SECTION 27 05 53

IDENTIFICATION FOR COMMS

PART 1 - GENERAL

1.1   SUMMARY

    A.   Section Includes:
          1.   Miscellaneous identification products.
          2.   Copper and Fiber Cabling, Low Voltage Outlet and Cabinet Labels.

1.2   ACTION SUBMITTALS

    A.   Product Data: For each type of product.

    B.   Identification Schedule:
          1.   Outlets: Scaled drawings indicating location and proposed designation.
          2.   Backbone Cabling: Riser diagram showing each communications room, backbone cable, and proposed backbone cable designation.
          3.   Racks: Scaled drawings indicating location and proposed designation.
          4.   Patch Panels: Enlarged scaled drawings showing rack row, number, and proposed designations.

PART 2 - PRODUCTS

2.1   PERFORMANCE REQUIREMENTS

    A.   Comply with NFPA 70 and TIA 606-B.

    B.   Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.

    C.   Shall be computer printed type. Handwritten labels are not acceptable.

    D.   Outside plant labels shall be waterproof, even when submerged.

2.2   COLOR AND LEGEND REQUIREMENTS

    A.   Equipment Identification Labels:
          1.   See drawing details for additional information on ID names, color and labeling schemes.
          2.   Generally – all labels shall be: Black letters on a white Background.

2.3   GENERAL LABELING RULES

A.   Identify individually:
       1.   Each communications cable end within 6" of each termination point.
               a.   Backbone cable label wrap shall be visible without the need to open the rear
                       of the patch panel.
       2.   Each structured cabling outlet.
       3.   Each termination block and patch panel (and each termination -- front and rear
               as applicable).
       4.   Each equipment rack.

B.   The nomenclature used to identify cables, blocks, equipment, etc. shall be as specified
       by drawings and shall be considered the minimum labeling requirement. Missing or
       unclear nomenclature criteria for the items specified above shall not be construed as a
       reason not to identify the items and shall be brought to the Owner/Engineer's attention.

C.   All materials required for labeling shall be provided by the supplier. All labels shall be
       permanently adhered, easily visible and shall be smudge-proof. All text shall be typed
       (not handwritten). All cables shall be labeled at both ends.

D.   Labels for face plates, workstation outlets, etc. shall consist of the workstation ID and
       port identification or function. The workstation ID shall be by means of an adhesive label
       with 1/4" high letter which contrasts with the plate finish so it can be easily read. Icons
       and other accessories shall be fully populated where applicable.

E.   Identification of all equipment, racks, patch panels, systems, etc. shall be by means of
       engraved laminated nameplates showing 2" high white lettering on a black background
       fastened in the center of all racks, cabinets and wall fields.

F.   Prior to installing identifying tags and nameplates, submit their nomenclature for
       approval.

G.   All cables terminated on blocks, patch panels, equipment assemblies, etc. shall be
       installed in increasing consecutive alphabetical or numerical order, starting from the
       upper left hand corner of the terminating device.

H.   All labeling must conform to the numbering scheme provided on the drawings. Labeling
       and identification information shall be provided as part of the record drawing as specified
       below (examples only):
       1.   Characters 1 thru 4 = MMR/IDF labels
       2.   Characters 5-6 = Port Number (with leftmost being number xx)
       3.   Character 7 = jack location on patch panel (with leftmost port being number A, B,
               C, D, etc.)
       4.   Sever cabinet and IDF Equipment Enclosure Identification: Provide large,
               laminated labels onto the fronts and rears of IDF cabinets. Refer to drawing
               details.
       5.   All terminations performed under this project shall be clearly identified at both
               ends with a permanent, type written self-adhering label. Work area outlet labels
               must match the patch panel tags identically. Include individual port labels at all
               face plates at each individual port. Also, all low voltage riser and horizontal

cables must have a self-adhering /self laminating type written cable label located on the cable jacket within 6" of each termination.

2.4 LABELS

A. Vinyl Wraparound Labels: Preprinted, flexible labels laminated with a clear, weather- and chemical-resistant coating and matching wraparound clear adhesive tape for securing label ends.

B. Snap-Around Labels: Slit, pretensioned, flexible, preprinted, color-coded acrylic sleeves, with diameters sized to suit diameters of raceway or cable they identify, that stay in place by gripping action.

C. Self-Adhesive Wraparound Labels: Typewritten self-laminating flexible labels with acrylic pressure-sensitive adhesive.

2.5 SIGNS

A. IT Equipment Cabinet Engraved Signs:
1. Preprinted aluminum signs, pre-punched or drilled for fasteners, with colors, legend, and size required for application.
2. 1/4-inch grommets in corners for mounting.
3. Sizes: Vary per cabinet type. Provide dimensioned submittal for each condition for approval by ownership representative.

2.6 CABLE TIES/WRAPS

A. Velcro straps (1/4"-wide) Black shall be the only method of security copper and fiber cabling bundles.

B. Use of all plastic/nylon or other rigid, locking-style tie-wraps are strictly prohibited.

2.7 MISCELLANEOUS IDENTIFICATION PRODUCTS

A. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws, or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Verify and coordinate identification names, abbreviations, label and text colors, sizing and other features with owner's representative prior to installation.

B. Verify identity of each item before installing identification products.

C. Apply identification devices to surfaces that require finish after completing finish work.

D.   Install signs with approved legend to facilitate proper identification, operation, and maintenance of communications systems and connected items.

E.   Elevated Components: Increase sizes of labels, signs, and letters to those appropriate for viewing from the floor.

F.   Self-Adhesive Wraparound Labels:
1.   Secure tight to surface at a location with high visibility and accessibility.
2.   Provide label 6 inches (150 mm) from cable end.
   a.   Backbone cable label wrap shall be visible without the need to open the rear of the patch panel.

G.   Self-Adhesive Labels:
1.   On each item, install unique designation label that is consistent with wiring diagrams, schedules, and operation and maintenance manual.

3.2   IDENTIFICATION SCHEDULE

A.   Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment. Install access doors or panels to provide view of identifying devices.

B.   Accessible Fittings for Raceways and Cables within Buildings: Identify covers of each junction and pull box with self-adhesive labels containing wiring system legend.
1.   System legends shall be determined by owner's representative.

C.   Faceplates: Label individual faceplates with self-adhesive labels. Place label at top of faceplate. Each faceplate shall be labeled with its individual, sequential designation composed of the following:
1.   Wiring closet fed from (IDF), Patch Panel. Port.

D.   Equipment Room Labeling:
1.   Racks, Frames, and Enclosures: Identify front and rear of each with self-adhesive labels.
   a.   Label Location: Labels must be centered on top of cabinet's door if single door and label must be centered on top of cabinet's right door if split door.
   b.   Label Text: Label text must be all caps, bold arial font, font size must be ¾" tall minimum oriented horizontal for single door labels and vertical for split door labels.
   c.   Label Color: All text must be etched white with a black background
   d.   Label Plate: The plate shall be plastic black with white core
   e.   Refer to technology details for additional information
2.   Copper Patch Panels: Label individual patch panels in each rack, starting at top and working down, with self-adhesive labels. Starting with "A".
   a.   Refer to technology details for additional information
3.   Fiber Patch Panels: Label each row from bottom to top, left to right.
   a.   Refer to technology details for additional information
4.   Data Outlets: Label each outlet with a self-adhesive label indicating the following:
   a.   Wiring closet fed from (IDF), Patch Panel. Port.
5.   *See drawings for further details.*

E.   Backbone Cables: Label each cable with a self-adhesive wraparound label. Fiber cable ID labels shall be barrel type and follow the following scheme:
1.   Top line: Origin MDF/POE/MMR:Origin cabinet RU:Origin Ports
2.   Bottom Line: Destination MDF/POE/MMR/IDF: Destination Cabinet (if applicable): Destination cabinet RU: Destination ports
3.   Example Top: MDF-ABC##X:1:101:44:1A-1C
4.   Example Bottom: IDF-ABC##X:1:1:47:1A-1C
5.   Labels shall be provided at both ends of each cable.
6.   Text must be all caps with a minimum height of 1/8 inch black text on a white background.

F.   Horizontal Cables: Label each cable with a self-adhesive wraparound label. Horizontal cable ID labels shall be barrel type and follow the following scheme:
1.   Line: IDF/MMR:Cabinet (if applicable):Patch panel letter:Port number
2.   Example: IDF-ABC##X:1:1:A:01
3.   Labels shall be provided at both ends of each cable.
4.   Text must be all caps with a minimum height of 1/8 inch black text on a white background.

END OF SECTION 27 05 53