



State University  
Construction Fund

**Directive: 28-2 Electronic Safety and Security Systems**

**Responsible Office: Design & Construction**

**Last Revised Date: May 2022**

## **SUMMARY**

This Directive provides the consultants with the requirements of the State University Construction Fund for SUNY projects. The requirements detailed within are to be implemented into the project's specifications and/or drawings. The intent is not for the specifications or drawings to reference back to this document for compliance nor is it intended to override or amend the local or state codes where either is more stringent.

## **TABLE OF CONTENTS**

### Contents

Section 1 - REFERENCE INFORMATION .....	3
A. RELATED FUND DIRECTIVES .....	3
B. CODES, STANDARDS, REGULATIONS and GUIDELINES .....	3
Section 2 –VIDEO SURVEILLANCE AND ACCESS CONTROL SYSTEMS.....	3
A. GENERAL .....	3
B. VIDEO SURVEILLANCE SYSTEM .....	3
C. ACCESS CONTROL SYSTEM .....	4

## Section 1 - REFERENCE INFORMATION

### A. RELATED FUND DIRECTIVES

1. Refer to *Directives of section 1A, Design Phase Guides*
2. Refer to *Directive 1B-1, Building Codes*

### B. CODES, STANDARDS, REGULATIONS and GUIDELINES

1. United Laboratories (UL); Electronic Industries Alliance (EIA); Security Industry Association (SIA)

## Section 2 –VIDEO SURVEILLANCE AND ACCESS CONTROL SYSTEMS

### A. GENERAL

1. Design video surveillance and access control systems to meet Campus program needs and preferences. See *Directive 1C-10 - Coordination with Individual Campus Standards*.
2. Raceway and Wiring
  - a. Raceway shall be provided as required by the National Electrical Code (NEC) and as per *Directive 26-4 Raceway Systems*.
  - b. In general, open low-voltage wiring above accessible ceilings is acceptable (coordinate and confirm with Campus) and shall be supported per the NEC. All open wiring shall be plenum rated.
  - c. Determine acceptable manufacturers of the video surveillance and access control systems equipment with the Campus. Devices may need to be tied into an existing system (building or campus-wide) and be sole sourced. See *Directive 1C-2 Specification of Materials*.
3. Quality Assurance
  - a. The design of systems shall be by a Registered Professional or by a certified security systems designer or technician with a NICET Video Security Systems Certification, ASIS Physical Security Professional certification or equivalent.
  - b. The installation of video surveillance and access control systems shall be by manufacturers factory certified technicians who are licensed per NYS requirements.

### B. VIDEO SURVEILLANCE SYSTEM

1. General
  - a. Typical projects include the raceway, outlet boxes, wiring and field devices for the video surveillance system. Confirm scope with SUCF and the Campus.
  - b. Video surveillance system devices include, but are not limited to, head-end control panel, digital video recorders, cameras, housings, power supplies and other equipment as required for a complete and functional system.
2. Design and Coordination
  - a. Locations of the cameras and other video surveillance system devices shall be coordinated with the Campus.
  - b. Power to video surveillance equipment shall be coordinated with Division 26. Backup power shall be provided from a generator, uninterruptible power supply (UPS) or individual batteries.
3. Submission Requirements
  - a. Security drawings shall include the following:
    - 1) A tabular list identifying all video surveillance system devices and whether the devices provided, furnished or installed as part of the project or by others (not in contract).
    - 2) Floor plans that indicate all device locations.

- 3) Project specific wiring diagrams indicating the interconnection of the head-end and the field devices.
- b. Electrical floor plan drawings shall include:
  - 1) The locations of devices and the requirements for raceways.
  - 2) Identification of the branch circuits to power the video surveillance system equipment.
- c. Division 28 Specifications shall include the following:
  - 1) Product data for all raceway, wiring and devices.
  - 2) Requirements for the complete installation and 100% testing of the video surveillance system.
  - 3) Requirements for programming any existing head-end equipment (if applicable).
  - 4) Provide services of the manufacturer's technical expert(s) and other quality assurance requirements as noted in *Directive 1C-2 Specification of Materials* (if applicable).

### C. ACCESS CONTROL SYSTEM

1. General
  - a. Typical projects include the raceway, outlet boxes, wiring and field devices for the access control system. Confirm scope with SUCF and the Campus.
  - b. Access control system devices include, but are not limited to, head-end control panel, remote control panels, power supplies, batteries, door controllers, credential readers, keypads, request to exit devices, door contacts, push button switches and other equipment as required for a complete and functional system.
2. Design and Coordination
  - a. Locations of card readers and other access control system devices shall be coordinated with the Campus.
  - b. Access control system devices shall be coordinated and be compatible with Division 8 door hardware.
  - c. Power to access control equipment shall be coordinated with Division 26. Backup power shall be provided to the access control equipment from a generator, uninterruptible power supply (UPS) or individual batteries.
  - d. The access control system shall receive an input signal from the fire alarm system (fire alarm control module) to unlock secured doors as required by the BCNYS Means of Egress requirements. Coordinate fire alarm requirements with Division 28.
3. Submission Requirements
  - a. Telecommunication drawings shall include the following:
    - 1) A tabular list identifying all access control system devices and indicates devices that are provided, furnished or installed as part of the project or by others (not in contract).
    - 2) Floor plans that indicate all device locations.
    - 3) Project specific wiring diagrams indicating the interconnection of the head-end and the field devices.
    - 4) Typical door riser diagrams
  - b. Electrical drawings shall include:
    - 1) The location of all devices and the raceway requirements for each device.
    - 2) Identification of the branch circuits to power the access control system equipment.
  - c. Fire alarm drawings shall indicate the location of the fire alarm control module(s) to communicate with the access control system (as required).
  - d. Division 28 Specifications shall include the following:
    - 1) Product data for all raceway, wiring and devices.

- 2) Sequence of operation of devices including if they are interconnected with Fire Alarm Systems.
- 3) Requirements for the complete installation and 100% testing of the access control system (if applicable).
- 4) Requirements for programming any existing head-end equipment (if applicable).
- 5) Provide services of the manufacturer's technical expert(s) and other quality assurance requirements as noted in *Directive 1C-2 Specification of Materials* (if applicable).