

MEDICAL CENTER SPECIAL REQUIREMENTS FOR DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

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The special requirements indicated in this appendix shall be incorporated in all Design Documents for Medical Center Projects. These Special Requirements consists of exceptions, revisions or additions to the base Building Design Standards.

28 00 00. ELECTRONIC SAFETY AND SECURITY

28 10 00. ELECTRONIC ACCESS CONTROL AND INTRUSION DETECTION

28 10 10 ACCESS CONTROL and ALARM MONITORING SYSTEM (ACAMS):

.12 Equipment used at the OSU Medical Center complex for all projects. Equipment to be used on each door application will be determined by the Medical Center Security dept's Systems Manager or Director.

- Matrix MX 2 Magnetic Stripe Card Reader
- Matrix RCM 2 Reader Control Module (to be located in data or electrical room)
- Matrix RDP Remote Data Panel w/ Alarm card (to be located in data or electrical room) (when needed for projects, survey will need completed of the area)
- Door contacts (GE Magnetic Contacts 1078/1076 Series)
- Matrix Relay Interface Boards 05-00172C (when needed)
- Matrix "M" Cable
- Bosch Request to Exit motion detectors DS150i / DS151i
- Von Duprin electric strike 6210,6211,6211AL,6211WF,6212, 6212WF
- Schlage Magforce 101+ Delayed Egress "Rocking" Electromagnetic Locks
- Schlage Magforce 390+ Series Electromagnetic Lock
- Matrix weather hoods are required for all outdoor installs.
- Panic buttons are to be Ademco 369 surface mounted with recessed switch.
- Emergency release for automatic doors shall be Securitron EEB2 30 second delay exit button.
- All CCTV equipment will be from Bosch. All termination, connections and ties for all cables between new cameras, and head end equipment in the SCC shall be done by KNS Services only.

Install procedures:

- All conduit, switch box rough-ins, and cable pulls are to be done by the security contractor or electrical contractor under the direction of Matrix.
- All equipment mounting, and wire hook-ups are to be done by Matrix Systems factory technicians or authorized affiliate.
- All termination, programming, and testing is to be done by Matrix factory tech

Reporting procedures

- All Matrix, CCTV and other security related equipment shall report all signals to the Medical Center Security Control Center. Any signal sent out beyond the SCC will be monitored and approved by either the Medical Center Security Systems Manager or Director.

28 30 00. ELECTRONIC DETECTION AND ALARM

28 31 00. FIRE DETECTION AND ALARM

- .5 SYSTEM ARCHITECTURE: The existing OSUMC fire alarm system network consist of Simplex fire alarm control panels (nodes) of various design releases communicating via Style 7 fiber token ring configuration. All existing OSUMC buildings currently have at least one addressable node in the building that shall be utilized for expansion and renovation purposes. All panels report to (3) Graphic Command Centers (GCC's) located in the Security Control Room (Rhodes Hall Room S128C), Facilities Services Control Room (Doan Rm 009) and PBX (660 Ackerman Road) via the token ring network. In order to maintain a single, dependable and UL listed monitoring system, it is expected that Simplex will be utilized in future expansion.
- .5.1 FIBER CONNECTION: The fiber connection in the network shall be 12 strand, multimode fiber extended via 1" conduit between hinged pull boxes located adjacent to each fire alarm panel. The pull box shall contain fiber landing points and fiber jumpers shall be extended to the fire alarm panel. The hinged pull box provides a point of demarcation between IS supported fiber optic cable and the facilities supported fire alarm panel.
- .5.2 RACEWAYS: A hinged pull box shall be located on each floor of any multistory building. Each pullbox shall contain terminal strips labeled for IDnet, strobe, speaker, door holder, and 24V DC. Horizontal backbone runs in corridor shall be 1" conduit with a 6"x6" junction box every 30'. Raceway infrastructure facilitates system expansion and troubleshooting.
- .6 SYSTEM OVERRIDES: System overrides shall be provided for AHU control, audio circuit, visual circuit, door holder, elevator recall, Matrix/Security panel, fire shutter and lighting system control to enable building testing without impact on building operations.
- .7 POINT DESCRIPTORS: Verify point descriptors with OSUMC prior to programming system. Each point requires (at minimum) two letter building designation and room number. Use of architectural corridor numbers is not permitted. Devices in corridors shall be labeled using nearest room as identifier (e.g., corridor by room 235).
- .8 WIRING CLASS: For initiating circuits, Class B Style C is acceptable. For notification circuits, Class B Style Y is acceptable.
- .9 DEVICES: All smoke sensor devices shall be labeled on the base (not head) with node, channel and device number. This address shall be visible without requiring removal of the head or access into the device.
- .10 PULL STATIONS: Pull stations shall be double action.
- .11 DUCT SENSORS: Use of area type smoke detectors in HVAC ducts is STRONGLY discouraged. Remote testing/indication station shall be provided.
- .12 DOOR HOLDER CIRCUITS: 24V door holder circuits shall be installed and drop on floor that is in alarm. One circuit shall not extend between floors.
- .13 SIGNAL DEVICE: Audible and combination audible/visual devices shall be of the speaker type.
- .14 SECURITY PANEL LOCATIONS: Provide fire alarm addressable control device at each security control panel.
- .15 FIRE SHUTTERS: Fire shutters requiring automatic operation shall have (1) smoke sensor with a sounder base on the staff side (if applicable) and (1) smoke sensor with

relay base on the public side (if applicable). A 24V DC power supply shall be provided above the ceiling in an accessible location. The normal state for the shutter firefly shall be with applied voltage. The firefly shall have a variable time delay release. Upon either of the (2) smoke sensors activating, the sounder base shall provide an audible warning signal to prior to the relay base activating the release of the shutter. In the event of excessive public traffic, a delay button may be required to allow for clearing of the area under the fire shutter prior to dropping the door (any deviation from code requirements require variance approval). The delay button shall be momentary type, connected to the firefly and parallel the operation of the relay base. Appropriate signage indicating operation of the switch shall be provided with white letters and red background.

- .16 HALON/CHEMICAL SUPPRESSION SYSTEMS: (2) programmable relays shall be provided at the control panel for any Halon or chemical suppression control panels. (1) shall be used for panel trouble indication and (1) for active alarm indication back to building fire alarm panel.
- .17 PRETEST: Prior to any life safety test, contractor and fire alarm manufacturer shall perform a pre-life safety test. Both the contractor and fire alarm manufacturer shall conduct the test under supervision of OSUMC. The pretest shall be performed at least (3) days prior to any official life safety test in order to allow for system corrections.
- .18 SPARE PARTS: Provide 10% spare parts.
- .19 WARRANTY AND TRAINING: Supplier shall provide a (1) year warranty with emergency service applicable. Fire alarm manufacturer shall provide maximum (1/2) hour telephone response and (4) hour site response time for emergency calls during the warranty period. The amount of training required will vary greatly with the size of the project and extent of the installation.
- .20 SERVICE: All service outside of warranty shall be provided under a separate contract.

END OF DIVISION 28 – ELECTRONIC SAFETY AND SECURITY