

Reference Data

Electrical Metallic Tubing (EMT) – Thinwall Conduit

Nominal Conduit Size		Outside Diameter		Inside Diameter		Weight Per 100 Ft. (30.5m) with		Weight of Conduit and Conductors Per 100 Ft. (30.5m)*	
						Lbs.	kg	Lbs.	kg
In.	mm	In.	mm	In.	mm				
3/8"	(10)	0.577	(14.7)	0.493	(12.5)	23.0	(10.4)	36.6	(16.6)
1/2"	(15)	0.706	(17.9)	0.622	(15.8)	28.5	(12.9)	50.6	(23.0)
3/4"	(20)	0.922	(23.4)	0.824	(20.9)	43.5	(19.7)	84.3	(38.2)
1"	(25)	1.163	(29.5)	1.049	(26.6)	64.0	(29.0)	130.3	(59.1)
1 1/4"	(32)	1.510	(38.3)	1.380	(35.1)	95.0	(43.1)	212.3	(96.3)
1 1/2"	(40)	1.740	(44.2)	1.610	(40.9)	110.0	(49.9)	269.8	(122.4)
2"	(50)	2.197	(55.8)	2.067	(52.5)	140.0	(63.5)	401.8	(182.3)
2 1/2"	(65)	2.875	(73.0)	2.731	(69.4)	205.0	(93.0)	579.0	(262.6)
3"	(80)	3.500	(88.9)	3.356	(85.2)	250.0	(113.4)	826.3	(374.8)
3 1/2"	(90)	4.000	(101.6)	3.834	(97.4)	325.0	(147.4)	1098.0	(498.0)
4"	(100)	4.500	(114.3)	4.334	(110.1)	370.0	(167.8)	1364.0	(618.7)

Dimensions taken from ANSI C80.3-1977.

*Conduit plus weight of heaviest conductor combination as specified by the National Electrical Code.

Electrical Metallic tubing shall be supported at least every 10 feet (3.05 m) and within 3 feet (914 mm) of each outlet box, junction box, cabinet, or fitting. See NEC Article 348.

Rigid Aluminum Conduit

Nominal Conduit Size		Outside Diameter		Nominal Inside Diameter		Minimum Weight Per 100 Ft. (30.5m) with Couplings Attached		Weight of Conduit and Conductors Per 100 Ft. (30.5m)*	
						Lbs.	kg	Lbs.	kg
In.	mm	In.	mm	In.	mm				
1/2"	(15)	0.840	(21.3)	0.632	(16.1)	27.4	(12.4)	49.5	(22.5)
3/4"	(20)	1.050	(26.7)	0.836	(21.2)	36.4	(16.5)	77.2	(35.0)
1"	(25)	1.315	(33.4)	1.063	(27.0)	53.0	(24.0)	119.3	(54.1)
1 1/4"	(32)	1.660	(42.2)	1.394	(35.4)	69.6	(31.6)	186.9	(84.8)
1 1/2"	(40)	1.900	(48.3)	1.624	(41.2)	82.2	(37.3)	242.0	(109.8)
2"	(50)	2.375	(60.3)	2.083	(52.9)	115.7	(52.5)	377.5	(171.2)
2 1/2"	(65)	2.875	(73.0)	2.489	(63.2)	182.5	(82.8)	556.5	(252.4)
3"	(80)	3.500	(88.9)	3.090	(78.5)	238.9	(108.4)	815.2	(369.8)
3 1/2"	(90)	4.000	(101.6)	3.570	(90.7)	287.7	(130.5)	1061.0	(481.3)
4"	(100)	4.500	(114.3)	4.050	(102.9)	340.0	(154.2)	1334.0	(605.1)
5"	(125)	5.563	(141.3)	5.073	(128.9)	465.4	(211.1)	2028.0	(919.9)
6"	(150)	6.625	(168.3)	6.093	(154.8)	612.5	(277.8)	2870.0	(1301.8)

Dimensions taken from ANSI C80.5-1977.

*Conduit plus weight of heaviest conductor combination as specified by the National Electrical Code.

Aluminum Rigid Conduit shall be supported at least every 10 feet (3.05 m) and within 3 feet (914 mm) of each outlet box, junction box, cabinet, or fitting, except for straight runs of conduit connected with couplings which may be supported in accordance with NEC Table 344.30 (B)(2), provided such supports prevent transmission of stresses to termination where conduit is deflected between supports.

NEC TABLE 344.30 (B)(2)

Conduit Size		Maximum Support Span	
In.	mm	Feet	Meters
1/2 - 3/4	(15 - 20)	10	(3.05)
1	(25)	12	(3.66)
1 1/4 - 1 1/2	(32 - 40)	14	(4.27)
2 - 2 1/2	(50 - 65)	16	(4.88)
3 - 6	(80 - 150)	20	(6.10)