Addendum No. 1 Issued: March 18, 2025

Project Name: Reading School District

13th & Union Elementary Renovations

CHA Project No. 093251

Project Owner: Reading School District

800 Washington Street Reading, PA 19601

Architect: AEM Architects, Inc.

3700 Perkiomen Ave. Reading, PA 19606

Owner's CHA Consulting

Representative: One East Broad Street, Suite 310

Bethlehem, PA 18018

BID DUE DATE: TUESDAY, APRIL 1, 2025 @ 1:30 PM

This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated **March 2025** as noted below. This Addendum must be acknowledged on the Bid Form in the space provided for this purpose. Failure to so acknowledge this addendum may subject the Bidder to disqualification.

1.0 **GENERAL INFORMATION:**

- 1.1 This addendum consists of 31 pages including the following attachments:
 - 2 Pages of Sign-in Sheets from the Pre-Bid meeting held on March 17, 2025.
 - 4 Pages of revised and reissued Specification Section 000110, "Table of Contents."
 - 6 Pages of newly issued Specification Section 004116, "General Construction Bid Form."
 - 17 Pages of revised and reissued Specification Section 087100, "Door Hardware."

2.0 CHANGES TO PREVIOUS ADDENDA:

2.1 None.

3.0 CHANGES TO THE BIDDING REQUIREMENTS, CONTRACT FORMS, & CONDITIONS OF THE CONTRACT:

- 3.1 Section 000110, "Table of Contents," **DELETE** in its entirety and **REPLACE** with the revised and reissued Section 000110 included as an attachment to this Addendum.
- 3.2 Specification Section 004116, "General Construction Bid Form," **ADD** newly issued Section 004116 included as an attachment to this Addendum.

4.0 CHANGES TO THE SPECIFICATIONS:

4.1 Specification Section 087100, "Door Hardware," **DELETE** in its entirety, and **REPLACE** with the revised and reissued Section 087100 included as an attachment to this Addendum.

Hardware Marks '2' and '8', the designation for the active leaf exit devices shall be revised to read "10-63-16-56-8774 x 306 Aux. Ctr. x 862 Pull."

Hardware Marks '2' and '8' the designation for the power supply shall be revised to read "AQD2-1R."

5.0 CHANGES TO THE DRAWINGS:

5.1 Drawing A-3, "1/8" Exterior Elevations," **MODIFY** to add the following note:

"For Bidding purposes, the Miscellaneous Metal Fabrications Labor & Material Allowance shall include, 30 hours of shop detailing and design, 60 hours of shop labor for fabrication and delivery, and 75 hours of field steel work including but not limited to cutting, welding, cleaning, and repairing existing steel lintels. All field work shall be assumed to be work from scaffold or a lift. Material shall be included for 350 pounds of miscellaneous steel shapes including flat stock up to ½-inch thick, along with standard angles up to ½-inch thick with 6-inch equal or unequal legs, and accessory materials needed for complete repair of in-place steel lintels. The work of this Allowance is in addition to surface cleaning, prep, and painting included in the Base Bid."

6.0 BIDDERS QUESTIONS:

Below are the questions received during bidding as of March 18, 2025.

6.1 **Question**: Can you provide a height from the floor to the tops of the windows?

Answer: The documents provided are believed to be generally accurate but certainly are not guaranteed dimensions. We hesitate to provide a fixed dimension as we are certain there is variation from space to space and certainly with the different vintages of construction. Contractor/Bidder shall verify actual field conditions.

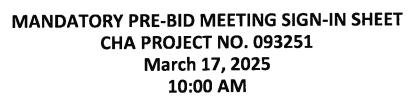
NOTE:

- ALL BIDDERS MUST indicate receipt of this Addendum on Page 1 of the Bid Form.
- <u>No other acknowledgment</u> is needed or requested to be returned as receipt of Addenda is tracked though the ShareFile service Addenda are issued through.

END OF ADDENDUM NO. 1 - 093251

READING SCHOOL DISTRICT 13th & UNION ELEMENTARY RENOVATIONS







Name:	Representing:	Email:	Phone:
Kupt Feit		KFRitz @ Uhrig. com	610-373-1612
JOE CHIARELL	Uhrig ConStr RSD,		
Wyatt Gallow	Balton construction	estimating @ Balton construction	484 707 2347
	HPCI	TWISE OHPCOASTIUCTION. NET	570-205-0243
Tom Wisz Beth Skrocki	Wickersham Construction	Skracki bm@wickcon.com	# 717-397-8282
*			

READING SCHOOL DISTRICT 13th & UNION ELEMENTARY RENOVATIONS



MANDATORY PRE-BID MEETING SIGN-IN SHEET CHA PROJECT NO. 093251 March 17, 2025 10:00 AM



20100 7 1111				
Name:	Representing:	Email:	Phone:	
PHIL LEINBACH	AEM			
4				

SECTION 000110 - TABLE OF CONTENTS

VOLUME 1

DIVISION 00 - F	Page No.	
00 01 15 -	List of Drawings	
00 11 13 -	Advertisement for Bids	
00 11 53 -	Request for Qualifications	
00 11 54 -	Agreement of Surety	
00 11 55 -	Letter of Insurer	
00 21 13 -	Instructions to Bidders	
00 21 13-ITB-A -	Act 141: Public Works Employment Verification Form	00 21 13-ITB-A-1 – 00 21 13-ITB-A-2
	Act 114: FBI Fingerprint Service Codes	
	Act 34: Pennsylvania State Police Clearance Form	
00 21 13-ITB-D -		
00 21 13-ITB-E -	Act 151: Child Abuse Clearance Form	00 21 13-ITB-E-1 – 00 21 13-ITB-E-4
00 21 13-ITB-F -		
00 21 13-ITB-G -		00 21 13-ITB-G-1 – 00 21 13-ITB-G-2
00 26 25 -	Substitution Request Form	
00 41 16 -	General Construction Bid Form (Issued Addendum No. 1).	
00 43 13.00 -	Bid Security Form	
00 43 13.13 -	Bid Bond Form	
00 45 19 -	Non-Collusion Affidavit	
00 52 16.00 -	Agreement Form	00 52 16.00-1 – 00 52 16.00-2
00 52 16.13 -	AIA Document A132-2019 - Draft "Standard Form of Agreeme	
		00 52 16.13-1 – 00 52 16.13-8
00 61 13.00 -	Performance and Payment Bond Forms	
00 61 13.13 -	Performance Bond Form	
00 61 13.16 -	Payment Bond Form	
00 62 16 -	Sample Certificate of Insurance Form	
00 72 16 -	AIA A232-2019 "General Conditions of the Contract for Constru	
00 72 50 -	Construction Documents Abbreviations	
00 73 43 -	Prevailing Wage Rate Requirements	
00 73 46.13 -	Prevailing Wage Rate Determination Schedule	
00 73 46.16 -	Certified Payroll Sample Form – PA Department of Labor & Inc	
00 82 00 -	Safety and Health Management Plan	00 82 00-1 – 00 82 00-22
DIVISION 01 – G	SENERAL REQUIREMENTS	
01 11 00 -	Summary of the Project	01 11 00-1 – 01 11 00-6
01 14 00 -	Work Restrictions	
01 21 29 -	Quantity Allowances	
01 22 00 -	Unit Prices	
01 23 00 -	Alternates	01 23 00-1 – 01 23 00-2
01 26 00 -	Contract Modification Procedures	
01 29 00 -	Payment Procedures	01 29 00-1 – 01 29 00-6
01 31 00 -	Project Management and Coordination	
01 32 00 -	Construction Progress Documentation	
01 33 00 -	Submittal Procedures	01 33 00-1 – 01 33 00-10
01 35 16 -	Alteration Project Procedures	
01 40 00 -	Quality Requirements	
01 42 00 -	References	
01 50 00 -	Temporary Facilities and Controls	
01 55 26 -	Traffic Control	
01 60 00 -	Product Requirements	01 60 00-1 – 01 60 00-8

TABLE OF CONTENTS

		Page No.	
01 73 00 - 01 73 29 - 01 77 00 - 01 78 23 01 78 39 01 79 00	Execution	01 73 29-1 - 01 73 29-8 01 77 00-1 - 01 77 00-4 01 78 23-1 - 01 78 23-8 01 78 39-1 - 01 78 39-4	
DIVISION 2 – EX	SISTING CONDITIONS		
02 41 19 -	Selective Demolition.	02 41 19-1 – 02 41 19-5	
DIVISION 4 - MA	SONRY		
04 01 20 - 04 20 00 -	Masonry Repair		
DIVISION 5 – ME	<u>ETALS</u>		
05 40 00 - 05 50 00 -	Cold-Formed Metal Framing Metal Fabrications		
DIVISION 6 – WO	OODS, PLASTICS AND COMPOSITES		
06 10 00 - 06 16 43 -	Rough Carpentry Gypsum Sheathing		
DIVISION 7 - TH	IERMAL AND MOISTURE PROTECTION		
07 21 00 - 07 25 00 - 07 42 13 - 07 92 00 -	Thermal Insulation Weather Barriers Metal Wall Panels Joint Sealants	07 25 00-1 - 07 25 00-2 07 42 13-1 - 07 42 13-9	
DIVISION 8 – DO	OORS AND WINDOWS		
08 11 13 - 08 41 13 - 08 44 13 - 08 51 13 - 08 71 00 - 08 80 00 - 08 91 19 -	Hollow Metal Doors and Frames Aluminum Framed Entrances and Storefronts Aluminum Curtain Walls Aluminum Windows Door Hardware (Revised and reissued Addendum No. 1) Glazing Architectural Fixed Louvers	08 41 13-1 - 08 41 13-10 08 44 13-1 - 08 44 13-9 08 51 13-1 - 08 51 13-8 08 71 00-1 - 08 71 00-17 08 80 00-1 - 08 80 00-11	
<u>DIVISION 9 – FINISHES</u>			
09 29 00 - 09 51 13 - 09 91 00 -	Gypsum Board Acoustical Panel Ceilings Painting and Finishing	09 51 13-1 – 09 51 13-6	

READING SCHOOL DISTRICT
13 TH & UNION ELEMENTARY RENOVATIONS
CHA #093251.00, MARCH 2025

00 01 10

TABLE OF CONTENTS

DIVISION 10 – SPECIALTIES

DIVISION 12- FURNISHINGS

END OF SECTION

TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

BID FOR READING SCHOOL DISTRICT 13TH & UNION ELEMENTARY RENOVATIONS GENERAL CONTRACTOR

Sub	omitte	ed To:	Submitted By:
Rea	ading	School District	
800) Wa	shington Street	
Rea	ading	g, PA 19601	
	<u>TH</u>		ERED IN ANY MANNER. ANY ALTERED BID FORMS SHALL BE
1.	the	form included in the Contract Docume	agrees, if this Bid is accepted, to enter into an Agreement with OWNER in into the complete all Work as specified or indicated in the Contract Documents act Time indicated in this Bid and in accordance with the Contract Documents.
2.	with is d bod cas	n disposition of Bid Security. This Bid welayed in awarding the Contract due to lies/governmental agencies having juri e, Bids shall be irrevocable for 120 da	litions of the Instructions to Bidders, including without limitation, those dealing will remain open for 60 days after the day of Bid Opening unless the OWNER to the failure to receive a required approval/permit from one or more reviewing isdiction over the Project, the sale of bonds or the award of a Grant, in which ays. BIDDER will sign the Agreement and submit the Contract Security and Documents within ten (10) days after the date of OWNER'S Notice of Award.
3.	In s	submitting this Bid, BIDDER represents	s, as more fully set forth in the Agreement, that:
	a.	Bidder has reported any discrepancie in the Instructions to Bidders and her apparent or discoverable by BIDDER	Contract Documents, Advertisement to Bid, and the Instructions to Bidders. es, duplications, errors, or omissions in the Contract Documents, as required reby waives any claims for additional cost or time for such matters that were R from a thorough and complete review of the Contract Documents prior to the BIDDER hereby acknowledges receipt of the following addenda:
		Addendum No;;	
	b.	state, and local laws, ordinances, rule of the Work and has made such inc	locality where the Work is to be performed, the legal requirements (federal, es and regulations) and the conditions affecting cost, progress or performance dependent investigations as BIDDER deems necessary. Failure to visit the ure request for additional compensation or costs of any kind.
	C.	and is not submitted in conformity corporation; BIDDER has not directly Bid; BIDDER has not solicited or indu	the interest of or on behalf of any undisclosed person, form, or corporation with any agreement or rules of any group, association, organization or or indirectly induced or solicited any other BIDDER to submit a false or sham used any person, firm or corporation to refrain from bidding; and BIDDER has BIDDER any advantage over any other BIDDER or OWNER.

5.

4. The BIDDER agrees to perform the various items of Work for the following Lump Sum Price:

BASE BID PROPOSAL:
Base Bid Price (INCLUDING Project Allowances) for all work indicated on the Contract Documents.
Dollars
(Words)
(\$
(Figures)
ALTERNATES: The BIDDER agrees that the Owner shall have the right to accept or reject any or all of the following alternates, which acceptance or rejection shall enter into the determination of the lowest BIDDER. The BIDDER agrees that the Contract Time shall not be increased on account of the acceptance of any one or combination of alternates unless specifically stated in such alternate description(s). The BIDDER agrees that the Owner shall have the right to accept an alternate that is higher in price than the Base Bid or other alternate. Alternates' prices shall include the cost of furnishing and installing all materials, labor, tools, equipment and other incidentals necessary to complete the Work in accordance with the design intent, manufacturers' recommendations, building codes, authorities having jurisdiction and the Construction Documents. Do not adjust material allowances under any alternate bid items. Indicate whether alternate cost is an add or deduct when a choice is provided.
ALTERNATE No. 1: The BIDDER shall state the adjustment in price to be DEDUCTED from the Base Bid to remove the door and window replacement work in the 2000 addition on all levels of that portion of the building.
DEDUCTDollars
(Words)
(\$
(Figures)
ALTERNATE No. 2: The BIDDER shall state the adjustment in price to be DEDUCTED from the Base Bid to eliminate all work from the Contract to furnish and install all roller shades indicated on the Drawings and as required by 12 Section "Roller Window Shades".
DEDUCTDollars
(Words)
(\$
(Figures)
ALTERNATE No. 3: The BIDDER shall state the adjustment in price to be DEDUCTED from the Base Bid to eliminate all masonry repairs required for the portion of the existing façade facing onto 13th Street as indicated or the Drawings and as required by applicable Division 04 Sections of the Specifications.
DEDUCT Dollars
(Words)
(\$
(Figures)

6.

GENERAL CONSTRUCTION BID FORM

the Work indicated for Southern Middle School. Under this Alternate, the BIDDER shat to be ADDED to the Base Bid to provide the full scope of Work indicated at South on Drawings and as required by related Specification Sections.	all state the ad ern Middle Sch	justment in price nool as indicated
ADD		Dollars.
(Words)		
(\$)
(Figures)		,
<u>UNIT PRICES</u> : OWNER shall make adjustments to the Contract based on the actual fit the Unit Prices included with the Bid. The BIDDER agrees that OWNER reserves the agree to use the Unit Prices submitted, if in the Owner's opinion, the nature or quantity that the Unit Price cost no longer applies to the Work. The Owner also reserves the right as required by the Department of Education guidelines, under a separate contract, to the responsiveness of the Bid may be determined by the Owner on the basis of the BIDDER. Unit Prices shall be consistent with verifiable average costs for the vagree that a Bid may be rejected if the Unit Prices submitted are inconsistent with circumstances will BIDDER perform Unit Price Work without prior written authorization include costs for furnishing and installing all materials, labor, tools, equipment, and off complete the specified operation. Unit Prices will be used to ADD/DEDUCT to the Complete the specified operation. Unit Prices will be used to ADD/DEDUCT to the Complete the Specified operation. Unit Prices will be used to ADD/DEDUCT to the Complete the Specified operation. Unit Prices will be used to ADD/DEDUCT to the Complete the Specified operation. Unit Prices will be used to ADD/DEDUCT to the Complete the Specified operation. Unit Prices will be used to ADD/DEDUCT to the Complete the Specified operation and the Material Allowance extension.	e right to reject of the Work end to solicit indeposite perform the sof the Unit Price Work to be perform OWNER the incidental company of the extension of shall be recalculated from OWNER.	or otherwise not countered is such endent proposals ervices required. es proposed by formed. Bidders cost. Under NO. Unit Prices shall osts necessary to here appropriate. f a Unit Price in a lated.
<u>UNIT PRICE 1</u> : BIDDER agrees to. rake, repoint and clean existing brick masonry versection "Masonry Restoration and Cleaning".	eneer as specif	
The contract Unit Price per square foot for Unit Price 1 work is:	\$	per SF
<u>UNIT PRICE 2</u> : BIDDER agrees. to remove existing masonry units, remove the exmasonry veneer units for installation in approximately four-to-six-foot sections in accommodation." Unit price shall include removal of existing veneer anchors to substranchors.	ordance with Di	vision 04 Section
The contract Unit Price per square foot for Unit Price 2 work is:	\$	per SF
<u>UNIT PRICE 3</u> : BIDDER agrees to furnish and install 2'x2', 2'x4' or mineral fiber ach hangers and accessories as specified in Division 09 Section "Acoustical Panel Ceiling"		iling panels, grid,
The contract Unit Price per square foot for Unit Price 3 work is:	\$	per SF
<u>UNIT PRICE 4</u> : BIDDER agrees to paint masonry or concrete walls with block filler ar in Division 09 Section "Painting and Finishing."	ıd acrylic latex լ	paint as specified
The contract Unit Price per square foot for Unit Price 4 work is:	\$	per SF
<u>UNIT PRICE 5</u> : BIDDER agrees to paint gypsum wallboard with acrylic latex paint as Painting and Finishing."	specified in Di	vision 09 Section
The contract Unit Price per square foot for Unit Price 5 work is:	\$	per SF

ALTERNATE No. 4: Under the Base Bid, the scope of Work is for 13th & Union Elementary only and does not include

per Unit

GENERAL CONSTRUCTION BID FORM

UNIT PRICE 6: BIDDER agrees to provide additional n	niscellaneous steel	el as specified in the	Division 5 Section for
metal fabrications and per the allowances stated on Drav	wing A-3.		

The contract Unit Price per unit for Unit Price 6 work is:	\$
--	----

7. PROJECT QUANTITY ALLOWANCES:

The Construction Manager must field measure and approve all allowance work prior to the Contractor performing the Work. Should the allowance amount be exceeded, the Contractor will be paid by Change Order addition at the Unit Price established for the related Work. Similarly, should the allowance used be less than the allowance amount, the Contractor will credit the Owner for the unused quantity in accordance with the related Unit Price by a Change Order deduction.

BIDDER agrees to include in the Base Bid Price, in addition to the Work shown on the Construction Documents the following:

Quantity Allowance 1: 150 square feet of Unit Price 1 Work.

Quantity Allowance 2: 400 square feet of Unit Price 2 Work.

Quantity Allowance 3: 500 square feet of Unit Price 3 Work.

Quantity Allowance 4: 500 square feet of Unit Price 4 Work.

Quantity Allowance 5: 500 square feet of Unit Price 5 Work.

Quantity Allowance 6: 1 Unit of Unit Price 6 Work.

- 8. BIDDER accepts the provisions of the Agreement as to the liquidated damages in the event of failure to complete the Work by the dates and milestones defined in the Contract Documents.
- 9. BIDDER understands that the OWNER reserves the unrestricted right to reject any and all bids. The Owner reserves the right to waive non-material defects, informalities, or technicalities in any Bid in accordance with law.
- 10. BIDDER understands that Owner reserves the right to consider Alternates Prices in determining the low bidder. All Alternate Prices shall include costs for furnishing and installing all materials, labor, tools equipment, and other incidentals necessary to complete the specified operation in accordance with the Project Specifications and the manufacturer's recommendations.

11.	Accompanying this Bid is Security in the form of	in the amount of ter
	percent (10%) of the total of the Base Bid and all possible add alternates.	

GENERAL CONSTRUCTION BID FORM

In witness whereof, the undersign	ned has caused this	s Proposal to be executed this _	day of	20
<u>INDIVIDUAL, F</u>	'ARTNERSHIP, LI	MITED LIABILITY COMPANY,	<u>OR CORPORATION</u>	<u>.</u>
		(Firm Name)		
Ву		(Signature)		
		(Signature)		
Print or Type Name of Person Au	thorized to Sign		Title	
State of LLC/Incorporation				
Business Address				
Business Telephone Number	() _			
Cellular Number	() _			
Email Address*	*Pro	vide email address(es) for Notic	es	
Attest by				
Print or Type Name of Person				
Business/Corporate Seal:				

GENERAL CONSTRUCTION BID FORM

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes:

- 1. Door hardware for swinging doors.
- 2. Door hardware for other doors to the extent indicated.
- Cylinders and cores or other locations.

B. Related Sections:

- 1. Division 08 Section "Hollow Metal Doors and Frames".
- 2. Division 08 Section "Aluminum-Framed Entrances and Storefronts".
- Division 08 Section "Aluminum Curtain Walls".

C. Electronic Finish Hardware

- 1. Furnish, deliver, and coordinate all mechanical and electronic finish hardware as indicated, specified and required. Include all hardware under this section that is not specified in other sections, whether or not such hardware is scheduled herein, and include all trim, attachments and fastenings specified or required for proper and complete installation for given application. Items of hardware (specifically, mounting accessories required by door or frame details and required to properly install hardware and have it function properly and in conjunction with specified interacting hardware) not definitely specified herein and necessary for completion of the work shall be provided. Such items shall be of type and quality suitable to the service required and comparable to adjacent hardware. Where size and shape of member is such as to prevent the use of types specified, hardware shall be furnished of suitable types having as nearly as practicable the same operation and quality as the type specified.
- 2. Review electrified hardware with Owner's existing systems to ensure compatibility. Visit Owner's existing facilities as required.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction and installation details, material descriptions, dimensions of individual components and profiles, and finishes.
 - 1. Provide complete manufacturer's catalog cuts for each item scheduled.
- B. Shop Drawings: Details of electrified door hardware, indicating the following:
 - 1. Wiring Diagrams: For power, signal, and control wiring and including the following:

- a. Details of interface of electrified door hardware and building safety and security systems.
- b. Schematic diagram of systems that interface with electrified door hardware.
- c. Point-to-point wiring.
- d. Risers.
- e. Elevations of doors controlled by electrified door hardware.
- 2. Operation Narrative: Describe the operation of doors controlled by electrified door hardware.
- C. Samples for Initial Selection: For plastic protective trim units in each finish, color, and texture required for each type of trim unit indicated.
- D. Door Hardware Schedule: Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as installation procedures and diagrams. Coordinate final door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - Submittal Sequence: Submit door hardware schedule concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate the fabrication of other work that is critical in Project construction schedule.
 - 2. Format: Use same scheduling sequence and format and use same door numbers as in the Contract Documents, in vertical format (horizontal format will not be reviewed).
 - 3. Content: Include the following information:
 - a. Identification number, location, hand, fire rating, size, and material of each door and frame.
 - Locations of each door hardware set, cross-referenced to Drawings on floor plans and to door and frame schedule.
 - c. Complete designations, including name and manufacturer, type, style, function, size, swing, quantity, function, and finish of each door hardware product.
 - Description of electrified door hardware sequences of operation and interfaces with other building control systems.
 - e. Fastenings and other pertinent information.
 - f. Explanation of abbreviations, symbols, and codes contained in schedule.
 - g. Mounting locations for door hardware.
 - h. List of related door devices specified in other Sections for each door and frame.
- E. Keying Schedule: Prepared by or under the supervision of Installer, detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations that are coordinated with the Contract Documents.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer and Architectural Hardware Consultant.
- B. Product Certificates: For electrified door hardware, from the manufacturer.
 - Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.
- C. Product Test Reports: For compliance with accessibility requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for door hardware on doors located in accessible routes.
- D. Warranty: Special warranty specified in this Section.

1.5 CLOSEOUT SUBMITTALS

- A. Independent Architectural Hardware Consultant report of door hardware deficiencies.
- B. Manufacturer's data for each piece of hardware.
- C. Maintenance Data: For each type of door hardware to include in maintenance manuals.
- D. Installation instructions for each piece of hardware for each door.
- E. Bitting Lists for all keys.
- F. Complete set of wiring diagrams for each door with door number indicated.
- G. Final, as-built copy of hardware and keying schedule.
- H. Warranties.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: Supplier of products and an employer of workers trained and approved by product manufacturers and an Architectural Hardware Consultant who is available during the course of the Work to consult with Contractor, Architect, and Owner about door hardware and keying.
 - 1. Warehousing Facilities: In Project's vicinity.
 - 2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
 - 3. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
- B. Independent Architectural Hardware Consultant Qualifications: A person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and extent to that indicated for this Project and who is currently certified by DHI as follows:
 - 1. For door hardware, an Architectural Hardware Consultant (AHC) who is also an Electrified Hardware Consultant (EHC).
 - 2. The supplier and/or installer shall not act as the (AHC).
- C. Source Limitations: Obtain each type of door hardware from a single manufacturer.
- D. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- E. Means of Egress Doors: Latches do not require more than 15 lbf to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.
- F. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines and ICC/ANSI A117.1.
 - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf.

- 2. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
- 3. Adjust door closer sweep periods so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches from the latch, measured to the leading edge of the door.
- G. Keying Conference: Conduct conference at Project site to comply with requirements in Division 01 Section "Project Management and Coordination." In addition to Owner, Contractor, and Architect, conference participants shall also include Installer's Architectural Hardware Consultant and a representative of the Door Hardware Manufacturer. Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including, but not limited to, the following:
 - 1. Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
 - 2. Preliminary key system schematic diagram.
 - 3. Requirements for key control system.
 - 4. Requirements for access control.
 - 5. Address for delivery of keys.

1.7 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site with suppliers, Independent Hardware Consultant, Owner's Representative and Manufacturer's Representative, in conjunction with preinstallation conference for wood and aluminum doors.
 - 1. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 2. Confirm electrified hardware is compatible with Owner's existing access control systems and components and compatible with new systems to be installed by the Electrical Contractor.
 - 3. Inspect and discuss preparatory work performed by other trades.
 - 4. Inspect and discuss electrical roughing-in for electrified door hardware.
 - 5. Review sequence of operation for each type of electrified door hardware.
 - 6. Review required testing, inspecting, and certifying procedures.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.
- C. Deliver keys to manufacturer of key control system for subsequent delivery to Owner.

1.9 COORDINATION

A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.

- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with the Owner.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.
- E. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.
- F. Phased Construction: Where lead times may compromise procurement of hardware required for initial phase(s) completion, submit hardware schedule for initial phase(s) in advance of the complete hardware submittal and obtain hardware for initial phases to not adversely affect the project schedule. The cost for multiple deliveries should be included in the bid.

1.10 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 specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Structural failures including excessive deflection, cracking, or breakage.
 - b. Faulty operation of doors and door hardware.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use
 - 2. Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.
 - a. Exit Devices: Five years from date of Substantial Completion.
 - b. Manual Closers: 10 years from date of Substantial Completion.
 - c. Locksets: 10 years from date of Substantial Completion.

1.11 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.
- B. Follow-Up Services: The hardware installer shall confirm, in writing, the operation of all door hardware is within tolerances prior to the General Contractor requesting Substantial Completion. In addition to warranty service required for issues realized post-occupancy during the warranty period, the installer shall re-review the operation of all door hardware ten months after Substantial Completion and shall make all adjustments required.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. Provide door hardware for each door as scheduled in Part 3 "Door Hardware Schedule" Article to comply with requirements in this Section.
 - 1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and named manufacturers' products.
 - 2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
- B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in Part 3 "Door Hardware Schedule" Article. Products are identified by using door hardware designations, as follows:
 - Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in Part 3 "Door Hardware Schedule" Article.
- C. Basis of Design: Hardware scheduled in Part 3 "Door Hardware Schedule" shall be considered the Basis of Design product. Acceptable manufacturers listed in this Part shall provide products that meet or exceed the published data of the Basis of Design product where their product is provided in lieu of the Basis of Design product.

2.2 HINGES

- A. Hinges: BHMA A156.1. Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Hager Companies.
 - b. IVES Hardware; an Allegion company.
 - c. McKinney Products Company; an ASSA ABLOY Group company.

2.3 MECHANICAL LOCKS AND LATCHES

- A. Lock Functions: As indicated in door hardware schedule.
- B. Lock Throw: Comply with testing requirements for length of bolts required for labeled fire doors.
- C. Lock Backset: 2-3/4 inches, unless otherwise indicated.
- D. Strikes: Provide manufacturer's standard strike for each lock bolt or latchbolt complying with requirements indicated for applicable lock or latch and with strike box and curved lip extended to protect frame; finished to match lock or latch.
- E. Mortise Locks: BHMA A156.13; Security Grade 1; stamped steel case with steel or brass parts; Series 1000.

- 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company.
 - SARGENT Manufacturing Company; an ASSA ABLOY Group company.
 - c. Schlage Commercial Lock Division; an Allegion company.

2.4 ELECTROMECHANICAL LOCKS

- A. Electromechanical Locks: BHMA A156.25; Grade 1; motor or solenoid driven; mortise latchbolt; with strike that suits frame.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company.
 - b. SARGENT Manufacturing Company; an ASSA ABLOY Group company.
 - c. Schlage Commercial Lock Division; an Allegion company.

2.5 SURFACE BOLTS

- A. Surface Bolts: BHMA A156.16.
 - Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Door Controls International, Inc.
 - b. IVES Hardware; an Allegion company.
 - c. Hager.
 - d. Rockwood, an ASSA ABLOY Group company.

2.6 EXIT DEVICES AND AUXILIARY ITEMS

- A. Exit Devices and Auxiliary Items: BHMA A156.3.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company.
 - SARGENT Manufacturing Company; an ASSA ABLOY Group company.
 - c. Von Duprin; an Allegion company.

2.7 LOCK CYLINDERS

- A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

- SARGENT Manufacturing Company; an ASSA ABLOY Group company; Signature Series, removable core master key system. Coordinate with the Owner's existing masterkey system.
- B. High-Security Lock Cylinders: BHMA A156.30; Grade 1; Type M, mechanical; permanent cores that are removable; face finished to match lockset.
 - 1. Core Type: Removable.
- C. Construction Cores: Provide construction cores that are replaceable by permanent cores.

2.8 SURFACE CLOSERS

- A. Surface Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves and forged-steel main arm. Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Provide factory-sized closers, adjustable to meet field conditions and requirements for opening force.
 - Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Corbin Russwin Architectural Hardware; an ASSA ABLOY Group company.
 - b. LCN Closers; an Allegion company.
 - c. SARGENT Manufacturing Company; an ASSA ABLOY Group company.

2.9 OVERHEAD STOPS AND HOLDERS

- A. Overhead Stops and Holders: BHMA A156.8.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Glynn-Johnson; an Allegion company.
 - b. Rockwood; an ASSA ABLOY Group company.
 - c. SARGENT Manufacturing Company; an ASSA ABLOY Group company.
 - d. Rixon Specialty Door Controls; an ASSA ABLOY Group company.

2.10 DOOR SILENCERS

- A. Door Silencers: BHMA A 156.16; rubber door silencer.
 - 1. Basis of Design: Subject to compliance with requirements, Door Silencers incorporated into the project shall be based on products as follows:
 - a. Rockwood Manufacturing Company, an ASSA ABLOY Group company; "608".
 - Acceptable Manufacturers: Subject to compliance with requirements, in lieu of the Basis of Design manufacturer, Contractor may provide products from the following manufacturers that meet or exceed the published data of the specified Basis of Design product.
 - a. IVES Hardware, an Allegion Company.

2.11 DOOR GASKETING

- A. Door Gasketing: BHMA A156.22; air leakage not to exceed 0.50 cfm per foot of crack length for gasketing other than for smoke control, as tested according to ASTM E 283; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Pemko Manufacturing Co.; an ASSA ABLOY Group company.
 - b. Reese Enterprises, Inc.
 - c. Zero International; an Allegion brand.

2.12 THRESHOLDS

- A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Pemko Manufacturing Co.; an ASSA ABLOY Group company.
 - b. Reese Enterprises, Inc.
 - c. Zero International; an Allegion brand

2.13 METAL PROTECTIVE TRIM UNITS

- A. Metal Protective Trim Units: BHMA A156.6; fabricated from 0.050-inch- thick stainless steel; with manufacturer's standard machine or self-tapping screw fasteners.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. IVES Hardware; an Allegion company.
 - b. Pemko Manufacturing Co.; an ASSA ABLOY Group company.

2.14 AUXILIARY DOOR HARDWARE

- A. Auxiliary Hardware: BHMA A156.16.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Rockwood; an ASSA ABLOY Group company.
 - b. Allegion.

2.15 AUXILIARY ELECTRIFIED DOOR HARDWARE

- A. Auxiliary Electrified Door Hardware:
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Schlage Commercial Lock Division; an Allegion company.
 - b. Securitron Magnalock Corporation; an ASSA ABLOY Group company.
- B. Door Position Switch (double-pole, double-throw):
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Edwards 1076D-G.
 - b. General Electric (GE) 1076D-G.
 - c. Sentrol 1076D-G.

2.16 KEYING

- A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, Appendix A. Incorporate decisions made in keying conference.
 - Great-Grand Master Key System: Change keys, a master key, a grand master key, and a greatgrand master key operate cylinders.
 - 2. Existing System:
 - a. Master key or grand master key locks to Owner's Sargent Signature Series existing system that shall match Owner's existing keyways.
- B. Keys: Brass.
 - 1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:
 - a. Notation: "DO NOT DUPLICATE."
 - 2. Quantity: In addition to one extra key blank for each lock, provide the following:
 - a. Master Keys: Six.b. Control Keys: Two

2.17 FABRICATION

- A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rated labels and as otherwise approved by Architect.
 - 1. Manufacturer's identification is permitted on rim of lock cylinders only.
- B. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.

- C. Fasteners: Provide door hardware manufactured to comply with published templates prepared for machine, wood, and sheet metal screws. Provide screws that comply with commercially recognized industry standards for application intended, except aluminum fasteners are not permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.
 - 1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware or is indicated as a required use of through bolts. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt. Where through bolts are utilized, provide finish-threaded caps to fully conceal nuts.
 - a. Steel through bolts required at the following locations (no exceptions):
 - 1) Door closers at all locations.
 - 2. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
 - Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.
 - Self-drilling "Tek" type screws are not acceptable. Use only fasteners supplied by hardware manufacturer.
 - Where it is not possible to reinforce substrate adequately for screws, use through-bolts with sleeves or use sex bolts.
 - a. Do not use where head or nut would be exposed on face of door, unless specifically indicated or made necessary by other requirements.
 - b. Finish exposed heads and nuts the same as hardware on that side of the door.
 - 6. Use expansion shield anchors in concrete and masonry.

2.18 FINISHES

- A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.

- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.

3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing. Do not install surface-mounted items until finishes have been completed on substrates involved.
 - Use manufacturers supplied installation templates.
 - 2. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 3. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- C. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- D. Lock Cylinders: Install construction cores to secure building and areas during construction period.
 - 1. Replace construction cores with permanent cores as indicated in keying schedule.

E. Closers:

- Install door closer mounting brackets, arms, plates, and miscellaneous equipment as necessary to
 mount all door closers inside room, or out of corridor at every instance where a door closer is
 specified. No door closers (nor parts, nor accessories of) shall be visible from corridor side unless
 Architect has authorized specific and formal approval for that mounting application, and has clear
 understanding closer is visible through lite, and has approved such.
- 2. Install top jamb mounted units where hardware schedule lists closer functions that are not available in regular arm mounting configurations.
- 3. Thru-bolt <u>all</u> closers to doors with sex bolts. Install aluminum spacers for all 5th and 6th bolts at arm connections to metal head frames, and notify frame suppliers to install reinforcing plates to receive all bolts including 5th and 6th bolts.
- Where any portion of the back of the closer is visible through glazing, a finish closure panel shall be installed.

- F. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, above accessible ceilings. Verify location with Architect.
 - 1. Configuration: Provide one power supply for each door opening with electrified door hardware.
- G. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants." Provide Tampin expansion bolts at all thresholds.
- H. Stops: Provide wall stops for doors unless floor or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- I. Door Silencers: Furnish at all hollow metal and wood frames. Each door leaf shall be supplied with three (3) bumpers each side. Do not provide on doors with sound seals or on exterior doors.
- J. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame. All exterior doors shall be installed with a complete set of gasketing (including thresholds, sweeps, seals, astragals, and drips) whether specifically scheduled or not. Where gasketing provided shows evidence of being insufficient, new gaskets shall be provided at no additional cost
- K. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- L. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.
- M. Primed Hardware: Paint factory-primed hardware in accordance with Division 09 Section "Painting & Finishing."
- N. Electrified Hardware: Where electrified hardware is not compatible with existing and new access control systems, Contractor shall replace non-compatible components with compatible components at no cost to the Owner.
 - 1. Compatibility includes existing proximity devices used by the Owner.

3.4 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
 - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
 - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
 - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Prior to Occupancy Adjustment: Adjust door closers to overcome air pressure produced by HVAC systems. If HVAC pressure, whether negative or positive, negates proper operation or function of any closing or latching device, or inhibits manufacturer's intended performance (in any manner), supplier shall inform the GC in writing that type of hardware cannot operate nor function as manufacturer has designed and tested due to HVAC condition.

- C. Post Occupancy Adjustment: Review operation of door hardware six to eight weeks after Substantial Completion in the presence of the Owner's Representative. Adjust hardware as required to ensure proper operation.
 - Contractor will be required to re-visit site to adjust hardware omitted from onsite review.

3.5 FIELD QUALITY CONTROL

- A. Independent Architectural Hardware Consultant: Contractor shall engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
 - Independent Architectural Hardware Consultant shall inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.
 - 2. Prior to Substantial Completion, Contractor shall correct deficiencies noted in Independent Architectural Hardware Consultant report and re-engage Consultant to review corrected work.
 - Where Project work occurs in phases, a report shall be prepared for each phase by this
 Consultant prior to Substantial Completion of each phase. A final complete report shall be
 furnished by the Consultant to confirm that all items for all phases have been corrected to comply
 with Project requirements.

3.6 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.7 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

3.8 HARDWARE MANUFACTURER LEGEND

Symbol	Manufacturer
MK	McKinney
PE	Pemko
RO	Rockwood
SA	Sargent
SC	Securitron
SE	Sentrol

3.9 DOOR HARDWARE SCHEDULE

M	lΑ	R	K	1

Doors 8G, 9G		HM DR x HM RF
MK Hinges	T4A3386 x NRP	US32D
SA Lockset	10-63-8225 x LE2P	US26D
SA Cylinder	10-6300	US26D
SA OH Closer	351 CPSH	EN
PE Rain Drip	346 BSP	AL
PE Threshold	2005 AT	AL
PE Frame Seals	303 AS	AL
SE Door Position Switch	1076D-G	_

MARK 2

Doors 5, 9, 10, 11, 12		AL DR x AL FR
MK Hinges	T4A3386 x NRP	US32D
SA Exit Device (active leaf)	10-63-16-56-8774 x 306 Aux.	US32D
	Ctrl. x 862 Pull	
SA Exit Device (inactive leaf)	16-8710	US32D
SA Cylinder	10-6300	US26D
SA OH Closers	351 CPSH	EN
PE Rain Drip	346 C	AL
PE Threshold	270 A	AL
PE Door Sweep	3452 CV	AL
RO Kickplate	K1050 x 8"h. x dr. width	US32D
SC Power Transfer	EL-CEPT	_
MK Frame Cable	QC-C1500	_
MK Door Cable	QC-C300	_
SE Door Position Switch	1076D-G	_
SC Power Supply	AQD2-1R	_

Note: Contractor and hardware supplier are responsible to coordinate with Owner's IT Department for removal, salvage, reuse/reinstallation of card readers. Contractor shall be responsible for final coordination with Owner on operation, control, and sequence for proper and continued operation of existing card readers after reinstallation/reconnection by Owner. Hardware supplier shall furnish point-to-point wiring diagram and door schematic elevation as part of hardware submittal.

MARK 3

Door 12G		HM DR X HM FR
MK Hinges	T4A3386 x NRP	US32D
SA Lockset (active leaf)	10-63-8225 LE2P	US26D
SA Cylinder	10-6300	US26D
SA OH Closers (active leaf)	351 CPSH	EN
SA OH Stop (inactive leaf)	590H	US26D
RO Surface Bolts (inactive leaf)	582-8 (top & bottom)	US32D
PE Rain Drip	346 BSP	AL
PE Threshold	2005 AT	AL
PE Frame Seals	303 AS	AL
PE Security Astragal	3572 SPBSP	AL
SE Door Position Switch	1076D-G	_

	Μ	ΙAΙ	٦ŀ	< 4	1
--	---	-----	----	-----	---

Door 13		HM DR X HM FR
MK Hinges	T4A3386 x NRP	US32D
SA Exit Device	10-63-8913 ETP	US32D
SA Cylinder	10-6300	US26D
SA OH Closer	351 CPSH	EN
PE Rain Drip	346 BSP	AL
PE Threshold	2005AT	AL
PE Frame Seals	303AS	AL
PE Security Astragal	3572 SPBSP	AL
SE Door Position Switch	1076D-G	_

MARK 5

Door 14		HM DR X HM FR
MK Hinges	T4A3386 x NRP	US32D
SA Deadlock	10-63-8221	US32D
SA OH Stop	590-H	US26D

MARK 6

Doors 1, 2B, 3, 4, 6B, 8		AL DR X AL FR
MK Hinges	T4A3386 x NRP	US32D
SA Exit Device (active leaf)	10-63-16-8713 ETP	US32D
SA Exit Device (inactive leaf)	16-8710	US32D
SA Cylinder	10-6300	US32D
SA OH Closer	351 CPSH	EN
PE Rain Drip	346C	AL
PE Threshold	270A	AL
PE Door Sweep	3452CV	AL
RO Kickplate	K1050 x 8"h. x dr. width	US32D
SE Door Position Switch	1076D-G	_

MARK 7

Doors 2A, 2C, 6A, 6C		AL DR X AL FR
MK Hinges	T4A3386 x NRP	US32D
SA Exit Device	16-8710 x 862 Pull (1 leaf)	US32D
SA Cylinder	10-6300	US32D
SA OH Closer	351 CPSH	EN
PE Rain Drip	346C	AL
PE Threshold	270A	AL
PE Door Sweep	3452CV	AL
RO Kickplate	K1050 x 8"h. x dr. width	US32D
SE Door Position Switch	1076D-G	_

DOOR HARDWARE

М	Α	R	K	8

Door 7		AL DR X AL FR
MK Hinges	T4A3386 x NRP	US32D
SA Exit Device (active leaf)	10-63-16-56-8774 x 306	US32D
	Aux. Ctrl x 862 Pull	
SA Exit Device (inactive leaf)	16-8710	US32D
SA Cylinders	10-6300	US32D
SA OH Closers	351 CPSH	AL
PE Rain Drip	346C	AL
PE Threshold	270A	AL
PE Door Sweep	3452CV	AL
RO Kickplate	K1050 x 8"h. x dr. width	US32D
SC Power Transfer	EL-CEPT	_
MK Frame Cable	QC-C1500	_
MK Door Cable	QC-C300	_
SE Door Position Switch	1076D-G	_
SC Power Supply	AQDZ-1R	_

NOTE: Owner will furnish and install card reader. Contractor and hardware supplier are responsible to coordinate with Owner's IT Department on coordination of installation and operation of new card reader. Hardware supplier shall furnish point-to-point wiring diagram and door schematic elevation as part of hardware submittal.

The following four (4) Hardware Marks are for providing new cores for existing doors including, keying and keys for installation by Owner.

MADICO

	MARK 9	
Reading High School (12 total cores)		Exist. Drs.

SA Cylinders 10-6300 (RC Keyway) US26D

MARK 10

Southwest Middle School (11 total cores) Exist. Drs.

SA Cylinders 10-6300 (RB Keyway) US26D

MARK 11

Northwest Middle School (2 total cores) Exist. Drs.

SA Cylinders 10-6300 (RA Keyway) US26D

MARK 12

Northeast Middle School (1 total core) Exist. Dr.

SA Cylinder 10-6300 (RA Keyway) US26D

END OF SECTION 08 71 00