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

SECTION 26 05 33.13

CONDUIT FOR ELECTRICAL SYSTEMS – PVC COATED RIGID STEEL 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. PVC Coated Rigid steel (carbon) 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 6 – *Standard for Electrical Rigid Metal Conduit – Steel*

B. ANSI C80.1 – *American National Standard for Electrical Rigid Steel Conduit (ERSC)*

C. NEMA RN-1 – *Polyvinyl-Chloride (PVC) Externally Coated Galvanized Rigid Steel Metal Conduit And Intermediate Metal Conduit*

D. UL 514B – *Standard for Conduit, Tubing and Cable Fittings*

E. ETL PVC-001 – *PVC Coating Verified for Adhesion Performance*

F. ASTM D2247 –*Standard Practice for Testing Water Resistance of Coatings in 100 % Relative Humidity*

G. ASTM D870 – *Standard Practice for Testing Water Resistance of Coatings Using Water Immersion*

H. NFPA 70 – *National Electrical Code® (NEC®)*

I. NECA NEIS 101 – *National Electrical Installation Standard for Installing Steel Conduits*

J. ANSI/ASME B 1.20.1 – *Standard for Pipe Threads, General Purpose (Inch)*

1.4 SUBMITTALS

A. 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. PVC Coated Rigid Conduit shall be listed to UL 6 and manufactured in accordance with ANSI C80.1 and NEMA RN-1.

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 DELIVERY, STORAGE AND HANDLING

1.7

A. Storage: Whenever 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 and water to drain-off and shall not be directly covered in plastic.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Calpipe Industries, LLC, 923 Calpipe Rd, Santa Paula, CA 93060, http://www.calbond.com/

2.2 PVC COATED RIGID CONDUIT

A. PVC Coated Rigid Steel Conduit shall be listed to UL 6 and manufactured in accordance with ANSI C80.1 and NEMA RN-1.

B. PVC Coated Rigid Steel Conduit shall be hot-dip galvanized on the inside and outside surfaces in trade sizes ½ -6.

C. Pass adhesion test ETL Verified PVC-001.

D. Coating Thickness: coating shall be nominal 0.040 inch (1 mm), minimum continuous over the entire length of the conduit except at the threads, and be free of blisters, bubbles or pinholes.

E. Urethane coat internal parts of conduit and fittings in accordance with NEMA RN-1 “Corrosion Resistant Internal Coatings”

F. Internal urethane coating shall be a nominal 2-mil thickness and shall be uniformly and consistently applied to the interior of conduit.

G. Product shall be labeled or marked showing evidence of third-party listing to product standard.

H. 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.

I. Conduit shall be supplied with a straight-tapped PVC coated steel coupling manufactured in accordance with UL 6.

J. A color-coded thread protector shall be installed on the other end: Trade Sizes 1, 2, 3, 4, (blue); ½, 1-½, 2-½, (black); ¾, 1-¼ (red).

2.3 FITTINGS

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

2.4 ELBOWS

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

2.5 NIPPLES

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

PART 3 – EXECUTION

3.1 INSTALLATION

A. PVC Coated Rigid Steel 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.

B. PVC Coated Rigid Steel Conduit shall be installed in accordance with NECA National Electrical Installation Standard (NEIS) 101, *Standard for Installing Steel Conduits.*