

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - EXECUTION

2.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1: **ROOF PLAN.**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with a 20'-2 1/2" x 35' 1 1/4" P.T.O. roof extension on south side of building, as indicated on sheet ALT-1 and S-4

B. Alternate No. 2: **SITE PLAN.**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with Concrete and asphalt parking and driveways, landscaping, pedestrian sidewalks, fencing and gates, signage and everything included in the sheet, as well as final engineering fees associated with the improvements. As indicated on Sheet ALT-2

C. Alternate No. 3: **FENCING NORTH SIDE OF EXISTING BUILDING.**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with the site improvements of two (2) lines of chain link fencing with barbed wire. Fencing on north side of existing building. Match (e) fence materials and construction. As indicated on Sheet ALT-1

D. Alternate No. 4: **ADDED WINDOWS.**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with additional bullet resistant glass panels on windows type 1 and type 3, 3 additional type 2 windows with bullet resistant glass, 1 additional type 4 window with bullet resistant glass and 1 additional type 5 window with bullet resistant glass. As indicated on Sheet ALT-4a and ALT - 4b.

E. Alternate No. 5: **BULLET RESISTANT INTERIOR WALLS.**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with walls 9000 and 9005 to be bulletproof level 8, see segmented lines in floor plan 1/ALT-5 for location of walls and details 2/ALT-5 and 3/ALT-5 for bulletproofing type. Doors 101 c, 120, 118, 117 and 119 to be bulletproof level 8

F. Alternate No. 6: **JANITORS CLOSET DOOR.**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with relocation of door to enter janitor's closet. Including demolition of existing exterior wall to accommodate new door and custom H.M. door framing. as indicated on sheet ALT-6

G. Alternate No. 7: **PAGING SYSTEM.**

Alternate: Provide additive alternate bid pricing for complete installation of sound paging system in building expansion. As indicated on Sheet E-001 and E-201.

H. Alternate No. 8: **DOOR PANEL MATERIAL**

Alternate: Provide added alternate cost to doors panel material to be 16 gauge hm with PNT-105 finish for doors: 101c, 117, 118 and 120

I. Alternate No. 9a: **DOOR HARDWARE SET**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with hardware set # 201, 301, 401, 501 and 801

J. Alternate No. **9b: DOOR HARDWARE SET**

Alternate: provide an additive cost alternate to the cost of labor and materials associated with hardware set # 302 and 402

K. Alternate No. **9c: DOOR HARDWARE SET**

Alternate: Provide an additive cost alternate to the cost of labor and materials associated with hardware set # 303.

L. Alternate No. **10: WHOLE BUILDING SHINGLE ROOFING**

Alternate: Provide new asphalt roof shingles for entire roof (phase I and phase II) to match new color. On section 073113, upgrade Material Warranty Period to Silver Pledge commercial 40 year material warranty, 20 year no prorated, and 10 year workmanship.

END OF SECTION 012300

SECTION 08 71 00 - FINISH HARDWARE

PART 1 - GENERAL

1.01 SUMMARY

A. Section Includes

1. Finish hardware for doors and casework as scheduled and specified herein, including:
 - a. Mechanical hardware for swinging wood and hollow metal doors.
 - b. Cylinders for swinging aluminum storefront and glass entrances.
 - c. Field verification, preparation, and modification of existing doors and frames to receive new finish hardware
 - d. Lead-lined finish hardware items required for radiation protection at door openings.
2. Electro-mechanical devices and access control components as specified herein.
3. Any parts, components, materials, and accessories, whether specified or not, that are required for a complete and operational access control system. Provide access control system with features, capabilities, and operation at each door as specified herein.

B. Products Furnished But Not Installed Under This Section

1. Furnish hardware for aluminum doors including but not limited to hanging devices, locking hardware, automatic operators, electrified hardware, and control devices.

C. Related Sections

1. Provide hardware complying with division 01 section "references" as well as the following publications to the extent referenced within this specification.
 - a. Division 06 Section: "Finish Carpentry"
 - b. Division 08 Section: "Hollow Metal Doors and Frames"
 - c. Division 08 Section: "Wood Doors"
 - d. Division 08 Section: "Aluminum-Framed Entrances and Storefronts"
 - e. Division 08 Section: "Automatic Door Operators"
 - f. Division 28 Section: "Access Control"
 - g. Division 28 Section: "Intrusion Detection"

1.02 PRICING AND PAYMENT PROCEDURES

A. Alternates

1. General: Provide pricing complying with Division 01 Section "Alternates."

1.03 REFERENCED STANDARDS

A. Provide hardware in accordance with the following standards in addition to those specified in Division 01 Section "References."

1. American National Standards Institute (ANSI), A117.1: Accessible and Usable Buildings and Facilities, edition as adopted by local AHJ.
2. Builders Hardware Manufacturer's Association (BHMA)
 - a. ANSI/BHMA A156.2: Bored and Preassembled Locks and Latches, 2011 edition
 - b. ANSI/BHMA A156.3: Exit Devices, 2008 edition
 - c. ANSI/BHMA A156.4: Door Controls - Closers, 2008 edition
 - d. ANSI/BHMA A156.18: Materials and Finishes, 2006 edition
 - e. ANSI/BHMA A156.19: Power Assist and Low Energy Power Operated Doors, 2007 edition
3. Door and Hardware Institute (DHI)
 - a. Recommended Locations for Architectural Hardware for Flush Wood Doors, 1993 edition

- b. Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames, 2004 edition
- c. Installation Guide for Doors and Hardware, 1994 edition
- d. Keying Systems and Nomenclature, 2003 edition
- e. Sequence and Format for the Hardware Schedule, 2001 edition

1.04 ADMINISTRATIVE REQUIREMENTS

A. Coordination

- 1. Coordinate with owner before submittals for specific hardware security requirements.
- 2. Coordinate layout, templating, and installation of work with other sections as required. Provide templates, product information, schedules, and diagrams required to fully coordinate the work.
 - a. Coordinate bollard mounted hardware with Division 05 Section "Metal Fabrications."
 - b. Coordinate blocking for wall stops and other surface-applied hardware with Division 06 Section "Rough Carpentry."
 - c. Coordinate hardware locations and templating with the appropriate Division 08 door and frame sections.
 - d. Coordinate conduit, raceways, wiring, and connection as required for electrical and pneumatic hardware items with the appropriate electrical, access control, intrusion detection, and fire alarm sections.

B. Pre-installation Meetings

- 1. Upon approval of hardware schedule and wiring diagram submittals and before hardware installation, conduct a pre-installation meeting complying with Division 01 Section "Project Management and Coordination."
- 2. Meeting attendees shall include the owner's representative, architect, contractor, hardware supplier, hardware installer, other affected trades, and manufacturer representative(s) for locks, exit hardware, operators, and closers.
- 3. Discuss the installation of continuous hinges, locksets, door closers, exit devices, electromechanical finish hardware, and finish hardware. Coordinate installation between trades.
 - a. Discuss special installation requirements.
 - b. Inspect and discuss electrical rough-in and other preparatory work performed by other trades.
 - c. Review sequence of operation for each electrified door opening.
 - d. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - e. Review required testing, inspecting, and certifying procedures
- 4. At the meeting, distribute installation manuals, templates, wiring diagrams, and approved hardware schedule submittals to each attendee.
- 5. Notify participants at least five (5) working days before meeting.

C. Keying Conference

- 1. Upon approval of hardware schedule and before ordering locking hardware and key system, conduct a keying meeting complying with Division 01 Section "Project Management and Coordination."
- 2. Meeting attendees shall include the owner, owner's security consultant, construction manager, contractor, architect, and hardware supplier's Architectural Hardware Consultant.
- 3. Discuss key system requirements and incorporate decisions made during the meeting into the keying schedule submittal.
 - a. Review each locking function and determine degree of security required at each opening.
 - b. Review function of building, flow of traffic, and purpose of each area.
 - c. Determine degree of security at each opening.
 - d. Determine requirements for future expansion.
 - e. Discuss requirements for shipping and delivery of keys and permanent cores.

1.05 SUBMITTALS

A. General

1. Provide submittals in accordance with Division 01 Section "Submittal Procedures."
2. Advise architect within the submittal package of incompatibility or issues which may detrimentally affect the work of this section.
3. Submittals shall be prepared by or under the supervision of Architectural Hardware Consultant. Stamp submittals with the DHI certification seal and signature of the supervising Architectural Hardware Consultant.
 - a. Submittals submitted without the above certification seal shall be marked incomplete and returned.
4. Submittal sequence: Submit product data, hardware schedule, samples, and qualification data concurrently. Coordinate submission of finish hardware schedule with scheduling requirements of other work to facilitate the fabrication of other work that is critical in project construction schedule. Upon approval of first submittal package, submit wiring diagrams and key schedule.

B. Product Data

1. Submit manufacturer's technical product data for each item of finish hardware, installation instructions, maintenance of operating parts and finish, and other information necessary to show compliance with requirements.
2. Highlight relevant product information such as model, function, trim, finish, options, electrical requirements, and accessories.

C. Hardware Schedule

1. Submit hardware schedule detailing fabrication and assembly of finish hardware, as well as procedures and diagrams. Coordinate the final finish hardware sets with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of finish hardware.
2. Check specified hardware for suitability and adaptability to details and surrounding conditions. Indicate unsuitable or incompatible items and proposed substitutions.
 - a. Format schedule complying with the vertical format in DHI's "Sequence and Format for the Hardware Schedule" publication. Double space entries, and number and date each page. Use same scheduling sequence and door numbers as in the Contract Documents
 - b. Include the following information:
 - 1) Numerical door index indicating door number, heading number, and architect's specified hardware set number.
 - 2) Identification number, location, hand, fire rating and material of each door and frame.
 - 3) Type, style, function, size, quantity, and finish of each finish hardware item. Include description and function of each lockset and exit device.
 - 4) Complete designations of every item required for each door or opening including name and manufacturer.
 - 5) Fastenings and other pertinent information.
 - a) Where universal-type closers are scheduled, indicate the application method to be used for installation at each door (e.g. regular arm, parallel arm, or top jamb).
 - 6) Location of each finish hardware set, cross-referenced to Drawings, both on floor plans and in door and frame schedule.
 - 7) Explanation of abbreviations, symbols, and codes contained in schedule.
 - 8) Mounting locations for finish hardware.
 - 9) Door and frame sizes and materials.
 - 10) Description of each electrified finish hardware function, including location, sequence of operation, and interface with other building control systems.
 - a) Sequence of Operation: Include description of component functions that occur in the following situations: authorized person wants to enter; authorized person

wants to exit; unauthorized person wants to enter; unauthorized person wants to exit; loss of power; fire alarm sounds.

11) List of related door devices specified in other Sections for each door and frame.

c. Submit, with the hardware schedule, a list of lead times for hardware items.

D. Keying Schedule

1. Submit keying schedule detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations complying with DHI's "Keying Systems and Nomenclature" publication.

E. Shop Drawings

1. Submit details of electrified finish hardware, indicating the following:

- a. System schematic.
- b. Point-to-point wiring diagram.
- c. Riser diagram.
- d. Elevation of each door.

2. Detail interface between electrified finish hardware and fire alarm, access control, security building control system.

3. Operation Narrative: Describe the operation of doors controlled by electrified finish hardware.

4. Include specific cable requirements; indicate twisted, shielded, and plenum rated cable requirements where required by manufacture or relevant building codes and standards.

F. Manufacturer's Templates

1. After final approval of the hardware schedule, provide templates for doors, frames, and other work specified to be factory prepared for the installation of finish hardware. Check shop drawings of other work to ensure that adequate provisions are made for locating and installing finish hardware to comply with indicated requirements. Provide additional templates, template lists, hardware schedules, and product information to other trades upon request.

G. Qualification Certificates

1. For installer, supplier, and Architectural Hardware Consultant provide letters of certification that indicate compliance with the requirements specified herein. Submit certifications concurrently with hardware schedule submittal. Submittals will not be considered without certifications.

- a. Installer: Provide documentation showing installer's past experience.
- b. Supplier: Provide letters of certification from the hardware manufacturer stating that the supplier is a factory direct authorized distributor. Provide documentation showing suppliers past experience.
- c. Architectural Hardware Consultant: Provide certificate showing consultant holds the required certificate(s) from DHI.

1.06 CLOSE OUT SUBMITTALS

A. General

1. Upon substantial completion, provide two (2) copies of the closeout submittals complying with Division 01 Section "Close Out Submittals."

B. Operation And Maintenance Data

1. Provide operation and maintenance manuals that include the following for each hardware item:
- a. Project information including contact information for architect, contractor, supplier, installer, Architectural Hardware Consultant, and local representative of each hardware manufacturer
 - b. Complete information on care, maintenance, adjustment, repair and replacement of parts, and preservation of finishes
 - c. Product data, templates, installation information, service manual, and parts lists.

- d. Copy of final hardware and keying schedules and wiring diagrams for each opening connected to either 120V or low voltage power. Edit schedules and diagrams to reflect “As installed” conditions.

C. Warranty Documentation

- 1. Provide information required for warranty service or replacement of each hardware item including:
 - a. Warranty certificates from manufacturer stating warranty period and conditions, complying with warranty requirements specified herein.
 - b. Copy of manufacturer’s order confirmation or original packing slip with manufacturer’s original order #, date of manufacture, and ship date.

D. Maintenance Material Submittals

- 1. Maintenance Tools: Furnish a complete set of specialized tools and maintenance instructions need for owner’s continued adjustment, maintenance, removal, and replacement of finish hardware. Include the following items:
 - a. 3 each Closer adjustment wrenches
 - b. 3 each Lockset lever removal tools

1.07 QUALITY ASSURANCE

A. Qualifications

- 1. Supplier Qualifications: Supplier shall have documented experience in the supply of finish hardware for five (5) years or for three prior projects similar in scope, size, and quality. Supplier shall have an Architectural Hardware Consultant, complying with the requirements specified herein, available to properly handle, detail, and service hardware in a satisfactory manner. Architectural Hardware Consultant shall be available during the course of the work to consult with contractor, architect, and owner about finish hardware and keying.
 - a. Supplier shall be a certified direct distributor and be a full sales and service organization for the manufacturer(s) listed.
 - b. Supplier shall have warehousing facilities within 50 miles of the project site.
- 2. Installer Qualifications: Installer shall have documented experience in the installation of finish hardware for five (5) years or for three prior projects similar in scope, size, and quality.
- 3. Manufacturer Sourcing Qualifications: Obtain each type of finish hardware (hinges, latch & locksets, exit devices, closers, etc.) from a single manufacturer, although several may be indicated as offering products complying with requirements.
 - a. Provide electrified hardware from same manufacturer as mechanical finish hardware unless otherwise indicated. Manufacturer’s that perform electrical modifications that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction (AHJ) are acceptable.
- 4. Architectural Hardware Consultant Qualifications: A person who is certified by DHI as an Architectural Hardware Consultant (AHC) or Architectural Openings Consultant (AOC) and is enrolled in the DHI Continuing Education Program. Consultant shall be experienced in providing consulting services for finish hardware installations that are comparable in material, design, and extent indicated.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Marking And Packaging

- 1. Package hardware items manufacturer’s standard packaging, clearly marked with hardware set number correlating to finish hardware schedule and architect’s door number.

B. Delivery And Acceptance

1. Coordinate with construction schedule and deliver packaged hardware items to place of installation (e.g. project site, fabrication shop). Upon delivery, inspect and inventory finish hardware. Immediately notify supplier of defective or missing items.
2. Deliver keys and cores to owner by registered mail or overnight package service. Ship keys separately from cores.

C. Storage And Handling

1. Provide secure, dry storage area complying with Division 01 Section "Product Storage and Handling Requirements" for finish hardware delivered to the project site, but not yet installed. Store items on shelves or pallets to prevent damage.
2. Control handling and installation of hardware items that are not immediately replaceable so that completion of work will not be delayed by hardware losses both before and after installation.

1.09 WARRANTY

A. General Warranty

1. Warrant finish hardware against defects in material and workmanship as set forth in Division 01 Section "Warranties."
2. Special warranties specified herein shall not deprive owner of other rights specified in the contract documents, but shall be in addition to, and run concurrent with, other warranty requirements.

B. Special Warranty

1. Provide a written warranty, executed by the product manufacturer agreeing to repair or replace components of finish hardware that fail in materials or workmanship within the specified warranty period.
 - a. Failures include, but are not limited to, the following:
 - 1) Structural failures including excessive deflection, cracking, or breakage.
 - 2) Faulty operation of operators and finish hardware.
 - 3) Deterioration of metals, metal finishes, and other materials beyond normal wear.
 - b. Warranty Period: Two (2) years from date of Substantial Completion, except for:

1) Gr. 2 Bored Locksets:	Ten (5) years from date of substantial completion
2) Exit Devices:	Three (3) years from date of substantial completion
3) Door Closers:	Ten (10) years from date of substantial completion
4) Auto Operators:	Two (2) years from date of substantial completion
5) Electrified Hardware Items:	One (1) years from date of substantial completion

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Substitutions submitted, no later than 10 business days prior to bid and complying with Division 01 Section "Substitutions" requirements will be reviewed for conformance to basis of design. Substitutions found in compliance will be approved by bid addendum.

2.02 MATERIALS

A. General

1. Manufacturer's Name Plate: Do not use manufacturers' products that have manufacturer's name or trade name displayed in a visible location (omit removable nameplates) except in conjunction with required fire-rated labels and as otherwise acceptable to Architect.
 - a. Manufacturer's identification will be permitted on rim of lock cylinders only.
2. Base Metals: Produce hardware units of basic metal and forming method indicated using manufacturer's standard metal alloy, composition, temper, and hardness, but in no case of lesser

(commercially recognized) quality than specified for applicable hardware units for finish designations indicated.

3. Provide hardware manufactured to conform to published templates generally prepared for machine screw installation. Do not provide hardware that has been prepared for self-tapping sheet metal screws, except as specifically indicated.

B. Fasteners

1. Furnish screws for installation with each hardware item. Provide Phillips flat-head screws except as otherwise indicated. Furnish stainless steel (exposed under any condition) screws to match hardware finish or, if exposed in surfaces of other work, to match finish of this other work as closely as possible including "prepared for paint" surfaces to receive painted finish.
2. Provide concealed fasteners for hardware units that are exposed when door is closed except to the extent no standard units of type specified are available with concealed fasteners. Use through bolts only as indicated in this section unless their use is the only means of reinforcing the work adequately to fasten the hardware securely. Where thru-bolts are used as a means of reinforcing the work, provide sleeves for each thru-bolt or use sex screw fasteners.

C. Hinges

1. Acceptable Products:

a. Ives:	5BB1	5BB1HW
b. Stanley:	FBB179	FBB168
c. McKinney:	TB2714	T4B3386

2. Requirements:

- a. Screws: Provide Phillips flat-head screws complying with the following requirements:
 - 1) For metal doors and frames install machine screws into drilled and tapped holes.
 - 2) For wood doors and frames install wood screws.
 - 3) For fire-rated wood doors install #12 x 1-1/4-inch, threaded-to-the-head steel wood screws.
- b. Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
 - 1) Out-Swing Doors with Locks: Non-Removable Pins (NRP).
 - 2) Interior Doors: Non-rising pins.
 - 3) Tips: Flat button and matching plug, finished to match leaves.
- c. Number of Hinges: At non-rated openings, provide two hinges for each door leaf 60 inches or less in height and one additional hinge for each 30 inches of additional height or portion thereof. At fire rated openings, provide no less than three ball bearing hinges for each door leaf 86 inches or less in height and one additional hinge for each 30 inches of additional height or portion thereof.
- d. Hinge Width: Where applied trim or closer templating require hinge widths wider than 4-1/2 inches, provide minimum width required. Otherwise, provide hinges 4-1/2 inches in width.
- e. Hinge Height: Provide hinges 5 inches in height where door leaf exceeds 3'0 in width or where door is a high-use door utilizing panic or push/pull hardware. Otherwise, provide hinges 4-1/2 inches in height.
- f. Hinge Weight: Provide heavy weight hinges where door leaf exceeds 3'0" in width, at exterior doors, where swing clear hinges are scheduled, where door utilizes panic or push/pull hardware, and where armor plates are scheduled. Otherwise provide standard weight hinges.

D. Continuous Hinges

1. Acceptable Products:

a. Ives:	112HD
b. Stanley:	661HD
	MCK-
c. McKinney:	12HD

2. Requirements:

- a. Geared Continuous Hinges: Shall utilize a single gear section for the door leaf and a separate gear section for the frame side of the door. Provide full mortise or surface applied hinge as scheduled in each set. Geared hinges are to be UL 10C tested and approved for 90 minutes.

E. Operating Door Trim

1. Door Bolts

a. Acceptable Products:

- 1) Ives: FB358/FB458
- 2) Rockwood: 557/555
- 3) Trimco: 3915/3917

b. Requirements:

- 1) Provide bolt model recommended by manufacturer for door material type.
- 2) Provide 1 inch throw stainless steel bolt with 12 inch length unless otherwise scheduled in the sets.

c.

2. Push Plates, Pull Plates, and Pulls

a. Acceptable Products:

- | | | | |
|--------------|------|---------|-------|
| 1) Ives: | 8200 | 8303 | 8190 |
| 2) Rockwood: | 70C | 111x70C | BF157 |
| 3) Trimco: | 1001 | 1018 | 1191 |

b. Requirements:

- 1) Push Plate: Provide 6 inch by 16 inch by .050 inch push plate constructed of stainless steel. Bevel all four edges.
- 2) Pull Plate: Provide 4 inch by 16 inch by .050 inch push plate constructed of stainless steel, bevel all four edges. Provide 10 inch center to center (CTC) pull constructed of stainless steel with a diameter of 1 inch.
- 3) Offset Pull: Provide 10 inch center to center (CTC) pull with a 4 inch offset constructed of stainless steel with a diameter of 1 inch.

F. Electric Strikes

1. Acceptable Products:

- a. Von Duprin: 5000 Series

2. Requirements:

- a. Provide electric strikes that are continuous duty rated without the use of external rectifiers.
- b. Provide electric strikes with function (fail safe, fail secure) and power requirements as scheduled.
- c. Where scheduled, provide electric strikes with monitor switches.

G. Locks And Latches

1. General:

- 1) Lock Chassis: Shall be made from steel, with locking spindles of stainless steel.
- 2) Latch Bolt: Shall be constructed of stainless steel with 3/4 inch throw on mortise locks and 1/2 inch throw otherwise. Latch to be deadlocking on keyed functions.
- 3) Lever Trim: Shall be pressure cast brass, bronze, zinc, or steel with wrought rose design.
- 4) Fire Rating: Lock shall be listed for up to 3 hours.
- 5) Strike Plates: Provide ANSI 4-7/8 inch strike plates. At pairs of doors, provide strike with 7/8 inch flat lip. At single doors, provide round-lipped strike with lip length as required to minimally clear jamb and trim. Provide dust box at each strike location.

2. Grade 2 Bored Locks

a. Acceptable Products:

- 1) Falcon: W Series, Dane Lever

b. Requirements:

- 1) ANSI Grade: BHMA/ANSI A156.2, Series 4000, Grade 2.
- 2) Door Prep: Provide lockset to install using a standard ANSI 161 door preparation.
3. Deadbolts
 - a. Requirements:
 - 1) Provide deadbolts by same manufacturer as the provided locksets.
 - 2) Provide chassis type, function, and grade as scheduled.

H. Access Controlled Locks

1. Keypad Only Access Controlled Locks
 - a. Acceptable Products:
 - 1) Schlage Electronics: CO-100, RHO Lever
 - b. Requirements:
 - 1) Provide battery-operated standalone keypad lock with non-handed chassis of type scheduled.
 - 2) Lock shall have an incorporated 12 button keypad.
 - 3) Lock shall have capacity for a minimum of 100 pin codes at least 4 digits in length.
 - 4) Provide lock with functions and keying as scheduled.
 - 5) Provide lock with emergency key override.
2. Stand-Alone Access Controlled Locks
 - a. Acceptable Products:
 - 1) Schlage Electronics: CO-200, RHO Lever
 - b. Requirements:
 - 1) Provide open-architecture, battery-operated, standalone electronic lock with non-handed chassis of type scheduled.
 - 2) Lock shall be programmable by hand held device for up to 2,000 users with an audit trail of 2,000 events.
 - 3) Lock shall be field adaptable from a stand-alone lock to a networked lock (either hardwired or wireless). It shall also have field-adaptable reader modules that may be replaced to transition to new credential technologies.
 - 4) Provide lock with functions and keying as scheduled.
 - 5) Provide lock with emergency key override.

I. Cylinders And Cores

1. Acceptable Products:
 - a. Falcon
2. Requirements:
 - a. Small Format Interchangeable Cylinders: Provide cylinders of quantity and type and with the appropriate cam/tailpiece to be compatible with the locking hardware provided. Provide cylinder housings ready to accept 6-pin, Small Format Interchangeable Cores (SFIC).
 - 1) Keyed Temporary Cores: Provide each cylinder housing and/or lock lever with keyed construction core during the construction period. Cores will remain property of the contractor and will be returned upon installation of owner's permanent key system.
 - 2) Permanent Cores: Ship cores directly to owner's representative. At substantial completion, accompany the owner's representative while replacing temporary construction cores with the owner's permanent key system.
 - b. Keys: Provide cylinder manufacturer's standard keys. Keys shall be shipped separate from cores directly to owner's representative. For estimating purposes, provide keys in the following quantities:
 - 1) Construction Control Keys: 2 each
 - 2) Construction Change Keys: 12 each
 - 3) Permanent Control Keys: 2 each
 - 4) Split Key Voiding Keys: 2 each

- | | | | |
|----|------------------------|---|----------|
| 5) | Permanent Master Keys: | 2 | each |
| 6) | Permanent Change Keys: | 4 | per core |

J. Exit Devices

1. Acceptable Products:
 - a. Falcon: 24 Series
2. Requirements:
 - a. ANSI Grade: BHMA/ANSI A156.3, Grade 1.
 - b. Device Construction:
 - 1) Exit device(s) shall have a mechanism case constructed of extruded aluminum or wrought stainless steel, base plates constructed of cold rolled or cast steel, push pad of extruded aluminum with stainless steel covering or wrought stainless steel, and end caps with flush design. At full-glass doors, provide exit devices with no exposed fasteners or rivets visible through glass. Where required by stile width, provide narrow-stile type device.
 - 2) Latchbolt: Provide Pullman-type deadlocking latch bolts constructed of stainless steel.
 - 3) Dogging Mechanism: where dogging or latch-retraction options are not specifically scheduled for non-fire rated doors, provide device with a hex-key activated hook-type dogging mechanism constructed of steel.
 - 4) Plastic or nylon used for the push pad, or parts in the dogging mechanism or latchbolt mechanism are unacceptable.
 - 5) Provide device type, function, and trim style as indicated in hardware schedules.
 - c. Provide shim kits, filler plates, and other accessories as required for each opening.
 - d. Unless otherwise indicated in the sets, provide device with roller-type strike.
 - e. Where scheduled, provide removable mullions by same manufacturer as provided exit devices. Provide mullion stabilizers, key removable option, strike preps, and fire rating as indicated in sets.

K. Mechanical Door Closers

1. General:
 - a. Valves: Closers shall have separate valves for latch speed, main speed, and back check. Valves shall be staked to prevent accidental removal. Internal Pressure Relief Valves (PRVs) are prohibited.
 - b. Provide the appropriate closer body, handing, and brackets to mount closer inside the building on the least-public side of the door.
 - 1) Where closers are to be mounted parallel arm, provide with heavy duty arms.
 - 2) Where closers are to be mounted regular arm and the opening can otherwise be opened to 180 degrees, provide closer with the appropriate special templating to allow 180 degree door swing.
 - c. Integrated Stop Closer Arms: Where a closer with integrated stop is required, provide the appropriate closer and arm as follows:
 - 1) Parallel arm with spring-cushioned stop arm: Provide where door is otherwise able to open to 95 degrees and requires a parallel arm mount closer.
 - 2) Parallel arm with dead stop arm: Provide where door is obstructed from opening to 95 degrees and requires a parallel arm mount closer.
 - 3) Regular arm with push side surface-mounted overhead stop: Provide where door closer should mount on pull side of door.
 - d. Provide closers with any special templates, brackets, plates, or other accessories required for interface with header, door, wall, and other hardware. Provide closers with screw packs containing thru-bolts, machine screws, and wood screws.

- e. Closers shall be provided with all-weather fluid and shall not require readjustment from 120 degrees F to -30 degrees F. Fluid shall be non-flaming and shall not fuel door or floor covering fires. Upon request, provide data indicating thermal properties of fluid.
 - f. Closers shall close and latch door when adjusted to meet accessibility requirements for door opening force: 8.5 lbs at exterior doors, 5 lbs at interior doors, and 15 lbs at labeled fire doors.
2. Heavy Duty Door Closers:
- a. Acceptable Products:
 - 1) Falcon: SC71
 - b. Requirements:
 - 1) ANSI Grade: BHMA/ANSI A156.4, Grade 1.
 - 2) Closer Construction: Closer shall have aluminum alloy body with 1-1/2 inch steel piston, double heat treated pinion, 5/8 inch bearing journals, and full complement needle or caged ball bearings. Closer shall be adjustable from sizes 1 through 6.
 - 3) Provide closers with spring size adjustment dial for ease of adjusting.
 - 4) Install surface mounted door closers on room side of openings, except where prohibited by scheduled hardware. Use appropriate arms, spacers, brackets, and accessories to properly install surface mounted door closers. Adjust spring power to the appropriate setting to ensure the doors reliably close under normal operating conditions.
3. Standard Duty Door Closers:
- a. Acceptable Products:
 - 1) Falcon: SC81
 - b. Requirements:
 - 1) ANSI Grade: BHMA/ANSI A156.4, Grade 1.
 - 2) Closer Construction: Closer shall have aluminum alloy body with 1-1/4 inch steel piston, double heat treated pinion, 5/8 inch bearing journals, and full complement needle or caged ball bearings. Closer shall be adjustable from sizes 1 through 6.
- L. Automatic Operators (Electro-Hydraulic)
- 1. Acceptable Products:
 - a. LCN: 4600 Series
 - 2. Requirements:
 - a. Provide low energy automatic operator units with hydraulic closer complying with ANSI A156.19.
 - b. Provide units with conventional door closer opening and closing forces unless power operator motor is activated. Provide door closer assembly with adjustable spring size, back-check, and opening and closing speed adjustment valves to control door.
 - 1) Hydraulic Fluid: Fireproof, passing requirements of UL10C, and requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
 - c. Provide units with on/off switch for manual operation, motor start up delay, vestibule interface delay, electric lock delay, and door hold open delay.
 - d. Provide drop plates, brackets, or adapters for arms as required for details.
 - e. Provide actuator switches for operation as specified. Provide weather-resistant actuators at exterior applications.
 - f. Provide complete assemblies of controls, switches, power supplies, relays, and parts/material recommended and approved by manufacturer of automatic operator for each individual leaf.
 - g. Provide units with vestibule inputs that allow sequencing operation of two units, and SPDT relay for interfacing with latching or locking devices.
 - 3. Door Stops and Holders
 - a. Acceptable Products:
 - 1) Ives: WS407
 - b. Requirements:
 - 1) Provide stops and holders as indicated in the HW sets.

- 2) Where wall bumpers are scheduled, provide concave rubber bumper where the adjacent lever trim incorporates a push-button. Otherwise, provide convex rubber bumpers.
- c. Locate wall mounted door stops at the appropriate height and location to properly contact protruding door trim.

M. Overhead Stops And Holders

- 1. Acceptable Products:
 - a. Glynn Johnson: 100 Series 90 Series
- 2. Requirements:
 - a. Provide overhead stops and holders as scheduled, sized per manufacturer's recommendations based on door width.
 - b. Provide concealed overhead stops with adjustable jamb bracket.
 - c. Where possible without conflicting with other hardware, mount surface overhead stops on least public side of door.
 - d. Provide stops with any special templates, brackets, plates, or other accessories required for interface with header, door, wall, and other hardware.

N. Saddle And Panic Thresholds

- 1. Acceptable Products:
 - a. Zero International: 546
 - b. National Guard: 613
 - c. Pemko: 272
- 2. Requirements:
 - a. Provide saddle thresholds with length equal to the width of the opening.
 - b. Provide panic thresholds with length equal to the overall frame width.
 - c. Provide panic thresholds with mitered and welded ends.
 - d. Provide stainless steel machine screws and lead anchors for each threshold.
 - e. Trim, cut, and notch thresholds and saddles neatly to minimally fit the profile of the door frame. Thresholds and saddles shall be set in full bed of butyl-rubber or polyisobutylene mastic sealant.

O. Weatherstrip And Gasket

- 1. General:
 - a. Provide weather strip and gasketing as scheduled.
 - b. Size weather strip and gasket to provide a continuous seal around opening and at meeting stiles.
 - c. Install gasketing to provide a continuous seal around the perimeter of the opening. Install soffit mounted hardware using the proper brackets, spacers, and accessories to allow proper installation without cutting or notching gasketing material or mounting channels.
 - d.
- 2. Perimeter Seals
 - a. Acceptable Products:
 - 1) Zero: 488S-BK 8305
 - 2) National Guard: 2525B A626A
 - 3) Pemko: PK33D 45041CN
 - B
- 3. Rain Drips
 - a. Acceptable Products:
 - 1) Zero: 142A
 - 2) National Guard: 16A
 - 3) Pemko: 346C

P. Miscellaneous Hardware

1. Silencers

a. Acceptable Products:

1) Ives: SR64

b. Requirements:

- 1) Where indicated on single openings, provide 3 each grey rubber silencers on lock jamb.
- 2) Where indicated on paired openings, provide 2 each grey rubber silencers on header.

Q. Electronic Accessories

1. Power Supplies

a. Acceptable Products:

1) Schlage Electronics: PS900 Series

b. Requirements:

- 1) Provide power supplies, recommended and approved by the manufacturer of the electrified locking component, for the operation of electrified locks, electrified exit devices, magnetic locks, electric strikes, and other components requiring a power supply.
- 2) Provide the appropriate quantity of power supplies necessary for the proper operation of the electrified locking component and/or components as recommended by the manufacturer of the electrified locking components with consideration for each electrified component utilizing the power supply, the location of the power supply, and the approved wiring diagrams. Locate the power supplies as directed by the Architect.
- 3) Provide a power supply that is regulated and filtered 24 VDC, or as required, and UL class 2 listed.
- 4) Options: Provide the following options.
 - a) Provide a power supply, where specified, with the internal capability of charging optional sealed backup batteries 24 VDC, or as required, in addition to operating the DC load.
 - b) Provide sealed batteries for battery back-up at each power supply where specified.
 - c) Provide keyed power supply cabinet.
 - d) Provide a power supply complete requiring only 120VAC to the fused input and shall be supplied in an enclosure.
- 5) Provide a power supply with emergency release terminals, where required, that allow the release of all devices upon activation of the fire alarm system complete with fire alarm input for initiating "no delay" exiting mode.

2. Keyswitches and Push Buttons

a. Acceptable Products:

1) Schlage Electronics: 653 Series

b. Requirements:

- 1) Keyswitches: Provide single gang keyswitch with momentary/maintained switches as indicated in the sets. Provide with LED indicator lights as indicated in the sets.

R. Proximity Card Readers

1. Acceptable Products:

a. Schlage Electronics: PR10

2. Requirements:

- a. Provide contactless credential reader capable of reading 125 kHz. Card readers shall output data using Weigand protocol.
- b. Provide card readers suitable for both interior and exterior use.
- c. Card Reader shall be configurable to read simultaneously from the following cards:
 - 1) Proximity Technology (Up to 42 Bit Formats): AWID Prox, Lenel Prox

2) Proximity Technology (Up to 37 Bit Formats): Schlage/Xceed ID Prox, HID Prox

S. Credentials

1. Acceptable Products:
 - a. Schlage Electronics: 7510
2. Requirements:
 - a. Provide 125 kHz Prox cards utilizing constructed of glossy white PVC.

T. High Security Emergency Key Box

1. Acceptable Products:
 - a. Knox, Inc. 3200 Series x RMK
2. Requirements:
 - a. Provide recess-mounted emergency key box as approved by the local fire jurisdiction. Key box to be master-keyed as dictated by local fire jurisdiction.

U. Key Control Cabinet

1. Acceptable Products:
 - a. Lund, Inc. 1200 Series
2. Requirements:
 - a. Provide a key control system including envelopes, labels, and tags with self-locking key clips, receipt forms, 3-way visible card index, temporary markers, permanent markers, and standard metal cabinet.
 - b. Provide complete cross-index system set up by Owner, and place keys on markers and hooks in the cabinet as determined by the final key schedule.
 - c. Provide hinged-panel type cabinet for wall mounting with capacity for 250 unique keys.

2.03 FINISHES

- A. Match items to the manufacturer's standard color and texture finish for the latch and locksets (or push-pull units if no latch or locksets).
- 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. The designations used in schedules and elsewhere to indicate hardware finishes are those listed in ANSI/BHMA A156.18, "Materials and Finishes," including coordination with the traditional U.S. finishes shown by certain manufacturers for their products.
- D. The designations used in schedules and elsewhere to indicate hardware finishes are the industry-recognized standard commercial finishes, except as otherwise noted.
 1. Brushed Chrome and/or Stainless Steel Appearance
 - a. Brushed Stainless Steel, no coating: ANSI 630.
 - b. Satin Chrome, Clear Coated: ANSI 626, ANSI 652.
 - c. Powder Coated Aluminum finish: ANSI 689.
 - d. Saddle and Panic Thresholds: Mill Aluminum finish.
 - e. Weatherstrip and Gasket: Clear Anodized Aluminum finish.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify conditions of walls, flooring, doors, frames, and hardware are satisfactory for installation of hardware.

1. Prior to installing doors and hardware, wash down of masonry and painting or staining of doors and frames shall be completed.
2. Verify that walls have blocking behind wall mounted stop locations. Verify that flooring does not interfere with door or hardware operation.
3. Ensure that frames are installed plumb, square, and true. Verify that doors and frames are properly sized and handed and are correctly prepared for hardware installation.
4. Verify function, quantity, type, hand, and finish of hardware to be installed with the approved hardware schedule.
5. Verify that electrical rough-in is complete and correctly located for each door.

B. Conditions that do not allow proper installation of hardware shall be corrected before proceeding.

3.02 INSTALLATION

A. General

1. Install door hardware in accordance with manufacturer's recommended procedures and methods.

B. Hardware Mounting Heights

1. Mount door hardware units at heights indicated, as follows, unless otherwise indicated or required to comply with governing regulations.
 - a. Standard Steel Doors and Frames: DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
 - b. Custom Steel Doors and Frames: DHI's "Recommended Locations for Builders' Hardware for Custom Steel Doors and Frames."
 - c. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."

C. Clearances

1. Install doors, both rated and non-rated, in accordance with NFPA 80 requirements for door clearances as follows:
 - a. 1/8 inch between door and frame head and jambs for wood doors
 - b. 3/16 inch between door and frame head and jambs for metal doors
 - c. 1/8 inch at meeting stiles of pairs of doors.
 - d. 3/4 inch undercut maximum.

3.03 FIELD QUALITY CONTROL

- A. Architectural Hardware Consultant: Architect will engage a qualified Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
- B. Architectural Hardware Consultant will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly installed and adjusted.

3.04 ADJUSTING

- A. After building HVAC system is balanced and adjusted, conduct final adjustment of door closers. Verify spring power of the surface mounted door closer is properly adjusted to close and latch the door and to comply with the opening force requirements of ANSI A117.1 as follows:
 1. Doors with Closers shall take five (5) seconds to close from 90 degrees to 12 degrees.
 2. Interior, non-fire rated swinging doors shall open with a maximum of 5 lbs of pressure.
 3. Exterior doors and fire rated doors shall open with the minimum amount of pressure required to positively close and latch the door.

3.05 CLEANING AND PROTECTION

- A. Clean adjacent surfaces soiled by door hardware installation.
- B. Clean operating items as necessary to restore proper function and finish.
- C. Provide final protection and maintain conditions that ensure that door hardware is without damage or deterioration at time of Substantial Completion.

3.06 SCHEDULE

- A. The following schedule of hardware sets shall be considered a guide and the supplier is cautioned to refer to general conditions, special conditions, and the full requirements of this section. It shall be the hardware supplier's responsibility to furnish all required hardware.
- B. Where items of hardware are not definitely or correctly specified and are required for completion of the Work, a written statement of such omission, error, conflict, or other discrepancy shall be sent to the Architect, prior to date specified for receipt of bids, for clarification by addendum.
- C. Adjustments to the Contract Sum will not be allowed for omissions or items of hardware not clarified prior to bid opening.

SPEXTRA: 99396

DOOR NO.	HARDWARE GROUP
101A	100
101B	600
101C	400
103	500
104	601
105	300
106	601
107	601
108	601
110	603
112	200
113	700
114	700
115	701
116	601
117	601
118	601
119	400
120	500
121	602
122	604
123	500
124	603

EX 121C	800
112 – Door Alternate 9a	201
105 – Door Alternate 9a	301
105 – Door Alternate 9b	302
105 – Door Alternate 9c	303
101C – Door Alternate 9a	401
119- Door Alternate 9a	401
101C- Door Alternate 9b	402
119 – Door Alternate 9b	402
120 – Door Alternate 9a	501
123 – Door Alternate 9a	501
103 – Door Alternate 9a	501
EX 121C – Door Alternate 9a	801

Hardware Group No. 100 (Doors 1A)

EACH TO HAVE:

1	EA	CONT. HINGE	BY SECTION 08 41 13 - 112HD	628	IVE
1	EA	PANIC HARDWARE	BY SECTION 08 41 13 - DL-24-R-EO	626	FAL
1	EA	PANIC HARDWARE	BY SECTION 08 41 13 - DL-R-NL-OP	626	FAL
1	EA	RIM HOUSING	C953	626	FAL
1	EA	MORTISE CYLINDER	C987	626	FAL
			@ KR MULLION & KEYSWITCH		
3	EA	SFIC CONST. CORE	C606CCA		FAL
3	EA	SFIC CORE	C606	626	FAL
1	EA	90 DEG OFFSET PULL	BY SECTION 08 41 13 - 8190 10" O	630	IVE
1	EA	OH STOP	BY SECTION 08 41 13 - 100S ADJ	630	GLY
1	EA	SURFACE CLOSER	BY SECTION 08 41 13 - SC71HDPA	689	FAL
1	EA	SURF. AUTO OPERATOR	BY SECTION 08 41 13 - 4342 (FLUSH CEILING MOUNT)	689	LCN
1	EA	BOLLARD POST	BY SECTION 05500 - AS PER DETAIL	AL	LCN
1	EA	WEATHER RING	BY SECTION 08 41 13 - 8310-800	BLK	LCN
1	EA	ACTUATOR, WALL MOUNT	BY SECTION 08 41 13 - 8310-856T	630	LCN
1	EA	FLUSH MOUNT BOX	BY SECTION 08 41 13 - 8310-868F	689	LCN
1	EA	SEAL	BY SECTION 08 41 13 - WEATHER STRIP		
1	EA	DOOR SWEEP	BY SECTION 08 41 13 - DOOR SWEEP		
1	EA	THRESHOLD	BY SECTION 08 41 13 - AS PER DETAIL		
1	EA	KEYSWITCH	BY SECTION 08 41 13 - 653-04 L2	630	SCE

- A) DOORS MUST HAVE A STILE WIDTH OF AT LEAST 4 INCH TO ACCOMMODATE SPECIFIED HARDWARE.
- B) SET OVERHEAD STOP TO STOP THE DOOR JUST AFTER THE OPERATOR REACHES FULL OPEN POINT.
- C) COORDINATE WITH DOOR MANUFACTURER (TOTAL SECURITY SOLUTIONS OR EQUAL) TO PREPARE DOOR TO RECEIVE THESE HARDWARE.

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. OUTER ACTUATOR IS ENABLED/DISABLED BY INSIDE KEYSWITCH.
3. INNER ACTUATOR IS ALWAYS ENABLED. OUTER ACTUATOR IS ENABLED/DISABLED BY INSIDE KEYSWITCH.
4. OPERATOR WILL ONLY OPEN DOOR IF PANIC DEVICES ARE DOGGED.

Hardware Group No. 200 (Doors 112)

EACH TO HAVE:

3	EA	HW HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	22-NL-210	689	VON
1	EA	RIM HOUSING	C953	626	FAL
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	6300 FSE	630	VON
1	EA	SURFACE CLOSER	SC71 DS	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DRIP CAP	16A	CL	NGP
1	SET	SEALS	A626A	CL	NGP
1	EA	DOOR SWEEP	C627A	CL	NGP
1	EA	SADDLE	613	719	NGP
		THRESHOLD			
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	EA	PROX READER	PR10	BLK	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. KEY IN OUTSIDE TRIM RETRACTS LATCH FOR ENTRY ONLY. DOOR RE-SECURES WHEN KEY IS REMOVED.

Hardware Group No. 201 – ALTERNATE 9a (Doors 112 – Alternate 9a)

EACH TO HAVE:

3	EA	HW HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	22-NL-210	689	VON
1	EA	ELEC CLASSROOM LOCK	CO-200-CY-70-PRK-RHO-BD	626	SCE
1	EA	RIM HOUSING	C953	626	FAL
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	6300 FSE	630	VON
1	EA	SURFACE CLOSER	SC71 DS	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DRIP CAP	16A	CL	NGP
1	SET	SEALS	A626A	CL	NGP
1	EA	DOOR SWEEP	C627A	CL	NGP
1	EA	SADDLE	613	719	NGP
		THRESHOLD			
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.

2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. KEY IN OUTSIDE TRIM RETRACTS LATCH FOR ENTRY ONLY. DOOR RE-SECURES WHEN KEY IS REMOVED.

Hardware Group No. 300 (Doors 105)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	W581HD6 DANE	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
1	SET	SEALS	2525B	BRN	NGP
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	EA	PROX READER	PR10	BLK	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. KEY IN OUTSIDE TRIM RETRACTS LATCH FOR ENTRY ONLY. DOOR RE-SECURES WHEN KEY IS REMOVED.

Hardware Group No. 301 - ALTERNATE 9a (Doors 105 Alternate 9a)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-100-CY-70-KP-RHO-BD	626	SCE
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
1	SET	SEALS	2525B	BRN	NGP

OPERATIONAL DESCRIPTION

4. FREE EGRESS AT ALL TIMES.
5. LOCKSET IS NORMALLY SECURE.
6. VALID TOGGLE PIN CODE ON THE EXTERIOR MAY BE USED TO CHANGE TO A PASSAGE OR SECURED STATUS.

Hardware Group No. 302 - ALTERNATE 9b (Doors 105 Alternate 9b)

EACH TO HAVE:

Yurok Tribe Planning and Community Development

Klamath, California

Documents

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-200-CY-70-PR-RHO-BD	626	SCE
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
1	SET	SEALS	2525B	BRN	NGP

**Yurok Justice Center
Construction**OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. LOCKSET IS NORMALLY SECURE.
3. VALID TOGGLE CREDENTIAL CODE ON THE EXTERIOR MAY BE USED TO CHANGE TO A PASSAGE OR SECURED STATUS.

Hardware Group No. 303 - ALTERNATE 9c (Doors 105 Alternate 9c)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-200-CY-70-PRK-RHO-BD	626	SCE
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
1	SET	SEALS	2525B	BRN	NGP

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. LOCKSET IS NORMALLY SECURE.
3. VALID TOGGLE CREDENTIAL CODE ON THE EXTERIOR MAY BE USED TO CHANGE TO A PASSAGE OR SECURED STATUS.

Hardware Group No. 400 (Doors 101 C, 119)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	W581HD6 DANE	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	EA	PROX READER	PR10	BLK	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. KEY IN OUTSIDE TRIM RETRACTS LATCH FOR ENTRY ONLY. DOOR RE-SECURES WHEN KEY IS REMOVED.

Hardware Group No. 401 ALTERNATE 9a (Doors 101 C Alternate 9a, 119 Alternate 9a)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-200-CY-70-PRK-RHO-BD	626	SCE
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. KEY IN OUTSIDE TRIM RETRACTS LATCH FOR ENTRY ONLY. DOOR RE-SECURES WHEN KEY IS REMOVED.

Hardware Group No. 402 ALTERNATE 9b (Doors 101 C Alternate 9b, 119 Alternate 9b)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELEC CLASSROOM LOCK	CO-200-CY-70-KP-RHO-BD	626	SCE
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
1	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. FREE EGRESS AT ALL TIMES.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. KEY IN OUTSIDE TRIM RETRACTS LATCH FOR ENTRY ONLY. DOOR RE-SECURES WHEN KEY IS REMOVED.

Hardware Group No. 500 (Doors 120, 123, 103)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ASYLUM LOCK	T411	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
2	EA	POWER SUPPLY	PS902	LGR	SCE
2	EA	PROX READER	PR10	BLK	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. PROX READER INSIDE AND OUTSIDE THE ROOM, AUTHORIZED CREDENTIAL TO GET IN THE ROOM AND TO GET OUT OF THE ROOM.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. DEADLOCKING LATCH BOLT OPERATED BY KEY IN LEVER FROM EITHER SIDE. LOCKSET TO BE SECURE BOTH SIDES OF THE DOOR.

Hardware Group No. 501 ALTERNATE 9a (Doors 120 – ALTERNATE 9a, 123 – ALTERNATE 9a, 103 – ALTERNATE 9a)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ELEC ASYLUM LOCK (KEYPAD AND CARD READER)	AD	626	SCE
1	EA	SFIC CORE	C606	626	FAL
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE
2	EA	POWER SUPPLY	PS902	LGR	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		

OPERATIONAL DESCRIPTION

1. PROX READER AND KEYPAD INSIDE AND OUTSIDE THE ROOM, AUTHORIZED CREDENTIAL TO GET IN THE ROOM AND TO GET OUT OF THE ROOM.
2. AUTHORIZED CREDENTIAL MOMENTARILY RELEASES STRIKE ALLOWING ENTRY.
3. DEADLOCKING LATCH BOLT OPERATED BY KEY IN LEVER FROM EITHER SIDE. LOCKSET TO BE SECURE BOTH SIDES OF THE DOOR.

Hardware Group No. 600 (Doors 101B)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRY / OFFICE LOCK	W511HD6 DANE	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	WALL STOP	WS407CCV	630	IVE
1	EA	SURFACE CLOSER WITH HOLD-OPEN ARM	SC80-3049PA	689	FAL
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 601 (Doors 104, 106, 107, 108, 117, 116, 118)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	ENTRY / OFFICE LOCK	W511HD6 DANE	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 602 (Doors 121)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1	EA	PASSAGE SET	W101S DANE	626	FAL
1	EA	SGL CYL X TURN DB	D141HD6	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

OPERATIONAL DESCRIPTION

1. DEADBOLT IS THROWN/RETRACTED BY KEY IN OUTSIDE CYLINDER OR BY INSIDE THUMBTURN.*

Hardware Group No. 603 (Doors 124, 110)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	W581HD6 DANE	626	FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 604 (Door 122)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	STOREROOM LOCK	W581HD6 DANE	626	FAL
1	EA	SFIC CORE	C606	626	FAL
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 700 (Doors 113, 114)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK	W301S DANE	626	FAL
1	EA	SURFACE CLOSER	SC81 RW/PA	689	FAL
1	EA	WALL STOP	WS407CCV	630	IVE
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 701 (Doors 115)

EACH TO HAVE:

3	EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1	EA	PRIVACY LOCK	W301S DANE	626	FAL
1	EA	SURFACE CLOSER WITH DOOR STOP	SC80-3077DS	689	FAL
3	EA	SILENCER	SR64	GRY	IVE

Hardware Group No. 800 (Existing door, EX 121C)

EXISTING HARDWARE:

3	EA	HW HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	22-EO	689	VON
1	EA	MORTISE CYLINDER	C987	626	FAL
			@ EXIT ALARM		
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	SURFACE CLOSER	SC71 DS	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DRIP CAP	16A	CL	NGP
1	SET	SEALS	A626A	CL	NGP
1	EA	DOOR SWEEP	C627A	CL	NGP
1	EA	SADDLE	613	719	NGP
		THRESHOLD			
1	EA	EXIT ALARM	EAX-500 (SK1 KIT)	GRY	DET

OPERATIONAL DESCRIPTION

1. CONNECTION TO TAP ROOM
2. EXIT ALARM TO SOUND WHEN DOOR IS OPENED TO REMAIN.
3. NOT AN EGRESS DOOR ANYMORE
4. ONLY AUTHORIZED PERSONAL HAVE ACCESS TO COURT ROOM BY CARD READER

5. DELAY PANIC DEVICE

NEW:

1	EA	POWER SUPPLY	PS902	LGR	SCE
1	EA	PROX READER	PR10	BLK	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON

Hardware Group No. 801 – ALTERNATE 9a (Existing door, EX 121C- Alternate 9a)

EXISTING HARDWARE:

3	EA	HW HINGE	5BB1HW 4.5 X 4.5 NRP	630	IVE
1	EA	PANIC HARDWARE	22-EO	689	VON
1	EA	MORTISE CYLINDER	C987	626	FAL
			@ EXIT ALARM		
1	EA	SFIC CONST. CORE	C606CCA		FAL
1	EA	SFIC CORE	C606	626	FAL
1	EA	SURFACE CLOSER	SC71 DS	689	FAL
1	EA	KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA	DRIP CAP	16A	CL	NGP
1	SET	SEALS	A626A	CL	NGP
1	EA	DOOR SWEEP	C627A	CL	NGP
1	EA	SADDLE	613	719	NGP
		THRESHOLD			
1	EA	EXIT ALARM	EAX-500 (SK1 KIT)	GRY	DET

OPERATIONAL DESCRIPTION

1. CONNECTION TO TAP ROOM
2. EXIT ALARM TO SOUND WHEN DOOR IS OPENED TO REMAIN.
3. NOT AN EGRESS DOOR ANYMORE
4. ONLY AUTHORIZED PERSONAL HAVE ACCESS TO COURT ROOM BY CARD READER AND KEYPAD
5. DELAY PANIC DEVICE

NEW:

1	EA	POWER SUPPLY	PS902	LGR	SCE
1	EA	ELEC CLASSROOM LOCK	CO-200-CY-70-PRK-RHO-BD	626	SCE
1	SET	WIRING DIAGRAMS	AS REQUIRED		
1	EA	ELECTRIC STRIKE	5100-3FP FSE	689	VON

END OF SECTION

SECTION 123623.13 - PLASTIC-LAMINATE-CLAD COUNTERTOPS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes plastic-laminate countertops.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product, **including and high-pressure decorative laminate.**
- B. Shop Drawings: Show location of each item, dimensioned plans and elevations, large-scale details, attachment devices, and other components.

1.3 QUALITY ASSURANCE

- A. Fabricator Qualifications: **Certified participant in AWI's Quality Certification Program.**
- B. Installer Qualifications: **Certified participant in AWI's Quality Certification Program.**

1.4 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install countertops until building is enclosed, wet work is complete, and HVAC system is operating and maintaining temperature and relative humidity at occupancy levels during the remainder of the construction period.

PART 2 - PRODUCTS

2.1 PLASTIC-LAMINATE COUNTERTOPS

- A. Quality Standard: Unless otherwise indicated, comply with the "Architectural Woodwork Standards" for grades indicated for construction, installation, and other requirements.
- B. Grade: **Premium.**
- C. Regional Materials: Plastic-laminate countertops shall be manufactured within **500 miles (800 km)** of Project site.
- D. Colors, Patterns, and Finishes: Provide materials and products that result in colors and textures of exposed laminate surfaces complying with the following requirements:
 - 1. As indicated by manufacturer's designations.
 - 2. Match Architect's sample.

3. As selected by Architect from manufacturer's full range in the following categories:
 - a. Patterns, **matte** finish.

E. Edge Treatment: **Same as laminate cladding on horizontal surfaces.**

F. Core Material at Sinks: **Particleboard made with exterior glue.**

G. Core Thickness: **3/4 inch (19 mm).**

1. Build up countertop thickness to **1-1/2 inches (38 mm)** at front, back, and ends with additional layers of core material laminated to top.

H. Backer Sheet: Provide plastic-laminate backer sheet, NEMA LD 3, Grade BKL, on underside of countertop substrate.

I. Paper Backing: Provide paper backing on underside of countertop substrate.

2.2 WOOD MATERIALS

A. Wood Products: Provide materials that comply with requirements of referenced quality standard unless otherwise indicated.

B. Composite Wood and Agrifiber Products: Provide materials that comply with requirements of referenced quality standard for each type of woodwork and quality grade specified unless otherwise indicated.

1. Composite Wood and Agrifiber Products: Products shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."
2. Medium-Density Fiberboard: ANSI A208.2, **Grade 130 made with binder containing no urea formaldehyde.**
3. Particleboard: ANSI A208.1, **Grade M-2, made with binder containing no urea formaldehyde] [Grade M-2-Exterior Glue.**
4. Softwood Plywood: DOC PS 1.

2.3 ACCESSORIES

A. Grommets for Cable Passage through Countertops: **2-inch (51-mm) OD, black**, molded-plastic grommets and matching plastic caps with slot for wire passage.

2.4 MISCELLANEOUS MATERIALS

A. Adhesives: Do not use adhesives that contain urea formaldehyde.

B. Adhesives: Use adhesives that meet the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

- C. VOC Limits for Installation Adhesives and Sealants: Use products that comply with the following limits for VOC content when calculated according to 40 CFR 59, Subpart D (EPA Method 24):
1. Wood Glues: 30 g/L.
 2. Multipurpose Construction Adhesives: 70 g/L.
 3. Structural Wood Member Adhesive: 140 g/L.
 4. Architectural Sealants: 250 g/L.

2.5 FABRICATION

- A. Fabricate countertops to dimensions, profiles, and details indicated. Provide front and end overhang of **1 inch (25 mm)** over base cabinets. Ease edges to radius indicated for the following:
1. Solid-Wood (Lumber) Members: **1/16 inch (1.5 mm)** unless otherwise indicated.
- B. Complete fabrication, including assembly, to maximum extent possible before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
- C. Shop cut openings to maximum extent possible to receive appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
1. Seal edges of openings in countertops with a coat of varnish.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installation, condition countertops to average prevailing humidity conditions in installation areas.

3.2 INSTALLATION

- A. Grade: Install countertops to comply with same grade as item to be installed.
- B. Assemble countertops and complete fabrication at Project site to the extent that it was not completed in the shop.
1. Provide cutouts for appliances, plumbing fixtures, electrical work, and similar items.
 2. Seal edges of cutouts by saturating with varnish.
- C. Field Jointing: Prepare edges to be joined in shop so Project-site processing of top and edge surfaces is not required.

1. Secure field joints in plastic-laminate countertops with concealed clamping devices located within **6 inches (150 mm)** of front and back edges and at intervals not exceeding **24 inches (600 mm)**. Tighten according to manufacturer's written instructions to exert a constant, heavy-clamping pressure at joints.
- D. Install countertops level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb to a tolerance of **1/8 inch in 96 inches (3 mm in 2400 mm)**.
- E. Scribe and cut countertops to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- F. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.
 1. Install countertops with no more than **1/8 inch in 96-inch (3 mm in 2400-mm)** sag, bow, or other variation from a straight line.
 2. Secure backsplashes **to walls with adhesive**.
 3. Seal junctures of tops, splashes, and walls with mildew-resistant silicone sealant or another permanently elastic sealing compound recommended by countertop material manufacturer.

END OF SECTION 123623.13