

REVISION BULLETIN NUMBER 013

DATE: November 21, 2024

RE: Anduril Industries – McHenry, MS  
Rocket Motor Systems  
Additions and Renovations to Buildings 300, 301, 302, 400, 600 & 700

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TO: Baldwin & Shell Construction Company

This Revision Bulletin forms a part of the Contract Documents and modifies the original Documents dated 26-October-2023, as noted below. Each item in Contract Documents complements each of the other Contract Documents. No sheet, section, or document is to be followed without referring to all sheets, sections, and parts of the Contract Documents.

This Revision Bulletin consists of the following Documents and Revisions, and the attached Drawings dated November 21, 2024.

CHANGES TO INTRODUCTORY INFORMATION, BIDDING REQUIREMENTS AND CONTRACTING REQUIREMENTS:

1: None

CHANGES TO SPECIFICATIONS:

2: Replace Revised Specifications issued with the Revision Bulletin.

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08 34 13 Cold Storage Doors  
08 71 00 Door Hardware

CHANGES TO DRAWINGS:

- 3: Architectural changes as directed by Owner/ Anduril. Addition of powered up overhead and sliding doors. Pits for Anduril purchased scales.
- 4: Mechanical changes as directed by Owner/ Anduril. Duct work associated with new hoods and paint booth purchased by others. Addition of new exhaust fans.
- 5: Electrical changes as directed by Owner/ Anduril. Additional outlets for Anduril equipment, new disconnects.
- 6: Plumbing changes as directed by Owner/ Anduril. New vacuum and pneumatic piping for equipment.
- 7: Replace Revised Drawings issued with this Revision Bulletin.

Sheet	Title/Description
G-002-1	INDEX OF DRAWINGS VOLUME 1
B300-M-101	MECHANICAL PLAN – CHAN BUILDING 301
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B400-S-101B	FOUNDATION SLAB PLANS
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B400-A-201	EXTERIOR ELEVATIONS
B400-A-601	ROOM FINISH AND DOOR SCHEDULES – NOTES AND LEGENDS
B400-P-001	PLUMBING LEGEND AND NOTES – ROBERTO – BUILDING 400
B400-P-101	PLUMBING PLAN – OVERALL – ROBERTO – BUILDING 400
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B400-EP101A	POWER PLAN – AREA A – ROBERTO – BUILDING 400
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B400-E-401	ENLARGED ELECTRICAL PLANS – ROBERTO – BUILDING 400
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Modified sections indicated by [\*RB 00X] and underline.

Deleted sections indicated by [\*RB 00X] and strikethrough.

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**END OF SECTION**

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**SECTION 08 34 13**  
**COLD STORAGE DOORS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Single horizontal electric slide doors.

**1.02 RELATED REQUIREMENTS**

- A. Section 26 05 83 - Wiring Connections: Power to disconnect.

**1.03 REFERENCE STANDARDS**

- A. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum); 2020.
- B. NEMA ICS 2 - Industrial Control and Systems Controllers, Contactors and Overload Relays Rated 600 Volts; 2000, with Errata (2008).
- C. NEMA MG 1 - Motors and Generators; 2018.
- D. UL (DIR) - Online Certifications Directory; Current Edition.
- E. UL 325 - Standard for Door, Drapery, Gate, Louver, and Window Operators and Systems; Current Edition, Including All Revisions.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B. Product Data: Provide general construction, electrical equipment, and component connections and details.
- C. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
- D. Manufacturer's Installation Instructions: Indicate installation sequence and procedure details, and adjustment and alignment instructions.
- E. Manufacturer's qualification statement.
- F. Maintenance Data: Indicate lubrication requirements and frequency and periodic adjustments required.
- G. Executed warranties.

**1.05 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with at least three years of documented experience.
- B. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for purpose specified.
- C. Electrical Enclosures: Class 1 Division 2 to meet or exceed NEMA 4X.

**1.06 WARRANTY**

- A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B. Manufacturer Warranty: Provide 5-year manufacturer warranty limited warranty for the door panel, door frame, trim, vertical casings and header. Complete forms in Owner's name and register with manufacturer.

**PART 2 PRODUCTS**

**2.01 SLIDING DOORS**

- A. Casings/Header
  - 1. Extruded aluminum profiles insulated with polystyrene inserts.

2. All sweep bottom freezer doors equipped with a heater cable in the three-sided casing frames. All high sill freezer doors shall be equipped with a full perimeter heater cable in the casing frames.
  3. Jamb: Provide "C" shaped cap channel.
- B. Track System
1. Extruded aircraft grade aluminum with integrated hood.
  2. Trolley assemblies to have stainless steel bushings and bearings at each panel hanging point.
  3. Guidance system includes a panel mounted guide rail, floor mounted HDPE bottom door guide and leading-edge hook.
- C. Power Operator:
1. Microprocessor-based digital control system with integrated encoder-based positioning system. User interface to provide self-diagnostics with readout.
  2. Corrosion resistant nickel-plated chain with adjustable, spring-loaded idler assembly.
  3. Pneumatic reversing edge, jamb mounted non-contact safety beam, emergency interior disconnect; two pull switch activators.
  4. Class 1 Division 2 to meet or exceed NEMA 4X.
- D. Door Panel
1. Constructed of aircraft grade aluminum inner frame with steel corner brackets and clad with two USDA approved 24 gauge steel face sheets.
  2. Panel is foamed-in-place with 4 inch thick R32 polyurethane insulation
  3. Gasketing shall be panel mounted dual blade gaskets and adjustable bottom sweep.
  4. 14 by 14 view window, tempered safety glass and metal frame.
  5. Aluminum diamond plate and stainless steel kick or impact plates are optional.
  6. UL listed and built to NSF standards.
- E. Door Hardware
1. Exterior and recessed interior pull handles.
  2. Cylinder locks with emergency release and integrated thermal break.
  3. All hardware and mechanisms shall be corrosion resistant materials.
- F. Products:
1. Frank Door Company; Model EFD-SHES Single Electric Slide Door: [www.frankdoor.com](http://www.frankdoor.com)
  2. Substitutions: See Section 01 60 00 - Product Requirements.

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Install units in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building structure without distortion or stress.
- C. Securely and rigidly brace components suspended from structure. Secure guides to structural members only.
- D. Fit and align assembly including hardware; level and plumb, to provide smooth operation.

### **3.02 ADJUSTING**

- A. Adjust operating assemblies for smooth and noiseless operation.

### **3.03 CLEANING**

- A. Clean installed components.
- B. Remove labels and visible markings.

**END OF SECTION**

## SECTION 08 71 00

### DOOR HARDWARE

#### PART 1 - GENERAL

##### 1.1 RELATED DOCUMENTS

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

##### 1.2 SUMMARY

- A. This Section includes commercial door hardware for the following:

1. Swinging doors.
2. Sliding doors.
3. Other doors to the extent indicated.

- B. Door hardware includes, but is not necessarily limited to, the following:

1. Mechanical door hardware.
2. Electromechanical door hardware.
3. Automatic operators.
4. Cylinders specified for doors in other sections.

- C. Related Sections:

1. Division 08 Section "Hollow Metal Doors and Frames".
2. Division 08 Section "Flush Wood Doors".
3. Division 08 Section "Aluminum-Framed Entrances and Storefronts".
4. Division 08 Section "Automatic Door Operators".

- D. Codes and References: Comply with the version year adopted by the Authority Having Jurisdiction.

1. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
2. ICC/IBC - International Building Code.
3. NFPA 70 - National Electrical Code.
4. NFPA 80 - Fire Doors and Windows.
5. NFPA 101 - Life Safety Code.
6. NFPA 105 - Installation of Smoke Door Assemblies.
7. UL/ULC and CSA C22.2 - Standards for Automatic Door Operators Used on Fire and Smoke Barrier Doors and Systems of Doors.
8. State Building Codes, Local Amendments.

- E. Standards: All hardware specified herein shall comply with the following industry standards as applicable. Any undated reference to a standard shall be interpreted as referring to the latest edition of that standard:

1. ANSI/BHMA Certified Product Standards - A156 Series.
2. UL10C - Positive Pressure Fire Tests of Door Assemblies.
3. ANSI/UL 294 - Access Control System Units.
4. UL 305 - Panic Hardware.
5. ANSI/UL 437- Key Locks.

### 1.3 SUBMITTALS

- A. Product Data: Manufacturer's product data sheets including installation details, material descriptions, dimensions of individual components and profiles, operational descriptions and finishes.
- B. Door Hardware Schedule: Prepared by or under the supervision of supplier, detailing, fabrication and assembly of door hardware, as well as procedures and diagrams. Coordinate the final Door Hardware Schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
1. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule."
  2. Organization: Organize the Door Hardware Schedule into door hardware sets indicating complete designations of every item required for each door or opening. Organize door hardware sets in same order as in the Door Hardware Sets at the end of Part 3. Submittals that do not follow the same format and order as the Door Hardware Sets will be rejected and subject to resubmission.
  3. Content: Include the following information:
    - a. Type, style, function, size, label, hand, and finish of each door hardware item.
    - b. Manufacturer of each item.
    - c. Fastenings and other pertinent information.
    - d. Location of door hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
    - e. Explanation of abbreviations, symbols, and codes contained in schedule.
    - f. Mounting locations for door hardware.
    - g. Door and frame sizes and materials.
    - h. Warranty information for each product.
  4. Submittal Sequence: Submit the final Door Hardware Schedule at earliest possible date, particularly where approval of the Door Hardware Schedule must precede fabrication of other work that is critical in the Project construction schedule. Include Product Data, Samples, Shop Drawings of other work affected by door hardware, and other information essential to the coordinated review of the Door Hardware Schedule.
- C. Shop Drawings: Details of electrified access control hardware indicating the following:
1. Wiring Diagrams: Upon receipt of approved schedules, submit detailed system wiring diagrams for power, signaling, monitoring, communication, and control of the access control system electrified hardware. Differentiate between manufacturer-installed and field-installed wiring. Include the following:
    - a. Elevation diagram of each unique access controlled opening showing location and interconnection of major system components with respect to their placement in the respective door openings.

- b. Complete (risers, point-to-point) access control system block wiring diagrams.
    - c. Wiring instructions for each electronic component scheduled herein.
  2. Electrical Coordination: Coordinate with related sections the voltages and wiring details required at electrically controlled and operated hardware openings.
- D. Keying Schedule: After a keying meeting with the owner has taken place prepare a separate keying schedule detailing final instructions. Submit the keying schedule in electronic format. Include keying system explanation, door numbers, key set symbols, hardware set numbers and special instructions. Owner must approve submitted keying schedule prior to the ordering of permanent cylinders/cores.
- E. Informational Submittals:
  1. Product Test Reports: Indicating compliance with cycle testing requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified independent testing agency.
- F. Operating and Maintenance Manuals: Provide manufacturers operating and maintenance manuals for each item comprising the complete door hardware installation in quantity as required in Division 01, Closeout Procedures.

#### 1.4 QUALITY ASSURANCE

- A. Manufacturers Qualifications: Engage qualified manufacturers with a minimum 5 years of documented experience in producing hardware and equipment similar to that indicated for this Project and that have a proven record of successful in-service performance.
- B. Certified Products: Where specified, products must maintain a current listing in the Builders Hardware Manufacturers Association (BHMA) Certified Products Directory (CPD).
- C. 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.
- D. Door Hardware Supplier Qualifications: Experienced commercial door hardware distributors with a minimum 5 years documented experience supplying both mechanical and electromechanical hardware installations comparable in material, design, and extent to that indicated for this Project. Supplier recognized as a factory direct distributor by the manufacturers of the primary materials with a warehousing facility in Project's vicinity. Supplier to have on staff a certified Architectural Hardware Consultant (AHC) available during the course of the Work to consult with Contractor, Architect, and Owner concerning both standard and electromechanical door hardware and keying.
- E. Source Limitations: Obtain each type and variety of door hardware specified in this section from a single source unless otherwise indicated.
  1. Electrified modifications or enhancements made to a source manufacturer's product line by a secondary or third party source will not be accepted.
  2. Provide electromechanical door hardware from the same manufacturer as mechanical door hardware, unless otherwise indicated.

- F. Each unit to bear third party permanent label indicating compliance with the referenced testing standards.
- G. 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.
- H. Pre-Submittal Conference: Conduct coordination conference in compliance with requirements in Division 01 Section "Project Meetings" with attendance by representatives of Supplier(s), Installer(s), and Contractor(s) to review proper methods and the procedures for receiving, handling, and installing door hardware.
  - 1. Prior to installation of door hardware, conduct a project specific training meeting to instruct the installing contractors' personnel on the proper installation and adjustment of their respective products. Product training to be attended by installers of door hardware (including electromechanical hardware) for aluminum, hollow metal and wood doors. Training will include the use of installation manuals, hardware schedules, templates and physical product samples as required.
  - 2. Inspect and discuss electrical roughing-in, power supply connections, and other preparatory work performed by other trades.
  - 3. Review sequence of operation narratives for each unique access controlled opening.
  - 4. Review and finalize construction schedule and verify availability of materials.
  - 5. Review the required inspecting, testing, commissioning, and demonstration procedures
- I. At completion of installation, provide written documentation that components were applied according to manufacturer's instructions and recommendations and according to approved schedule.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

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

#### 1.6 COORDINATION

- A. Templates: Obtain and distribute to the parties involved templates for doors, frames, and other work specified to be factory prepared for installing standard and electrified hardware. Check

Shop Drawings of other work to confirm that adequate provisions are made for locating and installing hardware to comply with indicated requirements.

- B. Door and Frame Preparation: Doors and corresponding frames are to be prepared, reinforced and pre-wired (if applicable) to receive the installation of the specified electrified, monitoring, signaling and access control system hardware without additional in-field modifications.

## 1.7 WARRANTY

- A. General Warranty: Reference Division 01, General Requirements. Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. Warranty Period: Written warranty, executed by manufacturer(s), agreeing to repair or replace components of standard and electrified door hardware that fails in materials or workmanship within specified warranty period after final acceptance by the Owner. Failures include, but are not limited to, the following:
  - 1. Structural failures including excessive deflection, cracking, or breakage.
  - 2. Faulty operation of the hardware.
  - 3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.
  - 4. Electrical component defects and failures within the systems operation.
- C. Warranty Period: Unless otherwise indicated, warranty shall be one year from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 SCHEDULED DOOR HARDWARE

- A. General: Provide door hardware for each door to comply with requirements in Door Hardware Sets and each referenced section that products are to be supplied under.
- B. Designations: Requirements for quantity, item, size, finish or color, grade, function, and other distinctive qualities of each type of door hardware are indicated in the Door Hardware Sets at the end of Part 3. Products are identified by using door hardware designations, as follows:
  - 1. Named Manufacturer's Products: Product designation and manufacturer are listed for each door hardware type required for the purpose of establishing requirements. Manufacturers' names are abbreviated in the Door Hardware Schedule.
- C. Please note that ASSA ABLOY is transitioning the Yale Commercial brand to Arrow. This affects only the brand name; the products and product numbers will remain unchanged. The brand transition is expected to be complete in or about May of 2024, and products shipping after that time will be branded Arrow.
- D. Substitutions: Requests for substitution and product approval for inclusive mechanical and electromechanical door hardware in compliance with the specifications must be submitted in writing and in accordance with the procedures and time frames outlined in Division 01,

Substitution Procedures. Approval of requests is at the discretion of the architect, owner, and their designated consultants.

## 2.2 BUTT HINGES

A. Hinges: ANSI/BHMA A156.1 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: With the exception of electric through wire hinges, 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.
5. Manufacturers:
  - a. Hager Companies (HA) - BB Series, 5 knuckle.
  - b. McKinney (MK) - TA/T4A Series, 5 knuckle.

## 2.3 POWER TRANSFER DEVICES

A. Electrified Quick Connect Transfer Hinges: Provide electrified transfer hinges with Molex™ standardized plug connectors and sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets with a 1-year warranty. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Wire nut connections are not acceptable.

1. Manufacturers:
  - a. Hager Companies (HA) - ETW-QC (# wires) Option.



- b. McKinney (MK) - QC (# wires) Option.
- B. Electric Door Wire Harnesses: Provide electric/data transfer wiring harnesses with standardized plug connectors to accommodate up to twelve (12) wires. Connectors plug directly to through-door wiring harnesses for connection to electric locking devices and power supplies. Provide sufficient number and type of concealed wires to accommodate electric function of specified hardware. Provide a connector for through-door electronic locking devices and from hinge to junction box above the opening. Wire nut connections are not acceptable. Determine the length required for each electrified hardware component for the door type, size and construction, minimum of two per electrified opening.
1. Provide one each of the following tools as part of the base bid contract:
    - a. McKinney (MK) - Electrical Connecting Kit: QC-R001.
    - b. McKinney (MK) - Connector Hand Tool: QC-R003.
  2. Manufacturers:
    - a. McKinney (MK) - QC-C Series.
- C. Provide mortar guard enclosure on steel frames installed at masonry openings for each electrical hinge specified.
- 2.4 DOOR OPERATING TRIM
- A. Flush Bolts and Surface Bolts: Provide products conforming to ANSI/BHMA A156.3 and A156.16, Grade 1.
1. Flush bolts to be furnished with top rod of sufficient length to allow bolt retraction device location approximately six feet from the floor.
  2. Furnish dust proof strikes for bottom bolts.
  3. Surface bolts to be minimum 8" in length and U.L. listed for labeled fire doors and U.L. listed for windstorm components where applicable.
  4. Provide related accessories (mounting brackets, strikes, coordinators, etc.) as required for appropriate installation and operation.
  5. Manufacturers:
    - a. Burns Manufacturing (BU).
    - b. Door Controls International (DC).
    - c. Rockwood (RO).
- B. Coordinators: ANSI/BHMA A156.3 door coordinators consisting of active-leaf, hold-open lever and inactive-leaf release trigger. Model as indicated in hardware sets.
1. Manufacturers:
    - a. Burns Manufacturing (BU).
    - b. Door Controls International (DC).
    - c. Rockwood (RO).

## 2.5 CYLINDERS AND KEYING

- A. General: Cylinder manufacturer to have minimum (10) years experience designing secured master key systems and have on record a published security keying system policy.
  - 1. Manufacturers:
    - a. Match Existing, Field Verify.
- B. Cylinder Types: Original manufacturer cylinders able to supply the following cylinder formats and types:
  - 1. Threaded mortise cylinders with rings and cams to suit hardware application.
  - 2. Rim cylinders with back plate, flat-type vertical or horizontal tailpiece, and raised trim ring.
  - 3. Bored or cylindrical lock cylinders with tailpieces as required to suit locks.
  - 4. Tubular deadlocks and other auxiliary locks.
  - 5. Mortise and rim cylinder collars to be solid and recessed to allow the cylinder face to be flush and be free spinning with matching finishes.
  - 6. Keyway: Match Facility Restricted Keyway.
- C. Keying System: Each type of lock and cylinders to be factory keyed.
  - 1. Supplier shall conduct a "Keying Conference" to define and document keying system instructions and requirements.
  - 2. Furnish factory cut, nickel-silver large bow permanently inscribed with a visual key control number as directed by Owner.
  - 3. Existing System: Field verify and key cylinders to match Owner's existing system.
- D. Key Quantity: Provide the following minimum number of keys:
  - 1. Change Keys per Cylinder: Two (2)
  - 2. Master Keys (per Master Key Level/Group): Five (5).
- E. Key Registration List (Bitting List):
  - 1. Provide keying transcript list to Owner's representative in the proper format for importing into key control software.
  - 2. Provide transcript list in writing or electronic file as directed by the Owner.

## 2.6 KEY CONTROL

- A. Key Control Cabinet: Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet. Key control cabinet shall have expansion capacity of 150% of the number of locks required for the project.
  - 1. Manufacturers:
    - a. Lund Equipment (LU).
    - b. MMF Industries (MM).
    - c. Telkee (TK).

## 2.7 CYLINDRICAL LOCKS AND LATCHING DEVICES

- A. Cylindrical Locksets, Grade 1 (Commercial Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed.
1. Locks are to be non-handed and fully field reversible.
  2. Manufacturers:
    - a. Arrow (AW) - QL Series.
    - b. Arrow, formerly known as Yale (YA) 4700LN Series.
    - c. Corbin Russwin Hardware (RU) - CL3500 Series.

## 2.8 ELECTROMECHANICAL LOCKING DEVICES

- A. Electromechanical Cylindrical Locksets, Grade 1 (Commercial Duty): Subject to same compliance standards and requirements as mechanical cylindrical locksets, electrified locksets to be of type and design as specified below.
1. Electrified Lock Options: Where indicated in the Hardware Sets, provide electrified options including: outside door lock/unlock trim control and request-to-exit signaling. Unless otherwise indicated, provide electrified locksets standard as fail secure.
  2. Manufacturers:
    - a. Arrow, formerly known as Yale (YA) - 4700LN Series.

## 2.9 LOCK AND LATCH STRIKES

- A. 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:
1. Flat-Lip Strikes: For locks with three-piece antifriction latchbolts, as recommended by manufacturer.
  2. Extra-Long-Lip Strikes: For locks used on frames with applied wood casing trim.
  3. Aluminum-Frame Strike Box: Provide manufacturer's special strike box fabricated for aluminum framing.
  4. Double-lipped strikes: For locks at double acting doors. Furnish with retractable stop for rescue hardware applications.
- B. Standards: Comply with the following:
1. Strikes for Mortise Locks and Latches: BHMA A156.13.
  2. Strikes for Bored Locks and Latches: BHMA A156.2.
  3. Strikes for Auxiliary Deadlocks: BHMA A156.36.
  4. Dustproof Strikes: BHMA A156.16.

## 2.10 ELECTRIC STRIKES

- A. Standard Electric Strikes: Electric strikes conforming to ANSI/BHMA A156.31, Grade 1, for use on non-rated or fire rated openings. Strikes shall be of stainless steel construction tested to a minimum of 1500 pounds of static strength and 70 foot-pounds of dynamic strength with a

minimum endurance of 1 million operating cycles. Provide strikes with 12 or 24 VDC capability, fail-secure unless otherwise specified. Where specified provide latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike.

1. Manufacturers:

- a. HES (HS) - 1500/1600 Series.

- B. Provide electric strikes with in-line power controller and surge suppressor by the same manufacturer as the strike with the combined products having a five year warranty.

2.11 CONVENTIONAL EXIT DEVICES

- A. General Requirements: All exit devices specified herein shall meet or exceed the following criteria:

1. Exit devices shall have a five-year warranty.
2. 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.
3. 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.
4. 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.
5. 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.
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. Vertical Rod Exit Devices: Where surface or concealed vertical rod exit devices are used at interior openings, provide as less bottom rod (LBR) unless otherwise indicated. Provide dust proof strikes where thermal pins are required to project into the floor.
8. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
9. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
10. Rail Sizing: Provide exit device rails factory sized for proper door width application.
11. Through Bolt Installation: For exit devices and trim as indicated in Door Hardware Sets.

- B. Conventional Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices furnished in the functions specified in the Hardware Sets. Exit device latch to be stainless steel, pullman type, with deadlock feature.

1. Manufacturers:
  - a. Arrow, formerly known as Yale (YA) - 7000 Series.
  - b. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
  - c. Sargent Manufacturing (SA) - 80 Series.

C. Steel Removable Mullions: ANSI/BHMA A156.3 steel removable mullions with options for fire rating, locking, through-wire electrification and hurricane compliance as specified.

1. Manufacturers:
  - a. Same as exit device manufacturer.

## 2.12 ELECTROMECHANICAL EXIT DEVICES

A. Electromechanical Push Rail Exit Devices (Heavy Duty): ANSI/BHMA A156.3, Grade 1 Certified Products Directory (CPD) listed panic and fire exit hardware devices subject to same compliance standards and requirements as mechanical exit devices. Electrified exit devices to be of type and design as specified below and in the hardware sets.

1. Where conventional power supplies are not sufficient, include any specific controllers required to provide the proper inrush current.
2. Manufacturers:
  - a. Arrow, formerly known as Yale (YA) - 7000 Series.
  - b. dormakaba Precision (PR) - Apex 2000 Series.
  - c. Sargent Manufacturing (SA) - 80 Series.

## 2.13 DOOR 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.
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. 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 Americans with Disabilities Act, provide units complying with ANSI ICC/A117.1.
4. Closer Arms: Provide heavy duty, forged steel closer arms unless otherwise indicated in Hardware Sets.
5. Closers shall not be installed on exterior or corridor side of doors; where possible install closers on door for optimum aesthetics.
6. 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. Door Closers, Surface Mounted (Commercial Duty): ANSI/BHMA 156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, institutional grade door closers with complete

spring power adjustment, sizes 1 thru 6; and fully operational adjustable according to door size, frequency of use, and opening force. Closers to be rack and pinion type, one piece cast iron or aluminum alloy body construction, with adjustable backcheck, closing sweep, and latch speed control valves. Provide non-handed units standard.

1. Manufacturers:
  - a. Arrow, formerly known as Yale (YA) - 3500 Series.
  - b. Corbin Russwin Hardware (RU) - DC6000 Series.
  - c. Sargent Manufacturing (SA) - 1431 Series.

## 2.14 DOOR STOPS AND HOLDERS

- A. General: Door stops and holders to be of type and design as specified below or in the Hardware Sets.
- B. Door Stops and Bumpers: ANSI/BHMA A156.16, Grade 1 door stops and wall bumpers. Provide wall bumpers, either convex or concave types with anchorage as indicated, unless floor or other types of door stops are specified in Hardware Sets. Do not mount floor stops where they will impede traffic. Where floor or wall bumpers are not appropriate, provide overhead type stops and holders.

1. Manufacturers:
  - a. Burns Manufacturing (BU).
  - b. Hiawatha, Inc. (HI).
  - c. Rockwood (RO).

- C. Overhead Door Stops and Holders: ANSI/BHMA A156.8, Grade 1 Certified Products Directory (CPD) listed overhead stops and holders to be surface or concealed types as indicated in Hardware Sets. Track, slide, arm and jamb bracket to be constructed of extruded bronze and shock absorber spring of heavy tempered steel. Provide non-handed design with mounting brackets as required for proper operation and function.

1. Manufacturers:
  - a. Norton Rixson (RF).
  - b. Rockwood (RO).
  - c. Sargent Manufacturing (SA).

## 2.15 ARCHITECTURAL SEALS

- 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. Sound-Rated Gasketing: Assemblies that are listed and labeled by a testing and inspecting agency, for sound ratings indicated.
- E. Replaceable Seal Strips: Provide only those units where resilient or flexible seal strips are easily replaceable and readily available from stocks maintained by manufacturer.
- F. Manufacturers:
  1. National Guard Products (NG).
  2. Pemko (PE).
  3. Reese Enterprises, Inc. (RE).

## 2.16 ELECTRONIC ACCESSORIES

- A. Door Position Switches: Door position magnetic reed contact switches specifically designed for use in commercial door applications. On recessed models the contact and magnetic housing snap-lock into a 1" diameter hole. Surface mounted models include wide gap distance design complete with armored flex cabling. Provide SPDT, N/O switches with optional Rare Earth Magnet installation on steel doors with flush top channels.
  1. Manufacturers:
    - a. Sargent Manufacturing (SA) - 3280 Series.
    - b. Securitron (SU) - DPS Series.
- B. Switching Power Supplies: Provide power supplies with either single or dual voltage configurations at 12 or 24VDC. Power supplies shall have battery backup function with an integrated battery charging circuit and shall provide capability for power distribution, direct lock control and Fire Alarm Interface (FAI) through add on modules. Power supplies shall be expandable up to 16 individually protected outputs. Output modules shall provide individually protected, continuous outputs and/or individually protected, relay controlled outputs.
  1. Provide the least number of units, at the appropriate amperage level, sufficient to exceed the required total draw for the specified electrified hardware and access control equipment.
  2. Manufacturers:
    - a. Securitron (SU) - AQD Series.
    - b. Altronix (AS) - Maximal 3.

## 2.17 FABRICATION

- A. Fasteners: Provide door hardware manufactured to comply with published templates generally prepared for machine, wood, and sheet metal screws. Provide screws according to manufacturers recognized installation standards for application intended.

## 2.18 FINISHES

- A. Standard: Designations used in the Hardware Sets and elsewhere indicate hardware finishes complying with ANSI/BHMA A156.18, including coordination with traditional U.S. finishes indicated by certain manufacturers for their products.
- B. Provide quality of finish, including thickness of plating or coating (if any), composition, hardness, and other qualities complying with manufacturer's standards, but in no case less than specified by referenced standards for the applicable units of hardware
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine scheduled openings, 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. Notify architect of any discrepancies or conflicts between the door schedule, door types, drawings and scheduled hardware. Proceed only after such discrepancies or conflicts have been resolved in writing.

### 3.2 PREPARATION

- A. Hollow Metal Doors and Frames: Comply with ANSI/DHI A115 series.
- B. Wood Doors: Comply with ANSI/DHI A115-W series.

### 3.3 INSTALLATION

- A. Install each item of mechanical and electromechanical hardware and access control equipment to comply with manufacturer's written instructions and according to specifications.
  - 1. Installers are to be trained and certified by the manufacturer on the proper installation and adjustment of fire, life safety, and security products including: hanging devices; locking devices; closing devices; and seals.
- B. Mounting Heights: Mount door hardware units at heights indicated in following applicable publications, unless specifically 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. DHI TDH-007-20: Installation Guide for Doors and Hardware.
  3. Where indicated to comply with accessibility requirements, comply with ANSI A117.1 "Accessibility Guidelines for Buildings and Facilities."
  4. Provide blocking in drywall partitions where wall stops or other wall mounted hardware is located.
- C. Retrofitting: Install door hardware to comply with manufacturer's published templates and 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 9 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
- D. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- E. Storage: Provide a secure lock up for hardware delivered to the project but not yet installed. Control the handling and installation of hardware items so that the completion of the work will not be delayed by hardware losses before and after installation.

### 3.4 FIELD QUALITY CONTROL

- A. Field Inspection (Punch Report): Reference Division 01 Sections "Closeout Procedures". Produce project punch report for each installed door opening indicating compliance with approved submittals and verification hardware is properly installed, operating and adjusted. Include list of items to be completed and corrected, indicating the reasons or deficiencies causing the Work to be incomplete or rejected.
1. Organization of List: Include separate Door Opening and Deficiencies and Corrective Action Lists organized by Mark, Opening Remarks and Comments, and related Opening Images and Video Recordings.

### 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.

### 3.6 CLEANING AND PROTECTION

- A. Protect all hardware stored on construction site in a covered and dry place. Protect exposed hardware installed on doors during the construction phase. Install any and all hardware at the latest possible time frame.
- B. Clean adjacent surfaces soiled by door hardware installation.

- C. Clean operating items as necessary to restore proper finish. Provide final protection and maintain conditions that ensure door hardware is without damage or deterioration at time of owner occupancy.

### 3.7 DEMONSTRATION

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

### 3.8 DOOR HARDWARE SETS

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

1. Quantities listed are for each pair of doors, or for each single door.
2. The supplier is responsible for handing and sizing all products.
3. Where multiple options for a piece of hardware are given in a single line item, the supplier shall provide the appropriate application for the opening.
4. At existing openings with new hardware the supplier shall field inspect existing conditions prior to the submittal stage to verify the specified hardware will work as required. Provide alternate solutions and proposals as needed.

- B. Manufacturer's Abbreviations:

1. MK - McKinney
2. RO - Rockwood
3. YA - Arrow, formerly known as Yale
4. OT - Other
5. HS - HES
6. RF - Rixson
7. NO - Norton
8. PE - Pemko
9. SU - Securitron

**Hardware Sets**

**Set: 1.0**

Doors: B400-109

5 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Hinge, Full Mortise, Hvy Wt	T4A3386 QC 4-1/2" x 4-1/2"	US32D	MK
1 Mullion	M200(F)	600	YA
1 Electrified Rim Exit, Fail Secure	6100(F)ED AU691F	630	YA
1 Rim Exit Device, Exit Only	6100(F)ED EO	630	YA
1 Permanent Cylinder	Match Existing System		OT
2 Surface Closer, PA, Spring Stop	5831	689	YA
1 Gasketing	2891AS TKSP		PE
1 Rain Guard	346C TKSP		PE
2 Sweep	315CN TKSP		PE
1 Threshold	2005AT MSES25SS		PE
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK
1 ElectroLynx Harness	QC-C1500P		MK
2 Position Switch	DPS		SU
1 Power Supply	AQD w/Relays as Required		SU
1 Card Reader	By Security Contractor		OT

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.

**Set: 2.0**

Doors: 300-100A, 300-100B, 300-100C, 300-101, 301-101B, 301-101C, 302-100A, 302-100B, 302-100C, 302-101, B400-101AA, B400-102, B400-103, B400-104, B400-106C, B400-106D, B400-107B, B400-108A, B400-108B, B400-111, B400-113C, B400-114B, B400-117, B400-121A, B400-121B, B400-122, B600-101A, B600-101B

2 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Hinge, Full Mortise, Hvy Wt	T4A3386 QC 4-1/2" x 4-1/2"	US32D	MK
1 Fail Secure Lock	AU 4791LN	626	YA
1 Permanent Cylinder	Match Existing System		OT
1 Surface Closer, PA, Spring Stop	5831	689	YA
1 Gasketing	2891AS TKSP		PE
1 Rain Guard	346C TKSP		PE
1 Sweep	315CN TKSP		PE
1 Threshold	2005AT MSES25SS		PE
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK
1 ElectroLynx Harness	QC-C1500P		MK

1	Position Switch	DPS	SU
1	Power Supply	AQD w/Relays as Required	SU
1	Card Reader	By Security Contractor	OT

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.

**Set: 3.0**

Doors: B400-110, B400-123, B600-104

2	Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK
1	Hinge, Full Mortise, Hvy Wt	T4A3386 QC 4-1/2" x 4-1/2"	US32D	MK
1	Electrified Rim Exit, Fail Secure	6100(F)ED AU691F	630	YA
1	Permanent Cylinder	Match Existing System		OT
1	Surface Closer, PA, Spring Stop	5831	689	YA
1	Gasketing	2891AS TKSP		PE
1	Rain Guard	346C TKSP		PE
1	Sweep	315CN TKSP		PE
1	Threshold	2005AT MSES25SS		PE
1	ElectroLynx Harness	QC-Cxxx Length as Required		MK
1	ElectroLynx Harness	QC-C1500P		MK
1	Position Switch	DPS		SU
1	Power Supply	AQD w/Relays as Required		SU
1	Card Reader	By Security Contractor		OT

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.

**Set: 5.0**

Doors: 301-110, 301-111, 301-112, B400-118, B600-105

6	Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1	Top Flush Bolt	555	US26D	RO
1	Classroom Lock	AU 4708LN	626	YA
1	Permanent Cylinder	Match Existing System		OT
1	Surf Overhead Stop	9-x36	630	RF
1	Surface Closer, PA, Spring Stop	5831	689	YA
2	Silencer	608-RKW		RO

**Set: 6.0**

Doors: B400-100E, B400-105A, ~~B400-105A.1~~, B400-105B, B400-105B.1, B400-105B.2, ~~B400-105C~~,  
 B400-105C.1, ~~B400-105C.2~~,

5 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Hinge, Full Mortise	TA2314 QC 4-1/2" x 4-1/2"	US32D	MK
1 Automatic Top Flush Bolt	2840	US32D	RO
1 Passage Latch	AU 4701LN	626	YA
1 Electric Strike	1500C	630	HS
1 SMART Pac Bridge Rectifier	2005M3		HS
1 Coordinator	2600 series w/Brackets as Required	US28	RO
1 Automatic Opener	D6011 / D6061	689	NO
2 Door Stop	409 / 441H	US26D	RO
1 Gasketing	S88BL		PE
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK
1 ElectroLynx Harness	QC-C1500P		MK
2 Touchless Actuator	673 / 674		NO

**Set: 7.0**

Doors: B600-102

2 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Hinge, Thru-Wire	TA3214 4-1/2" x 4-1/2" QC-12	US32D	MK
1 Exit Device, SVR, Active	6170EDF90 LBR MELR AU546F	630	YA
1 Permanent Cylinder	Match Existing System		OT
1 Auto-Operators	6331	689	NO
1 Wave Switch Actuators	673		NO
1 Door Stop	409 / 441H	US26D	RO
1 Gasketing	S88BL		PE
1 Electro-Lynx Harness	QC-1500P (Hinge to Auto-Op.)		MK
1 Electro-Lynx Harness	QC-012 (Hinge to Exit Dev.)		MK
3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
4 Storeroom or Closet Lock	AU 4705LN	626	YA
4 Permanent Cylinder	Match Existing System		OT
4 Surface Closer, PA / RA	5801	689	YA
4 Door Stop	409 / 441H	US26D	RO
4 Gasketing	S88BL		PE

**Set: 8.0**

Doors: 301-101A, 301-102

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Storeroom or Closet Lock	AU 4705LN	626	YA
1 Permanent Cylinder	Match Existing System		OT
1 Surface Closer, PA / RA	5801	689	YA
1 Door Stop	409 / 441H	US26D	RO
3 Silencer	608-RKW		RO

**Set: 9.0**

Doors: B600-103A, B600-103D

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Classroom Lock	AU 4708LN	626	YA
1 Permanent Cylinder	Match Existing System		OT
1 Surface Closer, PA, Spring Stop	5831	689	YA
1 Gasketing	2891AS TKSP		PE
1 Sweep	315CN TKSP		PE
1 Threshold	2005AT MSES25SS		PE
3 Silencer	608-RKW		RO

**Set: 10.0**

Doors: B400-116

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Classroom Lock	AU 4708LN	626	YA
1 Permanent Cylinder	Match Existing System		OT
1 Surface Closer, PA, Spring Stop	5831	689	YA
3 Silencer	608-RKW		RO

**Set: 11.0**

Doors: B400-101AB

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Passage Latch	AU 4701LN	626	YA
1 Surface Closer, PA / RA	5801	689	YA
1 Door Stop	409 / 441H	US26D	RO
3 Silencer	608-RKW		RO

**Set: 12.0**

Doors: B400-100D

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Passage Latch	AU 4701LN	626	YA
1 Surface Closer, PA, Spring Stop	5831	689	YA
1 Gasketing	S88BL		PE

**Set: 13.0**

Doors: B400-119

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Privacy Lock	AU 4702LN	626	YA
1 Surface Closer, PA / RA	5801	689	YA
1 Door Stop	409 / 441H	US26D	RO
3 Silencer	608-RKW		RO

**Set: 14.0**

Doors: B400-112

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK
1 Privacy Lock	AU 4702LN	626	YA
1 Surface Closer, PA, Spring Stop	5831	689	YA
3 Silencer	608-RKW		RO

**Set: 15.0**

Doors: B400-100A, B400-100B, B400-100C, B400-107A, B400-113A, B400-113B, B400-114A, B400-115, B400-120A, B400-120B, B600-103B, B600-103C, B600-103E

1 All Hardware	By Door and Frame Manufacturer		OT
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**Set: 16.0**

Doors: B700-111

Description: EXTERIOR PAIR MULLION ELEC TRIM RIM EXIT X EO CPS CLOSER

5 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Hinge, Full Mortise, Hvy Wt	T4A3386 QC 4-1/2" x 4-1/2"	US32D	MK	087100
1 Mullion	KRM200	600	YA	087100
1 Electrified Rim Exit, Fail Secure	6100ED AU691F	630	YA	087100
1 Rim Exit Device, Exit Only	6100ED EO	630	YA	087100

2 Permanent Cylinder	Match Existing System			
2 Surface Closer, CPS	5831	689	YA	087100
1 Rain Guard	346C TKSP		PE	087100
2 Gasketing	S88BL		PE	087100
2 Sweep	315CN TKSP		PE	087100
1 Threshold	273x3AFG		PE	087100
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK	087100
1 ElectroLynx Harness	QC-C1500P		MK	087100
2 Position Switch	DPS		SU	087100
1 Power Supply	AQD w/Relays as Required		SU	087100
1 Card Reader	By Security Contractor		OT	

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.

**Set: 17.0**

Doors: B700-108

Description: EXTERIOR FAIL SECURE LOCK CPS CLOSER

2 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Hinge, Full Mortise, Hvy Wt	T4A3386 QC 4-1/2" x 4-1/2"	US32D	MK	087100
1 Fail Secure Lock	AU 4791LN	626	YA	087100
1 Permanent Cylinder	Match Existing System			
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	2891AS TKSP		PE	087100
1 Rain Guard	346C TKSP		PE	087100
1 Sweep	315CN TKSP		PE	087100
1 Threshold	2005AT MSES25SS		PE	087100
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK	087100
1 ElectroLynx Harness	QC-C1500P		MK	087100
1 Position Switch	DPS		SU	087100
1 Power Supply	AQD w/Relays as Required		SU	087100
1 Card Reader	By Security Contractor		OT	

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.



**Set: 18.0**

Doors: B700-101B, B700-101D

Description: EXTERIOR ELEC TRIM RIM EXIT CPS CLOSER

2 Hinge, Full Mortise, Hvy Wt	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Hinge, Full Mortise, Hvy Wt	T4A3386 QC 4-1/2" x 4-1/2"	US32D	MK	087100
1 Electrified Rim Exit, Fail Secure	6100ED AU691F	630	YA	087100
1 Permanent Cylinder	Match Existing System			
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	2891AS TKSP		PE	087100
1 Rain Guard	346C TKSP		PE	087100
1 Sweep	315CN TKSP		PE	087100
1 Threshold	2005AT MSES25SS		PE	087100
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK	087100
1 ElectroLynx Harness	QC-C1500P		MK	087100
1 Position Switch	DPS		SU	087100
1 Power Supply	AQD w/Relays as Required		SU	087100
1 Card Reader	By Security Contractor		OT	

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.

**Set: 19.0**

Description: NOT USED

**Set: 20.0**

Doors: B700-109

Description: STOREROOM LOCK CPS CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Storeroom or Closet Lock	AU 4705LN	626	YA	087100
1 Permanent Cylinder	Match Existing System			
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	S88BL		PE	087100

**Set: 21.0**

Doors: NOT USED

**Set: 22.0**

Doors: B700-112

Description: FAIL SECURE LOCK CPS CLOSER GASKET

2 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Hinge, Full Mortise	TA2314 QC 4-1/2" x 4-1/2"	US32D	MK	087100
1 Fail Secure Lock	AU 4791LN	626	YA	087100
1 Permanent Cylinder	Match Existing System			
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	S88BL		PE	087100
1 ElectroLynx Harness	QC-Cxxx Length as Required		MK	087100
1 ElectroLynx Harness	QC-C1500P		MK	087100
1 Position Switch	DPS		SU	087100
1 Power Supply	AQD w/Relays as Required		SU	087100
1 Card Reader	By Security Contractor		OT	

Notes: Door normally closed and locked.  
 Entry by valid credential or manual key override.  
 Always free egress.  
 Upon activation of the fire alarm or loss of power, door remains locked.

**Set: 23.0**

Doors: B700-103

Description: OFFICE LOCK NO CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Entry Lock	AU 4707LN	626	YA	087100
1 Door Stop	409 / 441H	US26D	RO	087100
1 Gasketing	S88BL		PE	087100

**Set: 24.0**

Doors: B700-110

Description: PASSAGE LATCH PR CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Passage Latch	AU 4701LN	626	YA	087100
1 Surface Closer, PA / RA	5801 P/REG per dr swing	689	YA	087100
1 Door Stop	409 / 441H	US26D	RO	087100
1 Gasketing	S88BL		PE	087100

**Set: 25.0**

Doors: B700-104

Description: PASSAGE LATCH CPS CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Passage Latch	AU 4701LN	626	YA	087100
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	S88BL		PE	087100

**Set: 26.0**

Doors: B700-107

Description: PRIVACY LATCH CPS CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Privacy Lock	AU 4702LN	626	YA	087100
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	S88BL		PE	087100

**Set: 27.0**

Doors: B700-105, B700-106

Description: PRIVACY LATCH CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Privacy Lock	AU 4702LN	626	YA	087100
1 Surface Closer, PA / RA	5801 P/REG per dr swing	689	YA	087100
1 Door Stop	409 / 441H	US26D	RO	087100
1 Gasketing	S88BL		PE	087100

**Set: 28.0**

Description: NOT USED

**Set: 29.0**

Doors: B700-102

Description: PUSH/PULL CPS CLOSER GASKET

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Push Plate	70C	US32D	RO	087100
1 Pull Plate	110x70C	US32D	RO	087100
1 Surface Closer, CPS	5831	689	YA	087100
1 Gasketing	S88BL		PE	087100

**Set: 30.0**

Doors: B700-101A, B400-105A.1, B400-105C, B400-105C.2

Description: ALL BY DOOR SUPPLIER

1 All Hardware By Door and Frame Manufacturer

**Set: 31.0**

Doors: MISC

Description: MISC

1 BITTING LIST	KEY RECORDS		
1 KEY BLANKS	BOX OF 50		
1 Key Cabinet	Sized per specification documents		LU
1 Knox Box	Knox Box (coordinate with local fire station for requirements and location)		

**Set: 32.0**

Doors: B600-EX

1 Magnetic Lock	DEM680E	630	SU
1 Emergency Exit Button	EEB3		SU
1 Balance of Hardware	Existing to remain		OT
1 Card Reader	By Security Contractor		OT

Note: Access control being added to existing door. Field verify existing material for compatibility. Ingress via presenting credential to card reader. No key override. Egress via motion sensor built-in to the Magnetic Lock. Redundant egress EEB3 required per code. Coordinate with electrical and security contractors.

Anduril Industries  
Additions and Renovations  
Buildings 300, 301, 302, 400, 600, and 700  
McHenry, Mississippi

2023-047  
October 2023

**END OF SECTION**

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