

## 08 71 00 – Door Hardware

### 1. General

- A. Furnish all finish hardware for all wood and hollow metal doors; also all hardware as specified herein and in the hardware sets. Hardware shall be furnished with all fasteners as required.
- B. Submittals
  - 1. Product Data: Manufacturer's technical data for each item of finish hardware. Data should include any information necessary to show compliance with requirements.
  - 2. Hardware schedule: Submit final hardware schedule in manner indicated below. Coordinate hardware with doors, frames and related work to ensure proper size, thickness, hand, function and finish of hardware.
    - a. Final hardware schedule content: Based on finish hardware indicated, organize hardware schedule with "hardware sets" indicating complete designation of every item required for each door or opening. Includes the following information:
      - 1) Type, style, function, size and finish of each hardware item
      - 2) Name and manufacturer of each item
      - 3) Fastenings and other pertinent information
      - 4) Location of hardware set cross-referenced to indications on drawings both on floor plans and in door and frame schedule
      - 5) Explanation of all abbreviations, symbols, codes etc., contained in schedule
      - 6) Mounting locations
      - 7) Door and frame sizes and material
      - 8) Key information
      - 9) Format as published by DHI
      - 10) Vertical scheduling format only
    - b. Submittal Sequence: Submit schedule at earliest possible date. Particular acceptance of hardware schedule must precede fabrication of other work (e.g. hollow metal frames) which is critical in the project dates and other information essential to the coordinated review of hardware schedule.

- c. Keying Schedule: Submit detailed schedule indicating clearly how the Owner's final instructions of keying of locks has been fulfilled.
  3. Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factory prepared for the installation of hardware.
- C. Quality Assurance
1. Manufacturers and model numbers listed are to establish a standard of quality. Similar items by approved manufacturers as listed will be accepted except where items are listed – **No substitutions.**
  2. Supplier Qualifications:
    - a. Contractor shall select only a supplier who has in his employ qualified Architectural hardware consultants, who shall manage and coordinate the complete hardware contract. This Consultant shall also be available to visit the job in order to solve or correct any condition affecting proper hardware installation or adjustment as required. Supplier shall be an authorized Yale contract distributor and be within 150 miles of the jobsite.
  3. The manufacturer's representative for the locking devices and closing devices must inspect and approve, in writing, the installation of their products. Hardware installed incorrectly must be reported to the Architect prior to the Architect's final punch list.
- D. Product Delivery, Storage and Handling
1. Tag each item or package separately with identification related to final hardware schedule and include basic installation with each item or package.
  2. Packaging of hardware is the responsibility of the supplier as material is received by hardware supplier from various manufacturers, sort and repackage in containers clearly marked with appropriate hardware schedule.
  3. Inventory hardware jointly with representative of hardware supplier and hardware installer until each is satisfied that the count is correct.
  4. Deliver individually packaged hardware items at the proper times to the proper locations (shop or project site) for installation.
  5. Provide secured storage for all hardware delivered to the project before it is field installed.
  6. Since certain door controls are not immediately replaceable, verification of their proper functioning needs to occur in field as soon as possible so that completion of the work will not be delayed by hardware losses, both before and after installation.

7. For projects requiring twelve (12) or fewer locks, the Duke Lock Shop will furnish cylinders and cores, to be installed by the Contractor. For projects requiring more than twelve (12) locks, the Contractor will furnish and install approved lock cylinders and cores.

## 2. Products

### A. Scheduled Hardware

1. Requirements for design, grade, function, finish size and other distinctive qualities of each type of finish hardware are indicated in the finish hardware data sheet and hardware schedule at the end of this section. Products are identified by using hardware designation numbers of the following:
  - a. Manufacturer's product designations: One or more manufacturers are listed for each hardware type required. An asterisk (\*) denotes the preferred manufacturer, whose product designation are used in the hardware schedule. Provide the specified product by the preferred manufacturer, as listed in the schedule. If substitution is necessary, provide an equivalent product by an alternate manufacturer listed in the schedule and approved by the Owner. All hardware must meet Duke Standards as defined in the Design Guidelines.

### B. Materials and Fabrications

#### 1. General

- a. Hand of Door: Drawings show direction of slide, swing or hand of each door leaf. Furnish each item of hardware for proper installation and operation of door movement as shown.
- b. Manufacturer's name plate: Do not use manufacturer's products which have manufacturer's name or trade name displayed in a visible location (omit removable name plates), except in conjunction with required "UL" labels and as otherwise acceptable to Architect.
  - 1) Manufacturer's identification will be permitted on rim of cylinders only.
- c. Base metals: Produce hardware units of basic metal and forming method indicated, using manufacturers standard metal alloy, composition temper and hardness, but in no case of lesser, (commercially) recognized quality than specified for applicable hardware units by applicable, ANSI 1156 series standard for finish designations indicated. Do not furnish "optional" materials or forming methods for those indicated, except otherwise specified.
- d. Fasteners: Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation. Do not provide hardware

which has been prepared for self-tapping sheet metal screws, except as specifically indicated.

- e. Furnish screws for installation with each hardware item. Provide phillips flat-head screws to match hardware finish or if exposed in surfaces of other work, to match finish or such other work as closely as possible, including "prepared for painting" in surfaces to receive painted finish.
- f. Provide concealed fasteners for hardware units which are exposed when door is closed, except to extent no standard units of type specified are available with concealed fasteners. Do not use thru-bolts for installation where bolt head or 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.
- g. Tools and maintenance instructions for maintenance: Furnish a complete set of specialized tools and maintenance instructions as needed for Owner's continued adjustment, maintenance and removal and replacement of finish hardware.

#### C. Hinges, Butts and Pivots:

- 1. Templates: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- 2. Screws: Furnish phillips type, flat-head or machine screws for installation of units, except furnish phillips type, flat-head or wood screws for installation of units, into wood. Furnish screws heads to match surface of hinges or pivots.
- 3. Hinge pins: Except as otherwise indicated, provide hinge pins as follows:
  - a. Steel Hinges: Steel pins.
  - b. Non-ferrous hinges: Stainless steel pins.
  - c. Exterior doors: Non-removable pins.
  - d. Out-swing corridor doors: Non-removable pins.
  - e. Interior doors: Non-rising pins.
  - f. Tips: Flat button and matching plug, finished to match leaves, except where hospital top (HT) indicated.
  - g. Number of hinges: Provide a number of hinges indicated but not less than 3 hinges for door leaf for doors 90 inches or less in height and one additional hinge for each 30 inches of additional height.

#### D. Lock Cylinders and Keying

1. Locks and cylinders to be keyed as currently directed by Mr. Barry Clark, AHC - Key Shop - Duke University.
2. Cylinder to be Best 7-pin as required. Finish as indicated in hardware sets. **No substitutions.**
3. All cylinders to be delivered to Duke University, Key Shop, Attention: Mr. Barry Clark, AHC.
4. Factory masters and grandmaster keys permanent cylinders to existing system as directed by Owner.
  - a. Provide two change keys for each cylinder and number of master and grandmaster keys as directed by Owner.
  - b. Permanently inscribe each key with number of lock that identifies cylinder manufacturer key symbol, and notations "Duke University" and "Do Not Duplicate".

#### E. Locksets, Latchsets and Deadbolts

1. Provide 2 3/4 inch backsets with mechanical 3/4 inch throw antifriction latchbolt, equipped with hardened tailpieces for extra strength. Provide dead bolts with 1 inch throw and hardened steel inserts.
2. Provide completely reversible locks and latches to permit rearrangement of parts for easy conversion of lock from one function to another.
3. Provide strikes with extended lips where required to protect trim from being marred by latchbolt. Provide strike lips which do not project more than 1/8 inch beyond door-frame trim at single doors and have 7/8 inch lib to center at pairs of 1 3/4 inch thick doors. Furnish wrought box strikes on all locks and latches.
4. Provide only Yale 8800FL series with CRR trim as scheduled. Finish will be 26D as scheduled. **No substitutions.**

#### F. Closers and Door Control Devices

1. Size of Unit: 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.
  - a. Where parallel arms are indicated for closers, provide closer unit one size larger than recommended for use with standard arms.
  - b. Provide parallel arms for all overhead closers, except as otherwise indicated.

2. Access free manual closers: Where manual closers are indicated for doors required to be accessible to the physically handicapped, provide adjustable units complying with ANSE-A1171 provisions for door opening force and delayed action closing.
3. Combination door closers and holders: Provide units designed to hold door in open position under normal usage and to release and automatically close door under fire conditions. Incorporate an integral electromagnetic holder mechanism designed for use with UL listed fire detectors, provided with normally closed switching contacts.
  - a. Provide integral smoke detector device in combination door closers and holders complying with UL 228.
4. Closers to be Yale 4400 series or 4200 series. **No substitutions.**

#### G. Exit Devices

1. To be Von Duprin 99 series. **No substitutions.**
2. Finish, function, size per hardware sets.

#### H. Electric Strikes

1. Provide only "Von Duprin" electric strikes except where "Folger Adams" is scheduled. **No substitutions.**
2. Coordinate voltage requirements with electrical work.

#### I. Door Trim Units

1. Fasteners: Provide manufacturer's standard exposed fasteners for door trim units (kickplates, edge trim, viewers, knockers, mail drops, and similar units) either machine screws or self-tapping screws.
2. Fabricate protection plates (armour, kick or mop) not more than 2 inches less than door width on stop side and not more than 1/2 inch less than door width on pull side, times the height indicated.
  - a. Metal Plates: stainless steel, 0.050 inch (U.S. 16 gauge)

#### J. Finishes

1. Provide finishes as scheduled, matching samples submitted to and accepted by Architect and generally as follows:
  - a. US26D: Hinges (except as otherwise indicated) locksets, latch sets, cylinders, flush bolts, O.H. stops (except as otherwise indicated), electric strikes.
  - b. US32D: Push/pull sets push plated. Pulls, kickplate, key switches, wall bumpers.

- c. Painted: Door closers (except as otherwise indicated), electromagentic door releases.
- d. Mill finish aluminum: Weather seals, sound seals, astragal seals, thresholds, automatic door bottoms, magnetic catches.
- e. Satin aluminum/clear anodized: Electromagnetic locks.

### 3. Execution

#### A. Installation

1. Mount hardware units at heights indicated as per “recommended locations for builders hardware for standard steel doors and frames” by the door and hardware institute, except as specifically indicated or required to comply with governing regulations and except as may be otherwise directed by Architect.
2. Install each hardware item in compliance with the manufacturer’s instructions and recommendations wherever cutting and fitting is required to install hardware onto or into surfaces which are later to be painted or finished in another way. Coordinate removal, storage and reinstallation or application of surface protections with finishing work specified in the Division 9 sections. Do not install surface mounted items until finishes have been completed on the substrate.
3. Set units level, plumb and true to line and location. Adjust and reinforce the attachment substrate as necessary for proper installation and operation.
4. Drill and countersink units that are not factory-prepared for anchored fasteners. Space fasteners anchors in accordance with industry standards.

#### B. Adjust and Clean

1. Adjust and check each operating item of hardware and each door, to ensure proper operation or function of every unit. Replace units which cannot be adjusted to operate freely and smoothly.
2. Clean adjacent surfaces soiled by hardware installation.
3. Final adjustment: Whenever installation occurs more than one month prior to acceptance or occupancy of space or area, installer will return to the job site during the week prior to acceptance 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.
4. Instruct Owner’s personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

5. Continued maintenance service.
  - a. Approximately six months after Owner acceptance of the project, the installer and hardware manufacturer's representative must return to inspect all doors and hardware and adjust as necessary any doors and/or hardware that require service. At this time, the installer and manufacturer must replace any hardware that has deteriorated or failed due to faulty design, materials or installation. The installer and the manufacturer will jointly prepare a written report of current and foreseeable hardware performance problems.
4. Hardware Schedule (example on following pages)
  - A. Hardware Groups
    1. The General Contractor or Construction Manager, along with the supplier, will review drawings and specifications to determine extent of finish hardware required for completion of the work. Provide additional hardware as required whether or not listed under typical sets. Use finish hardware suitable for service required and of same quality as other hardware for similar service where additional hardware is required.
    2. The supplier will provide the correct size and type of hardware to meet the functional requirements of the project.
    3. The supplier will provide a final, detailed hardware schedule for the purposes of as-built documentation.
    4. The following hardware sets are listed by number in the door schedule.



**DOOR HARDWARE SCHEDULE**  
for  
**DUKE OUTPATIENT CLINICS AND URGENT CARE AT KNIGHTDALE**

**ABBREVIATIONS:**

SNB	SEX NUT & BOLT
RH	RIGHT HAND
LH	LEFT HAND
RHR	RIGHT HAND REVERSE
LHR	LEFT HAND REVERSE
RHRA	RIGHT HAND REVERSE ACTIVE
LHRA	LEFT HAND REVERSE ACTIVE
BA	BOTH ACTIVE
DA	DOUBLE ACTING

**MANUFACTURERS:**

A	ADAMS RITE	NG	NATIONAL GUARD
ASI	AMERICAN SPECIALTIES, INC.	P	PEMKO
B	BALDWIN	PBB	PBB, INC.
BE	BEST	PDQ	PDQ INDUSTRIES
BK	BOBRICK	PO	POTTER ROEMER
BO	BOMMER INDUSTRIES	PR	PRECISION HARDWARE
BR	BRADLEY	R	RIXSON
C	CORBIN	RO	ROCKWOOD
CU	CUTLER	RU	RUSSWIN
D	DETEX	S	SCHLAGE
F	FALCON	SA	SARGENT
FA	FOLGER ADAM	SE	SEACHROME
G	GRANT	SI	SIMPLEX
GJ	GLYNN-JOHNSON	ST	STANLEY
H	HAGER	TA	TAYMOR
HA	HARLOC	T	TELKEE
I	IVES	TR	TRIMCO
L	LOCKNETICS	V	VON DUPRIN
LCN	LCN CLOSERS	Y	YALE
LG	LATCHGUARD	X	BY OTHERS
LU	LUND		
M	MEDECO		
MC	MCKINNEY		
MK	MARKAR		
N	NORTON		

**Hardware Set 1**

Doors: 1000

Each to Receive:

2.00	EA	CONT. HINGE	FM300 x EPT x 95"	32D	MARKAR PRODUCTS, INC.
2.00	EA	ELECT S/V EXIT	EL3327A-NL-OP	US26D	VON DUPRIN INC.
2.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
2.00	EA	PULL	BF158 X 12"	US28	ROCKWOOD
2.00		POWER SUPPLY	PS873 X 871-2		VON DUPRIN INC.
2.00	EA	PWF TRANSFER	EPT 10	SP28	VON DUPRIN INC. BY
2.00	EA	AUTO OPERATORS	BY OTHERS	AL	OTHERS

WEATHERSTRIPPING &amp; THRESHOLD BY OTHERS

**Hardware Set 2**

Doors: 1001T, 1002T, 2001T, 2002T

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PUSH PLATE	70C	32D	ROCKWOOD
1.00	EA	PULL PLATE	106 X 70C	32D	ROCKWOOD
1.00	EA	CLOSER	4400	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 3**

Doors: 1002STWA

Each to Receive:

EA	CONT. HINGE	FM300 X 83"	32D	MARKAR PRODUCTS, INC.	
1.00	EA	ELECT RIM EXIT	33A-NL-OP x 36"	US26D	VON DUPRIN INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	CLOSER	UNI4400BF	689	YALE INC.

WEATHERSTRIPPING &amp; THRESHOLD BY OTHERS

**Hardware Set 4**

Doors: 1002STWB

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	RIM EXIT	99L F 996L R V	US26D	VON DUPRIN INC.
1.00	EA	RIM CYLINDER	1E72 X PREM	626	BEST LOCK CORP
1.00	EA	CLOSER	4400	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
1.00	SET	DOOR SEAL	5020B HEAD & JAMB	BR	NATIONAL GUARD

**Hardware Set 5**

Doors: 1004MR, 1004MRA

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	STOREROOM	CRR8805FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	CLOSER W/STOP	4420	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 6**

Doors: 1005, 1102, 1103, 1104, 1107A, 1109, 1135, 1209, 1212, 1216, 1226, 1231A, 1237, 1238, 1244, 1250, 2101, 2102, 2104, 2112, 2118, 2120, 2132, 2134, 2137, 2140, 2200CORB, 2201, 2203, 2205, 2207, 2217, 2219, 2234, 2244, 2246, 2247, 2249

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	ENTRANCE	CRR8807FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 7**

Doors: 1100, 1200, 2100, 2200

Each to Receive:

6.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
2.00	EA	MANUAL FB	555 X 12"	26D	ROCKWOOD
1.00	EA	DP STRIKE	570	26D	ROCKWOOD
1.00	EA	ENTRANCE	CRR8807FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
2.00	EA	OVERHEAD HOLDER	GJ-450H	26D	GLYNN-JOHNSON CO.
2.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 8**

Doors: 1100A, 1120, 1121, 1200B, 2100A, 2200A

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	ENTRANCE	CRR8807FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	OH STOPS	GJ-450S	32D	GLYNN-JOHNSON CO.
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 9**

Doors: 1100CORA, 1200CORB, 2100CORA, 2200CORA

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
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1.00	EA	STOREROOM	CRR8805FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM 310 X 2-3/4 X LCBMA X 24VDC X FAIL	626	BEST LOCK CORP
1.00	EA	ELECTRIC STRIKE	SAFE	32D	FOLGER-ADAMS
1.00	EA	CLOSER	4400	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.
1.00	EA	PUSH BUTTON	FAPB4N		FOLGER-ADAMS
1.00	EA	CYPHER LOCK	MODEL S X A8 - COMBO LOCK		CONTINENTAL

### **Hardware Set 9A**

Doors: 1100CORB, 1200CORA

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	STOREROOM	CRR8805FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM 310 X 2-3/4 X LCBMA X 24VDC X FAIL	626	BEST LOCK CORP
1.00	EA	ELECTRIC STRIKE	SAFE	32D	FOLGER-ADAMS
1.00	EA	CLOSER	4400	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.
1.00	EA	CYPHER LOCK	MODEL S X A8 - COMBO LOCK		CONTINENTAL

### **Hardware Set 10**

Doors: 1105T, 1111T, 1205T, 1216T, 1219T, 1221T, 1227T1, 1229T2, 1253T, 2154T

Each to Receive:

1.00	EA	DA PIVOTS	128 - 3/4	26D	RIXSON-FIREMARK
1.00	EA	PRIVACY LOCK	CRR8802FL	626	YALE INC.
1.00	EA	WALL STOP	409	32D	ROCKWOOD
2.00	EA	DOOR SEAL	OV634A-84"	AL	NATIONAL GUARD
1.00	EA	EMERGENCY STOP	ES-1	26D	STANLEY WORKS
1.00	EA	DBL LIP STRIKE	DLS-2	26D	STANLEY WORKS

### **Hardware Set 11**

Doors: 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1124, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1204, 1206, 1208, 1210, 1214, 2254, 2256, 2258, 2260

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PASSAGE	CRR8801FL	626	YALE INC.
1.00	EA	OH STOPS	GJ-450S	32D	GLYNN-JOHNSON CO.
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 12**

Doors: 1123T, 2157T1, 2157T3, 2218T1, 2218T2

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PRIVACY LOCK	CRR8802FL	626	YALE INC.
1.00	EA	CLOSER	4400-DL	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD

**Hardware Set 13**

Doors: 1133, 1202, 1225, 1228, 1231, 1249A, 1249B, 1249E, 1249F, 2117, 2135A, 2135B, 2141, 2143, 2146, 2148, 2149, 2150, 2151, 2152, 2208A, 2212, 2216, 2227, 2229, 2231, 2251, 2252, 2255, 2264

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PASSAGE	CRR8801FL	626	YALE INC.
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 14**

Doors: 1134, 2122, 2144, 2200CORC, 2210, 2233, 2241A

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	STOREROOM	CRR8805FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	ELECTRIC STRIKE	310 x 2-3/4 x LCBMA x 24VDC	32D	FOLGER-ADAMS
1.00	EA	CLOSER	4400	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	FLOOR STOP	440	26D	ROCKWOOD
1.00	EA	CYPHER LOCK	MODEL S X A8 - COMBO LOCK		CONTINENTAL

**Hardware Set 15**

Doors: 1200A

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PASSAGE	CRR8801FL	626	YALE INC.
1.00	EA	OH STOPS	GJ-450S	32D	GLYNN-JOHNSON CO.
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 16**

Doors: 1200CORC

Each to Receive:

2.00	EA	CONT. HINGE	FM300 x 83" X EPT PREP	32D	MARKAR PRODUCTS, INC.
2.00	EA	ELECT S/V EXIT	EL3327A-NL-OP	US26D	VON DUPRIN INC.

2.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
2.00	EA	PULL	BF158 X 12"	US28	ROCKWOOD
2.00		POWER SUPPLY	PS873 X 871-2		VON DUPRIN INC.
2.00	EA	AUTO OPERATORS	BY OTHERS	AL	BY OTHERS

WEATHERSTRIPPING & THRESHOLD BY OTHERS

### **Hardware Set 17**

Doors: 1200CORD

Each to Receive:

1.00	EA	CONT. HINGE	FM300 X 83"	32D	MARKAR PRODUCTS, INC.
1.00	EA	ELECT RIM EXIT	33A-NL-OP x 36"	US26D	VON DUPRIN INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	ELEC STRIKE	6111 x DS (24VDC)	US32D	VON DUPRIN INC.
1.00	EA	PULL	BF158 X 12"	US28	ROCKWOOD BY OTHERS
1.00	EA	AUTO OPERATORS	BY OTHERS	AL	OTHERS

WEATHERSTRIPPING AND THRESHOLD BY OTHERS

### **Hardware Set 18**

Doors: 1200CORE, 1200CORF, 2100CORB

Each to Receive:

EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER	
1.00	EA	ENTRANCE	CRR8807FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	CLOSER	4410	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
1.00	EA	LATCHGUARD	182	32D	IVES

### **Hardware Set 20**

Doors: 1219A, 2115T, 2129T, 2206T

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PRIVACY LOCK	CRR8802FL	626	YALE INC.
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

### **Hardware Set 21**

Doors: 1219B, 1221A, 1223MR, 1234MR, 1236MR, 2248MR, 2250MR

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	STOREROOM	CRR8805FL x LC	626	YALE INC.
1.00	EA	MORT CYLINDER	1E74 X PREM	626	BEST LOCK CORP
1.00	EA	CLOSER	4400	689	YALE INC.

1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
1.00	SET	DOOR SEAL	5020B HEAD & JAMB	BR	NATIONAL GUARD

**Hardware Set 21A**

Doors: 1219C, 1221B, 1249C, 1249D

Each to Receive:

3.00	EA	FULL MORT HINGE	BB1168 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	PRIVACY LOCK	CRR8802FL	626	YALE INC.
1.00	EA	WALL STOP	409	32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 22**

Doors: 1235

Each to Receive:

6.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
2.00	EA	MANUAL FB	555 X 12"	26D	ROCKWOOD
1.00	EA	DP STRIKE	570	26D	ROCKWOOD
1.00	EA	ENTRANCE	CRR8807FL x LC	626	YALE INC.
2.00	EA	WALL STOP	409	32D	ROCKWOOD
2.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 23**

Doors: 1255, 1257

Each to Receive:

3.00	EA	FULL MORT HINGE	BB1168 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	HOSP. LATCH	HL-6 X 5" X ASA	26D	GLYNN-JOHNSON CO.
1.00	EA	OVERHEAD STOP	GJ-906S	26D	GLYNN-JOHNSON CO.
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

**Hardware Set 24**

Doors: 2002STW

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
1.00	EA	RIM EXIT	99L F BE X 996L-F-BE	26D	VON DUPRIN INC.
1.00	EA	CLOSER	4400	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
1.00	EA	WALL STOP	409	32D	ROCKWOOD
1.00	SET	DOOR SEAL	5020B HEAD & JAMB	BR	NATIONAL GUARD

**Hardware Set 25**

Doors: 2157T2

Each to Receive:

3.00	EA	HINGES	BB1279 4 1/2" X 4 1/2"	US26D	HAGER
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1.00	EA	PRIVACY LOCK	CRR8802FL	626	YALE INC.
1.00	EA	CLOSER W/STOP	4420	689	YALE INC.
1.00	EA	KICKPLATE	.050 10" X 2" LDW	US32D	ROCKWOOD
3.00	EA	DOOR SILENCERS	GJ-64		GLYNN-JOHNSON CO.

### **Hardware Set 26**

Doors: 2221

Each to Receive:

1.00	EA	HOOK BOLT	MS1850S-050	628	ADAMS RITE MFG. CO.
1.00	EA	MORT CYLINDER BIFOLD	1E74 X PREM	626	BEST LOCK CORP
1.00	SET	SET	BFC125N-00-36		STANLEY WORKS