

SECTION 16723  
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 01300.
- 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 01700.
- 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, 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, 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. Provide & install a separate 2" raceway from the main "head-end" cabinet for each building distribution cabinet. For multi-story buildings, provide a floor distribution cabinet for each additional floor level. Feed each of these cabinets with a separate 1½" conduit, from the building distribution cabinet. Floor level 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.
- 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. 3/4" 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 2⅝" mounting boxes with covers at designated interior locations. If the area location has removable ceiling tile, the box shall be located above the tile. 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 2<sup>1</sup>/<sub>8</sub>" 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 2<sup>1</sup>/<sub>8</sub>" boxes at the interior feed penetrations through the exterior walls.
- E. Provide & install a 1" conduit from the Main V.S.S. 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. Exact location to be determined at plan review.
- H. Provide and install an additional 4-11/16" x 4-11/16" x 2<sup>1</sup>/<sub>8</sub>" box above suspended ceiling directly above each wall video-mounting box. 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 120volt 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 16111.
- B. Obtain a detail book from the Florida Tech Security Department 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 1/2" (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. Note: (removal of a light fixture or other similar ceiling equipment) is not considered as 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 2<sup>1</sup>/<sub>8</sub>" 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. (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. Coordinate with the FI Tech Security Dept.

END OF SECTION