DIVISION 08 70 00—Hardware

FORMAT

1. Technical specifications content and numbering system shall be based on the most current CSI Master Format.

BASIS OF DESIGN

1. APSU design standards shall not replace fully developed, project and market specific technical specifications, with 3 manufacturers unless indicated otherwise, e.g., Stanley CorMax. Associate shall utilize the standards as a minimum standard to guide the design.
2. Design guidelines supplement building, fire, and other health, safety and welfare codes, and represent practices APSU has adopted regarding the built environment. Where conflicts arise between codes and guidelines, codes take precedent.
3. Coordinate deviation from guidelines with the University Design and Construction (UDC) Department.

COORDINATION

1. Selection of doors and hardware shall be coordinated with APSU locksmith, 931-221-7021.
2. Associate shall submit shop drawings to the locksmith for review prior to their approval.
3. All door slabs shall be machined off-site in the vendor or manufacturer's facilities. Associate shall place the following note conspicuously on the each sheet showing the door schedule and in the technical specifications:

   "Door slabs and frames shall be ready for hardware installation before delivery to the work site. Door slabs and frames shall be machined at the vendor or manufacturer's facilities."
4. Location of rapid key entry vault shall be determined by APSU Office of Public Safety and the University locksmith.

RELATED SECTION

1. 08—Openings

DEMOLITION AND RENOVATION

1. Lock and door hardware removals shall be coordinated with APSU locksmith and UDC. All hardware removed shall be returned to the University locksmith office at its option.

08 71 00—DOOR HARDWARE

GENERAL PROVISIONS

1. Supplier shall be an APSU approved dealer of Stanley CorMax.
2. Cores and keys shall be shipped directly to APSU from the factory.

DIVISION 08 70 00—Hardware

3. Unpinned cores shall be provided at a rate of 5% of the total number of locks and 1 blank key per core.
4. Prior to submitting shop drawings, successful hardware supplier shall make contact with APSU locksmith, 931-221-7021, to receive instruction pertaining to key symbols, master keys and final approval of individual lock function and hardware options.

FINISH

1. For new construction and renovations impacting a majority of the building, hardware finish shall be 32D, satin stainless steel.
2. For renovations not affecting the entire building, match existing and adjacencies as closely as possible.
3. Associate shall ensure closers match finish and color of doors and frames.

LOCKS & LATCH SETS

1. Use Stanley Best 9K37_ _ 15DSTK626 Series Heavy Duty Locks—Levers.
2. Coordinate locking functions with APSU in situations where ones prescribed are inappropriate.
3. Each area shall receive the lock & latchsets functions below:

Location	Function Code
1. Offices, classrooms, conference rooms	AB
2. Student rooms	R
3. Single occupancy restrooms	L
4. Mechanical & electrical rooms, data rooms, custodial, storage rooms	D

DEAD BOLTS

1. Double-cylinder (i.e., keyed on both sides) deadbolts shall not be used.
2. Dead bolt shall be full-motise, commercial grade, heavy duty with thumb turn lever with 2 ¾" backset.

HINGES

1. Exterior, stairwell and corridor doors shall use heavy duty continuous hinges.
2. Low traffic doors 3' wide or less shall use full mortise 4 ½" x 4 ½" ball bearing, heavy duty, butt hinges with non-removable pin.
3. Doors wider than 3'-0" shall receive heavy-duty continuous hinge.
4. Doors 7'-2" and higher shall have 4 hinges; doors under 7'-2" shall have 3 hinges.

EXIT DEVICES

DIVISION 08 70 00—Hardware

1. Exit devices shall be stainless steel, heavy duty, rim-mounted and reversible from the following manufacturers:
    a. Von Duprin
    b. Precision
    c. Sargent 80
2. Exit paddles shall not be used.
3. Concealed verticle rod shall not be used.
4. Standard trim shall be similar to Von Duprin 992L-03

Location	Example Device
Stairwell with no lock and cannot be dogged down	VonDuprin 98L-F-BE
Stairwell with lock, or entrance in labeled opening where device cannot be dogged down during the day.	VD 98L-F
Entrance with dogging and outside pull trim	VD 98L-DT
Entrance with dogging and outside pull trim and keyed cylinder	VD 98L
Fire escapes or low occupancy classrooms with exit-only requirements	VD EO-F
Residence hall wide stile entrance doors with dogging and without cylinders	VD 98L-DT (pull trim & blank escutcheon)
Residence hall wide stile entrance-exit doors with dogging and cylinder	VD 98L (pull trim & cylinder)
Access control entrances	VD 99EL (trim may vary depending on use of door)

REMOVABLE MULLIONS

1. Removable mullions shall be used as a last resort.
2. If they are used they shall be:
    a. Keyed with removable core for Stanley Cormax.
    b. Galvanized steel, commercial grade, heavy duty, factory primed and painted to match adjacent doors.

MISCELLANEOUS HARDWARE

1. Push/pull plates shall be stainless steel, and bolted through plate and door,
2. .050” thick.
3. Toilet Rooms shall have 4” x 16” stainless steel plates.
4. Door stops shall be wall mounted when possible.
5. Kick Plates shall be stainless steel, .050” thick, 10” height.

6. Door hold-opens shall be stainless steel.

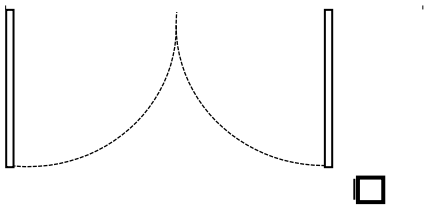
RAPID ENTRY SYSTEM

1. Rapid entry system shall be keyed to Stanley CorMax, recessed, similar to Knox Box brand, model 3275.

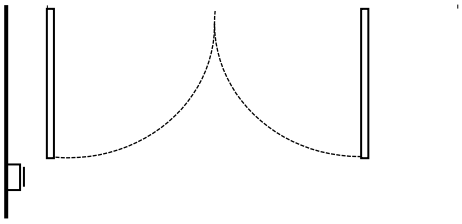
AUTOMATIC DOOR OPERATORS

1. Door actuators shall be mounted at all public exterior double entrance doors. At the following locations:
    a. Pedestal or wall mounted at the exterior ± 3'-0" from the face of the door and ≤ 1'-0" beyond the door swing on the hingeside.
    b. Surface-mounted in a vestibule
    c. Surface-mounted inside the main space

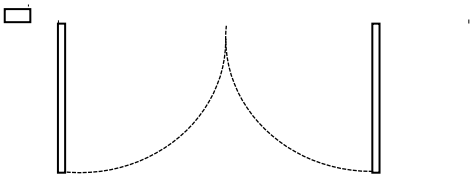
EXTERIOR PEDISTAL MOUNT



VESTIBULE OR EXTERIOR ALCOVE MOUNT



MAIN SPACE MOUNT



2. Actuators shall be radio frequency type.
3. Door opening shall be sequenced in vestibules to minimize inside/outside air transfer.
4. Actuators shall be 4 ½" in diameter, with the international symbol of accessibility, and "PUSH TO OPEN".
5. Automatic Door Operators manufacturers:
    a. LCN 4642
    b. Norton 6000 series low energy operator

c. Besam SW100 low energy operator

DOOR CLOSERS

1. Closers shall be overhead, surface mounted, parallel arm from the following manufacturers:
    a. Exterior and corridor applications:
        - LCN 404
        - Hager 5200 Extra-duty arm
        - Norton 8301 Extra-duty arm
    b. All other interior applications
        - LCN 1461
        - Hager 5200
        - Norton 8301
2. Closers shall match finish and color of frames they are attached to.
3. Corridor and exterior doors shall be similar to LCN “cush-n-stop.”
4. Power assisted openers shall be similar to LCN 4642, with Auto-equalizer.
5. **SEE NEXT PAGE FOR DOOR ACCESS IDENTIFICATION TABLE**

General Notes:

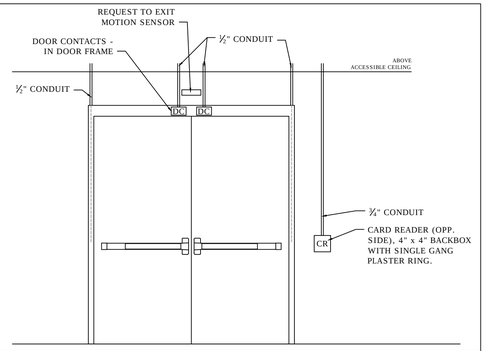
1. Often "Exits Only" also serve as emergency exits as defined by building code. The "Exit Only" is an operational designation meaning it is used for ordinary exiting in addition to having a required emergency exit device. Accordingly, a request to exit motion sensor is required. For doors that don't require an emergency exit device (Type ED & SD) only a Door Position Switch is required.

DOOR ACCESS IDENTIFICATION TABLE

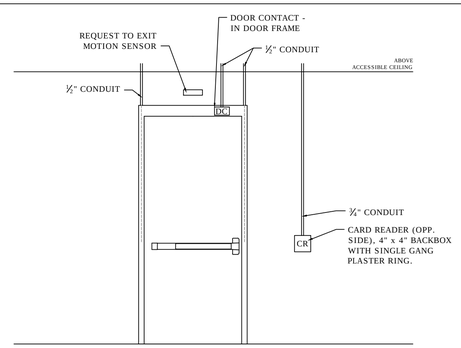
			Designation					Designation	
Exterior/Corridor Doors	**Entrance/Exit**	Double	EED	1-2-2-E3-M3-5	**Exterior Doors**	**No Emergency Exit Device Required[1] Exit Only,**	Double	ED	2-Feb
		Single	EES	1-2-E3-5			Single	SD	2
	Exit Only, Emergency Exit Device Required[1]	Double	EXD	1-2-2-M3-M3	**Interior Doors**	Double		IND	1-2-2-4-5
		Single	EXS	1-2-M3		Single		INS	1-2-4-5
	Emergency Exit Only	Double	EMD	2-2-M3-M3	**Elevator**	NA		EL	5
		Single	EMS	2-M3					

	Device	**Function**	**Notes**
1	Request to Exit Motion Sensor	Allows door to be exited without tripping an alarm	
2	Door Position Switch	Sends signal that door has been opened w/o valid read or	
E3	Electrified Lock (panic hardware, e.g., Von Duprin EPT2)	Unlocks and relocks door	Door is wired
M3	Non-electrified Lock (panic hardware)	Latches and relatches door	Typically inactive leaf
4	Fail Secure Electric Strike (mechanical	Unlocks and relocks door	Frame, inactive leaf or
5	Reader		Lenel (24V DC)

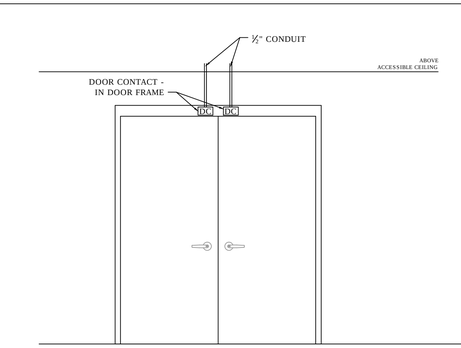
END OF SECTION



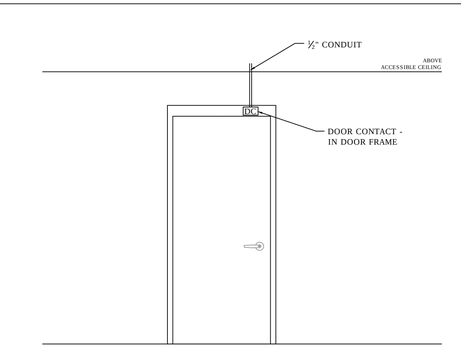
DOUBLE DOOR - EED



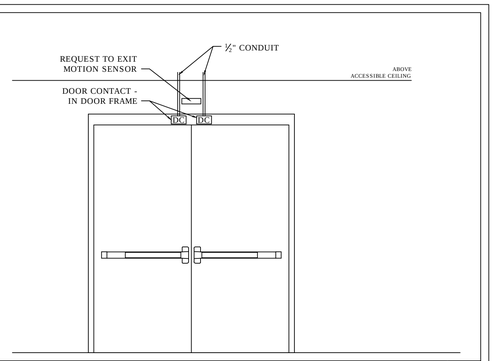
SINGLE DOOR - EES



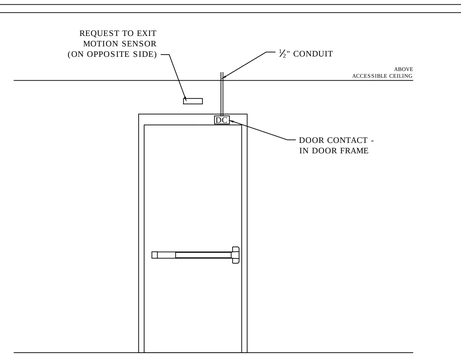
DOUBLE DOOR - ED



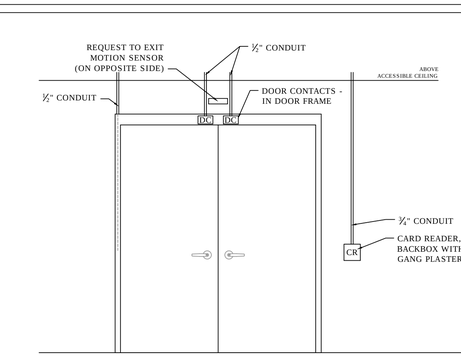
SINGLE DOOR - SD



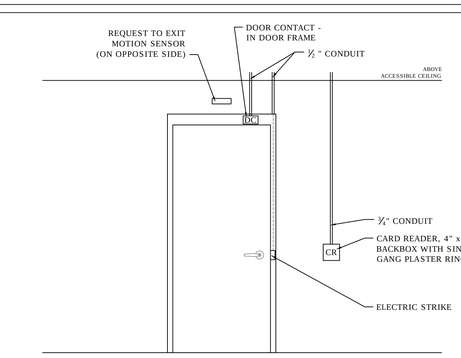
DOUBLE DOOR - EXD



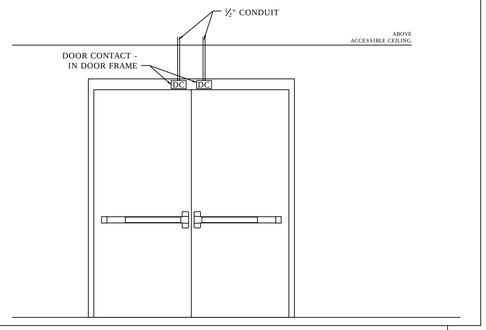
SINGLE DOOR - EXS



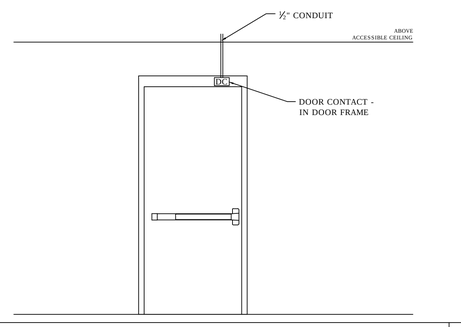
DOUBLE DOOR - IND



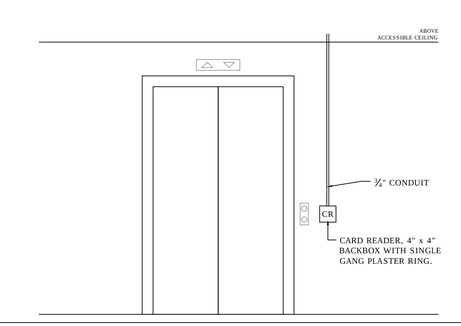
SINGLE DOOR INS



DOUBLE DOOR - EMD



SINGLE DOOR - EMS



ELEVATOR DOOR - EL

REX MOTION SENSOR INSTALL NOTES:

1. CEILINGS UNDER 10' AFF - INSTALL IN CEILING
2. ANY CEILINGS OVER 10' AFF - INSTALL 6" ABOVE DOOR FRAME, BACKBOX REQ'D

TELECOM - ACCESS CONTROL DOOR HARDWARE

SCALE: NTS

system INTEGRATIONS
233 LEGENDS DR, SUITE 100
LEBANON, TN 37087
VOICE: 615.449.2944
FAX: 615.443.4454

AUSTIN PEAY STATE UNIVERSITY

Access Control - Door Details

PRELIMINARY

KEY PLAN:

REVISIONS:

NOTE:
Drawings, symbols, and/or annotations may not be to scale, and are portrayed for representational purposes only. Actual sizes and/or design may differ. Any architectural drawings appear courtesy of their respective owners.

DATE: 07/28/2015
PROJ. NUMBER: P00000
DRAWN BY: MRO
PROJ. MGR: MBW

SHEET TITLE:
TELECOM - ACCESS CONTROL DOOR HARDWARE

SHEET NUMBER:
T4.1