

## SECTION 08 70 00 - HARDWARE

### PART 1 - GENERAL

#### 1.01 DESCRIPTION

- A. The extent of finish hardware required is shown on drawings and schedules.
- B. Types of required hardware:
  - Butt Hinges
  - Door Pulls and Push Plates
  - Locks, Latch Sets and Rim Cylinders
  - Keyless Combination Lock
  - Vertical Rod Assembly
  - Security/Panic Bar
  - Closers
  - Wall and Floor Bumpers
  - Silencers
  - Thresholds, Sweeps and Weather-stripping
  - One-Way Viewer
  - Door Protection and Kick Plates

#### 1.02 QUALITY ASSURANCE

- A. Obtain each type of hardware from a single manufacturer.
- B. Hardware supplier shall have warehousing facilities and shall have been furnishing finish hardware for not less than three years.
- C. Fire-Rated Openings: Provide hardware complying with NFPA 80 and local codes and ordinances. Furnish units with "UL" or "FM" labels as required.
- D. Accessibility: Provide hardware complying with the requirements of the "Americans With Disabilities Act".
- E. Discrepancies: Furnish proper types, finishes, fasteners, and quantities based on codes, requirements, etc. in effect at time of installation.

#### 1.03 SUBMITTALS

- A. Hardware Schedule: Final hardware schedule fully coordinated with other work, frames and operation.  
  
Indicate type, style, function, finish, fastening location and manufacturer for each hardware item.
- B. Templates: Furnish templates to each fabricator of doors, frames, and work factory prepared to receive hardware.

### PART II - PRODUCTS

#### 2.01 SCHEDULED HARDWARE

- A. Requirements for design, grade, function, finish, size, etc. are indicated on the criteria drawings.

- B. Manufacturers; Provide hardware from manufacturers listed in the schedule (on drawings) or the comparable products of the alternate manufacturers listed below;

Item:	Alternate Manufacturers:
Butt Hinges;	Hager, McKinney
Door Pulls & Push Plates;	Hager, Rockwood
Lock Sets, Latch Sets	Arrow, Sargent, Yale
Rim Cylinders;	
Keyless Combination Locks;	None
Alarm Locks;	None
Vertical Rod Assemblies;	None
Security/Panic Bar;	None
Closers;	LCN, Yale, Sargent
Wall/Floor Bumpers;	Hager, Rockwood
Silencers;	Hager, Rockwood
Thresholds, Sweeps;	National Guard, Pemko
Weather-stripping;	Pemko, Reese, Zero
One-Way Viewer;	Rockwood, Stanley
Door Protection & Kick Plates;	Hager

## 2.02 MATERIALS & FABRICATION

- A. Hand of Door; Drawings show swing of each door leaf. Furnish each hardware item for proper installation and operation of door movement.
- B. Manufacturers Nameplates; Shall not be visible except for required UL labels.
- C. Fasteners: Conform to templates, prepared for machine screw installation. Provide Phillips flat-head screws (unless noted otherwise), finish to match hardware. Provide concealed fasteners when available. Do not use exposed thru-bolts (unless noted otherwise). Thru-bolts allowed at Sur-Lock and Securitech hardware.

## 2.03 HINGES

- A. Screws: Phillips flat-head machine screws except furnish Phillips flat-head wood screws for installation into wood. Screw finish to match hinge.
- B. Hinge Pins: Exterior doors, non-removable pins with security studs. All other interior doors, non-rising pins (unless noted otherwise).

## 2.04 LOCK CYLINDERS & KEYING

- A. Keying: Locks shall not be master keyed. Provide keying as indicated on the hardware schedule on sheet A-610.

## 2.05 LOCKS, LATCHES, BOLTS

- 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 5/8" minimum. Comply with UL for rated doors.

2.06 PUSH/PULL UNITS

- A. Provide manufacturers standard exposed fasteners.

2.07 CLOSERS

- A. Comply with manufacturer's recommendations for closer size, door size, exposure and use. Thru-bolt fasteners shall be used only at interior wood doors.
- B. Access-free doors: Where installation must be handicapped accessible, comply with A.D.A. regarding opening force and delayed action.

2.08 DOOR TRIM UNITS

- A. Protection Plates and Kick Plates; Stainless steel (US 32D finish), 20 ga., fabricated to dimensions indicated on Criteria Drawings. Provide protection plates with overlapping wrap around door edges.

Mount with manufacturer's standard exposed fasteners.

2.09 WEATHERSTRIPPING

- A. Jambs and heads: Continuous extruded aluminum walls and flanges with bumper type, replaceable, flexible bulb/loop vinyl insert.
- B. Door sweep: Extruded aluminum with loop type replaceable rubber insert.

2.10 SECURITY BAR

- A. See drawings for model numbers. For Sur-Lock, contact Locknet, Michelle Cooper (800-887-4307 ext. 123). For Securitech, contact Marc Kapelus at Kaploss Security (800-548-7486).

PART III - EXECUTION

3.01 INSTALLATION

- A. Mounting height for devices required for accessible door passage, including, but not limited to lever handles, knobs, pushplates, pull handles, alarm locks, cylinder locks etc. shall not exceed 48" above finish floor (a.f.f.) or as required to comply with Americans With Disabilities Act. Unless required otherwise by code, mount hardware as noted below.
  - 1. 40 5/16" a.f.f. to centerline of strike for latches, locks, knobs, levers, cross bar exit devices.
  - 2. 42" a.f.f. to centerline of door pulls.
  - 3. 45" a.f.f. to centerline of dead bolts, push plates.
- B. Set units plumb, true to line and location, attached as required for proper operation.
- C. Set thresholds for exterior doors in a full bed of butyl rubber or polyisobutylene sealant.

3.02 ADJUST AND CLEAN

- A. Replace units which cannot be adjusted for proper operation.
- B. Final adjustment must occur within one week of occupancy by tenant.

END OF SECTION