PART 1 - INTRODUCTION

1.1 PURPOSE

A. This section contains general security-related design requirements for doors and windows.

PART 2 - GENERAL DESIGN REQUIREMENTS

2.1 REVIEW

A. Before developing the project design documents, the Project Manager and Yale University's Security Department should review and/or determine the security requirements. Provide adequate time to conduct a thorough review of the plans. A minimum of 10 working days is needed to adequately review and comment on the plans.

PART 3 - MINIMUM PRODUCT REQUIREMENTS

3.1 RESIDENTIAL AREA ENTRANCE DOORS

A. Residential area entrance doors must be windowless, of solid wood construction, 1-3/4" thick, or constructed of 18-gauge hollow metal mounted to a metal frame.

B. Equip residential area entrance doors with a fire-rated viewer that provides a 180-degree field of view. In fire-rated door assemblies, the viewer must be “ratable.”

C. Equip residential area entrance doors with ADA-approved, lever-type locking hardware that combines a single action dead bolt and latch bolt lock function. The Best 37H mortise lock is highly recommended for residential areas. This and other locks ordered for residential areas must not contain faceplate buttons. Use the University's new Best restricted key system to key the locks on all residential doors.

D. Equip residential area entrance doors with lock guards to prevent an intruder from gaining access to the lock latches from the outside.

E. Where feasible, mount the hinges on the interior side of the door. In those instances where egress requirements dictate that hinges be mounted on the outside of the door, install non-removable pins.

3.2 ROOF AREA ACCESS

A. Examine and design access doors and routes to roof areas to prohibit persons from gaining unauthorized access to these areas. Ensure that doors automatically lock when closed, thereby prohibiting re-entry.

B. Install a 1" throw, deadbolt-type lock. Otherwise, door and hinge requirements are the same as

those for residential area entrance doors.

3.3 DOORS TO INTERCONNECTING ROOMS THAT ARE NOT EMERGENCY EXITS

A. To provide occupants with the capability to lock their side of the door, install security surface bolts on interconnecting doors that are not identified as emergency exits.

3.4 OFFICE AND ADMINISTRATIVE AREAS

A. Individual departments have internal procedures that address security and operations. A project's design should enhance these procedures and the capability of the department to properly secure their areas of responsibility. Coordinate closely with department and security representatives before renovating an office or administrative area.

3.5 FIRE AND EMERGENCY EXITS

A. Doors Between Student Rooms

1. Equip designated emergency exit doors that interconnect student rooms with AC-powered local alarm devices, and mark the doors appropriately. Battery-operated local alarm devices are not permitted. Install local alarm devices that have a local reset capability for silencing or disabling the alarm.
2. Reset devices and door hardware must contain Best interchangeable cores. The Physical Plant Lock Shop is responsible for installing and pinning the cores. This work is not contracted to an outside agency.
3. Use Yale University's new Best restricted key system to key the locks on all doors not considered emergency exits.

B. Doors Between Common and Residential Areas

1. Install locking devices on emergency exit doors that enable egress from such common areas as bathrooms or game rooms to residential areas, but prevent unauthorized, immediate, and silent access to student rooms.
2. Equip each common area emergency exit door with a magnetic lock or electric strike that interfaces with the fire alarm system or a pull station and that activates the fire alarm system when opened. Conversely, when the fire alarm system or pull station is activated, the emergency exit door must be released, a local alarm activated, and a silent fire alarm signal enunciated at the alarm monitoring station.
3. Place a sign on each door indicating that the door is alarmed and is a designated emergency exit.

3.6 RESIDENTIAL AND OFFICE AREA SEPARATION

Make every effort to segregate office and residential areas. If it is absolutely necessary to co-locate faculty and administrative offices with residential areas, take access control, operational, and other measures to ensure the safety and security of the residences. As a minimum, equip residential areas with some form of physical or electronic access control to restrict non-resident access to the residential areas.

3.7 ELECTRONIC ACCESS CONTROL

A. Consider perimeter control for all facilities. Residential facilities have the highest priority for implementation of electronic access control.

B. Electronic access control systems should be capable of indicating whether a monitored door is closed or open, locked or unlocked. Electronic access control systems should also be capable of being programmed to initiate a predetermined alarm at the control center for specific conditions.

C. Do not install electronic access control components, especially heat- and humidity-sensitive components in such areas as mechanical rooms and tunnels that are not compatible with the components.

D. Electronic access control equipment, such as control panels, modems, and remote or satellite units, should be installed only in secure areas and within locked and secure cabinets.

E. The Ezra Stiles, Morse, Silliman, Jonathan Edward, Berkeley, and Hopper residential colleges are wired for electronic card access. Wiring originates in the general area of the telephone terminal closets and terminates at entryways. Do not disturb the existing conduits and wiring during the renovation of these colleges.

F. In colleges where wiring has not been completed, make provisions for the installation of wiring, conduit, and other components that will expedite the future installation of electronic security measures. Coordinate the installation with the Yale University Security Department.

3.8 ADA AND OTHER SPECIAL NEEDS REQUIREMENTS

A. All ADA components and devices and AD installations must comply with applicable building and fire safety codes.

B. Install the following security and life safety equipment and devices in rooms designated for occupancy by persons with special needs:

1. A wide-angle peephole positioned 48" above the floor to provide wide- angle viewing for wheelchair-bound persons as far as 18" from the door
2. An emergency alarm that enunciates at the alarm monitoring station
3. A fire alarm module that provides an in-room audible and visual means of signaling a fire alarm.

C. Electronic access control devices and automatic door openers should be installed along the entire route that a person with special needs must travel to access their designated suite or room. Access can be a gate, an entryway, and a suite or room door.

3.9 WINDOW PROTECTION

A. Expanded Metal Grates and Bars

Expanded metal grates and bars may be used to protect window openings for emergency purposes only and not as a standard for future use or for installation in large numbers.

B. Security Screens

The installation of security screens is the primary method of protecting window openings. Security screen minimum standards:

a. The frames must be constructed of aluminum.
b. The wire must be 16-gauge, stainless steel alloy (302/304)
c. The maximum mesh size is 12 strands per inch.
d. Screens must be quick-release, single action, pull-in type units that meet the State of Connecticut Fire Safety Code egress requirements.

3.10 MECHANICAL KEYS

A. Best is the standard keying system for Yale University.

B. Coordinate the re-keying or coring of locks on new projects with the appropriate Yale University lock shop. All requests to use outside contractors must be routed through the Yale University Security Department.

C. Use the Best restricted keying system in residential areas and in facilities that require a high level of security and accountability.

Date	Description of Change	Pages / Sections Modified	ID
07/15/19	Entire document	-	CJ385