
Part 1 General

1.1 RELATED SECTIONS

- .1 Section 26 05 00 - Common Work Results for Electrical.
- .2 Section 26 05 31 - Splitters, Junction, Pull Boxes and Cabinets.
- .3 Section 26 05 32 - Outlet Boxes, Conduit Boxes and Fittings.
- .4 Section 26 05 34 - Conduits, Conduit Fastenings and Conduit Fittings.
- .5 Section 26 05 36 - Cable Trays for Electrical Systems.
- .6 Section 33 65 73 - Concrete Encased Duct Banks and Manholes.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for communication raceway systems and include product characteristics, performance criteria, physical size, finish, and limitations.

1.3 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store, and handle materials in accordance with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, indoors, and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect communication raceway systems from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 SYSTEM DESCRIPTION

- .1 Empty raceways system for telecommunication systems (telephony and data), for physical security systems (fire alarm, access control, intrusion detection, and CCTV), and audiovisual systems, complete with outlet boxes, cover plates, terminal and distribution cabinets, conduits, cable trays, pull boxes, sleeves and caps, fish wires, service poles, service fittings, concrete encased ducts.

- .2 Overhead cable tray distribution system.

2.2 MATERIAL

- .1 Conduits: EMT type, in accordance with Section 26 05 34 - Conduits, Conduit Fastenings and Conduit Fittings.
 - .1 Bends with minimum radius of 914 mm for conduits with diameter of 53 mm or greater, for telecommunication systems.
- .2 Underground cable ducts: PVC type, in accordance with Section 33 65 73 - Concrete Encased Duct Banks and Manholes.
- .3 Cable Trays: in accordance with Section 26 05 36 - Cable Trays for Electrical Systems.
- .4 Junction Boxes and Cabinets: in accordance with Section 26 05 31 - Splitters, Junction, Pull Boxes and Cabinets.
 - .1 Box or cabinet length: 6 times largest conduit diameter entering the box.
- .5 Outlet Boxes and Conduit Boxes: in accordance with Section 26 05 31 - Splitters, Junction, Pull Boxes and Cabinets.
- .6 Fish Wire: polypropylene type.
- .7 Plywood panel for wall installation.
- .8 No. 6 grounding green wire in conduit or as directed, from each telephone room to main grounding bar.
- .9 One duplex receptacle 15 A, 120 V, in each telephone room or closet.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for communication raceway systems installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 INSTALLATION

- .1 Install empty raceway system, including underfloor and overhead distribution system, fish wire, terminal cabinets, outlet boxes, floor boxes, pull boxes, cover plates, conduit, sleeves and caps, cable tray, service poles, miscellaneous, and positioning material to constitute complete system.
- .2 Do not install more than two 90° bends without pulling means (pull box).
- .3 Install and support all conduits securely.

- .4 Ream, banding and recap metal conduits.
- .5 Install pull boxes in straight sections of conduits and do not use to replace an elbow.
- .6 Install pull boxes in readily accessible places.
- .7 Unless indicated otherwise, install a 21 mm conduit from each telephone and data outlet in the wall to the nearest accessible false ceiling in the corridor and ending horizontally with a 90° elbow with a radius as large as possible.

3.3 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

3.4 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by pathways for communications systems installation.

END OF SECTION