

ADDENDUM NO. 2
PUBLIC WORKS ADDITIONS
CITY OF PARAGOULD
PARAGOULD, ARKANSAS
Project No. 23044

September 9, 2024

Lewis, Elliott, McMorran, Vaden,
Ragsdale & Woodward, Inc.
11225 Huron Lane, Suite 104
Little Rock, AR 72211
Telephone: (501) 223-9302

The proposed Contract Documents, dated August 16, 2024, have been modified as follows:

Pertaining to the Notice to Bidders:

Item #1: Bid date shall be changed to September 17, 2024. Time and location to remain the same.

Pertaining to Addendum #001:

Item #2: Replace 08 71 00 - Door Hardware with attached 08 71 00 – Revised Door Hardware.

Pertaining to the Drawings:

Item #3: Sheet A8.1 – Door Schedule: See revised door schedule on attached sheet A8.1 dated 2024 09-09.

Item #4: Sheet E2.1 Floor plan – Building B – Power & Systems: Provide #10 AWG wire for EWH1 and HT-1 in lieu of #12 AWG as shown on drawings. (Revised 2024 09-09) Attached.

Item #5: Sheet E5.1, E6.1, & E7.1 – Electrical Schedules, details, & Risers (Revised 2024 09-09) Attached:

- a. Riser diagram to show MDP to be 1200A in lieu of 800A to correspond with One-Line/Panel schedules.
- b. Provide (2)30A/2P breaker for HT1 & EWH1 w/ #10 AWG min in panel “LPB”.
- c. Fixture type “D2” on drawings shall correspond with Fixture type “D1” on fixture schedule.
- d. Fixture type “D1” shall be Lithonia Lighting #CLX-L96-10000LM-SEF-WDL-WD-MVOLT-GZ1-40K-80CRI-FINISH in lieu of #TMSL as scheduled.
- e. Fixture type “Q” shall be Visa Lighting #OW1303-L40K-H-MVOLT-FINISH.

END OF ADDENDUM NO. 2

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. 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. Cylinders specified for doors in other sections.

- C. Related Sections:

1. Division 08 Section "Metal Doors and Frames".
2. Division 08 Section "Wood Doors".
3. Division 08 Section "Entrances and Storefronts".

- 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. 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.

1.4 CLOSEOUT SUBMITTALS

- A. 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.
- B. Project Record Documents: Provide record documentation of as-built door hardware sets in digital format (.pdf, .docx, .xlsx, .csv) and as required in Division 01, Project Record Documents.

1.5 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.

1.6 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".

1.7 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.

1.8 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 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. McKinney (MK) - TA/T4A Series, 5-knuckle.

2.2 CONTINUOUS HINGES

- A. Continuous Geared Hinges: ANSI/BHMA A156.26 Grade 1-600 continuous geared hinge. with minimum 0.120-inch thick extruded 6063-T6 aluminum alloy hinge leaves and a minimum overall width of 4 inches. Hinges are non-handed, reversible and fabricated to template screw locations. Factory trim hinges to suit door height and prepare for electrical cut-outs.

1. Manufacturers:

- a. Pemko (PE).

2.3 POWER TRANSFER DEVICES

- A. Electrified Quick Connect Continuous Geared Transfer Hinges: Provide electrified transfer continuous geared hinges with a removable service panel cutout accessible without de-mounting door from the frame. Furnish with Molex™ standardized plug connectors with sufficient number of concealed wires (up to 12) to accommodate the electrified functions specified in the Door Hardware Sets. 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. Pemko (PE) - SER-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.

2.4 DOOR OPERATING TRIM

- A. Door Push Plates and Pulls: ANSI/BHMA A156.6 door pushes and pull units of type and design specified in the Hardware Sets. Coordinate and provide proper width and height as required where conflicting hardware dictates.

1. Push/Pull Plates: Minimum .050 inch thick, size as indicated in hardware sets, with beveled edges, secured with exposed screws unless otherwise indicated.
2. Offset Pull Design: Size, shape, and material as indicated in the hardware sets. Minimum clearance of 2 1/2-inches from face of door and offset of 90 degrees unless otherwise indicated.

3. Pulls, where applicable, shall be provided with a 10” clearance from the finished floor on the push side to accommodate wheelchair accessibility.
4. Fasteners: Provide manufacturer's designated fastener type as indicated in Hardware Sets. When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
5. Manufacturers:
 - a. Ives (IV).
 - b. 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. No Substitution.
- 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 Standard.
- 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 CYLINDRICAL LOCKS AND LATCHING DEVICES

A. Cylindrical Locksets, Grade 1 (Heavy Duty): ANSI/BHMA A156.2, Series 4000, Operational Grade 1 Certified Products Directory (CPD) listed cylindrical locksets. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - CLX3300 Series.
 - b. Sargent Manufacturing (SA) - 10X Line.

2.7 DEADLOCKS AND LATCHES

A. Cylindrical Deadlocks: ANSI/BHMA A156.36 Grade 1 Certified Products Directory (CPD) listed deadlocks to fit standard ANSI 161 preparation. Provide tapered collars to resist vandalism and 1" throw solid steel bolt with hardened steel roller pins. Deadlocks to be products of the same source manufacturer and keyway as other locksets.

1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DL3000 Series.
 - b. Sargent Manufacturing (SA) - 480 Series.

2.8 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.

2.9 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 that install with no cutting of the frame required. Strikes shall be tested to a minimum of 1500 pounds of static strength and 70 foot-pounds of dynamic strength with a minimum endurance of 500,000 operating cycles. Provide strikes with 12 or 24 VDC capability, fail-secure unless otherwise specified with latchbolt monitoring as indicated.
 1. Manufacturers:
 - a. HES (HS) - 8000/8300/8500 Series.
- B. Surface Mounted Rim Electric Strikes: Surface mounted rim exit device electric strikes conforming to ANSI/BHMA A156.31, Grade 1, and UL Listed for both Burglary Resistance and for use on fire rated door assemblies. Construction includes internally mounted solenoid with two heavy-duty, stainless steel locking mechanisms operating independently to provide tamper resistance. Strikes tested for a minimum of 500,000 operating cycles. Provide strikes with 12 or 24 VDC capability supplied standard as fail-secure unless otherwise specified. Option available for latchbolt and latchbolt strike monitoring indicating both the position of the latchbolt and locked condition of the strike. Strike requires no cutting to the jamb prior to installation.
 1. Manufacturers:
 - a. HES (HS) - 9400/9500/9600/9700/9800 Series.
- C. 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.

2.10 CONVENTIONAL EXIT DEVICES

- 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. 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.
6. 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.
7. Narrow Stile Applications: At doors constructed with narrow stiles, or as specified in Hardware Sets, provide devices designed for maximum 2" wide stiles.
8. Dummy Push Bar: Nonfunctioning push bar matching functional push bar.
9. Rail Sizing: Provide exit device rails factory sized for proper door width application.
10. 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 exit devices. Listed manufacturers shall meet all functions and features as specified herein.

1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - ED4000 / ED5000 Series.
 - b. Sargent Manufacturing (SA) - 80 Series.

2.11 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 (Large Body Cast Iron): ANSI/BHMA A156.4, Grade 1 Certified Products Directory (CPD) listed surface mounted, heavy duty 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 body construction, with adjustable backcheck and separate non-critical valves for closing sweep and latch speed control.
1. Manufacturers:
 - a. Corbin Russwin Hardware (RU) - DC8000 Series.
 - b. Sargent Manufacturing (SA) - 281 Series.
- C. 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. Corbin Russwin Hardware (RU) - DC6000 Series.
 - b. Sargent Manufacturing (SA) - 1431 Series.

2.12 ARCHITECTURAL TRIM

A. Door Protective Trim

1. General: Door protective trim units to be of type and design as specified below or in the Hardware Sets.
2. Size: Fabricate protection plates (kick, armor, or mop) not more than 2" less than door width (LDW) on stop side of single doors and 1" LDW on stop side of pairs of doors, and not more than 1" less than door width on pull side. Coordinate and provide proper width and height as required where conflicting hardware dictates. Height to be as specified in the Hardware Sets.
3. Where plates are applied to fire rated doors with the top of the plate more than 16" above the bottom of the door, provide plates complying with NFPA 80. Consult manufacturer's catalog and template book for specific requirements for size and applications.
4. Protection Plates: ANSI/BHMA A156.6 protection plates (kick, armor, or mop), fabricated from the following:
 - a. Stainless Steel: 300 grade, 050-inch thick.

5. Options and fasteners: Provide manufacturer's designated fastener type as specified in the Hardware Sets. Provide countersunk screw holes.
6. Manufacturers:
 - a. Rockwood (RO).

2.13 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. Rockwood (RO).

2.14 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 NFPA 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. Pemko (PE).

2.15 ELECTRONIC ACCESSORIES

- A. Intelligent Switching Power Supplies: Provide power supplies with single, dual or multi-voltage configurations at 12 and/or 24VDC. Power Supply shall have battery backup function with an integrated battery charging circuit. The power supply shall have a standard, integrated Fire Alarm Interface (FAI). The power supply shall provide capability for secondary voltage, power distribution, direct lock control and network monitoring through add on modules. The power supply shall be expandable up to 16 individually protected outputs. Output modules shall provide individually protected, continuous outputs and/or individually protected, relay controlled outputs. Network modules shall provide remote monitoring functions such as status reporting, fault reporting and information logging.

1. Manufacturers:

- a. Securitron (SU) - AQL Series.

2.16 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.

2.17 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. Push Plates and Door Pulls: When through-bolt fasteners are in the same location as a push plate, countersink the fasteners flush with the door face allowing the push plate to sit flat against the door.
- E. Thresholds: Set thresholds for exterior and acoustical doors in full bed of sealant complying with requirements specified in Division 7 Section "Joint Sealants."
- F. 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 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.

3.5 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.

3.6 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.
- B. Manufacturer's Abbreviations:

- 1. MK - McKinney
- 2. PE - Pemko
- 3. SA - SARGENT
- 4. HS - HES
- 5. RO - Rockwood
- 6. SU - Securitron
- 7. OT - Other

Hardware Sets

Set: 1.0

Doors: 101.3, 201.1

1 Continuous Hinge	CFM83SLI-HD1 SER		PE	087100
1 Rim Exit Device, Exit Only	55 56 8810 EO	US32D	SA	087100
1 Pull	RM201 Mtg-Type 1XHD	US32D	RO	087100
1 Surface Closer	TB 281 CPS	EN	SA	087100
1 ElectroLynx Harness	QC-C*** As Req'd		MK	087100
1 ElectroLynx Harness	QC-C***P Per Door Size		MK	087100
1 Power Supply	AQL As Req'd		SU	087100

Notes: Exit device with electric latch retraction for access control. Credential reader, door position switch, request to exit by security contractor. Door is normally closed, latched and secured. Valid credential for ingress, free egress at all times. Co-ordinate with security and electrical.

Set: 2.0

Doors: 203.2

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1 Electric Strike	8000C-LBM	630	HS	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
1 Gasketing	303AV		PE	087100
1 Rain Guard	346C		PE	087100
1 Sweep	315CN		PE	087100
1 Threshold	170A		PE	087100
1 Power Supply	AQL As Req'd		SU	087100

Notes: Electric strike for access control. Credential reader, door position switch, request to exit by security contractor. Door is normally closed, latched and secured. Valid credential for ingress, free egress at all times. Co-ordinate with security and electrical.

Set: 3.0

Doors: 300.1, 300.2, 400.1

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1 Surface Closer	TB 281 CPS	EN	SA	087100
3 Silencer	608-RKW		RO	087100

Set: 4.0

Doors: 211.3

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Rim Exit Device, Storeroom	8804 ETL	US32D	SA	087100
1 Surface Closer	TB 281 CPS	EN	SA	087100
1 Kick Plate	K1050 10" CSK BEV	US32D	RO	087100
1 Gasketing	303AV		PE	087100
1 Rain Guard	346C		PE	087100
1 Sweep	315CN		PE	087100
1 Threshold	170A		PE	087100

Set: 5.0

Doors: 202.1, 211.1

3 Hinge, Full Mortise	TA2314 NRP 4-1/2" x 4-1/2"	US32D	MK	087100
1 Rim Exit Device, Storeroom	8804 ETL	US32D	SA	087100
1 Electric Strike	9600-LBSM	630	HS	087100
1 Surface Closer	TB 281 CPS	EN	SA	087100
1 Kick Plate	K1050 10" CSK BEV	US32D	RO	087100
1 Gasketing	303AV		PE	087100
1 Rain Guard	346C		PE	087100
1 Sweep	315CN		PE	087100
1 Threshold	170A		PE	087100
1 Power Supply	AQL As Req'd		SU	087100

Notes: Electric strike for access control. Credential reader, door position switch, request to exit by security contractor. Door is normally closed, latched and secured. Valid credential for ingress, free egress at all times. Co-ordinate with security and electrical.

Set: 6.0

Doors: 107.1

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 7.0

Doors: 105.1

3 Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK	087100
1 Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 8.0

Doors: 104.1

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 9.0

Doors: 101.2, 106.1, 201.2

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Entry/Office Lock	10XG05 LL	US26D	SA	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 10.0

Doors: 201.3, 212.1

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Storeroom/Closet Lock	10XG04 LL	US26D	SA	087100
1 Electric Strike	8000C-LBM	630	HS	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100
1 Power Supply	AQL As Req'd		SU	087100

Notes: Electric strike for access control. Credential reader, door position switch, request to exit by security contractor. Door is normally closed, latched and secured. Valid credential for ingress, free egress at all times. Co-ordinate with security and electrical.

Set: 11.0

Doors: 203.1, 204.1, 205.1, 206.1, 207.1, 210.1

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Entry/Office Lock	10XG05 LL	US26D	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 12.0

Doors: 211.2

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Rim Exit Device, Classroom	8813 ETL	US32D	SA	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 13.0

Doors: 102.1, 103.1

3 Hinge, Full Mortise	TA2714 4-1/2" x 4-1/2"	US26D	MK	087100
1 Privacy Lock	10XU65 LL	US26D	SA	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 14.0

Doors: 208.1, 209.1

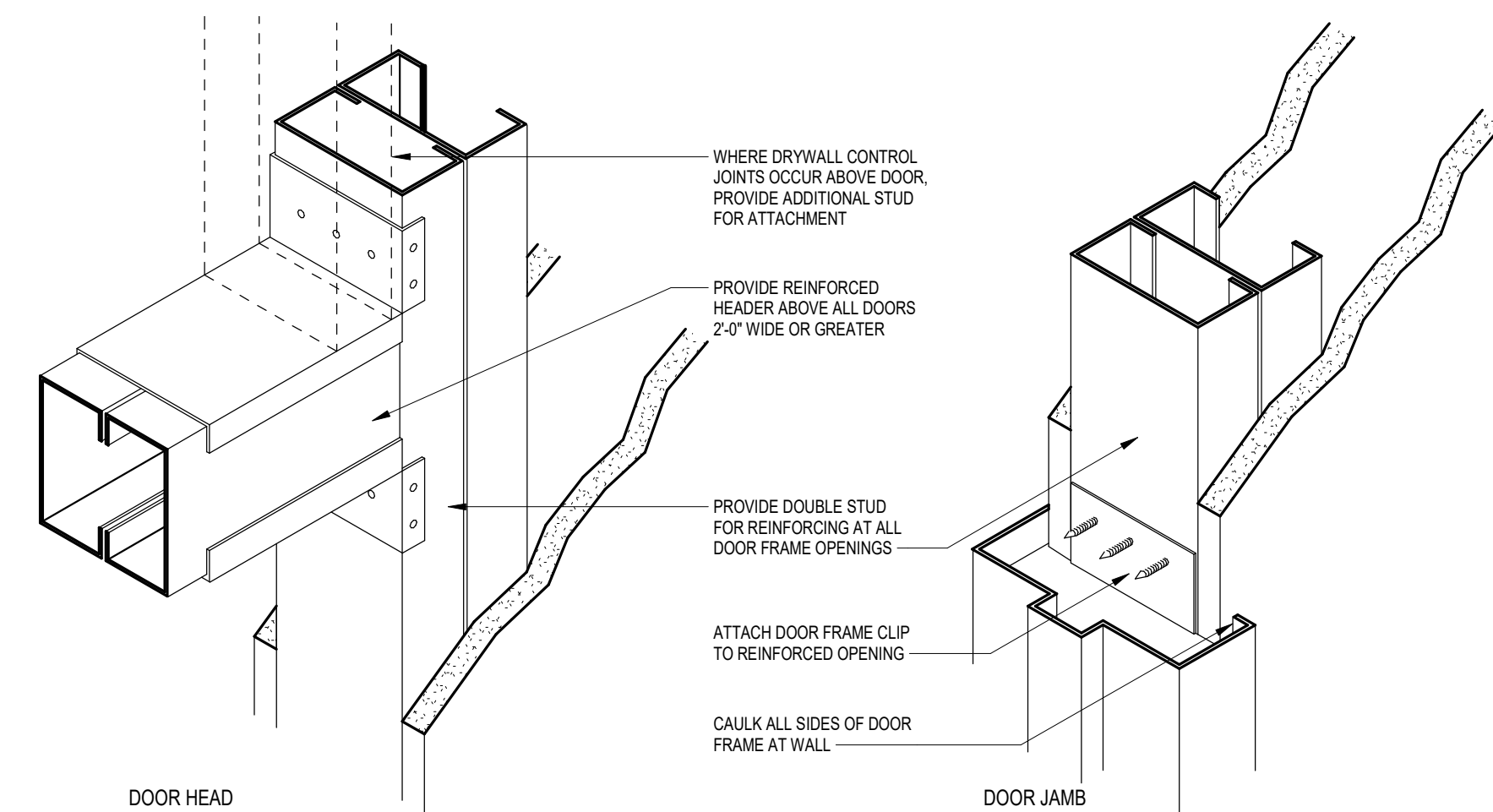
3 Hinge, Full Mortise, Hvy Wt	T4A3786 4-1/2" x 4-1/2"	US26D	MK	087100
1 Deadbolt (Classroom Function)	487	US26D	SA	087100
1 Pull	RM301 Mtg-Type 1XHD	US32D	RO	087100
1 Push Plate	70E	US32D-316	RO	087100
1 Surface Closer	TB 1431 UO	EN	SA	087100
1 Kick Plate	K1050 10" CSK BEV	US32D	RO	087100
1 Wall Stop	409	US32D	RO	087100
3 Silencer	608-RKW		RO	087100

Set: 15.0

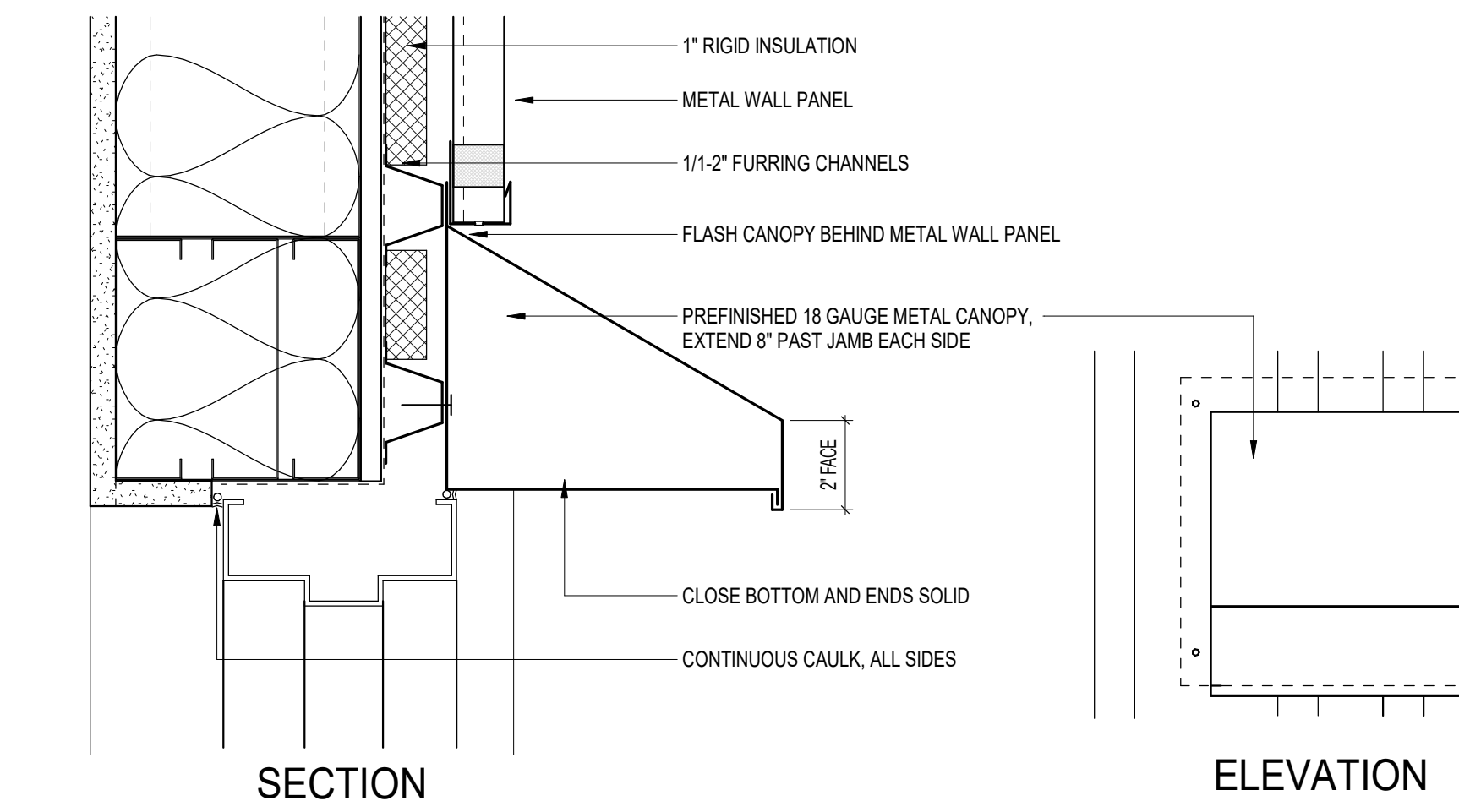
Doors: OS101, OS102, OS103, OS104, OS301, OS302, OS303, OS304, OS401, OS402, OS403, OS404

1 All hardware by the	Overhead Door Supplier	OT
-----------------------	------------------------	----

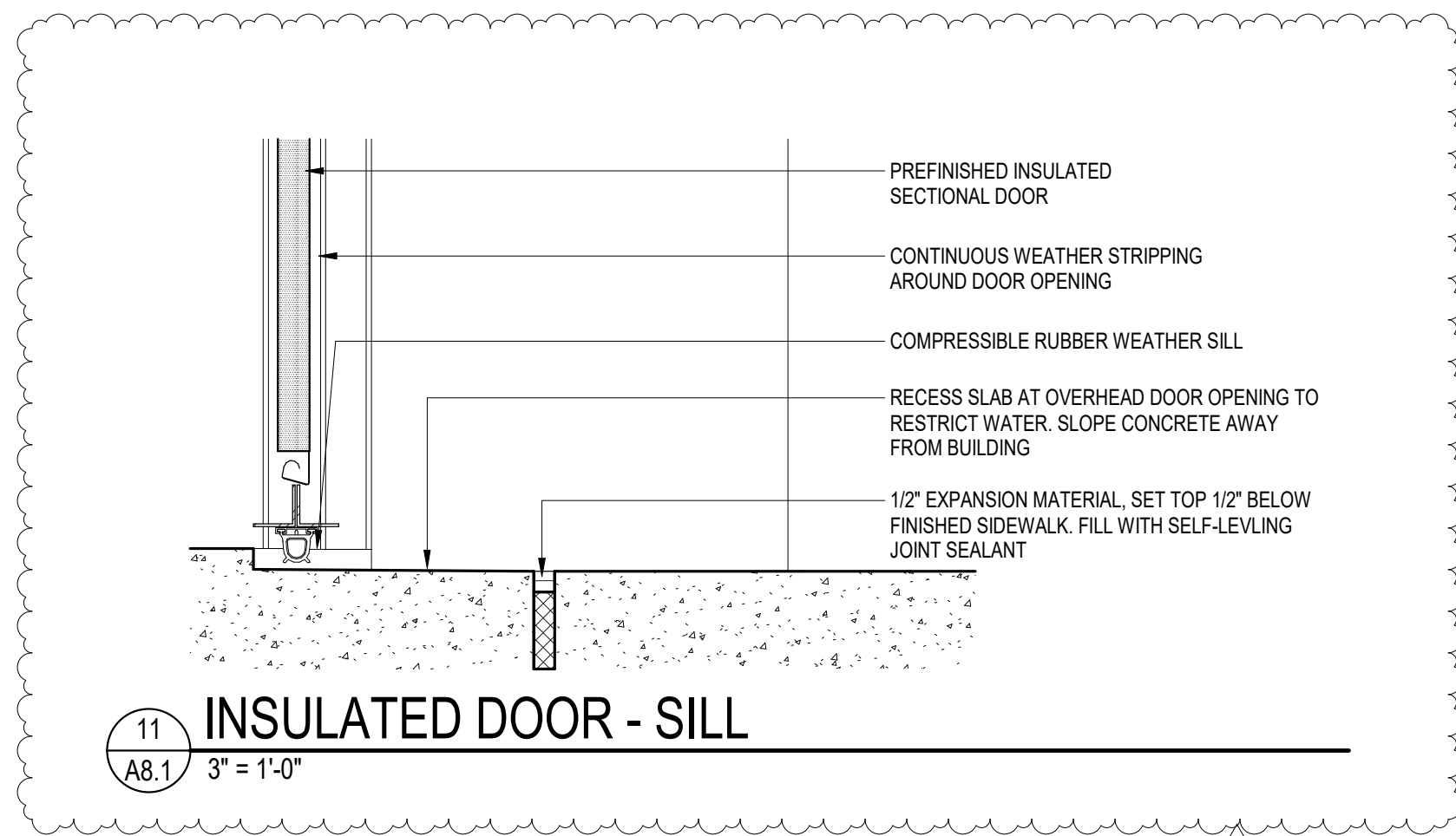
END OF SECTION 087100



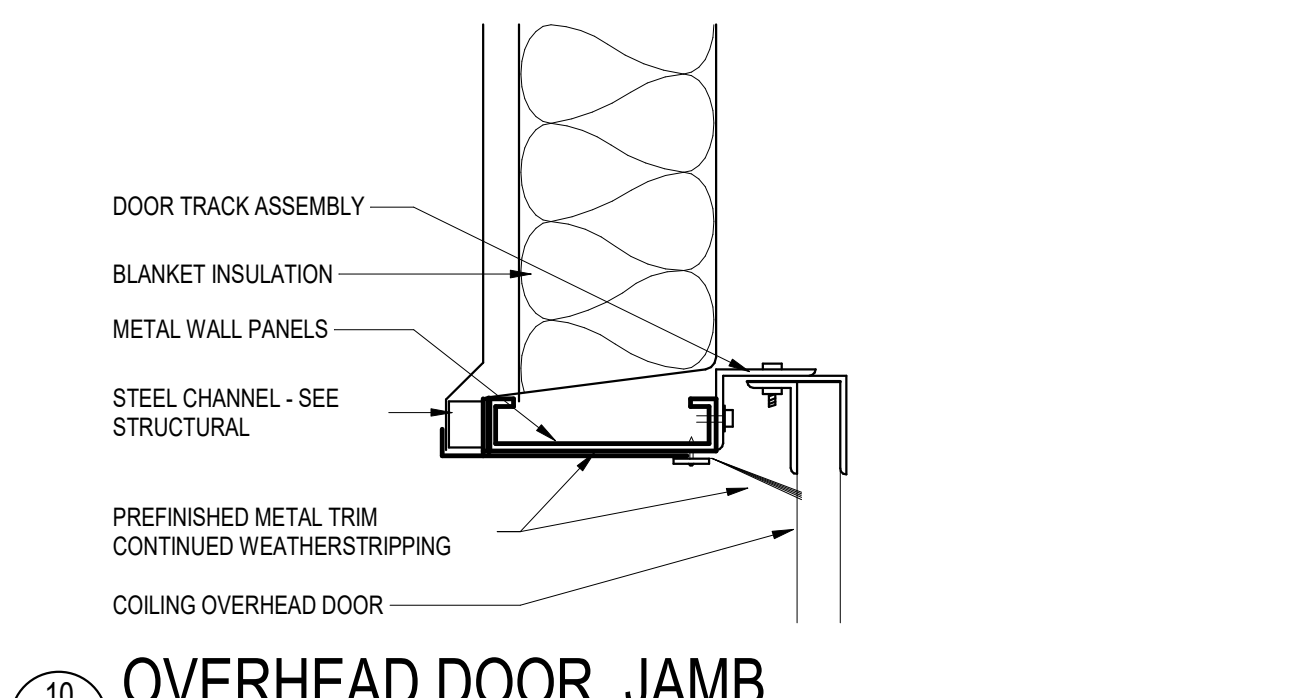
12 INTERIOR HOLLOW METAL FRAME HEAD & JAMB
3" = 1'-0"



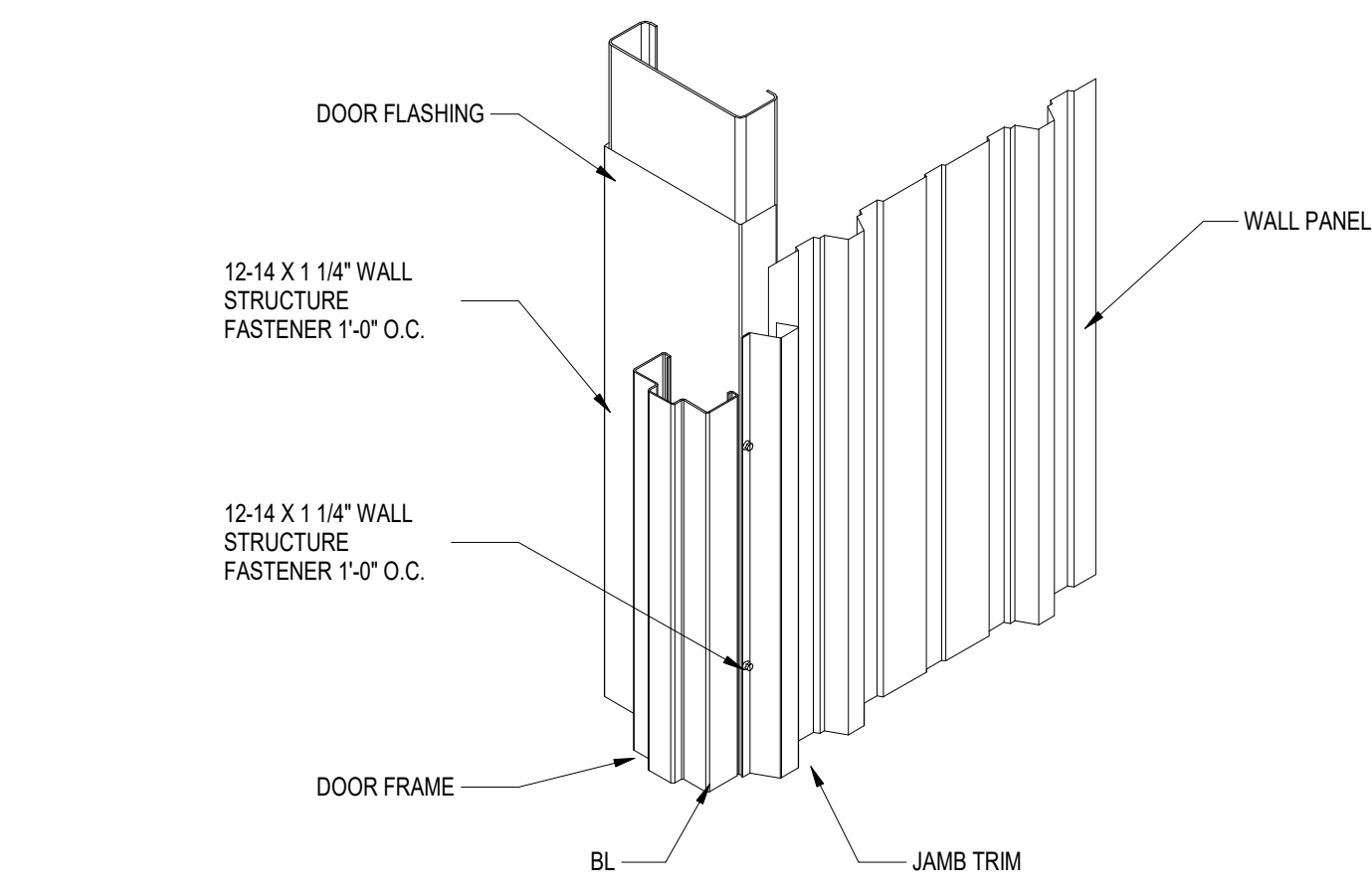
6 HOLLOW METAL FRAME
3" = 1'-0"



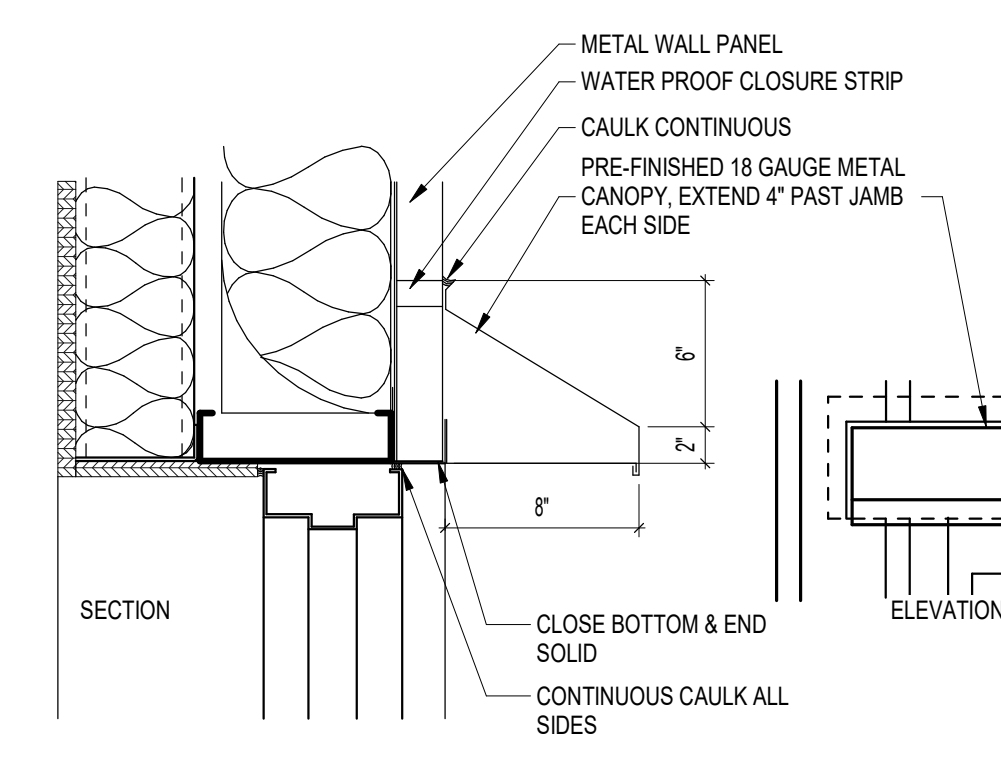
11 INSULATED DOOR - SILL
3" = 1'-0"



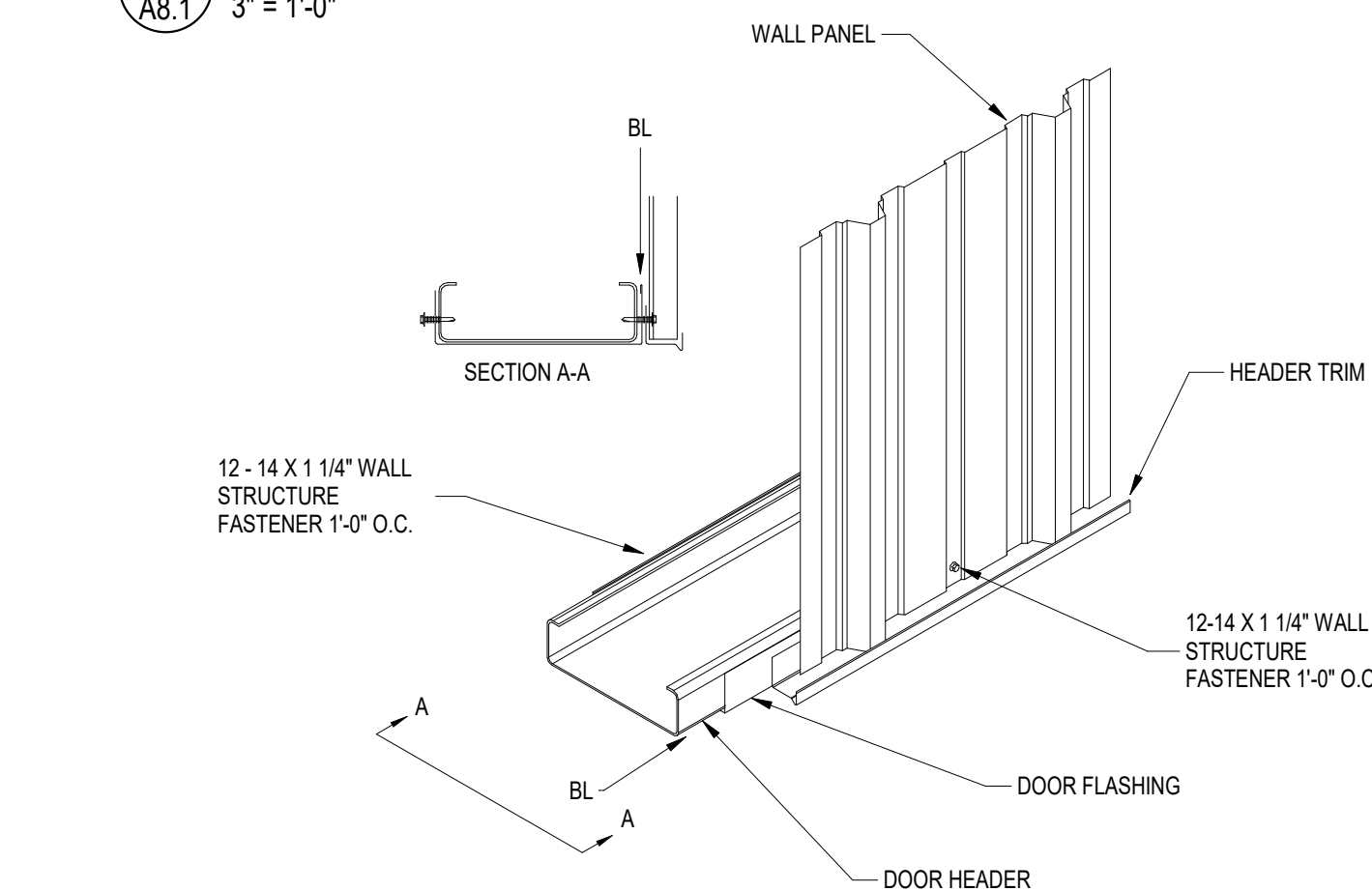
10 OVERHEAD DOOR JAMB
3" = 1'-0"



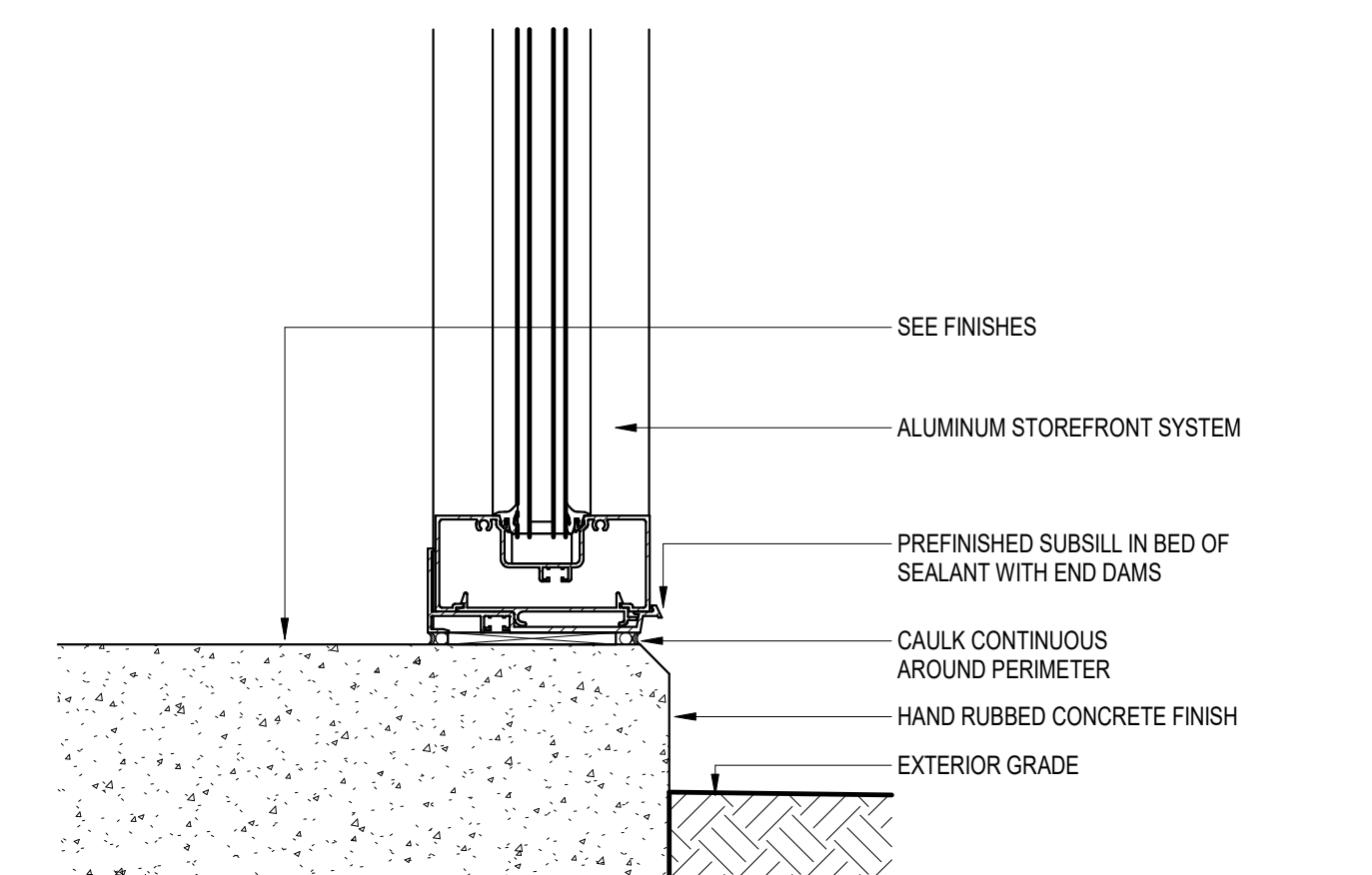
9 SERVICE DOOR TRIM
3" = 1'-0"



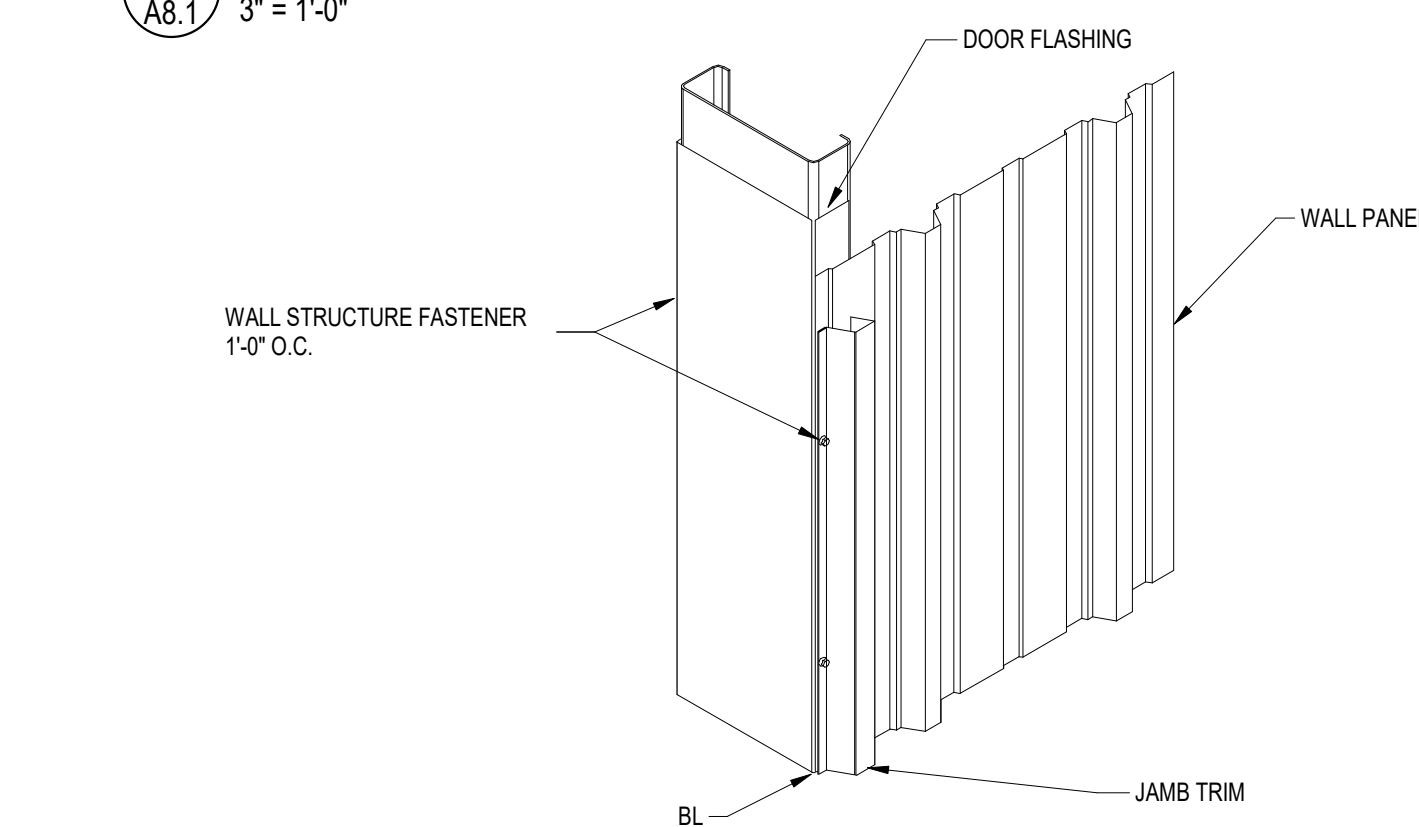
5 PREFINISHED METAL HOOD
1 1/2" = 1'-0"



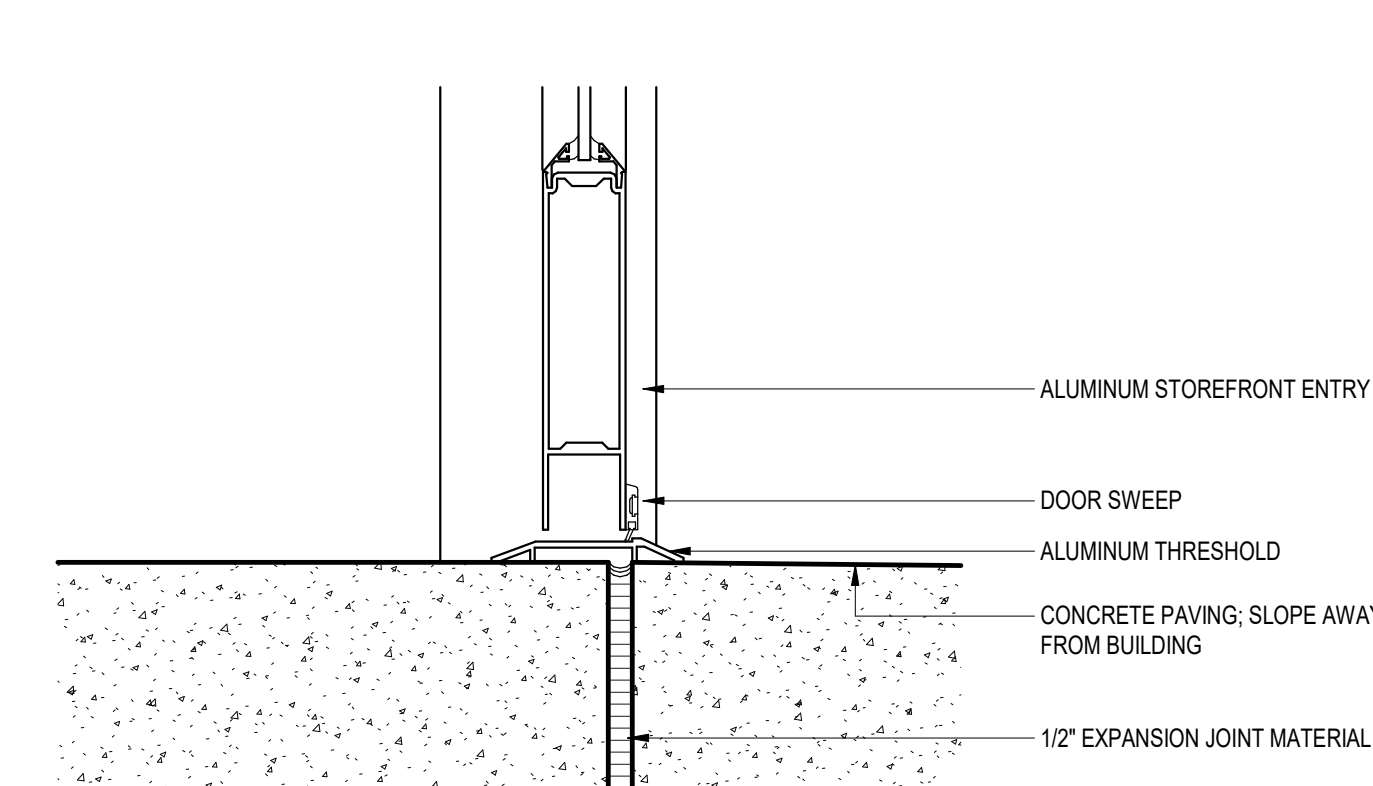
8 DOOR/WINDOW HEAD TRIM
3" = 1'-0"



4 EXTERIOR ALUMINUM STOREFRONT SILL
3" = 1'-0"



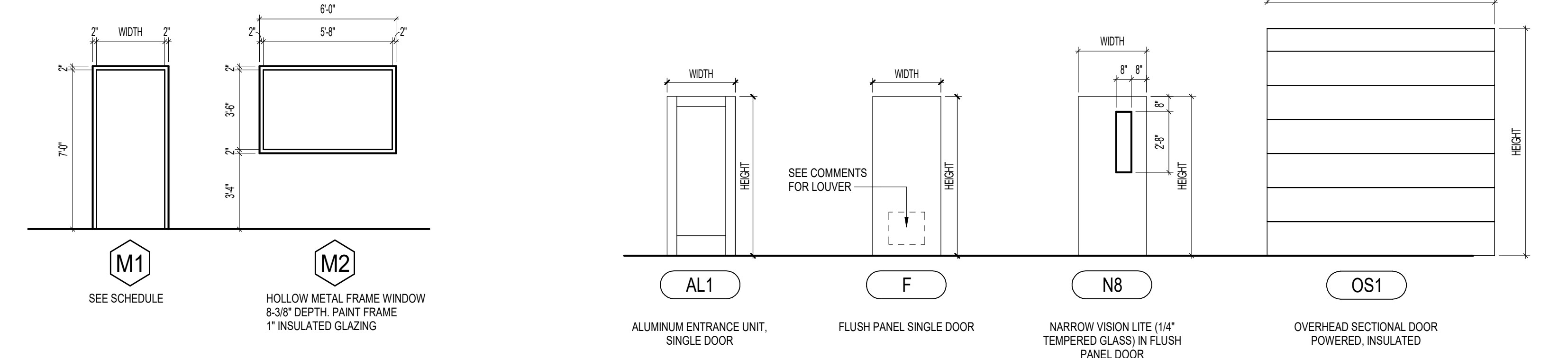
7 OVERHEAD DOOR JAMB TRIM
3" = 1'-0"



3 EXTERIOR ALUMINUM THRESHOLD
3" = 1'-0"

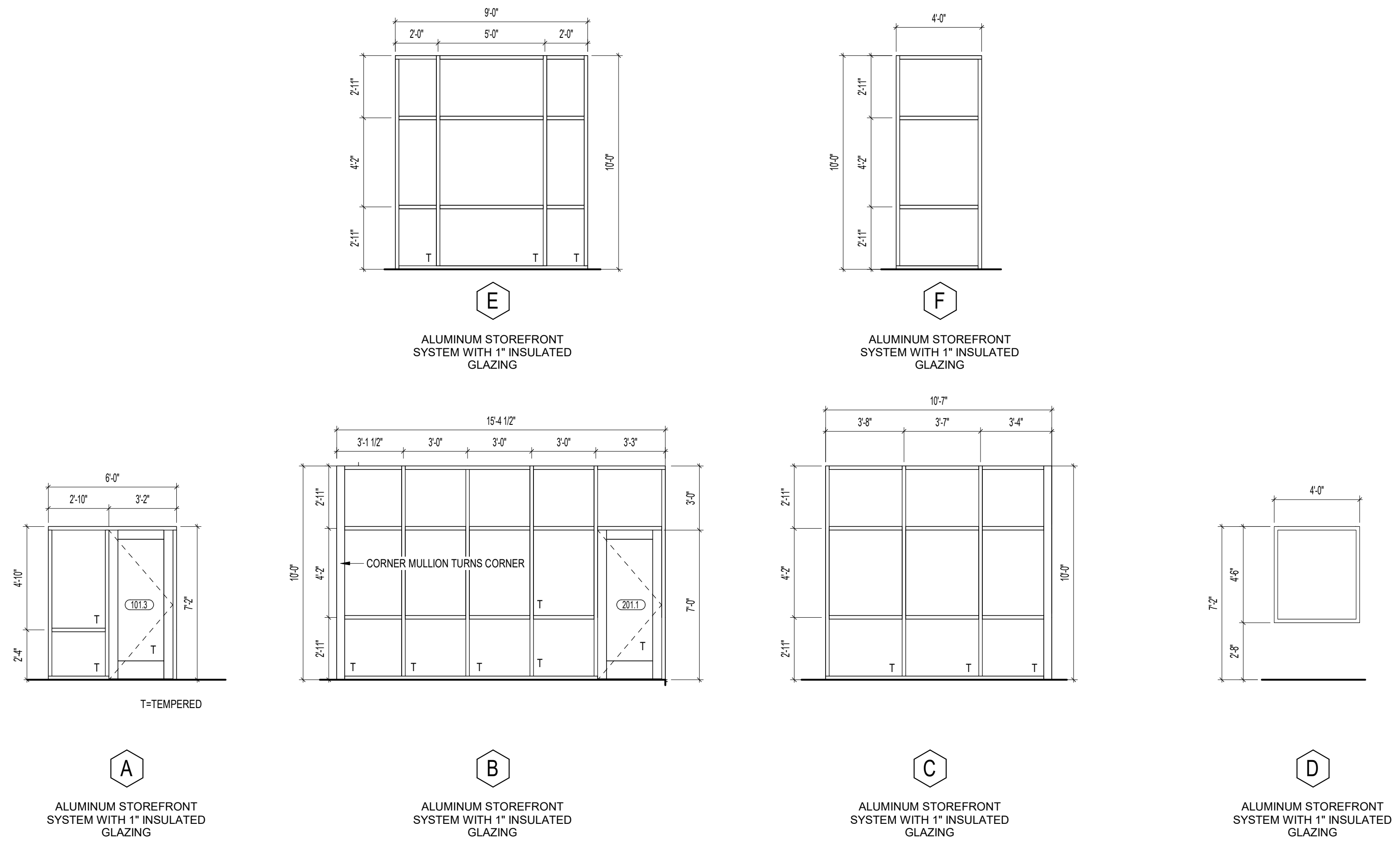
2024 09-09
AD2

MARK	HW SET	TYPE	PANEL				FRAME					COMMENTS	
			WIDTH	HEIGHT	THICK.	MATERIAL	FINISH	ELEV.	MATERIAL	FINISH	DEPTH		HEAD
101.2	9.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	8 3/8"	2"	
101.3	1.0	AL1	3'-0"	7'-0"	1 3/4"	ALUM.	SEE SPEC.	A	ALUM.	SEE SPEC.	4 1/2"	2"	ACCESS CONTROL
102.1	13.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	
103.1	13.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	
104.1	8.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	
105.1	7.0	F	4'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	8 3/8"	2"	WITH LOUVER (SEE MECH)
106.1	9.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	5 3/4"	2"	
107.1	6.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	10 1/2"	2"	
201.1	1.0	AL1	3'-0"	7'-0"	1 3/4"	ALUM.	SEE SPEC.	B	ALUM.	SEE SPEC.	4 1/2"	2"	ACCESS CONTROL
201.2	9.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	
201.3	10.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	ACCESS CONTROL
202.1	5.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	9 1/4"	2"	ACCESS CONTROL, EXIT DEVICE
203.1	11.0	N8	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	
203.2	2.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	8 1/4"	2"	ACCESS CONTROL
204.1	11.0	N8	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	
205.1	11.0	N8	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	
206.1	11.0	N8	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	5 3/4"	2"	
207.1	11.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	WITH LOUVER (SEE MECH)
208.1	14.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	WITH LOUVER (SEE MECH)
209.1	14.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	WITH LOUVER (SEE MECH)
210.1	11.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	
211.1	5.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	5 3/4"	2"	ACCESS CONTROL, EXIT DEVICE
211.2	12.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	EXIT DEVICE
211.3	4.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	5 3/4"	2"	EXIT DEVICE
212.1	10.0	F	3'-0"	7'-0"	1 3/4"	WOOD	PRE-FINISH	M1	HMF	PAINT	8 1/4"	2"	ACCESS CONTROL
300.1	3.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	5 3/4"	2"	
300.2	3.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	5 3/4"	2"	
400.1	3.0	F	3'-0"	7'-0"	1 3/4"	INSUL. METAL	PAINT	M1	HMF	PAINT	5 3/4"	2"	
OS101	15.0	OS1	14'-0"	14'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS102	15.0	OS1	14'-0"	14'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS103	15.0	OS1	14'-0"	14'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS104	15.0	OS1	14'-0"	14'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS301	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS302	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS303	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS304	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS401	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS402	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS403	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED
OS404	15.0	OS1	16'-0"	16'-0"	2"	INSUL. METAL	PRE-FINISHED	-	-	-	-	-	POWERED



1 HOLLOW METAL FRAME ELEVATIONS
1/4" = 1'-0"

DOOR ELEVATIONS
1/4" = 1'-0"



2 STOREFRONT ELEVATIONS
1/4" = 1'-0"