SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section includes:

1. Mechanical and electrified door hardware
2. Electronic access control system components

B. Section excludes:

1. Windows
2. Cabinets (casework), including locks in cabinets
3. Signage
4. Toilet accessories
5. Overhead doors

C. Related Sections:

1. Division 01 Section "Alternates" for alternates affecting this section.
2. Division 06 Section "Rough Carpentry"
3. Division 06 Section "Finish Carpentry"
4. Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
5. Division 08 Sections:
   a. "Metal Doors and Frames"
   b. "Flush Wood Doors"
   c. "Stile and Rail Wood Doors"
   d. "Interior Aluminum Doors and Frames"
   e. "Aluminum-Framed Entrances and Storefronts"
   f. "Stainless Steel Doors and Frames"
   g. "Special Function Doors"
   h. "Entrances"
6. Division 26 "Electrical" sections for connections to electrical power system and for low-voltage wiring.
7. Division 28 "Electronic Safety and Security" sections for coordination with other components of electronic access control system and fire alarm system.

1.02 REFERENCES

A. UL LLC

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

B. DHI - Door and Hardware Institute

1. Sequence and Format for the Hardware Schedule

2. Recommended Locations for Builders Hardware
3. Keying Systems and Nomenclature
4. Installation Guide for Doors and Hardware

C. NFPA – National Fire Protection Association

1. NFPA 70 – National Electric Code
2. NFPA 80 – 2016 Edition – Standard for Fire Doors and Other Opening Protectives
3. NFPA 101 – Life Safety Code
4. NFPA 105 – Smoke and Draft Control Door Assemblies
5. NFPA 252 – Fire Tests of Door Assemblies

D. ANSI - American National Standards Institute

1. ANSI A117.1 – 2017 Edition – Accessible and Usable Buildings and Facilities
2. ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
3. ANSI/BHMA A156.28 - Recommended Practices for Keying Systems
4. ANSI/WDMA I.S. 1A - Interior Architectural Wood Flush Doors
5. ANSI/SDI A250.8 - Standard Steel Doors and Frames

1.03 SUBMITTALS

A. General:

1. Submit in accordance with Conditions of Contract and Division 01 Submittal Procedures.
2. Prior to forwarding submittal:
   a. Review drawings and Sections from related trades to verify compatibility with specified hardware.
   b. Highlight, encircle, or otherwise specifically identify on submittals: deviations from Contract Documents, issues of incompatibility or other issues which may detrimentally affect the Work.

B. Action Submittals:

1. Product Data: Submit 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.
2. Riser and Wiring Diagrams: After final approval of hardware schedule, submit details of electrified door hardware, indicating:
   a. Wiring Diagrams: For power, signal, and control wiring and including:
      1) Details of interface of electrified door hardware and building safety and security systems.
      2) Schematic diagram of systems that interface with electrified door hardware.
      3) Point-to-point wiring.
      4) Risers.

3. Samples for Verification: If requested by Architect, submit production sample of requested door hardware unit in finish indicated and tagged with full description for coordination with schedule.
   a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into Work, within limitations of key coordination requirements.

4. Door Hardware Schedule:
    a. Submit concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate fabrication of other work critical in Project construction schedule.
    b. Submit under direct supervision of a Door Hardware Institute (DHI) certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule published by DHI.
    c. Indicate complete designations of each item required for each opening, include:
        1) Door Index: door number, heading number, and Architect's hardware set number.
        2) Quantity, type, style, function, size, and finish of each hardware item.
        3) Name and manufacturer of each item.
        4) Fastenings and other pertinent information.
        5) Location of each hardware set cross-referenced to indications on Drawings.
        6) Explanation of all abbreviations, symbols, and codes contained in schedule.
        7) Mounting locations for hardware.
        8) Door and frame sizes and materials.
        9) Degree of door swing and handing.
        10) Operational Description of openings with electrified hardware covering egress, ingress (access), and fire/smoke alarm connections.

5. Key Schedule:
    a. After Keying Conference, provide keying schedule that includes levels of keying, explanations of key system's function, key symbols used, and door numbers controlled.
    b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for selecting optimal keying system.
    c. Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic keying diagram and index each key to unique door designations.
    d. Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping instructions.
    e. Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion. Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
    f. Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.

C. Informational Submittals:

1. Provide Qualification Data for Supplier, Installer and Architectural Hardware Consultant.
2. Provide Product Data:
    a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
    b. Include warranties for specified door hardware.

D. Closeout Submittals:

1. Operations and Maintenance Data: Provide in accordance with Division 01 and include:
    a. Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
    b. Catalog pages for each product.
    c. Final approved hardware schedule edited to reflect conditions as installed.
    d. Final keying schedule

e. Copy of warranties including appropriate reference numbers for manufacturers to identify project.
f. As-installed wiring diagrams for each opening connected to power, both low voltage and 110 volts.

E. Inspection and Testing:

1. Submit written reports to the Owner and Authority Having Jurisdiction (AHJ) of the results of functional testing and inspection for:
   a. Fire door assemblies, in compliance with NFPA 80.
   b. Required egress door assemblies, in compliance with NFPA 101.

1.04 QUALITY ASSURANCE

A. Qualifications and Responsibilities:

1. Supplier: Recognized architectural hardware supplier with a minimum of 5 years documented experience supplying both mechanical and electromechanical door hardware similar in quantity, type, and quality to that indicated for this Project. Supplier to be recognized as a factory direct distributor by the manufacturer of the primary materials with a warehousing facility in the Project's vicinity. Supplier to have on staff, a certified Architectural Hardware Consultant (AHC) or Door Hardware Consultant (DHC) available to Owner, Architect, and Contractor, at reasonable times during the Work for consultation.
2. Installer: Qualified tradesperson skilled in the application of commercial grade hardware with experience installing door hardware similar in quantity, type, and quality as indicated for this Project.
3. Architectural Hardware Consultant: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and meets these requirements:
   a. For door hardware: DHI certified AHC or DHC.
   b. Can provide installation and technical data to Architect and other related subcontractors.
   c. Can inspect and verify components are in working order upon completion of installation.
   d. Capable of producing wiring diagram and coordinating installation of electrified hardware with Architect and electrical engineers.

4. Single Source Responsibility: Obtain each type of door hardware from single manufacturer.

B. Certifications:

1. Fire-Rated Door Openings:
   a. Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction.
   b. Provide only items of door hardware that are listed products tested by UL LLC, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.

2. Smoke and Draft Control Door Assemblies:
   a. Provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105

b. Comply with the maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at tested pressure differential of 0.3-inch wg (75 Pa) of water.

3. Electrified Door Hardware
   a. Listed and labeled as defined in NFPA 70, Article 100, by testing agency acceptable to authorities having jurisdiction.

4. Accessibility Requirements:
   a. Comply with governing accessibility regulations cited in "REFERENCES" article 087100, 1.02.D3 herein for door hardware on doors in an accessible route. This project must comply with all Federal Americans with Disability Act regulations and all Local Accessibility Regulations.

C. Pre-Installation Meetings

1. Keying Conference
   a. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
      1) Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
      2) Preliminary key system schematic diagram.
      3) Requirements for key control system.
      4) Requirements for access control.
      5) Address for delivery of keys.

2. Pre-installation Conference
   a. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
   b. Inspect and discuss preparatory work performed by other trades.
   c. Inspect and discuss electrical roughing-in for electrified door hardware.
   d. Review sequence of operation for each type of electrified door hardware.
   e. Review required testing, inspecting, and certifying procedures.
   f. Review questions or concerns related to proper installation and adjustment of door hardware.

3. Electrified Hardware Coordination Conference:
   a. Prior to ordering electrified hardware, schedule and hold meeting to coordinate door hardware with security, electrical, doors and frames, and other related suppliers.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site. Promptly replace products damaged during shipping.

B. Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package. Deliver each article of hardware in manufacturer's original packaging.

C. Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.

D. Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both before and after installation.

E. Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work. Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.

F. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.06 COORDINATION

A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.

B. Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.

C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.

D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.

1.07 WARRANTY

A. Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within published warranty period.

1. Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse.
2. Warranty Period: Beginning from date of Substantial Completion, for durations indicated in manufacturer's published listings.

1.08 MAINTENANCE

A. Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders.

B. Turn over unused materials to Owner for maintenance purposes.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Approval of alternate manufacturers and/or products other than those listed as "Scheduled Manufacturer" or "Acceptable Manufacturers" in the individual article for the product category are only to be considered by official substitution request in accordance with section 01 25 00.

B. Approval of products from manufacturers indicated in "Acceptable Manufacturers" is contingent upon those products providing all functions and features and meeting all requirements of scheduled manufacturer's product.

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

2.02 MATERIALS

A. Fabrication

1. Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. provide screws according to manufacturer's recognized installation standards for application intended.
2. Finish exposed screws to match hardware finish, or, if exposed in surfaces of other work, to match finish of this other work including prepared for paint surfaces to receive painted finish.
3. Provide concealed fasteners wherever possible for hardware units exposed when door is closed. Coordinate with "Metal Doors and Frames", "Flush Wood Doors", "Stile and Rail Wood Doors" to ensure proper reinforcements. Advise the Architect where visible fasteners, such as thru bolts, are required.

B. Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.

1. Where fasteners are exposed to view: Finish to match adjacent door hardware material.

C. Cable and Connectors:

1. Where scheduled in the hardware sets, provide each item of electrified hardware and wire harnesses with number and gage of wires enough to accommodate electric function of specified hardware.
2. Provide Molex connectors that plug directly into connectors from harnesses, electric locking and power transfer devices.
3. Provide through-door wire harness for each electrified locking device installed in a door and wire harness for each electrified hinge, electrified continuous hinge, electrified pivot, and electric power transfer for connection to power supplies.

2.03 HINGES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Ives 5BB series

B. Requirements:

1. Provide hinges conforming to ANSI/BHMA A156.1.
2. Provide five knuckle, ball bearing hinges.
3. 1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
   a. Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
   b. Interior: Standard weight, steel, 4-1/2 inches (114 mm) high

4. 1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
   a. Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
   b. Interior: Heavy weight, steel, 5 inches (127 mm) high

5. 2 inches or thicker doors:
    a. Exterior: Heavy weight, bronze or stainless steel, 5 inches (127 mm) high
    b. Interior: Heavy weight, steel, 5 inches (127 mm) high

6. Adjust hinge width for door, frame, and wall conditions to allow proper degree of opening.
7. Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
8. 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

9. Provide hinges with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electric hinge at second hinge from bottom or nearest to electrified locking component. Provide mortar guard for each electrified hinge specified.

2.04 CONTINUOUS HINGES

A. Manufacturers:

1. Scheduled Manufacturer:
    a. Ives

B. Requirements:

1. Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
2. Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
3. Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
4. Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
5. On fire-rated doors, provide aluminum geared continuous hinges classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
6. Provide aluminum geared continuous hinges with electrified option scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
7. Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.

2.05 ELECTRIC POWER TRANSFER

A. Manufacturers:

1. Scheduled Manufacturer and Product:
    a. Von Duprin EPT-10

B. Requirements:

1. Provide power transfer with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware.
2. Locate electric power transfer per manufacturer's template and UL requirements, unless interference with operation of door or other hardware items.

2.06 PIVOT SETS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

B. Requirements:

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 (2311 mm) high and one additional intermediate pivot per leaf for each additional 30 inches (762 mm) in height or fraction thereof. Intermediate pivots spaced equally not less than 25 inches (635 mm) or not more than 35 inches (889 mm) on center, for doors over 121 inches (3073 mm) high.
3. Provide appropriate model where pivot sets are scheduled at fire rated openings.
4. Provide pivots with electrified options as scheduled in the hardware sets. Provide with number and gage of wires enough to accommodate electric function of specified hardware. Locate electrified pivot nearest to electrified locking component. If manufacturer of electrified locking component requires another device for power transfer, then provide recommended power transfer device and appropriate quantity of pivots.
5. Provide mortar guard for each electric pivot specified, unless specified in hollow metal frame specification.

2.07 EMERGENCY HARDWARE

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. ABH
   b. Hager

B. Requirements:

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

2.08 FLUSH BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:

a. Ives

2. Acceptable Manufacturers:
   a. Burns
   b. Trimco

B. Requirements:

1. Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12 inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.

2.09 SURFACE BOLTS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Burns
   b. Trimco

B. Requirements:

1. Surface bolt s to have 1" throw for maximum security with concealed mounting that prevents vandalism. Units to be constructed of heavy-duty steel and UL listed up to three (3) hours when used on the inactive door of a pair up to 8' in height.

2.10 COORDINATORS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Burns
   b. Trimco

B. Requirements:

1. Where pairs of doors are equipped with automatic flush bolts, an astragal, or other hardware that requires synchronized closing of the doors, provide bar-type coordinating device, surface applied to underside of stop at frame head.
2. Provide filler bar of correct length for unit to span entire width of opening, and appropriate brackets for parallel arm door closers, surface vertical rod exit device strikes, or other stop mounted hardware. Factory-prepared coordinators for vertical rod devices as specified.

2.11 MORTISE LOCKS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Schlage L9000 series

B. Requirements:

1. Provide mortise locks conforming to ANSI/BHMA A156.13 Series 1000, Grade 1, and UL Listed for 3-hour fire doors.
2. Indicators: Where specified, provide indicator window measuring a minimum 2-inch x 1/2 inch with 180-degree visibility. Provide messages color-coded with full text and/or symbols, as scheduled, for easy visibility.
3. Provide locks manufactured from heavy gauge steel, containing components of steel with a zinc dichromate plating for corrosion resistance.
4. Provide lock case that is multi-function and field reversible for handing without opening case. Cylinders: Refer to "KEYING" article, herein.
5. Provide locks with standard 2-3/4 inches (70 mm) backset with full 3/4 inch (19 mm) throw stainless steel mechanical anti-friction latchbolt. Provide deadbolt with full 1-inch (25 mm) throw, constructed of stainless steel.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim. Provide electrified options as scheduled in the hardware sets. Where scheduled, provide switches and sensors integrated into the locks and latches.
7. Provide motor based electrified locksets that comply with the following requirements:
   a. Universal input voltage – single chassis accepts 12 or 24VDC to allow for changes in the field without changing lock chassis.
   b. Fail Safe/Fail Secure – changing mode between electrically locked (fail safe) and electrically unlocked (fail secure) is field selectable without opening the lock case.
   c. Low maximum current draw – maximum 0.4 amps to allow for multiple locks on a single power supply.
   d. Low holding current – maximum 0.01 amps to produce minimal heat, eliminate “hot levers” in electrically locked applications, and to provide reliable operation in wood doors that provide minimal ventilation and air flow.
   e. Connections – provide quick-connect Molex system standard.

8. Lever Trim: Solid brass, bronze, or stainless steel, cast or forged in design specified, with wrought roses and external lever spring cages. Provide thru-bolted levers with 2-piece spindles.
   a. Lever Design: 17A

2.12 CYLINDRICAL LOCKS – GRADE 1

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Schlage ND series

B. Requirements:

1. Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3-hour fire doors.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2-inch latch throw. Provide proper latch throw for UL listing at pairs.

4. Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
5. Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
6. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
7. Provide electrified options as scheduled in the hardware sets.
8. Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
   a. Lever Design: SPARTA

2.13 HOSPITAL LATCHES

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Schlage

B. Requirements:

1. Provide hospital latches conforming to ANSI/BHMA A156 with covers engraved "Push" and "Pull".
2. Provide proper latch throw for UL listing at pairs.
3. Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
4. Mount trim with push paddle mounted up and pull paddle mounted down except at psychiatric or security areas provide both paddles mounted down, unless noted otherwise.
5. Provide standard dampened paddle action – depression and snap back – reducing noise associated with lock operation

2.14 EXIT DEVICES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Von Duprin 99/33A series

B. Requirements:

1. Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
2. Cylinders: Refer to "KEYING" article, herein.
3. Provide grooved touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
4. Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
5. Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
6. Provide exit devices with weather resistant components that can withstand harsh conditions of various climates and corrosive cleaners used in outdoor pool environments.
7. Provide flush end caps for exit devices.
8. Provide exit devices with manufacturer's approved strikes.
9. Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by Architect.
10. Mount mechanism case flush on face of doors or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.

11. Provide cylinder or hex-key dogging as specified at non fire-rated openings.
12. Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which is self-locking when re-installed.
13. Provide factory drilled weep holes for exit devices used in full exterior application, highly corrosive areas, and where noted in hardware sets.
14. Provide electrified options as scheduled.
15. Top latch mounting: double- or single-tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
16. Provide exit devices with optional trim designs to match other lever and pull designs used on the project.

2.15 ELECTRIC STRIKES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Von Duprin 6000 Series

B. Requirements:

1. Provide electric strikes designed for use with type of locks shown at each opening.
2. Provide electric strikes UL Listed as burglary resistant that are tested to a minimum endurance test of 1,000,000 cycles.
3. Where required, provide electric strikes UL Listed for fire doors and frames.
4. Provide transformers and rectifiers for each strike as required. Verify voltage with electrical contractor.

2.16 POWER SUPPLIES

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. Schlage/Von Duprin PS900 Series

B. Requirements:

1. Provide power supplies approved by manufacturer of supplied electrified hardware.
2. Provide appropriate quantity of power supplies necessary for proper operation of electrified locking components as recommended by manufacturer of electrified locking components with consideration for each electrified component using power supply, location of power supply, and approved wiring diagrams. Locate power supplies as directed by Architect.
3. Provide regulated and filtered 24 VDC power supply, and UL class 2 listed.
4. Provide power supplies with the following features:
   a. 12/24 VDC Output, field selectable.
   b. Class 2 Rated power limited output.
   c. Universal 120-240 VAC input.
   d. Low voltage DC, regulated and filtered.
   e. Polarized connector for distribution boards.
   f. Fused primary input.
   g. AC input and DC output monitoring circuit w/LED indicators.
   h. Cover mounted AC Input indication.
   i. Tested and certified to meet UL294.

j. NEMA 1 enclosure.
k. Hinged cover w/lock down screws.
l. High voltage protective cover.

2.17 CYLINDERS

A. Manufacturers:

1. Scheduled Manufacturer and Product:
   a. Corbin Russwin

2. Acceptable Manufacturers and Products:
   a. No Substitute

B. Requirements:

1. Provide cylinders/cores to match Owner’s existing key system, compliant with ANSI/BHMA A156.5; latest revision.

2.18 KEY CONTROL SYSTEM

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Telkee

2. Acceptable Manufacturers:
   a. No Substitute
   b. HPC
   c. Lund

B. Requirements:

1. Provide key control system, including envelopes, labels, tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by system manufacturer, with capacity for 150% of number of locks required for Project.
   a. Provide complete cross index system set up by hardware supplier, and place keys on markers and hooks in cabinet as determined by final key schedule.
   b. Provide hinged-panel type cabinet for wall mounting.

2.19 DOOR CLOSERS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. LCN 4040XP series

B. Requirements:

1. Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of manufacture code.

2. Provide door closers with fully hydraulic, full rack and pinion action with high strength cast iron cylinder, and full complement bearings at shaft.
3. Cylinder Body: 1-1/2-inch (38 mm) diameter piston with 5/8-inch (16 mm) diameter double heat-treated pinion journal. QR code with a direct link to maintenance instructions.
4. Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
5. Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards. Provide snap-on cover clip, with plastic covers, that secures cover to spring tube.
6. Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and backcheck. Provide graphically labelled instructions on the closer body adjacent to each adjustment valve. Provide positive stop on reg valve that prevents reg screw from being backed out.
7. Provide closers with solid forged steel main arms and factory assembled heavy-duty forged forearms for parallel arm closers.
8. Pressure Relief Valve (PRV) Technology: Not permitted.
9. Finish for Closer Cylinders, Arms, Adapter Plates, and Metal Covers: 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 has special rust inhibitor (SRI).
10. Provide special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with closer mounting.

2.20 ELECTRO-MECHANICAL AUTOMATIC OPERATORS

A. Manufacturers and Products:

1. Scheduled Manufacturer and Product:
   a. LCN Senior Swing

B. Requirements:

1. Provide low energy automatic operator units that are electro-mechanical design complying with ANSI/BHMA A156.19.
   a. Opening: Powered by DC motor working through reduction gears.
   b. Closing: Spring force.
   c. Manual, hydraulic, or chain drive closers: Not permitted.
   d. Operation: Motor is off when door is in closing mode. Door can be manually operated with power on or off without damage to operator. Provide variable adjustments, including opening and closing speed adjustment.
   e. Cover: Aluminum.

2. 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 1 to 32 seconds, and logic terminal to interface with accessories, mats, and sensors.
3. Provide drop plates, brackets, and adapters for arms as required to suit details.
4. Provide motion sensors and/or actuator switches, and receivers for operation as specified. Provide weather-resistant actuators at exterior applications.
5. Provide key switches, with LED's, recommended and approved by manufacturer of automatic operator as required for function as described in operation description of hardware sets. Cylinders: Refer to "KEYING" article, herein.

6. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf. Actuators control both doors simultaneously at pairs. Sequence operation of exterior and vestibule doors with automatic operators to allow ingress or egress through both sets of openings as directed by Architect. Locate actuators, key switches, and other controls as directed by Architect.

2.21 PROTECTION PLATES

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Burns
   b. Trimco

B. Requirements:

1. Provide protection plates with a minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match plates.
2. Sizes plates 2 inches (51 mm) less width of door on single doors, pairs of doors with a mullion, and doors with edge guards. Size plates 1 inch (25 mm) less width of door on pairs without a mullion or edge guards.
3. At fire rated doors, provide protection plates over 16 inches high with UL label.

2.22 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS

A. Manufacturers:

1. Scheduled Manufacturers:
   a. Glynn-Johnson

2. Acceptable Manufacturers:
   a. Rixson
   b. ABH

B. Requirements:

1. Provide overhead stop at any door where conditions do not allow for a wall stop or floor stop presents tripping hazard.

2.23 DOOR STOPS AND HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Burns
   b. Trimco

B. Provide door stops at each door leaf:

1. Provide wall stops wherever possible. Provide concave type where lockset has a push button of thumbturn.
2. Where a wall stop cannot be used, provide universal floor stops.
3. Where wall or floor stop cannot be used, provide overhead stop.
4. Provide roller bumper where doors open into each other and overhead stop cannot be used.

2.24 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Zero International

2. Acceptable Manufacturers:
   a. National Guard
   b. Reese

B. Requirements:

1. Provide thresholds, weather-stripping, and gasketing systems as specified and per architectural details. Match finish of other items.
2. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
3. Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
4. Size thresholds 1/2 inch (13 mm) high by 5 inches (127 mm) wide by door width unless otherwise specified in the hardware sets or detailed in the drawings.

2.25 SILENCERS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Ives

2. Acceptable Manufacturers:
   a. Burns
   b. Trimco

B. Requirements:

1. Provide "push-in" type silencers for hollow metal or wood frames.
2. Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
3. Omit where gasketing is specified.

2.26 MAGNETIC HOLDERS

A. Manufacturers:

1. Scheduled Manufacturer:
   a. LCN

B. Requirements:

1. Provide wall or floor mounted electromagnetic door release as specified with minimum of 25 pounds of holding force. Coordinate projection of holder and armature with other hardware and wall conditions to ensure that door sits parallel to wall when fully open. Connect magnetic holders on fire-rated doors into the fire control panel for fail-safe operation.

2.27 DOOR POSITION SWITCHES

A. Manufacturers:

1. Scheduled Manufacturer:
   a. Schlage

B. Requirements:

1. Provide recessed or surface mounted type door position switches as specified.
2. Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches (102 mm) between switch and magnetic locking device.

2.28 FINISHES

A. FINISH: BHMA 626/652 (US26D); EXCEPT:

1. Hinges at Exterior Doors: BHMA 630 (US32D)
2. Aluminum Geared Continuous Hinges: BHMA 628 (US28)
3. Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
4. Protection Plates: BHMA 630 (US32D)
5. Overhead Stops and Holders: BHMA 630 (US32D)
6. Door Closers: Powder Coat to Match
7. Wall Stops: BHMA 630 (US32D)
8. Latch Protectors: BHMA 630 (US32D)
9. Weatherstripping: Clear Anodized Aluminum
10. Thresholds: Mill Finish Aluminum

PART 3 - EXECUTION

3.01 EXAMINATION

A. Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance. Verify doors, frames, and walls have been properly reinforced for hardware installation.

B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.

C. Submit a list of deficiencies in writing and proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

A. Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations.

1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
2. Custom Steel Doors and Frames: HMMA 831.
3. Interior Architectural Wood Flush Doors: ANSI/WDMA I.S. 1A
4. Installation Guide for Doors and Hardware: DHI TDH-007-20

B. Install door hardware in accordance with NFPA 80, NFPA 101 and provide post-install inspection, testing as specified in section 1.03.E unless otherwise required to comply with governing regulations.

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

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

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

F. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

G. Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.

H. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated.

I. Lock Cylinders:

1. Install construction cores to secure building and areas during construction period.
2. Replace construction cores with permanent cores as indicated in keying section.

J. Key Control System: Tag keys and place them on markers and hooks in key control system cabinet, as determined by final keying schedule.

K. Door Closers & Auto Operators: Mount closers/operators on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers/operators so they are not visible in corridors, lobbies and other public spaces unless approved by Architect.

L. Overhead Stops/Holders: Mount overhead stops/holders on room side of corridor doors, inside of exterior doors, and stair side of stairway doors.

M. Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings or in equipment room, or alternate location as directed by Architect.

N. Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."

O. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping hazard.

P. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

Q. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.

R. Door Bottoms and Sweeps: Apply to bottom of door, forming seal with threshold when door is closed.

3.03 ADJUSTING

A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.

1. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
2. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.

B. Occupancy Adjustment: Approximately three to six months after date of Substantial Completion, examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors and door hardware.

3.04 CLEANING AND PROTECTION

A. Clean adjacent surfaces soiled by door hardware installation.

B. Clean operating items per manufacturer's instructions to restore proper function and finish.

C. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of Substantial Completion.

3.05 DOOR HARDWARE SCHEDULE

A. The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard of quality. However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings, and other Contract Documents to verify the suitability of the hardware specified.

B. Discrepancies, conflicting hardware, and missing items are to be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a hardware set should be scheduled with the appropriate additional hardware required for proper application.

C. Hardware items are referenced in the following hardware schedule. Refer to the above specifications for special features, options, cylinders/keying, and other requirements.

D. Hardware Sets:

Abbreviation	Name
ABH	ABH Manufacturing
ADS	AD Systems
BEA	B.E.A., Inc.
C-R	Corbin Russwin Architectural Hardware
FAL	Falcon
GLY	Glynn-Johnson Corp
HOR	Horton, Inc.
IVE	H.B. Ives
JOH	Johnson Hardware
LCN	LCN Commercial Division
SCE	Schlage Electronic Security
SCH	Schlage Lock Company
STE	Steelcraft
STI	Stiles Custom Metal Inc
VON	Von Duprin
ZER	Zero International Inc

Legend:
Link to catalog cut sheet
Electrified Opening

Hardware Group No. 001A

~~1078~~ 1114 1119
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		630	IVE
1	EA	MULT PT STOREROOM	LM9380L 17A		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 SRT		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	EA	GASKETING	188SBK PSA		BK	ZER
1	SET	GASKETING	PS-074			STE
1	EA	DOOR SWEEP	FAS-SEAL			STE
1	EA	THRESHOLD	65A-223		A	ZER

MEETS FBC FL16740 LEVEL E

Hardware Group No. 001B

1080 1081
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5 NRP		630	IVE
1	EA	MULT PT STOREROOM	LM9380L 17A		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 SRT		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	EA	GASKETING	188SBK PSA		BK	ZER
1	SET	GASKETING	PS-074			STE
1	EA	DOOR SWEEP	FAS-SEAL			STE
1	EA	THRESHOLD	65A-223		A	ZER

MEETS FBC FL16740 LEVEL E

Hardware Group No. 002A

1086

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5 NRP		630	IVE
1	EA	POWER TRANSFER	EPT10		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-WS-9827-L-KC-06-WST304L-SNB 24 VDC		626	VON
1	EA	MORTISE CYLINDER	AS REQ - MATCH EXISTING D1 KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	CUSH SHOE SUPPORT	4050A-30		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	SET	GASKETING	PS-074			STE
1	EA	DOOR SWEEP	FAS-SEAL			STE
1	EA	THRESHOLD	65A-223		A	ZER
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS		LGR	SCE

MEETS FBC FL14022 LEVEL E

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL RETRACTS LATCH BOLT. LATCH BOLT RE-LATCHES AFTER PRESET INTERVAL. RX SWITCH IN PANIC BAR SHUNTS DPS. FREE EGRESS AT ALL TIMES

Hardware Group No. 002B

1110
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5 NRP		630	IVE
1	EA	POWER TRANSFER	EPT10		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-WS-9827-L-KC-06-WST304L-SNB 24 VDC		626	VON
1	EA	MORTISE CYLINDER	AS REQ - MATCH EXISTING D1 KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	CUSH SHOE SUPPORT	4050A-30		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	SET	GASKETING	PS-074			STE
1	EA	DOOR SWEEP	FAS-SEAL			STE
1	EA	THRESHOLD	65A-223		A	ZER
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS		LGR	SCE

MEETS FBC FL14022 LEVEL E

OPERATIONAL DESCRIPTION
DURING THE DAY DOORS ARE UNLOCKED. AFTER HOURS, PRESENTATION OF VALID CREDENTIAL RETRACTS LATCH BOLT. LATCH BOLT RE-LATCHES AFTER PRESET INTERVAL. RX SWITCH IN PANIC BAR SHUNTS DPS. FREE EGRESS AT ALL TIMES

Hardware Group No. 003A

1102
Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
6	EA	HINGE	5BB1HW 4.5 X 4.5 NRP		630	IVE
2	EA	SURFACE BOLT	SB360 12" T		604	IVE
1	EA	MULT PT STOREROOM	LM9380L 17A		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
2	EA	SURFACE CLOSER	4040XP SHCUSH		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	EA	MEETING STILE	328AA-S		AA	ZER
1	SET	GASKETING	PS-074			STE
1	EA	DOOR SWEEP	FAS-SEAL			STE
1	EA	THRESHOLD	65A-223		A	ZER

MEETS FBC FL16740 LEVEL E

Hardware Group No. 004A

1034	1036A	1038A	1098A	1117

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CONT. HINGE	112XY EPT		628	IVE
1	EA	POWER TRANSFER	EPT10		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-HH-98-L-NL-06-299F-SNB 24 VDC		626	VON
1	EA	RIM CYLINDER	AS REQ - MATCH EXISTING KEYWAY		626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 SRT		689	LCN
1	EA	BLADE STOP SPACER	4040XP-61		689	LCN
1	EA	SEAL	BY ALUM DR MFG			
1	EA	DOOR SWEEP	BY ALUM DR MFG			
1	EA	THRESHOLD	65A-223		A	ZER
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS		LGR	SCE

VERIFY WITH ALUM STOREFRONT MFG THAT HARDWARE MEETS FBC HURRICANE/WIND REQUIREMENTS

OPERATIONAL DESCRIPTION
DURING THE DAY DOORS ARE UNLOCKED. AFTER HOURS, PRESENTATION OF VALID CREDENTIAL RELEASES EXIT DEVICES. DOORS CLOSE AND EXITS RE-LOCKS AFTER PRESET INTERVAL

Hardware Group No. 101A

2001	2002	2003	2004	2005	2006
2007	2008	2009	2011	2012	2013
2014	2015	2016	2017	2018	2019
2020	2021	2022	2023	2024	2025
2026	2027	2028	2029		

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HWSC 5	652	IVE
1	EA	PUSH/PULL LATCH	HL6 5" A	626	SCH
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406CCV	630	IVE
1	EA	GASKETING	488SBR PSA	BR	ZER

Hardware Group No. 101B

1135 2010
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HWSC 5		652	IVE
1	EA	PUSH/PULL LATCH	HL6 5" A		626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	DOOR BOTTOM	369AA		AA	ZER

Hardware Group No. 101C

1018
Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	224XY		628	IVE
1	EA	AUTO FLUSH BOLT	FB31T		630	IVE
1	EA	PUSH/PULL LATCH	HL6 5" A		626	SCH
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	SURF. AUTO OPERATOR	9563 REG2 LESS TRACK STD72 MS AS REQ (120/240 VAC)		ANCL R	LCN
2	EA	ACTUATOR, TOUCHLESS	8310-813		BLK	LCN
2	EA	RELAY	8310-845			LCN
2	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	MEETING STILE	8194AA		AA	ZER
2	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
1	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESSING ACTUATOR FROM EITHER SIDE ENGAGES AUTOMATIC OPERATOR. RELAY IN AUTO OPERATOR SEQUENCES THE DOORS SO LARGE LEAF OPENS FIRST AND ENGAGES AUTO FLUSHBOLTS SO SMALL LEAF CAN BE OPENED. DOORS CLOSE AFTER PRESET INTERVAL. IN EVENT OF LIFE SAFETY ALARM CONDITION LATCH BOLTS WILL LATCH AND DOORS CAN BE OPERATED MANUALLY.

Hardware Group No. 102A

2001A	2002A	2003A	2004A	2005A	2006A
2007A	2008A	2009A	2010A	2011A	2012A
2013A	2014A	2015A	2016A	2017A	2018A
2019A	2020A	2021A	2022A	2023A	2024A
2025A	2026A	2027A	2028A	2029A	

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	HOSPITAL PRIVACY	ND44S SPA		626	SCH
1	EA	OH STOP	90S		652	GLY
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 103A

1044	1045	1046	1048	1057	1141
2057					

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	ENTRANCE LOCK	ND53JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 104A

1042	1043

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	CLASSROOM LOCK	ND70JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 105A

1147 1148

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	PRIVACY LOCK	ND40S SPA		626	SCH
1	EA	OH STOP	90S		652	GLY
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 105B

1005 1071 1127 2042

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	PRIVACY LOCK	ND40S SPA		626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 105C

1024 1093

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	ND40S SPA OS-OCC		626	SCH
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 105D

1040 1056 1143 2058

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	ND40S SPA OS-OCC	626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	WALL STOP	WS406CCV	630	IVE
1	EA	GASKETING	488SBR PSA	BR	ZER

Hardware Group No. 105E

1064B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	CONT. HINGE	224XY	628	IVE
1	EA	PRIVACY LOCK	ND40S SPA XN12-307	626	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	GASKETING	488SBR PSA	BR	ZER

Hardware Group No. 105F

1032 1033 1055 1064A 1070 ~~1134~~

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	DOUBLE SWING CONTINUOUS HINGE	A508	630	ABH
1	EA	PRIVACY LOCK	ND40S SPA	626	SCH
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	APPLIED STOP	RESCUE STOP A509	630	ABH
1	EA	WALL STOP	WS406CCV	630	IVE
1	EA	GASKETING	488SBR PSA	BR	ZER

Hardware Group No.105G
Door List Label
1134A 1134B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	DOUBLE SWING CONTINUOUS HINGE	A508	630	ABH
1	EA	PRIVACY LOCK	ND40S SPA	626	SCH
1	EA	OH STOP	90S	652	GLY
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE
1	EA	APPLIED STOP	RESCUE STOP A509	630	ABH
1	EA	GASKETING	488SBR PSA	BR	ZER
1	EA	ROLLER BUMPER	RB471	626	IVE

Hardware Group No. 106A

1085
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	MOP PLATE	8400 4" X 1" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 107A

1088
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 107B

1019
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 107C

1073 2044
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 107D

1084 1145

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 107E

1090 1091 1092 1094 1095 1100

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 107F

1097

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 107G

1036B
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	DOOR BOTTOM	369AA		AA	ZER

Hardware Group No. 107H

1103
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	DOOR BOTTOM	369AA		AA	ZER

Hardware Group No. 108A

1153
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	PASSAGE SET	ND10S SPA		626	SCH
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 108B

1058
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	PASSAGE SET	ND10S SPA		626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 108C

1054
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	PASSAGE SET	ND10S SPA		626	SCH
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 108D

1113
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	PASSAGE SET	ND10S SPA		626	SCH
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	DOOR BOTTOM	369AA		AA	ZER

Hardware Group No. 109A

1002	1003	1004	1076	1082A	1144
2037	2060A	2060B			

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE
1	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109B

2050
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
3	EA	SILENCER	SR64		GRY	IVE
1	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109C

1022 1023 1047 1082B 1152 2036 2045

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109D

1075

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5			652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA			626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM			626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE			630	VON
1	EA	SURFACE CLOSER	4040XP RW/PA			689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406CCV			630	IVE
3	EA	SILENCER	SR64			GRY	IVE
1	EA	WIRE HARNESS	CON X LENGTH REQ'D				SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR				
1	EA	DOOR CONTACT	679-05HM			BLK	SCE
1	EA	PUSH BUTTON/REMOTE RELEASE	BY SECURITY INTEGRATOR				
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR				
	EA	WIRING DIAGRAM	BY OTHERS				

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL OR REMOTE RELEASE UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109E

1077

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5			652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA			626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM			626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE			630	VON
1	EA	SURFACE CLOSER	4040XP RW/PA			689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406CCV			630	IVE
1	EA	GASKETING	488SBR PSA			BR	ZER
1	EA	DOOR BOTTOM	369AA			AA	ZER
1	EA	WIRE HARNESS	CON X LENGTH REQ'D				SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR				
1	EA	DOOR CONTACT	679-05HM			BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR				
	EA	WIRING DIAGRAM	BY OTHERS				

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109F

2038

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109G

1001 1072

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5			652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA			626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM			626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE			630	VON
1	EA	SURFACE CLOSER	4040XP RW/PA			689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406CCV			630	IVE
3	EA	SILENCER	SR64			GRY	IVE
1	EA	WIRE HARNESS	CON X LENGTH REQ'D				SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR				
1	EA	DOOR CONTACT	679-05HM			BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR				
	EA	WIRING DIAGRAM	BY OTHERS				

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109H

1007 1067 1136C 2051A 2054 2061A 2061B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109J

1104 2051B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA		626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE		630	VON
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	DOOR BOTTOM	369AA		AA	ZER
1	EA	WIRE HARNESS	CON X LENGTH REQ'D			SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR			
	EA	WIRING DIAGRAM	BY OTHERS			

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109K

1106

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5			652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA			626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM			626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE			630	VON
1	EA	OH STOP	90S			652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA			689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
1	EA	GASKETING	488SBR PSA			BR	ZER
1	EA	WIRE HARNESS	CON X LENGTH REQ'D				SCH
1	EA	CARD READER	BY SECURITY CONTRACTOR				
1	EA	DOOR CONTACT	679-05HM			BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR				
	EA	WIRING DIAGRAM	BY OTHERS				

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 109L

2033
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5			652	IVE
1	EA	STOREROOM LOCK	ND80JCO6D SPA			626	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM			626	C-R
1	EA	ELECTRIC STRIKE	6211 FSE			630	VON
1	EA	SURFACE CLOSER	4040XP H			689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406CCV			630	IVE
3	EA	SILENCER	SR64			GRY	IVE
1	EA	CARD READER	BY SECURITY CONTRACTOR				
1	EA	DOOR CONTACT	679-05HM			BLK	SCE
1	EA	POWER SUPPLY	BY SECURITY CONTRACTOR				

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS ELECTRIC STRIKE. ELECTRIC STRIKE RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 110A

1037	1061	1066	1122	1125	1128
1131	1137	2043			

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5			652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-SPA-B 4B BATTERY OPERATED			626	SCE
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM			626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA			689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406CCV			630	IVE
1	EA	GASKETING	488SBR PSA			BR	ZER

Hardware Group No. 110B

1006

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-SPA-B 4B BATTERY OPERATED		626	SCE
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 110C

1060 1124 1126

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-SPA-B 4B BATTERY OPERATED		626	SCE
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 110D

1123

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-SPA-B 4B BATTERY OPERATED		626	SCE
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 110E

1146A 1146B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-SPA-B 4B BATTERY OPERATED		626	SCE
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 110F

1150A 1150B 1151A 1151B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1 4.5 X 4.5		652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-SPA-B 4B BATTERY OPERATED		626	SCE
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	OH STOP	90S		652	GLY
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
3	EA	SILENCER	SR64		GRY	IVE

Hardware Group No. 111A

1096 1098B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	FIRE EXIT HARDWARE	98-L-BE-F-17-SNB		626	VON
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER

Hardware Group No. 111B

2030 2031

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5		652	IVE
1	EA	POWER TRANSFER	EPT10		689	VON
1	EA	ELEC FIRE EXIT HARDWARE	RX-98-L-F-M996-17-FS-SNB		626	VON
1	EA	RIM CYLINDER	AS REQ - MATCH EXISTING KEYWAY		626	C-R
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	SURFACE CLOSER	4040XP RW/PA		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	FLOOR STOP	FS441		626	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	DOOR CONTACT	679-05HM		BLK	SCE
1	EA	POWER SUPPLY	PS902 900-2RS-FA FA900 120/240 VAC		LGR	SCE

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL UNLOCKS TRIM. TRIM RE-LOCKS AFTER PRESET INTERVAL. FREE EGRESS AT ALL TIMES. COORDINATE WITH ELECTRICAL, SECURITY AND FIRE LIFE SAFETY SYSTEMS

Hardware Group No. 112B

1038B 2046 2047

Provide each DE door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5		630	IVE
2	EA	FIRE EXIT HARDWARE	9827-EO-F-LBR-499F-SNB		626	VON
2	EA	SURFACE CLOSER	4040XP EDA		689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		630	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7850		689	LCN
1	EA	GASKETING	488SBR PSA		BR	ZER
2	EA	MEETING STILE	8194AA		AA	ZER

Hardware Group No. 113A

1031 1120 1136A

Provide each DE door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER			FINISH	MFR
2	EA	CONT. HINGE	224XY EPT			628	IVE
2	EA	POWER TRANSFER	EPT10 CON		✓	689	VON
2	EA	ELEC FIRE EXIT HARDWARE	QEL-9827-EO-F-LBR-499F-SNB 24 VDC		✓	626	VON
2	EA	MAGNETIC LOCK	M490P 12/24 VDC		✓	628	SCE
1	EA	SURF. AUTO OPERATOR	9553 REG/STD MS		✓	ANCL R	LCN
1	EA	ROCKER SWITCH	8310-806R			689	LCN
2	EA	ACTUATOR, TOUCHLESS	8310-813		✓	BLK	LCN
2	EA	KICK PLATE	8400 10" X 2" LDW B-CS			630	IVE
2	EA	WALL STOP	WS406CCV			630	IVE
1	EA	GASKETING	488SBR PSA			BR	ZER
1	EA	GASKETING	8144SBK PSA (SILENCERS @ NON-RTD			BK	ZER
2	EA	MEETING STILE	8194AA			AA	ZER
1	EA	CARD READER	BY SECURITY CONTRACTOR		✓		
1	EA	POWER SUPPLY	PS902 900-4RL-FA 120/240 VAC		✓	LGR	SCE

OPERATIONAL DESCRIPTION:
LATCHBOLTS TO REMAIN RETRACTED AT ALL TIMES. PRESENTATION OF VALID CREDENTIAL FROM SECURE SIDE RELEASES MAG LOCK AND ACTIVATES AUTO OPERATOR TO OPEN BOTH LEAVES. AFTER PRESET INTERVAL, DOORS CLOSE AND MAG LOCK REENERGIZES. IN THE EVENT OF LIFE SAFETY ALARM, MAG LOCK RELEASES AND DOORS CAN BE OPERATED MANUALLY, LATCHBOLTS ENGAGE.
FROM FREE EGRESS SIDE A HAND WAVE ACTUATOR RELEASE MAG LOCK ON OPPOSITE LEAF AND ACTIVATES AUTO OPERATOR TO OPEN BOTH LEAVES. AFTER PRESET INTERVAL, DOORS CLOSE AND MAG LOCK RENERGIZES

Hardware Group No. 114A

1053A 1053B 1136B

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	224XY EPT		628	IVE
2	EA	POWER TRANSFER	EPT10		689	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9827-EO-LBR-SNB 24 VDC		626	VON
1	EA	ELEC PANIC HARDWARE	RX-QEL-9827-L-LBR-17-SNB 24 VDC		626	VON
1	EA	RIM CYLINDER	AS REQ - MATCH EXISTING KEYWAY		626	C-R
1	EA	SURF. AUTO OPERATOR	9553 REG2 LESS TRACK STD72 MS AS REQ (120/240 VAC)		ANCLR	LCN
1	EA	ACTUATOR, TOUCHLESS	8310-813		BLK	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		630	IVE
2	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
2	EA	MEETING STILE	8194AA		AA	ZER
1	EA	CARD READER	BY SECURITY CONTRACTOR			
1	EA	POWER SUPPLY	PS902 BBK 900-4RL-FA 120/240 VAC		LGR	SCE

OPERATIONAL DESCRIPTION
PRESENTATION OF VALID CREDENTIAL OR PRESSING ACTUATOR RELEASES LATCHBOLT ON EXIT DEVICES AND ENGAGES AUTOMATIC OPERATOR. DOORS CLOSE AND EXITS RELATCH AFTER PRESET INTERVAL. COORDINATE WITH FIRE AND LIFE SAFETY

Hardware Group No. 115A

1111A 1112A 1115A 1116A

Provide each PR door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
2	EA	CONT. HINGE	705		630	IVE
2	EA	CONST LATCHING BOLT	FB61T		630	IVE
1	EA	PUSH/PULL LATCH	HL6 5" A		626	SCH
1	EA	COORDINATOR	COR X FL		628	IVE
2	EA	SURFACE CLOSER	4041 DEL		689	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		630	IVE
2	EA	WALL STOP	WS406CCV		630	IVE
1	EA	GASKETING	488SBR PSA		BR	ZER
2	EA	MEETING STILE	8194AA		AA	ZER

Hardware Group No. 116B

1065

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	PIVOT SET	7230F SET		630	IVE
1	EA	INTERMEDIATE PIVOT	7230F INT		630	IVE
1	EA	PUSH/PULL LATCH	HL6 5" A L		626	SCH
1	EA	SURFACE CLOSER	4041 DEL		689	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406CCV		630	IVE

NOTE: LEAD LINE HARDWARE AS REQUIRED. COORDINATE EMERGENCY SHUT OFF WITH EQUIP AND DOOR SUPPLIER

Hardware Group No. 201A

1000 1035A
Provide each SL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	CARD READER	BY SECURITY CONTRACTOR	✓		

BALANCE OF HARDWARE BY STANLEY ACCESS TECHNOLOGIES SLIDING DOOR SUPPLIER - SEE SPEC SECTION 084229
COORDINATE WITH SECURITY AND ELECTRICAL

Hardware Group No. 202A

1035B
Provide each SL door(s) with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR

ALL HARDWARE BY STANLEY ACCESS TECHNOLOGIES SLIDING DOOR SUPPLIER - SEE SPEC SECTION 084229
COORDINATE WITH SECURITY AND ELECTRICAL

Hardware Group No. 203A

1011 1012 1013 1014 1015 1016
1017 1020 1021
Provide each SL door(s) with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR

ALL HARDWARE FOR ICU SLIDERS BY STANLEY ACCESS TECHNOLOGIES - SEE SPEC SECTION 084243

Hardware Group No. 301A

1050

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SLIDING DOOR SYSTEM	EXAMSLIDE SYSTEM , SECTION 08 34 00			ADS
1	EA	SELF-LATCHING OFFICE LOCK	AD6450-L L17		630	ADS
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R

Hardware Group No. 301B

1030

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SLIDING DOOR SYSTEM	EXAMSLIDE SYSTEM , SECTION 08 34 00			ADS
1	EA	ELECTRIC STRIKE	AD-11-ELEC6 (ELECT STK AND LOCKSET W/LEVERS BOTH SIDES)		630	ADS
1	EA	Closer	SELF-CLOSING SPRING MECHANISM(PROVIDE WITH SLIDING DOOR SYSTEM)			ADS

Hardware Group No. 301C

1111B 1112B 1115B 1116B

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	SLIDING DOOR SYSTEM	EXAMSLIDE SYSTEM , SECTION 08 34 00			ADS
1	EA	SELF-LATCHING PASSAGE SET	AD6010-L17		630	ADS
1	EA	Closer	SELF-CLOSING SPRING MECHANISM(PROVIDE WITH SLIDING DOOR SYSTEM)			ADS
1	EA	Acoustic Door Bottom	(PROVIDED WITH SLIDING DOOR SYSTEM)			ADS

Hardware Group No. 401A

1051A 1051B
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM		626	C-R
1	EA	AUTO OPERATOR	HD 2001-LL LEAD LINED		CLR	HOR
1	EA	TOUCHLESS ACTUATOR	10MS41-D		626	BEA

ALL HARDWARE BY SLIDING DOOR SUPPLIER

Hardware Group No. 501A

1074A 1074B
Provide each SGL door(s) with the following:

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

Hardware Group No. 601A

2056A 2056B
Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
1	EA	POCKET DOOR HARDWARE KIT	200PDSC SOFT CLOSE POCKET DOOR	626	JOH

Hardware Group No. 701A

1083 ~~1101~~ 1121 1142
Provide each SGL door(s) with the following:

QTY	DESCRIPTION	CATALOG NUMBER	FINISH	MFR

HOLLOW METAL CASED OPEN FRAME.

Hardware Group No.801A
Door List Label
E1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER	FINISH	MFR
3	EA	HINGE	5BB1HW 5 X 4.5 NRP	630	IVE
1	EA	STOREROOM W/DEADBOLT	L9480L 17A L583-363	630	SCH
1	EA	CYLINDER	AS REQ - MATCH EXISTING KEY SYSTEM	626	C-R
1	EA	SURFACE CLOSER	4040XP SCUSH	689	LCN
1	EA	CUSH SHOE SUPPORT	4040XP-30 SRT	689	LCN
1	EA	RAIN DRIP	142AA	AA	ZER
1	EA	GASKETING	188SBK PSA	BK	ZER
1	SET	GASKETING	PS-074		STE
1	EA	DOOR SWEEP	FAS-SEAL		STE
1	EA	THRESHOLD	65A-223	A	ZER

Hardware Group No.801B
Door List Label
E2 E3 E4 E5

Provide each SGL door(s) with the following:

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

END OF SECTION