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Revision of
ANSI C80.3-1994

American National Standard

For Steel Electrical Metallic Tubing (EMT)

Secretariat:

National Electrical Manufacturers Association

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American National Standards Institute, Inc.

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Foreword (This Foreword is not part of American National Standard C80.3-2005.)

This standard was developed by the Accredited Standards Committee on Raceways for Electrical Wiring Systems, C80. The objective of the committee is to produce a comprehensive specification that would establish uniform dimensions and standard construction requirements for Electrical Rigid Steel Conduit, Steel Electrical Metallic Tubing, Electrical Intermediate Metal Conduit and Electrical Aluminum Rigid Conduit raceway products and their associated components.

The standard was originally approved in 1950 and revised in 1953, 1959, 1963, 1966, 1977, 1983, 1991, 1994 and 2005.

Suggestions for improvement of this standard will be welcomed. They should be sent to:

National Electrical Manufacturers Association
1300 North 17th Street, Suite 1847
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This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Raceways for Electrical Wiring Systems, C80. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the C80 Committee had the following members:

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For Steel Electrical Metallic Tubing (EMT)—

1 Scope

This standard covers the requirements for steel electrical metallic tubing, for use as a raceway for wires or cables of an electrical system. Finished tubing is typically furnished in nominal 10 ft (3.05 m) lengths. It is protected on the exterior surface with a metallic zinc coating or alternate corrosion protection coating (see UL 797 Eighth edition Clauses 5.3.3, 6.2.4, 7.5 and 7.6) and on the interior surface with a zinc or organic coating.

This standard also covers electrical metallic tubing elbows.

Properly assembled systems of steel electrical metallic tubing and elbows, manufactured in accordance with this standard, and other identified fittings provide for the electrical continuity required of an equipment grounding conductor.

2 Normative References

The following standards contain provisions which, through reference in this text, constitute requirements of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below unless otherwise specified.

ASTM A 239 – 95 (1999), *Standard Practice for Locating the Thinnest Spot in a Zinc (Galvanized) Coating on Iron or Steel Articles*

ASTM B 499 – 96 (2002), *Standard Test Method for Measurement of Coating Thicknesses by the Magnetic Method: Nonmagnetic Coatings on Magnetic Basis Metals*

UL 797, *Electrical Metallic Tubing -- Steel*

3 Definitions

3.1 Electrical metallic tubing (EMT): A steel raceway of circular cross-section designed for the physical protection and routing of conductors and cables for use as an equipment grounding conductor.

3.2 Elbow: A manufactured curved section of EMT.

3.3 Alternate corrosion resistant coating (ACRC): A coating(s), other than one consisting solely of zinc, which, upon evaluation, has demonstrated the ability to provide the level of corrosion resistance required on the exterior of tubing. It is not prohibited that the coatings include zinc. (See UL 797 Eighth edition Clauses 5.3.3, 6.2.4, 7.5 and 7.6.)