

**HAMPSHIRE COUNTY SHERIFF'S OFFICE  
PROJECT NO. HSD FY 12-05  
Fire Alarm Replacement  
Hampshire County Jail & House of Correction**

**ADDENDUM NO. 2  
20 January 2012**

The attention of bidders submitting bids for the project at *Hampshire County Jail & House of Correction, Northampton, Massachusetts*, is called to the following addendum to the Project Manual and Drawings. The items set forth herein, whether of omission, addition, substitution, or clarification are all to be included in and form a part of the bid submitted.

THE NUMBER OF THIS ADDENDUM (**NO. 2**) MUST BE ENTERED IN THE APPROPRIATE SPACE PROVIDED AFTER THE WORD "ADDENDA" ON THE BID FORM.

Architect's Project #20945B  
Dietz & Company Architects, Inc.  
17 Hampden Street  
Springfield, MA 01103  
413-733-6798  
kevinr@dietzarch.com

**GENERAL**

---

This Addendum shall supplement, amend and become part of the Contract Documents. All work called for shall comply with requirements specified for similar work unless otherwise described. The following addendum modifies only those specific items described herein. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

Bidders are cautioned to base their price only on the written construction drawings, project manual, and addenda. Verbal responses made by the Architect, Consultant, Owner are not binding, unless confirmed in writing by addendum item.

Bidders shall submit all questions in writing, no telephone calls please. Requests for information shall be faxed to the Architect's office at (413) 732-4385.

The total number of pages in this document is (15) fifteen including attachments.

**1.1 General Bids due: 11:00 am on Wednesday, January 25, 2012**

The bid times and dates are not changed.

**QUESTIONS FROM PLANHOLDERS**

---

None

**REVISIONS TO THE SPECIFICATIONS**

---

- 1.2 See attached Specification Section 08710 Door Hardware.

## **REVISIONS TO THE DRAWINGS**

None

---

Attachments:  
Specification Section 08710 Door Hardware

**END OF ADDENDUM NO. 2**

## SECTION 08710 - DOOR HARDWARE

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

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

#### 1.2 SUMMARY

- A. Section includes:

- 1. Mechanical door hardware for the following:
  - a. Swinging doors.
- 2. Cylinders for door hardware specified in other Sections.
- 3. Electrified door hardware.

- B. Related Sections:

- 1. Division 08 Section " Steel Door & Frames". .
- 2. Division 16 Sections for connections to electrical power system and for low-voltage wiring work.

#### 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction and installation details, material descriptions, dimensions of individual components and profiles, and finishes.
- B. Shop Drawings: Details of electrified door hardware, indicating the following:
  - 1. Wiring Diagrams: For power, signal, and control wiring and including the following:
    - a. Details of interface of electrified door hardware and building safety and security systems.
    - b. Schematic diagram of systems that interface with electrified door hardware.
  - 2. Operation Narrative: Describe the operation of doors controlled by electrified door hardware.
- C. Samples for Initial Selection: For plastic protective trim units in each finish, color, and texture required for each type of trim unit indicated.
- D. Samples for Verification: For exposed door hardware of each type required, in each finish specified, prepared on Samples of size indicated below. Tag Samples with full description for coordination with the door hardware schedule. Submit Samples before, or concurrent with, submission of door hardware schedule.

1. Sample Size: Full-size units or minimum 2-by-4-inch (51-by-102-mm) Samples for sheet and 4-inch (102-mm) long Samples for other products.
  - a. Full-size Samples will be returned to Contractor. Units that are acceptable and remain undamaged through submittal, review, and field comparison process may, after final check of operation, be incorporated into the Work, within limitations of keying requirements.

E. Other Action Submittals:

1. Door Hardware Schedule: Prepared by or under the supervision of Installer, detailing fabrication and assembly of door hardware, as well as installation procedures and diagrams. Coordinate final door hardware schedule with doors, frames, and related work to ensure proper size, thickness, hand, function, and finish of door hardware.
  - a. Submittal Sequence: Submit door hardware schedule concurrent with submissions of Product Data, Samples, and Shop Drawings. Coordinate submission of door hardware schedule with scheduling requirements of other work to facilitate the fabrication of other work that is critical in Project construction schedule.
  - b. Format: Comply with scheduling sequence and vertical format in DHI's "Sequence and Format for the Hardware Schedule." Double space entries, and number and date each page.
  - c. Format: Use same scheduling sequence and format and use same door numbers as in the Contract Documents.
  - d. Content: Include the following information:
    - 1) Identification number, location, hand, fire rating, size, and material of each door and frame.
    - 2) Locations of each door hardware set, cross-referenced to Drawings on floor plans and to door and frame schedule.
    - 3) Complete designations, including name and manufacturer, type, style, function, size, quantity, function, and finish of each door hardware product.
    - 4) Description of electrified door hardware sequences of operation and interfaces with other building control systems.
    - 5) Fastenings and other pertinent information.
    - 6) Explanation of abbreviations, symbols, and codes contained in schedule.
    - 7) Mounting locations for door hardware.
    - 8) List of related door devices specified in other Sections for each door and frame.
2. Keying Schedule: Prepared by or under the supervision of Installer, detailing Owner's final keying instructions for locks. Include schematic keying diagram and index each key set to unique door designations that are coordinated with the Contract Documents.

F. Qualification Data: For Installer.

G. Product Certificates: For electrified door hardware, from the manufacturer.

1. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door assemblies.

H. Product Test Reports: For compliance with accessibility requirements, based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for door hardware on doors located in accessible routes.

- I. Maintenance Data: For each type of door hardware to include in maintenance manuals. Include final hardware and schedule.
- J. Warranty: Special warranty specified in this Section.

#### 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Supplier of products and an employer of workers trained and approved by product manufacturers and an Architectural Hardware Consultant who is available during the course of the Work to consult with Contractor, Architect, and Owner about door hardware and keying.
  - 1. Warehousing Facilities: In Project's vicinity.
  - 2. Scheduling Responsibility: Preparation of door hardware and keying schedules.
  - 3. Engineering Responsibility: Preparation of data for electrified door hardware, including Shop Drawings, based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.
- B. Source Limitations: Obtain each type of door hardware from a single manufacturer.
  - 1. Provide electrified door hardware from same manufacturer as mechanical door hardware, unless otherwise indicated. Manufacturers that perform electrical modifications and that are listed by a testing and inspecting agency acceptable to authorities having jurisdiction are acceptable.
- C. Fire-Rated Door Assemblies: Where fire-rated door assemblies are indicated, provide door hardware rated for use in assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at positive pressure according to NFPA 252 or UL 10C, unless otherwise indicated.
- D. Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meet requirements of assemblies tested according to UL 1784 and installed in compliance with NFPA 105.
  - 1. Air Leakage Rate: Maximum air leakage of 0.3 cfm/sq. ft. (3 cu. m per minute/sq. m) at the tested pressure differential of 0.3-inch wg (75 Pa) of water.
- E. Electrified Door Hardware: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction.
- F. Means of Egress Doors: Latches do not require more than 15 lbf (67 N) to release the latch. Locks do not require use of a key, tool, or special knowledge for operation.
- G. Accessibility Requirements: For door hardware on doors in an accessible route, comply with ADAAG and MAAB regulations.
  - 1. Provide operating devices that do not require tight grasping, pinching, or twisting of the wrist and that operate with a force of not more than 5 lbf (22.2 N).
  - 2. Comply with the following maximum opening-force requirements:
    - a. Interior, Non-Fire-Rated Hinged Doors: 5 lbf (22.2 N) applied perpendicular to door.
    - b. Fire Doors: Minimum opening force allowable by authorities having jurisdiction.

3. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch (13 mm) high.
4. Adjust door closer sweep periods so that, from an open position of 70 degrees, the door will take at least 3 seconds to move to a point 3 inches (75 mm) from the latch, measured to the leading edge of the door.

#### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inventory door hardware on receipt and provide secure lock-up for door hardware delivered to Project site.
- B. Tag each item or package separately with identification coordinated with the final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each item or package.

#### 1.6 COORDINATION

- A. Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete. Concrete, reinforcement, and formwork requirements are specified in Division 03.
- B. Installation Templates: Distribute for doors, frames, and other work specified to be factory prepared. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing door hardware to comply with indicated requirements.
- C. Security: Coordinate installation of door hardware, keying, and access control with Owner's security consultant.
- D. Electrical System Roughing-In: Coordinate layout and installation of electrified door hardware with connections to power supplies and building safety and security systems.
- E. Existing Openings: Where hardware components are scheduled for application to existing construction or where modifications to existing door hardware are required, field verify existing conditions and coordinate installation of door hardware to suit opening conditions and to provide proper door operation.

#### 1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty period.
  1. Failures include, but are not limited to, the following:
    - a. Structural failures including excessive deflection, cracking, or breakage.
    - b. Faulty operation of doors and door hardware.
    - c. Deterioration of metals, metal finishes, and other materials beyond normal weathering and use.
  2. Warranty Period: Three years from date of Substantial Completion, unless otherwise indicated.

- a. Electric Latch Locks: Five years from date of Substantial Completion.
- b. Exit Devices: Two years from date of Substantial Completion.
- c. Manual Closers: 10 years from date of Substantial Completion.

## 1.8 MAINTENANCE SERVICE

- A. Maintenance Tools and Instructions: Furnish a complete set of specialized tools and maintenance instructions for Owner's continued adjustment, maintenance, and removal and replacement of door hardware.
- B. Maintenance Service: Beginning at Substantial Completion, provide six months' full maintenance by skilled employees of door hardware Installer. Include quarterly preventive maintenance, repair or replacement of worn or defective components, lubrication, cleaning, and adjusting as required for proper door and door hardware operation. Provide parts and supplies that are the same as those used in the manufacture and installation of original products.

## PART 2 - PRODUCTS

### 2.1 SCHEDULED DOOR HARDWARE

- A. Provide door hardware for each door as scheduled in Part 3 "Door Hardware Schedule" Article to comply with requirements in this Section.
  1. Door Hardware Sets: Provide quantity, item, size, finish or color indicated, and named manufacturers.
  2. Sequence of Operation: Provide electrified door hardware function, sequence of operation, and interface with other building control systems indicated.
- B. Designations: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of door hardware are indicated in Part 3 "Door Hardware Schedule" Article. Products are identified by using door hardware designations, as follows:
  1. Named Manufacturers' Products: Manufacturer and product designation are listed for each door hardware type required for the purpose of establishing minimum requirements. Manufacturers' names are abbreviated in Part 3 "Door Hardware Schedule" Article.
  2. References to BHMA Designations: Provide products complying with these designations and requirements for description, quality, and function.

### 2.2 HINGES

- A. Hinges: BHMA A156.1.[ Provide template-produced hinges for hinges installed on hollow-metal doors and hollow-metal frames.
  1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Stanley Commercial Hardware; Div. of The Stanley Works.
    - b. Hager Companies.
    - c. McKinney Products Company; an ASSA ABLOY Group company.

2. Exterior doors: continuous hinges equal to MCK25HD-CL

### 2.3 PUSH/PULLS

- A. Push plates: stainless steel .050 thick, equal to Rockwood Mfg, (70B 3 1/2 x 15).
  1. Do not drill for thru bolts.
- B. Pulls: type 107 x 70B as manufactured by Rockwood Mfg., or equal.
- C. Pulls shall be furnished with thru-bolts in all cases where a push plate is on the opposite side of the door.
- D. Do not drill through push plates.
  1. On wood doors, counter sink and cover heads with push plate.
  2. On hollow metal doors, countersink or dimple and cover heads with push plate.

### 2.4 ELECTRICAL DOOR OPERATORS

- A. Operators: Gyro Tech 710 Low Energy or approved equal.
- B. Operator Housing for the GT8350 & GT8500 Side Load shall be, 5 1/2" (140mm) deep by 6" (152mm) high aluminum extrusion with finished end caps and shall be prepared for mounting to new or existing door frames. All structural sections shall have a minimum thickness of .166" (4mm) and shall be fabricated of 6063-T5 aluminum alloys. Hinged housing cover shall be able to be raised and secured or removed to provide service access and shall be extruded from 6063-T5 aluminum alloys to a minimum thickness of .100" (3mm). Plastic covers shall not be acceptable.
- C. Finish: Aluminum shall have a standard finish of AA-M12-C22-A31 (204R1, clear) or AA-M12-C22-A44 (dark bronze). Black and special finishes are available upon request.
- D. Power Operator: Completely assembled and sealed unit which shall include helical gear-driven transmission, mechanical spring and bearings all located in cast aluminum housing and filled with special lubricant for extreme temperature conditions. Attached to transmission system shall be a DC permanent magnet motor with sealed ball bearings. Motor shall operate from 115-volt supply and require less than 3 amps at full power stall. Complete unit shall be resilient mounted with provisions to easily adjust/replace the motor and gearbox without removing door from pivots or frame.
- E. Electrical Control: Shall be a solid-state microprocessor unit. The microprocessor control shall allow the opening speed, closing speed, back check and latch check speed each to be adjusted separately and independently from each other to meet specific site conditions. Adjustable opening and closing speeds shall be set in accordance with ANSI A156.19. All adjustments shall be specific and reproducible.
- F. Connecting Hardware: Conversion Unit (C.U.) outswing doors shall be connected to operator by a two piece drive arm with self aligning rod ends and connecting door bracket for push-type operation. Inswing drive arm with a urethane covered roller, shall ride in a track fabricated of 6061-T6 or A380 aluminum alloy attached to the door rail where required for pull-type operation. Overhead Concealed (OHC) power operator drive arm to door with a pin linkage rotating in a

self lubricated bearing, within a self adjusting slide block, traveling in an interconnected steel track and top door pivot assembly. The (OHC) unit will independently support the door on heavy-duty steel top and bottom door pivots. To allow for durability and easy serviceability, the door shall not pivot on shaft of operator.

## 2.5 LOCK CYLINDERS

- A. As required to coordinate between door hardware and Owner's key system.

## 2.6 KEYING

- A. Keying System: Schlage G Series

## 2.7 OPERATING TRIM

- A. Operating Trim: BHMA A156.6.

## 2.8 CLOSERS

- A. Accessibility Requirements: Where handles, pulls, latches, locks, and other operating devices are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)." and the Massachusetts Architectural Access Board guidelines.
- B. Closers: cast iron bodies with malleable iron arms, equal to 4000 series as manufactured by L.C.N. or other equivalent units by Norton or Sargent.
- C. Closers for hollow metal or mineral core doors shall be furnished with thru-bolts.
- D. Closers shall have adjustable spring power to meet A.D.A requirements.
- E. Closer shall be mounted on the least visible side of the door.
- F. Closers shall have separate valves for latching speed, closing speed, back check, and delayed action where called out in hardware sets.

## 2.9 MECHANICAL STOPS AND HOLDERS

- A. Wall- and Floor-Mounted Stops: BHMA A156.16; bronze base metal.
  - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
    - a. Hager Companies.
    - b. IVES Hardware; an Ingersoll-Rand company.
    - c. Rockwood Manufacturing Company.
    - d. Stanley Commercial Hardware; Div. of The Stanley Works.

## 2.10 THRESHOLDS

- A. Accessibility Requirements: Where thresholds are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA), Accessibility Guidelines for Buildings and Facilities (ADAAG)." and the Massachusetts Architectural Access Board guidelines.
  - 1. Bevel raised thresholds with a slope of not more than 1:2. Provide thresholds not more than 1/2 inch high.
- B. Thresholds for Means of Egress Doors: Comply with NFPA 101. Maximum 1/2 inch high.
- C. Thresholds shall be thermally broken equal to be 253X3AFG.

## 2.11 KICK PLATES

- A. Kick Plates shall be .050 thick, stainless steel, equal to Rockwood Mfg.
- B. Sizes as listed in hardware set.

## 2.12 DOOR GASKETING

- A. General: Provide continuous weather-strip gasketing on exterior doors and provide smoke, light, or sound gasketing on interior doors where indicated or scheduled. Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.
- B. Weatherstripping shall be equal to Pemko 303AS.
- C. Gasketing shall be equal to Pemko S88D.
- D. Sweeps shall be equal to Pemko 315DN
- E. Gasketing Materials: ASTM D 2000 and AAMA 701/702.

## 2.13 FABRICATION

- A. Manufacturer's Nameplate: Do not provide products that have manufacturer's name or trade name displayed in a visible location except in conjunction with required fire-rated labels and as otherwise approved by Architect.
  - 1. Manufacturer's identification is permitted on rim of lock cylinders only.
- B. Base Metals: Produce door hardware units of base metal indicated, fabricated by forming method indicated, using manufacturer's standard metal alloy, composition, temper, and hardness. Furnish metals of a quality equal to or greater than that of specified door hardware units and BHMA A156.18.
- C. Fasteners: Provide door hardware manufactured to comply with published templates prepared for machine, wood, and sheet metal screws. Provide screws that comply with commercially recognized industry standards for application intended, except aluminum fasteners are not

permitted. Provide Phillips flat-head screws with finished heads to match surface of door hardware, unless otherwise indicated.

1. Concealed Fasteners: For door hardware units that are exposed when door is closed, except for units already specified with concealed fasteners. Do not use through bolts for installation where bolt head or nut on opposite face is exposed unless it is the only means of securely attaching the door hardware. Where through bolts are used on hollow door and frame construction, provide sleeves for each through bolt.
2. Fire-Rated Applications:
  - a. Wood or Machine Screws: For the following:
    - 1) Hinges mortised to doors or frames; use threaded-to-the-head wood screws for wood doors and frames.
    - 2) Strike plates to frames.
    - 3) Closers to doors and frames.
  - b. Steel Through Bolts: For the following unless door blocking is provided:
    - 1) Surface hinges to doors.
    - 2) Closers to doors and frames.
    - 3) Surface-mounted exit devices.
3. Spacers or Sex Bolts: For through bolting of hollow-metal doors.
4. Fasteners for Wood Doors: Comply with requirements in DHI WDHS.2, "Recommended Fasteners for Wood Doors."
5. Gasketing Fasteners: Provide noncorrosive fasteners for exterior applications and elsewhere as indicated.

## 2.14 FINISHES

- A. Provide finishes complying with BHMA A156.18 as indicated in door hardware schedule.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly construction, wall and floor construction, and other conditions affecting performance.

- B. Examine roughing-in for electrical power systems to verify actual locations of wiring connections before electrified door hardware installation. See electrical drawings for wire pathways requiring modifications for door and door frame.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
- B. Wood Doors: Comply with DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."

### 3.3 INSTALLATION

- A. Mounting Heights: Mount door hardware units at heights to comply with the following unless otherwise indicated or required to comply with governing regulations.
  - 1. Standard Steel Doors and Frames: ANSI/SDI A250.8.
  - 2. Custom Steel Doors and Frames: HMMA 831.
  - 3. Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
- B. Install each door hardware item to comply with manufacturer's written instructions. Where cutting and fitting are required to install door hardware onto or into surfaces that are later to be painted or finished in another way, coordinate removal, storage, and reinstallation of surface protective trim units with finishing work specified in Division 09 Sections. Do not install surface-mounted items until finishes have been completed on substrates involved.
  - 1. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
  - 2. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
- C. Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than the number recommended by manufacturer for application indicated or one hinge for every 30 inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
- D. Lock Cylinders: Install construction cores to secure building and areas during construction period.
  - 1. Final cylinders supplied and installed by Owner.
- E. Thresholds: Set thresholds for exterior doors and other doors indicated in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
- F. Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they will impede traffic.
- G. Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.

- H. Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
- I. Door Bottoms: Apply to bottom of door, forming seal with threshold when door is closed.

### 3.4 FIELD QUALITY CONTROL

- A. Independent Architectural Hardware Consultant: Owner will engage a qualified independent Architectural Hardware Consultant to perform inspections and to prepare inspection reports.
  - 1. Independent 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.

### 3.5 ADJUSTING

- A. Initial Adjustment: Adjust and check each operating item of door hardware and each door to ensure proper operation or function of every unit. Replace units that cannot be adjusted to operate as intended. Adjust door control devices to compensate for final operation of heating and ventilating equipment and to comply with referenced accessibility requirements.
  - 1. Spring Hinges: Adjust to achieve positive latching when door is allowed to close freely from an open position of 30 degrees.
  - 2. Electric Strikes: Adjust horizontal and vertical alignment of keeper to properly engage lock bolt.
  - 3. Door Closers: Adjust sweep period to comply with accessibility requirements and requirements of authorities having jurisdiction.
- B. Occupancy Adjustment: Approximately six months after date of Substantial Completion, Contractor shall examine and readjust each item of door hardware, including adjusting operating forces, as necessary to ensure function of doors, door hardware, and electrified door hardware.

### 3.6 CLEANING AND PROTECTION

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

### 3.7 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain door hardware and door hardware finishes. Refer to Division 01 Section "Demonstration and Training."

### 3.8 DOOR HARDWARE SCHEDULE

#### Door Hardware Set No. 1 - Outer Vestibule Door

Locations: Exterior and interior doors at vestibule, each to have the following:

Qty.	Item	Manufacturer	Product/Finish
2	Hinges	MCK25HD-CL	
1	Auto Opener	Gyro Tech 710 low energy	Single door, interior mount, LH, 38" headers
2	Electric Lock	Folger Adams 401	Prep top of door for coord. bolt receiver hardware
1	Transformer		
1	Controller		Disengage Auto Opener when electric lock is engaged Remote switch activates bolt
1	Pull / Push	716F50M x 626	With matching pushbar
1 pr	Floor Stops		
2	Kickplates	8" x 1" LWD	
1	Weatherstripping		
1	Sweep		

#### Door Hardware Set No. 1A - Inner Vestibule Door

Locations: Exterior and interior doors at vestibule, each to have the following:

Qty.	Item	Manufacturer	Product/Finish
2	Hinges	MCK25HD-CL	
1	Pull / Push	716F50M x 626	With matching pushbar
1	Auto Opener	Gyro Tech 710 low energy	Single door, interior mount, LH, 38" headers
1 pr	Floor Stops		
2	Kickplates	8" x 1" LWD	
1 set	Silencers		

#### Door Hardware Set No. 2

Locations: Typical H.C. Toilet Room Doors

Qty.	Item	Manufacturer	Product/Finish
1.5 pr	Hinges	Stanley	FBB179 4 1/2" x 4 1/2"
1	Pull	Shlage	
1	Push Plate	Shlage	
1	Closer		
1	Floor Stop or wall stop	Rockwood	405 26D
3	Silencers	Ives	SR64
1	Deadbolt		Coordinate key cylinder with Owner

Door Hardware Set No. 3

Locations: Janitor Closet Door; to have the following:

Qty.	Item	Manufacturer	Product/Finish
1.5 pr	Hinges	Stanley	FBB179 4 1/2" x 4 1/2" US26D (Reverse bevel doors add NRP)
	Lockset	Shlage	Vandlgard ND96BDC, RHO, 626 (13-047 deadlatch and 10-025 strike) Fabricate to accept small format Best 7 pin removeable core and supplied with plastic construction core
1	Floor Stop or wall stop	Rockwood	440 26D 405 26D
3	Silencers	Ives	SR64
2	Kickplates	Rockwood or equal.	12" x 2" LWD, 1/8" thick, 626

END OF SECTION 08710