



Wheatland Tube Company

DIVISION OF JOHN MANEELY COMPANY

Standards and Specifications

Steel Conduit and Tubing

January 2005

RIGID METAL CONDUIT (RMC) ELECTRICAL METALLIC TUBING (EMT) INTERMEDIATE METAL CONDUIT (IMC)



Rigid Metal Conduit 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. RMC is generally made of steel (ferrous) with protective coatings or aluminum (nonferrous).

Electrical Metallic Tubing is an unthreaded thinwall 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 utilizing appropriate fittings. EMT is generally made of steel (ferrous) with protective coatings or aluminum (nonferrous).

Intermediate Metal Conduit is a steel 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. IMC is made of steel (ferrous) with protective coatings.



Certificate Numbers:
Wheatland, PA 007172
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Little Rock, AR 009081

Made in U.S.A.

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GALVANIZED RIGID METAL CONDUIT (RMC)

NEC® Article 344, ANSI C80.1, UL 6

LISTING REQUIREMENTS:

RMC, factory elbows and couplings, and associated fittings shall be listed.

TRADE SIZE:

½ - 6 Nominal; Standard length 10' (3.05 m) with coupling.

USE:

All atmospheric conditions and occupancies per NEC® 344.10.

COATING:

Hot-dip galvanized O.D. and zinc or organic I.D. O.D. min. coating thickness .0008 inch. Wheatland provides supplemental coating of chromate or equivalent.

THREADS:

Both ends threaded (Tapered NPT ¾" per foot) Coupling one end, thread protector other end. Threads are coated to inhibit corrosion from taking place prior to installation.

Threads per Inch: ANSI/ASME B1.20.1

½-¾ = 14, 1-2 = 11, 2½-6 = 8

BENDS:

No more than the equivalent of 4 quarter bends (360° total) between pull points. Internal diameter of conduit shall not be effectively reduced.

CONDUCTORS:

Number and percent conduit fill given in National Electrical Code® (NEC®) Chapter 9, Table 1.

TESTS:

Pass four 60-second immersions in copper sulfate solution. No flaking or cracking of zinc coating when ½ Steel RMC bent into semi-circle with 4" centerline radius.

SUPPORTS:

RMC shall be securely fastened in place and supported in accordance with NEC® 344.30(A) and (B).

| Size | Max. Dist. (Ft.) |
|--------------|------------------|
| ½ - ¾..... | 10 |
| 1..... | 12 |
| 1¼ - 1½..... | 14 |
| 2 - 2½..... | 16 |
| 3 - 6..... | 20 |

MARKING:

Each length clearly and durably identified every 10Ft. with Wheatland's name, trademark, "Rigid Steel Conduit", and "Consult manufacturer for installation instructions".

| Trade Size NPS | Metric Designator | I.D. | O.D. | WT. 100FT. |
|----------------|-------------------|-------|-------|------------|
| ½ | 16 | .632 | .840 | 82 |
| ¾ | 21 | .836 | 1.050 | 109 |
| 1 | 27 | 1.063 | 1.315 | 161 |
| 1¼ | 35 | 1.394 | 1.660 | 218 |
| 1½ | 41 | 1.624 | 1.900 | 263 |
| 2 | 53 | 2.083 | 2.375 | 350 |
| 2½ | 63 | 2.489 | 2.875 | 559 |
| 3 | 78 | 3.090 | 3.500 | 727 |
| 3½ | 91 | 3.570 | 4.000 | 880 |
| 4 | 103 | 4.050 | 4.500 | 1030 |
| 5 | 129 | 5.073 | 5.563 | 1400 |
| 6 | 155 | 6.093 | 6.625 | 1840 |

ELECTRICAL METALLIC TUBING (EMT)

NEC® Article 358, ANSI C80.3, UL 797

LISTING REQUIREMENTS:

EMT, factory elbows, and associated fittings shall be listed.

TRADE SIZE:

½ - 4 Nominal; Standard length 10' (3.05 m)

USE:

For exposed or concealed work per NEC® 358.10 and limitations of 358.12.

COATING:

Galvanized (zinc) or alternate corrosion resistant coating O.D., organic I.D. O.D. min. coating thickness .0008 inch. Wheatland provides supplemental coating of chromate or equivalent.

THREADS:

EMT shall not be threaded. Unless supplied with factory threaded integral coupling complying with NEC® 358.100.

BENDS:

No more than the equivalent of 4 quarter bends (360° total) between pull points. Internal diameter of tubing shall not be effectively reduced.

CONDUCTORS:

Number and percent conduit fill given in National Electrical Code® (NEC®) Chapter 9, Table 1.

TESTS:

Pass four 60-second immersions in copper sulfate solution. No flaking or cracking of zinc coating when ½ Steel EMT bent into semi-circle with 4" centerline radius.

SUPPORTS:

At least every 10 feet (3.05 m) and within 3 feet (900 mm) of outlet, junction box, cabinet, or other conduit termination. EMT shall be securely fastened in place and supported in accordance with NEC® 358.30(A) and (B).

MARKING:

Each length clearly and durably identified at least every 10Ft. with Wheatland's name, trademark, "Electrical Metallic Tubing", and "Consult manufacturer for installation instructions".

| Trade Size NPS | Metric Designator | I.D. | O.D. | WT. 100FT. |
|----------------|-------------------|-------|-------|------------|
| ½ | 16 | .622 | .706 | 30 |
| ¾ | 21 | .824 | .922 | 46 |
| 1 | 27 | 1.049 | 1.163 | 67 |
| 1¼ | 35 | 1.380 | 1.510 | 101 |
| 1½ | 41 | 1.610 | 1.740 | 116 |
| 2 | 53 | 2.067 | 2.197 | 148 |
| 2½ | 63 | 2.731 | 2.875 | 216 |
| 3 | 78 | 3.356 | 3.500 | 263 |
| 3½ | 91 | 3.834 | 4.000 | 349 |
| 4 | 103 | 4.334 | 4.500 | 393 |
| --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- |

INTERMEDIATE METAL CONDUIT (IMC)

NEC® Article 342, ANSI C80.6, UL 1242

LISTING REQUIREMENTS:

IMC, factory elbows and couplings, and associated fittings shall be listed.

TRADE SIZE:

½ - 4 Nominal; Standard length 10' (3.05 m) with coupling

USE:

All atmospheric conditions and occupancies per NEC® 342.10.

COATING:

Galvanized (zinc) or alternate corrosion resistant coating O.D., organic I.D. O.D. min. coating thickness .0008 inch. Wheatland provides supplemental coating of chromate or equivalent.

THREADS:

Both ends threaded (Tapered NPT ¾" per foot) Coupling one end, thread protector other end. Threads are coated to inhibit corrosion from taking place prior to installation.

Threads per Inch: ANSI/ASME B1.20.1

½-¾ = 14, 1-2 = 11, 2½-4 = 8

BENDS:

No more than the equivalent of 4 quarter bends (360° total) between pull points. Internal diameter of conduit shall not be effectively reduced.

CONDUCTORS:

Number and percent conduit fill given in National Electrical Code® (NEC®) Chapter 9, Table 1.

TESTS:

Pass four 60-second immersions in copper sulfate solution. No flaking or cracking of zinc coating when ½ Steel IMC bent into semi-circle with 4" centerline radius.

SUPPORTS:

At least every 10 feet (3.05 m) and within 3 feet (900 mm) of outlet, junction box, cabinet, or other conduit termination. IMC shall be securely fastened in place and supported in accordance with NEC® 342.30(A) and (B).

MARKING:

Each length clearly and durably identified with Wheatland's name, trademark, "Intermediate Metal Conduit", and "Consult manufacturer for installation instructions". Also, at 5' intervals the letters "IMC" are clearly and durably marked.

| Trade Size NPS | Metric Designator | I.D. | O.D. | WT. 100FT. |
|----------------|-------------------|-------|-------|------------|
| ½ | 16 | .659 | .815 | 62 |
| ¾ | 21 | .863 | 1.029 | 84 |
| 1 | 27 | 1.104 | 1.290 | 119 |
| 1¼ | 35 | 1.452 | 1.638 | 158 |
| 1½ | 41 | 1.683 | 1.883 | 194 |
| 2 | 53 | 2.150 | 2.360 | 256 |
| 2½ | 63 | 2.557 | 2.857 | 441 |
| 3 | 78 | 3.176 | 3.476 | 543 |
| 3½ | 91 | 3.671 | 3.971 | 629 |
| 4 | 103 | 4.166 | 4.466 | 700 |
| --- | --- | --- | --- | --- |
| --- | --- | --- | --- | --- |

Consult the NEC® Article for full text and Authority Having Jurisdiction for complete installation requirements.