

**Part 1 General**

**1.1 RELATED REQUIREMENTS**

- .1 Division 01 – General Requirements.
- .2 Section 26 05 31 – Splitters, Junction Boxes and Cabinets.
- .3 Section 26 05 34 – Conduits, Conduit Fastenings and Conduit Fittings.

**1.2 REFERENCES**

- .1 American National Standards Institute (ANSI)
  - .1 ANSI/TIA/EIA 569-B, Commercial Building Standard for Telecommunications Pathways and Spaces.
- .2 BICSI Telecommunications Distribution Methods Manual, 11th Edition.
- .3 BICSI Customer-Owned Outside Plant Design Manual.
- .4 Canadian Standards Association (CSA International)
  - .1 CSA C22.1-12, Canadian Electrical Code, Part 1 (22nd edition), Safety Standard for Electrical Installations.
  - .2 CSA C22.2 No. 182.1-13, Plugs, Receptacles, and Cable Connectors of the Pin and Sleeve Type.
  - .3 CSA C22.2 No. 214-08 (R2013), Communication Cables (Bi-National Standard, with UL 444).
  - .4 CSA T568.1-05 (R2010), Commercial Building Telecommunications Cabling Standard – Part 1: General Requirements.
  - .5 CSA T568.3-05 (R2010), Optical Fiber Cabling Components Standard.
  - .6 TBITS 6.9, Profile for the Telecommunications Wiring System in Government Owned and Leased Buildings.

**1.3 SYSTEM DESCRIPTION**

- .1 Telecommunications raceways system consists of outlet boxes, conduits, sleeves and caps, fish wire, and service fittings.

**Part 2 Products**

**2.1 MATERIAL**

- .1 Conduits: EMT type, in accordance with Section 26 05 34 - Conduits, Conduit Fastenings and Conduit Fittings.
- .2 Outlet boxes wall type, conduit boxes 100 mm X 100 mm size by 65 mm deep C/W single gang plaster ring, and fittings: in accordance with Section 26 05 31 - Splitters, Junction, Pull Boxes and Cabinets.
- .3 Fish wire: polypropylene type.

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**Part 3            Execution**

**3.1                INSTALLATION OF CONDUIT**

- .1 All conduit to be concealed EMT, minimum 27 mm or as noted. Ream and bush both ends. Install fish wire in all conduits.
- .2 Conduit bends to be minimum:
  - .1 6 times trade diameter for conduit less than 50 mm diameter.
- .3 LB, LR, LL or Conduit fittings shall not be used in place of bends.
- .4 Where outlet boxes are indicated to be interconnected with horizontal runs of conduit, install conduit such that cables will enter first box from top and exit from the bottom.

**3.2                IDENTIFICATION OF BOXES AND CONDUIT**

- .1 All conduits to be labelled at both ends. Pull boxes or junction boxes to have identification number on cover i.e. pull box 2 in room 144 = PB 144-2. Outlets to be numbered and identified per building standard.
- .2 Conduits to be colour coded blue.

**3.3                INSTALLATION**

- .1 Install system, fish wire, outlet boxes, conduit, sleeves and caps, miscellaneous and positioning material to constitute complete system from each Data Voice Outlet (DVO) to accessible ceiling space.
- .2 Pathways and spaces as per CSA Standard ANSI/TIA/EIA 569-A.

**3.4                AS-BUILT DRAWINGS**

- .1 The Contractor shall provide a record drawing for communications raceway system. Conduit locations and sizes, and receptacle numbers shall be clearly marked. Locations shall be dimensioned from adjacent walls and clearly recorded.

**END OF SECTION**