**ATKORE- ALLIED TUBE & CONDUIT, CALCONDUIT**

This product specification is written according to the Construction Specifications Institute *MasterFormat*, 2018 Update.

**SECTION 26 05 33.13**

**CONDUIT FOR ELECTRICAL SYSTEMS – INTERMEDIATE METAL CONDUIT**

PART 1 - GENERAL

* 1. RELATED DOCUMENTS
1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this Section.
	1. SUMMARY
2. This Section includes the following:
3. Steel Intermediate Metal Conduit with coupling
4. Related Sections
5. Section 26 05 26 “Grounding and Bonding for Electrical Systems”
6. Section 26 05 29 “Hangers and Supports for Electrical Systems”
7. Section 26 05 33.16 “Boxes for Electrical Systems”
8. Section 27 05 33 “Conduits and Backboxes for Communications Systems”
9. Section 25 05 28.33 “Conduits and Backboxes for Integrated Automation”
	1. REFERENCES
10. UL 1242 – Standard for Electrical Intermediate Metal Conduit –Steel
11. ANSI C80.6 – American National Standard for Electrical Intermediate Metal Conduit (EIMC)
12. UL 514B – Standard for Conduit, Tubing and Cable Fittings
13. UL 2196 Safety Standard - Fire Test for Circuit Integrity of Fire-Resistive Power, Instrumentation, Control and Data Cables
14. NFPA 70 – National Electrical Code® (NEC®)
15. NECA NEIS 101 – National Electrical Installation Standard for Installing Steel Conduits.
16. ANSI/ASME B 1.20.1 – Standard for Pipe Threads, General Purpose (Inch)
	1. SUBMITTALS
17. Product Data
18. Certifications to applicable standards
19. Domestic certifications: When required to Buy American Act or Buy America Act, comply with the provisions of Section 01 33 13
	1. QUALITY ASSURANCE
20. Intermediate Metal Conduit shall be listed to UL 1242 and manufactured in accordance with ANSI C80.6.
21. 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.
22. 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. DELIVERY, STORAGE AND HANDLING
23. Storage: If possible, store the conduit indoors to prevent possible discoloration, the accumulation of dirt and to extend the life of the product. However, if conduit is stored outdoors, it should be stored in such a way as to allow air circulation (do not cover directly with plastic, for example) and to allow water drain-off.

PART 2 – PRODUCTS

2.1 MANUFACTURERS

1. Atkore – Allied Tube & Conduit, 16100 S Lathrop Ave., Harvey, IL 60426; 1-800-882-5543 [Atkore.com](https://www.atkore.com/)
2. Atkore – Calconduit, 2400 E. 69th Ave, Merrillville, IN 46410; 1-800-882-5543 [Atkore.com](https://www.atkore.com/)

2.2 INTERMEDIATE METAL CONDUIT

1. Intermediate Metal Conduit shall be manufactured from premium; work hardened steel combining electrical and mechanical performance with ductility.
2. Intermediate Metal Conduit is hot galvanized using a process that combines zinc, a conversion coating, and a clear organic polymer top-coat to form a triple layer of protection against corrosion and abrasion.
3. Intermediate Metal Conduit shall have an interior coated with a highly corrosion- resistant lubricating finish for easier wire-pulling.
4. Intermediate Metal Conduit is offered in trade sizes ½ to 4.
5. Intermediate Metal Conduit shall be listed to UL 1242 and manufactured in accordance with ANSI C80.6.
6. Product shall be labeled or marked showing evidence of third-party listing to product standard.
7. Conduit shall be threaded on both ends. Taper of conduit threads shall be ¾” per foot (1 in 16) per ANSI/ASME B.1.20.1.
8. Intermediate Metal Conduit threads shall be hot-dip galvanized after factory cutting
9. Conduit shall be supplied with a straight-tapped electro-galvanized steel coupling manufactured in accordance with UL 1242 on one end.
10. A color-coded thread protector shall be installed on the other end: Trade Sizes 1, 2, 3, 4, (orange); ½, 1 ½, 2 ½, 3 ½, (yellow); ¾, 1 ¼ (green).

2.3 FITTINGS

1. Fittings shall be listed to UL 514B accept non-integral factory installed couplings which are listed to the conduit standard.

2.4 ELBOWS

1. Elbows shall be listed to UL 6 and manufactured in accordance with ANSI C80.1.

2.5 NIPPLES

1. Nipples shall be listed to UL 6 and manufactured in accordance with ANSI C80.1.

2.5 2-HOUR FIRE RATED CONDUIT SYSTEM

 The conduit product listed below, shall be used.

* + 1. Basis-or-Design Product; Steel Intermediate Metal Conduit manufactured by Atkore Allied Tube and Conduit and Atkore Calconduit for both vertical and horizontal installations.
1. Atkore Allied Tube and Conduit and Calconduit Steel Intermediate Metal Conduit is certified for 2 Hour Fire rating installations as per (UL FHIT System No. 28C). (For listed sizes ¾, 1, 1-1/4, 1-1/2, 2 in.)
2. Atkore Allied Tube and Conduit and Calconduit Steel Intermediate Metal Conduit is certified for 2-hour fire rating installations (UL FHIT/FHIT7 No.28D for US/Canada). (For listed sizes ¾, 1, 1-1/4, 1-1/2, 2 in.)
3. Atkore Allied Tube and Conduit and Calconduit Steel Intermediate Metal Conduit is certified for 2 Hour Fire rating installations as per (UL FHIT/FHIT7 System No. 40A for US/Canada).

PART 3 – EXECUTION

3.1 INSTALLATION

1. Intermediate Metal Conduit shall be installed in compliance with the latest version of the National Electrical Code and other applicable codes and standards as indicated elsewhere in these specifications.
2. Intermediate Metal Conduit shall be installed in accordance with NECA National Electrical Installation Standard (NEIS) 101, *Standard for Installing Steel Conduit.*