

**REV #2 – 10/04/23**

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes the following:
  - 1. Commercial door hardware.
  - 2. Cylinders for doors specified in other Sections.
  - 3. Electrified door hardware.

1.2 ACTION SUBMITTALS

- A. Product Data: For each product indicated.
- B. Shop Drawings: Include details of electrified door hardware and wiring diagrams.
- C. Samples: For each exposed finish.
- D. Door Hardware Schedule: Organized into door hardware sets indicating type, style, function, size, label, hand, manufacturer, fasteners, location, and finish of each door hardware item. Include description of each electrified door hardware function, including sequence of operation.
- E. Templates: Submit template information for finish hardware to suppliers of aluminum entrances, hollow metal and wood doors for production after hardware schedule approval.
- F. Keying Schedule: Detail Owner's final keying instructions for locks, per WoodSpring Suites construction bulletin.

1.3 CLOSEOUT SUBMITTALS

- A. Product certificates.

1.4 QUALITY ASSURANCE

- A. Supplier Qualifications: Person who is or employs a qualified DHI Architectural Hardware Consultant.
- B. Source Limitations: Refer to Door Hardware Schedule.

- C. Keying Conference: Conduct conference at Project site. Incorporate keying conference decisions into final keying schedule.
- D. Templates: Obtain and distribute templates for doors, frames, and other work specified to be factory prepared for installing door hardware.

#### 1.5 DELIVERY, STORAGE AND HANDLING.

- A. Marking and Packaging: Hardware delivered in original packaging and marked by architectural door opening number according to approved hardware schedule to identify correct location.
- B. Delivery: Hardware supplier will deliver finish hardware to job site in a timely manner per job completion schedule. Inventory and verify all hardware per approved door hardware schedule. Supply any material not accounted for.
- C. Storage: Store hardware in a locked on-site location to ensure protection of material and finish. Hardware to be stored on shelves off floor & grouped by hardware type in clean, dry & secure area.

#### 1.6 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within warranty period.
  - 1. Warranty Period for Electromagnetic and Delayed Egress Locks: Five years from date of Substantial Completion.
  - 2. Warranty Period for Exit Devices: Three years from date of Substantial Completion.
  - 3. Warranty Period for Lock sets: Lifetime from date of Substantial Completion.
  - 4. Warranty Period for Door Accessories: One year from date of Substantial Completion.
  - 5. Warranty Period for Closers: Lifetime from date of Substantial Completion.

### PART 2 - PRODUCTS

#### 2.1 MANUFACTURERS

- A. Product: Subject to compliance with requirements, provide the product named for each door hardware item indicated in Door Hardware Sets.
  - 1.

For this project the following products only will be considered. Specified items listed in sets.  
Equals are as follows:

- |    |                                 |                                                         |
|----|---------------------------------|---------------------------------------------------------|
| a. | Butts Pivots                    | Hager (EC, ECBB, RC)                                    |
| b. | Closers                         | Hager (5400 Series, 5300 Series)                        |
| c. | Locks (Common)                  | Hager (2500 Series)                                     |
| d. | Locksets (Guestrooms)           | Onity (HT RFID), Kaba (Ilco 790 RFID or Saflok RT RFID) |
| e. | Panics                          | Hager (4700 Series)                                     |
| f. | Stops                           | Hager (236) or                                          |
| g. | Push-pull, Kicks                | Hager (214)                                             |
| h. | Weather Stripping               | Hager (891, 726)                                        |
| i. | Door Sweeps                     | Hager (770)                                             |
| j. | Thresholds                      | Hager (412)                                             |
| k. | Mag. Locks/controls             | Hager (380)                                             |
| l. | Card Readers                    | Onity, Kaba                                             |
| m. | Viewers/Door Guard              | Hager (130)                                             |
| n. | Exterior closers @ set #3 and 4 | LCN – NO SUBSTITUTION                                   |
| o. | Continuous Hinges               | Roton – NO SUBSTITUTION                                 |
| p. | Overhead Stops                  | Glynn-Johnson – NO SUBSTITUTION                         |

- B. Provide RFID Electronic lock and key system from either Onity (Contact Mark Lewitt 864-621-1546) or Kaba (Contact Jules Dana 817-421-4270)

PRODUCT SPECIFICATIONS

Manufacturer/Supplier: ONITY

Lock Model: HT RFID

Finish: Satin Chrome 626

Front Desk System: OnPoint RFID

Manufacturer/Supplier: KABA ILCO

Lock Model: ILCO 790 RFID

Finish: Satin Chrome

Front Desk System: Next Gen FDU

Manufacturer/Supplier: KABA SAFLOK

Lock Model: SAFLOK RT RFID

Finish: Satin Chrome

Front Desk System: SAFLOK 6000

## 2.2 KEYING

- A. All keying shall be accomplished per Owner Requirements per the below Project Keying Legend.

Project Keying Legend				Grand Master A Mechanical AA Housekeeping AB Electrical Elevator AC		
Door ID	Opening Location	HW Set	Lock Information (Manufacturer/Part Description)	Type	Master Keying	Stamped Key ID
135A	Exterior from Vestibule	001	HA \ 3902 US26D (3902)	Double Keyed Cylinder	NONE	NONE
135B & 146	Vestibule/Lobby to Corridor	005	HA \ 3902 US26D (3902)	RFID	NONE	NONE
139	Corridor to Restroom	007	HA \ 2553 US26D WTN (2553)	Entry Lock	AB	B139
140	Exterior from Mechanical	002	HA \ 2580 US26D WTN (2580)	Storeroom Lock	AA	A140
141	Staff Laundry from Dryer	15	HA \ 2553 US26D WTN (2553)	Entry Lock	AA	A141
137B	AHU Access	015A	HA \ 2553 US26D WTN (2553)	Entry Lock	AA	1372
142B	Guest Laundry from AHU	015A	HA \ 2553 US26D WTN (2553)	Entry Lock	AA	A1422
142C	Guest Laundry from Closet	15	HA \ 2553 US26D WTN (2553)	Entry Lock	AA	A1421
143B	Staff Laundry from FCU-1	15	HA \ 2553 US26D WTN (2553)	Entry Lock	AA	A143
144	Exterior from Storage	2	HA \ 2580 US26D WTN (2580)	Storeroom Lock	AA	A144
145A	Exterior from Electrical	2	HA \ 2580 US26D WTN (2580)	Storeroom Lock	AC	C1451
240B	Mechanical Platform from Supplemental Utility	8	HA \ 2580 US26D WTN (2580)	Storeroom Lock	AA	A240

- B. All lock cylinders are to be grand master keyed. All locks and cylinders shall be supplied with a visual key control system. All keys shall be stamped per key schedule.
- Furnish two (2) change keys for each lockset and a total of six (6) master keys, (6) grand master keys, (10) construction keys.
- C. All locks to be construction keyed, employing "lost ball" method. All permanent grand master and master keys and permanent day keys will be turned over to the owner prior to substantial completion.
- D. Provide and comply with ANSI 7.1.4.27 (hazard warnings).

- E. Provide and comply with ANSI a117.1,4.13 (handicap access).

## 2.3 DOOR HARDWARE

- A. Scheduled Door Hardware: Provide door hardware according to Door Hardware Sets at the end of Part 3. Manufacturers' names are abbreviated.
- B. All materials can be procured from the following WoodSpring Suites preferred vendors:

American Direct Procurement  
11000 Lakeview Avenue  
Lenexa, KS 66219  
(913) 677-5588  
Attn: Jerry Pennington  
Email: [JerryP@AmericanDirectCo.com](mailto:JerryP@AmericanDirectCo.com)

Paragon Distribution, LLC  
1841-A West Oak Pkwy  
Marietta, GA 30062  
(770)-795-9564  
Attn: Nick Batrouney  
Email: [Nick@discoverparagon.com](mailto:Nick@discoverparagon.com)

## 2.4 FABRICATION

- A. Base Metals: Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18 for finishes. Do not furnish manufacturer's standard materials if different from specified standard.
- B. Fasteners: Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated. Provide steel machine or wood screws or steel through bolts for fire-rated applications.
- C. Spacers or Sex Bolts: For through bolting of hollow metal doors.
- D. Fasteners for Wood Doors: Comply with requirements of DHI WDHS.2, "Recommended Fasteners for Wood Doors."
- E. Finishes: Comply with BHMA A156.18.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

#### DOOR HARDWARE

- A. Examine doors and frames for compliance with requirements for installation tolerances, labeled fire door assembly construction, wall and floor construction, and other conditions affecting performance. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- B. Steel Door and Frame Preparation: Comply with DHI A115 series. Drill and tap doors and frames for surface-applied hardware according to SDI 107.
- C. Wood Door Preparation: Comply with DHI A115-W series.
- D. Mounting Heights: Comply with the following requirements, unless otherwise indicated:
  - 1. DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
  - 2. DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."
  - 3. DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- E. Adjust and reinforce attachment substrates as necessary for proper installation and operation. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
  - .1. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings. Verify location with Architect.
  - 2. Thresholds: Set thresholds for exterior in full bed of sealant. Complying with other requirements specified in Division 07 Section "Joint Sealants."
- F. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with accessibility requirements.
  - 1. Door Closers: Adjust sweep period so that from an open position of 70 degrees, the door will take at least three seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.

### 3.2 DOOR HARDWARE SETS:

See HARDWARE SCHEDULE that follows this Section.

END OF SECTION 087100

## HARDWARE SCHEDULE BY OPENING TYPE

Qty	Mfr.	Hardware Set Description
	<b>Hardware Set #001</b>	<b>ALD X ALF EXTERIOR-VESTIBULE - #135A</b>
1		DOUBLE TUMBLER LOCKSET
2		CLOSERS
1	PEMKO	200SAT THRESHOLD
		ALL OTHER HARDWARE BY ALUMINUM DOOR SUPPLIER
	<b>Hardware Set #002</b>	<b>3/6-6/8 HMD X HMF EXT-MECH - #140, EXT-STOR #144, <u>EXT-ELECT #145A</u></b>
1	ROTON	780-224HD - ALUM
1	FALCON	W581PD6 DANE 2 3/4" US26D KD ASA STOREROOM
1	DOM	SC81 REG W/PA ALUM CLOSER
1	PEMKO	303AV 42" X 80" WEATHER-STRIP
3	ROCKWOOD	307D METAL DOOR SILENCERS
1	PEMKO	3452AV 42" SWEEP
1	PEMKO	171A X 42" THRESHOLD
	<b>Hardware Set #003</b>	<b>3/0-6/8 HMD X HMF EXTERIOR-STAIRS - #150A, 152A</b>
1	ROTON	780-224HD ALUM
1	LCN	4040XP - Rw/PA ALUM
1	PEMKO	303AV 36" X 80" WEATHER-STRIP
3	ROCKWOOD	307D METAL DOOR SILENCERS
1	PEMKO	3452AV 36" SWEEP
1	PEMKO	171A X 36" THRESHOLD
1	ONITY	KHA3T-RS2-626-B
1	ROCKWOOD	BLACK LEXAN 34" X 34" KICKPLATE
		☐ Add 24" black kickplate at 1 <sup>st</sup> floor ext to stair doors
1	GLYNN JOHN	104S OVERHEAD STOP
1	HAGER	3817-ESCUTCHEON-WTN LEVER 32D LEVER PULL
	<b>Hardware Set #004</b>	<b>ALD X ALF EXTERIOR-HALL - #136</b>
1		KHA3T-SA4-626-B
1	ONITY	CLOSURE
1	PEMKO	2006AT THRESHOLD
		ALL OTHER HARDWARE BY ALUMINUM DOOR SUPPLIER

<b>Hardware Set #005</b>		<b>ALD X ALF VESTIBULE, LOBBY-CORRIDOR - #135B, 146</b>
		ALL OTHER HARDWARE BY ALUMINUM DOOR SUPPLIER
1	ONITY	KHA3T-AP1-626-B
2		CLOSURES
<b>Hardware Set #007</b>		<b>3/0-6/8 WD X TMF CORR-RESTROOM - #139</b>
3	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	FALCON	SC91 REG W/PA ALUM CLOSER
1	FALCON	W511PD6 DANE 2 3/4" US26D OFFICE
1	ROCKWOOD	409 US26D WALL STOP
1	PEMKO	S88D X 204" GASKET DARK BROWN
<b>Hardware Set #008</b>		<b>3/0-6/8 HMD X TMF CORR TO UTILITY - 240A, 240B, 340, 440</b>
3	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	FALCON	SC91 REG W/PA ALUM CLOSER
1	ROCKWOOD	409 US26D WALL STOP
1	PEMKO	S88D X 204" GASKET DARK BROWN
1	FALCON	W581PD6 DANE US26D
1	ROCKWOOD	BLACK LEXAN 24" X 34" KICKPLATE
		Kickplates and Onity locks not needed at 240B Door 3/0-3/0.
1	ONITY	KHH3-L-626
1	HAGER	412S MIL 36" SADDLE THRESHOLD
1	HAGER	770S-MIL 36" DOOR BOTTOM SWEEP
		Threshold and door sweep are only required at door 240B.
<b>Hardware Set #009</b>		<b>3/0-6/8 HMD X TMF CORRIDOR-STAIRS - #150B, 152B, 250, 252, 350, 352, 450, 452</b>
3	IVES	5BB1 4.5 X 4.5 US26D
1	FALCON	F-24-R-L-BE RIM SP28 36"
1	DOM	SC81 REG W/PA ALUM CLOSER
1	ROCKWOOD	409 US26D WALL STOP
1	PEMKO	S88D X 204" GASKET DARK BROWN
1	ROCKWOOD	BLACK LEXAN 34" X 34" KICKPLATE
1	NGP	513 SADDLE THRESHOLD 5" X 1/4" - MILL ALUM



	<b>Hardware Set #010</b>	<b>3/0-6/8 WD X TMF TRAINING, STAFF LDY - 143C 148A</b>
2	IVES	3SP1 4.5 X 4.5 US26D SPRING HINGE
1	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	ROCKWOOD	409 US26D WALL STOP
1	PEMKO	S88D X 204" GASKET DARK BROWN
1	ONITY	KHH3-L-626
	<b>Hardware Set #011</b>	<b>3/6-6/8 HMD X TMF CORR-STAFF LDY - #143A</b>
3	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	FALCON	SC91 REG W/PA ALUM CLOSER
1	ROCKWOOD	409 US26D WALL STOP
1	PEMKO	S88D X 216" GASKET DARK BROWN
1	ROCKWOOD	BLACK LEXAN 34" X 40" KICKPLATE
1	ONITY	KHH3-L-626
	<b>Hardware Set #012</b>	<b>3/0-6/8 WD X TMF CORR-GUEST LDY #142A, FITNESS #147</b>
1	FALCON	SC91 REG W/PA ALUM CLOSER
3	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	ROCKWOOD	409 US26D WALL STOP
1	PEMKO	S88D X 204" GASKET DARK BROWN
1	ROCKWOOD	BLACK LEXAN 34" X 34" KICKPLATE
1	ONITY	KHH3-L-626
	<b>Hardware Set #013</b>	<b>3/0-6/8 WD X TMF CORR-SUITES – Door "A"</b>
3	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	FALCON	SC91 REG W/PA ALUM CLOSER
1	ROCKWOOD	474 US26D DOOR STOP
1	PEMKO	S88D X 204" GASKET DARK BROWN
1	ROCKWOOD	620 CHROME DOOR VIEWER
1	PEMKO	US26D PRIVACY DOOR LATCH (No substitutions)
1	ROCKWOOD	603 SHIM DOOR GUARD SHIM
1		CARD READER
1	PEMKO	18062CNB X 36"

<b>Hardware Set #014</b>		<b>3/0-6/8 WD X TMF CORR-SUITES-HDCAP – Door “A”</b>
3	IVES	5BB1 4.5 X 4.5 US26D STD WT
1	FALCON	SC91 REG W/PA ALUM CLOSER
1	ROCKWOOD	409 US26D WALL STOP
1	HAGER	S88D X 204" GASKET DARK BROWN
2	ROCKWOOD	620 CHROME DOOR VIEWER
2	PEMKO	US26D PRIVACY DOOR LATCH (No substitutions)
2	ROCKWOOD	603 SHIM DOOR GUARD SHIM
1	PEMKO	18062CNB X 36"
1		CARD READER
<b>Hardware Set #015/15A</b>		<b>2/0-6/8 or 2/6-6/8 HMD X TMF - #137B, 141, 142B, 142C, 143B, 154</b>
3	IVES	5PB1 4.5 X 4.5 US26D STD WT PLAIN BEARING
1	FALCON	W511PD6 DANE 2 3/4" US26D KD ASA ENTRANCE
1	ROCKWOOD	409 US26D WALL STOP
<b>Hardware Set #016</b>		<b>3/0-6/8 WD X TMF SUITES-BATHROOM – Door “B”</b>
3	IVES	EC1100 4.5 X 4.5 US26D
1	FALCON	W301S DANE 2 3/8" US26D ASA PRIVACY
1	ROCKWOOD	474 US26D DOOR STOP
3		DOOR SILENCERS SUPPLIED BY FRAME SUPPLIER
<b>Hardware Set #021</b>		<b>3/6-7/0 HMD X TMF ELEVATOR DOOR - #241, 341, 441</b>
3	IVES	5BB1 4.5 X 4.5 US26D
1	SARGENT	99L-F-BE US26D DUMMY KNOB
1	FALCON	19-R-EO SP28 4FT
1	FALCON	DOOR SILENCERS SUPPLIED BY FRAME SUPPLIER
1	RIXON	FM998 689 WALL MAGNET
1	PEMKO	S773D – GASKET DARK BROWN
		WALL MAGNET TO BE TIED INTO FIRE ALARM SYSTEM
<b>Hardware Set #022</b>		<b>3/0-6/8 HMD X TMF ELEC ROOM - #145</b>
1	<u>ROTON</u>	<u>780-224HD – ALUM</u>
1	<u>FALCON</u>	<u>F-24-R-L w/Cylinder – RIM-SP28</u>
1	<u>FALCON</u>	<u>SC91 REG W/PA ALUM CLOSER</u>
1	<u>PEMKO</u>	<u>303 AV 42" X 80" WEATHER STIP</u>
3	<u>ROCKWOOD</u>	<u>307D METAL DOOR SILENCERS</u>
1	<u>PEMKO</u>	<u>3452AV 42" SWEEP</u>
1	<u>PEMKO</u>	<u>171A X 42" THRESHOLD</u>