



## SECTION 1060

### ELECTRICAL CONDUIT

**1060.1 Scope.** This specification covers electrical conduit to be used as specified or as shown on the plans.

**1060.2 Acceptance.** All material in this section will be accepted based on certification indicating the material is in accordance with this specification and any testing as required by the engineer.

#### **1060.3 Material.**

**1060.3.1 Rigid Metallic Conduit and Tubing.** Except for rigid aluminum conduit, rigid metallic conduit shall be galvanized on both the inside and the outside surfaces. The weight (mass) of zinc coating shall be no less than 0.5 ounce per square foot ( $0.15 \text{ kg/m}^2$ ) of coated surface, as determined in accordance with AASHTO T 65. The interior or exterior surface, or both, may be given a coating of suitable material to facilitate installation of wires and cables and to permit the conduit to be readily distinguished from pipe used for purposes other than electrical.

**1060.3.1.1 Rigid Steel Conduit, Zinc Coated.** Rigid steel conduit, zinc coated, (GRC) shall be in accordance with ANSI C80.1, except as noted herein.

**1060.3.1.2 Intermediate Metal Conduit.** Intermediate metal conduit (IMC) shall be in accordance with ANSI C80.6, except as noted herein.

**1060.3.1.3 Rigid Aluminum Conduit.** Rigid aluminum conduit (RAC) shall be in accordance with ANSI C80.5.

**1060.3.1.4 Electrical Metallic Tubing, Zinc Coated.** Electrical metallic tubing (EMT), zinc coated, shall be in accordance with ANSI C80.3 except as noted herein.

**1060.3.1.5 Fittings for Rigid Metal Conduit and Electrical Metallic Tubing.** Fittings shall be in accordance with ANSI C80.4.

**1060.3.1.6 Fittings for Intermediate Metal Conduit.** Fittings shall be in accordance with UL 1242, except the coating shall meet the same requirements as the conduit with which the fittings are used.

**1060.3.1.7 Inspection.** Conduit, tubing and fittings will be inspected for compliance with specifications. Test specimens for determination of weight (mass) of coating will be at least 2 inches (50 mm) long, cut no less than 6 inches (150 mm) from the end of the length of conduit or tubing selected for testing. If the prescribed two additional samples for retests are taken, and either sample does not comply, the lot represented will be rejected.

**1060.3.2 Rigid Non-Metallic Conduit.** Rigid non-metallic conduit shall be either polyvinyl chloride (PVC) or high-density polyethylene (HDPE).

**1060.3.2.1 Polyvinyl Chloride Conduit.** PVC conduit, bends, couplings and fittings shall be in accordance with UL 651.

**1060.3.2.2 High Density Polyethylene Conduit.** HDPE conduit shall be in accordance with ASTM D 3035 SDR11.

**1060.3.2.3 Fittings for Polyvinyl Conduit.** Fittings for PVC conduit shall be in accordance with UL 514. Cement used for the fittings shall be in accordance with the conduit manufacturer's recommendations.

**1060.3.2.4 Fittings for High Density Polyethylene Conduit.** Fittings for HDPE conduit shall be in accordance with ASTM D 2683. Epoxy used for the fittings shall be in accordance with the conduit manufacturer's recommendations.

**1060.3.2.5 Inspection and Testing.** Material will be inspected for compliance with the specifications, and samples for testing will be taken at either the project location or warehouse, as determined by the engineer.

**1060.4 Certification.** The contractor shall furnish a manufacturer's certification that the material supplied is in accordance with all requirements. If requested by the engineer, the contractor shall also furnish typical test results representative of the material.