



UL 1242

STANDARD FOR SAFETY

Electrical Intermediate Metal Conduit – Steel

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UL Standard for Safety for Electrical Intermediate Metal Conduit – Steel, UL 1242

Fourth Edition, Dated February 16, 2006

Summary of Topics

1. Addition of Requirements for IMC Manufactured from Stainless Steel and Removal of Figure 14 and Related References

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin. Changes in requirements are marked with a vertical line in the margin and are followed by an effective date note indicating the date of publication or the date on which the changed requirement becomes effective.

The revised requirements are substantially in accordance with Proposal(s) on this subject dated January 10, 2014.

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1

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Fourth Edition

February 16, 2006

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The most recent designation of ANSI/UL 1242 as an American National Standard (ANSI) occurred on March 5, 2014. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, or effective date information.

The Department of Defense (DoD) has adopted UL 1242 on May 21, 1984. The publication of revised pages or a new edition of this Standard will not invalidate the DoD adoption.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <http://csds.ul.com>.

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CONTENTS

INTRODUCTION

1 Scope	5
2 Units of Measurement	5
3 References	5
4 Glossary	5

CONSTRUCTION

5 General	6
6 Protective Coatings	6
6.1 General	6
6.2 Surface treatments	6A
6.3 Supplementary coatings	7
6.4 Alternate corrosion-resistant coatings	7
7 Threading and Chamfering	7
7.1 General	7
7.2 Protection of threads	8
7.3 Dimensions of threads	8
7.4 Taper of threads	9
8 Thread Gauging	9
9 Straight Conduit	10
10 Nipples	11
11 Elbows	11
12 Couplings	12

PERFORMANCE

13 Identification of Compounds	14
14 Bending	14
14.1 Ambient temperature	14
14.2 Low temperature	15
15 Protective Coatings	15
15.1 Zinc coating	15
15.2 Alternate corrosion-resistant coatings	17
15.3 Organic coatings	20
16 Tensile Strength and Adhesion	21
17 Cold Impact Test	22
18 Flammability Test	22
18.1 General	22
18.2 Preparations	22
18.3 Conduct of the test	25
19 Beam-Strength	25
20 Threaded-Conduit Pullout	26

MARKINGS

21 Details	27
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EXAMINATION OF FINISHED PRODUCT BY MANUFACTURER

22 General	28
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INTRODUCTION

1 Scope

1.1 These requirements cover steel electrical intermediate metal conduit (IMC), nipples, elbows, and couplings. This conduit is provided in trade sizes 1/2 – 4 (16 – 103), for use as a metal raceway for the installation of wires and cables in accordance with the National Electrical Code (NEC), NFPA 70. The values in parentheses are metric designators of conduit.

1.2 Steel intermediate metal conduit is provided both internally and externally with an acceptable level of corrosion resistance in normally corrosive environments. Reference 6.1 for details regarding protective coatings.

1.2 revised March 5, 2014

2 Units of Measurement

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

3 References

3.1 Any undated reference to a code or standard appearing in the requirements of this standard shall be interpreted as referring to the latest edition of that code or standard.

4 Glossary

4.1 For purposes of this standard the following definitions apply.

4.2 COATING(S), ALTERNATE CORROSION-RESISTANT – A coating(s) (other than one consisting solely of zinc) that, upon evaluation, has demonstrated the ability to provide the level of corrosion resistance required on the exterior of conduit. Coatings may include zinc. See 15.2.

4.3 COATING(S), ORGANIC – A coating(s) (other than one consisting solely of zinc) that, upon evaluation, has demonstrated the ability to provide the level of corrosion resistance necessary where the coating is not subject to physical damage, such as on the interior of conduit. The coatings may include zinc. See 15.3.

4.4 COATING(S), ZINC – A coating consisting solely of zinc, that, upon evaluation, has demonstrated the ability to provide the level of corrosion resistance required for the exterior or interior of the conduit as applicable. See 15.1.

CONSTRUCTION

5 General

5.1 Each tube shall be constructed of steel or stainless steel.

5.1 revised March 5, 2014

5.2 Each tube shall have a circular cross section, thereby facilitating the cutting of clean, true threads. All seams shall be thoroughly welded.

5.3 A welded seam shall be without any metal trimming, sharp edge, or sharp projection. A slight bead on the interior wall at the weld line is not prohibited when the bead is not sharp and when the bead does not decrease the interior diameter of the tube by more than:

a) 0.015 inch (0.38 mm) for trade sizes 1/2 – 2 (16 – 53) or

b) 0.020 inch (0.51 mm) for trade sizes 2-1/2 – 4 (63 – 103).

5.4 Before the protective coating is applied, the interior and exterior surfaces of each tube shall be free from scale, flash, or any other protrusion.

6 Protective Coatings

6.1 General

6.1.1 The exterior surface of the steel conduit shall be protected against corrosion by a zinc or an alternate corrosion-resistant coating.

6.1.1 revised March 5, 2014

6.1.2 The interior surface of the steel conduit shall be protected against corrosion by an organic or zinc coating.

6.1.2 revised March 5, 2014

6.1.3 Conduit and fittings constructed of stainless steel are not required to be provided with interior or exterior protective coatings.

6.1.3 added March 5, 2014

6.2 Surface treatments

6.2.1 When one or more surface treatments not exceeding 0.00015 inch (0.38 mm) are used as a top coat or conversion coating, the coatings are not required to meet the requirements for an alternate corrosion-resistant or organic coating.

