



Electrical Steel Conduit

EMT, RIGID



Providence Pipe Products

Division of Providence Trading Company



Providence Pipe Products



PRODUCTS

Electrical Metallic Tubing

Trade name: **EMT**

Providence EMT is an unthreaded thin wall raceway of circular cross section designed for the physical protection and routing of conductors and cables and for use as an equipment grounding conductors when installed utilizing appropriate fittings. Providence EMT is made of steel, and hot dipped galvanized for protection of corrosion for a long periods of time. Providence EMT provides shielding magnetic fields from within and without, while its uniform wall thickness provides resistance to physical damage from impact or crushing.

Providence EMT's quality steel combines damage resistant strength with ductility to provide easy bending, cutting and joining to prevent waste of time and material. Providence EMT is suitable for installation in exposed and concealed work.

Providence EMT meets the definition of article 358 of NEC (National Electrical Code).

Galvanized Rigid Steel Conduit

Trade name: **RIGID, RMC or GRC (Galvanized Rigid Conduit)**

Providence RIGID is a threadable raceway of circular cross section designed for the physical protection and routing of conductors and cables and for use as an equipment grounding conductor when installed with its integral or associated coupling and appropriate fittings. Providence RIGID is made of highest quality steel and is hot dipped galvanized for protection against corrosion. Providence RIGID combines damage-resistant strength with duct- ability to assure easy bending, cutting and joining. Manufactured from high-strength strip steel, it also provides smooth, continuous raceways for fast wire pulling. No need to worry about damage to the conduit system even when pulling through multiple 90 degree bends. Providence RIGID can be installed under



all atmospheric conditions and occupancies, Providence RIGID could be installed in concrete, in direct contact with the earth, or in areas subject to severe corrosive influences and judged suitable for the condition. Providence RIGID is hot-dipped galvanized. Providence's RIGID provides shielding of magnetic fields from within and without, while its uniform wall thickness provides resistance to physical damage from impact or crushing. Providence RIGID meets the definition of article 344 of NEC (National Electrical Code).



ISO9001 APPROVAL



UL APPROVAL

Providence Pipe Products

ADVANTAGE of STEEL CONDUITS

Impact resistance
Easy to recycle
Can be installed exposed or concealed
Protection from fire and mechanical force
Full grounding capabilities
(Always refer to local codes)



PERFORMANCE

Providence pipe manufactures its pipes to the highest standard of quality. Installation of all conduits shall be in accordance with National Electrical code and U.L General Information. Always refer to local codes, which may supersede these requirements prior to installation.

CONFIDENCE

NO HASSLE GUARANTEE.

We will promptly replace the material free of charge within a year from the time of your purchase if you are not satisfied with the quality of the electrical conduit from Providence Pipe Product. The exception to this guarantee is where environmental condition precludes one year of service life.

QUALITY

All of Providence Pipe is made from highest quality steel and is continuously tested through out the manufacturing process. Providence Pipe is registered, listed and approved by the following agencies.



CQC PRODUCT
CERTIFICATE



ISO9001 APPROVAL



UL APPROVAL

Providence Pipe Products

Galvanized Steel Electrical Metallic Tubing (EMT)



General

Providence EMT is manufactured from high-grade flat-rolled steel. Produced by the electric resistance welding process, the finished tube is uniform in OD size, wall thickness, a defect free interior surface and smoothly welded seams. The 1/2"-1 1/2" EMT are made from zinc coils. The 2"-4" EMT are produced using an inline galvanizing process. The surface of all of them is thoroughly coated zinc, so that metal to metal contact and galvanic protection against corrosion are provided. Additionally, the exterior is protected by a clear zinc chromate coating. The good interior surface quality provides smooth continuous raceways for easy and fast wiring pulling. Its excellent ductility provides easy bending, cutting and joining to prevent waste of time and materials.

Providence's EMT is produced in normal trade size from 1/2"-4". EMT is produced in standard lengths of 10 feet (3.05 m). The quantity in primary bundle is standard bundle quantity. Providence EMT is a UL listed product. Each pipe has been affixed a UL label and a manufacturer label including trade size and a bar code.

Application

Galvanized Steel Electrical Metallic Tubing, National Electrical Code (NEC)[®] 2002 Article 358, can be installed indoors or outdoors, exposed or concealed, in all kinds of atmospheric conditions, and in hazardous locations, when in accordance with NEC[®] 502.4, 503.3 and 504.20 and providing it is not subject to sever physical damage during and after installation and is properly protected against corrosion.

Also, it provides mechanical protection for the conductors while reducing Electro-Magnetic Field (EMF) exposure and shielding against Electro-Magnetic Interference (EMI). Galvanized Steel Electrical Metallic Tubing is an approved equipment grounding conductor under the 2002 NEC[®] Section 250.118(4). The NEC[®] establishes the minimum requirements for the safe electrical installation. Because of the varied environments in which electrical equipment is installed, local amendments are often added. Always consult local codes prior to installation.

Specifications

Providence Galvanized Steel EMT is manufactured in accordance with the latest edition of the following:
American National Standards Institute (ANSI) American National Standard for Steel Electrical Metallic Tubing, ANSI[®] C80.3.

Underwriting Laboratories Standard for EMT-Steel, UL 797 National Electric Code[®] 2002-Article 358 (1999 NEC Article 348)

Federal Specification- WW-C_563

The above specification may still be referenced, however the federal government has canceled it and adopted the UL797 and ANSI C80.3 standard.

Additional information can be found in the Underwriters Laboratories Inc., General Information for Electrical Equipment Directory. The UL product category for EMT is FJMX.

Dimensions and Weight Chart

Trade Size		Approx Wt. per 100Ft. (30.5M)		Nominal Outside Diameter		Nominal Wall Thickness	
U.S.	Metric	lb.	Kg	In	mm	In	mm
1/2	16	30	13.6	0.706	17.93	0.042	1.07
3/4	21	46	20.9	0.922	23.42	0.049	1.24
1	27	67	30.4	1.163	29.54	0.057	1.45
1-1/4	35	101	45.8	1.510	38.35	0.065	1.65
1-1/2	41	116	52.6	1.740	44.20	0.065	1.65
2	53	148	67.1	2.197	55.80	0.065	1.65
2-1/2	63	215	98.0	2.875	73.03	0.072	1.83
3	78	263	119.3	3.500	88.90	0.072	1.83
3-1/2	91	349	158.3	4.000	101.6	0.083	2.11
4	103	393	178.3	4.500	114.3	0.083	2.11

Packaging

Trade Size		Quantity in Primary Bundle		Master Bundle (lift)			
U.S.	Metric	Ft.	M	Pieces	Feet	Meter	Approx Wt. Kg
1/2	16	100	30.5	700	7000	2135	952.4
3/4	21	100	30.5	500	5000	1525	1043.1
1	27	100	30.5	300	3000	915	911.6
1-1/4	35	50	15.2	200	2000	610	916.1
1-1/2	41	50	15.2	150	1500	457.5	789.1
2	53	10	3.05	120	1200	366	805.4
2-1/2	63	10	3.05	61	610	186.1	597.7
3	78	10	3.05	51	510	155.6	608.2
3-1/2	91	10	3.05	37	370	112.9	585.5
4	103	10	3.05	30	300	91.5	534.7

Notes: 1. Applicable tolerances Length: 10Ft. (3.05m) \pm 1/4" (\pm 6.35mm).
Outside Diameter: 1/2" - 2" \pm 0.005" (\pm 0.13mm); 2 1/2" \pm 0.010" (\pm 0.25mm);
3" \pm 0.015" (\pm 0.38mm); 3 1/2" - 4" \pm 0.020" (\pm 0.51mm).

Providence Pipe Products

Hot Dip Galvanized Rigid Steel Conduit (RIGID) General



Providence RIGID is manufactured from high-strength steel. Produced by the electric resistance welding process. The finished conduit is uniform in OD size, wall thickness, a defect free interior surface and smoothly welded seams. RIGID produced using an inline galvanizing process. It is hot-dipped galvanized inside and outside, so that metal to metal contact and galvanic protection against corrosion are provided. Additionally, it is top-coated with a compatible organic layer to inhibit white rust and increase corrosion resistance. The good interior surface quality provides smooth continuous raceways for easy and fast wiring pulling. Its excellent ductility provides easy bending, cutting and joining to prevent waste of time and materials. No need to worry about damage to the conduit system even when through multiple 90° bends.

Providence's RIGID is produced in normal trade size from 1/2"-4" in standard lengths of 10 feet (3.05 m), including coupling.

Rigid is threaded on both ends, with a coupling applied to one end and a thread protector to the other. The pitch of threads conforms to the American National Standard for pipe threads, general purpose (Inch), ANSI/ASME B1.20.1 Threads are protected after cutting by an application of molten zinc. The quantity in primary bundle and master bundle NEMA standard bundle quantity.

Providence RIGID is a UL listed product. Each pipe has been affixed a UL label and a manufacturer label including trade size and a bar code.

Application

Galvanized Rigid Steel Conduit can be installed indoors or outdoors, exposed or concealed, in all kinds of atmospheric conditions, and in hazardous locations, when in accordance with NEC® 2002 Article 344. Also, it provides mechanical protection for the conductors while reducing Electro-Magnetic Field (EMF) exposure and shielding against Electro-Magnetic Interference (EMI).

Galvanized Steel Rigid Conduit is an approved equipment grounding conductor under the 2002 NEC® Section 250.118. The NEC® establishes the minimum requirements for the safe electrical installation. Because of the varied environments in which electrical equipment is installed, local amendments are often added. Always consult local codes prior to installation.

Specifications

Providence RIGID pipe is manufactured in accordance with the latest edition of the following:
American National Standards Institute (ANSI)
American National Standard for Rigid Steel Tubing, ANSI® C80.1
UL Standard for Rigid-Steel, UL 6

National Electric Code® 2002-Article 344(1999 NEC Article 346) Federal Specification- WW-C_581. The above specification may still be referenced, however the federal government has canceled it and adopted the UL6 and ANSI C80.1 standard.

Additional information can be found in the Underwriters Laboratories Inc., General Information for Electrical Equipment Directory. The UL product category for RIGID is DYIX.

Dimensions and Weight Chart

Trade Size		Approx. Wt. per 100Ft. (30.5M) With couplings		Nominal Outside Diameter		Nominal Wall Thickness	
U.S.	Metric	lb.	kg	in	mm	in	mm
1/2	16	82	37.2	0.840	21.3	0.104	2.60
3/4	21	109	49.4	1.050	26.7	0.107	2.70
1	27	161	73.0	1.315	33.4	0.126	3.20
1-1/4	35	218	98.9	1.660	42.2	0.133	3.40
1-1/2	41	263	119.3	1.900	48.3	0.138	3.50
2	53	350	158.7	2.375	60.3	0.146	3.70
2-1/2	63	559	253.5	2.875	73.0	0.193	4.90
3	78	727	329.7	3.500	88.9	0.205	5.20
3-1/2	91	880	399.1	4.000	101.6	0.215	5.50
4	103	1030	467.1	4.500	114.3	0.225	5.70
5*	129	1400	634.9	5.563	141.3	0.245	6.20
6*	155	1840	834.5	6.625	168.3	0.266	6.80

Packaging

Trade Size		Quantity in Primary Bundle		Master Bundles (lift)			
U.S.	Metric	Ft.	m	Pieces	Feet	Meter	Approx Wt. Kg
1/2	16	100	30.5	250	2500	762.5	929.7
3/4	21	50	15.2	200	2000	610.0	988.7
1	27	50	15.2	125	1250	381.3	912.9
1-1/4	35	10	3.05	90	900	274.5	889.8
1-1/2	41	10	3.05	80	800	244.0	954.2
2	53	10	3.05	60	600	183.0	952.4
2-1/2	63	10	3.05	37	370	112.9	937.9
3	78	10	3.05	30	300	91.5	989.1
3-1/2	91	10	3.05	25	250	76.3	997.7
4	103	10	3.05	20	200	61.0	934.2
5*	129	10	3.05	15	150	45.8	952.4
6*	155	10	3.05	10	100	30.5	834.5

Notes: 1. Applicable tolerances Length: 10Ft. (3.05m) ± 1/4" (±6.35mm). Outside Diameter: 1/2"-2" ± 0.015" (±0.38mm); 2 1/2"-4" ± 0.025" (± 0.64mm); 5"-6" ± 1%. 2. All * marked sizes may be available soon.

**ISO9001
CERTIFIED**



Providence Pipe Products

EMT and Rigid Conduits:

Table for Type THWN & THHN Insulated Conductors											
WIRE SIZE	Conduit Sizes:										
	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	6
14	13	24	39	69	94	154					
12	10	18	29	51	70	114	164				
10	6	11	18	32	44	73	104	160			
8	3	5	9	16	22	36	51	79	106	136	
6	1	4	6	11	15	26	37	57	76	98	
4	1	2	4	7	9	16	22	35	47	60	137
3	1	1	3	6	8	13	19	29	39	51	116
2	1	1	3	5	7	11	16	25	33	43	97
1		1	1	3	5	8	12	18	25	32	72
0		1	1	3	4	7	10	15	21	27	61
00		1	1	2	3	6	8	13	17	22	51
000		1	1	1	3	5	7	11	14	18	42
0000		1	1	1	2	4	6	9	12	15	35
250			1	1	1	3	4	7	10	12	28
300			1	1	1	3	4	6	8	11	24
350			1	1	1	2	3	5	7	9	21
400				1	1	1	3	5	6	8	19
500				1	1	1	2	4	5	7	16
600				1	1	1	1	3	4	5	13
750					1	1	1	2	3	4	11



NEMA Lift Information and Color Code-Bundle Tape Chart:

EMT Size	Lift quantity in feet	Lift weight LBS (APPROX.)	EMT Bundle Tape Color	EMT Code Method	RIGID Size	Lift quantity in feet	Lift weight LBS (APPROX.)	Rigid End Cap Color	Rigid Code Method
1/2"	7000	2100	Black	Tape	1/2"	2500	2050	Black	End Caps
3/4"	5000	2300	Red	Tape	3/4"	2000	2180	Red	End Caps
1"	3000	2010	Blue	Tape	1"	1250	2013	Blue	End Caps
1-1/4"	2000	2020	Red	Tape	1-1/4"	900	1962	Red	End Caps
1-1/2"	1500	1740	Black	Tape	1-1/2"	800	2104	Black	End Caps
2"	1200	1776			2"	600	2100	Blue	End Caps
2-1/2"	610	1318			2-1/2"	370	2068	Black	End Caps
3"	510	1341			3"	300	2181	Blue	End Caps
3-1/2"	370	1291			3-1/2"	250	2200	Black	End Caps
4"	300	1179			4"	200	2060	Blue	End Caps
					5"	150	2100	Blue	End Caps
					6"	100	1840	Blue	End Caps