

SECTION 28 05 53

SECURITY SYSTEM LABELING

PART 1 - GENERAL

1.1 SUMMARY

- A. General: Furnish engineering, labor, materials, apparatus, tools, equipment, transportation, temporary construction and special or occasional services as required to make a complete working security system installation, as described in these specifications.
- B. Section Includes:
 - 1. Labeling of wire, cable, security devices, enclosures, and raceways.
- C. Related Sections:
 - 1. Consult other Sections, determine the extent and character of related work and properly coordinate work specified herein with that specified elsewhere to produce a complete and operable system.
 - 2. Section 28 00 00 Basic Security Requirements: includes general project requirements, submittal formats, warranty, and installation requirements.

1.2 SUBMITTALS

- A. Product Data: Submit the following:
 - 1. Product information for components specified herein.
 - 2. List of equipment (wire, cable, devices, enclosures, and raceways) and the corresponding text for the label.

PART 2 - PRODUCTS

2.1 NAMEPLATES

- A. Engraved, plastic laminated nameplates, signs, and instruction plates. Engrave stock melamine plastic laminate 1/16 inch minimum thickness for signs up to 20 square inches, or 8 inches in length; 1/8 inch thick for larger sizes. Use white letters for engraved nameplates and punch for mechanical fasteners.

2.2 LABELS

- A. Manufacturer:
 - 1. Brady
 - 2. Thomas and Betts
- B. Wire and Cable Labels:
 - 1. Self-laminating adhesive laser labels.
 - 2. Machine printable with a laser printer.
 - 3. Printable area: X inches by X inches.
 - 4. Cable size: 0.16 – 0.32" OD
 - 5. Color: white with black lettering
 - 6. Manufacturer: Brady wire marking labels WML-211-295 and WML-311-292

C. Device Labels:

1. Self-laminating, type on tape, adhesive labels. Use Helvetica 12 pt text

PART 3 - EXECUTION

3.1 INSTALLATION

A. General Requirements

1. Label the security system components. The components include, but are not limited to, the following:
 - a. Equipment Enclosures
 - b. Conduits
 - c. Security Devices
 - d. Batteries
 - e. Wires and Cables
 - f. Equipment Racks
 - g. Terminal Blocks
 - h. Relays
 - i. Patch panels, and the termination positions within the patch panels.
2. Labels to coincide with device IDs used on the record drawings.
3. Degrease and clean surfaces to receive nameplates and labels
4. Install nameplates parallel to equipment lines. Secure nameplates to equipment fronts using machine screws.

B. Equipment Enclosures

1. Label SEC and CEC enclosures associated with the security system with a nameplate.
2. Mount label on exterior of door, centered horizontally, and positioned one-third of the door height vertically from the top.
3. Color: Green background with White lettering.
4. Example: Line 1: "SEC-01" (1/2 inch high letters)
 - a. Line 2: "Security Equipment Enclosure" (1/4 inch high letters)

C. Conduits

1. Write the destination for every conduit entering a junction box, SEC, and CEC enclosure, or wireway using a black permanent ink marker next to the conduit inside the box.
2. Example: "To SEC-01"

D. Security Devices

1. Label devices associated with the security system with a permanent machine generated, laminated, label. Use 12 point Helvetica text with a clear background. Use white or black lettering depending upon the color of the device.
2. Label each device in a concealed location with the system point number and address.

E. Batteries

1. Label power supply batteries with the month and year they were installed.
2. Example: "April 2007"

F. Wire and Cable

1. Identify wire and cable clearly with permanent machine-generated labels wrapped about the full circumference within one (1) inch of each connection.
2. Indicate the cable ID designated on the associated field or shop drawings or run sheet, as applies.
3. Assign wire or cable designations consistently throughout a given system; i.e., each wire or cable to carry the same labeled designation over its entire run, regardless of intermediate terminations.
4. Provide labels where wire and cable first enter and exit from conduit, junction or distribution boxes; locate labels within six (6) inches of the point of exit.
5. Positional labels so they are clearly visible without the need to remove wire management or other obstructions.
6. Label cables at both ends of a run and within pull and junction boxes using machine generated wrap-around labels.
7. See Item 3.02 for examples

G. Equipment Racks

1. Provide one label plate per rack. Permanently affix label plate and center the label plate on the rack's front top angle.
2. Example: "SECURITY RACK 01"

H. Terminal Blocks

I. Relays

J. Patch Panels

1. Label individual ports on the patch panels.
2. Example: "V01 V02 V03 ..."

3.2 CABLE LABEL FORMAT

A. From Panel to Field Device

1. Line 1: Device Type and Device Number
2. Line 2: Panel ID – Port Number
3. Example: CR 001

PANEL 2 – CR5

4. Standard Device Types
 - a. CR = Card Reader
 - b. K = Camera
 - c. IC = Intercom Reader
 - d. R = Relay Output
 - e. A = Alarm Point
5. Standard Port #s
 - a. CR = Reader
 - b. M = Monitored Input
 - c. R = Relay Output

B. From Door Junction Box to Card Reader

1. Line 1: Device Type and Device Number
2. Line 2: Panel ID – Port Number
3. Example: CR 001
PANEL 4 – CR3

C. Miscellaneous Examples:

1. From Door Junction Box to Door Contact
 - a. CR001
 - b. D.C.
2. From Door Junction Box to Rex Alarm
 - a. CR001
 - b. REX ALM
3. From Panel to Rex
 - a. CR001
 - b. REX PWR
 - c. VDC
4. From Panel to Lock
 - a. CR001
 - b. LCK PWR
 - c. 24 VDC

D. Communications Cable

1. Line 1: Communication Type and Direction
2. Line 2: Panel ID
3. Example: RS485 TO PANEL 2
4. Typical Communication Types
 - a. 100BASE-T
 - b. RS 485
 - c. RS 232
 - d. RS 422
 - e. SNET
 - f. 20mA

END OF SECTION