

ROME TRAY CABLE, TYPE TC

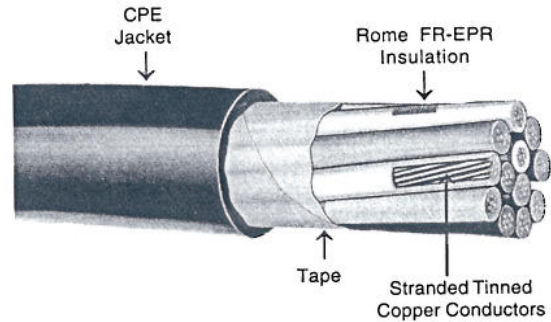
Rome FR-EPR XHHW-2 Conductors, CPE Jacket, 600 Volts

APPLICATION: As superior flame-retardant multi-conductor control, signal or 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. Also approved for use in Class 1 remote-control and signaling circuits per Article 725 of the NEC. Type TC cable is suitable for use in Class I and II, Division 2 hazardous locations. Cables may be installed in air, in ducts or conduits, tray or trough, and are suitable for direct burial.

STANDARDS:

1. Listed by UL as Type TC per Standard 1277 for Tray Cables.
2. Individual conductors UL listed as Type XHHW-2.
3. Individual conductors pass UL VW-1 flame test.
4. Overall jacket UL listed as Sunlight Resistant and Oil Resistant II.
5. Cables UL listed for Direct Burial.
6. Cables pass IEEE 383 (70,000 BTU/hr) and ICEA T-29-520 (210,000 BTU/hr) cable tray flame tests.
7. Cables pass IEEE 1202/CSA FT4 (70,000 BTU/hr) cable tray flame test.
8. Cables meet requirements of ICEA S-73-532, NEMA WC57 for Control Cables.

CONSTRUCTION: Stranded tinned copper conductors, 30 mils Rome FR-EPR flame-retardant ethylene-propylene-rubber insulation, color coded, two conductors flat, three or more conductors twisted with suitable fillers where necessary to make round, cable tape, CPE jacket overall, surface printed.



No. of Condrs.	#10 AWG - 7 Strand			#12 AWG - 7 Strand			#14 AWG - 7 Strand		
	Overall CPE Jacket Mils	Nom. Diam. Inches	Approx. Net Wt. Lb./ 1000 Ft.	Overall CPE Jacket Mils	Nom. Diam. Inches	Approx. Net Wt. Lb./ 1000 Ft.	Overall CPE Jacket Mils	Nom. Diam. Inches	Approx. Net Wt. Lb./ 1000 Ft.
2	45	.28 x .46	117	45	.25 x .41	85	45	.23 x .37	65
3	45	.49	167	45	.44	120	45	.39	90
4	60	.57	230	45	.48	154	45	.43	113
5	60	.62	280	45	.53	190	45	.47	137
6	60	.67	325	60	.60	235	45	.51	160
7	60	.67	370	60	.60	265	45	.51	180
8	60	.74	415	60	.67	300	60	.59	220
9	60	.79	455	60	.70	340	60	.63	250
10	80	.90	550	60	.77	370	60	.69	270
11	80	.90	595	60	.77	400	60	.69	290
12	80	.93	640	60	.79	430	60	.70	310
13	80	.95	685	60	.80	465	60	.72	335
14	80	.97	725	60	.83	500	60	.74	360
15	80	1.03	775	80	.92	535	60	.78	380
16	80	1.03	820	80	.92	570	60	.78	400
17	80	1.08	865	80	.96	605	60	.82	420
18	80	1.08	905	80	.96	640	60	.82	440
19	80	1.08	965	80	.96	675	60	.82	460
20	80	1.14	1010	80	1.01	710	80	.90	525
23	80	1.19	1145	80	1.06	815	80	.95	595
25	80	1.26	1235	80	1.12	890	80	1.00	640
27	80	1.29	1325	80	1.15	960	80	1.02	680
29	80	1.31	1415	80	1.16	1030	80	1.03	720
31	80	1.36	1505	80	1.21	1100	80	1.07	760
32	80	1.39	1550	80	1.23	1135	80	1.10	780
37	80	1.44	1775	80	1.28	1310	80	1.14	890

- NOTES:
1. All cables available with bare or covered grounding conductor.
 2. Standard color coding is Method 1 for NEC Applications, per Appendix E, Table E-2 of ICEA S-73-532 (TECH 1006). This color coding method omits white and green from the color sequence. A white or green conductor can be supplied on request.
 3. Cables with Open Wiring listing available on request.

Specification

ROME TRAY CABLE, TYPE TC

Rome FR-EPR XHHW-2 Conductors, CPE Jacket, 600 Volts

1. SCOPE

- 1.1 This specification describes multi-conductor Rome Type TC Tray Cable insulated with Rome FR-EPR flame-retardant ethylene-propylene-rubber and CPE 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 and may also be used in Class 1 remote-control and signaling circuits per Article 725 of the Code. Cables may be installed in air, in ducts or conduits, in tray or trough, and are also suitable for direct burial.

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-73-532, NEMA Pub. No. WC57, Control Cables.

3. CONDUCTORS

- 3.1 Conductors shall be Class B stranded tinned soft copper conforming to Part 2 of ICEA. Conductor sizes shall be 14 AWG through 10 AWG.

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 conductor shall be insulated with Rome FR-EPR flame-retardant ethylene-propylene-rubber, meeting the requirements of ICEA S-73-532, Table 3-2 (Type II-EP Rubber) and Underwriters Laboratories requirements for Type XHHW-2, VW-1.
- 5.2 **Thickness:** The average thickness of insulation shall be 30 mils. The minimum thickness at any point shall be not less than 90% of the specified average thickness.

6. CIRCUIT IDENTIFICATION

- 6.1 Circuit identification shall consist of Method 1 color coding for National Electrical Code applications in accordance with ICEA S-73-532, Appendix E, Table E-2. Cables shall not contain a green or white conductor unless specifically ordered (TECH I006 Option A).

7. ASSEMBLY

- 7.1 For three conductors or more, the insulated color coded conductors shall be cabled together with nonhygroscopic fillers, when necessary to make round. The cable assembly shall be covered with a suitable tape applied with a 10% minimum lap. Two conductor cable shall be flat without separator tape, unless otherwise specified.

8. OVERALL JACKET

- 8.1 **Compound:** Each cable shall have a Chlorinated Polyethylene (CPE) protective jacket applied over the assembly. The jacket shall meet the requirements of ICEA S-73-532, Table 4-2 (CPE-TP) and the Sunlight Resistant and Oil Resistant II requirements of UL Standard 1277.
- 8.2 **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.

9. SURFACE MARKING

- 9.1 Cables shall be identified by means of surface ink printing indicating manufacturer, number of conductors, size, voltage rating, and required UL information.

10. TESTS

- 10.1 Individual conductors and completed cables shall be tested in accordance with UL requirements for Type TC Power and Control Tray Cables having XHHW-2, VW-1 insulated conductors, and ICEA S-73-532.
- 10.2 Cables shall be capable of passing the ribbon burner cable tray flame test requirements of UL and IEEE 1202/CSA FT4.