

Addendum No. 1

DATE: September 5, 2025

PROJECT: Vivie Nelson Care Center Renovation, Alexandria, MN

BID DATE: Thursday, September 25, 2025 @ 2:00pm (No Change)

The following items modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections. Where portions of the Bidding Documents are modified by this Addendum, the unaltered portions of the Bidding Documents shall remain in effect.

CLARIFICATIONS:

- Included is the remainder of addendum #1 from Wold with missing specification sections 051200 and 087100.

Innovative's web site plan download instructions:

Go to www.innovativecompaniesinc.com. Click on the words "plan room" in the upper right hand portion of the page. Enter "vivie@innovative.com" as the user name and "[In2plans](#)" as the password, and then click on login. Next, the window will update showing the file directory, just click on the file to enter the directory. Once in the directory, click in the box to the left of the files you wish to download, and then click on the Red download button on the right hand side. After a brief period (depending on your internet speed), another window will open asking if you want to open, save or save as (this may vary depending on your web browser type and version). Please save or save as to your local computer. The website will be updated as addendums become available.

END OF ADDENDUM NO.1



To: Prospective Bidders
From: Wold Architects and Engineers
Date: September 5, 2025
Comm. No: 246040

Subject: Addendum No. 1 for Bidding Documents for the
Nelson Care Center Renovation
Alexandria, Minnesota

BIDS DUE SEPTEMBER 25, 2025 AT 2:00 P.M.

This addendum forms a part of the Contract Documents dated August 29, 2025. Acknowledge receipt of this Addendum on the space provided on the Bid Form. Failure to do so may result in disqualification of Bid.

This Addendum consists of one (1) typed sheet and attachments:
Specifications: 08 71 00, 05 12 00

PROJECT MANUAL

- 1. SPECIFICATION SECTION 08 71 00 FINISH HARDWARE**
 - A. Issued this addendum.
- 2. SPECIFICATION SECTION 05 12 00 STRUCTURAL STEEL FRAMING**
 - A. Issued this addendum.

END OF ADDENDUM #1

SECTION 05 12 00
STRUCTURAL STEEL FRAMING

PART 1 GENERAL

1.01 RELATED DOCUMENTS

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

1.02 SECTION INCLUDES

- A. Structural steel framing members.
 - 1. Steel will not be fireproofed.
- B. Architecturally Exposed Structural Steel (AESS).
- C. Base plates.

1.03 RELATED REQUIREMENTS

- A. Section 01 45 33 - Structural Testing and Special Inspection.
- B. Section 03 15 10 - Post-Installed Anchors.
- C. Section 03 10 00 - Concrete Forming and Accessories: Anchor rods and structural steel to be embedded in concrete affecting structural steel work.
- D. Section 05 31 00 - Steel Decking.
- E. Section 05 50 00 - Metal Fabrications: Steel fabrications affecting structural steel work.

1.04 REFERENCE STANDARDS

- A. AISC MANUAL - Steel Construction Manual; 2017, 15th Edition.
 - 1. AISC 360 - Specification for Structural Steel Buildings; 2016.
 - 2. RCSC - Specification for Structural Joints Using High-Strength Bolts; 2014.
 - 3. AISC 303 - Code of Standard Practice for Steel Buildings and Bridges; 2016.
- B. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2019.
- C. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products; 2024.
- D. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2021.
- E. ASTM A500/A500M - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes; 2023.
- F. ASTM A563/A563M - Standard Specification for Carbon and Alloy Steel Nuts (Inch and Metric); 2021a.
- G. ASTM A780/A780M - Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings; 2020.
- H. ASTM A992/A992M - Standard Specification for Structural Steel Shapes; 2022.
- I. ASTM F959/F959M - Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series; 2017a.
- J. ASTM F436 - Standard Specification for Hardened Steel Washers; 2011.
- K. ASTM F959 - Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners; 2013.
- L. ASTM F1852 - Twist Off Type Tension Control Structural Bolt/Nut/Washer Assemblies, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2008.
- M. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination; 2020.
- N. AWS B2.1/B2.1M - Specification for Welding Procedure and Performance Qualification; 2021.
- O. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2020, with Errata (2023).
- P. SSPC-Paint 20 - Zinc-Rich Coating (Type I - Inorganic, and Type II - Organic); 2019.
- Q. SSPC-SP 3 - Power Tool Cleaning; 2024.

1.05 SUBMITTALS

- A. See Division 1 for submittal procedures.
- B. Shop Drawings:

1. Review the Contract Documents prior to preparing shop drawings to determine if the structure is in conflict with OSHA requirements or any other safety regulation. Notify the Architect if any conflicts are noted. Do not prepare shop drawings affected by the conflict until the conflict is resolved.
 2. Prepare complete shop and setting drawings based on referenced AISC Specifications.
 3. Indicate profiles, sizes, spacing, locations of structural members, openings, attachments, and fasteners.
 4. Indicate type and location of shop and field connections. Detail all required field welds.
 5. Indicate welded connections with AWS A2.4 welding symbols. Indicate net weld lengths.
 6. Clearly indicate members considered to be Architecturally Exposed Structural Steel (AESS) and detail members and connections consistent with AESS criteria included in this specification section.
 7. If shop drawings are resubmitted after the original review, identify all changes made to the shop drawings after the original submittal with clouds or similar markings.
- C. Submit AISC Quality Certification Program certificates (for reduction in shop special inspections only if the fabricator is so certified) and welder qualifications to the Special Inspector-Technical.
- D. Welders' Qualification Statement: Submit to Special Inspector welders' qualifications in accordance with AWS B2.1/B2.1M.

1.06 QUALITY ASSURANCE

- A. Fabricate structural steel members in accordance with AISC "Manual of Steel Construction".
- B. Implement the quality control and quality assurance provisions of Chapter N of AISC 360. Document is available at www.aisc.org/publications/steel-standards/.
- C. Fabrication plant shall be certified in Buildings according to the requirements of the AISC Quality Certification Program and shall be acceptable to the structural engineer, Architect, and building official.
1. A fabricator without AISC certification may be acceptable subject to the following.
 - a. The fabrication plant shall be acceptable to the Structural Engineer, Architect, and Building Official.
 - b. The fabrication plant shall maintain written, detailed fabrication and quality control procedures per AISC 360 Chapter N that provide a basis for inspection control of the workmanship and for the fabricator's ability to conform to the construction documents. The Special Inspector shall perform an audit of these documents and procedures.
 - c. The Special Inspector shall perform inspections as outlined in AISC 360 Chapter N during steel fabrication. The Contractor shall reimburse Owner for required quality assurance inspections during steel fabrication. This inspection shall be conducted by the Owner's inspection company at the fabrication plant.
- D. Comply with Section 10 of AISC "Code of Standard Practice for Steel Buildings and Bridges", as amended herein, for AESS.
- E. Design connections not detailed on drawings under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State in which the Project is located.
- F. Codes and Standards:
1. AISC MANUAL - Manual of Steel Construction.
 2. AISC 360 - Specification for Structural Steel Buildings
 3. AISC 303 - Code of Standard Practice for Steel Buildings and Bridges
 4. AWS D1.1/D1.1M.
 5. RCSC - Specification for Structural Joints Using High-Strength Bolts
 6. SSPC - SSPC Painting Manual - Volume 2
- G. Provide personnel qualified according to AWS D1.1/D1.1M for all shop and field welding.

1.07 PROJECT/SITE CONDITIONS

- A. Verify all dimensions given on the Drawings and make such field measurements as are necessary to lay out the work properly and assure proper elevations. Be fully responsible for accuracy of all measurements and laying out of the work.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Steel Angles, Plates, Channels, and Threaded Rods: ASTM A36/A36M.
- B. Steel W Shapes and Tees: ASTM A992/A992M.
- C. Cold-Formed Structural Tubing: ASTM A500/A500M, Grade C.
 - 1. The longitudinal butt joint of welded tubing shall be welded across its full thickness.
- D. Structural Bolts and Nuts: Carbon steel, ASTM A307, Grade A.
- E. High-Strength Bolts, Nuts, and Washers: ASTM F3125/F3125M, Type 1, medium carbon, plain. Hot dip galvanize where noted.
 - 1. Tension control bolts meeting ASTM F1852 are also acceptable.
- F. Unheaded Anchor Rods: ASTM F1554, Grade 55, with Supplement S1, plain, with matching ASTM A563/A563M nuts and ASTM F436/F436M Type 1 washers. Hot dip galvanize where noted.
- G. Load Indicator Washers: Provide washers complying with ASTM F959/F959M at all connections requiring high-strength bolts. Not required if tension control bolts are used.
- H. Welding Materials: AISC Specification A35 and referenced AWS specifications, type required for materials being welded, E70 electrodes.
- I. Shop and Touch-Up Primer: Fabricator's standard, compatible with finish coatings, complying with VOC limitations of authorities having jurisdiction.
- J. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20 Type I - Inorganic, complying with VOC limitations of authorities having jurisdiction.
- K. Post-installed anchors: See Section 03 15 10 - Post-Installed Anchors.

2.02 FABRICATION

- A. Fabricate according to referenced AISC publications.
- B. Shop fabricate to greatest extent possible.
 - 1. For AESS members, locate field joints in AESS assemblies at concealed locations or as approved by the Architect. Detail AESS assemblies to minimize field handling and expedite erection.
- C. Do not substitute sections or modify details without written approval of the Structural Engineer. Provide full-length pieces between connections or splices indicated on the drawings. Do not permit built-up lengths. Do not use warped or damaged sections.
- D. Design shop and field connections unless detailed on the Drawings. Use standard connections as shown in Part 9 of the AISC Manual where possible. Bolt field connections, unless otherwise indicated on the Drawings.
- E. Perform bracing, blocking, cutting, fitting, drilling, tapping, welding, punching, etc., as required to complete work and to join work of others. Weld clip angles and plates to beams and punch holes for fastening work of other trades as shown on the Drawings.
- F. Furnish anchor bolts of size and type shown on the drawings for all field connections to be permanently bolted to concrete or masonry.
- G. Fabricate AESS with exposed surfaces smooth and square. Use special care in handling and shipping of AESS both before and after shop painting.
- H. In addition to special care used to handle and fabricate AESS, employ the fabrication techniques noted on the Drawings.

2.03 FINISH

- A. Prepare structural component surfaces in accordance with SSPC-SP 3 unless otherwise indicated.
- B. Shop prime structural steel members to a DFT of 2.0 - 3.5 mils. Do not prime surfaces that will be field welded.

- C. Galvanize structural steel lintels in exterior masonry walls to comply with ASTM A123/A123M except where noted.
 - 1. Prepare items to be galvanized in accordance with ASTM A385.
 - 2. Close and seal weld vent holes in pipes, tubes, and other closed members. Touch up damaged areas using procedures and products from ASTM A780/A780M .

2.04 SOURCE QUALITY CONTROL

- A. Perform quality control procedures and inspections as outlined in Chapter N of AISC 360.
- B. Implement quality assurance provisions as outlined in Chapter N of AISC 360.
 - 1. If Fabricator holds an AISC Building certification, quality assurance procedures and inspections may be performed by the Fabricator. If Fabricator does not hold an AISC Building certification, Owner will provide quality assurance procedures and inspections as outlined in Part 1.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that conditions are appropriate for erection of structural steel and that the work may properly proceed.
- B. Check all AESS members upon delivery for twist, kinks, gouges, or other imperfections which might result in rejection of the appearance of the member. Coordinate remedial action with fabricator prior to erecting steel.

3.02 ERECTION

- A. Erect structural steel in compliance with AISC 303.
 - 1. At AESS members, provide connections for temporary shoring, bracing, and supports only where noted on the approved shop drawings. Temporary connections not shown shall be made at locations not exposed to view of the final structure or as approved by the Architect. Handle, lift, and align pieces using padding slings and/or other protection required to maintain the appearance of the AESS through the process of erection.
- B. Allow for erection loads and provide sufficient temporary bracing to maintain structure in safe condition, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- C. Exercise care in handling structural steel during unloading, storage, and erection to prevent bends, twists, or other damage.
- D. Place structural steel stored at the site on substantial shores or blocking. Provide shores or blocking of sufficient size and strength to prevent any part of the steel from touching the ground.
- E. Remove dirt, oil, loose scale, burrs, pits, paint and other defects that would prevent solid seating of parts.
- F. Field weld components indicated on shop drawings.
- G. Where A307 bolts are used, tighten to a snug tight fit as obtained with the full effort of a man using an ordinary spud wrench. Verify that all parts are in contact. Use self-locking nuts or upset bolt threads to prevent nuts from bracing off.
- H. Where A325 bolts are used, tighten bolts and provide washers in accordance with "Specification for Structural Joints Using High Strength Bolts". Use tension control bolts or direct tension indicators for slip-critical (SC) and fully tensioned bolts (FT).
- I. Pre-heat material to be welded and maintain interpass temperatures as required. Do not weld below 0 degrees F.
- J. Do not cut steel or enlarge holes without written approval of the Structural Engineer.
- K. Do not field cut or alter structural members without approval of Architect and Structural Engineer.
- L. After erection, prime welds, abrasions, and surfaces not shop primed, except surfaces to be in contact with concrete or specified to be unprimed.
- M. Repair or replace structural steel damaged during shipment, unloading, or erection at no cost to the Owner.
- N. Install mechanical and adhesive anchors in strict accordance with manufacturer's recommendations.

- O. In addition to the special care used to handle and erect AESS, employ the erection techniques noted on the Drawings.

3.03 CLEANING AND REPAIR

- A. After erection and welding of steel, remove clay, mud or other foreign materials from all members.
- B. Apply a field touch-up coat of paint on all welded connections and damaged areas using the same color and type of paint used on the shop coat.
- C. Repair damaged galvanized members with procedures and products from ASTM A780/A780M .

3.04 FIELD QUALITY CONTROL

- A. Perform erection quality control procedures and inspections as outlined in AISC 360 Chapter N.
- B. Owner will provide erection quality assurance provisions as outlined in AISC 360 Chapter N.
- C. AESS acceptance: The Architect will observe the AESS in place and determine acceptability.

END OF SECTION 05 12 00

**SECTION 08 71 00
FINISH HARDWARE**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A Hardware for the following doors:
 - 1. Aluminum (except weatherstripping).
 - 2. HM.
 - 3. Wood.
 - 4. FRP.
- B Hardware for fire-rated doors as noted on the hardware schedule, opening schedule or Code Plan.
- C Electrically operated and controlled hardware.
- D Lock cylinders for doors that hardware is specified in other sections including:
 - 1. Access panel doors in Division 8.
 - 2. Coiling shutters in Division 8.
 - 3. Operable Partitions in Div 10.
 - 4. Gymnasium Equipment in Division 11.
- E Thresholds.
- F Weatherstripping and gasketing.
- G Provide two separate submittal packages and shipments of hardware as follows:
 - 1. Aluminum door hardware.
 - 2. All other door hardware.

1.02 ADMINISTRATIVE REQUIREMENTS

- A Coordinate the manufacture, fabrication, and installation of products that door hardware is installed on.
- B Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.
- C Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
- D Preinstallation Meeting: Convene a preinstallation meeting one week prior to commencing work of this section; attendance is required by affected installers and the following:
 - 1. Agenda:
 - a. Rough-in of electrical box locations.
 - b. Review power requirements of all hardware and coordinated with the site electrician.
 - c. Review installation manuals, hardware schedule, installation templates and physical product samples for:
 - 1) Locksets.
 - 2) Closers, including accessibility closers/button locations.
 - 3) Exit Devices.
 - 4) Miscellaneous hardware.
 - 5) Hardware mountable weatherstrip for exterior doors.
 - 6) Overhead stops.
 - 7) All low voltage hardware.
 - 2. Attendance is required by affected installers and the following:
 - a. Hardware manufacturer(s) representative.
 - b. Hardware Installer.
 - c. Owner's Representative and Security Consultant if applicable.
 - d. General Contractor or Construction Manager.
 - e. Electrician.
 - 3. Contractor is to take meeting minutes and distribute to attendees and Architect.

- E Keying Requirements Meeting:
 1. Schedule meeting at project site prior to Contractor occupancy.
 2. Attendance Required:
 - a. General Contractor or Construction Manager.
 - b. Owner's Representative and Security Consultant if applicable.
 - c. Architect.
 - d. Hardware supplier.
 3. Agenda:
 - a. Establish keying requirements.
 - b. Verify locksets and locking hardware are functionally correct for project requirements.
 - c. Verify that keying and programming complies with project requirements.
 - d. Establish keying submittal schedule and update requirements.
 4. Incorporate "Keying Requirements Meeting" decisions into keying submittal upon review of door hardware keying system including, but not limited to, the following:
 - a. Access control requirements.
 - b. Key control system requirements.
 - c. Schematic diagram of preliminary key system.
 - d. Flow of traffic and extent of security required.
 5. Contractor to record minutes and distribute copies within seven days after meeting to participants, with copies to Architect, Owner, participants, and those affected by decisions made.
 6. Deliver established keying requirements to manufacturers.

1.03 SUBMITTALS

- A See Section 01 30 00 - Administrative Requirements for submittal procedures.
- B Submittals are to be broken into two separate submittals as follows:
 1. Immediately after award of the hardware contract, submit the hardware schedule for aluminum door hardware.
 2. After architect's reviewed aluminum submittal is returned, submit the hardware schedule for the remaining door hardware.
- C Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project, and includes construction details, material descriptions, finishes, and dimensions and profiles of individual components.
- D Shop Drawings - Door Hardware Schedule: Submit detailed listing that includes each item of hardware to be installed on each door. Use door numbering scheme as included in Contract Documents.
 1. List groups and suffixes in proper sequence.
 2. Provide complete description for each door listed.
 3. Provide manufacturers and product names, and catalog numbers; include functions, types, styles, sizes and finishes of each item.
- E Shop Drawings - Electrified Door Hardware: Submit diagrams for power, signal, and control wiring for electrified door hardware that include details of interface with building safety and security systems. Provide elevations and diagrams for each electrified door opening as follows:
 1. Elevations: Submit front and back elevations of each door opening showing electrified devices with connections installed and an operations narrative describing how opening operates from either side at any given time.
 2. Diagrams: Submit point-to-point wiring diagram that shows each device in door opening system with related colored wire connections to each device.
- F For existing buildings, field verify existing swings and functions prior to submitting schedule.
- G Itemize hardware in the sequence and format established by this specification.
 1. List and describe each opening separately; include door number, room designations, degree of swing, and hand.

2. List related details; include dimensions, door and frame material, and other conditions affecting hardware.
 3. List all hardware items; include manufacturer's name, quantity, product name, catalog number, size, finish, attachments, and related details where applicable.
 4. Submit manufactures cut sheets on each type of hardware proposed.
 5. Resubmit the corrected schedule when required.
 6. Determine keying requirements by meeting with the Owner coordinated through the Architect, and submit a detailed keying schedule for review; resubmit the corrected schedule when required.
- H Samples for Verification:
1. Samples: Identify each sample and indicate the location of subsequent installation in the project.
 - a. Submit the following samples:
 - 1) Typical Rim Exit device.
 - 2) Typical lockset.
- I Keying Schedule:
1. Submit one PDF copy of Keying Schedule in compliance with requirements established during Keying Requirements Meeting unless otherwise indicated.

1.04 QUALITY ASSURANCE/REGULATORY REQUIREMENTS

- A Except where specified in the hardware schedule, furnish products of only one manufacturer for each type of hardware.
- B Supplier: Company specializing in the builders' hardware industry.
- C Provide hardware for fire-rated openings conforming in compliance with IBC and NFPA 80 (Adopted Editions by AHJ).
- D Furnish hardware listed by UL testing agency for all rated openings in conformance with requirements for the class of opening scheduled.
- E Rating requirements have precedence over this specification where conflict exists.
- F Furnish and install hardware that is in compliance with American with Disabilities Act (ADA) technical standards, and Building Code (Adopted Edition by AHJ).
- G Templates: Furnish a copy of the approved hardware schedule and all pertinent templates or template information to each fabricator of material factory-prepared for the installation of hardware.
- H Installer Qualifications: Company specializing in performing work of the type specified for commercial door hardware with at least five years of documented experience and approved by manufacturer.

1.05 DELIVERY, STORAGE, AND HANDLING

- A Package hardware items individually; label and identify each package with door opening code to match door hardware schedule.
- B Deliver hardware in two separate orders in the manufacturer's original containers that have been marked to correspond with the approved hardware schedule for installation location.
 1. One order delivered to the aluminum door contractor.
 2. One order to the jobsite.
- C Store hardware in dry surroundings and protect against loss and damage.

1.06 WARRANTY

- A See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
- B Warranty against defects in material and workmanship for period indicated, from Date of Substantial Completion.
 1. Closers: Five years, minimum.
 2. Exit Devices: Three years, minimum.
 3. Locksets and Cylinders: Three years, minimum.
 4. Other Hardware: Two years, minimum.

PART 2 PRODUCTS

2.01 DESIGN AND PERFORMANCE CRITERIA

- A Provide specified door hardware as required to make doors fully functional, compliant with applicable codes, and secure to extent indicated.
- B Provide individual items of single type, of same model, and by same manufacturer.
- C Provide door hardware products that comply with the following requirements:
 - 1. Applicable provisions of federal, state, and local codes.
 - 2. Accessibility: ADA Standards and ICC A117.1.
 - 3. Fire-Rated Doors: NFPA 80, listed and labeled by qualified testing agency for fire protection ratings indicated, based on testing at positive pressure in accordance with NFPA 252 or UL 10C.
 - 4. Hardware on Fire-Rated Doors: Listed and classified by UL (DIR), ITS (DIR), or testing firm acceptable to authorities having jurisdiction as suitable for application indicated.
 - 5. Hardware for Smoke and Draft Control Doors: Provide door hardware that complies with local codes, and requirements of assemblies tested in accordance with UL 1784.
 - a. Air Leakage Rate: Tested in accordance with UL 1784, with air leakage rate not to exceed 3.0 cfm/sf (0.01524 cu m/sec/sq m) of door opening at 0.10 inch (24.9 Pa) of water for both ambient and elevated temperature tests.
 - 6. Hardware Preparation for Steel Doors and Steel Frames: BHMA A156.115.
 - 7. Hardware Preparation for Wood Doors with Wood or Steel Frames: BHMA A156.115W.
 - 8. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for the purpose specified.
- D Electrically Operated and/or Controlled Hardware: Provide necessary power supplies, power transfer hinges, relays, and interfaces as required for proper operation; provide wiring between hardware and control components and to building power connection in compliance with NFPA 70.
 - 1. See Division 28 for additional access control system requirements.
- E Lock Function: Provide lock and latch function numbers and descriptions of manufacturer's series. See Door Hardware Schedule.
- F Fasteners:
 - 1. Provide fasteners of proper type, size, quantity, and finish that comply with commercially recognized standards for proposed applications.
 - a. Aluminum fasteners are not permitted.
 - b. Provide phillips flat-head screws with heads finished to match door surface hardware unless otherwise indicated.
 - 2. Provide machine screws for attachment to reinforced hollow metal and aluminum frames.
 - a. Self-drilling (Tek) type screws are not permitted.
 - 3. Provide stainless steel machine screws and lead expansion shields for concrete and masonry substrates.
 - 4. Provide wall grip inserts for hollow wall construction.
 - 5. Provide spacers or sex bolts with sleeves for through bolting of hollow metal doors and frames.
 - 6. Provide sex bolts for closers on wood doors.
 - 7. Fire-Rated Applications: Comply with NFPA 80.
 - a. Provide wood or machine screws for hinges mortised to doors or frames, strike plates to frames, and closers to doors and frames.
 - b. Provide steel through bolts for attachment of surface mounted closers, hinges, or exit devices to door panels unless proper door blocking is provided.

2.02 HINGES

- A Manufacturers:
 - 1. McKinney, Markar an Assa Abloy Group company: www.assaabloydss.com.
 - 2. Hager Companies: www.hagerco.com.
 - 3. Ives, an Allegion brand: www.allegion.com.
 - 4. Stanley, dormakaba Group: www.stanleyhardwarefordoors.com.

- B Hinges: Comply with BHMA A156.1, Grade 1.
 - 1. Provide hinges on every swinging door.
- C Butt hinge manufacturers, types and respective catalog numbers:
 - 1. Steel based, standard-weight, plain bearing, full mortise:
 - a. Ives: 5PB1.
 - b. Hager: ****
 - c. Stanley: F179.
 - d. McKinney: T2714.
 - 2. Steel based, Standard-weight, ball bearing, full mortise:
 - a. Ives: 5BB1.
 - b. Hager: BB1279.
 - c. Stanley: FBB179.
 - d. McKinney: TB2714.
 - 3. Non-ferrous based, standard-weight, ball bearing, full mortise:
 - a. Ives: 5BB1 630.
 - b. Hager: BB1191.
 - c. Stanley: FBB191.
 - d. McKinney: TB2314.
 - 4. Steel based, heavy-weight, ball bearing, full mortise:
 - a. Ives: 5BB1HW.
 - b. Hager: BB1168.
 - c. Stanley: FBB168.
 - d. McKinney: T4B3786.
 - 5. Non-ferrous based, heavy-weight, ball bearing, full mortise, non-removable pin:
 - a. Ives: 5BB1HW 630.
 - b. Hager: BB1199 x NRP.
 - c. Stanley: FBB199 x NRP.
 - d. McKinney: T4B3386 x NRP.
- D Continuous hinges manufacturers and respective catalog numbers:
 - 1. Ives: 700 Series.
 - 2. Markar: 300 Series
 - 3. Stanley: 600 Series.
 - a. Continuous hinges shall be full height pin and barrel type hinge providing full height door support up to 600 pounds. Edge mount (unless noted otherwise).
 - b. Hinges shall be constructed of heavy-duty 14-gauge material. The stainless internal pin shall have a diameter of .25 and the exterior barrel diameter of .438.
 - c. Hinge shall be non-handed with symmetrical templated hole pattern and factory drilled. Hinge must accept a minimum of 21 fasteners on the door and 21 fasteners on the frame.
 - d. Each knuckle to be 2", including split nylon bearing at each separation for quiet, smooth, self-lubricating operation.
 - e. Hinge to be able to carry Warnock Hersey Int. or UL for fire rated doors and frames up to three hours. Note: Fire label for doors and frames should be placed on the header and top rail of rated doors and frames.
- E When hinges are specified on the hardware schedule, furnish:
 - 1. Interior openings through 36 inches wide and 60 inches high without a door closer: Two (2) steel based, standard-weight, plain bearing, full mortise hinges per leaf.
 - a. For use at corrosive environments (swimming pools, showers, toilet stall doors) use Two (2) non-ferrous based, standard-weight, plain bearing, full mortise hinges per leaf.

2. Interior openings through 36 inches wide and 90 inches high without a door closer: Three (3) steel based, standard-weight, plain bearing, full mortise hinges per leaf per leaf.
 - a. For use at corrosive environments (swimming pools, showers, toilet stall doors) use Three (3) non-ferrous based, standard-weight, plain bearing, full mortise hinges per leaf.
3. Interior openings through 36 inches wide and 60 inches high with a door closer: Two (2) steel based, standard-weight, ball bearing, full mortise hinges per leaf.
 - a. For use at corrosive environments (swimming pools, showers, toilet stall doors) use Two (2) non-ferrous based, standard-weight, ball bearing, full mortise hinges per leaf.
4. Interior openings through 36 inches wide and 90 inches high with a door closer: Three (3) steel based, standard-weight, ball bearing, full mortise hinges per leaf.
 - a. For use at corrosive environments (swimming pools, showers, toilet stall doors) use Three (3) non-ferrous based, standard-weight, ball bearing, full mortise hinges per leaf.
5. Interior openings over 36 inches in width and/or 90 inches in height: One (1) continuous hinge per leaf.
6. Exterior HM, FRP or stainless steel openings: One (1) continuous hinge per leaf.
7. Exterior aluminum openings: One (1) continuous hinge per leaf.
8. Match existing hinge size and weight at existing doors or frames.

2.03 FLUSH BOLTS AND DUSTPROOF STRIKES

- A Manufacturers:
 1. Rockwood, an Assa Abloy Group company: www.assaabloydss.com.
 2. Hager Companies: www.hagerco.com.
 3. Ives, an Allegion brand: www.allegion.com/us.
- B Non-labeled opening flush bolts for inactive leaf of locked or unlocked doors:
 1. Ives: FB458.
 2. Hager: 282D.
 3. Rockwood: 550.
 - a. Locate centerline of the top bolt not more than 78" from the finished floor.
- C Labeled opening automatic flush bolts for the inactive leaf of doors:
 1. Ives: FB31P or FB41P.
 2. Hager: 292D or 291D.
 3. Rockwood: 1842 or 1942.
- D Dustproof strike for bottom bolts:
 1. Ives: DP2.
 2. Hager: 280X.
 3. Rockwood: 570.

2.04 EXIT DEVICES

- A Manufacturers:
 1. Sargent; an Assa Abloy Group company; 80 Series: www.assaabloydss.com.
 - a. Keyed removable mullions:
 - 1) Sargent: L980 Series.
 - b. Vandal resistant levers:
 - 1) Sargent: Free Wheeling Trim Series.
 - c. Mullion stabilizers/Blade stop strikes:
 - 1) Sargent: 651/657.
 2. Von Duprin, Falcon; an Allegion brand; 99 Series, 25 Series: www.allegion.com/us.
 - a. Keyed removable mullions:
 - 1) Von Duprin: KR4954/KR1654/KR9954.
 - 2) Falcon: KR-4023/KRF-4023.
 - b. Vandal resistant levers:
 - 1) Von Duprin: 996L.
 - 2) Falcon: 511L.

- c. Mullion stabilizers/Blade stop strikes:
 - 1) Von Duprin: 154/1439.
 - 2) Falcon: 525/1439.
- B Exit Devices: Comply with BHMA A156.3, Grade 1.
 - 1. Furnish exit device series and functions specified in the hardware schedule.
 - 2. Furnish sex bolt attachments for devices specified for mineral core door application.
 - 3. Furnish reinforced cross bars for door over 40" wide.
 - 4. Furnish rod and latch guards on all surface mounted vertical rod exit device, on bottom rods.
 - 5. All exit devices shall be provided with optional trim designs to match other lever and pull designs used on the project.
 - 6. For keyed removable mullion: Provide with cylinder to match building system.
 - 7. Provide cylinder (or lever when specified for security) dogging on all non-rated devices. Provide cylinder to match building system. Exit devices with electronic applications are to be supplied without any mechanical dogging unless specified in hardware sets.
 - 8. Provide and install wiring from electric exit device to power supply.
 - 9. Provide all aluminum door leafs with Mullion Stabilizers and Blade Stop Strikes.
 - 10. Provide exit devices properly sized for door width and height.
 - 11. Provide strike as recommended by manufacturer for application indicated.
 - 12. Provide less bottom rod (LBR) at scheduled locations to eliminate use of floor mounted strikes.
 - 13. Provide UL (DIR) listed exit device assemblies for fire-rated doors and panic device assemblies for non-fire-rated doors.

2.05 ELECTRIC STRIKES

- A Manufacturers:
 - 1. Von Duprin, an Allegion brand; 6000 Series: www.allegion.com/us.
 - 2. HES; an Assa Abloy Group company; 4500C Series: www.assaabloydss.com.

2.06 ELECTROMAGNETIC LOCKS

- A Manufacturers:
 - 1. Schlage Electronics, an Allegion brand; M490 Series: www.allegion.com/us.
 - 2. Securitron; an Assa Abloy Group company; 82B: www.assaabloydss.com.
- B Electromagnetic Locks: Comply with BHMA A156.23.
- C Provide electromagnetic locks in compliance with UL 10C.
- D Mounting: fasteners, brackets, and spacer bars as required for application.

2.07 LOCK CYLINDERS

- A Manufacturers:
 - 1. Match Owner's existing key system.
- B Lock Cylinders:
 - 1. Provide cams and/or tailpieces as required for locking devices.

2.08 KEYING

- A Change key and masterkey all lock cylinders from the keying meeting.
- B Furnish two change keys for each lock, six masterkeys for each masterkey set, and two removable core control keys.
- C Stamp keys with file key number and "Do Not Copy."
- D Ship masterkeys and control keys to the Owner via registered mail.
- E Permanent cylinder cores shall be installed by the contractor under the supervision of an Owner's representative.
- F Construction key all exterior cylinders and supply six (6) construction master keys. Using building keys clears construction keying without removal of cylinders.

2.09 LOCKS

A Manufacturers:

1. Cylindrical Locks:
 - a. Schlage, an Allegion brand; ND Series RHO: www.allegion.com/us.
 - b. Sargent; an Assa Abloy Group company; 10X Line LL: www.assaabloydss.com.
2. Furnish lock types and functions specified in the hardware schedule, with the following provisions:
 - a. Strikes:
 - 1) Wrought box type for the inactive leaf of pairs of wood doors, or wood frames.
 - 2) Lip length sufficient to protect trim, frame or inactive leaf.
3. Furnish knurled lock knobs or lever handles on doors to stairs other than exit stairs, loading platforms, stages, boiler rooms, and other hazardous locations.
4. Lever handles must be cast brass, bronze or stainless steel construction and conform to ASNI A117.1.
5. Provide and install wiring from electric lockset to power supply.

2.10 DOOR PULLS, PUSH PLATES/BARS AND FLUSH CUP PULLS

A Manufacturers:

1. Rockwood; an Assa Abloy Group company: www.assaabloydss.com.
2. Hager Companies: www.hagerco.com.
3. Hiawatha, Inc, division of Activar Construction Products Group, Inc: www.activarcpg.com/hiawatha.
4. Burns Manufacturing: www.burnsmfg.com.
5. Ives, an Allegion brand: www.allegion.com/us.

B Door Pulls, Push Plates/Bars and Flush Cup Pulls:

1. Satin finished stainless steel.
2. Manufacturers and products:
 - a. Straight Pull-10"
 - 1) Ives: 8103HD.
 - 2) Burns: 26C.
 - 3) Hager: CTC-4J.
 - 4) Rockwood: 111.
 - b. Push Plate for Flush Doors
 - 1) Ives: 8200 8x16.
 - 2) Burns: 57.
 - 3) Hager: 30s 8x16.
 - 4) Hiawatha: 200.
 - 5) Rockwood: 70F.
 - c. Push Plate for 6 inch (152.4 mm) Stile Doors
 - 1) Ives: 8200 4x16.
 - 2) Burns: 54.
 - 3) Hager: 30s 4x16.
 - 4) Hiawatha: 200F.
 - 5) Rockwood: 70C.
 - d. Pushbar
 - 1) Ives: 9100HD
 - 2) Burns: 422.
 - 3) Hager: 130s.
 - 4) Rockwood: 47.

2.11 COORDINATORS

- A Manufacturers:
 - 1. Ives, an Allegion brand; COR Series: www.allegion.com/us.
 - 2. Hager Companies; 297D Series: www.hagerco.com.
 - 3. Rockwood; an Assa Abloy Group company; 1600 Series: www.assaabloydss.com.
- B Furnish coordinator for labeled pairs of doors equipped with automatic flush bolts or vertical rod-mortise lock fire exit device combinations with astragals.
- C Furnish filler bars for total opening width, closer mounting brackets, carry bars, and special preparation for top latches where applicable.

2.12 CLOSERS

- A Manufacturers; Surface Mounted:
 - 1. LCN, an Allegion brand; 4050A/4050A EDA Series: www.allegion.com/us.
 - 2. Norton; an Assa Abloy Group company; 7500 Series: www.assaabloydss.com.
- B Where closers are listed in the hardware schedule, furnish series listed above unless other functions/series are specified in the hardware groups.
- C Furnish complete with all mounting brackets, drop plates and special shoes as may be required by the door and frame conditions.
- D Determine closer size in accordance with manufacturer's recommendations for application on the room side of corridor doors, stair side of stair doors, and interior side of exterior doors.
- E Provide rust inhibitor primer for all closers in pools, toilet stalls, showers and other corrosive areas.
- F Provide extra heavy-duty arm (EDA/HDPA) when closer is to be installed using parallel arm mounting.
- G Furnish through bolt attachments for closers specified for wood doors.

2.13 ELECTRIC ACCESSIBILITY CLOSERS

- A Manufacturers and Products:
 - 1. LCN, an Allegion brand; Auto Equalizer #4640; Electrohydraulic: www.allegion.com.
 - 2. When the term "accessibility closers" appears on the hardware schedule, provide a complete system, including all necessary brackets, mounting plates, and the following items:
 - 3. Actuators:
 - a. 4.5 inch (114.3 mm) diameter with blue handicapped logo, direct wired or wireless as indicated in Hardware Sets.
 - b. Provide two (2) per door leaf.
 - 4. Provide and install wiring from closers to actuators.

2.14 OVERHEAD STOPS AND HOLDERS

- A Manufacturers:
 - 1. Glynn-Johnson, an Allegion brand, GJ90, GJ100: www.allegion.com/us.
 - 2. Rixson; an Assa Abloy Group company, 9, 10: www.assaabloydss.com.
- B Use for doors that open against equipment, casework, sidelights or other objects that would make wall bumpers inappropriate.
- C Interior doors with EDA/HDPA arm closers are to be furnished with an SCUSH/SS spring stop closer arm instead.
- D Furnish sex bolt attachments for mineral core door applications, unless solid wood blocking is provided in the door for attachment.

2.15 KICK/ARMOR PLATES

- A Kick Plates: Where kick plates are specified in the Hardware Sets, furnish 16 gauge, 0.050 inch (1.27 mm) plates, with the following dimensions:
 - 1. Width at single doors: 2 inch (50.8 mm) less than door width.
 - 2. Width at pairs of doors: 1 inch (50.8 mm) less than door width.
 - 3. Height: 8 inch (203.2 mm) unless noted different in Hardware Sets.
 - 4. All kick plates shall be beveled 4 sides and counter sunk.

- B Armor Plates: Where armor plates are specified in the Hardware Sets, furnish 16 gauge, 0.050 inch (1.27mm) plates with the following dimensions:
1. Width at single doors: 2 inch (50.8 mm) less than door width.
 2. Width at pairs of doors: 1 inch (50.8 mm) less than door width.
 3. Height: 34 inch (863.6 mm), unless noted different in Hardware Sets.
 4. All armor plates shall be beveled 4 sides and counter sunk.

2.16 ELECTROMAGNETIC DOOR HOLDERS

- A Manufacturers:
1. LCN, an Allegion brand; 7840 Series: www.allegion.com/us.
 2. Architectural Builders Hardware Manufacturing; 2100 Series: www.abhmfg.com.
 3. Edwards Signaling; 1505 Series: www.edwards-signals.com.
- B Electromagnetic Door Holders: Comply with BHMA A156.15.
1. Type: Recessed wall mounted, single unit, standard duty, with strike plate attached to door.
 2. Voltage: 12 VDC, and provide power supplies by same manufacturer as holders.
 3. Provide interface with fire detectors and fire-alarm system for fire-rated door assemblies.

2.17 FLOOR STOPS, WALL STOPS AND HOLDERS

- A Manufacturers:
1. Ives, an Allegion brand: www.allegion.com/us.
 2. Rockwood; an Assa Abloy Group company: www.assaabloydss.com.
 3. Hager Companies: www.hagerco.com.
 4. Burns Manufacturing: www.burnsmfg.com.
 5. Manufacturers and product
 - a. Wall Stop Bumper
 - 1) Ives: WS407CVX.
 - 2) Burns: 570.
 - 3) Hager: 232W
 - 4) Rockwood: 407.
 - b. Wall Stop Projectected
 - 1) Ives: WS11X.
 - 2) Burns: 530.
 - 3) Hager: 255
 - 4) Rockwood: 475.
 - c. Wall Stop Holder
 - 1) Ives: WS40.
 - 2) Burns: 533 .
 - 3) Hager: 326W
 - 4) Rockwood: 490
 6. Furnish a wall bumper, as applicable, for each door leaf unless where other model stops or overhead stops/holders are specified in the hardware schedule.
 - a. Where wall stops are not applicable, furnish overhead stops as previously specified within this section of the specification.

2.18 THRESHOLDS, WEATHERSTRIPS AND JAMB GASKETS

- A Manufacturers:
1. Pemko; an Assa Abloy Group company: www.assaabloydss.com.
 2. National Guard Products, Inc: www.ngpinc.com.
 3. Reese Enterprises, Inc: www.reeseusa.com.
 4. Zero International, Inc, an Allegion brand: www.allegion.com/us.
 5. Manufacturers and Products
 - a. Saddle Threshold
 - 1) National Guard: 425E.
 - 2) Pemko: 171A.

- 3) Reese: S205A.
- 4) Zero: 8655.
- b. Half Saddle Threshold
 - 1) National Guard: 325 Alum.
 - 2) Pemko: 229A.
 - 3) Reese: S245A.
 - 4) Zero: 1675.
- c. Bumper Seal Threshold
 - 1) National Guard: 896 Alum (Vinyl).
 - 2) Pemko: 2005AV.
 - 3) Reese: S483AV.
 - 4) Zero: 65A.
- d. Weatherstrip
 - 1) National Guard: 700NA.
 - 2) Pemko: 2891APK.
 - 3) Reese: 755A.
 - 4) Zero: 429.
- e. Meeting Stile Weatherstrip
 - 1) National Guard: 9605.
 - 2) Pemko: 18041.
 - 3) Reese: 959.
 - 4) Zero: 8193.
- f. Sweep with Rain Drip
 - 1) National Guard: 101V.
 - 2) Pemko: 345_PK.
 - 3) Reese: 353.
 - 4) Zero: 8197.
- g. Head and Jamb Gasket
 - 1) National Guard: 5050.
 - 2) Pemko: S88.
 - 3) Reese: 797.
 - 4) Zero: 188.
- h. Drip
 - 1) National Guard: 16.
 - 2) Pemko: 346.
 - 3) Reese: R201.
 - 4) Zero: 142.
- i. Mullion Seal
 - 1) National Guard: 5100N.
 - 2) Pemko: 5110.
 - 3) Reese: 628.
 - 4) Zero: 8780.
- 6. Where specified in the hardware groups, furnish the above products unless otherwise details in groups.
- 7. Furnish Head/Jamb Gaskets and Meeting Stile Astragals for pairs, at all fire labeled doors whether listed in group or not.
- 8. Coordinate with door manufacturer the intumescent fire and smoke material for fire rated openings as required by door and frame manufacturer to comply with UL 10C, UBC test 7-2.
- 9. When “threshold” appears within a hardware group provide the following:
 - a. At aluminum entrances on new buildings provide a half saddle threshold.
 - b. At aluminum entrances on existing buildings provide a saddle threshold.

- c. At interior door ways provide a saddle threshold.
- d. At exterior doorways from occupied rooms and HM or FRP exit only doors provide a bumper seal threshold.
- e. At exterior HM or FRP doors to receiving areas, loading docks and boiler rooms provide a saddle threshold.

10. When removable mullions are furnished provide the Mullion Seal application as listed above.

2.19 LOCK PROTECTORS

A Manufacturers:

- 1. Ives, an Allegion brand: www.allegion.com/us.
- 2. Rockwood; an Assa Abloy Group company: www.assaabloydss.com.
- 3. Hager Companies: www.hagerco.com.

B Manufacturers and Products:

- 1. Ives: LG1-LG14.
- 2. Hager: 341D.
- 3. Rockwood: 320C.

2.20 MISCELLANEOUS ITEMS

A Barn Door Hardware

- 1. Manufacturer:
 - a. K.N. Crowder Manufacturing; www.kncrowder.com.

2.21 KEY CABINET

A Manufacturers:

- 1. Key Control Systems; www.keycontrolsystems.com
- 2. Lund Equipment Company; www.lundkey.com.
- 3. Telkee Key Cabinets; www.telkee.com/au.

B Provide one Key Cabinet of Sheet steel construction, piano hinged door with key lock; BHMA A156.28.

- 1. Mounting: Wall-mounted.
- 2. Capacity: Actual quantity of keys, plus 50 percent additional capacity.
- 3. Prepare the numerical, alphabetical and key change index record book.
- 4. Tag all keys and numerically place permanent file keys in the cabinet.
- 5. Finish: Baked enamel, manufacturer's standard color.

2.22 FINISHES

A Finish and Base Metal

Butt Hinges- Exterior	US32D on stainless steel
Butt Hinges-Interior	US26D on steel
Flush Bolts	US26D on brass or bronze
Exit Devices	US26D on brass or bronze
Locks	US26D on brass or bronze
Pulls And Push Plates/Bars	US32S on stainless steel
Coordinators	USP on steel
Closers	Sprayed AL on cast iron or aluminum
Protective Plates	US32D on stainless Steel
Overhead Stops	US32D on stainless steel
Wall Stops	US26D on brass, bronze, or steel
Magnetic Holder	Powder Coated-Aluminum color
Thresholds	Mill aluminum
Weatherships and Sweep Strips	Clear anodized aluminum
Key Cabinets	Gray enamel on steel
Miscellaneous	US26D on brass or bronze

PART 3 EXECUTION

3.01 EXAMINATION

- A Verify that doors and frames are ready to receive this work; labeled, fire-rated doors and frames are properly installed, and dimensions are as indicated on shop drawings.
- B Coordinate electric power requirements with the Electrical Contractor on site and ensuring the proper power is available to power operated devices and of correct characteristics.

3.02 INSTALLATION

- A Install hardware, including UL labeled openings, in accordance with manufacturer's instructions and applicable codes.
- B Install hardware on fire-rated doors and frames in accordance with applicable codes and NFPA 80.
- C Install hardware for smoke and draft control doors in accordance with NFPA 105.
- D Use templates provided by hardware item manufacturer.
- E Do not install surface mounted items until application of finishes to substrate are fully completed.
- F Door Hardware Mounting Heights:
 - 1. Install hardware at mounting heights conforming to the recommended mounting locations of the Builders' Hardware Manufacturing Association, and the adopted Building Code.
 - 2. Install wall stops, wall holders, and magnetic holders to strike near top of doors, but not more than 78" from the finished floor line; install wall stops WS407CVX to engage knobs, levers or pulls.
 - 3. Install pulls at 36" to center of pull and push bars at 36" above finished floor. Off set pull on exterior door rails to allow access to cylinders in lieu of providing offset pulls.
- G Install closers on the room side of corridor doors, stair side of stairways, and interior side of exterior doors.
- H Deliver to the Owner one complete set of installation and adjustment instructions, and tools as furnished with the hardware.
- I Install hardware mountable weatherstripping on exterior doors, continuous throughout opening prior to installation of other hardware. Hardware mounted before weatherstripping will be rejected and require removal and re-installation.
- J Set exterior door thresholds with full-width bead of elastomeric sealant at each point of contact with floor providing a continuous weather seal; anchor thresholds with stainless steel countersunk screws.

3.03 ADJUSTING AND INSPECTION

- A Adjust work under provisions of Section 01 70 00 - Execution and Closeout Requirements.
- B Adjust hardware for smooth operation, and Building Code compliance.
- C Adjust gasketing for complete, continuous seal; replace if unable to make complete seal.
- D Panic Hardware device manufacturer's representative to inspect panic hardware installation and provide a written report to General Contractor or Construction Manager and Architect with a list of items that need correction.

3.04 CLEANING

- A Clean finished hardware in accordance with manufacturer's written instructions after final adjustments have been made.
- B Clean adjacent surfaces soiled by hardware installation.

3.05 DEMONSTRATION

- A Engage a factory-authorized service representative(s) to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. At a minimum, provide the following training:
 - 1. Miscellaneous hardware: 1 hour
 - 2. Exit devices: 2 hours
 - 3. Locks: 1 hour
 - 4. Closers: 1 hour
 - 5. Electromagnetic locks: 2 hours
 - 6. Accessibility closers: 2 hours
- B Refer to Section 01 79 00 Demonstration and Training.

HW SET: 01

1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	MEL-25-R-NL-OP	FAL
1	EA	MULLION STABILIZER	525	FAL
1	EA	IC CYLINDER	AS REQUIRED	SCH
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	ACTUATOR	8310-856	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	READER	BY SECURITY SUPPLIER	BYO
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY RETRACTS LATCH. ACCESS CONTROL SYSTEM CONTROLS OUTSIDE ACTUATOR. INSIDE ACTUATOR ALWAYS ACTIVE TO MOMENTARILY RETRACT LATCH THEN OPEN DOOR.

HW SET: 02

1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	MEL-25-R-NL-OP	FAL
1	EA	MULLION STABILIZER	525	FAL
1	EA	IC CYLINDER	AS REQUIRED	SCH
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	OH STOP	100S	GLY
	EA	ACCESSIBILITY CLOSER AND ACTUATORS	REUSE EXISTING	
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	READER	REUSE EXISTING	
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY RETRACTS LATCH. REWIRE ACTUATORS SO THE ACCESS CONTROL SYSTEM CONTROLS OUTSIDE ACTUATOR AND THE INSIDE ACTUATOR IS ALWAYS ACTIVE TO MOMENTARILY RETRACT LATCH THEN OPEN DOOR.

HW SET: 03

1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	MEL-25-R-NL-OP	FAL
1	EA	MULLION STABILIZER	525	FAL
1	EA	IC CYLINDER	AS REQUIRED	SCH
1	EA	MAGNETIC LOCK	M490P	SCE
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	SURFACE CLOSER	4050A SCUSH	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	READER	BY SECURITY SUPPLIER	BYO
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY RETRACTS LATCH. THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD.

HW SET: 04

1	EA	CONT. HINGE	700	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	ELECTRIC STRIKE	6211 FSE	VON
1	EA	MAGNETIC LOCK	M490P	SCE
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	WIRELESS ACTUATOR	8310-3856WS	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: PASSAGE LATCH LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES. THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD. ACTUATORS ARE ALWAYS ACTIVE TO MOMENTARILY ENERGIZE STRIKE THEN OPEN DOOR.

HW SET: 05

1	EA	CONT. HINGE	700	IVE
1	EA	MAGNETIC LOCK	M490P	SCE
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	PUSH PLATE	8200 6" X 16"	IVE
1	EA	SURFACE CLOSER	4050A SCUSH	LCN
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD.

HW SET: 06

1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	MEL-25-R-NL-OP	FAL
1	EA	MULLION STABILIZER	525	FAL
1	EA	IC CYLINDER	AS REQUIRED	SCH
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	ACTUATOR	8310-856	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	READER	BY SECURITY SUPPLIER	BYO
1	EA	DOOR CONTACT	679-05	SCE
1	EA	INTERCOM	BY SECURITY SUPPLIER	BYO
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY RETRACTS LATCH. ACCESS CONTROL SYSTEM CONTROLS OUTSIDE ACTUATOR. INSIDE ACTUATOR ALWAYS ACTIVE TO MOMENTARILY RETRACT LATCH THEN OPEN DOOR.

HW SET: 07

1	EA	CONT. HINGE	700 EPT	IVE
1	EA	POWER TRANSFER	EPT10	VON
1	EA	ELEC PANIC HARDWARE	MEL-25-R-NL-OP	FAL
1	EA	MULLION STABILIZER	525	FAL
1	EA	IC CYLINDER	AS REQUIRED	SCH
1	EA	MAGNETIC LOCK	M490P	SCE
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	OH STOP	100S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	ACTUATOR	8310-856	LCN
1	EA	RAIN DRIP	142	ZER
1	EA	WEATHERSTRIP	BY DR/FR SUPPLIER	
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	READER	BY SECURITY SUPPLIER	BYO
1	EA	DOOR CONTACT	679-05	SCE
1	EA	INTERCOM	BY SECURITY SUPPLIER	BYO
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD AND OUTSIDE BY KEY IN CYLINDER. DOOR LOCKS WHEN KEY IS REMOVED AND DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY RETRACTS LATCH. ACCESS CONTROL SYSTEM CONTROLS OUTSIDE ACTUATOR. INSIDE ACTUATOR ALWAYS ACTIVE TO MOMENTARILY RETRACT LATCH THEN OPEN DOOR. THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD.

HW SET: 08

	EA	HINGES	AS SPECIFIED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	ELECTRIC STRIKE	6211 FSE	VON
1	EA	MAGNETIC LOCK	M490P	SCE
1	EA	OH STOP	90S	GLY
1	EA	SURF. AUTO OPERATOR	4642	LCN
2	EA	WIRELESS ACTUATOR	8310-3856WS	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	WEATHERSTRIP	429	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: PASSAGE LATCH LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES. THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD. ACTUATORS ARE ALWAYS ACTIVE TO MOMENTARILY ENERGIZE STRIKE THEN OPEN DOOR.

HW SET: 09

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	LOCK GUARD	LG_	IVE
1	EA	SURFACE CLOSER	4050A SCUSH	LCN
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	IVE
1	EA	RAIN DRIP	142	ZER
1	SET	WEATHERSTRIP	429	ZER
1	EA	DOOR SWEEP W/DRIP	8198	ZER
1	EA	THRESHOLD	PROFILE AS REQUIRED	ZER
1	EA	DOOR CONTACT	679-05	SCE

FUNCTION: STOREROOM LOCK LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 10

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: PASSAGE LATCH LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 11

	EA	HINGES	AS SPECIFIED	IVE
1	EA	AUTO FLUSH BOLT	FB41T	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	ROLLER LATCH	RL36	IVE
1	EA	OH STOP	90S	GLY
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER
2	EA	MEETING EDGE SEAL	8193	ZER

FUNCTION: PASSAGE LATCH LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 12

	EA	HINGES	AS SPECIFIED	IVE
1	EA	AUTO FLUSH BOLT	FB41T	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	ROLLER LATCH	RL36	IVE
2	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: PASSAGE LATCH LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 13

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 14

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	SURFACE CLOSER	4050A CUSH	LCN
1	EA	GASKETING	188S	ZER

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 15

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	FIRE/LIFE WALL MAG	SEM7800	LCN
1	EA	GASKETING	188S	ZER

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 16

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4050A REG	LCN

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 17

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 18

	EA	HINGE	AS REQUIRED	IVE
1	EA	PASSAGE SET	ND10	SCH
1	EA	OH STOP	90S	GLY
1	EA	GASKETING	188S	ZER

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 19

	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	FB458	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	PASSAGE SET	ND10	SCH
2	EA	OH STOP	90S	GLY
1	EA	GASKETING	188S	ZER
2	EA	MEETING EDGE SEAL	8193	ZER

FUNCTION: PASSAGE LATCH
LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE AT ALL TIMES.

HW SET: 20

	EA	HINGE	AS REQUIRED	IVE
1	EA	MAGNETIC LOCK	M490P	SCE
1	EA	DOOR PULL, 1" ROUND	8103 10"	IVE
1	EA	PUSH PLATE	8200 6" X 16"	IVE
1	EA	OH STOP	90S	GLY
1	EA	ACCESSIBILITY CLOSER AND ACTUATORS	REUSE EXISTING	
1	EA	KICK PLATE	8400 10" X 2" LDW B-CS	IVE
1	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD.

HW SET: 21

1	EA	SLIDING DOOR KIT	.	KNC
1	EA	CATCH N CLOSE	.	KNC
1	EA	DOOR PULL, 3/4" RND	PR 8102HD 6" J	IVE

HW SET: 22

	EA	HINGE	AS REQUIRED	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	ND40 OS-OCC	SCH
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4050A REG	LCN
1	EA	GASKETING	188S	ZER

FUNCTION: PRIVACY LOCK
 LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY INSIDE THUMBTURN. TURNING INSIDE LEVER OR CLOSING DOOR UNLOCKS OUTSIDE LEVER. TO UNLOCK FROM OUTSIDE, REMOVE EMERGENCY BUTTON, INSERT EMERGENCY TURN (FURNISHED) IN ACCESS HOLE AND ROTATE.
 OUTSIDE INDICATOR DISPLAYS OCCUPIED/VACANT

HW SET: 23

	EA	HINGE	AS REQUIRED	IVE
1	EA	PRIVACY LOCK W/ OUTSIDE INDICATOR	ND40 OS-OCC	SCH
1	EA	SURFACE CLOSER	4050A REG	LCN
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: PRIVACY LOCK
 LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY INSIDE THUMBTURN. TURNING INSIDE LEVER OR CLOSING DOOR UNLOCKS OUTSIDE LEVER. TO UNLOCK FROM OUTSIDE, REMOVE EMERGENCY BUTTON, INSERT EMERGENCY TURN (FURNISHED) IN ACCESS HOLE AND ROTATE.
 OUTSIDE INDICATOR DISPLAYS OCCUPIED/VACANT

HW SET: 24

	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE LOCK	ND53	SCH
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: OFFICE AND INNER ENTRY LOCK
 LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS MADE INOPERATIVE BY KEY OUTSIDE OR BY TURNING INSIDE THUMBTURN. WHEN OUTSIDE IS LOCKED, LATCHBOLT IS RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER REMAINS LOCKED UNTIL THUMBTURN IS RETURNED TO VERTICAL OR UNLOCKED BY KEY. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 25

	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE LOCK	ND53	SCH
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: OFFICE AND INNER ENTRY LOCK
 LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS MADE INOPERATIVE BY KEY OUTSIDE OR BY TURNING INSIDE THUMBTURN. WHEN OUTSIDE IS LOCKED, LATCHBOLT IS RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER REMAINS LOCKED UNTIL THUMBTURN IS RETURNED TO VERTICAL OR UNLOCKED BY KEY. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 26

	EA	HINGE	AS REQUIRED	IVE
1	EA	ENTRANCE LOCK	ND53	SCH
1	EA	OH STOP	90S	GLY
1	EA	GASKETING	188S	ZER

FUNCTION: OFFICE AND INNER ENTRY LOCK

LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS MADE INOPERATIVE BY KEY OUTSIDE OR BY TURNING INSIDE THUMBTURN. WHEN OUTSIDE IS LOCKED, LATCHBOLT IS RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER REMAINS LOCKED UNTIL THUMBTURN IS RETURNED TO VERTICAL OR UNLOCKED BY KEY. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 27

	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM LOCK	ND70	SCH
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: CLASSROOM LOCK

LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY. UNLOCKED FROM OUTSIDE BY KEY. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED..

HW SET: 28

	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM LOCK	ND70	SCH
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: CLASSROOM LOCK

LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY. UNLOCKED FROM OUTSIDE BY KEY. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 29

	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM LOCK	ND70	SCH
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: CLASSROOM LOCK

LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY. UNLOCKED FROM OUTSIDE BY KEY. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 30

	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM LOCK	ND70	SCH
1	EA	SURFACE CLOSER	4050A CUSH	LCN
1	EA	GASKETING	188S	ZER

FUNCTION: CLASSROOM LOCK

LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY. UNLOCKED FROM OUTSIDE BY KEY. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 31

	EA	HINGE	AS REQUIRED	IVE
1	EA	CLASSROOM LOCK	ND70	SCH
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4050A REG	LCN
1	EA	GASKETING	188S	ZER

FUNCTION: CLASSROOM LOCK

LATCHBOLT RETRACTED BY LEVER FROM EITHER SIDE UNLESS OUTSIDE IS LOCKED BY KEY. UNLOCKED FROM OUTSIDE BY KEY. INSIDE LEVER ALWAYS FREE FOR IMMEDIATE EXIT. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 32

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 33

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 34

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	OH STOP	90S	GLY
1	EA	SURFACE CLOSER	4050A REG	LCN
	EA	GASKETING	188S	ZER

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 35

	EA	HINGE	AS REQUIRED	IVE
2	EA	MANUAL FLUSH BOLT	FB458	IVE
1	EA	DUST PROOF STRIKE	DP2	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	OH STOP	90S	GLY
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER
2	EA	MEETING EDGE SEAL	8193	ZER

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 36

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	ELECTRIC STRIKE	6211 FSE	VON
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	READER	BY SECURITY SUPPLIER	BYO
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY ENERGIZES ELECTRIC STRIKE.

HW SET: 37

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	ELECTRIC STRIKE	6211 FSE	VON
1	EA	SURFACE CLOSER	4050A REG OR EDA AS REQ	LCN
1	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER
1	EA	READER	BY SECURITY SUPPLIER	BYO
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED. PRESENTATION OF VALID CREDENTIAL MOMENTARILY ENERGIZES ELECTRIC STRIKE.

HW SET: 38

	EA	HINGE	AS REQUIRED	IVE
1	EA	STOREROOM LOCK	ND80	SCH
1	EA	SURFACE CLOSER	4050A CUSH	LCN
1	EA	GASKETING	188S	ZER

FUNCTION: STOREROOM LOCK

LATCHBOLT RETRACTED BY KEY OUTSIDE OR BY LEVER INSIDE. OUTSIDE LEVER ALWAYS INOPERATIVE. AUXILIARY LATCH DEADLOCKS LATCHBOLT WHEN DOOR IS CLOSED.

HW SET: 39

	EA	HINGE	AS REQUIRED	IVE
2	EA	FIRE EXIT HARDWARE	F-25-V-EO-LBR	FAL
2	EA	SURFACE CLOSER	4050A EDA	LCN
2	EA	FIRE/LIFE WALL MAG	SEM7800	LCN
1	EA	GASKETING	188S	ZER
2	EA	MEETING EDGE SEAL	8193	ZER

FUNCTION: LATCHBOLT RETRACTED INSIDE BY EXIT DEVICE PUSH PAD. NO EXTERIOR TRIM.

HW SET: 40

	EA	HINGE	AS REQUIRED	IVE
2	EA	FIRE EXIT HARDWARE	F-25-V-L-BE-LBR	FAL
2	EA	MAGNETIC LOCK	M490P	SCE
2	EA	SURFACE CLOSER	4050A EDA	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS	IVE
2	EA	WALL STOP	WS406/407CCV	IVE
1	EA	GASKETING	188S	ZER
2	EA	MEETING EDGE SEAL	8193	ZER
2	EA	DOOR CONTACT	679-05	SCE
1	EA	POWER SUPPLY	BY SECURITY SUPPLIER	BYO
1	EA	ELEVATION DRAWING		
1	EA	WIRE DIAGRAM	POINT TO POINT	

FUNCTION: LATCHBOLT RETRACTED BY DEPRESSING THE ACTUATION BAR. ENTRANCE BY LEVER, ALWAYS ACTIVE.
THE MAGNETIC LOCK IS CONTROLLED WANDERGUARD.

END OF SECTION 08 71 00