SECTION 08 71 00

DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: "Finish Hardware" includes items known commercially as finish hardware that are required for swing and sliding doors, except special types of unique and non-matching hardware specified in the same section as the door and door frame.

1. Hinges.
2. Electric Hinges.
3. Electric Power Transfers.
4. Lock cylinders and keys.
5. Lock and latch sets.
6. Bolts.
7. Exit devices.
8. Closers.
9. Automatic door operators.
10. Miscellaneous door control devices.
11. Door trim units.
12. Weatherstripping for exterior doors.
13. Thresholds.
14. Smoke gasketing for interior doors.
15. Astragals or meeting seals on pairs of doors.
16. Protection plates.
17. Sound stripping for interior doors.
18. Automatic drop seals (door bottoms).

B. Related Sections:

1. Section 01 81 13 "Sustainable Design Requirements."
2. Silencers for metal frames: Section 08 11 13 “Hollow Metal Doors and Frames.”
3. Division 26 sections for installation of and connections to door hardware components suppled only by this section as required to accomplish requirements specified elsewhere and as indicated in the drawings.
4. Division 28 sections for installation of and connections to door hardware components suppled only by this section as required to accomplish requirements specified elsewhere and as indicated in the drawings.

1.2 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

B. Keying Conference: Conduct conference at Project site.

1. Incorporate conference decisions into keying schedule after reviewing door hardware keying system including, but not limited to, the following:

    a. Preliminary key system schematic diagram.
    b. Requirements for key control system.
    c. Requirements for access control.
    d. Address for delivery of keys.

1.3 ACTION SUBMITTALS

A. Product Data: Submit product data including installation details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings: Submit shop drawings with details of electrified door hardware, indicating the following:

1. Wiring Diagrams: Detail wiring for power, signal, and control systems and differentiate between manufacturer-installed and field-installed wiring. Include the following:
    a. System schematic.
    b. Point-to-point wiring diagram.
    c. Riser diagram.
    d. Elevation of each type of door.

C. Door Hardware Schedule: Submit door hardware schedule prepared by or under the supervision of door hardware supplier. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware. The Architect’s review of schedule shall neither be construed as a complete check nor shall it relieve the Contractor of responsibility for errors, deviations, or omissions from the specified requirements to provide complete door hardware for the project.

1. Content: Include the following information:
    a. Type, style, function, size, label, hand, and finish of each door hardware item.
    b. Manufacturer of each item.
    c. Fastenings and other pertinent information.
    d. Location of each door-hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    e. Explanation of abbreviations, symbols, and codes contained in schedule.
    f. Mounting locations for door hardware. Supply templates to door and frame manufacturer(s) to enable proper and accurate sizing and locations of cutouts for hardware. Detail any conditions requiring custom extended lip strikes, or any other special or custom conditions.
    g. Door and frame sizes and materials.
    h. Description of each electrified door hardware function, including location, sequence of operation, and interface with other building control systems.

D. Keying Schedule: Submit keying schedule for Owner review, prepared by or under the supervision of supplier, detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Product Certificates: For each type of electrified door hardware.

1. Certify that door hardware for use on each type and size of labeled fire-rated doors complies with listed fire-rated door assemblies.

C. Product Test Reports: For compliance with accessibility requirements, for tests performed by manufacturer and witnessed by a qualified testing agency, for door hardware on doors located in accessible routes.

D. Warranties: Submit special warranties specified in this Section.

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

F. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

A. Maintenance Data: For each type of door hardware to include in maintenance manuals.

B. Schedules: Final door hardware and keying schedule.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: An experienced installer who has completed door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

B. Supplier Qualifications: Door hardware supplier, who has completed a minimum of three (3) projects over the last 5 years which were similar in material, design and extent to that indicated for the project - as determined by the Architect – and which have resulted in construction with a record of successful in service performance, and who is or employs a qualified Architectural Hardware Consultant, available during the course of the Work to consult with Contractor, Architect, and Tenant about door hardware and keying.

1. Electrified Door Hardware Supplier Qualifications: An experienced door hardware supplier who has completed projects with electrified door hardware similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance, and who is acceptable to manufacturer of primary materials.
   a. Engineering Responsibility: Prepare data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
2. Scheduling Responsibility: Preparation of door hardware and keying schedules.

C. Source Limitations: Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.

D. Regulatory Requirements: Comply with the following:

1. Provide hardware items complying with the applicable provisions for accessibility and usability by the disabled and handicapped in compliance with Americans with Disabilities Act (ADA), "Accessibility Guidelines for Buildings and Facilities (ADAAG)," and ANSI A117.
2. NFPA 101: Comply with applicable provisions for means of egress doors.

3. Electrified Door Hardware: Listed and classified by Underwriter's Laboratories, Inc. or by a testing agency acceptable to authorities having jurisdiction, as suitable for the purpose indicated.

E. Fire-Rated Door Assemblies: Provide door hardware for assemblies complying with NFPA 80 that are listed and labeled by Underwriter's Laboratories, Inc. for fire ratings indicated, based on testing according to NFPA 252. Provide only door hardware items that are identical to items tested by UL for the types and sizes of doors required. In case of conflict between type of hardware specified and type required for accessibility or fire protection, furnish type required by NFPA and UL. Doors indicated in fire rated partitions and walls shall be positive latching and self-closing, with smoke gaskets where required by applicable codes.

1. Wherever exit device hardware is required on doors, comply with UL 305. Furnish hardware to door manufacturer for installation at factory. Provide supplementary label, "Fire Exit Hardware", on each exit device to certify that panic hardware has been panic load tested with door.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.

B. Tag each item or package separately with identification related to the final Door Hardware Schedule and include basic installation instructions with each item or package.

1.8 COORDINATION

A. Templates: Furnish templates and door hardware schedules, coordinated for the application of door hardware items with door and frame details, to door opening fabricators and trades performing door opening work to permit the preparation of doors and frames to receive the specified door hardware. Where the door hardware item scheduled is not adaptable to the finished size of door opening members requiring door hardware, submit an item having a similar operation and quality to the Architect for review. Each door hardware item shall be fabricated to templates.

B. Electrical System Roughing-in: Coordinate layout and installation of electrified door hardware with connections to, power supplies, fire alarm system and detection devices, access control system, security system, building control system.

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

D. Floor-Recessed Door Hardware: Coordinate layout and installation with floor construction.

1. Cast anchoring inserts into concrete.

1.9 WARRANTY

A. Special Warranty: Written warranty, executed by manufacturer agreeing to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period. Failures include, but are not limited to, the following:

1. Faulty operation of door hardware.
2. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

B. Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.
   1. Exit Devices: Two years from date of Substantial Completion.
   2. Manual Closers: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

A. General: Provide door hardware for each door to comply with requirements in this Section, door hardware sets are keyed on the drawings at each door opening and scheduled door in the door and frame schedule.
   1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and named manufacturer's products.
   2. The hardware supplier shall review each hardware set and compare it with the door types, details, and sizes as shown and verify each hardware item for function, hand, backset, and method of fastening through shop drawing submittals.
   3. Hinge sizes and quantities shall be determined based on the requirements provided in Articles 2.3 and 2.4.

2.2 MATERIALS AND FABRICATION, GENERAL

A. Hand of door: Drawings show direction of swing or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement shown. Provided non-handed or field-reversible hardware to accommodate door handing changes.

B. Base Metals: Produce hardware units of basic metal and forming method indicated, using manufacturer's standard metal alloy, composition, temper and hardness, but in no case of lesser (commercially recognized) quality than specified for the applicable hardware units ANSI A156 series standard for each type hardware and with ANSI A156.18 for finish designations indicated.

C. Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.

D. Furnish screws for installation, with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Finish exposed (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of such other work as closely as possible, including "prepared for paint" in surfaces to receive painted finish.

E. Provide concealed fasteners for hardware units that are exposed when door is closed, except to extent no standard units of the type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or nut on the opposite face is exposed in other work, except where it is not feasible to adequately reinforce the work. In such cases, provide sleeves for each thru-bolt or use sex screw fasteners.

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

G. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rating labels and as otherwise approved by Architect.

1. Manufacturer's identification is permitted on rim of lock cylinders only.

2.3 HINGES

A. Templates: Provide only template-produced units.

B. Screws: Provide Phillips flat-head screws complying with the following requirements:
   1. For metal doors and frames install machine screws into drilled and tapped holes.
   2. For wood doors and frames install wood screws.
   3. For fire-rated wood doors install #12 x 1-1/4-inch, threaded-to-the-head steel wood screws.
   4. Finish screw heads to match surface of hinges.

C. Hinge Pins:
   1. Out-Swing Exterior Doors: Nonremovable pins.
   2. Out-Swing Corridor Doors with Locks: Nonremovable pins.
   3. Interior Doors: Nonrising pins.
   4. Ferrous Hinges: Steel pins.
   5. Non-ferrous Hinges: Stainless steel pins.
   6. Tips: Flat button and matching plug, finished to match leaves, except where hospital tip (HT) indicated.
   7. Tornado Resistant Assemblies: At a minimum, provide heavy weight hinges with stainless steel screws used in accordance with and specified as part of a Severe Storm Shelter Opening meeting ICC 500 and FEMA 361.

D. Provide ball bearing type hinges for all doors with closers and where indicated in door schedule.

E. Size and Number of Hinges
   1. Height of Hinges:
      a. For doors 36" wide or less: 4-1/2" height.
      b. For doors over 36" to 48" wide: 5" height.
      c. For doors over 48" wide: 6" height.
   2. Width of Hinge:
      a. For hinge height up to 5" high: 4-1/2".
      b. For hinge height over 5" high: 5" width.
      c. Provide hinge width appropriate to allow 180 degree swing.
   3. Number of Hinges:
      a. Doors 60" high or less: 2 hinges.
      b. Doors over 60" not over 90": 3 hinges.
      c. Doors over 90" not over 120": 4 hinges.
      d. One additional hinge for each 30", or fraction thereof, over 120".
   4. Hinge Weight:
      a. Entrance Doors: Heavy weight.
      b. For all other doors, refer to manufacturer’s recommendations for proper hinge weight.
   5. Number of Hinges for Fire-Rated Doors: Not less than 3 hinges per door leaf for doors 86 inches or less in height. Provide one additional hinge for each additional 30" or fraction thereof.

F. Hinge Types:
   1. Mortise Type: Provide full mortise hinges unless noted otherwise in the hardware schedule.

G. Hinge Materials/Finish: Stainless steel 630.
   1. Exterior Doors: Provide stainless steel hinges and stainless steel pins.
   2. Penthouse Interior Doors: Provide stainless steel hinges and stainless steel pins.
   3. Typical Interior Doors: Provide steel hinges.

H. Hinge numbers listed in Hardware Sets are intended to show base material only. Refer to above for proper hinge size, weight and quantity.

I. Manufacturer: Provide hinges of one of the following:
   1. Hager Hinge Co.
   2. HB Ives.
   3. McKinney Mfg. Co.
   4. Stanley Hardware.

2.4 ELECTRIC HINGES

A. Provide hinges with electrified options as scheduled in the hardware sets. Provide with sufficient number and wire gage to accommodate electric function of specified hardware.

B. Locate electrical hinge at second hinge from bottom or nearest to electrified locking component.

C. Manufacturers:
   1. HB Ives.
   2. McKinney Mfg. Co.

2.5 ELECTRIC POWER TRANSFERS

A. Provide power transfers with electrified options as scheduled in the hardware sets. Provide with number and gage of wires sufficient to accommodate electric function of specified hardware.

B. Locate electric power transfer per manufacturer’s template and UL requirements, unless interference with operation of door or other hardware items.

C. Manufacturers:
   1. Von Duprin.

2.6 LOCK CYLINDERS AND KEYING

A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.

B. Standard Lock Cylinders: BHMA A156.5; Grade 1 permanent cores; face finished to match lockset. Standard lock cylinders are to be installed on doors without access control devices.
   1. Products: Subject to compliance with requirements, provide products by the following:
      a. Schlage; an Allegion Brand.
   2. Core Type: Interchangeable, Full Sized Interchangeable Core (FSIC).

3. Number of Pins: Six.
4. Lock Type: Mortise type.

C. High-Security Lock Cylinders: BHMA A156.30; Grade 1 permanent cores that are removable; face finished to match lockset. High-security lock cylinders are to be installed on doors provided with access control devices and / or are monitored by security.
   1. Products: Subject to compliance with requirements, provide the following products:
      a. Medeco Security Locks, Inc.; an ASSA ABLOY Group company; Medeco X4 (US projects only).
         1) No substitutions accepted.
      b. Schlage; an Allegion Brand; Primus XP Everest 29T (EU and Asian projects only).
         1) No substitutions accepted.
   2. Core Type: Interchangeable, Full Sized Interchangeable Core (FSIC).
   3. Type: E, electrical.
   4. Number of Pins: Six.
   5. Lock Type: Mortise type.

D. Review the keying system with the Owner and provide the type required (universal, primary or specific groupeither new or integrated with Owner's existing system.
   1. Equip locks with cylinders for interchangeable-core pin tumbler inserts. Furnish only temporary inserts for the construction period and remove these when directed.
   2. Furnish final cores and keys for installation as indicated in the Key.

E. Metals: Construct lock cylinder parts from brass or bronze, stainless steel, or nickel silver.

F. Comply with Owner's instructions for masterkeying and, except as otherwise indicated, provide individual change key for each lock that is not designated to be keyed alike with a group of related locks.

G. Permanently inscribe each key with number of lock that identifies cylinder manufacturer's key symbol, and notation, "DO NOT DUPLICATE."

H. Key Material: Provide keys of nickel silver only.

I. Key Quantity: Furnish 3 change keys for each lock, 5 secondary exterior and interior keys for each secondary system.

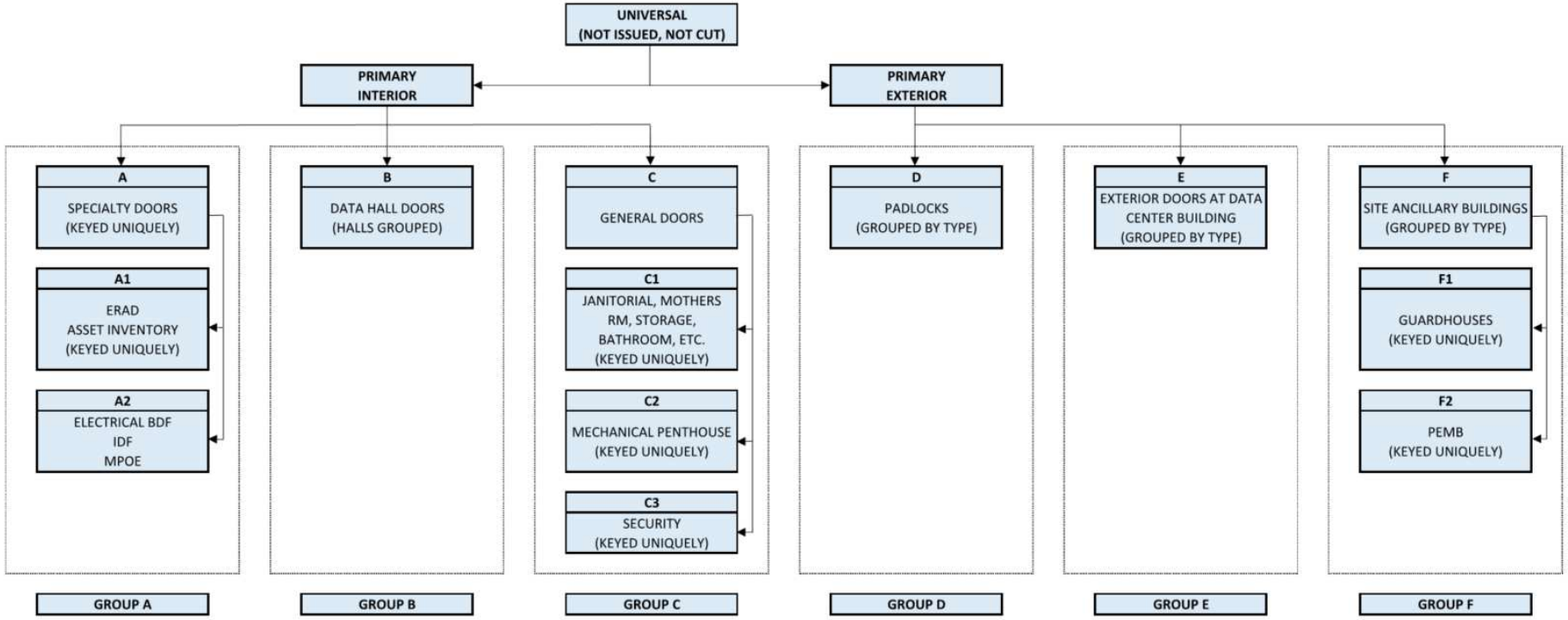
J. Furnish one extra blank for each lock.

K. Contractor for high security lock cylinder installations must be a certified dealer and / or possess manufacturer recognized certification for at least one year prior to date of bid submission.

L. Contractor for high security lock cylinder installations must be located in same state and county of the project. If not in designated project area, contractor must be able to provide documentation that contractor has ability to service high security cylinder deployment in the known project area.

M. Each building on the campus will have its own separate key matrix the follows the guidelines indicated in the Key Matrix. Keys utilized with a specific function will only allow access within one building and not others on the campus.

A. Key Hierarchy Diagram:



A. Key Matrix:

Group	Sub-Group	Security Level	Key Name	Location	Designation
A	A1	High Security	PCI	Any room that is used for PCI compliance; eg the disk destruction room.	Primary Interior - Specialty
	A1	High Security	MPOEs, IDF, MDFs, BDFs	MPOE and Security equipment.	Primary Interior - Specialty
	A1	High Security	Asset Allocation - Storage	High Value - Storage Rooms.	Primary Interior - Specialty
	A2	High Security	Electrical / Mechanical	All electrical and mechanical rooms including access to the Mezzanine level.	Primary Interior - Specialty
B		High Security	Data Hall A, B, C, D	Data Hall Doors - all grouped.	Primary Interior - Specialty
C	C1	Standard	Janitorial	Janitorial supply closets. This can be lower level Medeco - classroom style lock and key.	Primary Interior - Specialty
	C1	High Security	Perimeter Inside	All doors that are between an exterior door and a common area.	Primary Interior
	C1	Standard	General	The general office areas, security offices including the Mother's Room.	Primary Interior - Specialty
	C1	High Security	Perimeter Inside	All doors that are between an exterior door and a common area.	Primary Interior
	C2				
	C3	High Security	Security Offices	Security Offices	Primary Interior - Specialty

D		Standard	Padlock	Gates, equipment & electrical buildings that require padlocks.	Primary Exterior - Specialty

E	E1	High Security	Perimeter Outside	All exterior doors in the data center buildings including exterior doors at courtyards, equipment yards, roof terraces & roof access stairs.	Primary Exterior
	E2	High Security	Perimeter Site	All doors at site perimeter fencing.	Primary Exterior

2.7 LOCKS AND LATCHES

A. Strikes: Provide manufacturer's standard wrought box strike for each latch or lock bolt, with curved lip extended to protect frame, finished to match hardware set.

B. Lock Throw: Provide 3/4-inch minimum throw of latch for mortise locks. Provide 1-inch minimum throw for all dead bolts. Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.

C. Lock Throw: Provide 3/4" minimum throw of latch and deadbolt used on pairs of doors. Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.

1. Provide 1/2" minimum throw on other latch and deadlock bolts.

D. Tornado Resistance Compliance: Mechanical locking and latching devices to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate tornado resistant products for assemblies that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.

E. Locks and Latches Material/Finish: 630 Stainless steel.

F. Roller Latches: BHMA A156.16; Grade 1; rolling plunger that engages socket or catch, with adjustable roller projection.

G. Manufacturer:

1. Schlage.

2.8 BOLTS

A. Manufacturers:

1. HB Ives.
2. Hiawatha.
3. Rockwood Mfg.

B. Flush Bolt Heads: Minimum of 1/2-inch-diameter stainless steel rods with minimum 12-inch-long rod for doors up to 7'-0" in height. Provide longer rods as necessary for doors exceeding 7'-0" in height.
   1. Rabbeted Doors: Where rabbeted door stiles are indicated, provide special rabbeted front on bolts.
   2. Automatic Flush Bolts: Provide single with fire bolt or one pair, top and bottom, fully automatic, listed for metal fire door assemblies 3 hours and for wood fire doors 1-1/2 hours. Flush bolts shall automatically retract. Bolts shall have a 3/4" throw with a 2" vertical adjustment.
   3. Material/Finish: 626D Satin chromium plated steel.

C. Provide dust-proof strikes for floor bolts, except where special threshold construction provides strike for bolt.

D. Coordinator: Provide products indicated in Hardware Key on Drawings.
   1. Finish: Prepared for paint finish.

2.9 EXIT DEVICE

A. Exit Device:
   1. Panic Exit Device Types: As indicated in Hardware Key on Drawings.
   2. Function: As indicated in Hardware Key on Drawings.
   3. Levers: Levers required at exit devices to match lockset levers on project.

B. Exit Device Material/Finish: 630 Stainless steel.

C. Manufacturers:
   1. Von Duprin.

2.10 CLOSERS AND DOOR CONTROL DEVICES

A. Size of Units: Except as otherwise specifically indicated, comply with the manufacturer's recommendations for size of door control unit, depending upon size of door, exposure to weather and anticipated frequency of use.
   1. Parallel Arm Closers: Where parallel arms are required for closers, provide closer unit one size larger than recommended for use with standard arms.

B. Hurricane and Tornado Resistance Compliance: Door Closers to be U.L. listed for windstorm assemblies where applicable. Provide the appropriate tornado resistant products for assemblies that have been independent third party tested, certified, and labeled to meet state and local windstorm building codes applicable to project.

C. Provide either grey or black resilient parts for exposed bumpers, as directed by Architect.

D. Material/Finish: 689 powder coat cover, finish to match satin aluminum.

E. Install door closers on non-public side of door unless directed by Architect. If door closer location is unclear review installation location with Architect.

F. Manufacturer:
   1. LCN Closers.

2.11 AUTOMATIC DOOR OPERATOR

A. General: Provide openers of size recommended by manufacturer for door size, weight, and movement; for condition of exposure. Coordinate operator mechanisms with door operation, hinges, and activation devices.

B. Brackets and Reinforcements: Manufacturer's standard, fabricated from aluminum with nonferrous shims for aligning system components.

C. Standard: Certified ANSI/BHMA A156.19/ ANSI/BHMA A156.10 as indicated

D. Configuration: Surface mounted.

E. Operation: Power opening operation capable of meeting ANSI A117.1 accessibility guidelines. Provide time delay for door to remain open before initiating closing cycle as required by ANSI/BHMA A156.19 or ANSI/BHMA A156.10 as indicated.

F. Features: Opener units to have full feature adjustments for door speed, motor assist acceleration from 0 to 30 seconds, time delay, vestibule interface delay, obstruction recycle, and hold open time from 0 up to 30 seconds.

G. Provide outputs and relays on board the operator to allow for coordination of exit device latch retraction, electric strikes, magnetic locks, card readers, safety and motion sensors and specified auxiliary contacts.

H. Activation Devices: Provide activation devices in accordance with ANSI/BHMA A156.19/ ANSI/BHMA A156.10 as indicated standard, for condition of exposure indicated and for long term, maintenance free operation under normal traffic load operation. Coordinate activation control with electrified hardware and access control interfaces. Activation switches are standard SPST, with optional DPDT availability.

I. Signage: As required by cited ANSI/BHMA A156.19 standard.

J. Manufacturer:
1. ASSA SWi

2.12 DOOR TRIM UNITS

A. Manufacturer: Subject to compliance with requirements, provide products of one of the following:
1. Door Trim Units: Provide products indicated in Hardware Key on Drawings
2. Kick, Mop, and Armor Plates: Provide products indicated in Hardware Key on Drawings.

B. Fasteners: Provide manufacturer's standard exposed fasteners for door trim units consisting of either machine screws or self-tapping screws.

C. Fabricate protection plates not more than 1-1/2 inches less than door width on hinge side and not more than 1/2 inch less than door width on pull side by height indicated.
1. Metal Plates: Stainless steel, 0.050 inch (U.S. 18 gage).
2. Size: Indicated on Schedule.

D. Manufacturer:
1. HB Ives.

2. Hiawatha.
3. Rockwood Mfg.

2.13 WEATHERSTRIPPING

A. Provide continuous weatherstripping at each edge of every exterior door leaf. Provide non-corrosive fasteners recommended by manufacturer for application indicated.

B. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strip is easily replaceable and readily available from stocks maintained by manufacturer.

C. Head and Jamb Weatherstripping: Provide bumper-type resilient insert and metal retainer strips, surfaced-applied unless shown as mortised or semi- mortised, of following metal, finish and resilient bumper material:
1. Extruded aluminum with natural anodized finish, 0.062" minimum thickness of main walls and flanges.
2. Closed-cell sponge neoprene insert, l/4" x 3/4", MIL R6130A, Type II, Grade C.

D. Weatherstripping at Door Bottoms: Provide weatherstripping consisting of contact type resilient insert and metal housing of the following metal, finish and resilient seal strip.
1. Extruded aluminum with natural anodized finish; 0.062" minimum thickness of main walls and flanges.
2. Solid neoprene wiper or sweep seal strip, MIL R6055, Class II, Grade 40.

Automatic Door Bottom: Provide surface mounted automatic door bottom with extruded aluminum enclosure and solid neoprene seal. Provide extruded aluminum enclosure with natural anodized finish, 0.062-inch minimum thickness of walls and flanges. Provide solid neoprene conforming to MIL R 6855, Class II, Grade 40; Flexible, hollow bulb.

E. Manufacturer:
1. National Guard Products.
2. Pemko.
3. Reese.
4. Zero International.

2.14 THRESHOLDS

A. Exterior Hinged Doors: Provide units not less than 4" wide, formed to accommodate change in floor elevation where indicated, fabricated to accommodate door hardware and to fit door frames and as follows:
1. For out-swinging doors provide rabbeted units with replaceable weatherstrip insert in stop.

B. Manufacturer:
1. National Guard Products.
2. Pemko.
3. Reese.
4. Zero International.

2.15 SMOKE GASKETING

A. Smoke Seals: Self-adhesive silicone rubber head and jamb door gasketing. Smoke tested in accordance with UL 1784 *Air Leakage Tests of Door Assemblies*; and the requirements of NFPA 105, *Installation of Smoke Control Door Assemblies*.

B. Manufacturer:
1. National Guard Products.
2. Pemko.
3. Reese.
4. Zero International.

2.16 ASTRAGALS

A. Overlapping Astragal: Surface mounted steel astragal 1/4" x 2" with flat head screws.

B. Overlapping Astragal: Provide overlapping astragal consisting of contact type neoprene insert and aluminum housing.
1. Extruded aluminum with natural anodized finish; 0.062" minimum thickness of main walls and flanges.
2. Sold neoprene wiper or sweep seal strip, MIL R6055, Class II, Grade 40.

C. Split Astragal: Provide split astragal consisting of overlapping contact type neoprene insert and aluminum housing.
1. Extruded aluminum with natural anodized finish; 0.062" minimum thickness of main walls and flanges.
2. Solid neoprene wiper or sweep seal strip, MIL R6055, Class II, Grade 40.

D. Provide compatible strike at doors with astragals. Do not cut astragals in the field.

E. Manufacturer:
1. National Guard Products.
2. Pemko.
3. Reese.
4. Zero International.

2.17 MISCELLANEOUS HARDWARE

A. Stops:
1. Wall Stop:
a. Type: Cast Convex.
b. Finish: 626.
2. Application: Provide risers as required. Hardware supplier shall determine fastening.
3. Manufacturer: Subject to compliance with requirements, provide products indicated in Hardware Key on Drawings.

2.18 HARDWARE FINISHES

A. Provide matching finishes for hardware units at each door or opening, to the greatest extent possible, and except as otherwise indicated. Reduce differences in color and textures as much as commercially possible where the base metal or metal forming process is different for individual units of hardware exposed at the same door or opening. In general, match items to the manufacturer's standard finish for the latch and lock set (or push-pull units if no latch- lock sets) for color and texture.

B. Provide finishes that match those established by BHMA.

C. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness and other qualities complying with manufacturer's standards, but in no case less than specified for the applicable units of hardware by referenced standards.

D. Finish Designations: Scheduled designations refer to ANSI A156.18 "Materials & Finishes Standard", including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.

Standard Finish Designations: The designations used in schedules and elsewhere to indicate hardware finishes are those established by the Builders Hardware Manufacturers Association usually abbreviated BHMA, except where US number designations are used. Following is a list of BHMA finishes cross referenced to US numbers.

BHMA CODE	FINISH DESCRIPTION	BASE MATERIAL	NEAREST U.S. EQUIV.
626	Satin Chromium Plated	Brass, Bronze	US26D
628	Satin Aluminum	Aluminum	US28
630	Satin Stainless Steel	Stainless Steel	US32D
689	Powder Coat	Aluminum	US65

PART 3 - EXECUTION

3.1 EXAMINATION

A. 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 of the Work.

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

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Mount hardware units at heights indicated in following applicable publications, except as specifically indicated or required to comply with governing regulations and except as otherwise directed by Architect.

B. "Recommended Locations for Builders Hardware for Standard Steel Doors and Frames" by the Door and Hardware Institute.

C. Comply with "Accessibility Requirements" of the local state having jurisdiction and Americans with Disabilities Act Accessibility Guidelines for locations of hardware.

D. Install each hardware item in compliance with the manufacturer's instructions and recommendations. Where cutting and fitting is required to install hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation or application of surface protection with finishing work specified in the Division 09 Sections. Do not install surface-mounted items until finishes have been completed on the substrates involved.

E. Set units level, plumb, and true to line and location. Adjust and reinforce the 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 in accordance with industry standards.

G. Set thresholds for exterior doors in full bed of butyl-rubber or polyisobutylene mastic sealant complying with requirements specified in Division 07 Section "Joint Sealers."

H. Weatherstripping and Seals: Comply with manufacturer's instructions and recommendations to the extent installation requirements are not otherwise indicated.

I. Lock Cylinders: Install construction cores to secure building and areas during construction period.
   1. Replace construction cores with permanent cores as directed by Owner.
   2. If a door requires keying for security purposes prior to the access control system activation, a secure core shall be provided that is not a construction core. Work shall be coordinated with the Owner’s security representative.

J. Keys:
   1. Keys shall be provided to Owner’s security representative, who will catalogue and store the keys on site. A separate key box shall be provided at each building within the security office located in the primary building lobby, for the keys utilized within the building the key box is installed within.

3.3 ADJUST AND CLEAN

A. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly as intended for the application made.

B. Adjust door closers to close and latch softly within 6 seconds while maintaining ADA closing speed requirements. Clean adjacent surfaces soiled by hardware installation.

C. Final Adjustment: Wherever hardware installation is made more than one month prior to acceptance or occupancy of a space or area, return to the work during the week prior to acceptance or occupancy, and make 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

3.3 DOOR HARDWARE SCHEDULE

The hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies,

conflicting hardware and missing items should 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 and functionality.

A. The identification of Hardware Sets are coded in the following convention based on the function of the door:

1. Access Control Requirements (card readers, biometric readers or similar credential verification device):
   a. S – Access control device installed on one side of the door.
   b. SS - Access control device installed on one side of the door.
   c. S1 – No access control device installed on either side of the door, but power is required for specified door hardware.
2. Door Location:
   a. E – Exterior door.
   b. I – Interior door.
3. Door Type:
   a. 1 – Single door.
   b. 2 – Double door.
4. Door Style (where no indicator is provided, door is hollow metal):
   a. SF – Storefront door.
   b. GT – Swing gate.
5. Fire Rating:
   a. F – Fire rated door.
6. Door Hardware Options:
   a. G – Head, jamb, sill, astragal gasketed or sealed.
   b. O – Automatic door operator.
   c. W – Wicket door.
   d. H – High humidity installation condition.
   e. WS – Windstorm/ICC500
7. Lockset:
   a. B – Single occupant toilet room or privacy.
   b. E – Electrified.
   c. M – Multi-point.
   d. O – Office.
   e. P – Passage.
   f. R – Storeroom.
   g. T – Multi-occupant toilet room push / pull.
8. Exit Device:
   a. XB – Trim lever, blank escutcheon.
   b. XO – Exit only, no trim.
   c. XL – Trim lever.
   d. XM – Multi-point latching.
   e. XN – Night latch trim lever.
9. Door Stop:
   a. 1 – Spring cushion or cushion stop closer.

b. 2 – Concealed overhead stop.
c. 3 – Wall stop.
d. 4 – Floor stop.
e. 5 – Hold open.
f. 6 – No closer provided.

B. Examples:

1. Hardware Set “I1-G-P3” represents an interior single door without access control devices installed on either side of the door. The door is also fully sealed around the perimeter, utilizes a passage lockset and uses a wall stop to stop the door when fully opened.
2. Hardware Set “SSI2-F-G-XL1” represents an interior double, fire rated door with access control devices installed on both sides of the door. The door is also fully sealed around the perimeter, utilizes an exit device with a trim lever on the pull side and uses a closer to stop the door when fully opened.

C. The hardware sets represent the design intent and direction of the owner and Architect/Engineer. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the Architect/Engineer 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 and functionality.

SET NO. E1-XO1

	EA	HEAVY WEIGHT HINGE	SEE SPEC FOR SIZE AND QUANTITY		630	IVE
1	EA	PANIC HARDWARE	LD-9875-EO		630	VON
1	EA	LOCK GUARD	LG10		630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	SET	GASKETING	328AA-S (@ HEAD AND JAMBS)		AA	ZER
1	EA	DOOR SWEEP	8197AA		AA	ZER
1	EA	THRESHOLD	625A-223		A	ZER
1	EA	MOUNTING BRACKET	328SPB @ HEAD FOR CLOSER MOUNTING			ZER
1	EA		DOOR POSITION SWITCH BY DIV 28			
1	EA		LOCAL ALARM BY DIV 28			

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION: DOOR POSITION SWITCH MONITORS DOOR STATUS. ALARM WILL SOUND IF OPENING IS USED.

SET NO. I1-B3 - SINGLE USE RESTROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	L9040 03N L583-363 OS-OCC		630	SCH
1	EA	SURFACE CLOSER	4040XP		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER

SET NO. I1-F-G-XL1

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	FIRE EXIT HARDWARE	9875-L-BE-F-03		630	VON
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)		AA	ZER

SET NO. I1-F-XO1

	EA	HEAVY WEIGHT HINGE	SEE SPEC FOR SIZE AND QUANTITY		630	IVE
1	EA	FIRE EXIT HARDWARE	9875-EO-F		630	VON
1	EA	LOCK GUARD	LG10		630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER
1	EA		DOOR POSITION SWITCH BY DIV 28			
1	EA		LOCAL ALARM BY DIV 28			

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION: DOOR POSITION SWITCH MONITORS DOOR STATUS. ALARM WILL SOUND IF OPENING IS USED.

SET NO. I1-O3

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	OFFICE/ENTRY LOCK	L9050L 03N 09-544		626	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	FLOOR STOP	FS410		626	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER

SET NO. I1-R1

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	STOREROOM LOCK	L9080L 03N		630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER

SET NO. I1-R3

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	STOREROOM LOCK	L9080L 03N		630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	SURFACE CLOSER	4040XP		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER

SET NO. I1-SF-P4 - CONF ROOM, DAY OFFICE, SOFT COZY, HARD COZY

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	PASSAGE SET	L9010 03N		630	SCH
1	EA	FLOOR STOP	FS410		626	IVE
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)		AA	ZER
1			PERIMETER SEALS BY FRAME MANUFACTURER			

SET NO. I1-T3 - MENS/WOMENS ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	PUSH PLATE	8200 4" X 16"		630	IVE
1	EA	PULL PLATE	8302 10" 4" X 16"		630	IVE
1	EA	SURFACE CLOSER	4040XP		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER

SET NO. SI1-E2 - GENERAL, IN-SWING CR

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY	✓	652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N RX CON 12/24 VDC	✓	630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	OH STOP	100S		630	GLY
1	EA	SURFACE CLOSER	4040XP ST-1630		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)	✓		SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT	✓		SCH
1			ACCESS CONTROL READER(S) BY DIV 28	✓		
1			DOOR POSITION SWITCH BY DIV 28	✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
FREE EGRESS ALWAYS PERMITTED.
INSIDE LEVER/TOUCHBAR HAS RX (REQUEST TO EXIT) SWITCH TO SIGNAL AUTHORIZED EGRESS.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SI1-E3 - GENERAL, IN-SWING CR

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY			652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N RX CON 12/24 VDC			630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	SURFACE CLOSER	4040XP			689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406/407CCV			US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)				SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT				SCH
1	EA		DOOR POSITION SWITCH BY DIV 28				

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
FREE EGRESS ALWAYS PERMITTED.
INSIDE LEVER/TOUCHBAR HAS RX (REQUEST TO EXIT) SWITCH TO SIGNAL AUTHORIZED EGRESS.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SI1-G-E2 - MOTHERS ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		✓	652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N RX CON 12/24 VDC		✓	630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	OH STOP	100S			630	GLY
1	EA	SURFACE CLOSER	4040XP ST-1630			689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	SET	GASKETING	328AA-S (@ HEAD AND JAMBS)			AA	ZER
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
1	EA		DOOR POSITION SWITCH BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
FREE EGRESS ALWAYS PERMITTED.
INSIDE LEVER/TOUCHBAR HAS RX (REQUEST TO EXIT) SWITCH TO SIGNAL AUTHORIZED EGRESS.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SI1-SF-G-E1 - OUTSWING CR

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
1	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		✓	652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N RX CON 12/24 VDC		✓	630	SCH
1	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
1			PERIMETER SEALS BY FRAME MANUFACTURER				

SET NO. SSE1-G-E-XL1 - DATA HALL EXTERIOR

4	EA	HEAVY WEIGHT HINGE	SEE SPEC FOR SIZE AND QUANTITY		630	IVE
1	EA	POWER TRANSFER	EPT10 CON		689	VON
1	EA	ELEC PANIC HARDWARE	LD-9875-L-M996-03-FSE-CON		630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	LOCK GUARD	LG10		630	IVE
1	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
1	EA	RAIN DRIP	142AA		AA	ZER
1	SET	GASKETING	328AA-S (@ HEAD AND JAMBS)		AA	ZER
1	EA	DOOR SWEEP	111AA		AA	ZER
1	EA	THRESHOLD	625A-223		A	ZER
1	EA	MOUNTING BRACKET	328SPB @ HEAD FOR CLOSER MOUNTING			ZER
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT			SCH
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)			SCH
1	EA		DOOR POSITION SWITCH BY DIV 28			
1	EA		LOCAL ALARM BY DIV 28			
1			ACCESS CONTROL READER(S) BY DIV 28			

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD
2. FIRE RATED EXIT DEVICES ARE NOT REQUIRED AT DOORS INSTALLED IN A NON-RATED PARTITION.

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY
INSIDE CARD READER WILL SHUNT AUDIBLE ALARM UPON EXIT
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE)
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS

SET NO. SSI1-F-E3 - LIGHTING INVERTER

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC		630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	SURFACE CLOSER	4040XP EDA		689	LCN
1	EA	WALL STOP	WS406/407CCV		US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER
1	EA		DOOR POSITION SWITCH BY DIV 28			
1	EA		LOCAL ALARM BY DIV 28			

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY
INSIDE CARD READER WILL SHUNT AUDIBLE ALARM UPON EXIT
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE)
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS

SET NO. SSI1-F-G-E3 - LIGHTING INVERTER

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY			652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC			630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	SURFACE CLOSER	4040XP EDA			689	LCN
1	EA	WALL STOP	WS406/407CCV			US32D	IVE
1	SET	GASKETING	328AA-S (@ HEAD AND JAMBS)			AA	ZER
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
1	EA	MOUNTING BRACKET	328SPB @ HEAD FOR CLOSER MOUNTING				ZER
1	EA		DOOR POSITION SWITCH BY DIV 28				
1	EA		LOCAL ALARM BY DIV 28				

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY
INSIDE CARD READER WILL SHUNT AUDIBLE ALARM UPON EXIT
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE)
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS

SET NO. SSI1-F-G-XL1 - ELECTRIC ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY			652	IVE
1	EA	ELEC FIRE EXIT HARDWARE	9875-L-F-M996-03-FSE-CON			630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)				SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT				SCH
1	EA		DOOR POSITION SWITCH BY DIV 28				
1	EA		LOCAL ALARM BY DIV 28				
1			ACCESS CONTROL READER(S) BY DIV 28				

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI1-F-G-XL2 - ELECTRIC ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		652	IVE
1	EA	ELEC FIRE EXIT HARDWARE	9875-L-F-M996-03-FSE-CON		630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	OH STOP	100S		630	GLY
1	EA	SURFACE CLOSER	4040XP ST-1630		689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	EA	WALL STOP	WS406/407CCV		US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)		AA	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)			SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT			SCH
1	EA		DOOR POSITION SWITCH BY DIV 28			
1	EA		LOCAL ALARM BY DIV 28			
1			ACCESS CONTROL READER(S) BY DIV 28			

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI1-F-XL2 - ELECTRIC ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY			652	IVE
1	EA	ELEC FIRE EXIT HARDWARE	9875-L-F-M996-03-FSE-CON			630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	OH STOP	100S			630	GLY
1	EA	SURFACE CLOSER	4040XP ST-1630			689	LCN
1	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	EA	WALL STOP	WS406/407CCV			US32D	IVE
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)				SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT				SCH
1	EA		DOOR POSITION SWITCH BY DIV 28				
1	EA		LOCAL ALARM BY DIV 28				
1			ACCESS CONTROL READER(S) BY DIV 28				

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI1-G-E1

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		✓	652	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC		✓	630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN
1	SET	GASKETING	328AA-S (@ HEAD AND JAMBS)			AA	ZER
1	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
1	EA	MOUNTING BRACKET	328SPB @ HEAD FOR CLOSER MOUNTING				ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
1	EA		DOOR POSITION SWITCH BY DIV 28		✓		
1	EA		LOCAL ALARM BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-E3 - DOUBLE DOOR, STORAGE

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY			652	IVE
1	SET	CONST LATCHING BOLT	FB51P			630	IVE
1	EA	DUST PROOF STRIKE	DP2			626	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC			630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	COORDINATOR	COR X FL			628	IVE
2	EA	MOUNTING BRACKET	MB, TO SUIT HM FRAME (TO SUIT FRAME)			689	IVE
2	EA	SURFACE CLOSER	4040XP EDA			689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
2	EA	WALL STOP	WS406/407CCV			US32D	IVE
1	SET	MEETING STILE	328AA-S			AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
2	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)				SCH
2	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT				SCH
2	EA		DOOR POSITION SWITCH BY DIV 28				
1	EA		LOCAL ALARM BY DIV 28				

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-F-G-XL1 - ELECTRICAL ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
2	EA	POWER TRANSFER	EPT10 CON		✓	689	VON
1	EA	CONST LATCHING BOLT	FB52 12"			630	IVE
1	EA	ELEC FIRE EXIT HARDWARE	9875-L-F-M996-03-FSE-CON		✓	630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	COORDINATOR	COR X FL			628	IVE
2	EA	MOUNTING BRACKET	MB, TO SUIT HM FRAME (TO SUIT FRAME)			689	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	SET	MEETING STILE	328AA-S			AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
2	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
2	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
2	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
2	EA		DOOR POSITION SWITCH BY DIV 28		✓		
1	EA		LOCAL ALARM BY DIV 28		✓		
1			ACCESS CONTROL READER(S) BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-F-G-XM1 - ELECTRICAL ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY		652	IVE
2	EA	POWER TRANSFER	EPT10 CON	✓	689	VON
1	EA	FIRE EXIT HARDWARE	9847-EO-F		630	VON
1	EA	ELEC FIRE EXIT HARDWARE	9875-L-F-M996-03-FSE-CON	✓	630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)		626	MED
1	EA	COORDINATOR	COR X FL		628	IVE
2	EA	MOUNTING BRACKET	MB, TO SUIT HM FRAME (TO SUIT FRAME)		689	IVE
1	EA	CARRYBAR	CB1		652	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH		689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS		630	IVE
1	SET	MEETING STILE	328AA-S		AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING		BK	ZER
2	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)		AA	ZER
2	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)	✓		SCH
2	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT	✓		SCH
2	EA		DOOR POSITION SWITCH BY DIV 28	✓		
1	EA		LOCAL ALARM BY DIV 28	✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-F-G-XM3 - ELECTRICAL ROOM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
1	EA	POWER TRANSFER	EPT10 CON		✓	689	VON
1	EA	FIRE EXIT HARDWARE	9847-EO-F			630	VON
1	EA	ELEC FIRE EXIT HARDWARE	9875-L-F-M996-03-FSE-CON		✓	630	VON
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	COORDINATOR	COR X FL			628	IVE
2	EA	MOUNTING BRACKET	MB, TO SUIT HM FRAME (TO SUIT FRAME)			689	IVE
1	EA	CARRYBAR	CB1			652	IVE
2	EA	SURFACE CLOSER	4040XP EDA			689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	SET	MEETING STILE	328AA-S			AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
2	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
1	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
1	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
2	EA		DOOR POSITION SWITCH BY DIV 28		✓		
1	EA		LOCAL ALARM BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-G-E1 - DOUBLE DOOR, SPOKE TECH RM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		✓	652	IVE
1	EA	CONST LATCHING BOLT	FB51T 36"			630	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC		✓	630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	COORDINATOR	COR X FL			628	IVE
2	EA	MOUNTING BRACKET	MB, TO SUIT HM FRAME (TO SUIT FRAME)			689	IVE
2	EA	SURFACE CLOSER	4040XP SCUSH			689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	SET	MEETING STILE	328AA-S			AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
2	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
2	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
2	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
2	EA		DOOR POSITION SWITCH BY DIV 28		✓		
1	EA		LOCAL ALARM BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-G-E2 - DOUBLE DOOR, SPOKE TECH RM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		✓	652	IVE
1	EA	CONST LATCHING BOLT	FB51T 36"			630	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC		✓	630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	COORDINATOR	COR X FL			628	IVE
2	EA	OH STOP	100S			630	GLY
2	EA	SURFACE CLOSER	4040XP ST-1630			689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
1	SET	MEETING STILE	328AA-S			AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
2	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
2	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
2	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
2	EA		DOOR POSITION SWITCH BY DIV 28		✓		
1	EA		LOCAL ALARM BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

SET NO. SSI2-G-E3 - DOUBLE DOOR, SPOKE TECH RM

	EA	HEAVY WEIGHT HINGES	SEE SPEC FOR SIZE AND QTY			652	IVE
	EA	HEAVY WEIGHT TRANSFER HINGE	8-WIRE-CON, SEE SPEC FOR SIZE AND QTY		✓	652	IVE
1	EA	CONST LATCHING BOLT	FB51T 36"			630	IVE
1	EA	EU MORTISE LOCK	L9092LEU 03N CON 12/24 VDC		✓	630	SCH
1	EA	MORTISE CYLINDER	X4 (TO SUIT OWNER'S STANDARD)			626	MED
1	EA	COORDINATOR	COR X FL			628	IVE
2	EA	MOUNTING BRACKET	MB, TO SUIT HM FRAME (TO SUIT FRAME)			689	IVE
2	EA	SURFACE CLOSER	4040XP EDA			689	LCN
2	EA	ARMOR PLATE	8400 24" X 2" LDW B-CS			630	IVE
2	EA	WALL STOP	WS406/407CCV			US32D	IVE
1	SET	MEETING STILE	328AA-S			AA	ZER
1	EA	GASKETING	488S-BK PSA PERIMETER OF OPENING			BK	ZER
2	EA	DOOR BOTTOM	355AA (CONCEALED IN BOTTOM CHANNEL OF HM DOOR)			AA	ZER
2	EA	HARNESS (TO POWER SUPPLY)	CON-6W (CONNECTION LEADS)		✓		SCH
2	EA	WIRE HARNESS	CON-XX, LENGTH TO SUIT		✓		SCH
2	EA		DOOR POSITION SWITCH BY DIV 28		✓		
1	EA		LOCAL ALARM BY DIV 28		✓		

NOTE:
1. COORDINATE FRAME WITH DOOR POSITION SWITCH FOR IN-FRAME MOUNTING AT HEAD

OPERATION:
DOOR IS NORMALLY CLOSED AND LOCKED.
OUTSIDE CARD READER WILL UNLOCK DOOR FOR ENTRY.
INSIDE CARD READER WILL SHUNT SECURITY ALARM UPON EXIT.
OUTSIDE OF DOOR REMAINS LOCKED IN A POWER FAILURE (FAIL SECURE).
FREE EGRESS ALWAYS PERMITTED, ALARM WILL SOUND IF INSIDE CARD READER IS BYPASSED.
COORDINATE WITH ACCESS CONTROL DRAWINGS AND SPECIFICATIONS.

END OF SECTION 08 71 00