insulation, surface print phase identification. Four insulated conductors twisted with a Class B stranded uncoated copper grounding conductor in two opposite valleys, suitable fillers, cable tape, PVC jacket overall, surface printed.



FOUR CONDUCTORS WITH GROUNDING CONDUCTORS

Size AWG or kcmil	No. of Strands	Thickness in Mils		Nominal Diameter Inches	Gnd. Condr. Size In Two Valleys AWG (1)	Approx. Net Wt. Lb./1000 Ft.	Ampacity *	
		Insulation	Jacket				90°C	75°C
8	7	45	60	.72	12	415	44	40
6	7	45	60	.81	10	575	60	52
4	7	45	80	.96	10	840	76	68
2	7	45	80	1.10	9	1200	104	92
1	19	55	80	1.25	9	1545	120	104
1/0	19	55	80	1.35	9	1835	136	120
2/0	19	55	80	1.45	9	2195	156	140
3/0	19	55	80	1.58	7	2800	180	160
4/0	19	55	110	1.77	7	3460	208	184
250	37	65	110	1.93	7	4040	232	204
350	37	65	110	2.18	6	5475	280	248
500	37	65	110	2.50	5	7635	344	304
750	61	80	140	3.12	4	11400	428	380

*Ampacity in accordance with the National Electrical Code for cables in uncovered cable tray without maintained spacing and for cables in raceway or directly buried, at the conductor temperature indicated in wet or dry locations, 30°C ambient temperature.

NOTES: 1. Grounding conductors per UL Standard 1277 for Type TC Tray Cable.

Information on this sheet subject to change without notice.

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1-1-02

Specification

ROME TRAY CABLE, TYPE TC

Rome-XLP XHHW-2 Conductors, PVC Jacket, 600 Volts

Four Conductor with Grounding Conductors

1. **SCOPE**
   1.1 This specification describes four conductor Rome Type TC Tray Cable insulated with Rome-XLP crosslinked polyethylene and PVC jacketed overall, for use on circuits rated 600 volts. Cables are recommended for operation at 90°C maximum continuous conductor temperature in wet or dry locations. The cables are specifically approved for installation in cable trays in accordance with Article 336 of the NEC. They may be installed in air, in ducts or conduits, in tray or trough, in open wiring, or direct buried.

2. **APPLICABLE STANDARDS**
   2.1 The following standards shall form a part of this specification to the extent specified herein:
   2.1.1 Underwriters Laboratories Standard 1277 for Type TC Power and Control Tray Cables.
   2.1.2 Underwriters Laboratories Standard 44 for Rubber Insulated Wires and Cables.
   2.1.3 ICEA Pub. No. S-95-658 and NEMA Pub. No. WC70 for Nonshielded Power Cables Rated 2000 Volts or Less.

3. **CONDUCTORS**
   3.1 Conductors shall be Class B stranded uncoated soft copper per Part 2 of ICEA S-95-658.

4. **SEPARATOR**
   4.1 A suitable separator over the conductor may be used at the option of the manufacturer.

5. **INSULATION**
   5.1 **Compound**: Each phase conductor shall be insulated with Rome-XLP chemically crosslinked polyethylene, meeting the requirements of ICEA S-95-658, Table 3-7, Class X-2 and Type XHHW-2 requirements of Underwriters Laboratories.
   5.2 **Thickness**: The average thickness of insulation shall be as specified in UL Standard 44 for Type XHHW-2 conductors and in Table 3-4, Column B of ICEA. The minimum thickness at any point shall be not less than 90% of the specified average thickness.

6. **PHASE IDENTIFICATION**
   6.1 The insulated phase conductors shall be black in color and shall be printed with the numerals "1", "2", "3" and "4" on their surface.

7. **ASSEMBLY**
   7.1 Four phase conductors shall be cabled together with a Class B stranded, uncoated copper grounding conductor in two opposite valleys, and suitable nonhygroscopic fillers to make round. Length of lay shall not exceed 40 times the phase conductor diameter. Total circular mil area of the two grounding conductors shall be not less than the circular mil area of the grounding conductor listed in UL Standard 1277.

8. **CABLE TAPE**
   8.1 The cable assembly shall be covered with a suitable tape applied with a 10% minimum lap.

9. **OVERALL JACKET**
   9.1 **Compound**: Each cable shall have a PVC protective jacket applied over the taped assembly. The jacket shall meet the requirements of ICEA Table 4-1 and the Sunlight Resistant requirements of UL Standard 1277.
   9.2 **Thickness**: The average jacket thickness shall be in accordance with UL Standard 1277. The minimum thickness at any point shall be not less than 80% of the specified average thickness.

10. **SURFACE MARKING**
    10.1 Cables shall be identified by means of surface ink printing indicating manufacturer, number of conductors, size, voltage rating, and required UL information.

11. **TESTS**
    11.1 Individual conductors and completed cables shall be tested in accordance with UL requirements for Type TC Power and Control Tray Cables having XHHW-2 conductors, and ICEA S-95-658.
    11.2 Cables shall be capable of passing the ribbon burner cable tray flame test requirements of UL and IEEE.