

SECTION 08 71 00
DOOR HARDWARE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Door hardware and related items necessary for complete installation and operation of doors.

1.2 RELATED WORK

- A. Caulking: Section 07 92 00 JOINT SEALANTS.
- B. Application of Hardware: Section 08 11 13, HOLLOW METAL DOORS AND FRAMES
- C. Fire Detection: Section 28 31 00, FIRE DETECTION AND ALARM.

1.3 GENERAL

- A. All hardware shall comply with UFAS, (Uniform Federal Accessible Standards) unless specified otherwise.
- B. Provide rated door hardware assemblies where required by most current version of the International Building Code (IBC).
- C. Hardware for Labeled Fire Doors and Exit Doors: Conform to requirements of NFPA 80 for labeled fire doors and to NFPA 101 for exit doors, as well as to other requirements specified. Provide hardware listed by UL, except where heavier materials, large size, or better grades are specified herein under paragraph HARDWARE SETS. In lieu of UL labeling and listing, test reports from a nationally recognized testing agency may be submitted showing that hardware has been tested in accordance with UL test methods and that it conforms to NFPA requirements.
- D. Hardware for application on metal and wood doors and frames shall be made to standard templates. Furnish templates to the fabricator of these items in sufficient time so as not to delay the construction.

1.4 WARRANTY

- A. Automatic door operators shall be subject to the terms of FAR Clause 52.246-21, except that the Warranty period shall be two years in lieu of one year for all items except as noted below:
 - 1. Locks, latchsets, and panic hardware: 5 years.
 - 2. Door closers and continuous hinges: 10 years.

1.5 MAINTENANCE MANUALS

- A. In accordance with Section 01 00 00, GENERAL REQUIREMENTS Article titled "INSTRUCTIONS", furnish maintenance manuals and instructions on all door hardware. Provide installation instructions with the submittal documentation.

1.6 SUBMITTALS

- A. Submittals shall be in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES. Submit 6 copies of the schedule per Section

01 33 23. Submit 2 final copies of the final approved schedules to VAMC Locksmith as record copies (VISN Locksmith if the VAMC does not have a locksmith).

B. Hardware Schedule: Prepare and submit hardware schedule in the following form:

Hardware Item	Quantity	Size	Reference Publication Type No.	Finish	Mfr. Name and Catalog No.	Key Control Symbols	UL Mark (if fire rated and listed)	ANSI/BHMA Finish Designation

C. Samples and Manufacturers' Literature:

1. Samples: All hardware items (proposed for the project) that have not been previously approved by Builders Hardware Manufacturers Association shall be submitted for approval. Tag and mark all items with manufacturer's name, catalog number and project number.
2. Samples are not required for hardware listed in the specifications by manufacturer's catalog number, if the contractor proposes to use the manufacturer's product specified.

D. Certificate of Compliance and Test Reports: Submit certificates that hardware conforms to the requirements specified herein. Certificates shall be accompanied by copies of reports as referenced. The testing shall have been conducted either in the manufacturer's plant and certified by an independent testing laboratory or conducted in an independent laboratory, within four years of submittal of reports for approval.

1.7 DELIVERY AND MARKING

A. Deliver items of hardware to job site in their original containers, complete with necessary appurtenances including screws, keys, and instructions. Tag one of each different item of hardware and deliver to COR for reference purposes. Tag shall identify items by Project Specification number and manufacturer's catalog number. These items shall remain on file in COR's office until all other similar items have been installed in project, at which time the COR will deliver items on file to Contractor for installation in predetermined locations on the project.

1.8 PREINSTALLATION MEETING

- A. Convene a pre-installation meeting not less than 30 days before start of installation of door hardware. Require attendance of parties directly affecting work of this section, including Contractor and Installer, Architect, COR and VA Locksmith, Hardware Consultant, and Hardware Manufacturer's Representative. Review the following:
 - 1. Inspection of door hardware.
 - 2. Job and surface readiness.
 - 3. Coordination with other work.
 - 4. Protection of hardware surfaces.
 - 5. Substrate surface protection.
 - 6. Installation.
 - 7. Adjusting.
 - 8. Repair.
 - 9. Field quality control.
 - 10. Cleaning.

1.9 INSTRUCTIONS

- A. Hardware Set Symbols on Drawings: Except for protective plates, door stops, mutes, thresholds and the like specified herein, hardware requirements for each door are indicated on drawings by symbols. Symbols for hardware sets consist of letters (e.g., "HW") followed by a number. Each number designates a set of hardware items applicable to a door type.
- B. Keying: All cylinders shall be keyed into existing Grand Master Key System. Provide removable core cylinders that are removable only with a special key or tool without disassembly of knob or lockset. Keying information shall be furnished at a later date by the COR.

1.10 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only. In text, hardware items are referred to by series, types, etc., listed in such specifications and standards, except as otherwise specified.
- B. American Society for Testing and Materials (ASTM):
 - F883-04.....Padlocks
 - E2180-07.....Standard Test Method for Determining the Activity of Incorporated Antimicrobial Agent(s) In Polymeric or Hydrophobic Materials

C. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):

- A156.1-06.....Butts and Hinges
- A156.2-03.....Bored and Pre-assembled Locks and Latches
- A156.3-08.....Exit Devices, Coordinators, and Auto Flush Bolts
- A156.4-08.....Door Controls (Closers)
- A156.5-01.....Auxiliary Locks and Associated Products
- A156.6-05.....Architectural Door Trim
- A156.8-05.....Door Controls-Overhead Stops and Holders
- A156.12-05Interconnected Locks and Latches
- A156.13-05.....Mortise Locks and Latches Series 1000
- A156.14-07Sliding and Folding Door Hardware
- A156.15-06.....Release Devices-Closer Holder, Electromagnetic and Electromechanical
- A156.16-08.....Auxiliary Hardware
- A156.17-04Self-Closing Hinges and Pivots
- A156.18-06.....Materials and Finishes
- A156.20-06Strap and Tee Hinges, and Hasps
- A156.21-09.....Thresholds
- A156.22-05.....Door Gasketing and Edge Seal Systems
- A156.23-04.....Electromagnetic Locks
- A156.24-03.....Delayed Egress Locking Systems
- A156.25-07Electrified Locking Devices
- A156.26-06.....Continuous Hinges
- A156.28-07Master Keying Systems
- A156.29-07Exit Locks and Alarms
- A156.30-03High Security Cylinders
- A156.31-07Electric Strikes and Frame Mounted Actuators
- A250.8-03.....Standard Steel Doors and Frames

D. National Fire Protection Association (NFPA):

- 80-10.....Fire Doors and Fire Windows
- 101-09.....Life Safety Code

E. Underwriters Laboratories, Inc. (UL):

Building Materials Directory (2008)

PART 2 - PRODUCTS

2.1 BUTT HINGES

- A. ANSI A156.1. Provide only three-knuckle hinges, except five-knuckle where the required hinge type is not available in a three-knuckle version (e.g., some types of swing-clear hinges). The following types of butt hinges shall be used for the types of doors listed, except where otherwise specified:
1. Exterior Doors: Type A2112/A5112 for doors 900 mm (3 feet) wide or less and Type A2111/A5111 for doors over 900 mm (3 feet) wide. Hinges for exterior outswing doors shall have non-removable pins. Hinges for exterior fire-rated doors shall be of stainless steel material.
 2. Interior Doors: Type A8112/A5112 for doors 900 mm (3 feet) wide or less and Type A8111/A5111 for doors over 900 mm (3 feet) wide. Hinges for doors exposed to high humidity areas (shower rooms, toilet rooms, kitchens, janitor rooms, etc. shall be of stainless steel material.
- B. Provide quantity and size of hinges per door leaf as follows:
1. Doors up to 1210 mm (4 feet) high: 2 hinges.
 2. Doors 1210 mm (4 feet) to 2260 mm (7 feet 5 inches) high: 3 hinges minimum.
 3. Doors greater than 2260 mm (7 feet 5 inches) high: 4 hinges.
 4. Doors up to 900 mm (3 feet) wide, standard weight: 114 mm x 114 mm (4-1/2 inches x 4-1/2 inches) hinges.
 5. Doors over 900 mm (3 feet) to 1065 mm (3 feet 6 inches) wide, standard weight: 127 mm x 114 mm (5 inches x 4-1/2 inches).
 6. Doors over 1065 mm (3 feet 6 inches) to 1210 mm (4 feet), heavy weight: 127 mm x 114 mm (5 inches x 4-1/2 inches).
 7. Provide heavy-weight hinges where specified.
 8. At doors weighing 330 kg (150 lbs.) or more, furnish 127 mm (5 inch) high hinges.
- C. See Articles "MISCELLANEOUS HARDWARE" and "HARDWARE SETS" for pivots and hinges other than butts specified above and continuous hinges specified below.

2.2 CONTINUOUS HINGES

- A. ANSI/BHMA A156.26, Grade 1-600.
1. Listed under Category N in BHMA's "Certified Product Directory."
- B. General: Minimum 0.120-inch- (3.0-mm-) thick, hinge leaves with minimum overall width of 4 inches (102 mm); fabricated to full height

of door and frame and to template screw locations; with components finished after milling and drilling are complete

- C. Continuous, Barrel-Type Hinges: Hinge with knuckles formed around a Teflon-coated 6.35mm (0.25-inch) minimum diameter pin that extends entire length of hinge.
1. Base Metal for Exterior Hinges: Stainless steel.
 2. Base Metal for Interior Hinges: Both Steel and Aluminum.
 3. Base Metal for Hinges for Fire-Rated Assemblies: Stainless steel.
 4. Provide with non-removable pin (hospital tip option) at lockable outswing doors.
 5. Where required to clear adjacent casing, trim, and wall conditions and allow full door swing, provide wide throw hinges of minimum width required.
 6. Provide with manufacturer's cut-outs for separate mortised power transfers and/or mortised automatic door bottoms where they occur.
 7. Where thru-wire power transfers are integral to the hinge, provide hinge with easily removable portion to allow easy access to wiring connections.
 8. Where models are specified that provide an integral wrap-around edge guard for the hinge edge of the door, provide manufacturer's adjustable threaded stud and machine screw mechanism to allow the door to be adjusted within the wrap-around edge guard.

2.3 DOOR CLOSING DEVICES

- A. Closing devices shall be products of one manufacturer.

2.4 OVERHEAD CLOSERS

- A. Conform to ANSI A156.4, Grade 1.
- B. Closers shall conform to the following:
1. The closer shall have minimum 50 percent adjustable closing force over minimum value for that closer and have adjustable hydraulic back check effective between 60 degrees and 85 degrees of door opening.
 2. Where specified, closer shall have hold-open feature.
 3. Size Requirements: Provide multi-size closers, sizes 1 through 6, except where multi-size closer is not available for the required application.
 4. Material of closer body shall be forged or cast.
 5. Arm and brackets for closers shall be steel, malleable iron or high strength ductile cast iron.

6. Where closers are exposed to the exterior or are mounted in rooms that experience high humidity, provide closer body and arm assembly of stainless steel material.
7. Closers shall have full size metal cover; plastic covers will not be accepted.
8. Closers shall have adjustable hydraulic back-check, separate valves for closing and latching speed, adjustable back-check positioning valve, and adjustable delayed action valve.
9. Provide closers with any accessories required for the mounting application, including (but not limited to) drop plates, special soffit plates, spacers for heavy-duty parallel arm fifth screws, bull-nose or other regular arm brackets, longer or shorter arm assemblies, and special factory templating. Provide special arms, drop plates, and templating as needed to allow mounting at doors with overhead stops and/or holders.
10. Closer arms or backcheck valve shall not be used to stop the door from overswing, except in applications where a separate wall, floor, or overhead stop cannot be used.
11. Provide parallel arm closers with heavy duty rigid arm.
12. Where closers are to be installed on the push side of the door, provide parallel arm type except where conditions require use of top jamb arm.
13. Provide all surface closers with the same body attachment screw pattern for ease of replacement and maintenance.
14. All closers shall have a 1 ½" (38mm) minimum piston diameter.

2.5 NOT USED

2.6 DOOR STOPS

- A. Conform to ANSI A156.16.
- B. Provide door stops wherever an opened door or any item of hardware thereon would strike a wall, column, equipment or other parts of building construction. For concrete, masonry or quarry tile construction, use lead expansion shields for mounting door stops.
- C. Where cylindrical locks with turn pieces or pushbuttons occur, equip wall bumpers Type L02251 (rubber pads having concave face) to receive turn piece or button.
- D. Provide floor stops (Type L02141 or L02161 in office areas; Type L02121 x 3 screws into floor elsewhere. Wall bumpers, where used, must be installed to impact the trim or the door within the leading half of its

- width. Floor stops, where used, must be installed within 4-inches of the wall face and impact the door within the leading half of its width.
- E. Where drywall partitions occur, use floor stops, Type L02141 or L02161 in office areas, Type L02121 elsewhere.
 - F. Provide stop Type L02011, as applicable for exterior doors. At outswing doors where stop can be installed in concrete, provide stop mated to concrete anchor set in 76mm (3-inch) core-drilled hole and filled with quick-setting cement.
 - G. Omit stops where floor mounted door holders are required and where automatic operated doors occur.
 - H. Provide appropriate roller bumper for each set of doors (except where closet doors occur) where two doors would interfere with each other in swinging.
 - I. Provide appropriate door mounted stop on doors in individual toilets where floor or wall mounted stops cannot be used.
 - J. Provide overhead surface applied stop Type C02541, ANSI A156.8 on patient toilet doors in bedrooms where toilet door could come in contact with the bedroom door.
 - K. Provide door stops on doors where combination closer magnetic holders are specified, except where wall stops cannot be used or where floor stops cannot be installed within 4-inches of the wall.
 - L. Where the specified wall or floor stop cannot be used, provide concealed overhead stops (surface-mounted where concealed cannot be used).

2.7 NOT USED

2.8 NOT USED

2.9 LOCKS AND LATCHES

- A. Conform to ANSI A156.2. Locks and latches for doors 45 mm (1-3/4 inch) thick or over shall have beveled fronts. Cylinders for all locksets shall be removable core type. Cylinders shall be furnished with construction removable cores and construction master keys. Cylinder shall be removable by special key or tool. Construct all cores so that they will be interchangeable into the core housings of all mortise locks, rim locks, cylindrical locks, and any other type lock included in the Great Grand Master Key System. Disassembly of lever or lockset shall not be required to remove core from lockset. All locksets or latches on double doors with fire label shall have latch bolt with 19 mm (3/4 inch) throw, unless shorter throw allowed by the door manufacturer's fire label. Provide temporary keying device or

construction core of allow opening and closing during construction and prior to the installation of final cores.

- B. In addition to above requirements, locks and latches shall comply with following requirements:
1. Mortise Lock and Latch Sets: Conform to ANSI/BHMA A156.13. Mortise locksets shall be series 1000, minimum Grade 2. All locksets and latchsets shall have lever handles fabricated from cast stainless steel. No substitute lever material shall be accepted. All locks and latchsets shall be furnished with 122.55 mm (4-7/8-inch) curved lip strike and wrought box. At outswing pairs with overlapping astragals, provide flat lip strip with 21mm (7/8-inch) lip-to-center dimension. All lock cases installed on lead lined doors shall be lead lined before applying final hardware finish. Furnish armored fronts for all mortise locks. Where mortise locks are installed in high-humidity locations or where exposed to the exterior on both sides of the opening, provide non-ferrous mortise lock case.
 2. Cylindrical Lock and Latch Sets: levers shall meet ADA (Americans with Disabilities Act) requirements. Cylindrical locksets shall be series 4000 Grade I. All locks and latchsets shall be furnished with 122.55 mm (4-7/8-inch) curved lip strike and wrought box. At outswing pairs with overlapping astragals, provide flat lip strip with 21mm (7/8-inch) lip-to-center dimension. Provide lever design to match design selected by Architect or to match existing lever design.
 3. Auxiliary locks shall be as specified under hardware sets and conform to ANSI A156.5.

2.10 NOT USED

2.11 NOT USED

2.12 NOT USED

2.13 KEYS

- A. Stamp all keys with change number and key set symbol. Furnish keys in quantities as follows:

Locks/Keys	Quantity
Cylinder locks	2 keys each
Cylinder lock change key blanks	100 each different key way
Master-keyed sets	6 keys each
Grand Master sets	6 keys each
Great Grand Master set	5 keys
Control key	2 keys

2.14 NOT USED

2.15 ARMOR PLATES, KICK PLATES, MOP PLATES AND DOOR EDGING

- A. Conform to ANSI Standard A156.6.

- B. Provide protective plates and door edging as specified below:
1. Kick plates, mop plates and armor plates of metal, Type J100 series.
 2. Provide kick plates and mop plates where specified. Kick plates shall be 254 mm (10 inches) or 305 mm (12 inches) high. Mop plates shall be 152 mm (6 inches) high. Both kick and mop plates shall be minimum 1.27 mm (0.050 inches) thick. Provide kick and mop plates beveled on all 4 edges (B4E). On push side of doors where jamb stop extends to floor, make kick plates 38 mm (1-1/2 inches) less than width of door, except pairs of metal doors which shall have plates 25 mm (1 inch) less than width of each door. Extend all other kick and mop plates to within 6 mm (1/4 inch) of each edge of doors. Kick and mop plates shall butt astragals. For jamb stop requirements, see specification sections pertaining to door frames.
 3. Kick plates and/or mop plates are not required on following door sides:
 - a. Armor plate side of doors;
 - b. Exterior side of exterior doors;
 - c. Closet side of closet doors;
 - d. Both sides of aluminum entrance doors.
 4. Armor plates for doors are listed under Article "Hardware Sets". Armor plates shall be thickness as noted in the hardware set, 875 mm (35 inches) high and 38 mm (1-1/2 inches) less than width of doors, except on pairs of metal doors. Provide armor plates beveled on all 4 edges (B4E). Plates on pairs of metal doors shall be 25 mm (1 inch) less than width of each door. Where top of intermediate rail of door is less than 875 mm (35 inches) from door bottom, extend armor plates to within 13 mm (1/2 inch) of top of intermediate rail. On doors equipped with panic devices, extend armor plates to within 13 mm (1/2 inch) of panic bolt push bar.

2.16 EXIT DEVICES

- A. Conform to ANSI Standard A156.3. Exit devices shall be Grade 1; type and function are specified in hardware sets. Provide flush with finished floor strikes for vertical rod exit devices in interior of building. Trim shall have cast satin stainless steel lever handles of design similar to locksets, unless otherwise specified. Provide key cylinders for keyed operating trim and, where specified, cylinder dogging.

- B. Surface vertical rod panics shall only be provided less bottom rod; provide fire pins as required by exit device and door fire labels. Do not provide surface vertical rod panics at exterior doors.
- C. Concealed vertical rod panics shall be provided less bottom rod at interior doors, unless lockable or otherwise specified; provide fire pins as required by exit device and door fire labels. Where concealed vertical rod panics are specified at exterior doors, provide with both top and bottom rods.
- D. Where removable mullions are specified at pairs with rim panic devices, provide mullion with key-removable feature.
- E. At non-rated openings with panic hardware, provide panic hardware with key cylinder dogging feature.
- F. Exit devices for fire doors shall comply with Underwriters Laboratories, Inc., requirements for Fire Exit Hardware. Submit proof of compliance.

2.17 WEATHERSTRIPS (FOR EXTERIOR DOORS)

- A. Conform to ANSI A156.22. Air leakage shall not to exceed 0.50 CFM per foot of crack length ($0.000774\text{m}^3/\text{s}/\text{m}$).

PART 3 - EXECUTION

3.1 HARDWARE HEIGHTS

- A. For existing buildings locate hardware on doors at heights to match existing hardware. The Contractor shall visit the site, verify location of existing hardware and submit locations to VA COR for approval.
- B. Hardware Heights from Finished Floor:
 - 1. Exit devices centerline of strike (where applicable) 1024 mm (40-5/16 inches).
 - 2. Locksets and latch sets centerline of strike 1024 mm (40-5/16 inches).
 - 3. Deadlocks centerline of strike 1219 mm (48 inches).
 - 4. Hospital arm pull 1168 mm (46 inches) to centerline of bottom supporting bracket.
 - 5. Centerline of door pulls to be 1016 mm (40 inches).
 - 6. Push plates and push-pull shall be 1270 mm (50 inches) to top of plate.
 - 7. Push-pull latch to be 1024 mm (40-5/16 inches) to centerline of strike.
 - 8. Locate other hardware at standard commercial heights. Locate push and pull plates to prevent conflict with other hardware.

3.2 INSTALLATION

A. Closer devices, including those with hold-open features, shall be equipped and mounted to provide maximum door opening permitted by building construction or equipment. Closers shall be mounted on side of door inside rooms, inside stairs, and away from exterior doors, closers shall be mounted on interior side. Where closers are mounted on doors they shall be mounted with sex nuts and bolts; foot shall be fastened to frame with machine screws.

B. Hinge Size Requirements:

Door Thickness	Door Width	Hinge Height
45 mm (1-3/4 inch)	900 mm (3 feet) and less	113 mm (4-1/2 inches)
45 mm (1-3/4 inch)	Over 900 mm (3 feet) but not more than 1200 mm (4 feet)	125 mm (5 inches)
35 mm (1-3/8 inch) (hollow core wood doors)	Not over 1200 mm (4 feet)	113 mm (4-1/2 inches)

C. Hinge leaves shall be sufficiently wide to allow doors to swing clear of door frame trim and surrounding conditions.

D. Where new hinges are specified for new doors in existing frames or existing doors in new frames, sizes of new hinges shall match sizes of existing hinges; or, contractor may reuse existing hinges provided hinges are restored to satisfactory operating condition as approved by COR. Existing hinges shall not be reused on door openings having new doors and new frames. Coordinate preparation for hinge cut-outs and screw-hole locations on doors and frames.

E. Hinges Required Per Door:

Doors 1500 mm (5 ft) or less in height	2 butts
Doors over 1500 mm (5 ft) high and not over 2280 mm (7 ft 6 in) high	3 butts
Doors over 2280 mm (7 feet 6 inches) high	4 butts
Dutch type doors	4 butts
Doors with spring hinges 1370 mm (4 feet 6 inches) high or less	2 butts
Doors with spring hinges over 1370 mm (4 feet 6 inches)	3 butts

F. Fastenings: Suitable size and type and shall harmonize with hardware as to material and finish. Provide machine screws and lead expansion shields to secure hardware to concrete, ceramic or quarry floor tile, or solid masonry. Fiber or rawl plugs and adhesives are not permitted. All fastenings exposed to weather shall be of nonferrous metal.

- G. After locks have been installed; show in presence of COR that keys operate their respective locks in accordance with keying requirements. (All keys, Master Key level and above shall be sent Registered Mail to the Medical Center Director along with the bitting list. Also a copy of the invoice shall be sent to the COR for his records.) Installation of locks which do not meet specified keying requirements shall be considered sufficient justification for rejection and replacement of all locks installed on project.

3.3 FINAL INSPECTION

- A. Installer to provide letter to the COR that upon completion, installer has visited the Project and has accomplished the following:
1. Re-adjust hardware.
 2. Evaluate maintenance procedures and recommend changes or additions, and instruct VA personnel.
 3. Identify items that have deteriorated or failed.
 4. Submit written report identifying problems.

3.4 DEMONSTRATION

- A. Demonstrate efficacy of mechanical hardware and electrical, and electronic hardware systems, including adjustment and maintenance procedures, to satisfaction of the COR and VA Locksmith.

3.5 HARDWARE SETS

- A. Following sets of hardware correspond to hardware symbols shown on drawings. Only those hardware sets that are shown on drawings will be required. Disregard hardware sets listed in specifications but not shown on drawings.
- B. Hardware Consultant working on a project will be responsible for providing additional information regarding these hardware sets. The numbers shown in the following sets come from BHMA standards.

ELECTRIC HARDWARE ABBREVIATIONS LEGEND:

ADO = Automatic Door Operator

EMCH = Electro-Mechanical Closer-Holder

MHO = Magnetic Hold-Open (wall- or floor-mounted)

Hardware Group No. 01

Provide each PR door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
2 EA	CONT. HINGE	112HD (A31031G)	628 ANSI	
2 SET	PUSH/PULL BAR	9103EZ-12"-NO (J503)	630 ANSI	
1 EA	AUTO OPERATOR	SUPPLIED UNDER SECTION 084229		
1 EA	THRESHOLD	425 MS/LA (J32130)	AL	NGP

Doors require special 3/8 inch undercut for ADA type threshold.
Perimeter weather, meeting style and door sweep seals supplied by Aluminum Section.

Hardware Group No. 02

Provide each PR door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
2 EA	CONT. HINGE	112HD (A31031G)	628 ANSI	
2 SET	PUSH/PULL BAR	9103EZ-12"-NO (J503)	630 ANSI	
1 EA	AUTO OPERATOR	SUPPLIED UNDER SECTION 084229		

Perimeter weather, meeting style and door sweep seals supplied by Aluminum Section.

Hardware Group No. 03

Provide each PR door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
2 EA	CONT. HINGE	112HD (A31031G)	628 ANSI	
2 EA	PANIC HARDWARE	3349A-L-360-03-WH PBAR (Grade 1, Type 6, Function 08)	626 ANSI	
2 EA	RIM CYLINDER	BLDG STANDARD	626	
2 EA	OH STOP	100S (C01541)	630 ANSI	

2 EA SURFACE CLOSER 4041T DEL (C021 PT-4A, PT-4C, PT-4D, PT-4H)
ST3211 PULL SIDE TJ 689 ANSI
1 EA THRESHOLD 425 MS/LA
(J32130) AL NGP

Doors require special 3/8 inch undercut for ADA type threshold.
Perimeter weather and door sweep seals supplied by Aluminum Section.

Hardware Group No. 04

Provide each SGL door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
3 EA	HW HINGE	5BB1HW 5 X 4.5	(A8111) 652	ANSI
1 EA	OFFICE/ENTRY LOCK	L9050L 03A	(F04) 626	ANSI
1 EA	MORT. CYLINDER	BLDG STANDARD	626	
1 EA	SURFACE CLOSER	4040XP H (C02051	PT-4A, PT-4C, PT-4D, PT-4H)	
	689 ANSI			
1 EA	WALL STOP	WS407CVX (L52101)	630	ANSI
3 EA	SILENCER	SR64 (L03011)	GRY	ANSI

Hardware Group No. 05

Provide each SGL door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
3 EA	HINGE 5BB1	4.5 X 4.5 (A8112)	652	ANSI
1 EA	STOREROOM LOCK	L9080L 03A	(F07) 626	ANSI
1 EA	MORT. CYLINDER	BLDG STANDARD	626	
1 EA	SURFACE CLOSER	4040XP (C02011/C02041	PT-4A, PT-4C, PT-4D, PT-4H)	
	689 ANSI			
1 EA	WALL STOP	WS407CVX (L52101)	630	ANSI
1 SET	SEALS 5020B (R0G155)	BRN	NGP	

Hardware Group No. 06

Provide each DE door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
6 EA	HW HINGE	5BB1HW 4.5 X 4.5	NRP (A8111)	652 ANSI
1 EA	PANIC HARDWARE	9949-WDC-EO-LBL-SNB	(Grade 1, Type 8, Function 01)	626 ANSI
1 EA	MAGNETIC LOCK	M490 (E18501)	628	ANSI
1 EA	FILLER PLATE	4905F 335	SCE	
1 EA	PUSH BAR	9100-STD	630	IVE
2 EA	SURFACE CLOSER	4040XP EDA	(C02021 PT-4A, PT-4C, PT-4D, PT-4H)	689 ANSI
2 EA	WALL STOP/HOLDER	WS40	626	IVE
1 EA	POWER SUPPLY	PS902	FA900	LGR SCE
1 EA	ACCESS CONTROL	WORK BY DIVISION 28		

Description of Operation:

Presenting valid credential to reader will release magnetic lock to allow access to hospital and surgery corridors.
Free egress at all times from corridors to entry lobby.
This is a security door.

Hardware Group No. 07

Provide each PR door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
2 EA	CONT. HINGE	112HD EPT (A31031G)	628	ANSI
2 EA	POWER TRANSFER	EPT10	689	VON
1 EA	ELEC PANIC HARDWARE	LX-QEL+-3349A-DT-386	(Grade 1, Type 6, Function 02)	626 ANSI
1 EA	ELEC PANIC HARDWARE	LX-QEL+-3349A-NL-386	(Grade 1, Type 6, Function 03)	626 ANSI
1 EA	RIM CYLINDER	BLDG STANDARD	626	
1 EA	AUTO OPERATOR	SUPPLIED UNDER SECTION 084229		
1 EA	THRESHOLD	425 MS/LA (J32130)	AL	NGP
1 EA	POWER SUPPLY	PS902	900-4RL	LGR SCE

1 EA ACCESS CONTROL WORK BY DIVISION 28

Doors require special 3/8 inch undercut for ADA type threshold.
Perimeter weather, meeting style and door sweep seals supplied by Aluminum
Section.

Description of Operation:

Presenting valid credential to reader will retract latches and turn on
exterior ADA actuator for access. Interior ADA actuator is always
active.

Emergency access by mechanical key override.

Free egress at all times.

Hardware Group No. 08

Provide each PR door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
6 EA	HW HINGE	5BB1HW 4.5 X 4.5	(A8111)	652 ANSI
2 EA	FIRE EXIT HARDWARE	9949-L-F-996-06-LBL (Grade 1, Type 8, Function 08)	626 ANSI	
2 EA	RIM CYLINDER	BLDG STANDARD	626	
2 EA	SURFACE CLOSER	4040XP CUSH (C02021 PT-4A, PT-4C, PT-4D, PT-4G, PT-4H)	689 ANSI	
1 SET	SEALS	5020B BRN	NGP	
1 EA	ASTRAGAL SEAL	5070B BRN	NGP	

Hardware Group No. 09

Provide each PR door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
2 EA	CONT. HINGE	112HD EPT (A31031G)	628	ANSI
2 EA	POWER TRANSFER	EPT10 689	VON	
1 EA	ELEC PANIC HARDWARE	QEL+-3349A-DT-386 (Grade 1, Type 6, Function 02)	626 ANSI	

1	EA	ELEC PANIC HARDWARE	QEL+-3349A-NL-386 (Grade 1, Type 6, Function 03)	626	ANSI	
1	EA	RIM CYLINDER	BLDG STANDARD	626		
2	EA	OH STOP	100S (C01541)	630	ANSI	
2	EA	SURFACE CLOSER	4040XP EDA (C02021 PT-4A, PT-4C, PT-4D, PT-4H)	689	ANSI	
1	EA	MOUNTING PLATE	4040XP-18	689	LCN	
1	EA	CUSH SHOE SUPPORT	4040XP-30	689	LCN	
1	EA	BLADE STOP SPACER	4040XP-61	689	LCN	
1	EA	THRESHOLD	425 MS/LA (J32130)		AL	NGP
1	EA	POWER SUPPLY	PS902 LGR	SCE		
1	EA	ACCESS CONTROL	WORK BY DIVISION	28		

Doors require special 3/8 inch undercut for ADA type threshold.
Perimeter weather, meeting style and door sweep seals supplied by Aluminum Section.

Description of Operation:

Presenting valid credential to reader will retract latches for access.
Emergency access by mechanical key override.
Free egress at all times.

Hardware Group No. 10

Provide each SL door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr
EA	AUTO OPERATOR	SUPPLIED UNDER SECTION	084229	
	HARDWARE BY DOOR / FRAME MANUFACTURER			

Hardware Group No. 11

Provide each SGL door(s) with the following:

Qty	Description	Catalog Number	Finish	Mfr	
3	EA	HW HINGE	5BB1HW 5 X 4.5 (A8111)	652	ANSI
1	EA	STOREROOM LOCK	L9080L 03A (F07)	626	ANSI

1	EA	MORT. CYLINDER	BLDG STANDARD	626	
1	EA	ELECTRIC STRIKE	6210 FSE (E59321)	630	ANSI
1	EA	AUTO OPERATOR	SUPPLIED UNDER SECTION 084229		
1	EA	WALL STOP	WS407CVX (L52101)	630	ANSI
3	EA	SILENCER	SR64 (L03011)	GRY	ANSI
1	EA	POWER SUPPLY	PS902	900-4RL	LGR SCE
1	EA	ACCESS CONTROL	WORK BY DIVISION 28		

Description of Operation:

Presenting valid credential to reader will release electric strike for access and turn on the exterior ADA actuator. Card access from corridor 106.

Interior ADA actuator is always active.

Emergency access by mechanical key override.

Free egress at all times.

Hardware Group No. 12

Provide each SGL door(s) with the following:

Qty		Description	Catalog Number	Finish	Mfr
3	EA	HW HINGE	5BB1HW 5 X 4.5	NRP (A8111)	652 ANSI
1	EA	POWER TRANSFER	EPT10 689	VON	
1	EA	ELEC FIRE EXIT HARDWARE	RX-QEL+-99-L-F-996-03	(Grade 1, Type 1, Function 08) 626 ANSI	
1	EA	RIM CYLINDER	BLDG STANDARD	626	
1	EA	OH STOP	100S (C01541)	630	ANSI
1	EA	AUTO OPERATOR	SUPPLIED UNDER SECTION 084229		
3	EA	SILENCER	SR64 (L03011)	GRY	ANSI
1	EA	POWER SUPPLY	PS914	900-4RL-FA	LGR VON

Description of Operation:

Presenting valid credential to reader will retract latch and turn on exterior ADA actuator for access.

Free egress at all times.

Lebanon VA Medical Center
Lebanon, PA

New Front Entrance Building 1
595-11-125

- - E N D - - -

Lebanon VA Medical Center
Lebanon, PA

New Front Entrance Building 1
595-11-125