

ADDENDUM #2

1.1 PROJECT INFORMATION

- A. Project Number: 2023-276 G (1-1)
- B. Project Title: Moses Lake Readiness Center Tenant Improvements
- C. Project Location: 6500 32nd Avenue NE, Moses Lake, WA 98837
- D. Agency: Washington Military Department

1.2 NOTICE TO BIDDERS

- A. The following clarifications, changes, additions, and/or deletions are considered Addendum No. 2, and are hereby made a part of the contract documents. All bidders are required to base their bid upon the information furnished in this addendum and as required in the contract documents. The Contractor is required to acknowledge Addendum No. 2 in their company proposal. Failure to acknowledge Addendum No. 2 on the bid form will result in the bid proposal being declared non-responsive.
- B. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.

1.3 ATTACHMENTS

- A. Section 087100 – Door Hardware.....July 24, 2024 (20 page)
- B. Drawing Sheet A-502, Schedules – Doors, Windows and FramesRe-issued July 25, 2024 (1 page, 30x42)

1.4 BIDDER QUESTIONS

- A. Question 1: Hollow metal frames for windows in recruiting office rm. 116 and sidelites to family services office rm 138. Is the bottom leg (at floor) 2-inches high or 4-inches high?
Response 1: The intent is for the bottom leg on both hollow metal frames to be 4-inches high.
Sheet A-502, Schedules - Door, Windows and Frames has been re-issued as part of this addendum.

1.5 REVISIONS TO SPECIFICATIONS

- A. Section – Table of Contents, Vol. 1
DELETE
JDC 087113 Automatic Door Operators 6
[Clarification: This section has been deleted in its entirety]
- B. Section 074113.16 – Standing-Seam Metal Roof Panels, Paragraph 2.2.B, comparable products
ADD
d. The Bryer Company, TBC Superseam
[Clarification: Added to list of pre-approved manufacturer products]
- C. Section 084113 – Aluminum-Framed Storefronts, Paragraph 2.2.A, Storefront Framing
ADD
d. Oldcastle Building Envelope; Series 3000XT (double thermal)
[Clarification: Added to list of pre-approved manufacturer products]
- D. Section 087100 – Door Hardware
ADD this section in it's entirety, dated July 24, 2024, attached

- E. Section 087113 – Automatic Door Operators
 DELETE this section in it's entirety

- F. Section 238126 – Ductless Split-System Air Conditioners, Paragraph 2.01.A, Manufacturers
 ADD
 5. LG Electronics USA, Inc
[Clarification: Added to list of pre-approved manufacturers]

- G. Section 260921 – Luminaire Control System, Paragraph 2.3.B, Luminaire Control System Equal Manufacturers
 ADD
 8. Greengate
[Clarification: Added to list of pre-approved manufacturer products]

- H. Section 265100 – Interior Lighting, Paragraph 2.4.B, Acceptable Manufacturers
 ADD
 2. Cooper Lighting Solutions
[Clarification: Added to list of pre-approved manufacturers]

1.6 REVISIONS TO DRAWINGS

- A. Sheet M-002, Mechanical Schedules
 ADD
 General Note:
 1. Existing HVAC controls at the Moses Lake Readiness are Delta Control System

- B. Sheet E-301, Reflected Ceiling Plan
 ADD:
 General Lighting Note:
 1. For additional electrical detail, refer to sheet E-701.
 2. Contractor is responsible for providing a complete and functional lighting control system.
 4. Approved lighting control product substitutions include, but are not limited to:

Type	MFG	Part
CAT Dimming Switchpack	Greengate	RSP-C-010-Z1
CAT Emergency Dimming Switchpack	Greengate	ESP-C-010-Z1
CAT Bluetooth Programming Interface	Greengate	BPI-C-L
ONW-P-Neoswitch	Greengate	ONW-P-1001-MV-W
OSW/VSW-D 0-10V Sensor-Dimmer	Greengate	OSW-D-010-W
CAT Wallstation (WST-C Series)	Greengate	WST-C-3-ENGRV
CAT Wallstation (WST-C Series)	Greengate	WST-C-3D-ENGRV
CAT Wallstation (WST-C Series)	Greengate	WST-C-5D-ENGRV
CAT Contact Closure Input Module	Greengate	CCI-C-V
CAT Sensor Interface Module	Greengate	SIM-C-V
Ceiling Mount Occupancy Sensor	Greengate	OSC-DT-1000
CAT Terminator Plug	Greengate	ACC-C-TP-6PK
Wavelinx Area controller 2nd Gen	Greengate	WAC2-120

C. Sheet E-301, Reflected Ceiling Plan – Lighting, Interior Luminaire Schedule
ADD:

Approved product substitutions

Type	MFG	Part
H01	Solas Ray	HBRL2-040-40-U-XX
P01	Metalux	4SLSTPSLC-UNV
P02	Metalux	8SLSTPSLC-UNV
P03	Metalux	OHB-18SE-MFL-UNV-L840-CD-XX-U
P04	Metalux	OHB-18SE-W-UNV-L840-CD-XX-U
P05	Metalux	4SLSTPSLC-UNV
P06	Metalux	4SLSTPSLC-UNV
R01	Metalux	22CZ2-XX-S-UNV-L840-HCD-1-U
R02	Metalux	24CZ2-XX-S-UNV-L840-HCD-1-U
R03	Metalux	14CZ2-20-S-UNV-L840-HCD-1-U
R04	Metalux	14CZ2-29-S-UNV-L840-HCD-1-U
R05	Truly Green Solutions	TWSF-0615-C-S-WH
R06	Portfolio	LDSSQ6C059040D010B26 CSSQ2MWWLN
R07	Metalux	22CZ2-XX-S-UNV-L840-HCD-1-U
S01	Metalux	4AWS-L3C3-UNV
S02	Metalux	14CZ2-60HE-S-UNV-L840-HCD-1-U
S03	Metalux	4SLSTPSLC-UNV
S04	Metalux	14CZ2-29-S-UNV-L840-HCD-1-U
U01	Halo	HU30MSCTD18P
W01	Oxygen Lighting	3-544-24
X01	Sure-Lites	EUS62G
X02	Sure-Lites	EUR62G

D. Sheet E-301, Reflected Ceiling Plan – Lighting, Interior Luminaire Schedule, General Notes:
ADD:

2. Contractor shall submit photometrics and calculations confirming compliance with WA State Energy Code (WSEC) and National Electrical Code (NFPA 72, NEC) if product substitutions are provided. Contractor shall also be responsible for any and all additional costs associated with using product substitutions.

E. Sheet E-302, Reflected Ceiling Plan – Photometrics, Luminaire Schedule,
ADD:

General Note:

1. Contractor shall submit photometrics and calculations confirming compliance with WA State Energy Code (WSEC) and National Electrical Code (NFPA 72, NEC) if product substitutions are provided.

END OF ADDENDUM #2

SECTION 087100 - DOOR HARDWARE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section Includes:
 - 1. Mechanical door hardware for the following:
 - a. Swinging doors.
 - 2. Cylinders for door hardware specified in other Sections.
 - 3. Electrified door hardware.
- B. Related Requirements:
 - 1. Section 081113 "Hollow Metal Doors and Frames" for hollow metal doors and frames.
 - 2. Section 081416 "Flush Wood Doors"
 - 3. Section 083613 "Sectional Doors"
 - 4. Section 087113 "Automatic Door Operators"

1.3 COORDINATION

- A. 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.
- B. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.
- C. Door Hardware and Electrical Connections: Coordinate the layout and installation of scheduled electrified door hardware and related access control equipment with required connections to source power junction boxes, low voltage power supplies, detection and monitoring hardware, and fire and detection alarm systems.
- D. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.
- 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.

1.4 PREINSTALLATION MEETINGS

- A. Keying Conference: Conduct conference at Project site.
 - 1. Conference participants shall include:
 - a. Owner's project manager and building locksmith

2. Incorporate the following criteria into the final keying schedule document:
 - a. Function of building, purpose of each area and degree of security required.
 - b. Plans for existing and future key system expansion.
 - c. Requirements for key control storage and software.
 - d. Installation of permanent keys, cylinder cores and software.
 - e. Requirements for access control
 - f. Address and requirements for delivery of keys.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of Installer's Architectural Hardware Consultant. Coordinate door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
 1. 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 door hardware schedule in the Contract Documents.
 3. Content: Include the following information:
 - a. Identification number, location, hand, fire rating, size, and material of each door and frame.
 - b. 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, quantity, function, and finish of each door hardware product.
 - d. Description of electrified door hardware sequences of operation and interfaces with other building control systems.
 - e. Fastenings and other installation information.
 - f. Explanation of abbreviations, symbols, and designations contained in door hardware schedule.
 - g. Mounting locations for door hardware.
 - h. List of related door devices specified in other Sections for each door and frame.
- C. Keying Schedule: Prepared by or under the supervision of Installer's Architectural Hardware Consultant, 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.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Sample Warranty: For special warranty.

1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For each type of door hardware to include in maintenance manuals.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: A minimum 3 years documented experience installing both standard and electrified door hardware similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up and shelving for door hardware delivered to Project site. Do not store electronic access control hardware, software or accessories at Project site without prior authorization.
- B. Tag each item or package separately with identification related to the final Door Hardware Schedule, and include basic installation instructions with each item or package.
- C. Deliver, as applicable, permanent keys, cylinders, cores, access control credentials, software and related accessories directly to Owner via registered mail or overnight package service. Instructions for delivery to the Owner shall be established at the "Keying Conference".

1.10 WARRANTY

- A. Special Warranty: 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: [Two] years from date of Substantial Completion unless otherwise indicated below:
 - a. Exit Devices: [5] years from date of Substantial Completion.
 - b. Manual Closers: [25] years from date of Substantial Completion.
 - c. Ten years for mortise locks and latches.
 - d. Five years for motorized electric latch retraction exit devices.
 - e. Two years for electromechanical door hardware.

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 products complying with BHMA designations referenced.
- B. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.

2.2 MANUFACTURERS

- A. Source Limitations: Obtain each type of door hardware from single manufacturer.
 - 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.

2.3 PERFORMANCE REQUIREMENTS

- A. Fire-Rated Door Assemblies: Where fire-rated doors are indicated, provide door hardware complying with NFPA 80 that is listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C.
- B. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that complies with requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
- C. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- D. 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.
- E. Accessibility Requirements: For door hardware on doors in an accessible route, comply with the USDOJ's "2010 ADA Standards for Accessible Design" ICC A117.1 and HUD's "Fair Housing Accessibility Guidelines".
 - 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. Comply with the following maximum opening-force requirements:
 - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf applied perpendicular to door.
 - b. Sliding or Folding Doors: 5 lbf applied parallel to door at latch.
 - c. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.
 - 3. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
 - 4. Adjust door closer sweep periods so that, from an open position of 90 degrees, the door will take at least 5 seconds to move to a position of 12 degrees from the latch.
 - 5. Adjust spring hinges so that, from an open position of 70 degrees, the door will take at least 1.5 seconds to move to the closed position.
- F. Hanging Devices ANSI/BHMA A156.1 certified butt hinges with number of hinge knuckles and other options as specified in the Door Hardware Sets.
 - 1. Quantity: Provide the following hinge quantity:
 - a. Two Hinges: For doors with heights up to 60 inches.
 - b. Three Hinges: For doors with heights 61 to 90 inches.
 - c. Four Hinges: For doors with heights 91 to 120 inches.
 - d. For doors with heights more than 120 inches, provide 4 hinges, plus 1 hinge for every 30 inches of door height greater than 120 inches.
 - 2. Hinge Size: Provide the following, unless otherwise indicated, with hinge widths sized for door thickness and clearances required:
 - a. Widths up to 3'0": 4-1/2" standard or heavy weight as specified.
 - b. Sizes from 3'1" to 4'0": 5" standard or heavy weight as specified.
 - 3. Hinge Weight and Base Material: Unless otherwise indicated, provide the following:
 - a. Exterior Doors: Heavy weight, non-ferrous, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate standard weight.
 - b. Interior Doors: Standard weight, steel, ball bearing or oil impregnated bearing hinges unless Hardware Sets indicate heavy weight.
 - 4. Hinge Options: Comply with the following:
 - a. Non-removable 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 the all out-swinging lockable doors.

2.4 HINGES

- A. Hinges [ANSI/BHMA A156.1; #A8111]: Provide **steel**, fully-mortised, anti-friction bearing, heavy-duty Grade 1 size: 4-1/2 inch x4-1/2 inch, with non-removable pins (NRP).



MK T4A3786

- 1. Manufacturer and Product: Subject to requirements provide one of the following:
 - a. [Hager Companies](#);BB1168 NRP
 - b. [McKinney Products Company; an ASSA ABLOY Group](#);T4A3786 NRP
 - c. [Stanley Commercial Hardware; Div. of The Stanley Works](#). FBB168 NRP

- B. Hinges [ANSI/BHMA A156.1; #A8112]: Provide **steel**, fully-mortised, anti-friction bearing, medium-duty Grade 2 size: 4-1/2 inch x4-1/2 inch, with non-removable pins (NRP).



MK TA2714

- 1. Manufacturer and Product: Subject to requirements provide one of the following:
 - a. [Hager Companies](#);BB1279 NRP
 - b. [McKinney Products Company; an ASSA ABLOY Group](#);TA2714 NRP
 - c. [Stanley Commercial Hardware; Div. of The Stanley Works](#). FBB179 NRP

- C. Hinges [ANSI/BHMA A156.1; #A5112]: Provide **stainless steel**, fully-mortised, anti-friction bearing, medium-duty Grade 2 size: 4-1/2 inch x4-1/2 inch, with non-removable pins (NRP).



MK TA2314

- 1. Manufacturer and Product: Subject to requirements provide one of the following:
 - a. [Hager Companies](#);BB1191 NRP
 - b. [McKinney Products Company; an ASSA ABLOY Group](#);TA2314 NRP
 - c. [Stanley Commercial Hardware; Div. of The Stanley Works](#). FBB/CB191 NRP

- D. Hinges [ANSI/BHMA A156.1; #A5111]: Provide **stainless steel**, fully-mortised, anti-friction bearing, heavy-duty Grade 1 size: 4-1/2 inch x4-1/2 inch, with non-removable pins (NRP).



MK T4A3386

- 1. Manufacturer and Product: Subject to requirements provide one of the following:
 - a. [Hager Companies](#);BB1199 NRP
 - b. [McKinney Products Company; an ASSA ABLOY Group](#);T4A3386 NRP
 - c. [Stanley Commercial Hardware; Div. of The Stanley Works](#). FBB199 NRP

2.5 CONTINUOUS HINGES

- A. Continuous, Gear-Type Hinges [ANSI/BHMA A156.26, #A31011G]: Continuous, Edge-Mounted Gear-Type Hinges, Extruded-aluminum – Grade 1; pinless, geared hinge leaves joined by a continuous extruded-aluminum channel cap; with concealed, self-lubricating thrust bearings.



PE FM HD

- 1. Manufacturer and Product: Subject with requirements, provide one of the following:
 - a. [Hager Companies](#) 780-112
 - b. [IVES Hardware; Allegion, plc](#);112XY
 - c. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#)._FM HD

2.6 LOCK CYLINDERS

- A. Lock Cylinders: Tumbler type, constructed from brass or bronze, stainless steel, or nickel silver. Provide cylinder from same manufacturer of locking devices

- B. Standard Lock Cylinders: BHMA A156.5; Grade 1 permanent cores; face finished to match lockset.

- 1. Core Type: Small-Format Interchangeable (SFIC); **7-pin**
- 2. Key ways:
 - a. BEST (Verify with Owner)

- C. Construction Cores: Provide construction cores that are replaceable by permanent cores. Provide 10 construction master keys.

2.7 KEYING

- A. Keying System: Factory registered, complying with guidelines in BHMA A156.28, appendix. Provide one extra key blank for each lock. Incorporate decisions made in keying conference.
 - 1. Existing System:
 - a. Master key or grand master key locks to Owner's existing system.
 - b. Re-key Owner's existing master key system into new keying system.
- 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"

2.8 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, and as follows:
 - 1. Bored Locks: Minimum 1/2-inch latchbolt throw.
 - 2. Deadbolts: Minimum 1-inch bolt throw.
- C. Lock Backset: 2-3/4 inches unless otherwise indicated.
- D. Lock Trim:
 - 1. Description: Heavy-Duty Lock-Lever conforming to accessibility standards
 - 2. Levers: Cast.
 - a. Style: Contour angle return
 - 1) Best Access Systems; Div. of Stanley Security Solutions, Inc.; 15
 - 2) Sargent Manufacturing Co, ASSA ABLOY..... L-Lever
 - 3. Escutcheons (Roses, 3" convex): Wrought.
 - 4. Dummy Trim: Match lever lock trim and escutcheons.
 - 5. Operating Device: Lever with escutcheons (roses).
- E. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:
- F. Bored Locks: BHMA A156.2; **Grade 1**, Series 4000.
 - 1. ANSI #F74 – Passage
 - a. Best Access Systems; Div. of Stanley;9K_
 - 2. ANSI #F76 – Privacy
 - a. Best Access Systems; Div. of Stanley;9K_L
 - 3. ANSI #F84 – Classroom
 - a. Best Access Systems; Div. of Stanley;9K_R
 - 4. ANSI #F86 – Storeroom
 - a. Best Access Systems; Div. of Stanley;9K_D
- G. Push-Pull Latches: Bored, BHMA A156.2; Grade 1, Series 4000; with paddle handles that retract latchbolt; capable of being mounted vertically or horizontally.
 - 1. Push/Pull hospital latch with push mounted in the up position; and pull mounted in the down position only. With "PUSH" and "PULL" stamped into the top of the escutcheon.
 - Backset: 5" standard
 - Strike: ANSI curved lip strike #808
 - Function: Passage
 - Latchbolt Throw: 1/2-inchAcceptable Manufacturers: subject to requirements provide the following or appv'd equal:
 - a. Sargent Manufacturing Co, ASSA ABLOY. 115



SA 115

2.9 STANDALONE ELECTRONIC KEYLESS ACCESS LOCK

- A. Bored Locks: Subject to compliance provide the following:
 - 1. **Alarm Lock, Trilogy PIN/PROX lock – model #PDL30 [www.alarmlock.com]**
- B. Lock Backset: 2-3/4 inches unless otherwise indicated.
- C. Lathbolt throw: 1/2-inch
- D. Keypad:
 - 1. Weatherproof, all metal, 12-button programmable for multi-level access functions. Proximity antenna housing molded of Lexan.
- E. Audit Trail:
 - 1. Lock’s activity log can be extracted using the AL-DTMIII (data transfer module), the AL-PCI2 (PC Interface) and/or can be on-site printed using the AL-IR1 (hand-held infrared printer)
- F. Programming
 - 1. Locking modes, event schedules, group, individual, master, management, passage, emergency service codes. Lockout, remote override capability and allowable entry time (3, 10, or 15 seconds), are programmable through the keypad and other interfaces.
- G. Power
 - 1. Five (5) AA alkaline batteries rated to 60,000 cycles, supplied. Audible low battery alert, visual and audible entry indicators.
- H. Lock Trim:
 - 1. Description: BHMA A156.2; Grade 1, Heavy-Duty Lock-Lever conforming to accessibility standards
 - 2. Levers: Cast.
- I. Strikes: Provide manufacturer's standard strike with strike box for each latch or lock bolt, with curved lip extended to protect frame, finished to match door hardware set, unless otherwise indicated, and as follows:

2.10 AUXILIARY LOCKS

- A. Bored Aux Lock w/ indicator: BHMA A156.36: **[Grade 2]**; with strike that suits frame.
 - 1. Thumb turn inside operates deadbolt, emergency override key outside. Indicator both sides, (outside: VACANT/OCCUPIED, inside: UNLOCKED/LOCKED, color: GREEN/RED)
 - a. **Sargent Manufacturing Co, ASSA ABLOY**; 468-V21

2.11 MANUAL FLUSH BOLTS

- A. Manual Flush Bolts: BHMA A156.16; minimum **3/4-inch** throw; designed for mortising into door edge.
 - 1. One-inch diameter knob with 8”-surface bolt and fiber gasket to provide slide resistance without marring surface of bolt, solid brass with universal strike.
 - a. **Rockwood Manufacturing Company**; 630-8

2.12 EXIT DEVICES AND AUXILIARY ITEMS

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:
1. At doors not requiring a fire rating, provide devices complying with NFPA 101 and listed and labeled for "Panic Hardware" according to UL305. Provide proper fasteners as required by manufacturer including sex nuts and bolts at openings specified in the Hardware Sets.
 2. Where exit devices are required on fire rated doors, provide devices complying with NFPA 80 and with UL labeling indicating "Fire Exit Hardware". Provide devices with the proper fasteners for installation as tested and listed by UL. Consult manufacturer's catalog and template book for specific requirements.
 3. Except on fire rated doors, provide exit devices with hex key dogging device to hold the pushbar and latch in a retracted position. Provide optional keyed cylinder dogging on devices where specified in Hardware Sets.
 4. Devices must fit flat against the door face with no gap that permits unauthorized dogging of the push bar. The addition of filler strips is required in any case where the door light extends behind the device as in a full glass configuration.
 5. Energy Efficient Design: Provide lock bodies which have a holding current draw of 15mA maximum, and can operate on either 12 or 24 volts. Locks are to be field configurable for fail safe or fail secure operation.
 6. Lever Operating Trim: Where exit devices require lever trim, furnish manufacturer's heavy duty escutcheon trim with threaded studs for thru-bolts.
 - a. Lock Trim Design: As indicated in Hardware Sets, provide finishes and designs to match that of the specified locksets.
 - b. Where function of exit device requires a cylinder, provide a cylinder (Rim or Mortise) as specified in Hardware Sets.
 7. Rail Sizing: Provide exit device rails factory sized for proper door width application.
 8. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

B. Rim Exit Devices and Auxiliary Items: BHMA A156.3.



1. Rim Panic / ANSI #F03 (key retracts latch bolt)
 - a. [Von Duprin; an Allegion, plc;](#)#99/996L
2. Rim Panic ANSI #F01/#F08 (interior/exterior function with breakaway trim, lock, classroom lever and cylinder dogging with night-latch trim)
 - a. [Von Duprin; an Allegion, plc;](#)#99NL/996NL
3. Rim Panic ANSI #F01/#F08 (interior/exterior function with breakaway trim, lock, classroom lever and cylinder dogging with night-latch trim) and dummy trim
 - a. [Von Duprin; an Allegion, plc;](#) #99DT (dummy trim)

2.13 KEY CONTROL SYSTEM

- A. Key Lock Boxes: Designed for storage of **two** keys.
1. [Basis-of-Design Product:](#) Subject to compliance with requirements, provide Knox Company, Knox-Box 3200 Series key lock box.
 - a. Capacity: 10 key and access cards
 - b. Mount: recessed. Provide with recessed mounting kit.
 - c. Location: as indicated on drawings

2.14 OPERATING TRIM

A. Dust-proof strike. Dust-proof strike (ANSI/BHMA L04021) brass, spring-loaded plunger for dust-proof floor strike

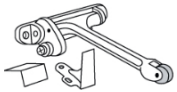


RO 570

1. Manufacturers:
 - a. [Rockwood Manufacturing Company;](#) 570

2.15 ACCESSORIES FOR PAIRS OF DOORS

A. Coordinators: BHMA A156.3; consisting of active-leaf, hold-open lever and inactive-leaf release trigger; fabricated from steel with nylon-coated strike plates; with built-in, adjustable safety release; and with internal override.



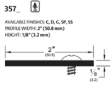
RO 576

1. **Manufacturers**
 - a. [IVES Hardware; Allegion, plc;](#)
 - b. [Rockwood Manufacturing Company;](#) 576
 - c. [Trimco \(Triangle Brass Manufacturing Co., Inc.\)](#).....

B. Carry-Open Bars: BHMA A156.3; prevent the inactive leaf from opening before the active leaf; provide polished brass or bronze carry-open bars with strike plate for inactive leaves of pairs of doors unless automatic or self-latching bolts are used.

1. Pair of 1-3/4-inch by 2-1/4-inch brass & steel carry bar to allow the inactive leaf to open the active leaf and allow the coordinator to engage both doors.
 - a. [Rockwood Manufacturing Company;](#) 1100

C. Astragals: BHMA A156.22.



RO 357

1. **Manufacturers**
 - a. [Rockwood Manufacturing Company;](#) 357

D. **Removable Mullions**

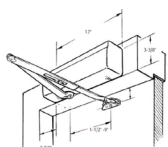
1. **Removable Steel Mullion with keyed cylinder and stabilizer**
 - a. [Von Duprin; Allegion, plc.](#)..... KR-4954, 154

2.16 SURFACE CLOSERS

A. All door closers specified herein shall meet or exceed the following criteria:

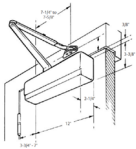
1. **General:** Door closers to be from one manufacturer, matching in design and style, with the same type door preparations and templates regardless of application or spring size. Closers to be non-handed with full sized covers including installation and adjusting information on inside of cover.
2. **Standards:** Closers to comply with UL-10C for Positive Pressure Fire Test and be U.L. listed for use of fire rated doors.
3. **Cycle Testing:** Provide closers which have surpassed 15 million cycles in a test witnessed and verified by UL.
4. **Size of Units:** Comply with manufacturer's written recommendations for sizing of door closers depending on size of door, exposure to weather, and anticipated frequency of use. Where closers are indicated for doors required to be accessible to the physically handicapped, provide units complying with ANSI ICC/A117.1.
5. **Closer Arms:** Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
6. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
7. **Closer Accessories:** Provide door closer accessories including custom templates, special mounting brackets, spacers and drop plates as required for proper installation. Provide through-bolt and security type fasteners as specified in the hardware sets.

B. 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 instructions 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.



SA 1431-CPS

1. Surface Closers (**BHMA/ANSI #C02061**) [**hinge (PUSH) side mount**] Heavy-duty Grade 1, adjustable opening-force cylinder, metal cover, with cushioned , door-mounted, surface closer. *Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use.*
 - a. [LCN Closers; Allegion, plc;](#) 4111-CUSH
 - b. [Sargent Manufacturing Co, ASSA ABLOY.](#)1431-CPS
 - c. [Stanley Commercial Hardware; Div. of The Stanley Works.](#)D3551-C8



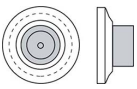
SA 1431-CPS

2. Surface Closers (**BHMA/ANSI #C02061**) [**hinge (PULL) side mount**] Heavy-duty Grade 1, adjustable opening-force cylinder, metal cover, with cushioned stop, door-mounted, surface closer. *Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use.*
 - a. [LCN Closers; Allegion, plc](#); 4011-CUSH
 - b. [Sargent Manufacturing Co, ASSA ABLOY](#).1431-CPS
 - c. [Stanley Commercial Hardware; Div. of The Stanley Works](#).D3550-CS

2.17 CONCEALED CLOSERS

- A. Concealed Closers: BHMA A156.4; rack-and-pinion hydraulic type with adjustable sweep and latch speeds controlled by key-operated valves. Comply with manufacturer's written instructions 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.
 1. Concealed Closers - Heavy-duty Grade 1, closer with hold-open (maximum interior door width: 3'-2"). Comply with manufacturer's written recommendations for size of door closers depending on size of door, exposure to weather, and anticipated frequency of use.
 - a. [Stanley Commercial Hardware; Div. of The Stanley Works](#).CO-153

2.18 MECHANICAL STOPS AND HOLDERS



RO 404

- A. Wall- and Floor-Mounted Stops: BHMA A156.16.
 1. Wall mounted stops; (ANSI/ BHMA #L02251) Concealed mounting, concave bumper with back plate
 - a. [Hager Companies](#);234W
 - b. [IVES Hardware; an Ingersoll-Rand company](#);WS401
 - c. [Rockwood Manufacturing Company](#);404
 2. Kick Down Door Stop (ANSI/BHMA #L01382). Solid cast brass with bumper
 - a. [Hager Companies](#);FS452-5
 - b. [McKinney Products Company; ASSA ABLOY](#).DS07L
 - c. [Rockwood Manufacturing Company](#).461L



RO 461L

2.19 DOOR GASKETING

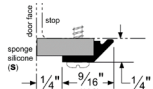
- A. General: Thresholds, weatherstripping, and gasket seals to be of type and design as specified below or in the Hardware Sets. Provide continuous weatherstrip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated. At exterior applications provide non-corrosive fasteners and elsewhere where indicated.
- B. 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 perimeter gasketing at all smoke labeled openings.
- C. 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 UL-10C.
 1. Provide intumescent seals as indicated to meet UL10C Standard for Positive Pressure Fire Tests of Door Assemblies, and NPFA 252, Standard Methods of Fire Tests of Door Assemblies.
- D. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.

E. Door Gasketing: BHMA A156.22; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.



PE S88_

1. Perimeter Gasketing, Adhesive: Silicone Rubber, head and jamb, frame soffit (hollow metal)
 - a. [NGP, National Guard Products](#) 252C
 - b. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#) S88_
 - c. [Reese Enterprises, Inc.](#)



PE 332 S

2. Perimeter Gasketing, fastened (BHMA/ANSI R3E164): Aluminum, Silicone Rubber, head and jamb, frame soffit (hollow metal)
 - a. [Hager Companies](#) 873S_
 - b. [NGP, National Guard Products](#) 110S_
 - c. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#) 332_S

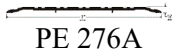


PE 45100_NB

3. Overhead Door Weather-strip: Surface-mounted brush perimeter seals for gap between the door and frame.
 - a. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#) 45100_NB

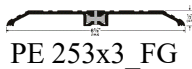
2.20 THRESHOLDS

A. Thresholds: BHMA A156.21; fabricated to full width of opening indicated.



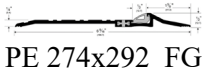
PE 276A

1. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than one-half inch high.
 - a. [Hager Companies](#) 430S
 - b. [National Guard Products \(NGP\)](#) 426
 - c. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#) 276A



PE 253x3_FG

2. Thermal barrier, slip resistant, saddle aluminum threshold, not more than one-half inch high x 6-inches wide with beveled slope of not more than 1:2 (BHMA/ANSI J32190)
 - a. [Hager Companies](#) 422S
 - b. [NGP, National Guard Products](#) 8426
 - c. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#) 253X3_FG



PE 274x292_FG

3. Thermal barrier, slip resistant, aluminum threshold, not more than one-half inch high x 6.6 inches wide with beveled slope of not more than 1:2 (BHMA/ANSI J32190)
 - a. [Pemko Manufacturing Co.; an ASSA ABLOY Group](#) 274x292_FGPK

2.21 METAL PROTECTIVE TRIM UNITS

A. Metal Protective Trim Units: BHMA A156.6; fabricated from 0.050-inch- thick with manufacturer's standard machine or self-tapping screw fasteners.

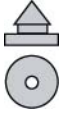


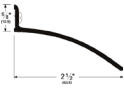


RO 1050

1. Kick Plate (ANSI/ BHMA #J102): Provide 0.050-inch stainless steel door protection kick plate, [10]inches high, beveled edges, 2-inches less than door width
 - a. [Hager Companies](#) 190S
 - b. [McKinney Products Company; an ASSA ABLOY Group](#); KP50
 - c. [Rockwood Manufacturing Company](#); K1050

2.22 AUXILIARY DOOR HARDWARE

A. Auxiliary Hardware: BHMA A156.16.

 RO 608	1. Door Silencers, HM frame; (ANSI/BHMA L03011) full range of mgfr's standard finish <ul style="list-style-type: none"> a. Hager Companies; 307D b. IVES Hardware; Allegion, plc; SR64 c. Rockwood Manufacturing Company; 608
 PE 3151_N	2. Door Bottom Sweep (ANSI/BHMA #R3B434) Surface mounted aluminum retainer with 1-inch exposed neoprene sweep <ul style="list-style-type: none"> a. Hager Companies; 754S b. NGP, National Guard Products 198NA c. Pemko Manufacturing Co.; an ASSA ABLOY Group 3151_N
 PE 3452_V	3. Door Bottom sweep with neoprene sweeps and rain drips as indicted in the hardware schedule and secured with stainless steel screws. <ul style="list-style-type: none"> a. Pemko Manufacturing Co.; an ASSA ABLOY Group company 3452_V
 PE 346_	4. Overhead rain drip with slotted holes, surface mounted: <ul style="list-style-type: none"> a. Pemko Manufacturing Co.; an ASSA ABLOY Group 346_
	5.

2.23 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-rating 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. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
 2. Fire-Rated Applications:
 - a. Wood or Machine Screws: For the following:
 - 1) Hinges mortised to doors or frames; use threaded-to-the-head wood screws for wood doors and frames.
 - 2) Strike plates to frames.
 - 3) Closers to doors and frames.
 - b. Steel Through Bolts: For the following unless door blocking is provided:
 - 1) Surface hinges to doors.
 - 2) Closers to doors and frames.
 - 3) Surface-mounted exit devices.
 3. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
 4. Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

2.24 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 of the Work.
- 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 and ANSI/DHI A115 Series.
- B. Wood Doors: Comply with door and hardware manufacturers' written instructions and ANSI/DHI A115-W series.

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.
 - 2. Wood Doors: DHI's "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- 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 work. 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.
- 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. Furnish permanent cores to Owner for installation.
- E. Key Control System:
 - 1. Key Lock Boxes: Install where indicated or approved by Architect to provide controlled access for fire and medical emergency personnel.
- F. Boxed Power Supplies: Locate power supplies as indicated or, if not indicated, **above accessible ceilings**. Verify location with Architect.
- G. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Section 079200 "Joint Sealants."
- H. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- I. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
 - 1. Do not notch perimeter gasketing to install other surface-applied hardware.
- J. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- K. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

3.4 FIELD QUALITY CONTROL

- A. Field Inspection: Supplier will perform a final inspection of installed door hardware and state in report whether work complies with or deviates from requirements, including whether door hardware is properly installed, operating and adjusted.

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.
 - 1. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
 - 2. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 70 degrees and so that closing time complies with accessibility requirements of authorities having jurisdiction.
 - 3. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.

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. Train Owner's maintenance personnel to adjust, operate, and maintain door hardware.
- B. Instruct Owner's maintenance personnel to adjust, operate, and maintain mechanical and electromechanical door hardware.

3.8 DOOR HARDWARE SCHEDULE

- A. Manufacturer Abbreviations
 Abb Description

AL	Alarm Lock
BE	Best Access Systems
KB	Knox Box
MK	McKinney Products
PE	Pemko
RO	Rockwood Products
SA	Sargent
ST	Stanley Hardware
VD	Von Duprin

- B. ANSI/BHMA Finish Numbers

No	Description	Base Material	US Equivalent
603	Zinc Plated Steel (galvanealed)	Steel	US2G
626	Satin Chrome Plated	Brass,Bronze	US26D
628	Satin Alum, Clear Anodized	Aluminum	US28
630	Satin Stainless Steel	Stainless Steel	US32D

- C. Schedule

Hardware Group		HG.01A			Door #		102, 115, 116, 119, 138		
Description		Int Single, FWD – Office, Corridor							
Qty	Product [Spec Part 2 Product]	Basis of Design				BHMA Finish			
		Mfgr	Product No						
3	Hinges, steel, medium duty	MK	TA2714 NRP			626			
1	Bored Lockset, Pin/Prox Keyless Lock	AL	PDL30			626			
1	Closer, surface	ST	D3550-CS (mount in room side, not corridor)			626			
1	Smoke seal	PE	S88			Grey			
1	Wall mounted stop, concave	RO	404			626			

Hardware Group		HG.01B			Door #		102A, 102B, 102C		
Description		Int Single, FWD – Office							
3	Hinges, steel, medium duty	MK	TA2714 NRP			626			
1	Bored Lockset, Pin/Prox Keyless Lock	AL	PDL30			626			
3	Silencers	RO	608			Grey			
1	Wall mounted stop, concave	RO	404			626			

Hardware Group		HG.01C			Door #		114
Description		Int Single, FWD – Office, Corridor					
Qty	Product [Spec Part 2 Product]	Basis of Design			BHMA		
		Mfgr	Product No		Finish		
3	Hinges, steel, medium duty	MK	TA2714 NRP		626		
1	Bored Lockset, Pin/Prox Keyless Lock	AL	PDL30		626		
1	Bored Aux Lock w/ indicator	SA	468-V21 (room indicator both sides)		626		
1	Closer, surface	ST	D3550-CS (mount in room side, not corridor)		626		
1	Smoke seal	PE	S88		Grey		
1	Wall mounted stop, concave	RO	404		626		

Hardware Group		HG.02			Door #		101A, 101B, 101C, 101D, 127A, 136
Description		Int Single, FWD – Classroom, Corridor					
Qty	Product [Spec Part 2 Product]	Basis of Design			BHMA		
		Mfgr	Product No		Finish		
3	Hinges, steel, heavy duty	MK	T4A3786 NRP		626		
1	Bored Lockset, Classroom (F84)	BE	9K_R		626		
1	Closer, surface	ST	D3551-CS (mount in room side, not corridor)		626		
1	Smoke seal	PE	S88		Grey		
1	Wall mounted stop, concave	RO	404		626		

Hardware Group		HG.03			Door #		118B
Description		Int Single, FWD – Corridor, Rim Exit					
Qty	Product [Spec Part 2 Product]	Basis of Design			BHMA		
		Mfgr	Product No		Finish		
3	Hinges, steel, medium duty	MK	TA2714 NRP		626		
1	Rim-Exit Device	VD	#99/996L <i>[verify before ordering]</i>		626		
1	Closer, surface	ST	D3551-CS (mount in room side, not corridor)		626		
1	Smoke seal	PE	S88		Grey		
1	Wall mounted stop, concave	RO	404		626		

Hardware Group		HG.04			Door #		110, 125
Description		Int Single, FWD – Storage, Corridor					
Qty	Product [Spec Part 2 Product]	Basis of Design			BHMA		
		Mfgr	Product No		Finish		
3	Hinges, stainless steel, medium duty	MK	TA2314 NRP		630		
1	Bored Lockset, Storage (F86)	BE	9K_D		626		
1	Closer, surface	ST	D3550/1-CS (mount in room side, not corridor)		626		
1	Smoke seal	PE	S88		Grey		
1	Wall mounted stop, concave	RO	404		626		

Hardware Group		HG.05A			Door #		103, 105A, 105B, 111A
Description		Int Single, FWD – push/pull, Corridor					
Qty	Product [Spec Part 2 Product]	Basis of Design			BHMA		
		Mfgr	Product No		Finish		
3	Hinges, stainless steel, heavy duty	MK	T4A3386 NRP		630		
1	Push-Pull latch	SA	115		626		
1	Closer, surface	ST	D3551-CS (mount in room side, not corridor)		626		
1	Kick Plate (10" high)	RO	K1050 (mount in room side, not corridor)		630		
1	Smoke seal	PE	S88		Grey		
1	Wall mounted stop, concave	RO	404		626		

Hardware Group		Door #		
HG.05B		111B		
Description				
Int Single, FWD – push/pull, vestibule				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
3	Hinges, stainless steel, heavy duty	MK	T4A3386 NRP	630
1	Push-Pull latch	SA	115 (dummy trim - no latch retraction, no strike)	626
1	Closer, surface	ST	D3550-CS (mount in vestibule)	626
1	Kick Plate (10" high)	RO	K1050 (mount in restroom)	630
3	Silencers	RO	608	Grey
1	Wall mounted stop, concave	RO	404	626

Hardware Group		Door #		
HG.06A		104A, 104B, 104C, 104D, 111G, 111H, 111I, 111J		
Description				
Int Single, FWD – Privacy				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
3	Hinges, continuous	PE	_FM HD	628
1	Push-Pull latch	SA	115	626
1	Bored Aux Lock w/ indicator	SA	468-V21 (room indicator both sides)	626
1	Kick Plate (10" high)	RO	K1050 (mount WC side)	630
1	Smoke seal	PE	S88	Grey
1	Wall mounted stop, concave	RO	404	626

Hardware Group		Door #		
HG.06B		104E, 104F, 104G, 104H, 104I, 104J, 104K, 111C, 111D, 111E, 111F		
Description				
Int Single, FWD – Privacy w/ closer				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
3	Hinges, continuous	PE	_FM HD	628
1	Closure, concealed with hold-open	ST	CO-153	626
1	Push-Pull latch	SA	115	626
1	Bored Aux Lock w/ indicator	SA	468-V21 (room indicator both sides)	626
1	Kick Plate (10" high)	RO	K1050 (mount shower-side)	630
3	Silencers	RO	608	Grey
1	Wall mounted stop, concave	RO	404	626

Hardware Group		Door #		
HG.07		125C		
Description				
Int Single, FWD – Storage w/ closer				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
3	Hinges, steel, medium duty	MK	TA2714 NRP	626
1	Bored Lockset, Storage (F86)	BE	9K_D	626
1	Closer, surface	ST	D3551-CS (mount in room side, not corridor)	626
1	Smoke seal	PE	S88	Grey
1	Wall mounted stop, concave	RO	404	626

Hardware Group		Door #		
HG.08		126		
Description				
Int Single, FWD – Passage w/ closer and auxiliary lock with indicator				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
3	Hinges, continuous	PE	_FM HD	628
1	Push-Pull latch	SA	115	626
1	Bored Aux Lock w/ indicator	SA	468-V21 (room indicator both sides)	626
1	Closure, concealed with hold-open	ST	CO-153	626
1	Kick Plate (10" high)	RO	K1050 (mount restroom side)	630
1	Smoke seal	PE	S88	Grey
1	Wall mounted stop, concave	RO	404	626

Hardware Group		Door #		
HG.09		118A		
Description				
Int Pair, HM – ADD Panic				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
1	Rim-Exit Device	VD	#99/996L <i>[verify before ordering]</i>	626
Modify existing door and hardware to accept new panic hardware on operable leaf only.				

Hardware Group		Door #		
HG.10		117A, 121A, 128B		
Description				
Ext Single, HM – Entry w/ closer				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
3	Hinges, steel, heavy duty	MK	T4A3786 NRP	626
1	Bored Lockset, Pin/Prox Lock	AL	PDL30	626
1	Closer, surface	ST	D3551-CS (mount on interior side)	626
1	Threshold with chair	PE	274X292_FGPK	628
1	Kick Plate (10" high)	RO	K1050 (mount on interior side)	630
1	Perimeter gasketing, fastened	PE	332_S	black
1	Overhead rain drip	PE	346_	628
1	Sweep w rain drip	PE	3452_V	628
1	Kick-down door stop	RO	461L	626
Set threshold in continuous bed of butyl sealant				

Hardware Group		Door #		
HG.11		125A		
Description				
Int Pair, FWD – Entry w/ closer				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
6	Hinges, steel, heavy duty	MK	T4A3786 NRP	626
1	Bored Lockset, Pin/Prox Lock	AL	PDL30	626
1	Manual flush bolt pair (top & bottom)	RO	630-8	630
1	Dust Proof Strike	RO	570	630
2	Closer, surface	ST	D3550-CS (mount in room side, not corridor)	626
1	Coordinator	RO	576	Black
1	Carry-open bar set	RO	1100	626
1	Astragal	PE	357	603
2	Smoke seal	PE	S88	Grey
2	Wall mounted stop, concave	RO	404	626
2	Threshold, interior	PE	276A	628
No latch trim on inactive leaf				

Hardware Group HG.12		Door # 135A		
Description Ext Pair, HM – Main Entry w/ closer & ADA operator				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
6	Hinges, steel, heavy duty	MK	T4A3786 NRP	626
1	Rim Panic, entry lock with vandal-guard	VD	#99NL/996NL	626
1	Rim Panic, dummy trim	VD	#99DT (dummy trim)	626
1	Removeable mullion, keyed	VD	KR-4954 (provide with cylinder)	-
2	Closer, surface	ST	D3551*-CS (mount on interior side) *provide closure with hold-open capabilities	626
2	Threshold with saddle & thermal break	PE	253x3_FG	628
2	Kick Plate (10" high)	RO	K1050 (mount on interior side)	630
2	Perimeter gasketing, fastened	PE	332_S	black
2	Overhead rain drip	PE	346_	628
2	Sweep w rain drip	PE	3452_V	628
1	Key Lock Box	KB	3200 (surface mount)	
<i>Verify with owner intent for stand-alone access control pin/prox lock or other entry protocol / including ADA automatic door controller</i>				

Hardware Group HG.13		Door # 117C, 125B, 134A		
Description Ext Pair, HM – Main Entry w/ closer				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
6	Hinges, steel, heavy duty	MK	T4A3786 NRP	626
1	Rim Panic, entry lock with vandal-guard	VD	#99NL/996NL	626
1	Rim Panic, dummy trim	VD	#99DT (dummy trim)	626
1	Removeable mullion, keyed	VD	KR-4954 (provide with cylinder)	-
2	Closer, surface	ST	D3551*-CS (mount on interior side) *provide closure with hold-open capabilities	626
2	Threshold with saddle & thermal break	PE	253x3_FG	628
2	Kick Plate (10" high)	RO	K1050 (mount on interior side)	630
2	Perimeter gasketing, fastened	PE	332_S	black
2	Overhead rain drip	PE	346_	628
2	Sweep w rain drip	PE	3452_V	628
<i>Verify with owner intent for stand-alone access control pin/prox lock or other entry protocol</i>				

Hardware Group HG.14		Door # 135B		
Description Ext Pair, HM – Vestibule w/closers				
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish
		Mfgr	Product No	
6	Hinges, steel, heavy duty	MK	T4A3786 NRP	626
1	Rim Panic, entry lock with vandal-guard	VD	#99NL/996NL	626
1	Rim Panic, dummy trim	VD	#99DT (dummy trim)	626
1	Removeable mullion, keyed	VD	KR-4954 (provide with cylinder)	-
2	Closer, surface	ST	D3551*-CS (mount on interior side) *provide closure with hold-open capabilities	626
2	Threshold with saddle & thermal break	PE	253x3_FG	628
2	Kick Plate (10" high)	RO	K1050 (mount on lobby side)	630
2	Perimeter gasketing, fastened	PE	332_S	black
2	Sweep	PE	3151_N	628
2	Wall mounted stop, concave	RO	404	626
<i>Verify with owner intent for stand-alone access control pin/prox lock or other entry protocol / including ADA automatic door controller</i>				

Hardware Group		HG.15		Door #		117B, 121B, 128A, 128C	
Description		Ext Sectional Door					
Qty	Product [Spec Part 2 Product]	Basis of Design		BHMA Finish			
		Mfgr	Product No				
1	cylinder						
1	Perimeter weather gasket	PE	45100_NB		-		

END OF SECTION

Door Schedule										Window Schedule																			
DOOR	TYPE	MAT'L	LEAFS	WIDTH	HEIGHT	THICK	FINISH	GLZ SPEC	FRAME	MAT'L	DEPTH	FINISH	GLZ SPEC	HEAD	JAMB	THRESH	FIRE	RTG	HDWR SPEC	PRVD ELECT RACE	DOOR	FRAME	BLDG	HP	MOTOR	V	REMARKS & KEYED NOTES	OTHER	
101 A CLASSROOM	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	17	20-MN	HG.02	-	-	-	-	-	-	-	-	-	-	-
101 B CLASSROOM	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	17	20-MN	HG.02	-	-	-	-	-	-	-	-	-	-	-
101 C CLASSROOM	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	17	20-MN	HG.02	-	-	-	-	-	-	-	-	-	-	-
101 D CLASSROOM	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	17	20-MN	HG.02	-	-	-	-	-	-	-	-	-	-	-
102 OFFICE - OPEN	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	F2.1	HM	7'-12"	PTT1	-	5	11	17	20-MN	HG.01A	NO	YES	5E701	-	-	-	-	-	-	-	-
102 A OFFICE - PRIVATE	D22	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	F3.1	HM	5'-3/4"	PTT1	-	6	12	17	-	HG.01B	-	-	-	-	-	-	-	-	-	-	-
102 B OFFICE - PRIVATE	D22	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	F3.1	HM	5'-3/4"	PTT1	-	6	12	17	-	HG.01B	-	-	-	-	-	-	-	-	-	-	-
102 C OFFICE - PRIVATE	D22	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	F3.1	HM	5'-3/4"	PTT1	-	6	12	17	-	HG.01B	-	-	-	-	-	-	-	-	-	-	-
103 RESTROOM - MAIN	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.1	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.05A	-	-	-	-	-	-	-	-	-	-	-
104 A WC - ADA	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06A	-	-	-	-	-	-	-	-	-	-	-
104 B WC	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06A	-	-	-	-	-	-	-	-	-	-	-
104 C WC	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06A	-	-	-	-	-	-	-	-	-	-	-
104 D WC	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06A	-	-	-	-	-	-	-	-	-	-	-
104 E SHWR - ADA	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 F SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 G SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 H SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 I SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 J SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 K SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
104 L SHWR - ADA	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.06B	-	-	-	-	-	-	-	-	-	-	-
105 A LOCKER RM	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.1	HM	5'-3/4"	PTT1	-	6	12	18	-	HG.05A	-	-	-	-	-	-	-	-	-	-	-
105 B LOCKER RM	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	EXIST	HM	-	PTT1	-	-	-	16	20-MN	HG.05A	-	-	-	-	-	-	-	-	-	-	
105 C LOCKER RM	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	EXIST	HM	-	PTT1	-	-	-	19	20-MN	HG.04	-	-	-	-	-	-	-	-	-	-	
110 AV STORAGE	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.1	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.05A	-	-	-	-	-	-	-	-	-	-	-
111 A RESTROOM - MAIN	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.1	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.05A	-	-	-	-	-	-	-	-	-	-	-
111 B RESTROOM - VESTIBULL	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.05B	-	-	-	-	-	-	-	-	-	-	-
111 C SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06B	-	-	-	-	-	-	-	-	-	-	-
111 D SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06B	-	-	-	-	-	-	-	-	-	-	-
111 E SHWR	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06B	-	-	-	-	-	-	-	-	-	-	-
111 F SHWR - ADA	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06B	-	-	-	-	-	-	-	-	-	-	-
111 G WC - ADA	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06A	-	-	-	-	-	-	-	-	-	-	-
111 H WC	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06A	-	-	-	-	-	-	-	-	-	-	-
111 I WC	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06A	-	-	-	-	-	-	-	-	-	-	-
111 J WC	D20	FWD	1	2'-8"	7'-0"	1-3/4"	PLC.2	-	F3.2	HM	5'-3/4"	PTT1	-	6	12	16	20-MN	HG.06A	-	-	-	-	-	-	-	-	-	-	-
114 OFFICE - PRIVATE	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	15	20-MN	HG.01C	-	-	-	-	-	-	-	-	-	-	
115 OFFICE - PRIVATE	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	15	20-MN	HG.01A	-	-	-	-	-	-	-	-	-	-	
116 OFFICE - PRIVATE	D21	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	088813	EXIST	HM	-	PTT1	-	-	-	15	20-MN	HG.01A	-	-	-	-	-	-	-	-	-	-	
117 A ENTRY - HALL	D11	HM	1	3'-0"	7'-0"	1-3/4"	PTT1	088000	F1.1	HM	6'-3/4"	PTT1	-	2	SM	8	13	SM	-	NO	YES	5E701	-	-	-	-	-	-	
117 B SECTIONAL DOOR	D33	SOH	1	16'-0"	14'-0"	2"	BE.1	083613	-	-	-	-	-	-	-	-	-	HG.15	-	-	-	-	-	-	-	-	-		
117 C ENTRY - HALL	D12	HM	2	3'-0"	7'-0"	1-3/4"	PTT1	088000	F1.1	HM	6'-3/4"	PTT1	-	2	SM	8	13	-	HG.13	YES	YES	5E701	-	-	-	-	-	-	
118 A MECHANICAL	EXIST	HM	2	6'-0"	7'-0"	1-3/4"	PTT1	-	EXIST	HM	-	PTT1	-	-	-	90-MN	HG.09	-	-	-	-	-	-	-	-	-	-		
118 B MECHANICAL	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F2.1	HM	7'-12"	PTT1	-	5	SM	11	SM	14	SM	-	-	-	-	-	-	-	-	-	
119 IT DATA RM	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	EXIST	HM	-	PTT1	-	-	-	19	20-MN	HG.01A	-	-	-	-	-	-	-	-	-		
121 A ENTRY - SUPPLY	D10	HM	1	3'-0"	7'-0"	1-3/4"	PTT1	-	F1.1	HM	7'-12"	PTT1	-	2	8	13	SM	-	NO	YES	5E701	-	-	-	-	-	-		
121 B SECTIONAL DOOR	D31	SOH	1	16'-0"	14'-0"	2"	BE.1	083613	-	-	-	-	-	-	-	-	-	HG.15	-	-	-	-	-	-	-	-			
125 A MP - EXERCISE	D24	FWD	2	6'-0"	7'-0"	1-3/4"	PLC.2	088813	F2.1	HM	7'-12"	PTT1	-	5	SM	11	SM	14	SM	20-MN	-	-	-	-	-	-	-		
125 B ENTRY - SOUTH	D12	HM	2	6'-0"	7'-0"	1-3/4"	PTT1	-	F1.1	HM	7'-12"	PTT1	-	2	SM	8	13	-	HG.13	YES	YES	5E701	-	-	-	-	-		
125 C STORAGE - CUSTODIAL	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	EXIST	HM	-	PTT1	-	-	-	14	SM	-	HG.07	-	-	-	-	-	-	-			
125 CUSTODIAL	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	EXIST	HM	-	PTT1	-	-	-	14	SM	20-MN	HG.04	-	-	-	-	-	-	-			
126 TOILET - PRIVATE	D20	FWD	1	3'-0"	7'-0"	1-3/4"	PLC.2	-	F2.1	HM	7'-12"	PTT1	-	5	SM	11	SM	16	SM	-	-	-	-	-	-	-	-		
127 A TRAINING HALL	D2	FWD	3	3'-0"	7'-0"	1-3/4"	PLC.2	-	F2.1	HM	7'-12"	PTT1	-	5	SM	11	SM	14	SM	20-MN	-	-	-	-	-	-	-		
128 A SECTIONAL DOOR	D32																												