SECTION 087100

DOOR HARDWARE

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

***NOTE TO SPECIFIER***

*Use this Specification Section for Mail Processing Facilities.*

***This is a Type 2 Specification with primarily editable text; therefore, most of the text can be edited, but there is some required text which is noted within the Section with a “Note to Specifier.” Do not revise these paragraphs without an approved Deviation from USPS Headquarters, Facilities Program Management, through the USPS Project Manager.***

*For Design/Build projects, do not delete the Notes to Specifier in this Section so that they may be available to Design/Build entity when preparing the Construction Documents.*

*For the Design/Build entity, this specification is intended as a guide for the Architect/Engineer preparing the Construction Documents.*

*The MPF specifications may also be used for Design/Bid/Build projects. In either case, it is the responsibility of the design professional to edit the Specifications Sections as appropriate for the project.*

*Text shown in brackets must be modified as needed for project specific requirements.* *See the “Using the USPS Guide Specifications” document in Folder C for more information.*

*The last date that USPS revised this standard specification section occurs in two places, at the end of this section and in the Table of Contents. If the date in this section matches the date in the Table of Contents, then you are using the latest version. Do not delete or revise the “last revised” date at the end of the section during the development of the Project Manual.*

*The footer in this section should be edited to replace the text, “USPS MPF SPECIFICATION” with the project name, and the blank date in the center should be replaced with the submission date, for interim design reviews, or the issue date of the completed Project Manual.*

*Evaluation of the type of door and hardware to be specified for each door is to be based on the door’s use and frequency. Sets may be added as required for additional doors.*

*COORDINATE THE HARDWARE SET NUMBERS WITH THE DOOR NUMBERING SYSTEM ON THE FLOOR PLAN AND DOOR SCHEDULE.*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

GENERAL

1.1 SUMMARY

A Section Includes:

1. Finish Hardware items which are required for swing, sliding and folding doors, except special types of unique and non‑matching hardware specified in the same section as the door and door frame.

2. Hinges.

3. Locks and latches.

4. Operating trim.

5. Accessories for pairs of doors and exit devices.

6. Closing devices.

7. Door controls.

8. Stops and holders.

9. Miscellaneous hardware.

B Related Sections:

1. Section 083613 - Sectional Doors.

2. Section 084113 - Aluminum-Framed Entrances and Storefronts: Hardware for same, and coordination.

3. Section 084229 - Automatic Entrances.

4. Section 016000 - Product Requirements.

5. Section 281304 – Enterprise Physical Access Control System

1.2 REFERENCES

1. American National Standards Institute (ANSI);
2. ANSI A156.3 - National Standard for Exit devices.
3. ANSI A156.4 - National Standard for Door Controls - Closers.
4. ANSI A156.6 - National Standard for Architectural Door Trim.
5. ANSI A156.13 - National Standard for Mortise Locks & Latches.
6. National Fire Protection Association (NFPA):
7. NFPA 80 - Fire Doors and Windows.
8. NFPA 101 - Code for Safety to Life from Fire in Buildings and Structures.
9. NFPA 252 - Fire Tests of Door Assemblies.
10. Underwriters Laboratories (UL):
11. UL 10B - Fire Tests of Door Assemblies.
12. UL 305 - Panic Hardware.

1.3 SUBMITTALS

1. Section 013300 - Submittal Procedures: Procedures for submittals.
2. Product Data: Submit manufacturers' technical product data for each item of hardware. Include whatever information may be necessary to show compliance with requirements and include instructions for installation and for maintenance of operating parts and finishes.
3. Hardware Schedule: Submit final hardware schedule in manner indicated below. Coordinate hardware with doors, frames, Enterprise Physical Access Control System, and related work to ensure proper size, thickness, hand, function, door control, and finish of hardware.
4. Final Hardware Schedule Content: Based on finish hardware indicated, organize hardware schedule into "hardware sets" indicating complete designations of every item required for each door or opening. Include the following information:
5. Type, style, function, size and finish of each hardware item.
6. Name and manufacturer of each item.
7. Fastenings and other pertinent information.
8. Location of hardware set cross‑referenced to indications on Drawings both on floor plans and in door and frame schedule.
9. Explanation of all abbreviations, symbols, codes, etc. contained in schedule.
10. Mounting locations for hardware.
11. Door and frame sizes and materials.
12. Keying information.
13. Submittal Sequence: Submit schedule at earliest possible date particularly where acceptance of hardware schedule must precede fabrication of other work (e.g., hollow metal frames) which is critical in the project construction schedule. Include with schedule the product data, samples, shop drawings of other work affected by finish hardware, and other information essential to the coordinated review of hardware schedule.
14. Samples: Prior to submittal of the final hardware schedule and prior to final ordering of finish hardware, submit one sample of each type of exposed hardware unit, as selected by the USPS Project Manager, finished as required, and tagged with full description for coordination with schedule.
15. Samples will be returned to the supplier. Units which are acceptable and remain undamaged through submittal, review and field comparison procedures may, after final check of operation, be used in the work, within limitations of keying coordination requirements.
16. Templates: Furnish hardware templates to each fabricator of doors, frames and other work to be factory‑prepared for the installation of hardware. Upon request, check shop drawings of such other work, to confirm that adequate provisions are made for proper location and installation of hardware.
17. Written Report: Before project acceptance and final inspection, the General Contractor shall provide a detailed written report shall be made to the USPS Project Manager covering application and condition of the Finish Hardware. A report shall be made for each door indicating what was installed, that it matches what was indicated in the door hardware schedule, that it was installed correctly and that it functions properly. The report shall be submitted to the CO with a copy to the COR (the project manager). The A/E or the project manager may choose to verify the report by verifying every door or a random number of them.

1.4 QUALITY ASSURANCE

1. Perform work in accordance with the following requirements:
2. ANSI A117.1
3. NFPA 101.
4. NFPA 80.
5. NFPA 252.
6. UL 10B.
7. UL 305.
8. Regulatory Requirements:
9. Conform to applicable code for requirements applicable to fire rated doors and frames.
10. Products Requiring Electrical Connection: Listed and classified by Underwriters’ Laboratories, Inc., and acceptable to the public authority as suitable for the purpose specified and indicated.
11. Conform to United States Postal Service “Standards for Facility Accessibility by the Physically Handicapped” Handbook RE-4 for mounting heights and locations of accessories.
12. Manufacturer: Obtain each type of hardware (latch and lock sets, hinges, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.
13. Supplier: A recognized architectural finish hardware supplier, with warehousing facilities, who has been furnishing hardware to similar projects for a period of not less than 2 years, and who employs an experienced architectural hardware consultant (AHC) who is available, at reasonable times during the course of the work, for consultation about projects’ hardware requirements.
14. Fire-Rated Openings: Provide hardware for fire-rated openings in compliance with NFPA Standard No. 80 and local building code requirements.

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

***NOTE TO SPECIFIER***

*\*\*Required: Do not revise PART 2 without a written deviation from USPS Headquarters, Facilities Program Management, through the USPS Project Manager.*

*Coordinate all products and hardware sets with the requirements of the Enterprise Physical Access Control System providing all components and products necessary for a fully functioning access control system. Refer to SDC Module 2, Chapter 5, Electrical and the MPF Hardware Guide.*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Within each Article in Part 2 hardware products from a few manufacturers are specified to establish a standard of quality and minimum functional requirements.

B. All items of a particular hardware category i.e. locksets, closers, hinges shall be of the same manufacturer.

C. Hardware Manufacturers:

1., Adams Rite / ASSA ABLOY, Phoenix, AZ, (800) 872-3267

2., Alarm Lock Systems, Amityville, NY, (800) 252-5625

4, Best Access Systems, Indianapolis, IN, (800) 311-1705

5., Corbin Russwin, Berlin, CT, (800) 543-3658

6., Detex Corporation, New Brannfels, TX, (800) 729-3839

7., Door Controls International, Dexter, MI, (800) 742-3634

8., Folger Adam Company, Lemont, IL, (800) 260-9001

9., Glynn Johnson, Indianapolis, IN, (877) 613-8766

10., Hager Companies, St. Louis, MO, (800) 255-3590

11., Hiawatha, Inc., Bloomington, MN, (800) 777-1686

12., H. B. Ives, Wallingford, CT, (888) 371-7331

13., Knape & Vogt Manufacturing Co., Grand Rapids, MI, (800) 253-1561

14., LCN Closers, Princeton, IL, (800) 526-2400

15., McKinney Hinge, Scranton, PA, (800) 346-7707

16., National Guard Products, Incorporated, Memphis, TN, (800) 647-7874

17., Norton, Charlotte, NC, (800) 393-1097,

18., Pemko, Ventura, CA, (800) 824-3018

19., Precision Hardware, Romulus, MI, (317) 849-2250

20., Reese Enterprises, Incorporated, Rosemount, MN, (800) 328-0953

21., Rixson-Firemark, Franklin Park, IL, (866) 474-9766

22., Rockwood Manufacturing, Rockwood, PA, (800) 458-2424

23., Sargent, New Haven, CT, (800) 727-5477

24., Sargent & Greenleaf, Nicholasville, KY, (800) 826-7652

25., Schlage, Colorado Springs, CO, (800) 847-1864

26., Securitech Group Incorporated, Maspeth, NY, (800) 622-5625

27., Simplex Access Controls, (800) 746-7539

28., Soss, Pioneer, OH, (800) 922-6957

29., Stanley, New Britain, CT, (877) 334-6791

30., Trimco, Los Angeles, CA, (323) 262-4191

31., Von Duprin, Indianapolis, IN, (317) 613-8302

32., Wooster Products Incorporated, Wooster, OH, (800) 321-4936

33., Yale, Charlotte, NC, (800) 438-1951

34., Zero International, Bronx, NY, (800) 635-5335

D. Section 016000 - Product Requirements: Unless noted otherwise, substitution of specified products with equivalent products from the above approved manufacturers is permitted in accordance with Product Options and Substitutions in Section 016000.

2.2 HINGES

A. Subject to compliance with requirements, provide hinges of one of the following manufacturers and as specified below:

1. Hager.

2. McKinney.

3. Stanley.

4. Soss.

B. Material:

1. For interior doors, provide full mortise type steel hinges with steel pins; non-rising for non-security exposure, flat button with matching plugs.

2. For exterior doors, provide full mortise type stainless steel hinges with stainless steel pins; non-removable, flat button with matching plugs.

3. Ball bearing Type: Swaged, inner leaf beveled, square corners.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

**NOTE TO SPECIFIER**

Finish Type Key below indicates ANSI A156.18 National Standard for Materials and Finishes used for hardware finished in this schedule.

**Finish Type Key:** **Nearest**

 **Former US**

**Code Description Basis Material Category Equivalent**

626 Satin Chromium, Plated Brass, Bronze A US 26D

628 Satin Aluminum, Clear Anodized Aluminum A US 28

629 Bright Stainless-Steel Stainless Steel, 300 Series A US 32

630 Satin Stainless-Steel Stainless Steel A US 32D

652 Satin Chromium Plated Steel E US 26D

689 Aluminum Painted Any E US 28

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

C. Hinges/pivots by types:

1. Type H-1: Medium weight door, average frequency, steel.

a. Hinge FBB179 4-1/2 x 4-1/2 652 Stanley

b. Hinge BB1279 4-1/2 x 4-1/2 652 Hager

c. Hinge TA2714 4-1/2 x 4-1/2 652 McKinney

2. Type H-2: Medium weight door, average frequency, steel, non-removable pins. Hinges on interior doors shall be satin chrome plated finish 652. Hinges on exterior doors shall be completely stainless-steel finish 630.

a. Hinge FBB179 4-1/2 x 4-1/2 NRP Stanley

b. Hinge BB1279 4-1/2 x 4-1/2 NRP Hager

c. Hinge TA2714 4-1/2 x 4-1/2 NRP McKinney

3. Type H-3: Concealed, medium weight door, average frequency, steel.

a. Hinge 216 626 Soss

b. Hinge MK80 626 McKinney

4. Type H-4: Medium weight door, average frequency, steel. (Continuous Piano hinge)

a. Hinge STS314 1/4 626 Stanley

5. Type H-5: Medium weight door, average frequency, steel, 5-inch high, non-removable pins. Hinges on interior doors shall be satin chrome plated finish 652. Hinges on exterior doors shall be completely stainless-steel finish 630.

a. Hinge FBB179 4-1/2 x 5 NRP Stanley

b. Hinge BB1279 4-1/2 x 5 NRP Hager

c. Hinge TA2714 4-1/2 x 5 NRP McKinney

2.3 LOCKS, LATCHES, AND BOLTS

A. Subject to compliance with requirements, provide locks, latches and bolts of one of the following manufacturers and as specified below:

1. Best.

2. Corbin Russwin.

3. Sargent.

4. Schlage.

5. Yale.

B. Materials:

1. Mortise Locks: ANSI A156.13, Grade 1, equipped with 6 pin tumbler. Provide 2 3/4-inch backset. Provide three keys per cylinder.

2. Latch Sets: ANSI/BHMA A156.2 Series 4000, Grade 1. Provide 2 ¾ inch backset. Provide three keys per cylinder.

3. Strikes: ANSI Strikes, 1-1/4 x 4-7/8 inches, with curved lip. Wrought box strikes, with extended lip for latch bolts, except open strike plates may be used in wood frames. Provide dustproof strikes for foot bolts.

4. Tactile Warning: Provide lever handles with manufacturer's standard tactile warning per handicapped codes when required by local authority.

C. Keying

1. General:

a. Incorporate a security system to ensure that keys used during construction do not open doors after United States Postal Service occupancy.

b. Key side of locks shall be on the public side.

c. Master and submaster key system shall conform to United States Postal Service criteria. Doors at exterior of facility, from public area to workroom, and Stamped Envelope Storage shall not be on the master/submaster keying schedule. Other areas, based on need or local preference, may be excluded from master/submaster keying schedule.

2. Construction Keying:

a. Furnish exterior door lock sets with keyed alike removable construction core cylinders for use during construction.

b. Restrict distribution of construction keys. Maintain record of persons who have received keys and deliver copies of record to USPS Project Manager upon request.

c. Provide permanent cores to Postmaster prior to substantial completion. Postmaster shall store them securely until needed. At substantial completion and at USPS Project Manager direction, remove construction cores and replace with permanent cores in presence of Project Manager. Provide keys to Project Manager and return construction cores to manufacturer.

3. Permanent Keying:

a. Master locks and cylinders are to match the United States Postal Service existing keying system if a system exists.

b. Master to open all doors, except entrance doors to facility, doors from public area to workroom, and Stamped Envelope Storage shall not be on any master key system.

D. Cylinders and Thumbturns by types:

1. Type B-1: Rim Cylinder.

a. Cylinder 1109 626 Yale

b. Cylinder 20-022 626 Schlage

c. Cylinder 3000-200 626 Corbin Russwin

2. Type B-2: Mortise Cylinder.

a. Cylinder 2153 w/ 1161 series cam 626 Yale

b. Cylinder 20-013 626 Schlage

c. Cylinder 1000-A03 626 Corbin Russwin

3. Type B-3: Cylinder Guard

a. Cylinder Guard MS4043 630 Adams Rite

E. Locks and Latches by types:

1. Type L-1 Hotel Lock (similar to ANSI F15)

a. AUR 8832FL w/security collar 626 Yale

b. ML2029 NSA w/security collar 626 Corbin Russwin

c. L9485P-06 w/security collar 626 Schlage

2. Type L-2 Classroom Lock (ANSI F84)

a. AU 5408LN 626 Yale

b. CL 3555 626 Corbin Russwin

c. ND70PD 626 Schlage

3. Type L-3 Entrance Lock (ANSI F20)

a. AUR 8847FL w/security collar 626 Yale

b. ML2067 w/ security collar 626 Corbin Russwin

c. L9453P-06A w/ security collar 626 Schlage

4. Type L-4 Storeroom Lock (ANSI F86)

a. AU 5405LN 626 Yale

b. CL3557 626 Corbin Russwin

c. ND80PD 626 Schlage

5. Type L-5 Privacy Lock (ANSI F76)

a. AU 5402LN 626 Yale

b. CL3520 626 Corbin Russwin

c. ND40S 626 Schlage

6. Type L-6 Closet Deadbolt (ANSI E2151)

a. D111 626 Yale

b. 470 626 Sargent

7. Type L-7 Passage

a. AU 5401LN (F75) 626 Yale

b. CL3510 626 Corbin Russwin

c. ND10S 626 Schlage

2.4 PUSH/PULL UNITS

A. Pulls and Pushes Manufacturers: Subject to compliance with requirements, provide from one of the following manufacturers as specified below.

1. H. B. Ives.

2. Trimco.

3. Rockwood.

4. Baldwin.

5. Adams Rite

B. Materials: ANSI A156.6 for 0.050-inch thickness.

C. Push and Pulls by types:

1. Type P-1: Push 4-inch x 16 inch.

a. 1001-3 630 Trimco

b. 70C 630 Rockwood

2. Type P-2 Pull: 4-inch x 16 inch.

a. 1010-3 630 Trimco

b. 132 x 70C 630 Rockwood

3. Type P-3 Pull: 2.75-inch x 11.5 inch.

a. 3001 fixed pull 629 Adams Rite

2.5 EXIT DEVICES

A. Exit Devices: Subject to compliance with requirements, provide exit devices of one of the following manufacturers and as specified below.

1. Corbin Russwin.

2. Yale.

3. Von Duprin.

4. Adams Rite.

5. Sargent.

6. Securitech Group Inc.

B. Exit Only Door Alarms:

1. SDA103 SECURITECH

C. Materials:

1. Provide exposed metal to match hardware.

2. Size and mount units indicated or, if not indicated, to comply with manufacturer's recommendations for exposure condition. Reinforce substrate as recommended.

D. Exit Devices by types:

1. Type E-1: Exit Device (F01) (for wood and metal doors)

a. 8700 w/ security interlock nose guard/strike 628 Adams Rite

2. Type E-2: Exit Device (F04) (for narrow stile rim for aluminum doors)

a. 8800 x cyl. dog w/ security interlock nose guard/strike 630 Adams Rite

3. Type E-3: Exit Device (F03) (for wood and metal doors)

a. 8700 x cyl. dog w/ security interlock nose guard/strike 628 Adams Rite

4. Type E-3: Not Used

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

***NOTE TO SPECIFIER***

*Select appropriate product from the three manufacturers based on the project and facility security requirements.*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

5. Type E-4EM: Electromechanical Access Control Device

a. Centurion 8155-DX2 Series Securitech

b. Trilogy DL 3500 SERIES 628 Alarm Lock

c. Yale Nextouch NTB 630 series 626 Yale

2.6 CLOSERS

A. Closers: Subject to compliance with requirements, provide closers of one of the following manufacturers and as specified below.

1. LCN.

2. Norton.

3. Yale.

B. Materials & Features:

1. ANSI A156.4, Grade 1.

2. ADA/ANSI A117.1

3. U.L. listed. Provide closers for fire rated openings in compliance with NFPA 80, NFPA 101, and local building codes.

4. Non-Sized; adjustable 1 to 5 pounds.

5. 180-degree door opening.

6. Heavy Duty parallel arm.

7. Standard Cover.

8. Provide exposed metal to match hardware.

9. Mounting: Mount closers as follows unless indicated otherwise:

a. Interior side of exterior doors.

b. Opposite side of public side.

c. Workroom side of doors leading to or from the Workroom.

d. Room side of corridor doors.

10. Size and mount units indicated or, if not indicated, to comply with manufacturer's recommendations for exposure condition. Reinforce substrate as recommended.

11. Closers to be installed to allow door swing as shown on drawings.

C. Closers by types:

1. Type C-1:

a. 4011 689 LCN

b. P7500 689 Norton

c. 4400 689 Yale

2. Type C-2: Parallel arm.

a. 4111 689 LCN

b. P7500 689 Norton

c. 4400 689 Yale

2.7 STOPS, HOLDERS AND BUMPERS

A. Stop and Holder, Floor and Wall Stop, and Bumper Manufacturers: Subject to compliance with requirements, provide from one of the following manufacturers as specified below.

1. H. B. Ives.

2. Quality Hardware Manufacturing Co., Inc.

3. Trimco.

4. Dor-O-Matic.

5. Glenn-Johnson.

B. Materials:

1. Door stop mounting: Methods to suit substrates encountered (plastic anchor, drywall anchor, expansion shield).

2. Provide grey rubber exposed resilient parts.

3. Do not furnish aluminum floor stops.

4. Where a door stop is specified in the Hardware Schedule, provide a wall stop type (S-1). However, if circumstances prevent a wall stop installation (door too far from perpendicular wall, door swing into adjacent glass, etc.) then substitute a type (S-2) or (S-3) floor stop as indicated for use intended.

5. Adjust height of floor stops to suit undercut of adjacent door.

C. Stops, Holders and Bumpers by types:

1. Type S-1: Wall Stop - Install with appropriate anchors for substrate encountered.

a. 1270W 630 Trimco

b. 407 1/2C 630 Ives

c. 409 630 Rockwood

2. Type S-2: Floor Stop - Install with appropriate anchors for substrate encountered.

a. 1201 626 Trimco

b. FS444 626 Ives

c. 471 626 Rockwood

3. Type S-3: Floor Stop - Install with appropriate anchors for substrate encountered.

a. W1211 630 Trimco

b. FS436 630 Ives

c. 440/442 626 Rockwood

2.8 THRESHOLDS

A. Threshold Manufacturers: Subject to compliance with requirements, provide from one of the following manufacturers as specified below.

1. Pemko.

2. National Guard.

3. Reese.

4. Zero.

B. Section 016000 - Product Requirements: Product options and substitutions. Substitutions: Permitted.

C. Thresholds by types:

1. Type T-2: Saddle threshold for floor finish at doors (either VCT to VCT or VCT to tile or sealed concrete.)

a. VCT to VCT:

271 628 Pemko

HD5A 628 Reese

425E 628 National

b. VCT to Tile/Concrete:

158 628 Pemko

S514A 628 Reese

653 628 National

2. Type T-3 (with weather seal):

a. S483AV 628 Reese

b. 2005AT 628 Pemko

c. 896V 628 National

2.9 WEATHERSTRIPPING

A. Weatherstripping Manufacturers: Subject to compliance with requirements, provide from one of the following manufacturers as specified below.

1. Pemko.

2. Reese.

3. Zero.

4. National Guard.

B. Weatherstripping by types:

1. Type W-1: Door Gaskets.

a. 807A Reese

b. 303AS Pemko

c. 160VS GP

2.10 MISCELLANEOUS HARDWARE

A. Miscellaneous Hardware Manufacturers: Subject to compliance with requirements, provide from the manufacturers specified below.

B. Provide door silencers for all doors unless indicated otherwise.

C. Miscellaneous Hardware by types:

1. Type M-1: Acoustical Perimeter Door Seal

a. 379 APK 628 Pemko

2. Type M-2: Dead Lock, (ANSI E0191) - w/ No exposed trim on lobby side.

a. D200 Series 630 Yale

3. Type M-3: Security Viewer. Mounted/installed, centered at 5-foot AFF.

a. 1756 630 Hager

b. 627 626 Rockwood

4. Type M-4: Astragal

a. 184A 628 Reese

b. 359A 628 Pemko

5. Type M-5: Silencers

a. 1229A Gray Trimco

b. SR64 Ives

c. 608 Grey Rockwood

6. Type M-6: Flushbolts

a. 3917 626 Trimco

b. 555 626 Rockwood

7. Type M-7: Astragal

a. 276C 628 Reese

b. 355CS 628 Pemko

8. Type M-8: Kick Plates

a. K0050 8 x 34 630 Trimco

b. KP1050 8 x 34 630 Rockwood

9. Type M-9: Armor Plate; 40 inches H x 46 inches W (both sides of door) 630

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

***NOTE TO SPECIFIER***

*In facilities equipped with an Enterprise Physical Access Control System (ePACS) the exit door alarm is to be rated at 12 VDC and provided as part of the ePACS system. Change Paragraph 2.10.C.10 to “Type M-10: Not Used.” when a facility is equipped, or will be equipped, with an ePACS.*

*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

10. Type M-10: Emergency Exit Alarm with Contacts:

a. SDA103: Securitech Group Incorporated

1) Provide concealed door contacts and a separate alarm unit with keyed reset switch. Alarm unit will have local 110 db minimum audible alarm and a 75 cd visual alarm (strobe light) and shall be from an independent 120 Volt power supply equipped with a backup battery to power the alarm for one hour in the event of a loss of power, and to continually charge the battery. Battery operated door or panic bar mounted alarms are not allowed.

2) Exit alarm shall be equipped with a keyed reset station mounted top at 60 inches AFF.

3) Alarm to be located directly above the door 9 feet above the finished floor. Provide door sign indicating alarm will sound when opened and labeled, “EMERGENCY EXIT ONLY - RE-ENTRY PROHIBITED”.

11. Type M-11: Reinforcing Pivot Hinges

a. 253 652 Hager

b. B1923 652 McKinney

12. Type M-12: Bumper (Install on push side of door at same height as lockset, in line with lever handle of lockset and approximately 2 inches away from the handle.)

a. 170-19 630 Bommer

13. Type M-13: Door Bottom Shoe

a. DES-3C, 1-1/4 inches x 1-3/4 inches width 630 Hiawatha

2.11 FABRICATION

A. Finish and Base Material Designations: Number indicate BHMA Code or nearest traditional U.S. commercial finish.

B. Where base material and quality of finish are not otherwise indicated, provide at least commercially recognized quality specified in applicable Federal Specifications.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Section 017300 - Execution: Verification of existing conditions before starting work.

B. Verification of Conditions: Verify that field measurements, surfaces, substrates and conditions are as required, and ready to receive Work.

1. Verify that doors and frames are ready to receive Work and dimensions are as instructed by the manufacturer.

2. Verify that electric power is available to power operated devices and of the correct characteristics.

C. Report in writing to USPS Project Manager prevailing conditions that will adversely affect satisfactory execution of the Work of this Section. Do not proceed with Work until unsatisfactory conditions have been corrected.

1. By beginning Work, Contractor accepts conditions and assumes responsibility for correcting unsuitable conditions encountered at no additional cost to the United States Postal Service.

3.2 INSTALLATION

A. Where not specified under other sections to be performed by manufacturer or suppliers, machine, fit and drill wood and metal doors.

B. Prepare doors of various types to receive hardware, using templates and instructions provided with the hardware items for jobsite work.

C. Mount hardware units at heights indicated in "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 USPS Project Manager.

1. Conform to requirements United States Postal Service "Standards for Facility Accessibility by the Physically Handicapped" Handbook RE-4.

D. 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.

E. Installer of security hardware is to be trained and familiar with product.

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

G. Drill and countersink units which are not factory prepared for anchorage fasteners. Space fasteners and anchors in accordance with industry standards.

H. Set thresholds for exterior doors in full bed of butyl rubber or polyisobutylene mastic sealant.

3.3 ADJUSTING

A. 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 as intended for the application made.

B. 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.

D. Instruct United States Postal Service Personnel in proper adjustment and maintenance of hardware and hardware finishes, during the final adjustment of hardware.

E. Continued Maintenance Service: Approximately six months after the acceptance of hardware in each area, the Installer, accompanied by the representative of the latch and lock manufacturer, shall return to the project and re‑adjust every item of hardware to restore proper function of doors and hardware. Consult with and instruct United States Postal Service personnel in recommended additions to the maintenance procedures. Replace hardware items which have deteriorated or failed due to faulty design, materials or installation of hardware units. Prepare a written report of current and predictable problems (of substantial nature) in the performance of the hardware.

3.4 HARDWARE SCHEDULE

A. General requirements, see respective paragraphs above for details:

1. Ensure that keys used during construction cannot open doors after United States Postal Service occupancy.

2. Provide door silencers for all doors unless indicated otherwise.

SET 1

Vestibule Storefront Entry Pair Doors

Exterior Storefront Entry Pair Doors

Each set to have:

6 each Hinges – by Storefront Manufacturer

2 each Exit Device – by Storefront Manufacturer

2 each (B-1) Rim Cylinder

1 each Threshold – by Storefront Manufacturer

2 each Closer – by Storefront Manufacturer

1 each Weatherstripping – by Storefront Manufacturer

2 each Pulls – by Storefront Manufacturer

SET 2

NOT USED

SET 3

Automatic Storefront Doors

Provide final cylinder cores. Coordinate with Section 084229.

All other hardware is furnished by Automatic Entrance Door supplier as specified in Section 084229.

SET 4

Lunchroom to Exterior Break Area

Workroom to Mail Vestibule

Express Mail to Open Mail Platform

Exterior Contractor Driver Entry

Each set to have:

3 each (H-2) Hinges

1 each (E-3 Exit Device

1 each Closer

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each Electric Strike – provided as part of the ePACS system

1 each Door Contact – provided as part of the ePACS system

2 each Card Reader – provided as part of the ePACS system

1 each Video/Intercom Call Station (at Contract Driver Only) – provided as part of the ePACS system

SET 5

Workroom to Exterior Pair Doors

Administration to Exterior Pair Doors

Maintenance Support Area to Exterior Pair Doors

Each set to have:

6 each (H-2) Hinges

2 each (E-3) Exit Device

2 each Closers

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each Astragal

1 each Rain Drip (if no overhead cover)

2 each Magnetic Lock – provided as part of the ePACS system

2 each Door Contact – provided as part of the ePACS system

2 each Card Reader – provided as part of the ePACS system

1 each Exit Door Alarm – provided as part of the ePACS system

SET 6

Carrier Vestibule Personnel to Exterior

Enclosed Platform: Platform to Dock Stairs

Mail Vestibule Personnel to Exterior and to Workroom

Workroom to Exterior

Administration to Exterior

Maintenance to Exterior

Each set to have:

3 each (H-2) Hinges

1 each (E-3) Exit Device

1 each (T-3) Threshold

1 each Doorstop

1 each Closer

1 set (W-1) Door Gaskets

1 each Electric Strike – provided as part of the ePACS system

1 each Door Contact – provided as part of the ePACS system

2 each Card Reader – provided as part of the ePACS system

1 each Exit Door Alarm – provided as part of the ePACS system

SET 7

Exterior Emergency Exit

Each set to have:

3 each (H-2) Hinges

1 each (E-1) Exit Device

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each Closer

1 each Rain Drip

1 each Door Contact – provided as part of the ePACS system

1 each Exit Door Alarm – provided as part of the ePACS system

SET 8

Maintenance Shop to Exterior Pair Doors

Each set to have:

6 each (H-2) Hinges

1 each (L-1) Hotel Lock (Similar to F15)

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 set (M-6) Flushbolts (Top & bottom)

1 each (M-7) Astragal

2 each (S-1) Door Stop

2 each Closers

1 each Rain Drip

1 each Request to Exit Motion Sensor – provided as part of the ePACS system

2 each Magnetic Locks – provided as part of the ePACS system

2 each Door Contacts – provided as part of the ePACS system

1 each Door Release Push Button – provided as part of the ePACS system

1 each Card Reader – provided as part of the ePACS system

SET 9

Electrical to Exterior – Main

Each set to have:

3 each (H-2) Hinges

1 each (L-1) Hotel Lock (Similar to F15)

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each Closer

1 each Rain Drip

1 each Request to Exit Motion Sensor – provided as part of the ePACS system

1 each Electric Strike – provided as part of the ePACS system

1 each Card Reader – provided as part of the ePACS system

1 each Door Contact – provided as part of the ePACS system

SET 10

CIO Covert Entry to Exterior

Each set to have:

3 each (H-2) Hinges w/ NRP

1 each (L-1) Hotel Lock (Similar to F15), Note: the lock must be specified model from Yale, substitutions are not permitted.

1 each Cylinder, USPS Furnished (PSIN#091SP), Contractor Installed

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each (M-3) Security Viewer

1 each (M-13) Door Bottom Shoe

1 each Door Stop

1 each Closer

1 each Rain Drip

SET 11

Enclosed Platform to Exterior Pair Doors

Building and Grounds Room Pair Doors

Each set to have:

6 each (H-2) Hinges w/NRP

1 each (L-1) Hotel Lock (Similar to F15)

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 set (M-6) Flushbolts (Top and bottom)

1 each (M-7) Astragal

1 each (S-1) Door Stop

1 each Closer

1 each Rain Drip

SET 12

Electrical to Exterior

Recycling to Exterior

Each set to have:

3 each (H-2) Hinges

1 each (L-1) Hotel Lock (Similar to F15)

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each Closer

1 each Rain Drip

SET 13

NOT USED

SET 14

NOT USED

SET 15

Admin to Lobby Pair Doors

Each set to have:

6 each (H-2) Hinges

2 each (E-3) Exit Device

2 each Closers

2 each Magnetic Locks – provided as part of the ePACS system

2 each Door Contacts – provided as part of the ePACS system

2 each Card Reader – provided as part of the ePACS system

1 each Exit Door Alarm – provided as part of the ePACS system

1 each Video/Intercom Call Station – provided as part of the ePACS system

SET 16

Admin to Lobby

Admin to Workroom

Each set to have:

3 each (H-2) Hinges

1 each (L-1) Hotel Lock (Similar to F15)

1 each Door Stop

1 each Closer

1 each Electric Strike – provided as part of the ePACS system

2 each Card Reader – provided as part of the ePACS system

1 each Door Contact – provided as part of the ePACS system

1 each Request to Exit Motion Sensor – provided as part of the ePACS system

1 each Video/Intercom Call Station – provided as part of the ePACS system

SET 17

Tools/Parts to Workroom Pair Doors

Workroom to Administration Pair Doors

Corridor to Consolidated Computer Room or “APD” Pair Doors

Workroom to Maintenance/Support Areas Pair Doors

Mechanical Rooms Pair Doors

Accountable Paper Depository (APD) Postal Equipment to Workroom Pair Doors

Each set to have:

6 each (H-1) Hinges

1 each (L-1) Hotel Lock (Similar to F15)

1 set (M-6) Flushbolts (Top & bottom)

2 each Closers

2 each Wall Stops

2 each Door Contacts – provided as part of the ePACS system

2 each Magnetic Locks – provided as part of the ePACS system

1 each Request to Exit Motion Sensor – provided as part of the ePACS system

1 each Door Release Push Button – provided as part of the ePACS system

1 each Card Reader – provided as part of the ePACS system

SET 18

Tools/Parts to Workroom

Workroom to Administration

Corridor to Consolidated Computer Room or APD

Workroom to Maintenance/Support Areas

Mechanical Room - Main

Accountable Paper Depository (APD)

Equipment Rooms Containing ePACS Equipment

Electrical Room - Main

Storage Rooms – Containing Equipment

Each set to have:

3 each (H-1) Hinges

1 each (L-1) Storeroom Lock

1 each Door Stop

1 each Closer

1 each Card Reader – provided as part of the ePACS system

1 each Electric Strike – provided as part of the ePACS system

1 each Door Contact – provided as part of the ePACS system

1 each Request to Exit Motion Sensor – provided as part of the ePACS system

SET 19

CIO to Workroom

Each set to have:

3 each (H-2) Hinges

1 each (L-1) Hotel Lock (Similar to F15)

 Note: the lock must be the specified model from Yale, substitutions are not permitted.

1 each Cylinder, USPS Furnished (PSIN# 0931A0), Contractor Installed

1 each (T-3) Threshold

1 each (M-13) Door Bottom Shoe

1 each (M-1) Acoustical perimeter seal

1 each Door Stop

1 each Closer

SET 20

Custodial Supplies

Postal Records

Recycling Room to Workroom

BMEU Storage to Workroom

Each set to have:

3 each (H-1) Hinges

1 each (L-4) Storeroom Lock (F86)

1 each Door Stop

1 each Closer

SET 21

Work Area to Office

Manager's Office to Admin Corridor

Conference Room to Admin Corridor

Janitor's Closet to Workroom

Meeting Room

Closet

Label Room

Each set to have:

3 each (H-1) Hinges

1 each (L-2) Classroom Lock (F84)

1 each Door Stop

1 each Closer

SET 22

BMEU to Scale room to Workroom

BMEU Customer Service to Workroom

Each set to have:

3 each (H-2) Hinges

1 each (L-3) Entrance Lock (ANSI F20)

1 each (T-2) Threshold

1 each (M-13 Door Bottom Shoe

1 each Door Stop (interior doors only)

1 each Closer

SET 23

BMEU Lobby to Mail Platform

Each set to have:

3 each (H-2) Hinges

1 each (L-3) Entrance Lock (F20)

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each (M-13) Door Bottom Shoe

1 each Closer

SET 24

BMEU Scale Room to Staging Area in Workroom

Each set to have:

3 each (H-5) Hinges (5-inch)

1 each (L-4) Storeroom Lock (F86)

1 each Door Stop

1 each Closer

SET 25

BMEU Scale Room to Mail Platform Pair Doors

Each set to have:

6 each (H-2) Hinges

1 each (L-1) Hotel Lock

1 each (T-3) Threshold

1 set (W-1) Door Gaskets

1 each (M-6) Flushbolts

1 each (M-7) Astragal

2 each (M-13) Door Bottom Shoe

1 each Closer

SET 26

Toilet - single occupancy

Each set to have:

3 each (H-1) Hinges

1 each (L-5) Privacy Lock (F76)

1 each (T-1) Threshold

1 each Door Stop

1 each Closer

SET 27

Toilet - multiple occupancy

Carrier Vestibule Personnel to Workroom

Lunchroom

Each set to have:

3 each (H-1) Hinges

1 each (P-1) Push

1 each (P-2) Pull

1 each (M-8) Kick Plate

1 each Door Stop

1 each Closer

SET 28

NOT USED

SET 29

NOT USED

SET 30

Mail and Carrier Vestibule Impact Doors

All hardware furnished by Impact Door supplier as specified in Section 083800

SET 31

Mail Platform Sectional Overhead Door: All hardware furnished by Sectional Overhead Door supplier as specified in Section 083613.

SET 32

Highspeed Rollup Door

Each set to have:

1 each Long Range Card Reader – provided as part of the ePACS system

1 each Card Reader – provided as part of the ePACS system

All other controls and hardware by Overhead Door Supplier

END OF SECTION

USPS MPF Specification Last Revised: 10/1/2022