PART 1 - GENERAL

1.01 DESCRIPTION OF WORK:

A. Extent of raceways is indicated by drawings and application. Provide raceway as required by the application. Use EMT for interior of building, as permitted by the codes, except imbeded in masonry. Type ENT, AC cable, and MC cable conduit is not permitted to be used. Use schedule 40 PVC or RMC as directed under slab or encased. Use RMC where exposed to damage. Provide a code size grounding conductor in all nonmetallic conduit. Install an insulated code size grounding conductor in all metallic raceway systems and connect/bond to all electrical system boxes, enclosures, frames and device grounds. Connect this conductor to all equipment frames, metallic boxes, device frames and other metallic components of the electrical distribution and utilization systems.

B. Types of raceways in this section include the following:

- Electrical metallic tubing.
- Flexible metal conduit.
- Liquid-tight flexible metal conduit.
- Rigid metal conduit.
- Rigid nonmetallic conduit.
- Surface metal and nonmetallic raceways.
- Cable trays.

PART 2 - PRODUCTS

2.01 METAL AND NONMETALLIC CONDUIT AND TUBING:

A. General: Provide metal and nonmetallic conduit, tubing and fittings of types, grades, sizes and weights (wall thicknesses) for each service indicated. Where types and grades are not indicated, provide proper selection determined by Installer to fulfill wiring requirements, and comply with fire codes and applicable portions of NEC for raceways.

B. Provide connectors, fittings, accessories and installation tools suitable for the product and application.
C. Install conduit systems complying with manufacturers’ published product information.

D. Minimum conduit system shall be electrical metallic tubing except as otherwise noted.

E. Minimum size conduit shall be 3/4 inch except for single receptacles or switch leg drops.

2.02 WIREWAYS:

A. General: Provide electrical raceways of types, grades, sizes, weights (wall thicknesses), number of channels, for each type service indicated. Provide complete assembly of raceway including, but not necessarily limited to, couplings, offsets, elbows, expansion joints, adapters, holddown straps, end caps, and other components and accessories as needed for complete system. Where types and grades are not indicated, provide proper selection as determined by Installer to fulfill wiring requirements, and comply with applicable provisions of NEC for electrical raceways.

2.03 ELECTRICAL (50-V OR HIGHER) SURFACE MOUNTED RACEWAY

A. Provide metal one-piece surface mounted raceway, Wiremold Company or approved equal. Raceway shall be permanently attached using 2-hole straps designed for use with the raceway. Area of raceway shall meet NEC requirements for the conductors installed. Raceway containing more than one circuit shall be equivalent in area to 3/4 inch conduit. Boxes and fittings shall be metal and shall be provided as required to meet the applications.

B. Surface mounted raceway shall be used where raceways are exposed in finished areas such as offices, classrooms, assembly areas, conference room and other similar spaces. EMT conduit is acceptable in other areas.

C. All raceway shall be installed plumb and level. Surface mounted raceways shall be used for runs to surface mounted receptacles.

2.04 POWER POLES

A. Power poles shall be two-compartment aluminum construction. Pole shall extend to the structural ceiling and be attached to structure as required by the pole manufacturer. The communications compartment shall allow for a minimum of a
1-inch bending radius. Surface mounted faceplates shall be installed on pole as indicated on the contract documents. Wiremold 25DTP-4 or equal.

PART 3 - EXECUTION

3.01 INSTALLATION OF ELECTRICAL RACEWAYS:

A. Install electrical raceways where indicated; in accordance with manufacturer's written instructions, applicable requirements of NEC and NECA "Standard of Installation", and complying with recognized industry practices.

B. Coordinate with other work including metal and concrete deck work, as necessary to interface installation of electrical raceways and components with other work.

C. Level and square raceway runs, and install at proper elevations/heights.

D. Complete installation of electrical raceways before starting installation of cables/wires within raceways.

E. Install flexible conduit for motor connections, and for other electrical equipment connections where subject to movement and vibration.

F. Install liquid-tight flexible conduit for connection of motors and for other electrical equipment where subject to movement and vibration, and also where subjected to one or more of the following conditions:

   Exterior location.
   Moist or humid atmosphere where condensate can be expected to accumulate.
   Subjected to water spray.
   Subjected to dripping oil, grease, or water.

G. Wherever possible, install horizontal raceway runs above water and steam piping.

H. Provide secure fastening and support of conduit systems from the building structural system using materials manufactured for the intended application.

I. Support conduit runs in accordance to seismic code requirements.

END OF SECTION 26 05 10