

**SECTION 28 33 00
VIDEO SURVEILLANCE SYSTEM**

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Main cabinet
- B. Distribution cabinet
- C. Conduit and boxes
- D. Power wiring

1.2 SYSTEM DESCRIPTION

- A. Video surveillance system shall include the furnishing and installation of main and distribution cabinets, conduit system and power feeds.

1.3 SUBMITTALS

- A. Submit under the provisions of Section 01 33 00.
- B. Shop Drawings: Indicate layout, raceway diagrams, and equipment dimensions.
- C. Product Data: Provide data sheets for each item of equipment, depicting equipment capacity.

1.4 RECORD DRAWINGS

- A. Submit under the provisions of Section 01 77 00.
- B. Accurately indicate actual locations of cabinets, boxes, and conduit runs.

PART 2 PRODUCTS

2.1 MAIN CABINET

- A. Steel construction #14 gauge 36" x 36" x 6" cabinet with hinged lockable cover on ½" thick plywood backboard painted light gray and shall be surface mounted.

2.2 DISTRIBUTION CABINETS

- A. Steel construction #14 gauge 24" x 24" x 6" cabinet with hinged lockable cover on ½" thick plywood backboard painted light gray and shall be surface mounted.

2.3 CONDUIT AND BOXES

- A. Provide & install a building distribution cabinet for each building.
 - 1. Provide & install a separate 2" raceway from the main "head-end" cabinet for each building distribution cabinet.
 - 2. For multi-story buildings, provide a floor distribution cabinet for each additional floor level.
 - 3. Feed each cabinet with a separate 1½" conduit, from the building distribution cabinet.
 - 4. Floor areas greater than 20,000 sq ft provide additional floor distribution cabinets, with no one cabinet feeding more than 20,000 sq ft and no raceway more than 400' without a pull box.
 - 5. Do not provide ½" conduits, minimum conduit size shall be ¾".
- B. Provide & install feed conduits from each distribution cabinet to feed the mounting boxes designated for the area, size each of the separate feeds as follows:
 - 1. ¾" for a maximum of 2 mounting boxes
 - 2. 1" for a maximum of 4 mounting boxes
 - 3. 1¼" for a maximum of 6 mounting boxes
 - 4. 1½" for a maximum of 8 mounting boxes
- C. Provide & install 4-11/16" x 4-11/16" x 2½" mounting boxes with covers at designated interior locations.
 - 1. If the area location has removable ceiling tile, the box shall be located above the tile.

2. If the location has a structure of fixed ceiling material, then flush mount the box with a double gang mud ring & cover.
 - D. Provide & install 4-11/16" x 4-11/16" x 2½" flush mounted mounting boxes with double gang mud ring and weatherproof covers; mounted with the opening vertical, at all designated exterior locations fed from additional 4-11/16" x 4-11/16" x 2½" boxes at the interior feed penetrations through the exterior walls.
 - E. Provide & install a 1" conduit from the Main VSS cabinet to the Main "head-end" Security cabinet.
 - F. If the design requires that the main terminal cabinet is to be flush-mounted, then provide a 2" conduit from the cabinet to a 6" x 6" flush-mounted box with cover at floor level.
 - G. Provide and install a 2" conduit from the Main Video Surveillance terminal cabinet to a brooks box located at the designated entry gates.
 1. The exact location determined at plan review by the School Police.
 - H. Provide and install an additional 4-11/16" x 4-11/16" x 2½" box above suspended ceiling directly above each wall video-mounting box.
 1. Locate j-box no higher than 36" above the ceiling in the same room as the wall-mounted box.
- 2.4 POWER FEED
- A. Provide & install a dedicated 120-volt duplex outlet fed from the optional branch of the generator power source, adjacent to the normal power receptacle.
 - B. Provide and install a dedicated 120-volt duplex fed from the optional branch of the generator power source, adjacent the lower portion of main terminal cabinet and the entry terminal cabinet of each building.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install system in accordance with NECA "Standard of Installation" and Section 26 05 33.
- B. Obtain a detail book from the SDPBC School Police Department Security Section for system specifics.
- C. Permanently label all conduits as to plan room number destination, at all terminal cabinets.
- D. Paint all Video surveillance system junction box covers gold.
- E. Install ½" (gold round indicators) of paper construction on ceiling tile grid work at all locations where video surveillance system boxes are located above the drop ceiling.
- F. Permanently label all the video surveillance system terminal cabinets, "video surveillance system".
- G. Install 200 lb strength pull string throughout the raceway system.
- H. Mount all junction boxes mounted above ceiling with the opening facing down, and provide a reasonable immediate access pathway.
 1. Note: The requirement of removing a light fixture or other similar ceiling equipment is not a reasonable access pathway.
- I. Do not use the "Video Surveillance System Raceway" as part of any other raceway system.
- J. Provide and install 6 additional 4-11/16" x 4-11/16" x 2½" mounting boxes with flush single gang ring and single gang cover; with the opening mounting vertical with 3/4" conduit run to the nearest video terminal cabinet or junction box.
 1. (Allow 100' of conduit for each run) Mounting locations field directed during construction, prior to final above ceiling final inspection.

3.2 LOCATION

- A. Provide video junction boxes in the following locations.
 1. At all card reader locations

The School District of Palm Beach County

Project Name:

SDPBC Project No.:

2. Cafeteria main dining room
3. Bus loop
4. Main office reception area
5. In all corridors
6. Student pick-up/drop off
7. Parking areas
8. Gymnasium
9. Auditorium
10. Other areas as defined in the project specific review process, by the SDPBC

3.3 DEMONSTRATION AND TRAINING

- A. Training of the Owner's operation and maintenance personnel is required in cooperation with the Owner's Representative.
 1. Provide competent, factory authorized personnel to provide instruction to operation and maintenance personnel concerning the location, operation, and troubleshooting of the installed systems.
 2. Schedule the instruction in coordination with the Owner's Representative after submission and approval of formal training plans.
 3. Refer to Section 01 91 00, Commissioning, for further contractor training requirements.
- B. Provide demonstration and training for all types of video surveillance systems installed in this project.

END OF SECTION