

SECTION 27 05 53  
IDENTIFICATION FOR COMMUNICATIONS SYSTEMS

**Part 1 General**

1.1 Summary

- 1.1.1 This section shall govern the products and installation of identification and labeling of all required parts, pieces and accessories of the communications cabling system, which shall include, but is not limited to, cabling, faceplates, patch panels, bix-blocks, conduit, innerduct, junction and pullboxes, firestop locations, and the communications grounding system.
- 1.1.2 Contractor shall also supply a cable manifest (spreadsheet) prior to construction for all backbone and horizontal cabling links, which shall identify the cable type, the starting and ending points of each cable, include pair/strand count, and indicate the label content on both ends (at the faceplate or telecommunications room termination). An updated cable manifest shall be delivered with substantial completion.

1.2 Related Documents

- 1.2.1 The latest versions of the following codes, standards, and guidelines shall be followed. Bring to the immediate attention of CCS if construction documents or conditions differ from requirements in codes, standards, guidelines and specifications.
- 1.2.2 The following codes, as required by law:
  - Ontario Electrical Safety Code (OESC)
  - Ontario Building Code (OBC)
- 1.2.3 The following standards:
  - TIA/EIA-606-B – Administration Standard for Commercial Telecommunications Infrastructure
- 1.2.4 The following best practices:
  - BICSI, Telecommunications Distribution Methods Manual (TDMM)
  - BICSI, Information Transport Systems Installation Methods Manual (ITSIMM)

1.3 Quality Assurance

- 1.3.1 All labels shall be machine-printed, crisp, clear, non-smearing and extremely legible. Labels shall be durable for the life of the system (the 15+ year system warranty); labels which can be easily removed shall not be utilized.

1.4 Coordination with CCS

- 1.4.1 Prior to submission of pre-construction submittals, coordinate with CCS Representative for an owner-provided labeling scheme to be followed for each building.
- 1.4.2 CCS will provide both copper and fiber backbone cable identifiers.

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- 1.4.3 Refer to the subsequent sections for additional instructions. Failure to coordinate with CCS on labeling and identification schemes in a timely manner, and/or failure to follow the requirements of this section may result in the project's Substantial Completion not being met.

1.5 Submittals

- 1.5.1 The following submittals are due at the Pre-Construction Phase, in accordance with submittal requirements in Section 27 05 00 Communications:
1. Product Information Submittals
    - a) Provide manufacturer's product information cutsheet or specifications sheet with the specific product number identified or filled out.
    - b) For planned labeling for all outlets/horizontal cables and backbone cabling:
      - 1) Provide a complete list, in Microsoft Excel format, of the planned identification labels for all outlets/horizontal cables and backbone cables.
      - 2) Await approval or corrections by CCS for labeling scheme prior to printing/applying labels.
  2. Shop Drawings
    - a) Planned labeling for outlets:
      - 1) Provide scaled drawings of the floor plans showing all outlets with the proposed identification label for each outlet.
    - b) Communication Rooms and Backbone Cabling:
      - 1) Provide a riser diagram that indicates each Communications Room by both room number and two letter ITS designation. Also indicate the ITS-provided backbone cable identifiers on this riser diagram.
    - c) Planned labeling for racks and patch panels:
      - 1) Provide enlarged scaled drawings of each communication room indicating Rack Row and Number.
      - 2) Refer to the Execution section for additional information, including Rack Row/Number and Patch Panel labeling.
- 1.5.2 The following submittals are due prior to Substantial Completion, in accordance with the submittal requirements in Section 27 05 00 Communications:
1. Record Drawings
    - a) Updated shop drawings (now identified as Record Drawings) with any additions or changes as required during the course of construction.
  2. Cable Manifest
    - a) Provide cable manifest (spreadsheet) identifying source, destination, pair/strand count, and labeling scheme used for each horizontal and backbone cable. b) This file shall be readable with Microsoft Excel (2007 Version) with formatting intact.
    - c) Submit this file on USB Flash Drive or CD/DVD-R specific for Div. 27 Record Drawings. Refer to Section 27 05 00 for additional information.

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**Part 2 Product**

2.1 Cable, Faceplate, Patch Panel and Active Equipment Labelling

- 2.1.1 All products shall meet UL 969 standards and be rated for indoor or outdoor use as applicable to the installation.
- 2.1.2 Cable labels shall be self laminating, vinyl with white printing area and sized to allow label to wrap around 2.5 times minimum. Labels also shall be sized to suit the labelling requirement maintaining a minimum 10pt. font size.
- 2.1.3 Faceplate and Patch Panel labels shall be adhesive style made of polyester with a white printing area and sized to suit the designated label location. Labels shall be printed with a minimum 10pt. font size.
- 2.1.4 Active equipment labels shall be adhesive style made of polyester with a white printing area and sized to suit the designated label location. Labels shall be printed with a minimum ¼" high font.
- 2.1.5 Patch Panel labels shall be adhesive style made of polyester with a white printing area and sized to suit the designated label location. Labels shall be printed with a minimum ¼" high font.
- 2.1.6 Approved manufacturers:
  - 1. Dymo, Rhino, 5200 or 6000
  - 2. Panduit, LS8E or LS9
  - 3. Or approved equivalent

2.2 IDC Mounts

- 2.2.1 IDC mounts shall be labelled using designation strips and labels specifically manufactured for the IDC mount being installed. Labels shall be colour coded as follows:

Orange	Incoming Circuits (Demarcation Point)
Green	Client Connection to Incoming Circuits (Client side of Demarcation Point)
White	Equipment Connections
Purple	First Level Backbone Cabling
Gray	Second Level Backbone Cabling
Blue	Horizontal Cabling
Brown	Interbuilding Backbone
Yellow	Auxiliary Circuits, Alarms, Maintenance, Security, and other Misc. Circuits
Red	Key Telephone Systems

2.3 Racks and Cabinets

- 2.3.1 Racks and Cabinets shall be labelled using lamacoid plates.
- 2.3.2 Lamacoid plates shall be black background with white letters.
- 2.3.3 Lamacoid plate letters shall be 1" high.
- 2.3.4 Lamacoid plates shall be no more than 2" high.
- 2.3.5 Length of lamacoid plates shall be as required to accommodate number of characters.





