

BUILDING ACCESS CONTROL

General

This section addresses minimum functional and technical requirements of the Building Access Control (BAC) system on the University of Michigan Ann Arbor Campus. Functional requirements apply to General Fund buildings. Technical requirements apply to all buildings connecting to the campus BAC system.

University of Michigan Hospitals and Health Centers (UMHHC) and University of Michigan Housing (UMH) maintain their own respective access control systems, standards and hardware. For UMHHC projects, contact UMHHC Facilities Planning and Development. For UMH projects, contact Design Manager.

Related Sections

U-M Design Guideline Sections:

[SID-F Codes and Regulatory Agencies](#)
[08710 Door Hardware](#)

U-M Master Specifications:

[08710 Door Hardware](#)
[16724 Security System General Requirements](#)
[16727 Access Control and Monitoring System](#)

U-M Standard Details:

16725 Series - Request from Design Manager

Definitions

Building Access Control (BAC): Campus central electronic system (existing), local building panels, distribution and hardware that controls and monitors access to a building and areas within a building based on one or more of the following types of doors:

- *Monitored:* Use of monitoring devices to detect forced door openings and door held conditions.
- *Electronically scheduled:* Use of a central time clock to electronically schedule the locking and unlocking of doors plus functions described for monitored doors.
- *Card reader:* Use of a code, card, or other method of authentication to unlock a door plus functions described for monitored and electronically scheduled doors.
- *Card reader with auto door operator:* Use of a push button to initiate a low energy operator that is interfaced with BAC functions described for monitored, electronically scheduled, and card reader doors.

Mechanical or battery operated digital security hardware: Stand alone mechanical locks that use keypads or other local methods of authentication to gain access to a secured area.

SID-Q

Surveillance systems: Surveillance systems shall include any Closed Circuit Television (CCTV) system installed for the purpose of viewing and/or recording video images for security or system troubleshooting purposes.

BAC: Minimal Functional Requirements

New buildings, additions and major renovations

Evaluate the physical and programmatic layout of the building as related to BAC locations and security requirements. Pay particular attention to egress paths through secured areas, interior connections to adjacent buildings, and control points that are required by code to connect to the building fire alarm system.

Exterior Doors

Provide exterior doors that connect to the campus BAC system and meet the following minimum requirements:

- General (all doors):
 - Provide key cylinder and hardware capable of mechanical access.
 - Provide hardware that allows manually-actuated egress requiring only a single operation at all times.
- Card reader with auto door operator: At least one access point for authorized after-hour use. Coordinate location with accessible building entry.
- Card reader doors: As needed for authorized after-hour use.
- Electronically scheduled doors: All exterior entrance doors used for ingress during building hours of operations.
- Monitored doors: All remaining exterior doors including loading dock and overhead doors.
- Other door types:
 - Exterior doors that provide access to building services spaces (mechanical, electrical, and grounds rooms) but do not provide access to the building interior may not require access control capability. Review with the Design Manager.
 - Doors equipped with an intercom or other communication device to allow a momentary remote unlocking of doors is permitted in select situations only. Review with Design Manager and Department of Public Safety.

Review location and quantity of each door type described above with the Design Manager.

Special alarm systems

Contact Design Manager early in the design process to review the need for special alarm systems.

Interior Doors

Contact Design Manager early in the design process to review interior security requirements.

Elevator Doors

Do not connect elevator doors to BAC system

BAC - Technical Requirements

Contact Design Manager.

Related Systems and Hardware

Surveillance Systems

Contact the Design Manager early in the design process to review the need for surveillance systems.

Mechanical or battery operated digital security hardware

Provide stand alone mechanical or battery operated digital security hardware for select interior applications only. Contact the Design Manager to review interior security requirements.