

SECTION 087101 – DOOR HARDWARE SETS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section references specification sections relating to commercial door hardware for the following:
  - 1. Swinging doors.
  - 2. Other doors to the extent indicated.
- B. Commercial door hardware includes, but is not necessarily limited to, the following:
  - 1. Mechanical door hardware.
  - 2. Cylinders specified for doors in other sections.
- C. Related Sections:
  - 1. Division 08 Section “Hollow Metal Doors and Frames”.
  - 2. Division 08 Section “Door Hardware”.
- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.
  - 1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
  - 2. ICC/IBC - International Building Code.
  - 3. NFPA 70 - National Electrical Code.
  - 4. NFPA 80 - Fire Doors and Windows.
  - 5. NFPA 101 - Life Safety Code.
  - 6. NFPA 105 - Installation of Smoke Door Assemblies.
  - 7. State Building Codes, Local Amendments.
- E. Standards: Reference Related Sections for requirements regarding compliance with applicable industry standards.

### 1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  - 1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  - 2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
  - 3. Content: Include the following information:
    - a. Type, style, function, size, label, hand, and finish of each door hardware item.
    - b. Manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    - e. Explanation of abbreviations, symbols, and codes contained in schedule.
    - f. Mounting locations for door hardware.
    - g. Door and frame sizes and materials.
  - 4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Keying Schedule: Prepared under the supervision of the Owner, separate schedule detailing final keying instructions for locksets and cylinders in writing. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner to approve submitted keying schedule prior to the ordering of permanent cylinders.
- D. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- E. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Submittals. The manual to include the name, address, and contact information of the manufacturers providing the hardware and their nearest service

representatives. The final copies delivered after completion of the installation test to include "as built" modifications made during installation, checkout, and acceptance.

- F. Warranties and Maintenance: Special warranties and maintenance agreements specified in the Related Sections.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum [5] years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Installer Qualifications: Installers, trained by the primary product manufacturers, with a minimum [3] years documented experience installing both standard and electrified builders hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
- C. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum [5] years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor in good standing by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- D. Source Limitations: Obtain each type and variety of Door Hardware specified in the Related Sections from a single source, qualified supplier unless otherwise indicated.
- E. Regulatory Requirements: Comply with NFPA 70, NFPA 80, NFPA 101 and ANSI A117.1 requirements and guidelines as directed in the applicable model building code.
- F. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.

- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

## 1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.
- B. Door and Frame Preparation: Division 08 Sections (Steel, Aluminum and Wood) doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

## 1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

## 1.8 MAINTENANCE SERVICE

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

## PART 2 - PRODUCTS

### 2.1 SCHEDULED DOOR HARDWARE

- A. Refer to "PART 3 – EXECUTION" for required specification sections.

## PART 3 - EXECUTION

### 3.1 DOOR HARDWARE SETS

- A. The door hardware sets represent the design intent and direction of the owner and architect. They are a guideline only and should not be considered a detailed hardware schedule. Discrepancies, conflicting hardware and missing items should be brought to the attention of the architect with corrections made prior to the bidding process. Omitted items not included in a

hardware set should be scheduled with the appropriate additional hardware required for proper application and functionality.

- B. The supplier is responsible for handing and sizing all products and providing the correct option for the appropriate door type and material where more than one is presented in the hardware sets. Quantities listed are for each pair of doors, or for each single door.
- C. Products listed in the Door Hardware Sets must meet the requirements described in the specification sections noted.
  - 1. Section 08 71 00 – Door Hardware.
- D. Manufacturer’s Abbreviations:
  - 1. BD – Best / dormakaba Group
  - 2. MK – McKinney
  - 3. PE – Pemko
  - 4. RO – Rockwood
  - 5. SA – SARGENT
  - 6. RF – Rixson
  - 7. CW – Corbin Russwin
  - 8. OT - Other

**Hardware Sets**

*NOTE:*

- 1. SEE 084113-Aluminum Framed Entrances & Storefronts for Door Hardware at Doors: 101 and 108.
- 2. Provide permanent cores for all door hardware locksets based on City of East Providence requirements.

**Set: 1.0**

Doors: 103, 105

3 Hinge, Full Mortise, Hvy Wt	<a href="#">T4A3386</a>	US32D	MK	087100
1 Office Lockset	<a href="#">ML2051</a>	US32D	CW	087100
1 Surface Closer	<a href="#">7500</a> 600 x	689	NO	087100
1 Wall Stop	<a href="#">403</a>	US26D	RO	087100
3 Silencer	<a href="#">608</a>		RO	087100
1 Threshold	252x3AFG		PE	087100
1 Gasketing	291APK x 2891APK		PE	087100
1 Sweep	315CN		PE	087100

**Set 2.0**

Doors: Mech/Elec/Storage: 102, 106, 106A\* (\*double door)

3 Hinge, Full Mortise, Hvy Wt	T4A3386	US32D	MK	
1 Storeroom Lock	ML2057 NSA CT6SB	630C		RU
1 Cylinder Lock		US32D		BD
1 Door Closer	281 UO	EN		SA
1 Wall Stop	403 (or) 441CU (As Required)	US26D		RO
1 Threshold	252x3AFG			PE
1 Gasketing	290APK x 2891APK			PE
1 Sweep	315CN			PE

**Set: 3.0**

Doors: Lav 104

3 Hinge, Full Mortise, Hvy Wt	T4A3386	US32D	MK	087100
1 Privacy Lock (Latch w/Occ Ind)	ML2060 NSA V21	US32D	OT	087100
1 Cylinder Lock		US32D	BD	
1 Surface Closer	7500 600 x	689	NO	087100
1 Wall Stop	403	US26D	RO	087100
3 Silencer	608		RO	087100
1 Threshold	252x3AFG		PE	087100
1 Gasketing	291APK x 2891APK		PE	087100
1 Sweep	315CN		PE	087100

**Set: 4.0**

Doors: 101A

1 Continuous Hinge	FM_HD1	C	PE	
1 Concealed Vert Rod Exit, Classroom	ED5860 N955ET M52 CT6SB	630C	RU	087100
2 Permanent Core	Compatible with City's System	626	BE.	087100
1 Surface Closer	7500	600 x 689	NO	087100
3 Silencer	608		RO	087100
1 Threshold	252x3AFG		PE	087100
1 Gasketing	291APK x 2891APK		PE	087100
1 Sweep	315CN		PE	087100

**Set: 5.0**

Door: 109, Lav

3 Hinge, Full Mortise, Hvy Wt	T4A3386	US32D	MK	087100
1 Privacy Lock (Latch w/Occ Ind)	ML2030 NSVN V20	US32D	CR	087100
1 Surface Closer	7500	600 x 689	NO	087100
3 Silencer	608		RO	087100
1 Threshold	252x3AFG		PE	087100
1 Gasketing	291APK x 2891APK		PE	087100
1 Sweep	315CN		PE	087100

**Set: 6.0**

Door: 107, Closet

3 Hinge, Full Mortise, Hvy Wt	T4A3386	US32D	MK	087100
1 Storeroom Lock	ML2057 NSACT65B	630C	RU	087100
1 Surface Closer	7500	600 x 689	NO	087100
1 Permanent Core	Compatible with City's System 626.		BE.	087100
3 Silencer	608		RO	087100
1 Gasketing	291APK x 2891APK		PE	087100
1 Sweep	315CN		PE	087100

**Set: 7.0**

Door: 108A, Office [Interior between Office 108 & Storage 106]

3 Hinge, Full Mortise, Hvy Wt	T4A3386	US32D	MK	087100
1 Entrance Lock	ML2054 NSA CT65B	630C	RU	087100
1 Permanent Core	Compatible with Facilities System		BE	087100
1 Wall Stop	403	US26D	RO	087100
3 Silencer	608		RO	087100
1 Gasketing	291APK x 2891APK		PE	087100

END OF SECTION 087101