



UNIVERSITY OF KENTUCKY Purchasing Division

INVITATION FOR BIDS

CCK-2680-23

ADDENDUM # 1

12/19/2022

ATTENTION: This is not an order. Read all instructions, terms and conditions carefully.

IMPORTANT: BID AND ADDENDUM MUST BE RECEIVED BY 01/10/2023 @ 3:00 P.M. LEXINGTON, KY TIME

Bidder must acknowledge receipt of this and any addendum as stated in the Invitation for Bids.

ITEM #1: BIDDER NOTICES

- The prebid attendance log is enclosed.
- Attendance at this prebid meeting was not mandatory. However, all responsive bids warrant that the bidder has examined the site and local conditions (IB-3, 2iii).
- The University of Kentucky's Supplier Diversity Initiative is enclosed.
- To assist in outreach efforts, bidders are encouraged to use the following website for certified diverse firms providing goods and services in several relevant categories:
<https://www.mbdky.com/>
- The written question deadline is now 12/23/2022 by 3:00PM Lexington KY time.
- The final addendum will be published on or before 01/05/2023.

ITEM #2: GENERAL CLARIFICATIONS

- For bonding purposes, the project budget is estimated below \$5M.
- Roof: Existing roof will remain and will only be patched/ repaired as indicated on the documents. While Installer's warranty has expired, Manufacturer's roof warranty must be maintained – see the enclosed file roof warranty
- The museum space will not be occupied during construction. The two adjacent spaces – the Special Collections Area and the Fitness Center - MUST remain operational during construction. Any required outages for tie-in of new work will have to include temporary power for those spaces so they can remain operational.
- The site is limited for parking and lay down space. Parking for the Fitness Center must be maintained, so only a portion of the parking lot can be used during construction. UK is attempting to see if additional parking can be provided on adjacent sites.

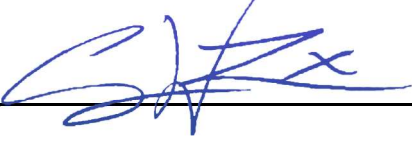
University of Kentucky
Purchasing Division
322 Peterson Service Building
Lexington, KY 40506-0005

ITEM #3: MODIFICATIONS AND CLARIFICATIONS TO THE PROJECT DOCUMENTS

- Modifications to the Specifications section 08 71 00 Door Hardware are enclosed.
- Modifications to the Drawings sheet A601 Door Elevations, Details & Schedule are enclosed.

OFFICIAL APPROVAL
UNIVERSITY OF KENTUCKY

SIGNATURE



Contracting Officer / corey.leslie@uky.edu

Typed or Printed Name

UK UNIVERSITY OF KENTUCKY Purchasing Division

CCK-2680-23
EduceLab Modernization

December 13, 2022

SIGN-IN SHEET

	REPRESENTATIVE	COMPANY
1.	COLEEN LESLIE	UK PURCHASING
2.	Chelsea Miller	Calhoun Construction
3.	BILL GIBBART	MESSER CONSTRUCTION
4.	Adam Ogden	Finney Co.
5.	Josh Skidmore	Abel Construction
6.	MASON STUMPH	ABEL CONSTRUCTION
7.	Singleton Keary	Churchill McFee
8.	Dennis Gier	UK CPMD
9.	Brent Wilder	BESCO Electric
10.	Elisabeth Hunt	LAS
11.	Taylor Stephens	LAS
12.	KYLE CRIST	Magna Contracting
13.	Josep Luaces	OMNI Commercial
14.	JACK MATTHEWS	EC MATTHEWS CO.
15.	PATRICK THURSTON	EC MATTHEWS CO.
16.	Jeff Huns	OMNI Commercial
17.		
18.		
19.		
20.		



University of Kentucky Supplier Diversity Initiative Addendum

Thank you for your interest in partnering with the University of Kentucky to create great spaces and safe environments for our students, staff, and community. Diversity, equity, and inclusion (DEI) are important components of our strategic mission and vision. In 2020, UK created 17 working committees dedicated to moving DEI initiatives forward. Your efforts in working with diverse suppliers is key to reaching our goals. As you know, supplier diversity is a critical component of economic development. We want to work with companies like yours that share our values.

University of Kentucky Strategic Vision: As Kentucky's indispensable institution, we transform lives through diversity and inclusion, discovery, research and creativity, promotion of health and deep community engagement.

Mission: The University plays a critical leadership role by promoting diversity, inclusion, economic development, and human well-being. As the flagship institution in Kentucky, UK plays a critical leadership role for the Commonwealth by contributing to the economic development and quality of life within Kentucky's borders and beyond. The University nurtures a diverse community characterized by fairness and equal opportunity. We will diligently seek and work with companies that share our vision, mission, and values.

Goals: We are committed to increasing the purchasing of goods and services from minority, women, veteran, and disabled-owned businesses to a **minimum of ten percent** with an aspirational goal that equals and surpasses the diversity on our campus and in the communities we serve. In addition, UK supports non-profit work centers for the blind and disabled. All contractors are expected to support and actively work toward achieving these goals.

Bidders utilizing minority, women, veteran, and disabled-owned businesses are requested to identify these contractors and suppliers in required UK Bids and Proposals.

For assistance in identifying diverse businesses and contractors to work on this project, please contact Marilyn Clark, Supplier Diversity Manager, University of Kentucky at mcl256@uky.edu

Regards,
Marilyn Clark
Supplier Diversity Manager
University of Kentucky
322 Peterson Service Building
411 South Limestone
Lexington, KY 40506
859-218-5612
<https://purchasing.uky.edu/bid-and-proposal-opportunities>



1020 EXPORT STREET
BLDG # 9854
WARRANTY
PURCHASED
EPDM - NOT
BY
W.R. Collins
4/13/15

CONTRACTORS FOR:
ROOFING
ROOF DECKS
INDUSTRIAL SHEETING
SHEET METAL FABRICATION AND ERECTION

ROOFING & SHEET METAL COMPANY

P.O. BOX 56 • 1624 OLD FRANKFORT PIKE • LEXINGTON, KY 40588-0056 • TELEPHONE: (859) 233-4546
FAX: (859) 231-9747 • WEB SITE: <http://www.tri-stateservicegroup.com>

COMMERCIAL ROOFING WARRANTY

To: FCPH

Term: 2 Years

Address: 307 7th Street Ste. 1705
Fort Worth, TX 76102

Type of Roof: Carlisle Fully Adhered 60 Mil EPDM

No. of Squares: 323

Date of Completion: 8/10/2013

Date of Expiration: 8/10/2015

Tri-State Roofing & Sheet Metal Company (hereinafter "Contractor") hereby warrants, subject to the terms and conditions set forth herein, that for a period of 2 years from the date of completion, Contractor will, free of charge to the Owner, make repairs to leaks in the roofing and flashing installed by Contractor resulting from defects in workmanship applied by or through Contractor. Contractor shall, within the warranty period and during normal working hours, inspect and furnish the labor and materials to repair leaks covered under this Warranty at no cost to Owner.

This Warranty is made under and subject to the following terms and conditions:

1. In order for this Warranty to be effective, the Owner must first notify Contractor of any repairs required under this Warranty. Notice may be given orally, but in order to pursue any claim that Contractor has not honored this Warranty, notification of a leak must be given to Contractor in writing at the address shown above within five (5) days after a leak is experienced. Contractor shall make repairs as soon as practicable after notification.

2. This Warranty does not extend to conditions caused by, and Contractor shall not be responsible for leaks or damage to the roof caused by (1) abuse, misuse, vandalism, lack of maintenance, accident or negligence in maintaining the roof; (2) lightning, hail, windstorm, hurricane, earthquake, thermal shock or other acts of God; (3) other building components, including solar equipment, building movement, settlement, deflection of roof deck, dry rot, deterioration of walls, water entry through masonry or other building components, and defects in the materials used as a base under the roof; (4) faulty vents, equipment supports, and other penetrations of the roof work and edge conditions, unless such work was performed by Contractor; (5) installation service or maintenance of roof top equipment, solar equipment, plant media, overburden or traffic of any nature on the roof; (6) acts or omissions of other trades or contractors; (7) movement of metal work; (8) ponding of water; (9) discharge of oils, greases, solvents or chemicals; (10) damage caused by termites, insects, birds or animals; (11) penetration of the roofing from beneath by nails or other fasteners; or (12) blockage of roof drains or gutters. If, during the term of this warranty, the subject property is exposed to tornadoes, hurricanes, or earthquakes, the warranty will be void and cancelled.

3. No work shall be done on said roof, including, but without limitation, openings made for flues, vents, drains, sign braces, railings, or other equipment fastened to or set on the roof, and no repairs or alterations shall be made to the roof or flashings, unless Contractor shall first be notified and be given the

opportunity, at the expense of the Owner, to make the necessary roofing application thereto. Failure to observe this condition shall render this Warranty null and void with respect to any area of the roof affected thereby.

4. Nothing in this Warranty shall render Contractor liable in any respect for any damage to the Owner's building, or any components or contents thereof, mold, mildew or interruption of any business conducted in the building. Owner should inspect ceilings and overhangs periodically for signs of leakage.

TRI-STATE ROOFING & SHEET METAL COMPANY SHALL NOT BE
LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

5. This Warranty is intended solely for the benefit of the Owner named above and is not transferable or assignable by the Owner without the express written consent of Contractor.

6. This Warranty shall not be effective unless Contractor receives full payment for installation, repairs, or service in connection with the roofing system covered by this Warranty.

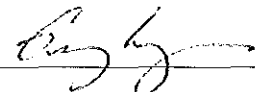
7. Contractor's obligation to make repairs to leaks resulting from a deficiency in workmanship during the term of this Warranty is its sole and exclusive obligation to Owner and Owner's exclusive remedy against Contractor. This warranty is not a maintenance contract. Upon expiration of the warranty, Contractor shall have no further obligation.

THIS WARRANTY IS GIVEN AND ACCEPTED IN LIEU OF ALL
OTHER LIABILITY OR WARRANTIES ON THE PART OF TRI-
STATE ROOFING & SHEET METAL COMPANY, EXPRESS OR
IMPLIED, IN FACT OR IN LAW. ALL IMPLIED WARRANTIES
AND SPECIFICALLY THE IMPLIED WARRANTIES OF
MERCHANTABILITY AND FITNESS FOR A PARTICULAR
PURPOSE ARE EXPRESSLY EXCLUDED AND DISCLAIMED.

8. If Contractor is called upon to investigate a reported leak and the condition is determined not to be covered under this warranty, Owner will compensate Contractor for repairs, if any, and time expended by Contractor. Contractor will not be responsible for leaks, or damage to the roof caused by service to or maintenance of heating, air conditioning and ventilating equipment mounted on or above the roofing and specifically excludes from this Warranty all areas of roofing lying under or within five (5) feet of the perimeter of this equipment and/or its supports.

9. Any claim alleging a breach of this Warranty against Contractor shall be resolved through arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association or through such other neutral organization as the parties may agree and must be initiated no later than one year after the claim arose and in no event later than one year after expiration of this warranty.

Tri-State Roofing & Sheet Metal Company

By:  _____

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following:
1. Commercial door hardware for the following:
 - a. Swinging pedestrian doors: new and existing with retrofit work required.
 2. **Electrified door hardware requiring electrical work and materials. See electrical and access control specifications and 087100-3.7 for hardware sets with electrified door hardware.**
 3. **Automatic door operators.**
 4. **Door Hardware Inspections and Fees: See 087100-3.4.**

1.2 SUBMITTALS

- A. Number of Submittals: All items listed by model number in this section are to be included in one submittal prepared by one supplier.
- B. Product Data: Include construction and installation details, material descriptions, dimensions of individual components and profiles, and finishes.
- C. Qualification Data:
1. Finish Hardware Installers
 - a. Finish hardware, including electrified hardware, for wood, hollow metal, and aluminum doors to be installed by personnel trained and certified by the manufacturer of the product furnished.
 - b. Provide manufacturer's certificates for installer as part of Contractor's bid information. Failure to supply certificates may result in rejection of bid.
 2. Hardware Supplier
 - a. Established contract hardware firm which maintains and operates an office, display, and stock in project area and which is a factory authorized distributor of the lock being furnished.
 - b. Hardware scheduled and furnished by or under direct supervision an Architectural Hardware Consultant.
 - c. All schedules submitted to the Architect for approval and job use must carry the signature and certified seal of this Architectural Hardware Consultant.
 3. Architectural Hardware Consultant
 - a. Currently certified by the Door and Hardware Institute.
 - b. Full-time employee of the Hardware Supplier.
 - c. Available at reasonable times to Architect, Owner, and Contractor during course of work.
- D. Maintenance Data: For each type of door hardware. Include final hardware schedule, keying schedule, riser diagrams, and point-to-point wiring diagrams in 3-ring binder, labeled on spine with project name and "Door Hardware".
- E. Warranty: Special warranty specified in this Section.

F. Other Action Submittals:

1. Door Hardware Sets: Prepared by or under the supervision of a DHI certified Architectural Hardware Consultant, detailing fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final door hardware sets with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 - a. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule"; other formats will be rejected without review. Double space entries, and number and date each page.
 - b. Number of Digital Copies: (1).
 - c. Sequence of Sets: Submittal hardware sets shall be in exact same order as specification hardware sets: one heading per specification and submittal hardware set. Submittal set numbers shall relate to specification set numbers, ie. if three headings are required for Set 12 due to door width differences, then the heading numbers should be 12.1, 12.2, 12.3 or 12A, 12B, and 12C, or employing similar linking logic.
 - d. Content: Include the following information:
 - 1) Identification number, location, hand, fire rating, and material of each door and frame.
 - 2) Notes included with specification hardware sets transcribed verbatim into submittal hardware sets.
 - 3) Type, style, function, size, quantity, and finish of each door hardware item.
 - 4) Complete designations of every item required for each door or opening including name and manufacturer.
 - 5) Degree of opening for closer and overhead stop and holder installation.
 - 6) Keying information.
 - 7) Fastenings and other pertinent information.
 - 8) Location of each door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - 9) Explanation of abbreviations, symbols, and codes contained in schedule.
 - 10) Mounting locations for door hardware.
 - 11) Door and frame sizes and materials.
 - 12) List of related door devices specified in other Sections for each door and frame.
 - e. Submittal Sequence: Submit the final door hardware sets at earliest possible date, particularly where approval of the door hardware sets must precede fabrication of other work that is critical in 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 sets.
2. Keying Schedule: Prepared by or under the supervision of Architectural Hardware Consultant, detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations.

1.3 QUALITY ASSURANCE

- A. Furnish proper hardware types and quantities for door function, hardware mounting and clearances, and to meet applicable codes. Bring discrepancies to the attention of the Architect a minimum of (10) days prior to bid date so that an addendum may be issued. No additional compensation will be allowed after bidding for hardware changes required for proper function, hardware mounting or clearances, or to meet codes.

- B. 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.
 - C. Source Limitations: All items listed in this section are to be furnished by one supplier. Obtain each type and variety of door hardware from a single manufacturer, unless otherwise indicated.
 - 1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.
 - D. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252 or UBC Standard 7-2.
 - 1. Test Pressure: After 5 minutes into the test, neutral pressure level in furnace shall be established at 40 inches (1016 mm) or less above the sill.
 - E. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
 - F. Keying Conference: Conduct conference to comply with requirements in Division 01 Section "Project Meetings." Keying conference to incorporate the following criteria into the final keying schedule document:
 - 1. Function of building, purpose of each area and degree of security required.
 - 2. Plans for existing and future key system expansion.
 - 3. Requirements for key control storage and software.
 - 4. Installation of permanent keys, cylinder cores and software.
 - 5. Address and requirements for delivery of keys.
 - G. Preinstallation 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 Certified Installer, Hardware Supplier's Architectural Hardware Consultant, and Security Supplier. Review methods and procedures related to electrified door hardware including, but not limited to, the following:
 - 1. Coordinate electrical roughing-in and other preparatory work to be performed by other trades.
 - 2. Review sequence of operation for each type of electrified door hardware.
 - 3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - 4. Review required testing, inspecting, and certifying procedures.
- 1.4 DELIVERY, STORAGE, AND HANDLING
- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.
 - B. Deliver hardware for aluminum doors to GC in timely manner so as not to delay fabrication of storefront doors and frames. Balance of hardware may be delivered to GC at same time, packaged separately from aluminum door hardware, and may be billed as stored materials.

- C. Tag each item or package separately with identification related to the final door hardware sets, and door numbers, and include basic installation instructions, templates, and necessary fasteners with each item or package.
- D. Deliver keys to UK Keyshop Supervisor by registered mail or overnight package service. Obtain Owner's contact name and address from Architect.

1.5 COORDINATION

- A. Templates: Distribute door hardware templates for doors, frames, and other work specified to be factory prepared for installing door hardware. Distribute templates in a timely manner so as not to delay suppliers. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- B. Electrical System Roughing-in: Coordinate layout and installation of electrified door hardware with connections to power supplies, fire alarm system and detection devices, access control system, and security system.

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 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 operators and door hardware.
 - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.
 - 2. Warranty Period: Five years from date of Substantial Completion, except as follows:
 - a. Manual Closers: 10 years from date of Substantial Completion.

1.7 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.
- B. Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of door hardware Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door hardware operation. Provide parts and supplies same as those used in the manufacture and installation of original products.

PART 2 - PRODUCTS

2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in this and door hardware sets indicated in Part 3 "Door Hardware Sets" Article.
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 Sets" Article. Products are identified by using door hardware designations, as follows:
1. 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 Sets" Article.
 2. References to BHMA Standards: Provide products complying with these standards and requirements for description, quality, and function.
- C. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include manufacturers specified.

2.2 BUTT HINGES, GENERAL

- A. Quantity: Provide the following, unless otherwise indicated:
1. Two Hinges: For doors with heights up to 60 inches (1524 mm).
 2. Three Hinges: For doors with heights 61 to 90 inches (1549 to 2286 mm).
 3. Four Hinges: For doors with heights 91 to 120 inches (2311 to 3048 mm).
 4. For doors with heights more than 120 inches (3048 mm), provide 4 hinges, plus 1 hinge for every 30 inches (750 mm) of door height greater than 120 inches (3048 mm).
- B. Template Requirements: Except for hinges and pivots to be installed entirely (both leaves) into wood doors and frames, provide only template-produced units.
- C. Hinge Height, Width, and Weight: Unless otherwise indicated, provide the following:
1. Doors with Exit Devices or 3'6" or more in width: 5" high, heavy-weight hinges.
 2. Doors less than 3'6" in width: 4-1/2" high, standard-weight hinges.
 3. Width: 4-1/2" heavy-weight, 4.5" standard-weight unless proper clearance requires a different width.
 4. Doors with Closers: Antifriction-bearing hinges.
- D. Hinge Base Metal: Unless otherwise indicated, provide the following:
1. Exterior and in-swinging restroom door hinges: Stainless steel, with stainless-steel pin.
 2. Balance of hinges: Steel, with steel pin.

- E. Hinge Options: Comply with the following:
 - 1. Nonremovable Pins: Provide set screw in hinge barrel that, when tightened into a groove in hinge pin, prevents removal of pin while door is closed; for reverse bevel lockable doors.
 - 2. Corners: Square.
 - 3. Number of knuckles: Five.

- F. Fasteners: Comply with the following:
 - 1. Machine Screws: For metal doors and frames. Install into drilled and tapped holes.
 - 2. Wood Screws: For wood doors and frames.
 - 3. Threaded-to-the-Head Wood Screws: For fire-rated wood doors.
 - 4. Screws: Phillips flat-head. Finish screw heads to match surface of hinges.

- G. Template Hinge Dimensions: BHMA A156.7.

- H. Available Manufacturers:
 - 1. Hager Companies (HAG).
 - 2. Ives. (IVE)
 - 3. McKinney Products Company; an ASSA ABLOY Group company (MCK).
 - 4. Stanley Commercial Hardware; Div. of The Stanley Works (STH).

2.3 PIVOTS

- A. Available Manufacturers (equal in all features to model specified):
 - 1. Rixson Specialty Door Controls; an ASSA ABLOY Group company (RIX).
 - 2. Approved equal.

2.4 CONTINUOUS HINGES

- A. Configuration: Provide hinges of proper size, shape, design, model and inset for door fit and function, and consistent with series specified in hardware sets.

- B. Continuous, Pinless-Type Hinges: Extruded-aluminum, pinless, hinge leaves; with concealed, self-lubricating thrust bearings.
 - 1. Available Manufacturers:
 - a. Hager Companies (HAG).
 - b. IVES Hardware; an Allegion Company (IVE).
 - c. McKinney Products Company; an ASSA ABLOY Group company (MCK).
 - d. Pemko Manufacturing Co. (PEM).
 - e. Select Products Limited (SEL).
 - f. Stanley (STA).

2.5 ELECTRONIC ACCESSORIES

- A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. Screw adjustable for door/frame gap. DPDT contacts as specified.
 - 1. Acceptable Manufacturers:
 - a. Flair Electronics (FLR).
 - b. Interlogix.
 - c. GE Security.
 - d. Sentrol.
- B. Electronic Power Transfers:
 - 1. Concealed: For new doors and frames, concealed when door is closed. All metal construction, cast housing with steel backboxes, two universal joints and rigid tubing. Acceptable Manufacturers:
 - a. Security Door Controls (SDC).
 - b. Securitron Door Controls (SEC).
 - c. Architectural Builders Hardware (ABH).
 - d. Hager (HAG).
 - e. Von Duprin (VON).

2.6 LOCKS AND LATCHES, GENERAL

- A. Accessibility Requirements: Where indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."
 - 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 (22 N).
- B. Latches and Locks for Means of Egress Doors: Comply with NFPA 101. Latches shall not require more than 15 lbf (67 N) to release the latch. Locks shall not require use of a key, tool, or special knowledge for operation.
- C. Electrified Locking Devices: BHMA A156.25. UL approved electrical modifications are acceptable. Provide electric mortise locks with 24VDC electric lock/unlock solenoids, monitoring of inside lever for REX indication and door position monitoring (security monitoring which includes in series monitoring of the auxiliary deadlatch and solenoid position is acceptable as a substitute for door position monitoring).
- D. Lock Trim:
 - 1. Levers: Cast.
 - a. Sargent H002 model with E3 rose except where an escutcheon is specified.
 - 2. Lockset Designs: Provide design indicated in hardware sets, or, if sets are provided by another manufacturer, provide designs that exactly match those designated.
- E. Lock Throw: Comply with testing requirements for length of bolts required for labeled fire doors, and as follows:

1. Mortise Locks: Minimum 3/4-inch (19-mm) latchbolt throw.
- F. Backset: 2-3/4 inches (70 mm), unless otherwise indicated.
- G. Strikes: Manufacturer's standard strike with strike box for each latchbolt or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, and as follows:
1. Strikes for Mortise Locks and Latches: BHMA A156.13.

2.7 MECHANICAL LOCKS AND LATCHES

- A. Lock Functions: Function numbers and descriptions indicated in door hardware sets comply with the following:
1. Mortise Locks: BHMA A156.13.
- B. Mortise Locks: Stamped steel case with steel or brass parts; BHMA A156.13 Grade 1.
1. Available Manufacturers:
 - a. Best Access Systems; Div. of The Stanley Works (BES).
 - b. SARGENT Manufacturing Company; an ASSA ABLOY Group company (SAR).
 - c. Schlage Commercial Lock Division; an Allegion Company (SCH).

2.8 EXIT DEVICES

- A. Exit Devices: BHMA A156.3, Grade 1.
- B. Accessibility Requirements: Where handles, pulls, latches, locks, and other operating devices are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."
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 (22 N).
- C. Exit Devices for Means of Egress Doors: Provide exit devices on doors servicing spaces with occupant loads of 50 or more, and as required by the National Electrical Code. Comply with NFPA 101. Exit devices shall not require more than 15 lbf (67 N) to release the latch. Locks shall not require use of a key, tool, or special knowledge for operation.
- D. Electric Latch Retraction: Provide motorized electric latch retraction exit devices fully warranted for use with generic filtered, regulated 24VDC power with proper wiring conductor sizing for the current load.
- E. Panic Exit Devices: Listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for panic protection, based on testing according to UL 305. Concealed vertical rod exit devices and removable mullions are not allowed.
- F. Outside Trim: As specified in hardware sets; material and finish to match locksets, unless otherwise indicated.
1. Match design for locksets and latchsets, unless otherwise indicated.

- G. Fasteners. Manufacturer's standard, except furnish sex bolts for attachments to doors.
- H. Shims: Provide shims if needed for clearance.
- I. Available Manufacturers for Rim exit devices:
 - 1. Von Duprin; an Allegion Company (VON).
 - 2. Precision.
 - 3. Sargent (SAR).
 - 4. Detex.

2.9 LOCK CYLINDERS AND CYLINDER HOUSINGS

- A. Cylinders: Provide SFIC key cylinder housings and permanent cores for all devices requiring key cylinders to properly function: constructed from brass or bronze, stainless steel, or nickel silver, and complying with the following:
 - 1. Number of Pins: Seven.
 - 2. Mortise Type: Threaded cylinders with rings and straight- or clover-type cam.
 - 3. Rim Type: Cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
 - 4. Fully warranted for use with Stanley Best Cormax permanent cores.
- B. Permanent Cores: Best Cormax; keyway as chosen by UK Keyshop. No substitutes allowed.
- C. Supplemental Items: Provide cylinder spacers, collars, and correct cams as needed for proper function of locking devices.
- D. Construction Keying: Comply with the following:
 - 1. Construction Cores: Provide keyed brass construction cores that are replaceable by permanent cores for exterior doors plus ten extra. Provide 6 construction master keys.
 - a. Remove construction cores as directed by Owner.
- E. Available Manufacturers for Cylinder Housings and Construction Cores:
 - 1. Best Access Systems (BES).
 - 2. Sargent (SAR).
 - 3. Schlage (SCH).
- F. Available Manufacturers for Permanent Key Cylinder Cores:
 - 1. Best Access Systems (BES).

2.10 KEYING

- A. Keying System: Factory registered, keyed as directed by UK Keyshop Supervisor, complying with guidelines in BHMA A156.28, Appendix A. Incorporate decisions made in keying conference, and as follows:

1. Great-Grand Master Key System: Cylinders are operated by a change key, a master key, a grand master key, and a great-grand master key.
- B. Keys: Nickel silver.
 1. Stamping: Permanently inscribe each key with a visual key control number and include the following notation:
 - a. Notation: "DO NOT DUPLICATE."
 2. Quantity: Provide the following:
 - a. Cylinder Change Keys: Three per cylinder.
 - b. Master Keys: Six per master.
 - c. Grand Master Keys: Six.
 - d. Great-Grand Master Keys: Five.
 - e. Control Keys: Two.
 - f. Construction Control Keys: Two.

2.11 OPERATING TRIM

- A. Materials: Fabricate from stainless steel, unless otherwise indicated.
- B. Dimensions: All dimensions, shapes, fasteners, materials, finishes and other properties identical to models specified in hardware sets.
- C. Available Manufacturers:
 1. Elmes (ELM)
 2. Forms + Surfaces (FS).
 3. Hager Companies (HAG).
 4. IVES Hardware; an Allegion Company (IVE).
 5. McKinney Products Company; an ASSA ABLOY Group company (MCK).
 6. Rockwood Manufacturing Company (ROC).
 7. Trimco (TRI).

2.12 SURFACE CLOSERS

- A. Accessibility Requirements: Where handles, pulls, latches, locks, and other operating devices are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."
 1. Comply with the following maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
 - b. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
- B. Door Closers for Means of Egress Doors: Comply with NFPA 101. Door closers shall not require more than 30 lbf (133 N) to set door in motion and not more than 15 lbf (67 N) to open door to minimum required width.

- C. Fasteners: Manufacturer's standard for arms, shoes and brackets. Sex bolts for fastening closers to doors.
- D. Mounting Accessories: Provide shoes, brackets, drop plates, spacers, etc., as needed for proper mounting of closers and arms to door and frame.
- E. Spring Size of Units: Provide field-sizable closers, adjustable for spring sizes 1-6, plus 50% extra spring power at spring size 6, to meet field conditions and requirements for opening force.
- F. Cylinders: 1-1/2" minimum diameter; cast iron or high-silicon alloy aluminum.
- G. Mounting Configuration: Unless otherwise indicated by model number in the hardware sets:
 - 1. Do not furnish closers capable of being mounted on the corridor side of doors.
 - 2. Do not furnish regular arm closers in areas accessible to students.
 - 3. If tri-pack closers are furnished for regular arm applications, remove parallel arm shoe from closer box before delivering to job.
 - 4. Parallel Arm closers are to be manufacturer's double forged rigid models.
- H. Available Manufacturers for Rack and Pinion Surface Closers:
 - 1. LCN Closers; an Allegion Company (LCN): 4040XP.
 - 2. SARGENT Manufacturing Company; an ASSA ABLOY Group company (SAR): 281 series.
 - 3. Detex (DTX): D4550 series.

2.13 LOW-HIGH ENERGY AUTOMATIC DOOR OPERATORS

- A. Standard: Comply with BHMA A156.19.
- B. Performance Requirements:
 - 1. Not more than 15 lbf (67 N applied) 1 inch (25 mm) from latch edge of door to prevent stopped door from opening or closing.
 - 2. If power fails, not more than 30 lbf (133 N applied) 1 inch (25 mm) from latch edge of door to manually set door in motion.
 - 3. Operator must be warranted for stopping exterior doors of the size and weight in this project without the use of a supplemental stop.
- C. Operation: Power opening and spring closing. When not in automatic mode, door operator shall function as manual door closer, with or without electrical power.
- D. Operating System: Electromechanical or electrohydraulic.
- E. Microprocessor Control Unit: Solid-state controls.
- F. Features:
 - 1. Adjustable opening and closing speed.
 - 2. Adjustable opening and closing force.
 - 3. Adjustable backcheck.
 - 4. Adjustable latch speed.
 - 5. Adjustable hold-open time of not less than 0 to 30 seconds.
 - 6. Adjustable time delay.

7. Adjustable acceleration.
8. Obstruction recycle.
9. On/Off/HO switch on top of housing.

G. Mounting: Surface mounted to top jamb.

H. Mounting Accessories: Provide shoes, brackets, drop plates, spacers, etc., as needed for proper mounting of operators and arms to door and frame.

I. Activation Devices

1. Material: Stainless steel or dark bronze anodized as indicated in hardware sets.
2. Message: International symbol of accessibility and "Push to Open" or as indicated in the hardware sets.
3. Available Manufacturers for Full-height Activation Devices and In-ground Mounted Bollards:

- a. Wikk Industries.
- b. Approved equal.

J. Automatic Door Operator Signage:

1. Comply with BHMA A156.19.
2. Consult Architect before applying signage to door.

K. Available manufacturers and series:

1. **LCN Closers; an Allegion Company (LCN); Senior Swing series.**
2. **Stanley M-Force (STA).**
3. **Besam SW200i (BSM).**

2.14 PROTECTIVE TRIM UNITS

A. Size:

1. Width
 - a. Singles, and pairs with removable mullions or surface applied astragals: 2 inches (38 mm) less than door width on push side and 1 inch (13 mm) less than door width on pull side
 - b. Other pairs: 1 inch (13 mm) less than door width.
 - c. As required for proper 1/8" maximum gap fit-up with edge guards and continuous hinges.
2. Height: as specified in door hardware sets; or, if constrained by door bottom rail height, 1" less than bottom rail height.

B. Fasteners: Manufacturer's machine or self-tapping countersunk screws.

C. Metal Protective Trim Units: BHMA A156.6; beveled 4 sides; fabricated from 0.050-inch- (1.3-mm-) thick stainless steel.

D. Available Manufacturers:

1. Hager Companies (HAG).
2. IVES Hardware; an Allegion Company (IVE).
3. McKinney Products Company; an ASSA ABLOY Group company (MCK).

4. Rockwood Manufacturing Company (ROC).
5. Trimco (TRI).

2.15 MECHANICAL WALL STOPS

- A. Stops and Bumpers: BHMA A156.16, Grade 1.
1. Provide wall stops for doors unless floor, overhead, or other type stops are scheduled or indicated. Convex stops are indicated in hardware sets for estimating purposes only. Provide convex stops unless lock pushbutton function requires concave stop for proper function. Do not mount floor stops where they will impede traffic. Where floor or wall stops are not appropriate, provide overhead holders.
 2. Properties. Cast construction with fastener suitable for wall or floor condition.
 3. Available Manufacturers:
 - a. Hager Companies (HAG).
 - b. IVES Hardware; an Allegion Company (IVE).
 - c. Rockwood Manufacturing Company (ROC).
 - d. Trimco (TRI).

2.16 SILENCERS

- A. Provide silencers for Metal Door Frames: BHMA A156.16, Grade 1; neoprene or rubber, minimum diameter 1/2 inch (13 mm); fabricated for drilled-in application to frame.
- B. Available Manufacturers:
1. Glynn-Johnson; an Allegion Company (GJ).
 2. Hager Companies (HAG).
 3. IVES Hardware; an Allegion Company (IVE).
 4. McKinney Products Company; an ASSA ABLOY Group company (MCK).
 5. Rockwood Manufacturing Company (ROC).
 6. Trimco (TRI).

2.17 DOOR GASKETING

- A. General: Provide continuous weather-strip gasketing on exterior hollow metal doors and provide smoke, light, or sound gasketing on interior doors where indicated or scheduled. Provide noncorrosive fasteners as indicated by models in hardware sets.
1. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
 2. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
 3. Mullion Gasketing: Fasten to mullions, forming seal when doors are closed.
 4. Sweeps: Apply to bottom of in-swinging hollow metal doors, forming seal with threshold when door is closed.
 5. Seals integral to threshold at out-swinging exterior hollow metal doors.
- B. Requirements per type of rated door provided (these requirements supersede models indicated in hardware sets):
1. Category A wood doors: provide models indicated in hardware sets.

2. Category B wood doors: provide NGP 9550 (or approved equal) Category G&H seals at jambs and meeting edges. If sound seals are indicated in hardware sets, provide the 9550 seals in addition to the sound seals.
 3. Category A and B hollow metal doors: provide models indicated in hardware sets.
- C. Air Leakage: Not to exceed 0.50 cfm per foot (0.000774 cu. m/s per m) of crack length for gasketing other than for smoke control, as tested according to ASTM E 283.
- D. Smoke-Labeled Gasketing: Assemblies complying with NFPA 105 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for smoke-control ratings indicated, based on testing according to UL 1784.
1. Provide smoke-labeled gasketing on 20-minute-rated doors and on smoke-labeled doors.
- E. Fire-Labeled Gasketing: Assemblies complying with NFPA 80 that are listed and labeled by a testing and inspecting agency acceptable to authorities having jurisdiction, for fire ratings indicated, based on testing according to NFPA 252 or UBC Standard 7-2.
1. Test Pressure: After 5 minutes into the test, neutral pressure level in furnace shall be established at 40 inches (1016 mm) or less above the sill.
- F. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- G. Gasketing Materials:
1. Adhesive Seals. As specified in hardware sets or approved equal.
 2. Screwed-on weatherstrip and sweeps. Closed cell neoprene or polyprene.
 3. Panic type thresholds. Neoprene.
- H. Available Manufacturers:
1. Hager Companies (HAG).
 2. National Guard Products (NGP).
 3. Pemko Manufacturing Co. (PEM).
 4. Reese Enterprises (RE).

2.18 THRESHOLDS

- A. Standard: BHMA A156.21
- B. Accessibility Requirements: Where thresholds are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)."
1. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch (13 mm) high.
- C. Thresholds for Means of Egress Doors: Comply with NFPA 101. Maximum 1/2 inch (13 mm) high.
- D. Fasteners: 1/4-20 machine screws and expansion anchors.
- E. Gasketing material: At panic-type thresholds: closed cell neoprene.

F. Available Manufacturers:

1. Hager Companies (HAG).
2. National Guard Products (NGP).
3. Pemko Manufacturing Co. (PEM).
4. Reese Enterprises (RE).
5. Zero International (ZRO).

2.19 MISCELLANEOUS DOOR HARDWARE

- A. Miscellaneous door hardware items must be of same material, thickness, shape, appearance, functionality and durability as those specified in the hardware sets and must be submitted for approval by addendum prior to the bid.

2.20 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, 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. Do not furnish manufacturer's standard materials or forming methods if different from specified standard.

- C. Fasteners: Manufacturer's standard, except as noted in product sections of this specification.

2.21 FINISHES

- A. Standard: BHMA A156.18, as indicated in door hardware sets.

- 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 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: Comply with DHI A115 Series.
 - 1. Surface-Applied Door Hardware: Drill and tap doors and frames according to ANSI A250.6.
- B. Wood Doors: Comply with DHI A115-W Series.

3.3 INSTALLATION

- A. Low-energy Automatic Door Operators:**
 - 1. **Installer is to have current AAADM certification to install automatic door operators and actuating systems.**
- B. Mounting Heights: Mount door hardware units at heights indicated as follows unless otherwise indicated or required to comply with governing regulations.
 - 1. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - 2. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
 - 3. Pulls: locate offset and straight pulls as directed by Architect.
 - 4. Push Plates: Top edge of plate: 53" AFF.
 - 5. Key Cylinders for Auxiliary Deadbolts: 48" AFF.
- C. Mounting Locations:
 - 1. Wall Stops: Locate so that lockset spindle and wall stops share horizontal and vertical centerlines.
 - 2. Closers and Overhead Stop/holders: Closers and overhead stops shall be mounted for the maximum degree of opening before the door encounters an obstruction. They shall be mounted so that doors can function properly with hardware such as wall stops, holders, etc. Closer arms should never fully extend or bottom out. Properly locating closers is in all cases the Installer's responsibility.
 - 3. Floor Stops and Holders: Locate at least 20" out from hinge edge of door and for maximum degree of opening before door encounters obstruction.

- D. 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 work specified in Division 09 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
 - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
 - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- E. Weatherstrip and Gasketing with Metal Retainers: Miter cut at butt joints as needed for neat appearance with no gaps between retainers or bulbs.
- F. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."

3.4 FIELD QUALITY CONTROL

- A. Provide Door Hardware Inspection Services and Field Quality Report as indicated below.
- B. Door Hardware Inspection Services
 - 1. Scope:
 - a. Door Hardware Inspection Services for the project shall be performed by the Inspector as a sub-consultant of the Architect.
 - b. Inspection of all swinging pedestrian doors and door hardware immediately following substantial completion of all hardware in entire project.
 - c. Inspector to furnish a Field Inspection Report, itemized per each individual opening, to the Architect, and to UK Chief of Police within 7 days of the inspection, including:
 - 1) deficiencies in workmanship and standard industry practices,
 - 2) use of allowable products,
 - 3) use of manufacturer recommended fasteners,
 - 4) compliance with the ADA,
 - 5) proper door/frame/hardware clearances,
 - 6) problems related to function, security, aesthetics or maintenance.
 - 2. Inspector: Calvert Independent Hardware Specifications, LLC. (Calvert IHS, LLC.) shall perform all inspections and re-inspections required by this specification. Contact info: Joseph D. (Joe) Calvert CSI CDT AHC SCIP, 307 Oakwood Circle, Vine Grove, KY 40175, 502-930-2039, joe@hardware-specs.com, www.hardware-specs.com.
 - 3. Initial Inspection and Re-inspections:
 - a. An initial inspection shall be performed by the Inspector as directed by the UK Police Department when notified by the contractor.
 - b. Re-inspections are required until all items listed in the initial punch list report are approved by the Reviewer as corrected.
 - 4. Fees and Payment:

- a. The cost of the initial inspection at substantial completion shall be reimbursed directly by the Contractor by check or money order (due net 10 days from date of receipt of invoice) at the rate of \$750.00.
- b. Additional visits required by the Consultant to review work not completed by the first back check review shall be reimbursed directly by the Contractor by check or money order (due net 10 days from date of each additional visit) at a rate of \$150.00 per hour for extra trips required to complete the final punch lists.

3.5 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.
- B. Overhead Stops/ HOLDERS: Set adjustable stops for maximum degree of opening before door encounters obstruction. Adjust friction to control door.
- C. Door Closers:
 1. Unless otherwise required by authorities having jurisdiction, adjust sweep period so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches (75 mm) from the latch, measured to the leading edge of the door.
 2. Adjust latch period so that door does not slam nor injure fingers.
 3. Adjust spring power for minimum force required so that door properly and reliably latches. It is recommended that all closers be adjusted to a Spring Size 1 (either at the factory or at the facility of the Contract Hardware Supplier) prior to delivery to job; they can then be adjusted up to meet requirements. ADA maximum force to open a non-rated interior doors is 5 lbf; 8.5lbf for an exterior non-rated door. Installer is required to adjust spring power on every closer during installation using a door force gage. If ADA requirements cannot be met due to door-frame-hardware clearance issues or HVAC issues, bring to Contractors attention to resolve problem.
 4. Adjust backcheck to slow door down before hitting stop point so as to prevent damage to closer, arm, door, frame, and fasteners.
- D. Occupancy Adjustment: Approximately six months after date of Substantial Completion, Installer shall examine and readjust, including adjusting operating forces, each item of door hardware as necessary to ensure function of doors, door hardware, and electrified door hardware.

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 DOOR HARDWARE SETS (on following pages)

HARDWARE SET PREFIX KEY:

- A Automatic Door Operator**
- C Card Reader**
- M Monitoring but with no card reader**
- R Retrofit work or materials**

Hardware Set A01

Mechanical Hardware

(2) Continuous Hinge	BSPFMHD1	BSP	PEM
(2) Push Plate	73C	BSP	ROC
(2) Pull Plate	126 x 70C	BSP	ROC
(2) Armor Plate	K1050 34 x 2LDW x CSK x HVBEV	BSP	ROC
(2) Universal Stop, 1-1/2"	RM851	BSP	ROC
(1) Cat H Astragal Set	115NA	MBL	NGP

Electrified Hardware

(2) Automatic Door Operator	SW200i	BSP	BSM
Note: Provide operators in one full width housing with On/Off/HO switch on underside of housing.			
(2) Operator Actuator, 36"	S-i36-3		WIK
Note: Provide actuator in RAL 9005 satin black finish with white lettering.			

System Function

Free egress and ingress. Either actuator opens both door leaves; doors close after time delay.

Hardware Set AC01

Mechanical Hardware

(1) Bottom Pivot	195 (Less top pivot)	BSP	RIX
(1) Intermediate Pivot	M19	BSP	RIX
(1) Top Pivot	H180	BSP	RIX
(1) SFIC Rim Cylinder Housing		622	BES
(1) SFIC Permanent Cylinder Core		622	BES
(1) Straight Pull, 1-1/4"D, 12"CTC	RM5202 x 6R Mtg	BSP	ROC

Note 1: ADA threshold, jamb and door bottom seals by aluminum door and frame supplier.

Electrified Hardware

(1) Jamb-to-Door Power Transfer	CEPT-10-BSP	BSP	SEC
(1) NS Panic Device, Rim, 03, ELR	LD-55-56-AD8504 x Less Pull	BSP	SAR
Note 1: Panic device has request-to-exit monitoring of the touchbar and electric latch retraction.			
(1) Automatic Door Operator	SW200i	BSP	BSM
(2) Operator Actuator, 36"	Ingress'r		WIK
Note: Provide actuators in RAL 9005 satin black finish with white lettering. Locate one on exterior bollard and one interior. Locate bottom of actuator 3" AFF.			
(1) Bollard Post			WIK
Note: Provide in-ground mount in RAL 9005 6x6 bollard with welded steel top slanting from front to back with weather shroud, factory prepped for single-gang card reader and Ingress'r actuator, located exterior as directed by Architect.			
(1) Door Contact, Pop-in, DPDT	1076D-G	Grey	Interlogix
(1) Lot: Single-gang card reader, control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications)			

System Function

Free egress. Panic device latch is retracted or extended upon signal from access control system. When locked against ingress, exterior actuator is disabled; presenting valid card retracts latch on panic device. During unlock period, exterior actuator is enabled to open door. Actuator inside Vestibule is always enabled to retract latch (if need be) on panic device and open door. Mechanical ingress by key.

Hardware Set C01

Mechanical Hardware

- | | | | |
|----------------------------|------------------|-----|-----|
| (3) Butt Hinges | TA2714 4.5 x 4.5 | BSP | MCK |
| (1) Universal Stop, 1-1/2" | RM851 | BSP | ROC |

Electrified Hardware

- | | | | |
|---|---------------|------|------------|
| (1) Jamb-to-Door Power Transfer | CEPT-10 | | SEC |
| (1) Electric Mortise Lock | RX8271-E3H002 | BSP | SAR |
| Note: Do not prep door face for key cylinder. | | | |
| (1) Door Contact, Pop-in, DPDT | 1076D-G | Grey | Interlogix |
| (1) Lot: Card reader, control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications) | | | |

System Function

Free egress. Door is normally locked (not powered) and is monitored for inside lever REX and door position; ingress by card.

Hardware Set C02

Mechanical Hardware

- | | | | |
|-----------------------------------|------------------|-----|-----|
| (6) Butt Hinges | TA2714 4.5 x 4.5 | BSP | MCK |
| (2) Manual Flush Bolt | 555 x 555 | BSP | ROC |
| (1) SFIC Mortise Cylinder Housing | | 622 | BES |
| (1) SFIC Permanent Cylinder Core | | 622 | BES |
| (1) Closer, w/Spring Stop/HO | 281-CPSH | BSP | SAR |
| (1) Overhead Stop, MD, Surface | OH100_M | BSP | ROC |

Electrified Hardware

- | | | | |
|---|---------------|------|------------|
| (1) Jamb-to-Door Power Transfer | CEPT-10 | | SEC |
| (1) Electric Mortise Lock | RX8271-E3H002 | BSP | SAR |
| (2) Door Contact, Pop-in, DPDT | 1076D-G | Grey | Interlogix |
| (1) Lot: Card reader, control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications) | | | |

System Function

Free egress. Door is normally locked (not powered) and is monitored for inside lever REX and door position; ingress by card or key.

Hardware Set C02A

Mechanical Hardware

- | | | | |
|--------------------------------|------------------|-----|-----|
| (6) Butt Hinges | TA2714 4.5 x 4.5 | BSP | MCK |
| (2) Manual Flush Bolt | 555 x 555 | BSP | ROC |
| (1) Closer, w/Spring Stop/HO | 281-CPSH | BSP | SAR |
| (1) Overhead Stop, MD, Surface | OH100_M | BSP | ROC |

Electrified Hardware

- | | | | |
|---|---------------|------|------------|
| (1) Jamb-to-Door Power Transfer | CEPT-10 | | SEC |
| (1) Electric Mortise Lock | RX8271-E3H002 | BSP | SAR |
| Note: Do not prep door face for key cylinder. | | | |
| (2) Door Contact, Pop-in, DPDT | 1076D-G | Grey | Interlogix |
| (1) Lot: Card reader, control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications) | | | |

System Function

Free egress. Door is normally locked (not powered) and is monitored for inside lever REX and door position; ingress by card.

Hardware Set C02B

Mechanical Hardware

(1) Continuous Hinge	BSPFMHD1	BSP	PEM
(2) Manual Flush Bolt	555 x 555	BSP	ROC
(1) SFIC Mortise Cylinder Housing		622	BES
(1) SFIC Permanent Cylinder Core		622	BES
(1) Closer, w/Spring Stop/HO	281-CPSH	BSP	SAR
(2) Armor Plate	K1050 34 x 2LDW x CSK x HVBEV	BSP	ROC
(1) Overhead Stop, HD, Concealed	OH100_3	BSP	ROC

Electrified Hardware

(1) Continuous Hinge	BSPFMHD1 x EPT Prep	BSP	PEM
(1) Jamb-to-Door Power Transfer	CEPT-10-BSP	BSP	SEC
(1) Electric Mortise Lock	RX8271-E3H002	BSP	SAR
(2) Door Contact, Pop-in, DPDT	1076D-G	Grey	Interlogix
(1) Lot: Card reader, control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications)			

System Function

Free egress. Door is normally locked (not powered) and is monitored for inside lever REX and door position; ingress by card or key.

Hardware Set C03

Mechanical Hardware

(1) Closer, w/Spring Stop/HO	281-CPSH	BSP	SAR
(1) Armor Plate	K1050 34 x 2LDW x CSK x HVBEV	BSP	ROC
(1) Overhead Rain Drip	16A	MBL	NGP
(1) Cat H Adhesive Jamb Seal Set	2525B	Brown	NGP
Note: Apply to top jamb only.			
(1) Cat H Jamb Seal Set	135NA	MBL	NGP
Note: Apply to side jambs only.			
(1) Panic Threshold	896HD-N x RCE	MBL	NGP
Note: 3/8" door undercut required for proper mating of door bottom with seal integral to threshold.			

Electrified Hardware

(1) Continuous Hinge	BSPFMHD1 x EPT Prep	BSP	PEM
(1) Jamb-to-Door Power Transfer	CEPT-10-BSP	BSP	SEC
(1) NS Panic Device, Rim, 03, ELR	LD-55-56-8804 x 814-FSW	BSP	SAR
Note 1: Panic device has request-to-exit monitoring of the touchbar and electric latch retraction.			
(1) Door Contact, Pop-in, DPDT	1076D-G	Grey	Interlogix

System Function

Free egress. Door is normally locked (not powered) and is monitored for inside lever REX and door position; ingress by card or key.

Hardware Set CR01

Mechanical Hardware

(1) SFIC Permanent Cylinder Core		626	BES
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Retrofit Notes

Replace existing key cylinder core with new core. Re-utilize existing card reader and door electronics.

Hardware Set CR02

Mechanical Hardware

(3) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1) Storeroom Lock	8204-CEH002	BSP	SAR
(1) SFIC Mortise Cylinder Housing		622	BES
(1) SFIC Permanent Cylinder Core		622	BES
(1) Kick Plate	K1050 10 x 2LDW x CSK x HVBEV	BSP	ROC
(1) Universal Stop, 1-1/2"	RM851	BSP	ROC
(1) Door Bottom Sweep	674 x Black Brush	MBL	NGP

Retrofit Notes

Re-utilize existing card reader and door electronics on relocated door and frame. Field paint entire closer and arm assembly to be satin black. Replace existing hinges, lockset, key cylinder and kickplate with new hardware. Wood door will require minor re-prep for key cylinder and lock throughbolt locations.

Hardware Set CR03

Mechanical Hardware

(1) Mortise Cylinder		626	BES
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Electrified Hardware

(1) Electric Strike	4100	630	TRN
(1) REX Motion Sensor	MD-31DB	Black	SDC
(1) Door Contact, Pop-in, DPDT	1076D-G	Grey	Interlogix
(1) Lot: Card reader (single-gang), control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications)			

System Function

Free egress. Door is normally locked (not powered) and is monitored for REX from motion sensor and door position; ingress by card.

Retrofit Notes

Re-utilize existing all hardware on existing door. Replace existing key cylinder with new key cylinder. Field prep existing frame for electric strike and door contact. Install REX motion sensor on head on push side of door.

Hardware Set CR04

Mechanical Hardware

(6) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(2) Manual Flush Bolt	555 x 555	BSP	ROC
(1) Mortise Cylinder		622	BES
(2) Kick Plate	K1050 10 x 2LDW x CSK x HVBEV	BSP	ROC
(2) Mop Plate	K1050 10 x 1LDW x CSK x HVBEV	BSP	ROC
(2) Door Bottom Sweep	674 x Black Brush	MBL	NGP

Electrified Hardware

(1) Jamb-to-Door Power Transfer	CEPT-10-BSP	BSP	SEC
(1) Panic Device, Mortise, 03, ELR	LD-55-56-8904 x ETH002 x 68-0657	BSP	SAR
Note 1: Panic device has request-to-exit monitoring of the touchbar and electric latch retraction.			
(2) Door Contact, Pop-in, DPDT	1076D-G	Grey	Interlogix
(1) Lot: Card reader (single-gang), control electronics, low voltage power, cabling, terminations, programming (see electronic access control specifications)			

System Function

Manual flushbolts are normally extended to secure inactive leaf. Free egress through LHRB door leaf. Door is normally locked against ingress (not powered) and is monitored for REX from panic device touchbar and door position; ingress by card or key.

Retrofit Notes

Remove existing hardware and replace with new hardware. Field prep existing wood door and non-grouted hollow metal frame for concealed electric power transfer. Field prep wood door, which has a rim panic device on it to suit a mortise panic device and strike and wire chase. Re-utilize existing alarm system. Field paint entire closer and arm assemblies to be satin black.

Hardware Set M01

Mechanical Hardware

Note 1: All mechanical hardware by overhead door supplier.

Electrified Hardware

(1) Door Contact, Exterior OHD	QS 911MA		QSW
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Note 1: Balance of electrified items by overhead door supplier.

System Function

Door is monitored for door position.

Hardware Set 01

(3) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1) Passage Set	8215-E3H002	BSP	SAR
(1) Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 01A

(3) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1) Passage Set	8215-E3H002	BSP	SAR
(1) Kick Plate	K1050 8 x 2LDW x CSK x HVBEV	BSP	ROC
(1) Overhead Stop, HD, Concealed	OH100_3	BSP	ROC

Hardware Set 02

(3) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1) Office Lock	8255-E3H002	BSP	SAR
(1) SFIC Mortise Cylinder Housing		622	BES
(1) SFIC Permanent Cylinder Core		622	BES
(1) Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 02A

(6)	Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(2)	Manual Flush Bolt	555 x 555	BSP	ROC
(1)	Office Lock	8255-E3H002	BSP	SAR
(1)	SFIC Mortise Cylinder Housing		622	BES
(1)	SFIC Permanent Cylinder Core		622	BES
(1)	Overhead Stop, HD, Concealed	OH100_3	BSP	ROC
Note: Locate OHS on LHRB leaf of Door 115D, and on RHRB leaf of Door 115E.				
(1)	Universal Stop, 1-1/2"	RM851	BSP	ROC
Note 1: Door Hands: 115D-RHRBA, 115E-LHRBA.				

Hardware Set 02B

(3)	Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1)	Office Lock	8255-E3H002	BSP	SAR
(1)	SFIC Mortise Cylinder Housing		622	BES
(1)	SFIC Permanent Cylinder Core		622	BES
(1)	Kick Plate	K1050 8 x 2LDW x CSK x HVBEV	BSP	ROC
(1)	Overhead Stop, HD, Concealed	OH100_3	BSP	ROC

Hardware Set 02C

(6)	Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(2)	Manual Flush Bolt	555 x 555	BSP	ROC
(1)	Office Lock	8255-E3H002	BSP	SAR
(1)	SFIC Mortise Cylinder Housing		622	BES
(1)	SFIC Permanent Cylinder Core		622	BES
(2)	Kick Plate	KO050 8 x 1LDW x CS x B4E	630	TRI
(2)	Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 02D

(3)	Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1)	Office Lock	8255-E3H002	BSP	SAR
(1)	SFIC Mortise Cylinder Housing		622	BES
(1)	SFIC Permanent Cylinder Core		622	BES
(1)	Kick Plate	K1050 8 x 2LDW x CSK x HVBEV	BSP	ROC
(1)	Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 03

(3)	Butt Hinges	TA2314 4.5 x 4.5	630	MCK
(1)	Privacy Set w/Indicators	V21-EMB-8265-E3H002	BSP	SAR
(1)	Closer, Regular Arm	281-O	BSP	SAR
(1)	Kick Plate	K1050 8 x 2LDW x CSK x HVBEV	BSP	ROC
(1)	Mop Plate	K1050 4 x 1LDW x CSK x HVBEV	BSP	ROC
(1)	Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 03A

(3)	Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1)	Privacy Set w/Indicators	V21-EMB-8265-E3H002	BSP	SAR
(1)	Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 04

(3) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(1) Storeroom Lock	8204-E3H002	BSP	SAR
(1) SFIC Mortise Cylinder Housing		622	BES
(1) SFIC Permanent Cylinder Core		622	BES
(1) Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 04A

(6) Butt Hinges	TA2714 4.5 x 4.5	BSP	MCK
(2) Manual Flush Bolt	555 x 555	BSP	ROC
(1) Storeroom Lock	8204-E3H002	BSP	SAR
(1) SFIC Mortise Cylinder Housing		622	BES
(1) SFIC Permanent Cylinder Core		622	BES
(1) Overhead Stop, MD, Surface	OH100_M	BSP	ROC
Note: Locate OHS on RHRBA leaf.			
(1) Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 05

(3) Butt Hinges	TA2314 4.5 X 4.0	BSP	MCK
(1) Push Plate	73C	BSP	ROC
(1) Pull Plate	126 x 70C	BSP	ROC
(1) Closer, Regular Arm	281-O	BSP	SAR
(1) Kick Plate	K1050 8 x 2LDW x CSK x HVBEV	BSP	ROC
(1) Mop Plate	K1050 4 x 1LDW x CSK x HVBEV	BSP	ROC
(1) Universal Stop, 1-1/2"	RM851	BSP	ROC

Hardware Set 06

Note 1: All hardware by overhead door supplier.

END OF SECTION

