

270553-TC

Identification for Telecommunications Systems

PART 1: GENERAL

Related Documents

The following related sections of the OT standards shall also be applicable to this section.

OT Engineer shall approve all product cut sheets prior to purchasing and installation by contractor. Reference S9 Approved Products.

- S1 Approved Product Request
- S1 Change Request
- S1 Request for Variance
- S1 Resource Allocation Permit
- S2 Introduction
- S3 SOP and Policy
- S4 275116-TC CORE Passenger Communications Paging System
- S4 275118-TC Emergency Communications and Evacuation Paging System
- S5 270000X Telecommunications Systems (Boiler Plate)
- S5 MAA Radio System
- S7 270000-TC Common Work
- S7 270100-TC Systems Cabling
- S7 270101-TC COMCAST Standard
- S7 270526-TC Grounding and Bonding
- S7 270528-TC Hangers and Support
- S7 270555-TC OT Facility Warning Standard
- S7 271116-TC Cabinets Racks Frame Enclosures
- S7 271119-TC Termination Blocks and Patch Panels
- S7 271313-TC Cable Splicing and Termination
- S7 271323-TC Optical Fiber Splicing and Terminations
- S7 271519-TC Horizontal Cabling
- S7 271525- TC Tenant and Airlines Extended DEMARC
- S7 271543-TC Faceplates and Connectors
- S7 271600-TC Telecommunications Station Equipment
- S7 271601-TC Courtesy Phone Backboard
- S8 E911 PS ALI Standard
- S9 Approved Products

SCOPE OF WORK

- A. Work covered by this Section shall consist of furnishing labor, equipment, supplies, materials, and testing unless otherwise specified, and in performing the following operations recognized as necessary for the labeling of the telecommunications infrastructure as described on the Drawings and/or required by these specifications.
 - B. It is the intent of the MAA to create a Class 3 system of administration As per ANSI/TIA/EIA 606-A Standards. As such, all elements must be labeled with unique identifiers as described in the following sections.
 - C. This includes minimum requirements for the following:
 - 1. Labeling Communications Cabling
 - 2. Labeling Communications Closet Hardware
 - 3. Labeling Conduit/Hand hole/Inner duct
 - 4. Labeling Patch Panel Jumpers
- 2
- A. The Cable Labeling Hierarchy will be the following unless otherwise noted for all Cables, Inner Duct, Conduits, Hand holes, Patch cables and hardware inside plant and outside plant:
109.1.1.1.1 Whereas,
Rack Row number, Rack number, Panel number, Port number
 - B. Contractor shall submit for approval by OT Engineer labeling scheme that provides all required information

PART 2 - PRODUCTS

LABELS

- A. The size, color and contrast of all labels should be selected to ensure that the identifiers are easily read.
- B. All labels are to be mechanically printed, no hand printed labels allowed for any component.
- C. Labels should be visible during the installation of and normal maintenance of the infrastructure. Labels should be resistant to the environmental conditions at the point of installation (such as moisture, heat or ultraviolet light) and should have a design life equal to or greater than that of the labeled component.
- D. Provide vinyl substrate with a white printing area and black print. If cable jacket is white, provide cable label with printing area that is any other color than white, preferably orange or yellow – so that the labels are easily distinguishable.
- E. Labels shall be flexible vinyl or other substrates to apply easy and flex as cables are bent.
- F. Labels shall use aggressive adhesives that stay attached even to the most difficult to adhere to jacketing.

PART 4: EXECUTION

LABELING INSTALLATION

- A. Horizontal Copper Cable Labeling:
1. All horizontal cables shall be labeled with self-laminating marking tape, with approved labeling system. Identification shall be as follows:
 2. At the TR end, the cables shall be labeled with the location of where the other end of the cable is terminated including room number, TO number, and jack position. Place label on a visible part of cable within 12" of termination point for ease of identification after termination.
 - a. Example: cable going to room 114, first TO, first jack position would be labeled as: 114-1A1. A cable in the second TO, third jack position would be 114-2A3.
 3. At the TO end, the cables shall be labeled 4" from termination with the following: TR – Rack.Patch Panel.Port. This shall be visible by removing outlet cover plate.
Example: TR Room 114, rack row 1, rack 1, patch panel 1, port 03 would be: 114 – 1.1.1.03
 - b. For voice cabling in older building with separate voice closets and no patch panels, include the TR and as much information as practical such as column, row, block number, and port number or pairs.
 4. For CATV coaxial drop cables, at the splitter or tap, the cables shall be labeled with the location where the other end of the cable is terminated including room number, TO number, and jack position. If not collocated with a TO, indicate room number at a minimum. Place label on a visible part of cable within 12" of termination point for ease of identification after termination.
 5. For coaxial cables at the TO, they shall be labeled 4" from termination with the room number where the splitter or tap is. This shall be visible by removing outlet cover plate.
- B. Telecommunications Outlet (TO) Labeling Scheme:
1. TO's are labeled alphanumerically in a clockwise rotation around the room. Typically, the first TO located to the left of the main entrance of the room is labeled 1A, followed by 2A, 3A, etc.
- C. Horizontal 8 position punch block Labeling for voice:
1. If the cables are for room terminations, label the appropriate corresponding space for the port with the room number, TO, and jack position.
Example: A cable going to room 114, first TO, first jack position would be labeled as: 114-1A1. A cable in the second TO, third jack position would be 114-2A3.

- D. Patch Panel Labeling:
1. For station cabling going to a TO, label each port on the patch panel with the room number, TO, and jack position.
Example: A cable in room 114, first TO, first jack position would be labeled as: 114-1A1. A cable in the second TO, third jack position would be 114-2A3.
Example: A cable going to a floor box TO labeled FB1A in room 114 in the second jack position would be labeled as: 114-FB1A2
- E. Vertical/Riser/Intrabuilding Copper Cable Labeling:
1. All riser cables shall be labeled with self-laminating marking tape, Brady ID-Pro labeler, Panduit LS7 labeler, or equivalent labeling system.
2. At the TR, the copper riser cables shall be labeled with from/to, cable number, and count information on both ends.
Place label on a visible part of cable close to wiring block for ease of identification after termination.
3. Label cabling every 50' along the length of the cable in open trays, and on each side of wall penetrations.
- F. Interbuilding/Campus/Backbone Copper and Fiber Cable Labeling:
1. All interbuilding cables shall be labeled permanently with from/to information, cable type and size, installation date, and installing contractor at each end, manhole, and pull box the cable passes through.
a. Example: From Building 500 to 300, a 24 stand fiber single mode cable would be:
500.105.1.1.1 - 300.100.2.1.3 – 24 ST SM
- G. Conduit, manhole and hand hole Labeling:
1. All interbuilding and intrabuilding Inner duct and conduit systems shall be labeled permanently with from/to information, Building, manhole/hand hole, bank, and conduit number.
Example: from/to 100.109.1.1-MH5W.3.1

- H. Cable Function Color Code
1. As an additional level of identification that allows a particular field type to be quickly located, Color Coded strips, icons, and so on will be installed on all terminated wall plates and block areas. Common equipment refers to PBX equipment, host computer, LAN's and multiplexers. Miscellaneous refers to maintenance alarms, security, paging systems, and other systems and circuits not an integral part of common equipment. Refer to the table below:

| <u>Function</u> | <u>Color</u> |
|--------------------------------------|--------------|
| Auxiliary and miscellaneous circuits | Yellow |
| Common equipment | Purple |
| Customer side of network interface | Green |
| First level backbone | White |
| Horizontal cabling to workstations | Blue |
| Interbuilding backbone | Brown |
| Key telephone systems | Red |
| Network side of network interface | Orange |
| Second level backbone | Gray |

| <u>Building Reference</u> | <u>Identification</u> |
|---------------------------|--------------------------|
| 901 | Building 901 |
| 991 | Building 991 |
| TER | BWI Terminal |
| ARF | ARFF Building |
| KB | Kauffman Building |
| MAC | MAC Building |
| CR<nnn> | Cargo Building <number> |
| MCR | Mid-Field Cargo Building |
| PHG | Parking-Hourly Garage |
| PDA | Parking-Daily A Garage |
| PLA | Parking-Long Term A |
| PLB | Parking-Long Term B |
| PEX | Parking-Express Lot |
| PEP | Parking-Employee |
| PEA | Parking-Old ESP A |
| PEB | Parking-Old ESP B |