

**Part 1            General**

**1.1                SYSTEM DESCRIPTION**

- .1        Termination, patch cords, and cross-connection equipment installed inside building for voice telecommunications systems employing unshielded-twisted-pair (UTP).

**1.2                RELATED SECTIONS**

- .1        Section 27 05 14 – Communications Cables Inside Building
- .2        Section 26 05 01 – Common Work Results – Electrical

**1.3                REFERENCES**

- .1        CAN/CSAT530-M90, Building Facilities, Design Guidelines for Telecommunications.
- .2        CAN/CSAC22.2No.182.4-M90(R2006), Plugs, Receptacles and Connectors for Communication Systems.
- .3        CAN/CSAT529-91, Design Guidelines for Telecommunications Wiring Systems in Commercial Buildings.
- .4        Canadian Open Systems Application Criteria (COSAC) Profile for the Telecommunications Wiring System in Government Owned and Leased Buildings, Treasury Board Information Technology Standards TBITS-6.9
- .5        EIA/TIA Bulletin TSB-36, Technical Systems Bulletin Additional Cable Specifications for Unshielded Twisted Pair Cables, Electronic Industries Association (USA), November 1991.
- .6        TIA/EIA Telecommunications Systems Bulletin TSB40, Additional Transmission Specifications for Unshielded Twisted-Pair Connecting Hardware, Telecommunications Industry Association, August 1992.

**Part 2            Products**

**2.1                COVERPLATES**

- .1        4 port coverplate.
- .2        Stainless steel, 1 mm thick cover plates, thickness 2.5 mm for wiring devices mounted in flush-mounted or surface mount outlet box.

**2.2                VOICE OUTLETS**

- .1        Flush type, snap-in inserts with encapsulated lead frame design and inline IDC terminating interface.
- .2        Category 6, RJ-45.

.3 Suitable for 568A termination.

.4 White in color.

### **2.3 WALL MOUNT CONNECTORS FOR VOICE**

.1 Fire retardant plastic construction with front and back IDC terminating strips.

.2 Suitable for terminating 22, 24, or 26 gauge plastic insulated solid copper conductors without stripping.

.3 Connection clips recessed to prevent accidental short circuit contact.

.4 Contact resistance < 1 Mohm / contact.

.5 Insulation resistance > 100 Mohm between clips.

.6 Provide quantity of connectors to accommodate all termination plus 25% future.

.7 Mount in wall mount connector mount of stamped steel, one piece construction and fire retardant plastic fanning strips. Provide quantity to accommodate all connectors plus 25% future.

.8 Designation strips shall have fire retardant plastic construction and shall snap onto mounts between connectors. Provide ID labels with designation strips.

### **2.16 COMMUNICATIONS CABLE ROUTING HOOKS:**

.1 100mm in diameter

.2 Galvanized steel construction

.3 Complete with wire retainers

.4 Suitable for fastening directly to building structure only.

## **Part 3 Execution**

### **3.1 INSTALLATION**

.1 Install building communications terminating and cross-connecting systems on wall in equipment room in accordance with manufacturer's instructions.

### **3.2 INSTALLATION OF COMMUNICATION WIRES**

.1 Colour match conductors on terminal strip in accordance with CAN/CSA C22.2 No.182.4 and CSA T529. For IDC-type connections, use tool with seating and cutting heads for connecting conductors to terminals.

- .2 Harness slack wire in cabinets, terminals and cross-connecting terminating systems.

**3.3 FIELD QUALITY CONTROL**

- .1 Perform tests in accordance with Section 26 05 01 - Common Work Results - Electrical.

**3.4 LABELING**

- .1 Provide a separate label for each terminated outlet or connector location.
- .2 For outlets at patch panels or workstations, provide self-adhesive labels using black characters on white background.
- .3 Prior to labelling, coordinate with the Project Authority to determine the exact labelling requirements. Allow 10 characters per label.

**END OF SECTION**