

SECTION 16110

RACEWAYS

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Furnish and install complete systems of raceways for the installation of electrical conductors and other materials as specifically indicated.

B. Provide complete raceway systems for each conductor of electric power, to be installed in this division of the work and for other work where so indicated except as specifically indicated otherwise.

1.02 REFERENCE DOCUMENTS

A. The Special Provisions for Electrical Work are hereby made a part of this section of the work. Refer to Section 16010.

B. See Section 16190 for Supporting Devices.

1.03 SUBMITTALS

A. Submit complete information including manufacturer, material, and finish on each type of raceway to be installed.

B. Submit complete information on methods and materials for support of each type of raceway.

1.04 QUALITY ASSURANCE

A. Each raceway shall bear the UL Label where UL Standards have been established for the type of raceway being provided.

B. Each raceway shall be suitably protective coated for the installation and each portion of the protective coating that is damaged during receiving, handling and installation shall be refinished equal to factory protection.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Raceways include conduits, ducts, wireways, gutters, cable trays, boxes, fittings, and similar items as indicated in other sections of the work.

- B. Raceways fabricated for special pull boxes, junction boxes, gutters, and similar connections shall be code-gauge steel fully rust inhibited and finish painted to match adjacent switch-gear. Interiors shall be accessible through screw covers. Supports and interior protection shall be provided for conductors.

2.02 SLEEVES

- A. Sleeves shall be galvanized steel, formed to meet the size and shape of the raceway to pass through the sleeve.
- B. Sleeves for conduits through exterior walls shall be galvanized steel Schedule 40 pipe or conduit.
- C. Sleeves for conduits through interior walls that are not subject to moisture may be non-metallic conduit.
- D. Sleeves through waterproof walls, floors and roofs shall be provided with water-stop flanges at the point of waterproofing membrane.
- E. Sleeves through waterproof floors shall be as specified for exterior walls below grade except that the collar shall be located at the level of the waterproofing membrane.
- F. Sleeves through the roof shall be as specified for waterproof floors, plus a galvanized iron or steel pitch pan around the sleeve.
- G. Sleeves through fire-rated construction shall be non-combustible.

2.03 PITCH PANS

- A. Pitch pans shall be galvanized iron or steel pans of the shape of the raceway passing through the waterproofing membranes, of the size to provide 1" to 2" space between the outside of the raceway and the vertical side of the pan and of a depth to be set on the waterproofing membrane and extend 1" above the finished roof.

2.04 SMOKE AND FIRE STOP SEALANT

- A. Smoke and fire stop sealant caulk shall be 3M Company Type CP-25 and putty shall be 3M Company Type 303. Larger openings shall be stuffed with 3M Company fire barrier composite sheet No. CS195 in accordance with the manufacturer's directions. Silicone foam penetration sealant shall be General Electric PENSIL 851 or Dow-Corning RTV as approved for the installation.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Each raceway shall be suitably supported from, installed and aligned with the main structural components of the building.
- B. Raceways shall be installed to avoid interference with work of other trades.
- C. Raceways and boxes within the dialysis counter to be installed in metal raceways and boxes conforming to NEC 517-13 and shall be painted per Specification Section 09900.

3.02 PROTECTION AND CLEANING

- A. Raceways will be cleaned both internally and externally of all dirt, debris, and other foreign materials. Raceways in areas to be finish-painted shall be cleaned properly prior to the painting. Raceways not indicated to be finish-painted on the job shall be protected from foreign objects and materials during construction and cleaned and touch-up coated before completion of the work.

END OF SECTION