

Allied Tube & Conduit Product Specification

This product specification is written according to the Construction Specifications Institute *MasterFormat*, 2014 Update.

SECTION 26 05 33.13

CONDUIT FOR ELECTRICAL SYSTEMS – Aluminum Rigid Conduit

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Aluminum Rigid Conduit with coupling
- B. Related Sections
 - 1. Section 26 05 26 “Grounding and Bonding for Electrical Systems”
 - 2. Section 26 05 29 “Hangers and Supports for Electrical Systems”
 - 3. Section 26 05 33.16 “Boxes for Electrical Systems”
 - 4. Section 27 05 33 “Conduits and Backboxes for Communications Systems”
 - 5. Section 25 05 28.33 “Conduits and Backboxes for Integrated Automation”

1.3 REFERENCES

- A. UL 6A – *Standard for Electrical Rigid Metal Conduit – Aluminum, Red Brass, and Stainless Steel*
- B. ANSI C80.5 – *American National Standard for Electrical Rigid Aluminum Conduit (ERAC)*
- C. UL 514B – *Standard for Conduit, Tubing and Cable Fittings*
- D. NFPA 70 – *National Electrical Code® (NEC®)*
- E. NECA NEIS 102 – *National Electrical Installation Standard for Installing Aluminum Rigid Metal Conduit.*
- F. ANSI/ASME B 1.20.1 – *Standard for Pipe Threads, General Purpose (Inch)*

1.4 SUBMITTALS

- A. Manufacturer’s Product Data
- B. Certifications to applicable standards
- C. Domestic certifications: When required to Buy American Act or Buy America Act, comply with the provisions of Section 01 33 13

1.5 QUALITY ASSURANCE

- A. Aluminum Rigid Conduit shall be listed to UL 6A and manufactured in accordance with ANSI C80.5.
- B. Electrical equipment and materials shall be new and comply with the latest codes and standards. No used, re-built, refurbished and/or re-manufactured electrical equipment and materials shall be furnished on this project.
- C. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7 and that is acceptable to authorities having jurisdiction.

1.6 STORAGE AND HANDLING

- A. Storage: Whenever possible, store the conduit indoors to prevent possible discoloration, the accumulation of dirt and to extend the life of the product. If conduit is stored outdoors, it shall be stored in such a way as to allow air circulation and water drain-off and shall not be directly covered with plastic.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

- A. Allied Tube & Conduit, 16100 S. Lathrop Ave, Harvey, IL 60426, www.alliedeg.com

2.2 ALUMINUM RIGID CONDUIT

- A. Aluminum Rigid Conduit shall be available in trade sizes ½ through 6.
- B. Aluminum Rigid Conduit shall be listed to UL 6A and manufactured in accordance with ANSI C80.5.
- C. Aluminum Rigid Conduit shall be manufactured of 6063 alloy in temper designation T-1.
- D. Aluminum Rigid Conduit shall be labeled or marked showing evidence of third-party listing to product standard.
- E. Aluminum Rigid Conduit shall be threaded on both ends. Taper of conduit threads shall be ¼” per foot (1 in 16) per ANSI/ASME B.1.20.1.
- F. Aluminum Rigid Conduit shall be supplied with a straight-tapped aluminum coupling manufactured in accordance with UL 6A on one end.
- G. A color-coded thread protector shall be installed on the other end: Trade Sizes 1, 2, 3, 4, 5, 6 (blue); ½, 1-1/2, 2-1/2, 3-1/2 (black); ¾, 1-1/4 (red).

2.3 FITTINGS

- A. All field-installed fittings shall be listed to UL 514B.
- B. Fittings shall be aluminum. In non-corrosive environments, steel fittings may be used with aluminum conduit.

2.4 ELBOWS

- A. Elbows shall be listed to UL 6A and manufactured in accordance with ANSI C80.5.

2.5 NIPPLES

- A. Nipples shall be listed to UL 6A and manufactured in accordance with ANSI C80.5.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Aluminum Rigid Conduit shall be installed in compliance with the latest version of the National Electrical Code® (NEC®) and other applicable codes and standards as indicated elsewhere in these specifications.
- B. Aluminum Rigid Conduit shall be installed in accordance with NECA National Electrical Installation Standard (NEIS) 102, *Standard for Installing Aluminum Rigid Metal Conduit*. When installed in concrete or direct buried, supplementary corrosion protection shall be applied.

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END OF SECTION 26 05 33.13