

ROME THW

PVC Insulation, 600 Volts

<p>APPLICATION: General purpose wiring for lighting and power - residential, commercial, industrial buildings in accordance with the National Electrical Code, maximum conductor temperature of 75°C in wet or dry locations, for circuits not exceeding 600 volts.</p> <p>STANDARDS:</p> <ol style="list-style-type: none"> Listed by UL as Type THW per Standard 83. All sizes carry the VW-1 flame test designation. Listed by UL as Oil Resistant I. Listed by UL as Sunlight Resistant (250 kcmil and larger, black only) 250 kcmil and larger pass UL and IEEE-383 ribbon burner flame test and are listed For CT Use. <p>CONSTRUCTION: Annealed uncoated copper conductor, PVC insulation, surface printed.</p>					<p style="text-align: center;">PVC Insulation ↓ ↑ Conductor</p>												
Size AWG or kcmil	No. of Strands	Insulation Thick- ness Mils	Nom. Diam. Inches	Copper													
				NEC Ampac- ity*	Approx. Wt. Lb./1000 Ft.		Stock Items ⁽¹⁾										
					Net	Shipping	1	2	3	4	5	6	7	8	9	10	11
Solid																	
14	Solid	30	.13	20 t	19	19											
12	Solid	30	.15	25 t	26	27											
10	Solid	30	.17	35 t	39	41											
Stranded																	
14	7	30	.14	20 t	19	20											
12	7	30	.16	25 t	28	29											
10	7	30	.18	35 t	41	44											
8	7	45	.24	50	67	70											
6	7	60	.30	65	105	107											
4	7	60	.35	85	160	162											
3	7	60	.38	100	195	197											
2	7	60	.41	115	245	247											
1	19	80	.49	130	315	335											
1/0	19	80	.53	150	390	410											
2/0	19	80	.57	175	480	500											
3/0	19	80	.62	200	595	620											
4/0	19	80	.68	230	735	770											
250	37	95	.75	255	880	915											
300	37	95	.81	285	1040	1095											
350	37	95	.86	310	1205	1260											
400	37	95	.90	335	1365	1420											
500	37	95	.98	380	1685	1760											
600	61	110	1.09	420	2030	2115											
700	61	110	1.16	460	2385	-											
750	61	110	1.19	475	2510	2605											
800	61	110	1.26	490	2705	-											
900	61	110	1.32	520	3025	-											
1000	61	110	1.34	545	3305	3430											
1250	91	125	1.55	590	4190	-											
1500	91	125	1.67	625	4990	-											
1750	127	125	1.79	650	5790	-											
2000	127	125	1.89	665	6585	-											

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

¹ 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⁾ Color code: 1 black, 2 white, 3 red, 4 blue, 5 green, 6 yellow, 7 orange, 8 brown, 9 purple, 10 pink, 11 gray.

Specification

ROME THW

PVC Insulation, 600 Volts

1. SCOPE

- 1.1 This specification describes single conductor Rome THW, a general purpose building wire insulated 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 75°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.

2. APPLICABLE SPECIFICATIONS

- 2.1 The following specifications form a part of this specification to the extent specified herein:
 - 2.1.1 Underwriters Laboratories Standard 83 for Thermoplastic Insulated Wires.

3. CONDUCTORS

- 3.1 Conductors shall be solid or Class B stranded, annealed uncoated copper per UL Standard 83.

4. INSULATION

- 4.1 Each conductor shall be insulated with PVC complying with the physical and electrical requirements of UL Standard 83 for Type THW. In addition, the PVC insulation shall comply with the optional Oil Resistant I listing of UL Standard 83.
- 4.2 The average thickness of insulation, for a given conductor size, shall be as specified in UL Standard 83 for Type THW wire. 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. IDENTIFICATION

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

6. TESTS

- 6.1 Wire shall be tested in accordance with the requirements of UL Standard 83 for Type THW wire and for the optional Oil Resistant listing.

7. LABELS

- 7.1 The wire shall bear the Underwriters Laboratories label for Type THW.