SECTION 08 71 00 – DOOR HARDWARE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section Includes

1. Furnishing and installation of all mechanical and electrical finish hardware necessary for all doors, and hardware as specified herein and as enumerated in hardware sets and as indicated and required by actual conditions at the building. The hardware shall include the furnishing of all necessary screws, bolts, expansion shields, drop plates, and all other devices necessary for the proper application of the hardware. Installation shall include field modification and preparation of existing doors and/or frames for new hardware being installed. Provide necessary fillers, Dutchmen, reinforcements, and fasteners for mounting new hardware and to cover existing door/frame preps.

B. Related Sections

1. Division 6 Section - Finish Carpentry
2. Division 8 Section - Hollow Metal Doors and Frames
3. Division 8 Section - Wood Doors
4. Division 8 Section - Aluminum Framed Storefronts
5. Division 8 Section - Glass and Glazing
6. Division 26 Section - Electrical
7. Division 27 Section - Communications
8. Division 28 Section - Electronic Security and Safety

C. Specific Omissions: Hardware for the following is specified or indicated elsewhere, unless specifically listed in the hardware sets:

1. Windows
2. Cabinets of all kinds, including open wall shelving and locks.
3. Signage, except as noted.

4. Complete toilet accessories including coat hooks, unless note otherwise.

5. Overhead doors, unless noted otherwise.

1.03 REFERENCES

A. Applicable state and local building codes and standards.

B. FIRE/LIFE SAFETY

1. NFPA - National Fire Protection Association

a. NFPA 70 – National Electric Code
b. NFPA 80 - Standard for Fire Doors and Fire Windows
c. NFPA 101 - Life Safety Code
d. NFPA 105 - Smoke and Draft Control Door Assemblies

C. UL - Underwriters Laboratories

1. UL 10B - Fire Test of Door Assemblies

2. UL 10C - Positive Pressure Test of Fire Door Assemblies

3. UL 1784 - Air Leakage Tests of Door Assemblies

4. UL 305 - Panic Hardware

D. Accessibility

1. ADA - Americans with Disabilities Act

2. Maine Human Rights Act

E. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule

2. Recommended Locations for Builders Hardware

F. ANSI - American National Standards Institute

1. ANSI/BHMA A156.1 - A156.29, and ANSI A156.31 - Standards for Hardware and Specialties

1.04 SUBMITTALS

A. General: Submit the following in accordance with Conditions of Contract and Division 1 requirements. Prior to submittal field verify existing doors and/or frames receiving new hardware and/or existing conditions receiving new openings. Verify new hardware is compatible with the existing door/frame preparation and/or existing conditions. Advise architect within the submittal package of incompatibility or issues.

B. Catalog Cuts: Product data including manufacturers' technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.

C. Final Hardware Schedule Content: Submit schedule with hardware sets in vertical format as illustrated by the Sequence of Format for the Hardware Schedule as published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, Include the following information:

1. Door Index; include door number, heading number, and Architects hardware set number.

2. Opening Lock Function Spreadsheet; list locking device and function for each opening.

3. Type, style, function, size, and finish of each hardware item.

4. Name and manufacturer of each item.

5. Fastenings and other pertinent information.

6. Location of each hardware set cross-referenced to indications on Drawings.

7. Explanation of all abbreviations, symbols, and codes contained in schedule.

8. Mounting locations for hardware.

9. Door and frame sizes and materials.

10. Name and phone number for the local manufacturer's representative for each product.

11. Operational Description of openings with any electrified hardware (locks, exits, electromagnetic locks, electric strikes, automatic operators, door position switches, magnetic holders or closer/holder units, and/or access control components). Operational description should include how the door will operate on egress, ingress, and/or fire/smoke alarm connection.

D. Key Schedule: After a keying meeting between representatives of the Owner, Architect, hardware supplier, and, if requested, the representative for the lock manufacturer, provide a keying schedule, listing the levels of keying, as well as an explanation of the key system's function, the key symbols used, and the door numbers controlled. Utilize ANSI A156.28 “Recommended Practices for Keying Systems” as a guideline for nomenclature, definitions, and approach for selecting the optimal keying system.

E. Samples: If requested by the Architect, submit production sample or sample installations as requested of each type of exposed hardware unit in the finish indicated, and tagged with a full description for coordination with the schedule.

1. Samples will be returned to the supplier in like-new condition. Units that are acceptable to the Architect may, after final check of operations, be incorporated into the Work, within limitations of key coordination requirements.

F. Templates: After final approval of the hardware schedule, provide templates for doors, frames, and other work specified to be factory prepared for the installation of door hardware.

G. Riser and Wiring Diagrams: After final approval of the hardware schedule, submit riser and wiring diagrams as required for the proper installation of complete electrical, electromechanical, and electromagnetic products.

H. Operations and Maintenance Data: Provide in accordance with Division 1 and include the following:

1. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.

2. Catalog pages for each product.

3. Name, address, and phone number of local representative for each manufacturer.

4. Parts list for each product.

5. Copy of final approved hardware schedule, edited to reflect "As installed."

6. Copy of final keying schedule.

7. As installed "Wiring Diagrams" for each opening connected to power, both low voltage and 110 volts.

8. One (1) complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

9. Copy of warranties including appropriate reference numbers for manufacturers to identify the project.

I. Certificates of Compliance: Upon request of Architect or Authority Having Jurisdiction certificates of compliance for fire-rated hardware and installation instructions shall be made available.

1.05 QUALITY ASSURANCE

A. Substitutions: Products are to be those specified to ensure a uniform basis of acceptable materials. Requests for substitutions must be made in accordance with Division 1 requirements. If proposing a substitute product, submit product data for the proposed item with product data for the specified item and indicate basis for substitution and savings to be made. Provide sample if requested. Certain products have been selected for their unique characteristics and particular project suitability.

1. Items specified as "no substitute" shall be provided exactly as listed.

2. Items listed with no substitute manufacturers listed have been requested by the Owner or Architect to match existing for continuity and/or future performance and maintenance standards or because there is no known equal product.

3. If no other products are listed in a category, then "no substitute" is implied.

B. Supplier Qualifications: A recognized architectural hardware supplier, with warehousing facilities in the Project's vicinity, that has a record of successful in-service performance for supplying door hardware similar in quantity, type, and quality to that indicated for this Project and that provides a certified Architectural Hardware Consultant (AHC) available to the Owner, Architect, and Contractor, at reasonable times during the course of the Work for consultation.

C. Single Source Responsibility: Obtain each type of hardware (latch and locksets, hinges, exit devices, closers, etc.) from a single manufacturer.

D. Fire-Rated Openings: Provide door hardware for fire-rated openings that complies with NFPA Standard No. 80 and requirements of authorities having jurisdiction. Provide only items of door hardware that are listed and are identical to products tested by Underwrites Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to the authorities having jurisdiction for use on types and sizes of doors indicated in compliance with requirements of fire-rated door and door frame labels.

E. Electronic Security Hardware: When electrified hardware is included in the hardware specification, the hardware supplier must employ an individual knowledgeable in electrified components and systems, who is capable of producing wiring diagrams and consulting as needed. Coordinate installation of the electronic security hardware with the Architect and electrical engineers and provide installation and technical data to the Architect and other related subcontractors. Upon completion of electronic security hardware installation, inspect and verify that all components are working properly.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Tag each item or package separately with identification related to the final hardware schedule, and include installation instructions with each item or package.

B. Each article of hardware shall be individually packaged in manufacturer's original packaging.

C. Contractor will provide secure lock-up for door hardware delivered to the Project, but not yet installed. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

D. Items damaged in shipment shall be replaced promptly and with proper material and paid for by whomever did the damage or caused the damage to occur.

E. Hardware shall be handled in a manner to avoid damage, marring, or scratching. Irregularities that occur to the hardware after it has been delivered to the Project shall be corrected, replaced, or repaired by the Contractor. Hardware shall be protected against malfunction due to paint, solvent, cleanser, or any chemical agent.

F. No direct shipments will be allowed unless approved by the Contractor.

1.07 WARRANTY

A. Provide manufacturer's warrantees as specified in Division 1 and as follows:

1. Closers: 10 years, except electronic closers, 2 years.

2. Exit Devices: 3 years, except electrified devices, 1 year.

3. Locksets: 3 years, except electrified locksets, 1 year.

4. Continuous Hinges: Lifetime warranty.

5. Other hardware: 1 year.

B. No liability is to be assumed where damage or faulty operation is due to improper installation, improper use, or abuse.

C. Products judged to be defective during the warranty period shall be replaced or repaired in accordance with the manufacturer's warranty, at no additional cost to the Owner.

1.08 MAINTENANCE

A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. The Awarding Authority has determined that certain products should be selected for their unique characteristics and particular project suitability to insure continuity of existing and future performance and maintenance standards. After investigating available product offerings the Awarding Authority has elected to prepare proprietary specifications. These products are specified with the notation: "No Substitute" (NO OTHER PRODUCTS WILL BE CONSIDERED FOR THOSE LISTED IN PROJECTS DOCUMENTS.)

B. Approval of manufacturers other than those listed shall be in accordance with paragraph 1.05.A.

C. Note that even though an acceptable substitute manufacturer may be listed, the product must provide all the functions and features of the specified product or it will not be approved.

Item	Scheduled Manufacturer	Acceptable Substitute
Hinges	Ives (IVE)	Hager, Stanley
Continuous Hinges	Ives (IVE)	Markar, Stanley
Electric Power Transfer	Von Duprin (VON)	Adams-Rite, Falcon
Floor Closers	Dorma (DRM)	Jackson, Rixson
Pivots	Ives (IVE)	Dorma, Rixson
Emergency Release Pivots	Ives (IVE)	Rixson, Stanley
Double Lipped Strikes	Donjo (DON)	Hager, McKinney
Emergency Stop	Hager (HAG)	McKinney, Stanley
Flush Bolts & Coordinators	Ives (IVE)	Burns, Rockwood
Locksets & Deadlocks	Schlage (SCH)	Marks, Sargent
Hospital Latches	Glynn-Johnson (GLY)	ABH, Sargent
Padlocks	Schlage (SCH)	Sargent
Exit Devices	Von Duprin (VON)	No Substitute
Electric Strikes	Von Duprin (VON)	HES, Folger Adam
Magnetic Locks - Surface Type	Schlage Electronics (SCE)	Folger Adam, Securitron
Power Supplies	Von Duprin (VON)	Precision, Sargent, Schlage Electronics
Roller Latches	Ives (IVE)	Burns, Rockwood
Door Closers	LCN (LCN)	No Substitute
Electro-Hydraulic Automatic Operators	LCN (LCN)	Besam, Norton
Electro-Mechanical Automatic Operators	LCN (LCN)	Besam, Horton
Door Trim	Ives (IVE)	Burns, Rockwood
Protection Plates	Ives (IVE)	Burns, Rockwood
Overhead Stops	Glynn-Johnson (GLY)	Rixson, Sargent
Stops & Holders	Ives (IVE)	Burns, Rockwood
Thresholds & Weatherstrip	National Guard (NGP)	Reese, Zero
Silencers	Ives (IVE)	Burns, Rockwood
Magnetic Holders	LCN (LCN)	Rixson, Sargent
Door Contacts	Schlage Electronics (SCE)	GE, Sargent
Cylinders & Keying	Keymark (MIS)	No Substitute

D. Hand of Door: Drawings show direction of slide, swing, or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.

E. Where the hardware specified is not adaptable to the finished shape or size of the members requiring hardware, furnish suitable types having the same operation and quality as the type specified, subject to the Architect's approval.

2.02 MATERIALS

A. Fasteners

1. Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.

2. Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.

3. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent that no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on opposite face is exposed in other work unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Review door specification and advise Architect if thru-bolts are required.

4. Hardware shall be installed with the fasteners provided by the hardware manufacturer.

B. Hinges

1. Provide five-knuckle, ball bearing hinges of type, material, and height as outlined in the following guide for this specification:

a. 1-3/4 inch thick doors, up to and including 36 inches wide:
Exterior: standard weight, bronze/stainless steel, 4-1/2 inches high
Interior: standard weight, steel, 4-1/2 inches high
b. 1-3/4 inch thick doors over 36 inches wide:
Exterior: heavy weight, bronze/stainless steel, 5 inches high
Interior: heavy weight, steel, 5 inches high
c. 2 inches or thicker doors:
Exterior: heavy weight, bronze/stainless steel, 5 inches high
Interior: heavy weight, steel, 5 inches high

2. Provide three hinges per door leaf for doors 90 inches or less in height, and one additional hinge for each 30 inches of additional door height.

3. Where new hinges are specified for existing doors and/or existing frames, the new hinge size must be identical to hinge preparation present in the existing door and/or existing frame.

4. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:

a. Steel Hinges: Steel pins
b. Non-Ferrous Hinges: Stainless steel pins
c. Out-Swinging Exterior Doors: Non-removable pins
d. Out-Swinging Interior Lockable Doors: Non-removable pins

e. Interior Non-lockable Doors: Non-rising pins

5. The width of hinges shall be 4-1/2 inches at 1-3/4 inch thick doors, and 5 inches at 2 inches or thicker doors. Adjust hinge width as required for door, frame, and/or wall conditions to allow proper degree of opening.

6. Provide hinges with electrified option where specified. Provide with sufficient number and gage of concealed wires to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to the electrified locking component.

7. Provide mortar guard for each electrified hinge specified, unless specified in hollow metal frame specification.

8. Provide spring hinges where specified. Provide two spring hinges and one bearing hinge per door leaf for doors 90 inches or less in height. Provide one additional bearing hinge for each 30 inches of additional door height.

9. Acceptable manufacturers and/or products: Ives 5BB series, Hager BB series, Stanley FBB Series.

C. Continuous Hinges

1. Provide aluminum geared continuous hinges conforming to ANSI A156.25, Grade 2.

2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum, with .25 inch diameter Teflon coated stainless steel hinge pin.

3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.

4. Hinges shall be capable of supporting door weights up to 450 pounds, and shall be successfully tested for 1,500,000 cycles.

5. On fire-rated doors, provide aluminum geared continuous hinges that are classified for use on rated doors by a testing agency acceptable to the authority having jurisdiction.

6. Provide aluminum geared continuous hinges with electrified option where specified. Provide with sufficient number and gage of concealed wires to accommodate electric function of specified hardware.

7. Install hinges with fasteners supplied by manufacturer. Hole pattern shall be symmetrically patterned.

8. Acceptable manufacturers and/or products: Ives, Markar, Stanley.

D. Electric Power Transfer

1. Provide power transfer sufficient for number and gage of wires to accommodate electric function of specified hardware.

2. Electric power transfer is to be located per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

3. Acceptable manufacturers and/or products: Von Duprin, Adams Rite, Falcon.

E. Center Hung Floor Closers - Double Acting

1. Provide double-acting center hung floor closers complete with ball-bearing top pivot, floor plates, and cement boxes unless indicated otherwise.

2. Provide floor closers with adjustable spring tension and closing speed, and automatic hold-open features.

3. Provide separate concealed overhead stop.

4. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force for the physically handicapped. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and backcheck.

5. Provide appropriate model for wood doors.

6. Acceptable manufacturers and/or products: Dorma, Jackson, Rixson.

F. Pivot Sets

1. Provide pivot sets complete with oil-impregnated top pivot, unless indicated otherwise.

2. Where offset pivots are specified, Provide one intermediate pivot for doors less than 91 inches high and one additional intermediate pivot per leaf for each additional 30 inches in height or fraction there of. Intermediate pivots spaced equally not less than 25 inches or not more than 35 inches on center, for doors over 121 inches high.

3. Provide appropriate model where pivot sets are specified at fire rated openings.

4. Provide lead-lined model where pivot sets are specified at lead-lined doors.

5. Provide electric pivot, located nearest to the electrified locking component, with sufficient number and gage of concealed wires to accommodate electric function of specified hardware. If the manufacturer of the electrified locking component requires another device for power transfer then provide the recommended power transfer device and the appropriate quantity of pivots.

6. Provide mortar guard for each electric pivot specified, unless specified in hollow metal frame specification.

7. Acceptable manufacturers and/or products: Ives, Dorma, Rixson.

G. Emergency Release Pivots

1. Provide emergency release pivot sets offset-hung to allow door to swing open in opposite direction unless detailed otherwise.

2. Acceptable manufacturers and/or products: Ives, Rixson, Stanley.

H. Double Lipped Strike

1. Provide double lip strike offset-hung to allow door to swing open in opposite direction unless detailed otherwise. Size for specific frame depth. Coordinate special latchbolt-hole location and/or special template, as required, to operate with the mortise lock being used as specified.

2. Provide a compatible emergency stop/release as recommended by the manufacturer of the double lip strike or engineered to operate with the double lip strike.

3. Acceptable manufacturers and/or products: Don-Jo, Hager, McKinney.

I. Emergency Stop/Release

1. Provide emergency stop/release for doors with double lip strikes offset-hung to allow door to swing open in opposite direction unless detailed otherwise.

2. Acceptable manufacturers and/or products: Stanley, Hager, McKinney.

J. Flush Bolts

1. Provide automatic and manual flush bolts with forged bronze face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch steel or brass rods at doors up to 90 inches in height. Top rods at manual flush bolts for doors over 90 inches in height shall be increased by 6 inches for each additional 6 inches of door height. Provide dust-proof strikes at each bottom flush bolt.

2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

K. Coordinators

1. Provide a bar-type coordinating device, surface applied to the underside of the stop at the frame head where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors.

2. Provide a filler bar of the correct length for the unit to span the entire width of the opening, and appropriate brackets for parallel arm door closers and surface vertical rod exit device strikes. Factory-prep coordinators for vertical rod devices if required.

3. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

L. Mortise Locks

1. Provide mortise locks certified as ANSI A156.13, Grade 1 Operational, Grade 1 Security, and manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance. Lock case shall be multi-function and field reversible for handing without opening the case. Cylinders: Refer to 2.04 KEYING.

2. Provide locks with a standard 2-3/4 inches backset with a full 3/4 inch throw stainless steel mechanical anti-friction latchbolt. Deadbolt shall be a full 1 inch throw, constructed of stainless steel.

3. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.

4. Provide electrical options as scheduled. Provide electrified locksets with micro switch (RX) option that monitors the retractor crank, and is actuated when rotation of the inside or outside lever rotates the retractor hub. Provide normally closed contacts or normally open contacts as required by security system.

5. Lever trim shall be solid brass, bronze, or stainless steel, cast or forged in the design specified, with wrought roses and external lever spring cages. Levers shall be thru-bolted to assure proper alignment, and shall have a 2-piece spindle.

   a. Lever design shall be Schlage 06A.
   b. Lever trim on the secure side of doors serving rooms considered by the authority having jurisdiction to be hazardous shall have a tactile warning.

6. Acceptable manufacturers and/or products: Schlage L9000 series, Marks, Sargent 8200 series.

M. Hospital Latches

1. Provide hospital latches conforming to ANSI A156 with covers engraved "Push" and "Pull".

2. Provide hospital latches with a standard 5 inches backset, unless noted otherwise, with a 1/2 inch latch throw. Provide proper latch throw for UL listing at pairs.

3. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.

4. Trim shall be push paddle mounted up and pull paddle mounted down except at psychiatric or security areas provide both paddles mounted down for safety, unless noted otherwise.

5. Acceptable manufacturers and/or products: Glynn-Johnson HL6E series, ABH 6000 series, Sargent 114P/115P series.

N. Deadbolts

1. Provide deadbolt series conforming to ANSI A156 and function as specified. Cylinders: Refer to 2.04 KEYING.

2. Provide deadbolts with a standard 2-3/4 inches backset. Provide 2-3/8 inches where noted or if door or frame detail requires. Deadbolt shall be a full 1 inch throw, constructed of steel alloy.

3. Provide manufacturers standard strike.

4. Acceptable manufacturers and/or products: Schlage B600 series, Marks, Sargent 480 series.

O. Padlocks

1. Provide padlocks with 1 inch shackle height, unless noted otherwise, as specified. Cylinders: Refer to 2.04 KEYING.

2. Acceptable manufacturers and/or products: Schlage PL series, Best 11B series, Sargent 758 series.

P. Exit Devices

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1, and UL listed for Panic Exit and/or Fire Exit Hardware. Cylinders: Refer to 2.04 KEYING.

2. Provide touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to the standard architectural finishes to match the balance of the door hardware.

3. Exit devices shall incorporate a fluid damper or other device that eliminates noise associated with exit device operation. Touchpad shall extend a minimum of one half of the door width, but not the full length of the exit device rail. End-cap will have two-point attachment to door. Touch-pad shall match exit device finish, and shall be stainless steel for US26, US26D, US28, US32, and US32D finishes; for all other finishes, the touch-pad finish shall be of compatible finish to exit device. Only compression springs will be used in devices, latches, and outside trims or controls.

4. Devices to incorporate a deadlatching feature for security and/or for future addition of alarm kits and/or other electrical requirements.

5. Vertical rod devices shall be capable of being field modified to less bottom rod devices by removal of bottom rod and adding firing pin(s), if required at fire rated openings.

6. Provide manufacturer's standard strikes.

7. Provide exit devices cut to door width and height. Locate exit devices at a height recommended by the exit device manufacturer, allowable by governing building codes, and approved by the Architect.

8. Mechanism case shall sit flush on the face of all flush doors, or spacers shall be furnished to fill gaps behind devices. Where glass trim or molding projects off the face of the door, provide glass bead kits.

9. Non-fire-rated exit devices shall have cylinder dogging.

10. Removable mullions shall be a 2 inches x 3 inches steel tube. Where scheduled, mullion shall be of a type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.

11. Where lever handles are specified as outside trim for exit devices, provide heavy-duty lever trims with forged or cast escutcheon plates. Provide vandal-resistant levers that will travel to a 90-degree down position when more than 35 pounds of torque are applied, and which can easily be re-set.

    a. Lever style will match the lever style of the locksets.
    b. Lever trim on doors serving rooms considered by the authority having jurisdiction to be hazardous shall have a tactile warning.

12. Exit devices for fire rated openings shall be UL labeled fire exit hardware.

13. Field drill weep holes per manufacturer’s recommendation for exit devices used in full exterior application, highly corrosive areas, and where noted in the hardware sets.

14. Provide electrical options as scheduled.

15. Acceptable manufacturers and/or products: Von Duprin 98/35 series, No Substitute.

Q. Electric Strikes

1. Provide electric strikes designed for use with the type locks shown at each opening.

2. Provide electric strikes UL Listed as burglary-resistant electric door strikes and where required shall be UL Listed as electric strikes for fire doors and frames. Provide fail-secure type electric strikes, unless specified otherwise.

3. Provide transformers and rectifiers for each strike as required. Verify voltage with electrical contractor.

4. Acceptable manufacturers and/or products: Von Duprin 6000 series, Folger Adam 300 series, HES 1006 series.

R. Magnetic Locks - Surface Type

1. Provide magnetic locks conforming to ANSI/BHMA A156.23 classification criteria including a minimum holding force of 1500 LBF.

2. Provide magnetic locks equipped with a SPDT Magnetic Bond Sensing device, where specified, to monitor whether sufficient magnetic holding force exists to ensure adequate locking and SPDT Door Status Monitor device, where specified, to monitor whether the door is open or closed. The bond sensors shall be fully concealed within the electromagnet to resist tampering or damage.

3. Provide fasteners, mounting brackets, and spacer bars required for mounting and details.

4. Provide a power supply recommended and approved by the manufacturer of the magnetic locks.

5. Where magnetic locks are scheduled, provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by the manufacturer of the magnetic locks for each individual leaf. Switches shall control both doors simultaneously at pairs. Locate controls as directed by the Architect. Cylinders: Refer to 2.04 KEYING.

6. Acceptable manufacturers and/or products: Schlage Electronics M490/M492 DSM/MBS series, Folger Adam FAM82SC series with separate door position switch (DPS), Securitron M82SC series with separate door position switch (DPS).

S. Power Supplies

1. Provide power supplies, recommended and approved by the manufacturer of the electrified locking component, for the operation of electrified locks, electrified exit devices, magnetic locks, electric strikes, and other components requiring a power supply.

2. Provide the appropriate quantity of power supplies necessary for the proper operation of the electrified locking component and/or components as recommended by the manufacturer of the electrified locking components with consideration for each electrified component utilizing the power supply, the location of the power supply, and the approved wiring diagrams. Locate the power supplies as directed by the Architect.

3. Provide a power supply that is regulated and filtered 24 VDC, or as required, and UL class 2 listed.

4. Provide a power supply, where specified, with the internal capability of charging optional sealed backup batteries 24 VDC, or as required, in addition to operating the DC load.

5. Provide a power supply complete requiring only 120VAC to the fused input and shall be supplied in an enclosure.

6. Provide a power supply with emergency release terminals, where required, that allow the release of all devices upon activation of the fire alarm system complete with fire alarm input for initiating "no delay" exiting mode.

7. Acceptable manufacturers and/or products: Von Duprin PS900 series, Precision ELR series, Sargent 3500 series, Schlage Electronics PS900 series.

T. Roller Latches

1. Provide roller latches with a 4-7/8 inches strike at single doors to fit ANSI frame prep. If dummy levers are used in conjunction with roller latch mount the roller latch at a height as to not interfere with the proper mounting and height of the dummy lever.

2. Provide roller latches 2-1/4 inches full lip strike at pair doors. Mount roller in the top rail of each leaf per manufacturer's template.

3. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

U. Door Closers

1. Provide door closers certified to ANSI/BHMA A156.4 Grade 1 requirements by a BHMA certified independent testing laboratory. Surface mounted mechanical closers shall be certified to exceed ten million (10,000,000) full load cycles by a recognized independent testing laboratory. Closers shall be ISO 9000 certified. Units shall be stamped with date of manufacture code.

2. Door closers shall have fully hydraulic, full rack and pinion action with a high strength cast iron cylinder, and shall utilize full complement bearings at shaft. Cylinder body shall be 1-1/2 inch diameter, and double heat-treated pinion journal shall be 11/16 inch diameter.

3. Provide hydraulic fluid requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F. Fluid shall be fireproof and shall pass the requirements of the UL10C "positive pressure" fire test.

4. Spring power shall be continuously adjustable over the full range of closer sizes, and allow for reduced opening force as required by accessibility codes and standards. Hydraulic regulation shall be by tamper-proof, non-critical valves. Closers shall have separate adjustment for latch speed, general speed, and backcheck.

5. Provide closers with a solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers. When closers are parallel arm mounted, provide closers which mount within a 6-inch top rail without the use of a mounting plate so that closer shall not be visible through vision panel from pull side.

6. Closers shall not incorporate Pressure Relief Valve (PRV) technology.

7. Closer cylinders, arms, adapter plates, and metal covers shall have a powder coating finish which has been certified to exceed 100 hours salt spray testing as described in ANSI Standard A156.4 and ASTM B117, or shall have special rust inhibitor (SRI).

8. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other finish hardware items interfering with closer mounting.

9. Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Closers shall not be visible in corridors, lobbies and other public spaces unless approved by Architect.

10. Door closers meeting this specification: LCN 4010/4110 series, No Substitute.

V. Electro-Hydraulic Automatic Operators

1. Provide low energy automatic operator units with hydraulic closer complying with ANSI A156.19 where automatic operators are specified.

2. Provide hydraulic fluid of a type requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F. Fluid shall be fireproof and shall pass the requirements of the UL10C "positive pressure" fire test.

3. Provide units with conventional door closer opening and closing forces unless the power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door

4. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.

5. Provide units with conventional door closer opening and closing forces unless the power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check valve, sweep valve, latch valve to control door.

6. Provide drop plates, brackets, or adapters for arms as required for details.

7. Provide hard-wired actuator switches for operation as specified. Actuators shall be weather-resistant type at exterior applications.

8. Provide key switches, with LED's, recommended and approved by the manufacturer of the automatic operator as required for the function as described in the operation description of the hardware group with the provisions below. Cylinders: Refer to 2.04 KEYING.

9. Where automatic operators are scheduled, provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by the manufacturer of the automatic operator for each individual leaf. Actuators shall control both doors simultaneously at pairs. Exterior and vestibule doors with automatic operators shall be sequenced to allow ingress or egress through both sets of openings as directed by the Architect. Locate the actuators, key switches, and other controls as directed by the Architect.

10. Provide units with vestibule inputs, which allow sequencing operation of two units, and a SPDT relay for interfacing with latching or locking devices.

11. Acceptable manufacturers and/or products: LCN 4600 series, Norton 6900 series, Besam Power Swing.

W. Electro-Mechanical Automatic Operators

1. Provide low energy automatic operator units that are electro-mechanical design complying with ANSI A156.19 where automatic operators are specified.

2. The operator shall be powered with a DC motor working through reduction gears. Closing shall be spring force. No manual, hydraulic, or chain drive closer will be acceptable. The motor is to be off when the door is in closing mode. The door can be manually operated with the power on or off without damage to the operator. The operator shall include variable adjustments, including opening and closing speed adjustment. Operator shall be mounted in an aluminum cover.

3. Provide units with manual off/auto/hold-open switch, push and go function to activate power operator, vestibule interface delay, electric lock delay, hold-open delay adjustable from 2 to 30 seconds, and logic terminal to interface with accessories, mats, and sensors.

4. Provide drop plates, brackets, or adapters for arms as required to suit details.

5. Provide hard-wired motion sensors and/or actuator switches for operation as specified. Actuators shall be weather-resistant type at exterior applications.

6. Provide key switches, with LED's, recommended and approved by the manufacturer of the automatic operator as required for the function as described in the operation description of the hardware sets. Cylinders: Refer to 2.04 KEYING.

7. Where automatic operators are scheduled, provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by the manufacturer of the automatic operator for each

individual leaf. Actuators shall control both doors simultaneously at pairs. Exterior and vestibule doors with automatic operators shall be sequenced to allow ingress or egress through both sets of openings as directed by the Architect. Locate the actuators, key switches, and other controls as directed by the Architect.

8. Acceptable manufacturers and/or products: LCN Senior Swing, Besam Swingmaster MP, Horton 4000LE series.

X. Door Trim

1. Provide push plates 4 inches wide x 16 inches high x 0.050 inch thick and beveled 4 edges. Where width of door stile prevents use of 4 inches wide plate, adjust width to fit.

2. Provide push bars of solid bar stock, diameter and length as scheduled. Push bars shall be of sufficient length to span from center to center of each stile. Where required, mount back to back with pull.

3. Provide offset pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.

4. Provide flush pulls as specified. Where required, provide back-to-back mounted model.

5. Provide pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.

6. Provide pull plates 4 inches wide x 16 inches high x 0.050 inch thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4 inches wide plate, adjust width to fit.

7. Provide wire pulls of solid bar stock, diameter and length as scheduled.

8. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

Y. Protection Plates

1. Provide kick plates, mop plates, and armor plates minimum of 0.050 inch thick as scheduled. Furnish with machine or wood screws, finished to match plates. Sizes of plates shall be as follows:

   a. Kick Plates – 10 inches high x 2 inches less width of door on single doors, 1 inch less width of door on pairs
   b. Mop Plates – 4 inches high x 2 inches less width of door on single doors, 1 inch less width of door on pairs
   c. Armor Plates – 36 inches high x 2 inches less width of door on single doors, 1 inch less width of door on pairs

2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

Z. Overhead Stops and Overhead Stop/Holders

1. Provide heavy duty concealed mounted overhead stop or overhead stop/holder as specified for exterior and interior vestibule single acting doors.

2. Provide heavy duty concealed mounted overhead stop or overhead stop/holder as specified for double acting doors.

3. Provide heavy or medium duty and concealed or surface mounted overhead stop or overhead stop/holder for interior doors as specified. Provide medium duty surface mounted overhead stop for interior doors and at any door that swings more than 140 degrees before striking a wall, open against equipment, casework, sidelights, and/or where conditions do not allow a wall stop or a floor stop presents a tripping hazard.

4. Where overhead holders are specified provide friction type at doors without a closer and positive type at doors with a closer.

5. Acceptable manufacturers and/or products: Glynn-Johnson, Rixson, Sargent.

AA. Door Stops and Holders

1. Provide door stops for all doors in accordance with the following requirements:

   a. Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
   b. Where wall stops cannot be used, provide dome type floor stops of the proper height.
   c. At any opening where a wall or floor stop cannot be used, a medium duty surface mounted overhead stop shall be used.

2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

BB. Thresholds, Seals, Door Sweeps, Automatic Door Bottoms, and Gasketing

1. Provide thresholds, weatherstripping (including door sweeps, seals, astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details. Match finish of other items as closely as possible. Size of thresholds shall be as follows:

   a. Exterior Saddle Thresholds – 1/2 inch high x jamb width x door width
   b. Interior Saddle Thresholds – ¼ inch high x jamb width x door width
   c. Bumper Seal Thresholds – 1/2 inch high x 5 inches wide x door width

2. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.

3. Acceptable manufacturers and/or products: National Guard, Reese, Zero.

CC. Silencers

1. Provide "Push-in" type silencers for each hollow metal or wood frame. Provide three for each single frame and two for each pair frame. Omit where gasketing is specified or required by code.

2. Acceptable manufacturers and/or products: Ives, Burns, Rockwood.

DD. Magnetic Holders

1. Provide wall or floor mounted electromagnetic door release as specified with a minimum of 25 pounds of holding force. Projection of holder and armature must be coordinated with other hardware and wall conditions to ensure that door sits parallel to wall when fully open. Where magnetic holders are used on fire-rated doors, they must be wired into the fire control panel for fail-safe operation.

2. Acceptable manufacturers and/or products: LCN, Rixson, Sargent.

EE. Door Contacts

1. Provide recessed or surface mounted type door contacts as specified.

2. Contacts shall be installed as recommended by manufacturers installation instructions and coordinated with other hardware being installed on the opening. Coordinate door and frame preparations with door and frame suppliers. If separate contacts are being used with a magnetic locking device provide a minimum of 4 inches between the contact and the magnetic locking device.

3. Acceptable manufacturers and/or products: Schlage Electronics, GE-Interlogix, Sargent.

2.03 FINISHES

A. Finish of all hardware shall be US26D (BHMA 626/652) with the exceptions as follows:

1. Hinges at Exterior Doors: US32D (BHMA 630).

2. Continuous Hinges: Clear Anodized Aluminum.

3. Push Plates, Pulls, and Push Bars: US32D (BHMA 630).

4. Protection Plates: US32D (BHMA 630).

5. Exterior Overhead Stops and Holders: US32D (BHMA 630).

6. Interior Overhead Stops and Holders: Powder Coat to Match.

7. Door Closers: Powder Coat to Match.

8. Weatherstipping: Clear Anodized Aluminum.

9. Thresholds: Mill Finish Aluminum.

2.04 KEYING

A. Provide cores and cylinders for the Owner's Existing Marks key system conforming to the following requirements:

1. Provide removable core cylinders at all keyed devices, locksets, cylinder dogging, and exit device trim. Provide construction cores with construction master keying for use during construction. The hardware supplier, accompanied by the Owner or Owner's security agent, shall install permanent keyed cores upon completion of the project. The temporary construction cores are to be returned to the hardware supplier.

2. Provide permanent cores and cylinders keyed by the manufacturer or authorized distributor into the existing key system as directed by the Owner. Provide owner with a copy of the bitting list, return receipt requested.

3. The hardware supplier, accompanied by a qualified factory representative for the manufacturer of the cores and cylinders, shall meet with Owner and Architect to review keying requirements and lock functions prior to ordering finish hardware. Submit a keying schedule to Architect for approval.

4. Provide keys as follows

   a. Ten grand master keys for each set.
   b. Ten master keys for each set.
   c. Three keys per core and/or cylinder.
   d. Two construction core control keys
   e. Two permanent core control keys
   f. Six construction master keys for each type (Contractor is to provide one set of construction keys to Architect)

5. Visual key control:

   a. Keys shall be stamped with their respective key set number and stamped "DO NOT DUPLICATE".
   b. All keys shall be stamped with their respective key set letters.
   c. Do not stamp any keys with the factory key change number.
   d. Do not stamp any cores with key set on face (front) of Core. Stamp on back or side of cores so not to be visible when core is in cylinder.

6. Deliver all keys and/or key blanks from the factory or authorized distributor directly to the Owner in sealed containers, return receipt requested. Failure to comply with these requirements may be cause to require replacement of all or any part of the keying system that was compromised at no additional cost to the Owner.

7. Approved products: Keymark, No Substitute.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Prior to installation of any hardware, examine all doors, frames, walls and related items for conditions that would prevent proper installation of finish hardware. Correct all defects prior to proceeding with installation.

3.02 INSTALLATION

A. Coordination:

1. Prior to installation of hardware, schedule and hold a meeting for the purpose of instructing installers on proper installation and adjustment of finish hardware. Representatives of locks, exit devices, closers, automatic operators, and electrified hardware shall conduct training; provide at least 10 days notice to representatives. After training a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.

2. Prior to ordering electrified hardware, schedule and hold a meeting for the purpose of coordinating finish hardware with security, electrical, doors and frames, and other related suppliers. A representative of the supplier of finish hardware, and doors and frames, the electrical subcontractor, and the Owner's security contractor shall meet with the Owner, Architect, and General Contractor prior to ordering finish hardware. After meeting a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.

B. Hardware will be installed by qualified tradesmen, skilled in the application of commercial grade hardware. For technical assistance if necessary, installers may contact the manufacturer's rep for the item in question, as listed in the hardware schedule.

C. Mount hardware units at heights indicated in "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute.

D. Install each hardware item in compliance with the manufacturer's instructions and recommendations, using only the fasteners provided by the manufacturer.

E. Do not install surface mounted items until finishes have been completed on the substrate. Protect all installed hardware during painting.

F. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.

G. Operating parts shall move freely and smoothly without binding, sticking, or excessive clearance.

H. Existing Doors and/or Frames: Remove existing hardware being replaced, tag, and store according to contract documents. Field modify and prepare existing door and/or frame for new hardware being installed. Provide necessary fillers, Dutchmen, reinforcements, and fasteners for mounting new hardware and to cover existing door/frame preps.

I. Wire (including low voltage), conduit, junction boxes, and pulling of wire is by Division 26, Electrical. Electrical Contractor shall connect wire to door position switches and run wire to central room or area as directed by the Architect. Wires shall be tested and labeled with the Architects opening number. Connections to/from power supplies to electrified hardware and any connection to fire/smoke alarm system, and/or smoke evacuation system where specified is by Division 26 Electrical.

3.03 ADJUSTING, CLEANING, AND DEMONSTRATING

A. Adjust and check each operating item of hardware and each door, to insure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly.

B. Where door hardware is installed more than one month prior to acceptance or occupancy of a space or area, return to the installation during the week prior to acceptance or occupancy and make a final check and adjustment of all hardware items in such space or area. Clean operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.

C. Clean adjacent surfaces soiled by hardware installation.

D. Instruct Owner's personnel in the proper adjustment, lubrication, and maintenance of door hardware and hardware finishes.

3.04 FIELD QUALITY CONTROL

A. Prior to Substantial Completion, the installer, accompanied by representatives of the manufacturers of locks, exit devices, closer, and any electrified hardware, shall perform the following work:

1. Examine and re-adjust each item of door hardware as necessary to restore function of doors and hardware to comply with specified requirements.

2. Consult with and instruct Owner's personnel in recommended additions to the maintenance procedures.

3. Replace hardware items that have deteriorated or failed due to faulty design, materials, or installation of hardware units.

4. Prepare a written report of current and predictable problems of substantial nature in the performance of the hardware.

5. At completion of project, a qualified factory representative for the manufacturers of locksets, closer, exit devices, and access control products shall arrange and hold a training session to instruct the Owner's personnel on the proper maintenance, adjustment, and/or operation of their respective products. After training a letter of compliance, indicating when the training was held and who was in attendance, shall be sent to the Architect.

3.05 PROTECTION

A. Provide for the proper protection of complete items of hardware until the Owner accepts the project as complete. Damaged or disfigured hardware shall be replaced or repaired by the responsible party.

3.06 HARDWARE SCHEDULE

A. Provide hardware for each door to comply with requirements of Section "Finish Hardware," hardware set numbers indicated in door schedule, and in the following schedule of hardware sets.

B. It is intended that the following schedule includes complete items of finish hardware necessary to complete the work. If a discrepancy is found in the schedule, such as a missing item, improper hardware for a frame, door or fire codes, the preamble will be the deciding document.

C. Locksets, exit devices, and other hardware items are referenced in the Hardware Sets for series, type, and function. Refer to the preamble for special features, options, cylinders/keying, and other requirements.

D. Hardware Sets

HEADING # 01 (EXTERIOR SINGLE WITH STOREROOM LOCKSET (ROOF))

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	112HD	628	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4111 SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DRIP CAP	16A	AL	NGP
1	EA	SEALS	706A	AL	NGP
1	EA	DOOR SWEEP	C627A	AL	NGP
1	EA	THRESHOLD	425E	AL	NGP
1	EA	DOOR CONTACT	679-05HM/WD	BLK	SCE

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
DOOR CONTACT CONNECTED TO BUILDING'S SECURITY SYSTEM.
NOTE: LOCKSET TO BE LOCKED FROM INSIDE TO ALLOW FREE EGRESS FROM ROOF.

HEADING # 02 (EXTERIOR PAIR WITH STOREROOM LOCKSET X FLUSH BOLTS X CLOSER)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
2	EA	CONT. HINGE	112HD	628	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE

1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
2	EA	SURFACE CLOSER	4011 REG	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
1	EA	SEALS	706A	AL	NGP
1	EA	ASTRAGAL	A605A X 2 PCS	AL	NGP
2	EA	DOOR SWEEP	C627A	AL	NGP
1	EA	THRESHOLD	425E	AL	NGP
2	EA	DOOR CONTACT	679-05HM/WD	BLK	SCE

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
DOOR CONTACT CONNECTED TO BUILDING'S SECURITY SYSTEM.

HEADING # 03 (SINGLE - GLASS DOOR - WITH CUSTOM PULL)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	FLOOR CLOSER	BTS-80/A	630	DRM
1	EA	MORTISE CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
1	EA	CUSTOM PULL	36LPBS	630	CRL
1	EA	BALANCE OF HARDWARE	BY GLASS DOOR MANUFACTURER		

HEADING # 04 (SINGLE WITH PUSH/PULL X DEADBOLT)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	CLASSROOM DEADBOLT	B663	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	DOOR PULL	8103EZ -0	630	IVE
1	EA	PUSH PLATE	8200	630	IVE
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 05 (SINGLE DOUBLE ACTING WITH CONCEALED CLOSER X DEADBOLT)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	PIVOT SET	7255 SET	626	IVE
1	EA	CLASSROOM DEADBOLT	B663	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
2	EA	PUSH PLATE	8200	630	IVE
1	EA	CONCEALED CLOSER	6031 BUMP	689	LCN
2	EA	ARMOR PLATE	8400 36" X 2" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE

HEADING # 06 (SINGLE DOUBLE ACTING WITH CONCEALED CLOSER X DEADBOLT)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	PIVOT SET	7255 SET	626	IVE
1	EA	CLASSROOM DEADBOLT	B663	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
2	EA	PUSH PLATE	8200	630	IVE
1	EA	CONCEALED CLOSER	6031 BUMP	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE

HEADING # 07 (SINGLE WITH OFFICE LOCKSET)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	OFFICE/ENTRY LOCK	L9050 06A L583-363	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 08 (SINGLE WITH OFFICE LOCKSET X SWING CLEAR HINGES)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
1	EA	OFFICE/ENTRY LOCK	L9050 06A L583-363	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS

1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 09 (SINGLE WITH STOREROOM LOCKSET)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 10 (SINGLE WITH STOREROOM LOCKSET X SWING CLEAR HINGES)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 11 (SINGLE WITH HOSPITAL PRIVACY X EMERGENCY RELEASE HARDWARE)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	PIVOT SET	7255J SET	626	IVE
1	EA	PRIVACY LOCK	L9040 06A L583-363 XL11-446	626	SCH
1	EA	DBLE LIPPED STRIKE	DL-11/12	630	DON
1	EA	EMERGENCY STOP	610	626	HAG
1	EA	OVERHEAD STOP	CONCEALED MEDIUM DUTY 410S SERIES	689	GLY
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	MOP PLATE	8400 4" X 2" LDW	630	IVE
1	EA	EDGE GASKETING	136P	AL	NGP

HEADING # 12 (SINGLE WITH PRIVACY SET X CLOSER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	PRIVACY LOCK	L9040 06A L583-363	626	SCH
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 13 (SINGLE WITH PRIVACY INDICATOR LOCKSET X CLOSER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
1	EA	PRIVACY W/DB & IND	L9496 06A L583-363	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 14 (SINGLE WITH CLASSROOM LOCKSET X CLOSER X SWING CLEAR HINGES)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
1	EA	CLASSROOM LOCK	L9070 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 15 (SINGLE - ALUMINUM - WITH CLASSROOM LOCKSET X CLOSER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	CLASSROOM LOCK	L9070 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN

1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	SET	SEALS	BY ALUMINUM DOOR SUPPLIER		

NOTE: FURNISH PARALLEL ARM CLOSER @ DOOR #DC-20R5B & DC20R7D.

HEADING # 16 (SINGLE WITH STOREROOM LOCKSET X CLOSER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 17 (SINGLE WITH STOREROOM LOCKSET X CLOSER X SWING CLEAR HINGES)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 18 (SINGLE WITH FAIL SECURE ELECTRIFIED STOREROOM LOCKSET X CLOSER X CARD READER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	EU STOREROOM LOCK	RX-L9080EU 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE

3	EA	SILENCER	SR64	GRY	IVE
1	EA	DOOR CONTACT	679-05HM/WD	BLK	SCE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	EA	CARD READER	SPECIFIED ELSEWHERE		

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
IMMEDIATE EGRESS ALWAYS ALLOWED. ACCESS BY KEY OR BY CARD READER. CARD READER WILL UNLOCK LOCKSET AND ALLOW ACCESS. REQUEST TO EXIT AND DOOR CONTACT CONNECTED TO BUILDING'S SECURITY SYSTEM.

HEADING # 19 (SINGLE WITH STOREROOM LOCKSET X CLOSER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP

HEADING # 20 (SINGLE WITH PUSH/PULL X SWING CLEAR HINGES)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
1	EA	DOOR PULL	8103EZ -0	630	IVE
1	EA	PUSH PLATE	8200	630	IVE
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
3	EA	SILENCER	SR64	GRY	IVE

HEADING # 21 (SINGLE WITH RIM FIRE EXIT HARDWARE X SMOKE GASKETING)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	FIRE EXIT HARDWARE	98-L-BE-F	626	VON

1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP
1	EA	DOOR SWEEP	200N	AL	NGP
1	EA	THRESHOLD	513	AL	NGP

HEADING # 22 (SINGLE WITH RIM FIRE EXIT HARDWARE)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	FIRE EXIT HARDWARE	98-L-F	626	VON
1	EA	RIM CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4111 SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	SEAL	2525	BRN	NGP

HEADING # 23 (SINGLE WITH RIM FIRE EXIT HARDWARE X SMOKE GASKETING)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	FIRE EXIT HARDWARE	98-L-F	626	VON
1	EA	RIM CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP
1	EA	DOOR SWEEP	200N	AL	NGP
1	EA	THRESHOLD	513	AL	NGP

HEADING # 24 (SINGLE WITH ELECTRIFIED RIM FIRE EXIT HARDWARE X SMOKE GASKETING X CARD READER)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	POWER TRANSFER	EPT10	689	VON
1	EA	ELEC FIRE EXIT HARDWARE	RX-98-L-F E996 FSE	626	VON

1	EA	RIM CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4011 REG	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP
1	EA	DOOR SWEEP	200N	AL	NGP
1	EA	THRESHOLD	513	AL	NGP
1	EA	DOOR CONTACT	679-05HM/WD	BLK	SCE
1	EA	POWER SUPPLY	PS902 FA900	LGR	SCE
1	EA	CARD READER	SPECIFIED ELSEWHERE		

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
IMMEDIATE EGRESS ALWAYS ALLOWED. ACCESS BY KEY OR BY CARD READER. CARD READER WILL UNLOCK TRIM AND ALLOW ACCESS. REQUEST TO EXIT AND DOOR POSITION SWITCH CONNECTED TO BUILDING'S SECURITY SYSTEM.

HEADING # 25 (PAIR WITH DUMMY TRIM X ROLLER LATCHES)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	ROLLER LATCH	RL30 (TOP MOUNT)	626	IVE
1	EA	HALF DUMMY TRIM	L0170 06A	626	SCH
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HEADING # 26 (PAIR WITH CLASSROOM LOCKSET X FLUSH BOLTS)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	CLASSROOM LOCK	L9070 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HEADING # 27 (PAIR WITH STOREROOM LOCKSET X FLUSH BOLTS X CLOSER AT ACTIVE LEAF)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

NOTE: FURNISH REGULAR ARM CLOSER @ DOOR #40109 & 40117.

HEADING # 28 (PAIR WITH HOSPITAL LATCH X ELECTRIC STRIKE X FLUSH BOLTS X AUTOMATIC OPERATOR AT ACTIVE LEAF)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
7	EA	SWING CLEAR HW HINGE	5BB1HWSC 5	652	IVE
1	EA	SC ELECTRIC HW HINGE	5BB1HWSC 5 TW8	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	PUSH/PULL LATCH	HL6 E1	626	GLY
1	EA	ELECTRIC STRIKE	6223 FSE	630	VON
1	EA	SURF. AUTO OPERATOR	4630 SERIES (PULL SIDE MOUNTED)	689	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-852/8310-818 AS REQUIRED	630	LCN
2	EA	ARMOR PLATE	8400 36" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
IMMEDIATE EGRESS ALWAYS ALLOWED. DOOR CAN BE MANUALLY OR AUTOMATICALLY OPERATED. AUTOMATIC OPERATION BY PUSHING ACTUATOR WHICH WILL RELEASE ELECTRIC STRIKE KEEPER THEN SIGNAL AUTOMATIC OPERATOR TO OPEN DOOR. LOCATE ACTUATORS AS DIRECTED BY ARCHITECT.

HEADING # 29 (PAIR WITH STOREROOM LOCKSET X FLUSH BOLTS X CLOSER AT ACTIVE LEAF)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	MANUAL FLUSH BOLT	FB458	626	IVE
1	EA	DUST PROOF STRIKE	DP1/DP2 AS REQUIRED	626	IVE
1	EA	STOREROOM LOCK	L9080 06A	626	SCH
1	EA	PERMANENT CORE	(KEYMARK) AS REQUIRED	626	MIS
1	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP
1	EA	ASTRAGAL	A605A X 2 PCS	AL	NGP

HEADING # 30 (PAIR WITH PUSH/PULL HARDWARE X AUTO OPERATOR)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
4	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	DOOR PULL	8103EZ -0	630	IVE
2	EA	PUSH PLATE	8200	630	IVE
1	EA	SURF. AUTO OPERATOR	9550 SERIES	ANCLR	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-852/8310-818 AS REQUIRED	630	LCN
2	EA	ARMOR PLATE	8400 36" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
IMMEDIATE EGRESS ALWAYS ALLOWED. DOOR CAN BE MANUALLY OR AUTOMATICALLY OPERATED. DOOR CAN BE MANUALLY PULLED OPEN OR AUTOMATICALLY OPERATED BY PUSHING ACTUATOR WHICH SIGNALS AUTOMATIC OPERATOR TO OPEN DOOR. INTERIOR ACTUATOR TO SIGNAL AUTOMATIC OPERATOR TO OPEN DOOR. LOCATE ACTUATORS AS DIRECTED BY ARCHITECT.

HEADING # 31 (PAIR WITH SURFACE LESS BOTTOM ROD PANIC HARDWARE)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	PANIC HARDWARE	CD-9827-L-LBR	626	VON
2	EA	MORTISE CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
2	EA	RIM CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
2	EA	SURFACE CLOSER	4111 EDA	689	LCN

2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HEADING # 32 (PAIR - DOUBLE EGRESS - WITH PUSH/PULL HARDWARE X MAGNETIC LOCKS X AUTO OPERATOR)

PROVIDE EACH DE DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	MAGNETIC LOCK	M490P	628	SCE
2	EA	PUSH PLATE	8200	630	IVE
1	EA	SURF. AUTO OPERATOR	9550 SERIES	ANCLR	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-852/8310-818 AS REQUIRED	630	LCN
4	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	SILENCER	SR64	GRY	IVE
1	EA	PUSHBUTTON	621ALEX	629	SCE
1	EA	MOTION SENSOR	SCANII	WHT	SCE
1	EA	POWER SUPPLY	PS902 FA900	LGR	SCE

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:

*** FINAL COORDINATION AND OPERATIONAL DESCRIPTION TO BE DETERMINED.

HEADING # 33 (PAIR - DOUBLE EGRESS - WITH SURFACE LESS BOTTOM ROD FIRE EXIT HARDWARE X MAGNETIC HOLDERS)

PROVIDE EACH DE DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	FIRE EXIT HARDWARE	9827-EO-F-LBR	626	VON
2	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQUIRED	689	LCN
1	EA	SEAL	2525	BRN	NGP
1	EA	ASTRAGAL	A605A X 2 PCS	AL	NGP

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
DOORS NORMALLY HELD OPEN BY MAGNETIC HOLDERS. MAGNETIC HOLDERS TO BE CONNECTED TO BUILDING'S FIRE/SMOKE ALARM SYSTEM TO RELEASE IMMEDIATELY UPON ACTIVATION.

HEADING # 34 (PAIR - DOUBLE EGRESS - WITH SURFACE LESS BOTTOM ROD DELAYED EGRESS FIRE EXIT HARDWARE X MAGNETIC HOLDERS X CARD READERS)

PROVIDE EACH DE DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
2	EA	POWER TRANSFER	EPT10	689	VON
2	EA	DELAYED PANIC HARDWARE	CX-9827-EO-LBR	626	VON
2	EA	MORTISE CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
2	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7800 SERIES AS REQUIRED	689	LCN
1	EA	SEAL	2525	BRN	NGP
1	EA	ASTRAGAL	A605A X 2 PCS	AL	NGP
1	EA	POWER SUPPLY	PS914	LGR	VON
1	EA	CARD READER	SPECIFIED ELSEWHERE		

ALL WIRING AND CONNECTIONS BY DIVISION 26.
OPERATIONAL DESCRIPTION:
DOORS NORMALLY HELD OPEN BY MAGNETIC HOLDERS. MAGNETIC HOLDERS TO BE CONNECTED TO BUILDING'S FIRE/SMOKE ALARM SYSTEM TO RELEASE IMMEDIATELY UPON ACTIVATION.

OPERATIONAL DESCRIPTION (WHEN SECURE):
DELAYED EGRESS ALLOWED AFTER 15 SECOND DELAY. MOMENTARY RELEASE BY CARD READERS ALLOWING ENTRY OR EGRESS, OR BY CYLINDER IN RAIL ALLOWING EGRESS.

AN IRREVERSIBLE PROCESS RELEASES THE LOCKING DEVICE WITHIN 15 SECONDS UPON APPLICATION TO THE RELEASE DEVICE (15LBF FOR NOT MORE THAN 3 SECONDS).

INITIATION OF THE RELEASE PROCESS ACTIVATES AN AUDIBLE SIGNAL IN THE VICINITY OF THE DOOR.
AFTER RELEASE, DOOR MUST BE MANUALLY RELOCKED.
SIGNAGE ON THE EGRESS SIDE OF DOOR TO READ "PUSH UNTIL ALARM SOUNDS, DOOR CAN BE OPENED IN 15 SECONDS".

DELAYED EGRESS SYSTEM TO BE CONNECTED TO BUILDING'S FIRE/SMOKE ALARM SYSTEM TO UNLOCK IMMEDIATELY ALLOWING IMMEDIATE EGRESS. DOOR CONTACTS CONNECTED TO BUILDING'S SECURITY SYSTEM.

HEADING # 35 (PAIR WITH PUSH/PULL HARDWARE X AUTOMATIC OPERATOR)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
2	EA	DOOR PULL	8103EZ -0	630	IVE
2	EA	PUSH PLATE	8200	630	IVE
1	EA	SURF. AUTO OPERATOR	9550 SERIES	ANCLR	LCN
2	EA	ACTUATOR, WALL MOUNT	8310-852/8310-818 AS REQUIRED	630	LCN
2	EA	ARMOR PLATE	8400 36" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
2	EA	SILENCER	SR64	GRY	IVE

HEADING # 36 (PAIR WITH SURFACE LESS BOTTOM ROD FIRE EXIT HARDWARE)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
8	EA	SWING CLEAR HINGE	5BB1SC SERIES AS SPECIFIED	652	IVE
2	EA	FIRE EXIT HARDWARE	9827-L-F-LBR	626	VON
2	EA	RIM CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
2	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP
1	EA	ASTRAGAL	A605A X 2 PCS	AL	NGP

HEADING # 37 (PAIR WITH SURFACE LESS BOTTOM ROD PANIC HARDWARE)

PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
6	EA	HINGE	5BB1 SERIES AS SPECIFIED	652	IVE
1	EA	FIRE EXIT HARDWARE	9827-EO-F-LBR	626	VON
1	EA	FIRE EXIT HARDWARE	9827-L-NL-F-LBR-996-06	626	VON
1	EA	RIM CYLINDER	(KEYMARK) AS REQUIRED	626	MIS
2	EA	SURFACE CLOSER	4111 EDA	689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW	630	IVE
2	EA	STOP	WS407/FS436 AS SPECIFIED	626	IVE
1	EA	SEAL	2525	BRN	NGP
1	EA	ASTRAGAL	A605A X 2 PCS	AL	NGP

HEADING # 38 (SPECIALTY DOORS)

PROVIDE EACH SL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	ALL HARDWARE	BY DOOR MANUFACTURER		

HEADING # 39 (PADLOCKS)

PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	PADLOCK L/CYL-FSIC	KS43F3200	606	SCH
1	EA	PERMANENT CORE	23-030	606	MIS

END OF SECTION