Electrunite® Electrical
Metallic Tubing (EMT)

Republic Conduit’s Electrunite® EMT is manufactured from high-quality, flat-rolled, domestic steel. Produced by the electric resistance welding (ERW) process, the finished tube is uniform in OD size, wall thickness and ductility.

Electrunite® EMT, the top-of-the-line labor and material saving conduit product, has the thinnest wall of the steel conduit products. Our 1/2”, 3/4” and 1” sections of Electrunite® EMT are identified as Inch-Marked® and Guide-Lined® to denote our quality. The coating and diamond knurled surface in our Silverslick® product allows for easier wire pulling and pushing. All are exclusive to Republic Conduit.

Because of its ductility and tight tolerances, Electrunite® EMT promotes wrinkle-free bends and reduces kinking and splitting from repeated bending and straightening. The structural strength of this product ensures system integrity; it doesn’t sag or become brittle under normal weather and design temperature extremes. Our EMT also provides important safety factors. It doesn’t burn or decompose to produce harmful smoke or gases.

Unique Benefits of Electrunite

Electrunite® EMT provides a number of features that enhance quality and performance while reducing material and installation costs. They include:

• Electrogalvanizing. All Republic Conduit EMT is electrogalvanized to provide a protective surface coating of satin-smooth, corrosion-resistant zinc. This tightly adherent coating withstands repeated forming without cracking, flaking or peeling. A secondary chromate treatment following zinc coating extends surface protection.

• Knurled diamond design and coating in our Silverslick conduit. The entire ID surface is stamped with a knurled diamond design to reduce contact friction during installation and is coated for easier wire pulling and pushing. The finish stays hard and smooth in all climate conditions.

• Inch-Marked® and Guide-Lined®. Every length of 1/2”, 3/4” and 1” Electrunite® EMT carries the Inch-Marked® and Guide-Lined® trademarks, and help save time and money on installation.

In addition, where permitted by local building code, Electrunite® EMT works well with concrete construction since there’s no damaging galvanic action with concrete or steel reinforcing bars. Special concrete boxes aren’t needed. Tube is easily attached to connectors installed on boxes before spotting on the form, and it can be bent, easily and accurately, to fit into narrow spaces between pans.
Specifications

Architects desiring to specify Electrunite® EMT should include the following description: “Electrical conductors shall be enclosed in Electrunite® EMT in accordance with the National Electrical Code. Electrical metallic tubing shall be mild steel, electrically-welded, galvanized and produced to the following specifications:

- American National Standards Institute – American National Standard for Steel Electrical Metallic Tubing, (EMT) ANSI C80.3
- Underwriters Laboratories Standard for Electrical Metallic Tubing – 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 has adopted the UL 797 and ANSI C80.3 standards.

**Electrunite® EMT Simplifies Installation, Reduces Costs**

The quality and exclusive features of our Electrunite® EMT result in lower installation costs. They help save time and money by allowing for more accurate, consistent bends.

**Silverslick®**

Our inside finish allows for easier wire pulling and pushing. The finish stays hard and smooth in all types of climates.

**Knurled Inside**

The inside surface is knurled for easier wire pulling/pushing. The diamond design decreases wires-to-wall contact, reducing friction.

**Close Tolerance**

“Out of round” ends are eliminated and tight connections are assured because of the consistent roundness and close tolerance in every length of EMT.

**Guide-Lined®**

Our EMT bends in correct plane when using an EMT Bender. This allows for accurate bends without the time-consuming “try and fit” method.

**Inch-Marked®**

Inch-Marked® EMT denotes Republic Conduit Quality.
The Benefits of Steel Conduit

here are a number of advantages to the use of steel conduit:

• Simple installation
• EMI shielding
• System grounding
• Physical and mechanical protection
• Chemical compatibility with concrete
• Fire resistance
• Impact resistance
• Lower life-cycle costs
• Complete recyclability
• Manufactured for long life

Product Availability

*Electrunite*® EMT is manufactured in standard trade sizes through 4”. Please refer to the chart on the back of this data sheet for complete size and weight information. Bundle tape on the 1/4”, 1/2” and 1” sizes is color coded for ease in identification, as shown on the chart on the reverse side.

Inventories of *Electrunite*® EMT are maintained by leading distributors throughout North America.

Large Size EMT

Large size *Electrunite*® EMT has another big advantage where weight is a key factor in the design of an electrical wiring system. Because of its thinner walls, large size EMT is approximately 40% of the weight of rigid steel conduit.

Less weight means less shipping, handling and installation costs.

And because walls are thinner, there’s approximately 22% more inside space than with identically-sized rigid steel conduit. That’s an important consideration when sizing the conduit and pulling large conductors.
No Hassle Quality Guarantee

If at any time within one year of the date of shipment of our Republic Conduit™ products from our facilities, you are not satisfied with the quality of the electrical conduit products purchased from Republic Conduit™, we will promptly replace the material – free of charge. This guarantee applies to all of our electrical conduit products except where environmental conditions preclude one year of service life.

EMT Dimensions and Weights Chart

The values stated in feet/pound units are to be the standard. The metric equivalents may be approximate.

<table>
<thead>
<tr>
<th>Trade Size Designator</th>
<th>Outside Diameter</th>
<th>Nominal Inside Diameter</th>
<th>Nominal Wall Thickness</th>
<th>Nominal Weight Per 100 Feet</th>
<th>Feet Per Bundle</th>
<th>Standard Lifts</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>Metric</td>
<td>IN</td>
<td>mm</td>
<td>IN</td>
<td>mm</td>
<td>IN</td>
<td>mm</td>
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<td>.083</td>
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</tbody>
</table>

*Furnished bearing the INCH-MARKED and GUIDE-LINED trademarks and with knurled inside finish.

**OD size same as corresponding trade sizes of rigid conduit.

EMT Conduit Color Code–Bundle Tape Chart

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>SIZE, IN.</th>
<th>COLOR CODE</th>
<th>METHOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMT Steel Conduit</td>
<td>1/4 Sizes</td>
<td>Red</td>
<td>Tape</td>
</tr>
<tr>
<td></td>
<td>1/2 sizes</td>
<td>Black</td>
<td>Tape</td>
</tr>
<tr>
<td></td>
<td>1 sizes</td>
<td>Blue</td>
<td>Tape</td>
</tr>
</tbody>
</table>

OUTSIDE DIAMETER:
- For trade sizes through 2": ±0.005" (±0.13 mm)
- For trade size 2-1/2": ±0.010" (±0.25 mm)
- For trade size 3": ±0.015" (±0.38 mm)
- For trade sizes 3-1/2" and 4": ±0.020" (±0.51 mm)