## Atkore - Allied Tube & Conduit / Heritage Plastics / Queen City Plastics

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

## **SECTION 26 05 33.13**

# CONDUIT FOR ELECTRICAL SYSTEMS – Schedule 40 / Schedule 80 PVC Conduit, Elbows and Fittings

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:
- B. Schedule 40 and Schedule 80 PVC conduit, Elbows and Fittings
- C. 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 651 Safety Standard– Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings
- B. NEMA TC-2 Electrical Polyvinyl Chloride (PVC) Conduit
- C. NEMA TC-3 Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing
- D. NFPA 70 National Electrical Code® (NEC®)
- E. NECA NEIS 111 National Electrical Installation Standard for Installing Nonmetallic Raceways

#### 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. Schedule 40 and Schedule 80 PVC Conduit and Fittings shall be listed to UL 651 and manufactured in accordance with NEMA TC-2 (conduit) and NEMA TC-3 (fittings).
- B. Electrical equipment and materials shall be new and within one year of manufacture, complying with the latest codes and standards. No used, re-built, refurbished and/or remanufactured electrical equipment and materials shall be furnished on this project.
- C. Testing Agency Qualifications: Testing/listing agency shall be one of the following Nationally Recognized Testing Laboratories:
  - 1. Underwriters Laboratories (UL)
  - 2. Intertek Testing Services (ETL)
  - 3. NSF International

## 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.
- B. Schedule 40 and Schedule 80 PVC conduit shall be listed to UL 651 for use outdoors and where exposed to direct sunlight.

#### PART 2 – PRODUCTS

### 2.1 BRANDS

- A. Allied Tube & Conduit
- B. Heritage Plastics
- C. Queen City Plastics

## 2.2 SCHEDULE 40 AND SCHEDULE 80 PVC CONDUIT

- A. PVC Conduit shall be available in trade sizes ½-6.
- B. PVC Conduit shall be listed to UL 651 and manufactured in accordance with NEMA TC-2.
- C. PVC Conduit shall be labeled or marked showing evidence of third-party listing to product standard.
- D. PVC Conduit shall be listed as sunlight resistant.
- E. PVC Conduit shall be listed for use with 90° conductors.

## 2.3 INTEGRAL COUPLINGS

A. Integral couplings shall be listed to UL 651 and manufactured in accordance with NEMA TC-2.

#### 2.4 ELBOWS

A. Elbows shall be listed to UL 651 and manufactured in accordance with NEMA TC-3.

## 2.5 FITTINGS

- A. Fittings, including fabricated fittings, junction-box adapters, expansion joints, threaded adapters and service entrance heads shall be listed to UL 651 and manufactured in accordance with NEMA TC-3.
- B. Fittings for use in wet locations shall be listed for use in wet-locations.

#### PART 3 – EXECUTION

## 3.1 INSTALLATION

- A. Schedule 40 and Schedule 80 PVC Conduit, elbows and fittings 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. Schedule 40 and Schedule 80 PVC Conduit, elbows and fittings shall be installed in accordance with NECA National Electrical Installation Standard (NEIS) 111, Standard for Installing Nonmetallic Raceways.
- C. Schedule 40 PVC conduit shall be acceptable where not subject to physical damage.
- D. Schedule 80 PVC conduit shall be acceptable where subject to physical damage.